

Appendix A: Public Engagement

The Redmond community played a central role in guiding the development of the Transportation Master Plan (TMP). This process included three stakeholder workshops, three open house events, presentations at community events, online outreach, and a continuous focus on existing direction from the public as represented by the City vision, community priorities, and Comprehensive Plan.

The community involvement process began in the spring of 2010 with a statistically valid travel survey of 410 Redmond households and 470 employees. The data from this survey informed the TMP Update about how people are choosing to travel in the city today, and were inputs to the travel demand forecast model used to calculate several of the performance measures.

The City then held a series of meetings intended to gather ideas from the community and later to validate the draft Buildout Plan (see Figure 58). Major community events and outcome. These meetings included targeted stakeholder workshops for representatives of major constituencies (e.g., residents, business leaders, nonprofit organizations, the development community, transportation agencies), to large-scale open house events. Earlier events focused on exploring sustainable transportation and sustainability and identifying transportation needs and priorities; the last community event was an opportunity for participants to review draft TMP principles and the draft Buildout Plan, and either express concerns or validate the direction of the plan. Feedback from the community guided the overall direction of the plan; for example, its emphasis on providing travel choices, which was a consistent message from community involvement activities throughout the process. Feedback from TMP events and the neighborhood planning processes also led to the inclusion of specific projects in the TFP and Buildout Plan.

Redmond 2012 Transportation Master Plan (TMP) Update

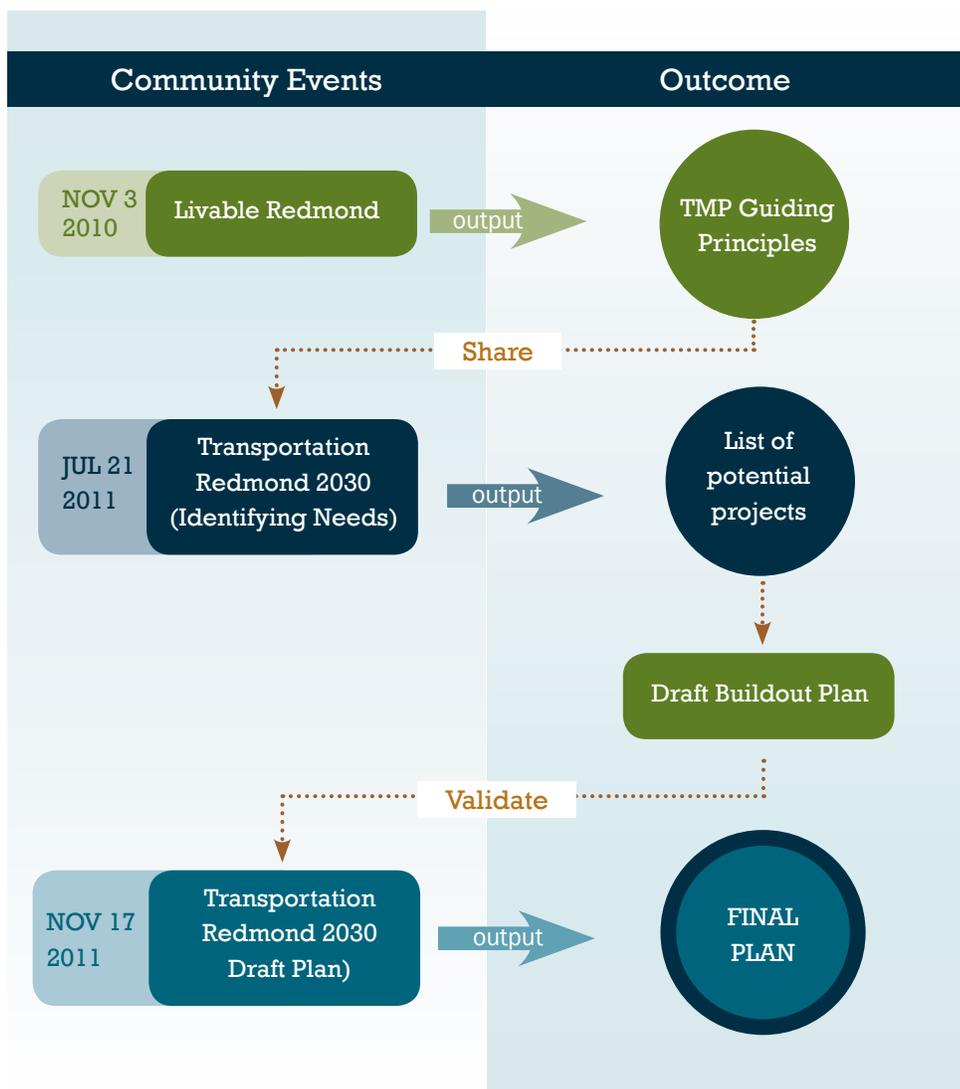


Figure 58. Major community events and outcome

Attendance at the TMP events ranged from the dozens (for the stakeholder workshops) up to about 75 at the last open house event (November 17, 2011). Several were covered by the Redmond Reporter newspaper, and some were highlighted on the calendars of local transportation organizations.

Online, the City maintained a web page for the TMP where users could review content and answer an opinion questionnaire on the progress of the TMP update. The questionnaire stood open between and received 43 responses which were generally supportive or strongly supportive of the TMP. Over 400 people opted in to a mailing list to receive TMP updates. Also as part of the community involvement process, the City solicited feedback from the public through its Facebook and Twitter accounts. The public also had the opportunity to submit comment on the Transportation Master Plan at two public hearings on April 10th and April 24th 2013, which were hosted by the Redmond Planning Commission during the public comment period. Six individuals gave comment at those meetings.



Members of the public at a Transportation Master Plan outreach event

Appendix B: Supplementary Performance Measures

Annual Vehicular Volume Change at Screenlines

This indicator is the set of year-over-year percentage changes in traffic volumes at each of the City's 11 screenlines (see Figure 59), which are the same as those used to calculate volume-to-capacity ratios. It provides an overall picture of how traffic volumes are changing in the city. There are no volume change targets; this measure is used primarily for trend analysis.

| | |
|----------------------------|---|
| Unit | Annual percent change in traffic volume by screenline |
| Baseline | 2010 |
| Objective | Not applicable |
| Reporting frequency | Yearly |
| Data source | City of Redmond Department of Public Works |

Average Motor Vehicle Traffic Change by TMD

Redmond is divided into seven Transportation Management Districts (TMD)—geographic subdivisions used for transportation planning purposes. Each year Redmond counts automobile traffic on city arterials, and the volumes are summed by TMD and compared to previous years.

Occasionally, specific count locations are unavailable due to construction or for other reasons. When this occurs, an estimate will be made by applying a citywide percentage change factor to the last complete count for that location.

| | |
|----------------------------|---|
| Unit | Annual percent change in traffic volume, by TMD |
| Baseline | 2010 |
| Objective | Not applicable |
| Reporting frequency | Yearly |
| Data source | City of Redmond Department of Public Works |

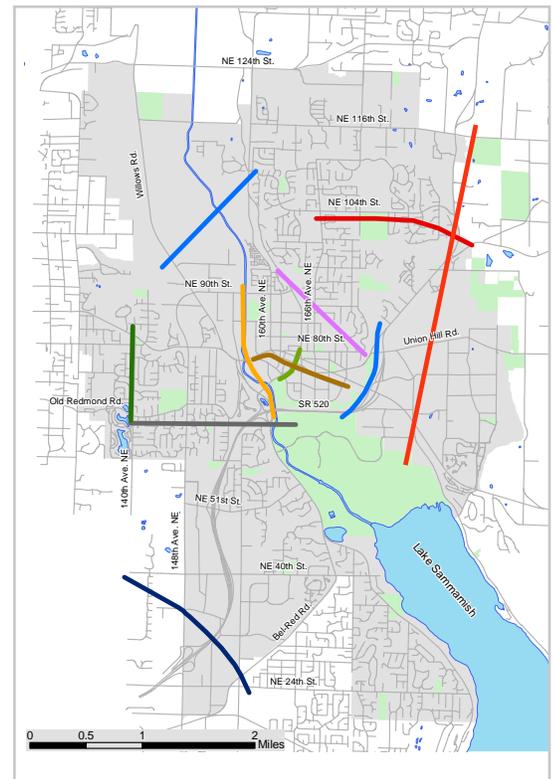


Figure 59. Traffic count screenlines

Completion of Transportation Facilities Plan

This measure reports the percentage of Transportation Facilities Plan funding that has been allocated to date, the percentage of the Transportation Facilities Plan funding that would be allocated to date assuming steady and proportionate funding each year, and the percentage point difference between the two.

| Unit | Percent of TFP funding allocated to date, by mode |
|---------------------|--|
| Baseline | 2013 |
| Objective | Commit, on average, approximately 6 percent of the TFP per year |
| Reporting frequency | Yearly |
| Data source | City of Redmond Department of Planning and Community Development |

Pedestrian and Bicycle Volumes

Each fall, the City of Redmond counts pedestrians and bicyclists at 12 locations around the city as part of its annual traffic count program. Pedestrian and bicycle volumes are expressed as a percentage change from the volumes in 2010. The PM peak (4-6 p.m.) volumes from all sites are aggregated, and the resulting number is then compared to the 2010 baseline as a percentage change. Targets are derived from the City of Redmond travel model, given expected transportation investments and land use changes.

| Unit | Average annual percent change in pedestrian and bicycle traffic |
|---------------------|---|
| Baseline | 2010 |
| Objective | Increase bicycling 75 percent by 2030. Increase walking by 110 percent by 2030. |
| Reporting frequency | Yearly |
| Data source | City of Redmond Department of Planning and Community Development |

Percentage of Project Funding Completed with Leveraged Dollars

This is the percentage of committed project funding that is provided by project partners, such as the Washington State Department of Transportation or the federal government. Grant funding allows the City of Redmond to accomplish more improvements with each tax dollar.

| Unit | Percent of committed project funding coming from grants |
|---------------------|--|
| Baseline | 2010 |
| Objective | Fund 10 percent of the TFP with grants |
| Reporting frequency | Yearly |
| Data source | City of Redmond Department of Planning and Community Development |

Status of Three-Year Action Plan

This table reports the completion status of all Three-Year Action Plan items identified in Chapter 8. Together with concurrency, this performance measure provides an indication of whether the City is meeting its Transportation Master Plan implementation goals.

| Unit | Percent of Three-Year Action Plan items complete |
|---------------------|---|
| Baseline | 2012 |
| Objective | 100 percent for each three-year period |
| Reporting frequency | Yearly |
| Data source | City of Redmond Department Planning and Community Development |

Transit Performance

In addition to ridership—one of the dashboard performance measures—transit is evaluated on several other measures. These help staff work with regional transit providers to ensure a high quality of service for Redmond commuters and residents.

Service Hours

Service hours are the number of hours spent carrying passengers, plus associated deadhead hours. Service hours are one indicator of the amount of transit service provided.

| Unit | Service hours for routes serving Redmond |
|---------------------|--|
| Baseline | 2010 |
| Objective | Increase |
| Reporting frequency | Yearly |
| Data source | City of Redmond Department of Planning and Community Development |

Local and Regional Connections

| | |
|----------------------------|---|
| Unit | Frequency, travel time, and span of service for transit connections between the following list of origins and destinations: In Redmond: Downtown, Overlake, Education Hill, North Redmond, Avondale, Bear Creek, Southeast Redmond, Idylwood, Overlake Transit Center, Overlake Village, Grass Lawn, Willows Road Outside Redmond: Downtown Kirkland, Totem Lake, Downtown Bellevue, Crossroads, University District/UW, Downtown Seattle |
| Baseline | 2010 |
| Objective | Meet standards described in Transit chapter |
| Reporting frequency | Yearly |
| Data source | City of Redmond Department of Planning and Community Development |

Access

| | |
|----------------------------|--|
| Unit | The percentage of jobs and housing (2030 projection) with half-mile access to a transit stop |
| Baseline | 2010 |
| Objective | 80 percent of Redmond jobs and housing units |
| Reporting frequency | Every two years |
| Data source | City of Redmond Department of Planning and Community Development |

High Frequency Corridors

| | |
|----------------------------|---|
| Unit | Percent of high-frequency priority corridors (see Chapter 4-2) by length that are achieving their frequency targets |
| Baseline | 2012 |
| Objective | 15-minute headways or better from 6 a.m. to 6 p.m. |
| Reporting frequency | Yearly |
| Data source | City of Redmond |

Appendix C:

Concurrency Management and Level of Service

Introduction

The TMP represents a multimodal approach to addressing transportation and includes programs, projects, and services that are intended to serve the communities transportation and land use vision as articulated in the Redmond Comprehensive Plan. The City of Redmond's plan-based transportation concurrency system is a tool to ensure the pace of development does not exceed the pace at which the multimodal, growth-related program, projects, and services included in the TMP are implemented.

The 2004 Comprehensive Plan and 2005 TMP established the framework for a new plan-based concurrency management system that would ensure the City meets its level of service (LOS) standard of growth occurring proportionately and in parallel with development of the City's transportation system. This was a significant change from the prior LOS and concurrency management system which was based solely on measuring vehicle LOS at system intersections in seven Transportation Management Districts. This system was determined to be inconsistent with other Comprehensive Plan policy.

After the adoption of the 2005 TMP, the City embarked on a study to implement plan-based concurrency and the City's new LOS standard. The study resulted in establishing an LOS based on citywide person miles traveled, also referred to as Mobility Units. The study also resulted in updates to the City's Zoning Code consistent with Comprehensive Plan policy TR-27, which describes that Redmond's transportation concurrency management system is based on a "plan-based" approach to ensure that funding of programs, construction of projects, and provision of services occur in proportion to the needs of the City and the pace of growth. Another part of the study was determining how the new system would be administered to ensure implementation of growth-related multimodal transportation programs, projects, and services consistent with the Comprehensive Plan policy and the TMP. The resulting plan-based concurrency system now in place ensures the City is meeting the requirements of the Washington State Growth Management Act (GMA), while also simplifying the development review process.

The foundation of the plan-based concurrency system is an up-to-date plan of programs, projects, and services that supports the community land use vision. The TMP includes the Transportation Facilities Plan (TFP), which is multimodal in scope, financially constrained, and based on Redmond's 2030 vision of a balanced land use and transportation system. The TFP represents a plan that responds to existing growth trends and prepares for future growth in the city's two urban centers while continuing to improve transportation within established neighborhoods.

The TMP also includes a Performance Measurement chapter which provides transportation system monitoring beyond what is required in this chapter to meet GMA level of service and concurrency requirements. The Performance Measurement chapter provides specific performance measures

Plan-based concurrency is about building transportation capacity in a way that supports the community's vision.

reported out annually for various transportation modes allowing the City to better manage the transportation system. This also allows the concurrency management system to focus on ensuring that implementation of growth-related programs, projects, and services included in the TFP keeps pace with growth.

Framework

The plan-based concurrency system is based on analysis of 2030 land uses (as contained in the Comprehensive Plan) and the 2030 TFP, which is designed to provide sufficient capacity for that land use. To maintain concurrency, it will be necessary to appropriately pace land development with multimodal transportation system programs, projects, and services.

The overall concept for maintaining this critical balance of transportation concurrency in Redmond is shown in the figure below. The committed, complete, and existing “bucket” in the bottom right illustrates the short-term capacity that will be available to new development based on progress made by the City in implementing transportation programs, projects, and services.

Level of Service

The level of service measure for concurrency is to demonstrate completion of the multimodal transportation system is occurring at the same rate or a faster rate than the growth in travel demand.

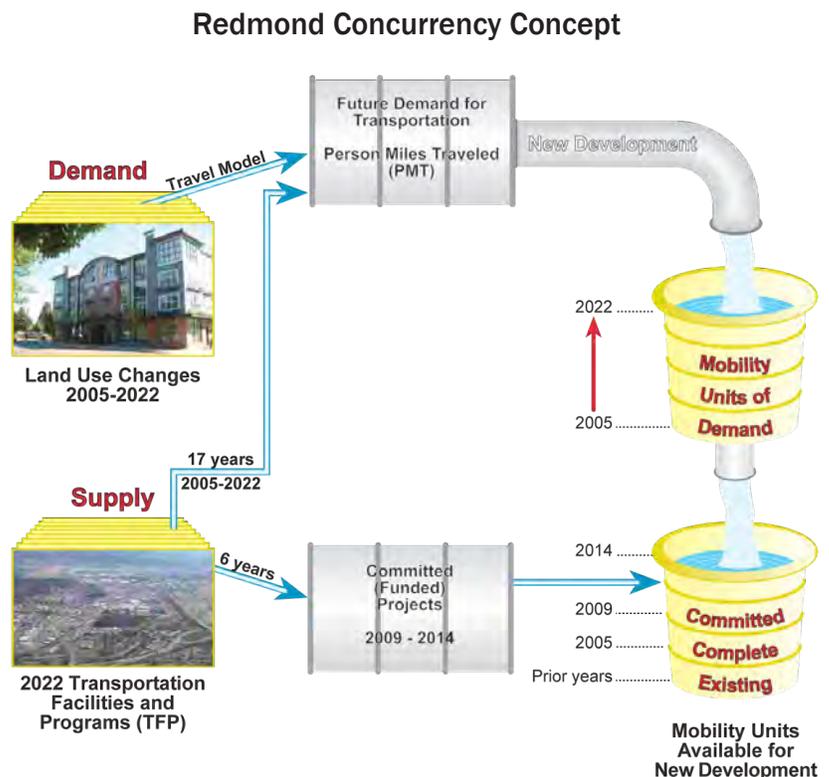
Demand

Measuring concurrency requires the creation of an apples-to-apples comparison between demand for and supply of multimodal transportation infrastructure. The starting point for this comparison is the development of a land use summary table. This table summarizes the total amount of new development, measured in the number of residential dwelling units and square feet of nonresidential space in 2010 and the 2030 land uses forecasted by district. The growth in development is calculated as the difference in the 2030 and 2010 land uses.

Conventional planning practice determines transportation impacts by calculating the number of automobile trips that will be generated by the forecast land uses. Using a multimodal approach, the new plan-based concurrency system relies on a mode-neutral measure known as the “mobility unit” (measured in terms of person miles traveled rather than vehicle miles traveled or automobile delay).

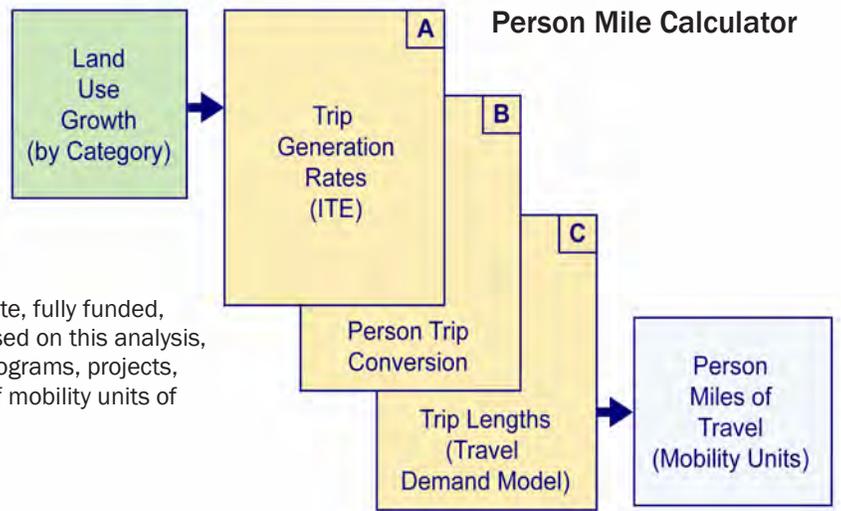
Supply

Based on adopted plans and policies, the list of transportation programs, projects, and services to be implemented by 2030 is expected to be sufficient to meet the travel demand generated by new development. A key element of the plan-based concurrency system is communicating how much of the 2030 TFP is implemented within the six-year concurrency window.



In order to measure the amount of capacity available for each travel mode (e.g., bicyclists, motorists, pedestrians, and transit users), the City developed a measure called “system completion.”

The analysis uses the capacity-enhancing list of transportation programs, projects, and services from the 2030 TFP with cost estimates for each. Next, the analysis evaluates their status by determining how many projects are complete, fully funded, or partially funded in the City’s Six-Year Program. Based on this analysis, the percent of committed capacity-enhancing TFP programs, projects, and services is determined, as well as the number of mobility units of supply available.



Concurrency Management

Using the calculations described for supply and demand above, concurrency is determined by comparing the available transportation mobility units against the demand for mobility units generated by new development. To manage the pace of development in the short term, the concurrency test focuses on “how much room is left in the Six-Year Bucket?” This test entails a comparison of the available mobility units based on projects funded or constructed in the time horizon of the Six-Year Program, as required under the GMA. One important step in this process is to account for the mobility units that have been allocated for “pipeline” development projects that have been approved by the City but not yet occupied.

Available Mobility Units - Comparing Supply to Demand

The available mobility units are calculated by comparing the available supply to the demand. As shown below, the supply of mobility units represents the proportion of the TFP that is committed to be built during the next six years. As previously described, approximately 60 percent of the mobility units are currently available for development. The current demand for mobility units is represented by the amount of pipeline development approved within the city.

Management System and Development Review

Under the proposed plan-based concurrency system, concurrency approval of a proposed development is based on the availability of mobility units within the mandated six-year time frame. To manage the pace of development in the short term, the concurrency test will focus on “how much room is left in the Six-Year Bucket?” This test will entail a comparison of the available mobility units based on projects funded or completed in the Six-Year Program time horizon, as required under the GMA.

As part of the concurrency review process, each development proposal would be analyzed to determine the number of mobility units expected to be generated by the development. This demand for mobility units would then be compared to the available mobility units within the City’s Six-Year Program. If sufficient mobility units are available, then the development is considered to be concurrent.

If the development is deemed to be not concurrent, then the applicant would need to wait until additional mobility units become available or pay for additional mobility units to offset the impacts of the development. Mobility units become available as additional projects are funded and committed by the City within its Six-Year Program, the Transportation Improvement Program, and Capital Investment Program. Alternatively, an applicant could agree to accelerate the implementation of key infrastructure projects in order to provide sufficient transportation system capacity. This process would be similar to the supplemental mitigation procedures currently used under the City’s existing concurrency regulations.

Once concurrency is achieved, the proposed development would need to comply with SEPA requirements, applicable City zoning and building codes, and pay transportation impact fees.

Trends and Conditions

Comparing Supply and Demand

The current demand for mobility units (person miles of travel) is based on the total amount of development that is either in the development design and review “pipeline,” under construction or complete during the planning horizon. Based on current development, 35,429 mobility units of demand planned for in the 2005 Transportation Master Plan have been allocated to these projects.

The current supply for mobility units is based on the total amount of capacity-enhancing programs, projects, and services in the Transportation Facility Plan which are either complete or committed. This is also referred to as system completion. Based on analysis of completed projects and the current Six-Year TIP, there are 44,060 mobility units of supply available.

The comparison of current mobility unit demand and mobility unit supply available determines the amount of mobility units available for new development. The City currently has 8,631 mobility units of supply available ($44,060 - 35,429 = 8,631$).

System Completion

System completion refers to the portion of the TFP that is complete or committed. The result of this analysis showed that the total system completion equals the sum of the Six-Year Transportation Improvement Program (TIP)/Capital Improvement Program (CIP) (60 percent).

Highway Levels of Service

The Washington State Growth Management Act requires that cities’ comprehensive plans include “[e]stimated traffic impacts to state-owned transportation facilities resulting from land use assumptions to assist the department of transportation in monitoring the performance of state facilities, to plan improvements for the facilities, and to assess the impact of land-use decisions on state-owned transportation facilities.”¹ Redmond has two state routes within its borders: SR 520 and SR 202 (Redmond-Woodinville Road NE/Redmond Way). Table 13. Significance includes volume-to-capacity (V/C) ratios for the Redmond extents of these facilities for the 2010 baseline and in 2030 with projected land use changes and completion of the Transportation Facilities Plan (see Chapter 7 – Transportation Facilities Plan). The 2030 land use data used in estimating the V/C ratios are consistent with the adopted 2030 land use growth targets for the City of Redmond (see Chapter 2 – Trends and Conditions).

¹ RCW 36.70A.070(6)(a)(ii)

Mobility Units Concept

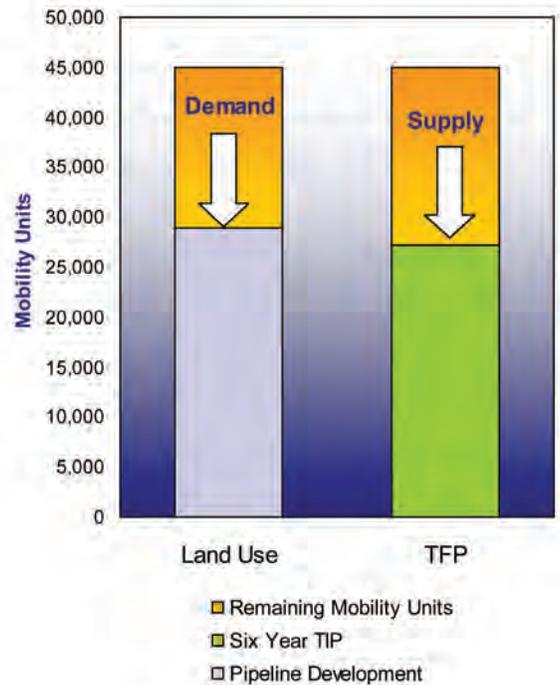


Table 13. V/C ratios for highways of state significance in Redmond

| Corridor | Volume to Capacity (V/C Ratio) | | | |
|---|--------------------------------|------|----------|------|
| | 2010 | | 2030 TFP | |
| | MD | PM | MD | PM |
| SR 520 WB from Redmond Way to West Lake Sammamish Parkway NE | 0.79 | 0.82 | 0.89 | 0.89 |
| SR 520 EB from Redmond Way to West Lake Sammamish Parkway NE | 0.75 | 1.16 | 0.84 | 1.17 |
| SR 520 WB from West Lake Sammamish Parkway NE to NE 51st Street | 0.61 | 0.55 | 0.67 | 0.57 |
| SR 520 EB from West Lake Sammamish Parkway NE to NE 51st Street | 0.62 | 0.85 | 0.62 | 0.89 |
| SR 520 WB from NE 51st Street to NE 40th Street | 0.61 | 0.57 | 0.71 | 0.67 |
| SR 520 EB from NE 51st Street to NE 40th Street | 0.42 | 0.62 | 0.54 | 0.72 |
| SR 520 WB from NE 40th Street to 148th Avenue NE | 0.58 | 0.54 | 0.72 | 0.71 |
| SR 520 EB from NE 40th Street to 148th Avenue NE | 0.49 | 0.58 | 0.6 | 0.68 |
| Redmond Woodinville Road NE (SR 202) from NE 90th Street to NE 124th Street | 0.92 | 1.34 | 1.06 | 1.66 |
| Red-Wood Road (SR 202) from NE 85th Street to NE 90th Street | 0.73 | 0.81 | 0.79 | 0.97 |
| 164th Avenue NE (SR 202) from NE 85th Street to Redmond Way | 0.74 | 0.83 | 0.92 | 1.07 |
| Redmond Way (SR 202) from 164th Avenue NE to 170th Avenue NE | 0.52 | 0.5 | 0.84 | 1.08 |
| Redmond Way (SR 202) from 170th Avenue NE to SR 520 | 0.89 | 0.98 | 1.07 | 1.12 |
| Redmond Way (SR 202) from SR 520 to East Lake Sammamish Parkway NE | 0.85 | 1.17 | 1.09 | 1.36 |
| Redmond Way (SR 202) from East Lake Sammamish Parkway NE to 185th Avenue NE | 0.72 | 1.04 | 0.87 | 1.21 |
| Redmond Way (SR 202) from 185th Avenue to east city limits | 0.66 | 1.03 | 0.83 | 1.26 |

Implementation and Action Steps

Once the TMP update is adopted, the concurrency management system will be recalculated using the adopted 2013-2030 Transportation Facility Plan from the TMP and the 2010-2030 growth targets from the Comprehensive Plan. The amount of “pipeline” development will also be updated to reflect the new 2013-2030 planning horizon. The result of this update will be an updated number of Mobility Units of supply available for new development.

Once the status of the concurrency management system has been updated, implementation of the growth related portion of the TFP annually and new development proposals will be tracked as developers apply for concurrency. Based on this information, the Mobility Units of supply available for new development will remain up to date.

Appendix D: Street Classification System

Introduction

The functional classification of a street depends on its purpose and role in serving transportation mobility, access, and circulation needs. Streets may:

- Connect Redmond's urban centers to other parts of the region.
- Connect neighborhoods with urban centers.
- Provide internal circulation within neighborhoods.

The functional classification also considers the role of each corridor in supporting Redmond's multimodal transportation system. The street design is based on its functional classification.

Redmond's functional classification system organizes streets into the following categories:

- The SR 520 Freeway
- Principal Arterial
- Minor Arterial
- Collector Arterial
 - Connectors
 - Local Access
 - Shared Streets

SR 520 Freeway

The SR 520 Freeway is a high-capacity, high-speed highway connecting Redmond with the region. SR 520 is the city's most significant multimodal corridor and serves as the alignment for the East Link light rail line between Redmond and Seattle. Furthermore, the SR 520 Trail along SR 520 is a priority pedestrian/bicycle corridor.

The SR 520 Freeway requires massive infrastructure and wide rights-of-way (up to 300 feet or more) and is intended to carry heavy volumes of traffic at high speeds, including a relatively large percentage of trucks. The freeway is a limited access highway. Adjacent land uses include commercial office and retail uses, residential uses, open space, parks, and industrial uses.

SR 520 terminates at Avondale Road, a principal arterial. All interconnections with other roadway classifications are accomplished through grade-separated interchanges. The SR 520 Freeway is a divided highway with at least two general purpose and one HOV lane in each direction. Lanes are at least 12 feet wide with inside and outside paved shoulders provided. Design geometry is based on relatively high travel speeds. There are no at-grade pedestrian crossings and no bike lanes adjacent to vehicular travel lanes. In certain instances bicycles may be allowed to utilize paved shoulders or may be accommodated in separate trail facilities within the right-of-way.

Traffic calming and speed reduction measures are not applicable to the SR 520 Freeway. Noise and visual mitigation measures may be appropriate in specific settings. Interchanges are to be located far enough apart to safely accommodate merging and weaving maneuvers.

The SR 520 Freeway will continue to accommodate regional and interregional transit routes and the SR 520 Trail will continue to provide safe travel for cyclists and pedestrians.

Principal Arterial

A principal arterial provides capacity and continuity for travel between different areas of the region. Adjacent land uses may include residential and commercial areas, open space, public lands, industrial sites, and institutional sites. The activity center for a neighborhood will often be located along a principal arterial or at the intersection of a principal arterial with another principal arterial or a collector arterial.

Principal arterials connect typically with freeways or other principal arterials. Direct connections with other roadways are provided via at-grade intersections. Principal arterials may have as many as four through lanes, but will generally be designed as divided facilities with a center median. Turn lanes will be provided as turning movements warrant and may include left-turn lanes and right-turn lanes, or in five-lane or three-lane configurations may include a two-way continuous left-turn lane.

Clearly marked crosswalks will be provided at all legs of every signalized intersection unless their absence is warranted. On-street bicycle lanes may be provided even if alternative, close-by, parallel facilities are available. Sidewalks will be included on both sides of the street and will be separated from vehicle lanes by a buffer strip. While serving as the separation between vehicles and pedestrians, the buffer strip will use vegetation to treat stormwater runoff using rain gardens or bioswales.

Traffic calming and speed reduction measures are generally not applicable to principal arterials. Principal arterials will be designed with partial control of access through the City's access management system. On-street parking will not generally be allowed.

Principal arterials shall provide for transit circulation and access, including bus stops and bulb-outs. Pedestrian facilities in the corridor including connections to transit, will be designed to provide safety and comfort, and standards may increase in pedestrian zones.

Minor Arterial

A minor arterial provides capacity and continuity for travel between different areas of the region, but will not have the capacity and significance of principal arterials. Adjacent land uses may include residential and commercial areas, open space, public lands, industrial sites, and institutional sites. The activity center for a district will often be served by minor arterials and may include the intersections of minor arterials with principal arterials and collector arterials.

Minor arterials terminate only at freeways, principal arterials, or other minor arterials. Direct connections with other roadways are provided via at-grade intersections. Minor arterials may have as many as four through lanes and may or may not have median dividers. Turn lanes are provided as movements warrant and may include left-turn lanes and right-turn lanes, or in a three-lane configuration may include a two-way continuous left-turn lane.

Clearly marked crosswalks are provided at all legs of every signalized intersection unless their absence is warranted. On-street bicycle lanes may be provided even if alternative, close-by, parallel facilities are available. Sidewalks will be included on both sides of the street and will be separated from vehicle lanes by a buffer strip. While serving as the separation between vehicles and pedestrians, the buffer strip will use vegetation, such as rain gardens or bioswales, to treat stormwater runoff.

Traffic calming and speed reduction measures are generally applicable to minor arterials only in areas where sensitive land uses (residential property, schools, public parks, and certain other public institutions) directly abut the roadway or are nearby. Minor arterials will be designed with partial control of access through the City's access management system. On-street parking will be allowed only in commercial areas.

Minor arterials shall include provisions for transit circulation and access, including bus stops and bulb-outs. Pedestrian facilities in the corridor will be designed to provide safety and comfort, and standards may increase in pedestrian zones.

Collector Arterial

A collector arterial receives traffic from connectors and local streets and provides access to principal arterials. Collectors are generally not intended to serve regional trips and generally do not provide route continuity for more than a mile or two.

These roadways are generally contained entirely within the city and connect neighborhoods with each other. Adjacent land uses may include residential areas, commercial areas, open space, public lands, industrial sites, and institutional sites.

Collectors terminate only at principal arterials, minor arterials, or other collector arterials. Direct connections with other roadways are provided via at-grade intersections. Collector arterials have two through/general purpose lanes without a center median. Turn lanes are provided as turning movements warrant, and may include left-turn lanes and right-turn lanes, or in a three-lane configuration may include a two-way continuous left-turn lane.

Clearly marked crosswalks are provided at all legs of signalized intersections and in the vicinity of schools unless their absence is warranted. On-street bicycle lanes may be provided even if alternative, close-by, parallel facilities are available. Sidewalks to treat stormwater runoff are included on both sides of the street and are separated from vehicle lanes by a buffer strip. While serving as the separation between vehicles and pedestrians, the buffer strip will use treatment such as rain gardens or bioswales.

Traffic calming and speed reduction measures are applicable to collector arterials, primarily in areas where sensitive land uses (residential property, schools, public parks, and certain other public institutions) directly abut the roadway or are nearby. Collector arterials will be designed with partial control of access through the access management system. On-street parking will be allowed only in commercial areas.

Collector arterials shall include provisions for transit circulation and access, including bus stops and bulb-outs. Pedestrian facilities in the corridor will be designed to provide safety and comfort, and standards may increase in pedestrian zones.

Local Streets

There are three types of local streets listed in hierarchical order: connectors, local access, and shared streets.

Connectors

Connectors are specially designated local streets that provide for direct vehicle, bicycle, and pedestrian connections between adjacent neighborhoods, and between neighborhoods and commercial areas. Connectors do not serve trans-regional trips and provide no route continuity beyond the areas they serve. Adjacent land uses may include residential areas, commercial areas, open space, public lands, industrial sites, and institutional sites.

Connectors terminate at collector arterials, minor arterials, and/or local streets. Direct connections with other roadways are provided via at-grade intersections. Connectors have only two through/general purpose lanes. Turn lanes will not be provided unless unusual circumstances warrant, in which case they may include left-turn lanes only.

Bicycle circulation will typically be accommodated in lanes shared with motor vehicle traffic. Sidewalks are included on both sides of the street and are separated from vehicle lanes by a buffer strip. While serving as the separation between vehicles and pedestrians, the buffer strip will use treatments such as rain gardens or bioswales to treat stormwater runoff.

Traffic calming and speed reduction measures may be used on connectors as warranted by adjacent land uses and traffic characteristics. Connectors are designed with partial control of access through the access management system. On-street parking will be allowed where adequate roadway width is available.

The City may map and specify future connector alignments and may require dedication of rights-of-way for these facilities.

Local Access

Local access streets provide direct connections to and within single-family neighborhoods and typically terminate at connector or collector streets. These streets provide for direct vehicle, bicycle, and pedestrian access to commercial and residential land uses. Local streets do not serve regional trips and provide no route continuity beyond the areas they connect. Adjacent land uses may include residential properties, commercial areas, industrial sites, and institutional sites.

Local streets may terminate at principal arterials, minor arterials, collectors, connectors, or other local streets. Direct connections with other roadways are provided via at-grade intersections.

Local streets have only two through/general purpose lanes. Left-turn lanes may be provided only in unusual circumstances. Clearly marked crosswalks are provided at signalized intersections or at other locations where warranted because of the proximity of schools or significant pedestrian activity.

On-street bicycle lanes will not be provided; rather, bicycle circulation will be accommodated in lanes shared with motor vehicle traffic. Sidewalks are included on both sides of the street and will be separated from vehicle lanes by an appropriate buffer strip. Traffic calming and speed reduction measures are applicable to local streets as warranted by adjacent land uses and traffic characteristics.

Local streets are designed with partial control of access through the access management system. On-street parking will be allowed where adequate roadway width is available.

Shared Streets

Shared streets are slow-speed streets shared by pedestrians, cyclists, and vehicles. Shared streets allow people to use the public right-of-way for a variety of activities during the course of a typical day and enjoy the outside active life. In a shared street, every user yields to any more vulnerable user. Pedestrians may use the full width of the street within an area defined as a shared street; playing on the roadway is also permitted. Drivers within a shared street may not drive faster than a walking pace. They must make allowance for the possible presence of pedestrians, including children at play, unmarked objects and irregularities in the road surface, and the alignment of the roadway.

In Redmond, some local streets will be transitioned to shared streets, which are appropriate on a residential, limited use, or other low-volume street, where the neighborhood desires to create a public space for social activities and play. Shared streets are also appropriate on streets with commerce where there is a desire to create an active and attractive people-oriented area.

Shared streets have:

- Special paving and surface treatment to identify these streets as unique people places.
- Flush or reduced curb height and nonexistent curb sidewalk to encourage pedestrians to use the entire street rather than street edges.
- Narrow vehicular lanes to create a safe and comfortable environment for pedestrians and cyclists.
- Chicanes to slow drivers by adding curves to the travel lane to indicate that they are entering a pedestrian area.
- High-quality and artistic street furniture to announce that people are welcome and create a friendly pedestrian environment.
- Plants to increase the quality of the urban space and the pedestrian experience.

Where appropriate, curb extensions, gateways, pedestrian lighting, art, and play elements are used to improve safety and entice people to enjoy shared street.

Shared streets will not provide entrance to garages or loading/unloading docks.

Streets designated as shared streets are shown in Zoning Code, Exhibit A. Downtown Chapter, Pedestrian System, page 74 of 87. This can be found at http://zoningplus.com/regs/redmond/media/files/PDF/Map10_3_RZC_20130216.pdf.

Figure 60 and Tables 14 through 17 define the functional classification for all streets in the City of Redmond except local streets. Tables 14 through 17 also identify the number of future general purpose through lanes and modal priorities except that of pedestrians (which are covered in Chapter 4: Pedestrian System). Modal priorities correspond to modal corridors designated in Figure 28 of Chapter 4. Abbreviations are used in indicating modal priorities: A - Automobile, B - Bike, and T - Transit.

Table 14. Principal arterial streets

| Principal Arterial Streets | The Number of Future General Purpose Through Lanes | Modal Priorities |
|---|--|------------------|
| Avondale Road NE (Avondale Way to Avondale north city limits) | 4 | A, B, T |
| Avondale Road NE (Union Hill Road to Avondale Way) | 4 | A, T |
| Bear Creek Parkway (Redmond Way west to Redmond Way east) | 4 | A |
| Bel-Red Road (NE 20th Street to West Lake Sammamish Parkway) | 4 | |
| NE 90th Street - 154th Avenue NE to 160th Avenue NE | 4 | A, T |
| NE 90th Street - 160th Avenue NE to Red-Wood Road | 2 | A |
| NE 90th Street - Willows Road to 154th Avenue NE | 2 | A, T |
| Redmond Way (east city limits to Bear Creek Parkway east) | 4 | A |
| Redmond Way (west city limits to Bear Creek Parkway west) | 4 | A |
| Redmond-Woodinville Road - NE 90th Street - NE 116th Street | 2 | A |
| Redmond-Woodinville Road - NE 116th Street - NE 124th Street | 2 | A |
| West Lake Sammamish Parkway NE - NE 51st Street to Redmond Way | 4 | A, B |
| West Lake Sammamish Parkway NE (Bel-Red Road to NE 51st Street) | 4 | A, B |
| 124th Avenue NE (Willows Road to Avondale Road) | 2 | A |
| 148th Avenue NE (NE 20th Street to Willows Road) | 4 | A, T |
| 154th Avenue NE (NE 85th Street to NE 90th Street) | 2 | A |
| 154th Avenue NE (West Lake Sammamish Parkway to NE 85th Street) | 4 | A, T |

Table 15. Minor arterial streets

| Minor Arterial Streets | The Number of Future General Purpose Through Lanes | Modal Priorities |
|--|--|------------------|
| Avondale Way NE (Avondale Road NE to NE 79th Street) | 3 | A, T |
| Avondale Way (NE 79th Place to Redmond Way) | 3 | B |
| East Lake Sammamish Parkway NE (Redmond Way to 187th Avenue NE) | 2 | |
| Leary Way NE (NE 76th Street to NE 80th Street) | 2 | |
| Leary Way NE (West Lake Sammamish Parkway to NE 76th Street) | 4 | |
| NE 20th Street (148th Avenue NE to Bel-Red Road) | 4 | A |
| NE 24th Street (148th Avenue NE to Bel-Red Road) | 3 | P |
| NE 24th Street (city limits to West Lake Sammamish Parkway NE) | 2 | T |
| NE 31st/NE 36th Streets (152nd Ave NE to 156th Ave NE) | 2 | T |
| NE 40th Street (SR 520 to West Lake Sammamish Parkway) | 4 | B, T |
| NE 40th Street (west city limits to SR 520) | 4 | T |
| NE 51st Street (148th Avenue NE to 156th Avenue NE) | 4 | T |
| NE 51st Street (156th Avenue NE to West Lake Sammamish Parkway) | 2 | |
| NE 80th Street (Leary Way to 164th Avenue NE) | 2 | B |
| NE 85th Street (154th Avenue NE to 161th Avenue NE) | 2 | T |
| NE 85th Street (161st Avenue NE to 166th Avenue NE) | 2 | |
| NE Union Hill Road (east city limits to 188th Avenue NE) | 4 | A |
| NE Union Hill Road (188th Avenue NE to Avondale Way) | 4 | A |
| Novelty Hill Road (east city limits to Avondale Road NE) | 4 | |
| Old Redmond Road (west city limits to West Lake Sammamish Parkway) | 2 | B |
| Redmond Way (Bear Creek Parkway to 170th Avenue NE) | 2 | |
| Redmond-Woodinville Road (NE 90th Street to Cleveland Street) | 2 | |
| West Lake Sammamish Parkway NE (Bel-Red Road to NE 40th Street) | 2 | B |
| West Lake Sammamish Parkway NE (NE 24th Street to south city limits) | 2 | T |
| West Lake Sammamish Parkway NE (NE 40th Street to NE 24th Street) | 2 | T |

Table 15. Minor arterial streets (continued)

| Minor Arterial Streets | The Number of Future General Purpose Through Lanes | Modal Priorities |
|--|--|------------------|
| Willows Road (NE 90th Street to north city limits) | 4 | A, T |
| Willows Road (Redmond Way to NE 90th Street) | 4 | A |
| 140th Avenue NE (Redmond Way to south city limits) | 2 | |
| 152nd Avenue NE (NE 20th Street to NE 24th Street) | 2 | B |
| 152nd Avenue NE (NE 24th Street to NE 31st Street) | 2 | B, T |
| 156th Avenue NE (NE 51st Street to NE 31st Street) | 4 | P,T |
| 156th Avenue NE (NE 31st Street to NE 24th Street) | 4 | T |
| 164th Avenue NE Extension (NE 76th Street to Cleveland Street) | 2 | |
| 170th Place NE/Avenue NE (Redmond Way to Avondale Way) | 4 | A |
| 188th Avenue NE (between Union Hill Road & Redmond-Fall City Road) | 2 | |

Table 16. Collector arterial streets

| Collector Arterial Streets | The number of Future General Purpose Through Lanes | Modal Priorities |
|--|--|------------------|
| Cleveland Street (160th Avenue NE to 168th Avenue NE) | 2 | |
| NE 27th Street/NE 28th Street (150th Avenue NE to 156th Avenue NE) | 2 | |
| NE 28th Street (Overlake Access Ramp to 152nd Avenue NE) | 2 | |
| NE 31st Street/NE 36th Street (SR 520 Trail to 152nd Avenue NE) | 2 | B |
| NE 36th Street (148th Avenue NE to SR 520 Trail) | 2 | |
| NE 60th Street (154th Avenue NE to 156th Avenue NE) | 2 | |
| NE 76th Street (Redmond Way to 180th Avenue NE) | 2 | A, T |
| NE 76th Street (180th Avenue NE to 188th Avenue NE) | 2 | T |
| NE 80th Street (132nd Avenue NE to Redmond Way) | 2 | |
| NE 83rd Street (158th Avenue NE to 161st Avenue NE) | 2 | |

Table 16. Collector arterial streets (continued)

| Collector Arterial Streets | The number of Future General Purpose Through Lanes | Modal Priorities |
|---|--|------------------|
| NE 83rd Street (161st Avenue NE to 166th Avenue NE) | 2 | T |
| NE 104th Street/NE 109th Street (Redmond-Woodinville Road to 166th Avenue NE) | 2 | B |
| NE 104th Street (166th Avenue NE to Avondale Road) | 2 | T |
| NE 111th Street (166th Avenue NE to 172nd Avenue NE) | 2 | |
| NE 116th Street (Red-Wood Road to Avondale Road NE) | 2 | |
| NE 116th Street (Willows Road to 154th Place NE) | | |
| 150th Avenue NE (NE 36th Street to NE 51st Street) | 2 | |
| 151st Avenue NE (NE 20th Street to NE 28th Street) | | |
| 154th Avenue NE (NE 60th Street to Old Redmond Road) | 2 | |
| 154th Place NE (Red-Wood Road to NE 116th Street) | 2 | |
| 156th Avenue NE (NE 51st Street to NE 60th Street) | 2 | |
| 159th Place NE (Bear Creek Parkway to Leary Way) | 2 | |
| 160th Avenue NE (NE 85th Street to NE 90th Street) | 2 | T |
| 160th Avenue NE (NE 90th Street to Red-Wood Road) | 2 | |
| 160th Avenue NE (Redmond Way to NE 85th Street) | 2 | |
| 161st Avenue NE (NE 83rd Street to Redmond Way) | 2 | |
| 161st Avenue NE (NE 85th Street to NE 83rd Street) | 2 | T |
| 161st Avenue NE (NE 90th Street to NE 85th Street) | 2 | |
| 161st Avenue NE (Redmond Way to Bear Creek Parkway) | 2 | |
| 166th Avenue NE (NE 76th Street to NE 83rd Street) | 2 | |
| 166th Avenue NE (NE 83rd Street to NE 85th Street) | 2 | T |
| 166th Avenue NE (NE 85th Street to NE 104th Street) | 2 | T |
| 166th Avenue NE (NE 104th Street to NE 111th Street) | 2 | |
| 169th Avenue NE (NE 79th Street to NE 80th Street) | 2 | |
| 172nd Avenue NE (NE 111th Street to NE 116th Street) | 2 | B |
| 172nd Avenue NE (West Lake Sammamish Parkway to NE 30th Street) | 2 | |
| 178th Place NE/180th Avenue NE (NE 76th Street to Union Hill Road) | 2 | T |
| 180th Avenue NE (Redmond Way to NE 76th Street) | 2 | |

Table 16. Collector arterial streets (continued)

| Collector Arterial Streets | The number of Future General Purpose Through Lanes | Modal Priorities |
|---|--|------------------|
| 185th Avenue NE (NE 68th Street to SR 202/Redmond-Fall City Road) | 2 | T |
| 185th Avenue NE (NE 76th Street to NE 68th Street) | 2 | |
| 185th Avenue NE (Union Hill Road to NE 76th Street) | 2 | A |

Table 17. Connector streets

| Connector Streets | General Purpose Through Lanes | | Modal Priorities |
|---|-------------------------------|--------|------------------|
| | Widest Existing | Future | |
| Avondale Way (Redmond Way to NE 76th Street) | 0 | 2 | |
| NE 65th Street (185th Avenue NE to 192nd Avenue NE) | 0 | 2 | |
| NE 73rd Street (185th Avenue NE to 192nd Avenue NE) | 0 | 2 | |
| NE 76th Street (Leary Way to Bear Creek Parkway) | 2 | 2 | |
| NE 80th Street (169th Avenue NE to 172nd Avenue NE) | 2 | 2 | |
| NE 80th Street (185th Avenue NE to 188th Avenue NE) | 0 | 2 | |
| NE 100th Street (166th Avenue NE to 171st Avenue NE) | 2 | 2 | |
| 158th Avenue NE (NE 83rd Street to Redmond Way) | 0 | 2 | |
| 158th Avenue NE (NE 85th Street to NE 83rd Street) | 2 | 2 | |
| 168th Avenue NE (Redmond Way to NE 79th Street) | 2 | 2 | |
| 171st Avenue NE (NE 80th Street to NE 88th Street) | 2 | 2 | B |
| 171st Avenue NE (NE 88th Street to NE 100th Street) | 2 | 2 | |
| 172nd Avenue NE (NE 116th Street to NE 128th Street) | 2 | 2 | |
| 187th Avenue NE (East Lake Sammamish Parkway to SR 202) | 2 | 2 | |
| 192nd Avenue NE (Union Hill Road to NE 65th Street) | 0 | 2 | |

Appendix E:

The Unfunded Buildout Plan

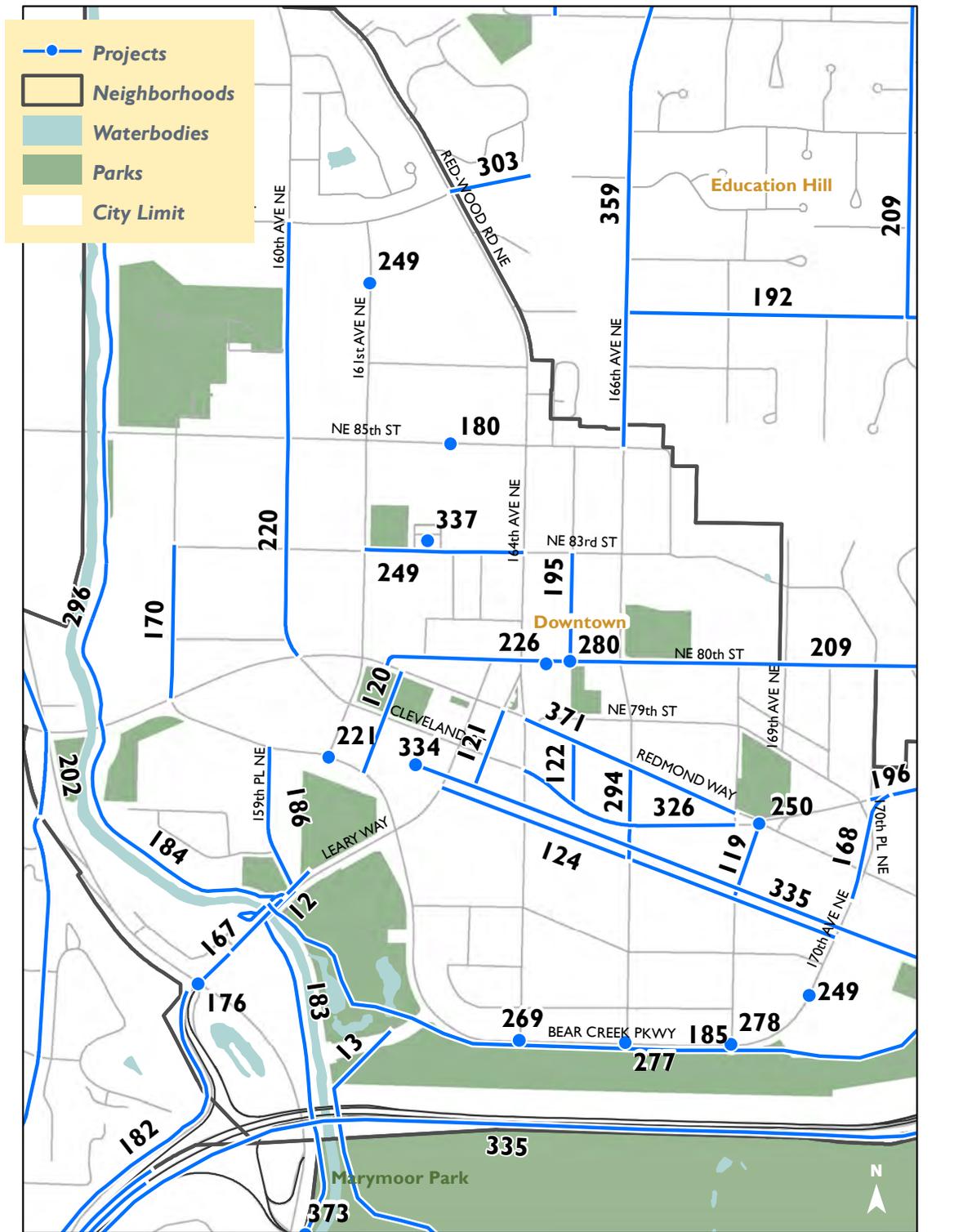
The unfunded Buildout Plan includes capital improvements needed for Redmond to complete its long-range transportation system, but which do not currently have identified sources of City funding for the 2013-2030 timeframe. There are a number of regional projects important to the long-range transportation system also included on this list. Please refer to Chapter 6 Regional Transportation for more information on the timeline and status of funding for these projects.

With 198 capital improvements, the unfunded portion of the Buildout Plan serves as a guide for completing Redmond's transportation system. Included in this list are potential system improvements (capacity projects that benefit the overall transportation system) that could move to the Transportation Facilities Plan if funding becomes available. In addition, there are candidate projects for the pedestrian, bicycle, targeted safety, and preservation programs. The candidate projects for potential program funding are not a complete list but include those needed projects that have been specifically identified by the community or through a separate approved plan. As Redmond evolves and travel needs of the community develop, revisions to the Buildout Plan will be needed and new capital improvements are expected to be added. Unfunded Buildout Plan projects are listed in numerical order, grouped by location: Downtown, Overlake, and the remaining neighborhoods. The numbers are for the purpose of locating projects on the maps and do not reflect a priority order.

Table 18. Downtown projects

| DOWNTOWN PROJECTS | | | | | |
|-------------------|--|--|---|--|--|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 12 | Regional Trail Interchange Improvements | 520 Trail | 520 Trail | Sammamish River Trail and Bear Creek Trail | Improve the intersection of three regional trails to reduce safety hazards and add capacity for bicycles and pedestrians. Build new bridge, preferably at height of trails on north side of Leary Way bridge. Coordinate with Project 167 Leary Way bridge widening. |
| 13 | Redmond Town Center To Marymoor Trail Connection | Redmond Town Center To Marymoor Trail Connection | Bear Creek Trail at Redmond Town Center | Marymoor Park | Construct nonmotorized bridge from Bear Creek Trail and Redmond Town Center to Marymoor Park underneath east side of SR 520 bridge over the Sammamish River. |
| 119 | Avondale Way Extension | Avondale Way Extension | Redmond Way at Avondale Way | NE 76th Street at 168th Avenue NE | Construct a new north/south connection between Redmond Way and NE 76th Street. Improvements include one lane in each direction, sidewalks, bicycle lanes, utilities, street lights, trees, signs, and stormwater treatments. |
| DOWNTOWN PROJECTS | | | | | |

Unfunded Buildout Plan – Downtown



Note: projects shown are conceptual only; actual alignments may vary.



Figure 61. Unfunded Buildout Plan – Downtown

Table 18. Downtown projects (continued)

| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
|--------------------------|---------------------------------|---------------------------|----------------------|---------------------------|--|
| 120 | Brown Street Woonerf | Brown Street | Redmond Way | Bear Creek Parkway | In conjunction with the Downtown Park, construct a street designed primarily for pedestrians and bicycles, allowing business access but no on-street parking or significant vehicle movements. This woonerf will have a slow design speed, with pedestrians and bicyclists provided priority over vehicles within the roadway and design elements including narrow roadway lanes, special paving treatments, pedestrian amenities, low impact development techniques, public art, lighting, and utilities. |
| 121 | Gilman Street Woonerf | Gilman Street | 164th Avenue NE | Redmond Central Connector | Construct a street designed primarily for pedestrians and bicycles, allowing business access but no significant vehicle movements. This woonerf will have a slow design speed, with pedestrians and bicyclists provided priority over vehicles within the roadway and design elements including narrow roadway lanes, special paving treatments, pedestrian amenities, low impact development techniques, public art, lighting, and utilities. |
| 122 | 165th Ave NE Extension | 165th Avenue NE Extension | Redmond Way | Cleveland Street | Construct a new north/south connection between Redmond Way and Cleveland Street, realign the NE 79th Street connection to Redmond Way. Improvements include intersection improvements, one lane in each direction, sidewalks, bicycle lanes, utilities, street lights, trees, signs, plaza space, and stormwater treatments. |
| 124 | NE 76th Street Ped Improvements | NE 76th Street | Leary Way | 170th Ave NE | Improve NE 76th St from Leary Way to 170th Ave NE to create a lively and active street. This pedestrian supportive street would include one through lane in each direction, parking, sidewalks, street lights, pedestrian amenities, storm drainage, utility relocation and easements. This improvement project could also include light rail transit depending on timing and final alignment. |
| DOWNTOWN PROJECTS | | | | | |

Table 18. Downtown projects (continued)

| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
|--------------------------|---|---|-----------------------------|---------------------------|--|
| 167 | Leary Way Reconfiguration | Leary Way | West Lake Sammamish Parkway | 159th PI NE | Reconfigure Leary Way Sammamish River Bridge and widen street from West Lake Sammamish Parkway to 159th Place NE. Improvements would include two through lanes in each direction, left turn lanes, lighting, transit amenities, pedestrian bridge on north side and right-of-way. Coordinate with Project 12, bicycle and pedestrian bridge project. |
| 168 | 170th Place NE Widening | 170th PI NE (Bear Creek Parkway Extension, east) | Redmond Way | Avondale Way | Widen and reroute 170th Place NE from Redmond Way to Avondale Way. Improvements would include 2 through lanes in each direction, left-turn lanes, sidewalks, street lights, storm drainage, and right-of-way and easements. |
| 170 | 158th Ave NE Extension | 159th Ave NE | Redmond Way | NE 83rd St | Construct new 159th Ave NE from Redmond Way to NE 83rd St. Improvements include one through lane in each direction, parking, sidewalks, street lights, pedestrian amenities, transit stop amenities, storm drainage, right-of-way and easements. |
| 176 | West Lake Sammamish Parkway & Leary Way Intersection Improvements and 520 Regional Trail Crossing | West Lake Sammamish Parkway at Leary Way | | | Intersection modification. Construct either a multilane roundabout or double left-turn lanes (WLSP southbound to Leary Way eastbound) and add a lane on Leary Way from West Lake Sammamish Parkway to the bridge over the Sammamish River. Construct a grade-separated crossing for SR 520 Trail. The trail crossing across West Lake Sammamish Parkway that connects the end of the 520 Regional Trail to the Sammamish River Regional Trail. |
| 180 | NE 85th Street Midblock Crossing | 85th Street between 161st Ave NE and 164th Ave NE | | | With the Post Office site moving, remove existing right-turn lane and add a mid-block crossing with curb bulbs connecting existing and future interior pathways. |
| 182 | SR 520 Trail Lighting | 520 Trail | Sammamish River Trail | 148th Ave NE/ City Limits | As a transportation facility, lighting is necessary to allow use of the trail, especially during peak hours in the winter months. Provide lighting and consider other elements such as reflective delineators or fog lines. |
| DOWNTOWN PROJECTS | | | | | |

Table 18. Downtown projects (continued)

| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
|--------------------------|---|-----------------------|-----------------------------|---------------------------|---|
| 183 | Sammamish River Trail Lighting Marymoor | Sammamish River Trail | 520 Trail | NE 51st St | This trail has a unique need for lighting - the trail exists in lieu of a sidewalk on West Lake Sammamish Parkway. Sidewalks in the City are typically lit, meaning that pedestrians in this corridor do not receive the same level of service. As a transportation facility, lighting is necessary to allow use of the trail, especially during peak hours in the winter months. Provide lighting and consider other elements such as reflective delineators or fog lines. |
| 184 | Sammamish River Trail North Lighting | Sammamish River Trail | 520 Trail | NE 90th St | As a transportation facility, lighting is necessary to allow use of the trail, especially during peak hours in the winter months. Provide lighting and consider other elements such as reflective delineators or fog lines. |
| 185 | Bear Creek Trail Widening | Bear Creek Trail | 520 Trail | Union Hill Road | Provide an east west route through Downtown for through cyclists by widening the trail to 12 to 14 feet with good sight lines and limited curve radii. As a transportation facility, lighting is necessary to allow use of the trail, especially during peak hours in the winter months. Provide lighting and consider other elements such as reflective delineators or fog lines. |
| 186 | 159th Place Sidewalk | 159th PI NE | Bear Creek Parkway | Leary Way | Provide interim concrete sidewalk including curb, gutter, and storm as applicable. |
| 192 | NE 88th Street Sidewalk | NE 88th Street | 166th Ave NE | 172nd Ave NE | Construct sidewalk on one side of roadway including curb, gutter, and storm as applicable. |
| 195 | 165th Ave NE Sidewalk | 165th Ave NE | NE 83rd St | NE 80th St | Construct sidewalk on west side roadway including curb, gutter, and storm as applicable to fill in sidewalk gap. |
| 196 | Avondale Way Sidewalk | Avondale Way | 170th Ave NE | Bear Creek Trail | Replace heavily degraded sidewalk. Install sidewalk with planter strip up to the Bear Creek Trail, including landscaping. |
| 202 | Grasslawn Trail | Grasslawn Trail | West Lake Sammamish Parkway | Redmond Central Connector | Complete difficult connection between Grass Lawn Neighborhood and Redmond Central Connector and Sammamish River Trail by constructing trail from Old Redmond Road and West Lake Sammamish Parkway headed east, through a cantilevered bridge under Redmond Way and over 154th Ave, and then to the Redmond Central Connector. Include storm facilities as applicable. |
| DOWNTOWN PROJECTS | | | | | |

Table 18. Downtown projects (continued)

| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
|------------|---|---|-----------------------------|--------------------|---|
| 203 | Old Redmond Road Cycle Track | Old Redmond Road | West Lake Sammamish Parkway | West city Limits | Provide cycle tracks over existing bicycle lanes. Provide storm drain access. |
| 209 | Education Hill Bike Boulevard | 171st Ave, NE 88th St, 172nd Ave NE, NE 80th St | 100th Street | Redmond Way | Construct bicycle boulevard treatments such as bicycle related wayfinding signage and channelization, and median islands. |
| 220 | 160th Avenue NE Shared Lane Markings | 160th Avenue NE | Cleveland Street | NE 90th St | Add shared lane markings to roadway, indicating proper positioning for cyclists along bike route. |
| 221 | 161st Avenue NE and Bear Creek Parkway Bike Signal | 161st Ave NE at Bear Creek Parkway | | | Add bicycle signal treatment enabling cyclists to continue on Heron Rookery Trail with access to regional trails. Signal does not allow through vehicular movements, which would be allowed only for bicyclists. |
| 226 | Transit Center Bicycle Station | Near the Downtown Transit Center (NE 83rd St at 161st Ave NE) | | | Construct a bicycle station to serve the Downtown Transit Center and the Downtown Urban Center central downtown location. A bicycle station includes, covered, enclosed, and secure access bicycle parking that may be staffed during operating hours. The cost is a place holder to coordinate with existing businesses to combine space for bike station. |
| 249 | Flashing Beacon Upgrade | Flashing Beacon Upgrade: System- wide project | | | Upgrade smart studs at four locations: 1) 161st, 87th to 90th; 2) and 3) 83rd, 161st to 164th near Transit Center; and 4) Bear Creek Park Way at 75th. |
| 250 | Redmond Way and Avondale Way Intersection Mods | Redmond Way/Avondale Way | | | Remove separated right-turn lane from WB Avondale Way to Redmond Way; at eastern end of Downtown east and west corridor. Coordinate with Project 116. |
| 269 | Bear Creek Parkway and 164th Ave NE Flashing Beacon | Bear Creek Parkway at 164th Avenue NE | | | Install flashing beacon at the existing pedestrian crossing from Bear Creek trail. Include center median island on east side of intersection. |
| 277 | Bear Creek Parkway and 166th Ave NE Crosswalk | Bear Creek Parkway at 166th Avenue NE | | | Install crosswalk on west leg, providing access to Bear Creek trail. |

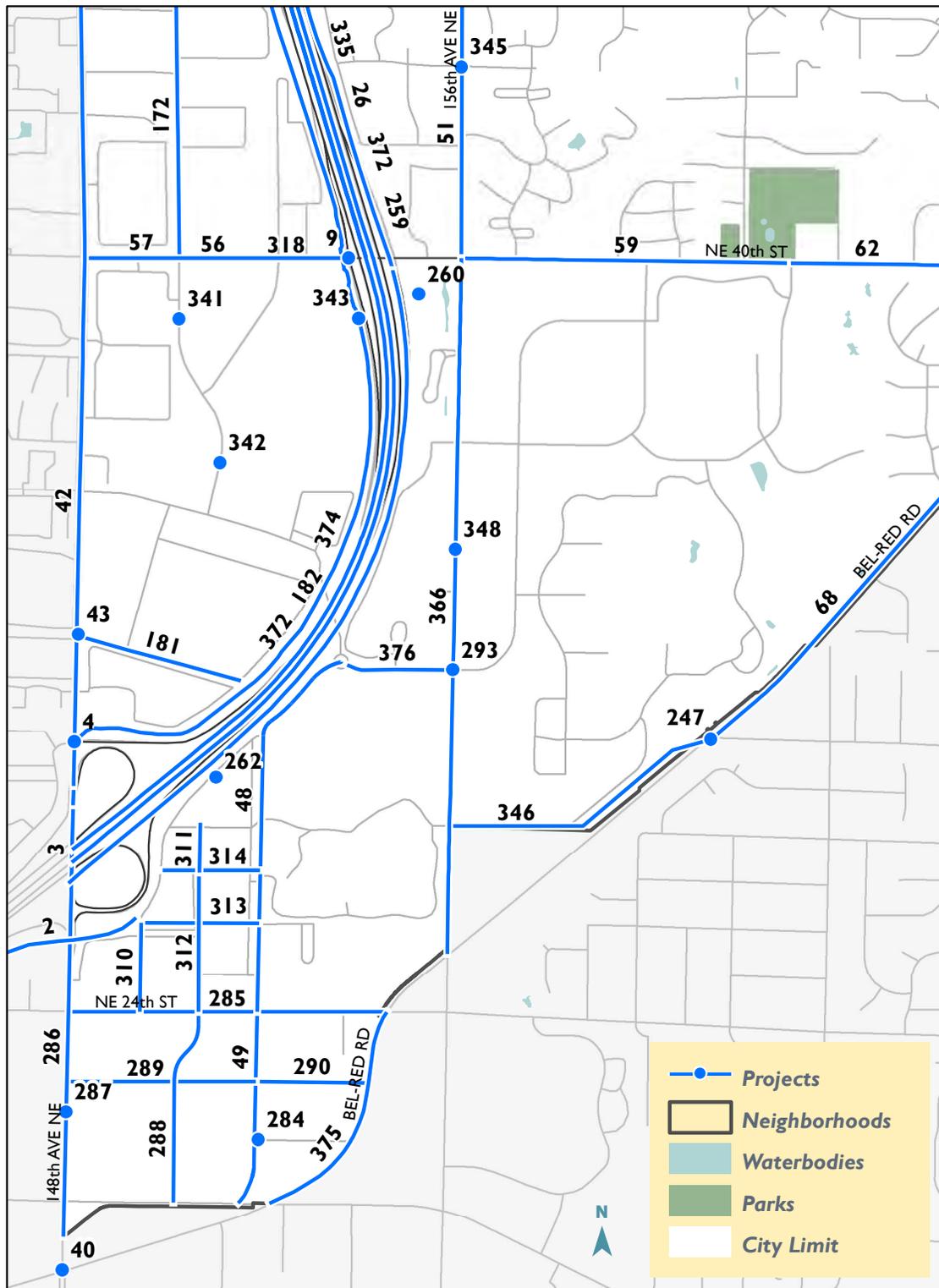
Table 18. Downtown projects (continued)

| DOWNTOWN PROJECTS | | | | | |
|-------------------|---|--------------------------------|----------------------|-----------------------|--|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 279 | Einstein Elementary Crosswalk Enhancement | Einstein Elementary School | | | Install flashing beacon on NE 116th St at school crossing. |
| 294 | 166th Ave NE Bike Connection | 166th Avenue | 76th Street | Redmond Way | Construct bicycle lanes. |
| 296 | Sammamish River Trail Widening | Sammamish River Trail Widening | NE 90th Street | SR 520 Trail | Widen existing hard surface regional trail and improve existing section and construct missing links of parallel soft surface trail. |
| 303 | 91st Street Connection | NE 91st Street | NE 90th Street | 91st Street/166th Ave | Enhance existing roadway along steep slope, adding safety and visibility enhancements for pedestrians and vehicles. Add wayfinding. |
| 326 | Cleveland Street East | Cleveland Street | 164th Avenue NE | 166th Avenue NE | Improve Cleveland Street to a pedestrian-friendly Main Street. Improvements include one through lane, parking, and sidewalk in each direction, mid-block crossings, street lights, utilities, stormwater treatments, public art, bicycle racks, pedestrian amenities, street furnishing, trees, traffic and wayfinding signs, and realignment of street at eastern and western ends to improve traffic flow. |
| 334 | Downtown Redmond Light Rail Station | | | | Construct a light rail station on the East Link line, including station platforms and entryways, and amenities including art, high quality pedestrian access and bicycle parking. Integrate with existing amenities such as the Redmond Central Connector and Heron Rookery Park. |
| 335 | East Link Phase II | | | | Connect to existing East Link light rail line and extend from Overlake Transit Center Station to Downtown Redmond Station along SR 520 and the Redmond Central Connector, including track, overhead electric wires, utilities, and stormwater. Consider light rail maintenance facility needs. |
| 337 | Redmond Downtown Transit Center Pickup/Dropoff Zone | NE 83rd Street | | | Convert existing on-street parking spaces to a pickup/dropoff zone for transit riders on NE 83rd Street. Include 15 minute parking zone markings and signage. |

Table 18. Downtown projects (continued)

| DOWNTOWN PROJECTS | | | | | |
|-------------------|---|-----------------------------|----------------------|--------------------|---|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 359 | 166th Avenue NE Streetscape | 166th Avenue NE | NE 85th Street | NE 104th Street | Improve 166th Avenue NE to a pedestrian-friendly street. Improvements include widened sidewalk and one through lane in each direction, center left turn lane and bike lanes, pedestrian amenities, transit amenities, utilities, street lights, stormwater, and LID. Add pedestrian crossings coordinated with bus stops. |
| 371 | Redmond Way Widening | Redmond Way | 168th Avenue NE | 164th Avenue NE | Add second westbound lane and parking on the north side of Redmond Way between 168th Avenue and 164th Avenue. Project would include one travel lane, on-street parking, sidewalk, right-of-way, utilities and streetscape improvements. |
| 372 | Phases 1 & 2 SR 520 Active Traffic Management | SR 202 | I-405 | | Add variable speed limits and variable message signs. |
| 373 | SR 520/ West Lake Sammamish Parkway – Eastbound off ramp improvements | West Lake Sammamish Parkway | Eastbound off ramp | | Construct either a multilane roundabout or exclusive right-turn lane at the ramp terminal. |

Unfunded Buildout Plan – Overlake



Note: projects shown are conceptual only; actual alignments may vary.

Figure 62. Unfunded Buildout Plan – Overlake

0 0.125 0.25 Miles

Table 19. Overlake projects

| OVERLAKE PROJECTS | | | | | |
|-------------------|---|---|----------------------|--------------------|---|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 2 | SR 520/148th Interchange Overlake Access Ramp and Trail Connection Within WSDOT Limited Access | Overlake Access Ramp | 148th Avenue NE | 152nd Ave NE | Construct a second eastbound off ramp at 148th Avenue NE. This ramp will go under 148th Avenue NE, terminate at the east side of 148th Avenue NE with a roundabout, and connect the Overlake Access Street and NE 28th Street west of 152nd Avenue NE. Improvements along the ramp include two lanes on the ramp, walls, shoulders, stormwater, utilities, street lights, and a multi-user trail connecting the SR 520 eastbound on ramp with the roundabout. Coordinate with project #315, the Overlake Access Street and project #3, 520 Trail Grade Separation at 148th Avenue NE. |
| 3 | SR 520/148th Interchange Overlake Access Ramp and Trail Connection: The Trail Improvement Portion | 148th Avenue NE | SR 520 EB Ramp | NE 29th Place | Modify channelization and signals, and provide wide multi-use trail that is separated from the roadway on the east side of 148th Ave NE from the eastbound SR 520 on ramp to the SR 520 Trail at the westbound SR 520 off ramp at NE 29th Place (148th Ave NE bridge over SR 520). Design to accommodate future grade separation project at 148th Avenue NE and NE 29th Place. Coordinate with the Overlake Access Ramp project, #2. |
| 4 | SR 520 Regional Trail Grade Separation at 148th Ave NE | SR 520 Trail | 148th Avenue NE | SR 520 Trail | Grade separate SR 520 Trail at 148th Avenue NE. |
| 9 | NE 40th St & 520 Trail Interim Ped Improvements | NE 40th Street at SR 520 Ramps (N side) | | | Construct interim improvement with raised median pedestrian refuge island with push button on NE 40th St along 520 Trail route; curb bump-outs at WB on-ramp; "Yield to Pedstrian" signage. |

Table 19. Overlake projects (continued)

| OVERLAKE PROJECTS | | | | | |
|-------------------|---|--|----------------------|---------------------|---|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 26 | SR 520 BRT | SR 520 | NE 40th Street | SR 202/ Redmond Way | In advance of the future light rail alignment to SE Redmond from the Overlake Transit Center Station, develop an alignment or a bus rapid transit corridor with needed right-of-way acquisition and roadway construction. This BRT corridor alignment needs to be compatible with the future light rail infrastructure. Construct layover facilities in Downtown Redmond. |
| 40 | Bel-Red Road & 148th Ave NE Turn Lanes | Bel-Red Road at 148th Avenue NE | | | Work with the City of Bellevue to add additional capacity in the vicinity of this intersection by creating eastbound and westbound dual left turn lanes at Bel-Red Road and 148th Avenue NE, adding a third northbound through lane on 148th Avenue NE starting south of Bel-Red Road and adding a northbound right-turn lane at Bel-Red Road and 148th Avenue NE. |
| 42 | 148th Ave NE Multiuse Trail | 148th Avenue NE Paved, Shared-Use Path | NE 29th Pl | Old Redmond Road | Provide a wide (12-foot) multi-use trail on the east side of 148th Avenue NE from NE 29th Place to Old Redmond Road. This trail can expand upon the existing sidewalk to accommodate both pedestrians and bicyclists. |
| 43 | 148th Ave NE & NE 31st St Intersection Improvements | 148th Avenue NE at NE 31st Street | | | Signalize and modify intersection to improve safety and traffic operations. Relocate pedestrian crossing at 3300 block to this signal. |
| 48 | 152nd Ave NE Safety Enhancement | 152nd Avenue NE | 24th Street | 31st Street | Rechannelize road to a three lane section where possible and adjust signal phasing to provide protected left turns at this high pedestrian collision location. Coordinate project with storm water holding facility project. It is a near term interim improvement. |

Table 19. Overlake projects (continued)

| OVERLAKE PROJECTS | | | | | |
|-------------------|--|---------------------------------|----------------------|--------------------|---|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 49 | 152th Ave NE Main Street South of NE 24th Street | 152nd Avenue NE | NE 20th Street | NE 24th Street | Implement a multi-modal pedestrian corridor concept on 152nd Avenue NE from NE 20th Street to NE 24st Street to create a lively and active signature street in the Overlake Village. The cross section for the improvements would include one through lane in each direction, turn lanes as necessary, on-street parking and pedestrian and bicycle facilities. Other improvements include storm drainage, LID, street lighting, pedestrian amenities, transit amenities, right-of-way, easements, and utilities. |
| 51 | 156th Avenue NE Multi-use Trail | 156th Avenue NE Multi-use Trail | NE 40th St | NE 51st St | Provide a wide (12-foot) multi-use trail on the east side of 156th Avenue NE from Bel-Red Road to NE 51st Street. This trail can expand upon the existing sidewalk to accommodate both pedestrians and bicyclists. Coordinate construction with Project 366. |
| 56 | NE 40th St Rechannelization Segment I | NE 40th Street | 148th Avenue NE | SR 520 | Within existing right-of-way and easements, resize vehicular lanes and add bike lanes in both directions. Improvements include two vehicular lanes in each direction, one turn lane, bike lanes and sidewalks on both sides, stormwater treatments, and street lights. Locations of existing curbs and sidewalks remain the same. Coordinated with Project 57. |
| 57 | NE 40th St Streetscape Segment I | NE 40th Street | 148th Avenue NE | SR 520 | Add bike lanes on both sides. Improvements include two vehicular lanes in each direction, one turn lane, bike lanes and sidewalks on both sides, streetscape including gateway wayfinding and art elements, stormwater treatment, utilities, street lights, right-of-way and easement acquisition. Coordinated with Project 56. |

Table 19. Overlake projects (continued)

| OVERLAKE PROJECTS | | | | | |
|-------------------|--|-----------------|-----------------------|---|--|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 59 | NE 40th St Rechannelization Segment III | NE 40th Street | 156th Avenue NE | 163rd Avenue NE | Within existing right-of-way, resize vehicular lanes and add bike lanes in both directions. Improvements include two 10 foot vehicular lanes in each direction, one turn lane, bike lanes and sidewalks in both directions, and streetscape, stormwater treatment, utilities, and street lights. Locations of existing curbs and sidewalks remain the same. Coordinated Project with Project 60. |
| 62 | NE 40th St Streetscape Segment IV | NE 40th Street | 163rd Avenue NE | Bel-Red Road | Add bike lanes in both directions. Improvements include one 11 feet vehicular lane, 5.5 feet bike lane, and 8.5 feet sidewalk in both directions, one turn lane or median, trees, stormwater treatments, utilities, street lights, and right-of-way acquisition, and streetscape including gateway wayfinding and art elements. Coordinated with Project 64. |
| 68 | Bel-Red Road Bicycle and Pedestrian Improvements | Bel-Red Road | NE 30th Street | NE 40th Street | Widen Bel-Red Rd from NE 30th Street to NE 40th Street. Improvements include bike lanes, pedestrian path, street lights, right-of-way and easement acquisition. |
| 172 | 150th Avenue NE Bike Improvements | 150th Avenue NE | NE 51st St | NE 40th St | Fill in gaps in bicycle facility network on 150th Avenue NE from NE 51st Street to NE 40th Street in both directions, and improve curve radius to allow for truck movements through existing chokepoint. Widen roadway 6' to west and build retaining walls. Include shared lane markings at edges of new 13' wide lanes. |
| 181 | NE 31st Street Light Rail Station Access | NE 31st St | 148th Ave NE | SR 520 Trail/Overlake Village Bicycle-Pedestrian Bridge | Allow public access to future Overlake Village Light Rail Station and future pedestrian bridge across SR 520 by acquiring right-of-way or acquiring easement northwest of SR 520. Enhance pedestrian facilities. |
| 182 | SR 520 Trail Lighting | 520 Trail | Sammamish River Trail | 148th Ave NE/ City Limits | As a transportation facility, lighting is necessary to allow use of the trail, especially during peak hours in the winter months. Provide lighting and consider other elements such as reflective delineators or fog lines. |

Table 19. Overlake projects (continued)

| OVERLAKE PROJECTS | | | | | |
|-------------------|--|---|----------------------|--------------------|---|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 247 | Bel-Red and NE 30th Street Intersection Improvements | NE 30th Street and Bel-Red Road | | | Coordinate with City of Bellevue to revise intersection signalization and channelization to improve pedestrian and bicycle access and allow northbound left-turn movements between Bel-Red Road and Microsoft campus. |
| 259 | East Link Phase I | Seattle to Downtown Redmond Light Rail Transit (LRT) Corridor | | | As part of the East Link Phase I, extend light rail from Bellevue to Overlake Transit Center Station along SR 520, including track, overhead electric wires, utilities, and stormwater. |
| 260 | Overlake Transit Center Light Rail Station | Overlake Transit Center Light Rail Station | | | Construct a light rail station on the East Link line, including station platforms and entryways, and amenities including art, high quality pedestrian access and bicycle parking. Coordinate with Project 6 to expand the walk and bike shed for the station. |
| 262 | Overlake Village Light Rail Station | Overlake Village Light Rail Station | | | Construct a light rail station on the East Link line, including station platforms and entryways, and amenities including art, high quality pedestrian access and bicycle parking. Coordinate with Project 5 to expand the walk and bike shed for the station. |
| 284 | 152nd Mid-block Crossing | Mid-Block Crossings | | | Provide a mid-block crossing on 152nd Avenue NE between NE 20th Street and NE 24th Street to improve pedestrian accessibility. |
| 285 | NE 24th Street Access Management | NE 24th Street | 148th Avenue NE | Bel-Red Road | Implement more stringent access management along NE 24th Street from 148th Avenue NE to Bel-Red Road to improve efficiency and safety in the corridor. |
| 286 | 148th Avenue NE Access Management | 148th Avenue NE | NE 20th Street | NE 36th Street | Implement more stringent access management along 148th Avenue NE from NE 20th Street to NE 36th Street to improve efficiency and safety in the corridor. |

Table 19. Overlake projects (continued)

| OVERLAKE PROJECTS | | | | | |
|-------------------|--|---|----------------------|--------------------|---|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 287 | 148th Ave NE Pedestrian Overpass | 148th Ave NE Grade Separation Pedestrian overpass | | | Provide a grade-separated pedestrian overpass that crosses 148th Avenue NE in the vicinity of 22nd street. |
| 288 | 151st Avenue NE South | 151st Avenue NE | NE 20th Street | NE 24th Street | Construct new 151st Avenue NE between NE 20th Street and NE 24th Street. Refer to the Overlake Neighborhood Plan for more details. Coordinate with the Overlake Village South Study. |
| 289 | NE 22nd St, West | NE 23rd St, West | | | Construct new NE 22nd Street from 148th Avenue NE to 152nd Avenue NE and design the street as a local access street using pedestrian supportive design with on-street parking and one through lane in each direction. Major street connections would be signalized. |
| 290 | NE 22nd St, East | NE 23rd St, East | | | Construct new NE 22nd Street from 152nd Avenue NE to Bel-Red Road and design the street as a local access street using pedestrian supportive design with on-street parking and one through lane in each direction. Major street connections would be signalized. |
| 293 | 156th Avenue NE & NE 31st Street Turn Lane | 156th Avenue NE and NE 31st Street | | | Construct an additional WB left-turn lane. |
| 310 | 150th Avenue NE Connection | 150th Avenue | NE 26th Street | NE 24th Street | Construct Access Street in accordance with Overlake Village Design Standards, including 1 travel lane, parking lane and sidewalk in each direction. |
| 311 | 151st Avenue NE Connection Segment II | 151st Avenue NE | NE 27th Street | NE 28th Street | Construct neighborhood street in accordance with Overlake Village Design Standards, including 1 travel lane, parking lane, cycle track, and sidewalk in each direction as well as an urban pathway trail. |

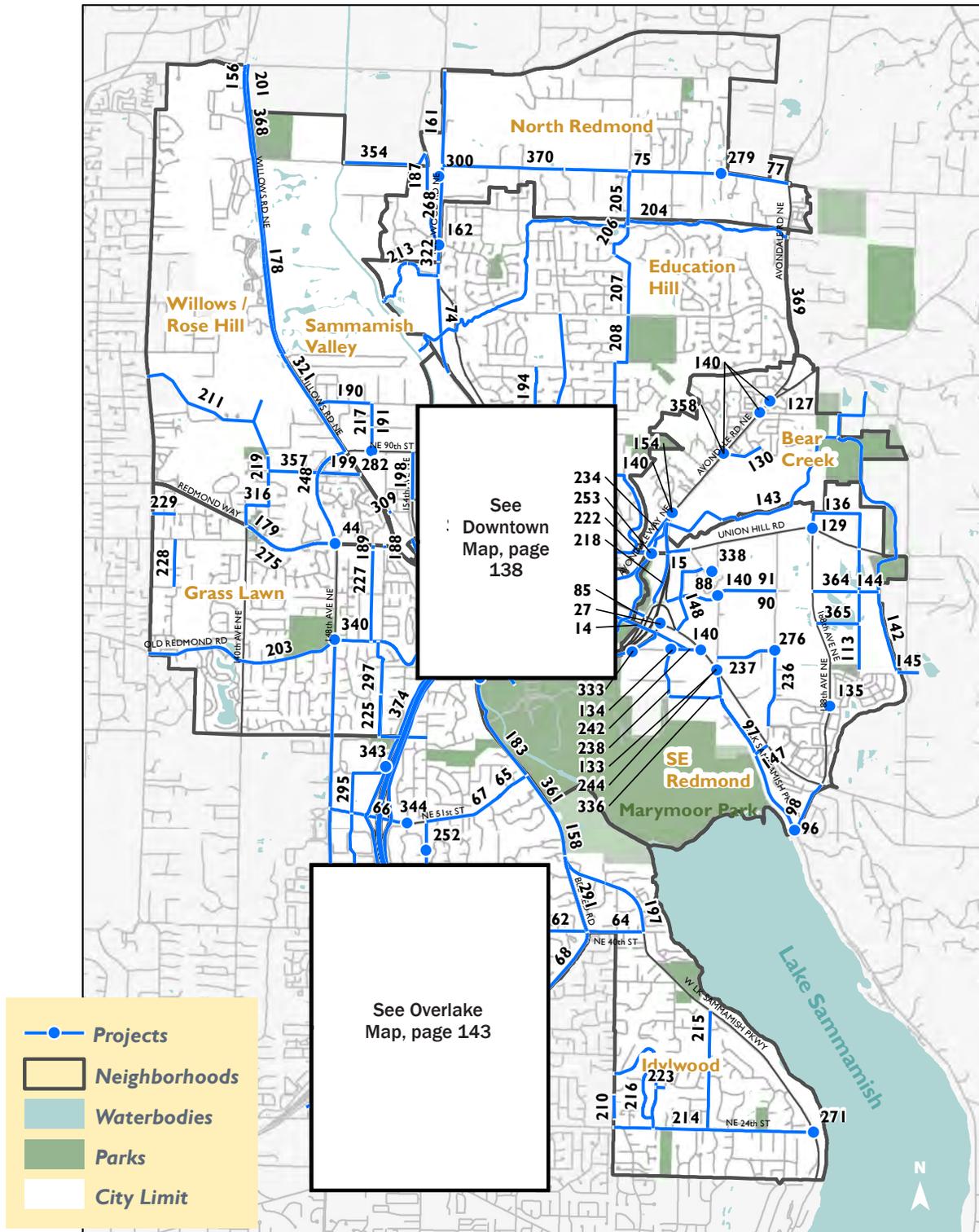
Table 19. Overlake projects (continued)

| OVERLAKE PROJECTS | | | | | |
|-------------------|---|-----------------|----------------------|-------------------------------|--|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 312 | 151st Avenue NE Connection Segment I | 151st Avenue NE | NE 24th Street | NE 27th Street | Construct neighborhood street in accordance with Overlake Village Design Standards, including one travel lane, parking lane, cycle track, and sidewalk in each direction as well as an urban pathway trail. |
| 313 | NE 26th Street Connection | NE 26th Street | 152nd Avenue NE | Overlake Access Ramp Terminus | Construct Access Street in accordance with Overlake Design Standards, including one travel lane, parking lane and sidewalk in each direction. |
| 314 | NE 27th Street Connection | NE 27th street | 152nd Avenue NE | Overlake Access Ramp Terminus | Construct Access Street in accordance with Overlake Village Design Standards, including one travel lane, parking lane and sidewalk in each direction. |
| 318 | NE 40th Street Sidewalk Widening | 40th Street | SR 520 | 148th Avenue NE | Widen sidewalk on both sides of street to meet pedestrian modal corridor standards (8.5'). |
| 335 | East Link Phase II | | | | Connect to existing East Link light rail line and extend from Overlake Transit Center Station to Downtown Redmond Station along SR 520 and the Redmond Central Connector, including track, overhead electric wires, utilities, and stormwater. Consider light rail maintenance facility needs. |
| 341 | 150th Avenue Mid-Block Crossing North | 150th Ave NE | 3800 block | | Construct a mid-block crossing with flashing beacons on 150th Avenue NE in the vicinity of NE 38th Court. |
| 342 | 150th Avenue NE Mid-Block Crossing South | 150th Ave NE | 3700 Block | | Construct a mid-block crossing with flashing beacons on 150th Avenue NE near NE 36th Street. |
| 343 | Microsoft 520 Trail Access Points | | | | Provide access points to and from 520 Trail. |
| 345 | 156th Avenue NE and NE 45th Street Intersection Improvement | | | | Extend the existing northbound left turn lane at 156th Avenue NE and NE 45th Street. |

Table 19. Overlake projects (continued)

| OVERLAKE PROJECTS | | | | | |
|-------------------|---|-----------------|----------------------|--------------------|--|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 346 | NE 28th Street to Bel-Red Road Pedestrian and Bike Connection | NE 28th Street | 156th Ave NE | Bel-Red Road | Provide a hard surface trail connecting NE 28th Street to Bel-Red Road. Acquire public pedestrian and bike easement on NE 28th Street to access Bel-Red Road at the intersection of NE 30th Street and Bel-Red Road. |
| 348 | 156th Avenue Mid-Block Crossing South of NE 40th Street | | | | Construct a signalized mid-block crossing between NE 31st Street and NE 36th Street, utilizing existing median as a pedestrian median. Coordinate crossing with existing transit stops. |
| 366 | 156th Trail South | 156th Avenue NE | Bel-Red Road | NE 40th Street | Intend to provide a high comfort bicycle facility along 156th Avenue NE. Expand the existing 8-foot wide sidewalk to a 12-foot wide multiuse trail on the east side of 156th Avenue NE from Bel-Red Road to NE 40th Street. Coordinate construction with Project 51. |
| 372 | Phases 1 & 2 SR 520 Active Traffic Management | SR 202 | I-405 | | Add variable speed limits and variable message signs. |
| 375 | Bel-Red Road Widening between NE 20th Street and NE 24th Street | Bel-Red Road | NE 20th Street | NE 24th Street | Widen Bel-Red Rd from NE 20th Street and NE 24th Street. Improvements include two through lane in each direction, a center turn lanes, bike lanes, curb, gutter, sidewalks, street lights and storm drainage. |
| 376 | NE 31st St Bike Lanes (Construction) | NE 31st St | 152nd Ave NE | 156th Ave NE | Build bicycle lanes along NE 31st Street from the NE 36th Bridge over SR 520 to 156th Avenue NE. |

Unfunded Buildout Plan – Neighborhoods



Note: projects shown are conceptual only; actual alignments may vary.

Figure 63. Unfunded Buildout Plan – Neighborhoods

Table 20. Neighborhood projects

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|---|--------------------------------|---------------------------------|--------------------------------|--|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 14 | East Lake Sammamish Trail Connection (SR 520 Undercrossing) | East Lake Sammamish Trail | Redmond Central Connector | NE 70th Street | Provide grade separated trail through the SR 520/SR 202 Interchange area along the planned light rail alignment, connecting East Lake Sammamish Trail and Redmond Central Connector. Provide access to the planned Southeast Redmond light rail station. |
| 15 | SR 520 Terminus Enhancements | Union Hill Rd at Avondale Rd | Union Hill Road and 178th PI NE | Avondale Road and Avondale Way | Provide a flyover ramp from westbound NE Union Hill Road to southbound SR 520; provide an Avondale Road flyover ramp over NE Union Hill Road with ramps to NE Union Hill Road. Provide grade separated crossing of Avondale Road for Bear Creek Trail extension. Complete bicycle lane network in project area for at grade portion. Complete sidewalks in project area. Enhance pedestrian and bicycle crossing safety through intersection improvements for at grade section. Improve HOV and freight access through the project area. |
| 27 | SR 520 & SR 202 Off Ramp Improvement | SR 520 and SR 202/ Redmond Way | | | Improve the geometry of eastbound SR 520 off ramp at Redmond Way to reduce queue blocking. |
| 44 | Redmond Way & 148th Avenue NE Intersection Improvements | Redmond Way at 148th Avenue NE | | | Widen intersection to separate the northbound share through and left-turn lane to have dual left-turn lanes and two through lanes to improve traffic flow. |
| 64 | NE 40th St Rechannelization Segment V | NE 40th Street | Bel-Red Road | West Lake Sammamish Parkway | Within the existing right-of-way, provide one vehicular lane, 5.5 to 6 feet bike lane, and 5.5 to 6 feet sidewalk in each direction. A 5.5 feet planter is optional in the eastbound direction. This optional planter requires resizing the width of vehicular lanes to 11 feet. Other improvements include street scape, stormwater treatments, utilities, and street light. Coordinated with Project 62. |
| 65 | NE 51st Street New Sidewalk | NE 51st Street | 158th Avenue NE | West Lake Sammamish Parkway | Complete missing segments of sidewalk on the southside of NE 51st St from 158th Ave NE to West Lake Sammamish Parkway. |

Table 20. Neighborhood projects (continued)

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|---------------------------------|----------------------------|----------------------|-----------------------------|--|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 66 | NE 51st St Bike Lanes | NE 51st Street | 148th Avenue NE | 154th Avenue NE | Provide bicycle lanes on NE 51st Street in both directions from 148th Avenue NE to 154th Avenue NE. Install additional bike signage and pavement markings in existing bike lane between 154th Avenue NE and West Lake Sammamish Parkway. |
| 67 | NE 51st St Rechannelization | NE 51st Street | 156th Avenue NE | West Lake Sammamish Parkway | Install additional bike signage and rechanelize roadway to install standard bike lane in the westbound (uphill) direction and implement a shared lane in the eastbound (downhill) direction from 156th Avenue NE and West Lake Sammamish Parkway. |
| 74 | 160th Ave NE Extension | 160th Avenue NE | NE 99th Street | SR 202 / Red-Wood Road | Construct new 160th arterial from current terminus at approximately NE 99th Street north to the intersection with Red- Wood Rd. Modify existing 160th arterial from NE 90th St north to current terminus. Relocate transit service and amenities from Red-Wood Road to 160th Avenue NE. Improvements include one through lane in each direction, left-turn lanes, bike lanes, curb, gutter, sidewalks, transit amenities, street lights, storm drainage, wetland and stream mitigation, right-of-way and easement acquisition. |
| 75 | NE 116th St Widening Segment II | NE 116th Street | 167th Place NE | 179th Place NE | Widen NE 116th St from 167th Place NE to 179th Place NE. Improvements include 1 through lane in each direction, left-turn lanes, bike lanes, curb, gutter, sidewalks, equestrian trail, street lights, storm drainage, underground power, right-of-way and easement acquisition. |
| 77 | NE 116th St Segment III | NE 116th Street (East End) | 179th Avenue NE | Avondale Rd | Widen remaining sections of NE 116th St from 179th Avenue to Avondale Road. Improvements include one through lane in each direction, left-turn lanes, bike lanes, curb, gutter, sidewalks, equestrian trail, street lights, storm drainage, underground power, right-of-way and easement acquisition. |

Table 20. Neighborhood projects (continued)

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|---|---|--|-----------------------|--|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 85 | Redmond Way Bridge Replacement Over Bear Creek | Redmond Way | Bear Creek Crossing | Avondale Road On Ramp | Replace the Redmond Way Bridge over Bear Creek. Improvements include two through lanes in each direction on Redmond Way and NE 76th Street, two eastbound left-turn lanes to NE 76th St, one eastbound right-turn lane to westbound SR 520 on-ramp, sidewalks, Bear Creek and East Lake Sammamish Trail connections, street lights, storm drainage, right-of-way and easements. The bridge will be designed to accommodate a grade separated connection of Bear Creek Trail underneath the bridge. The bridge should only be replaced when the existing bridge conditions no longer meet federal structural rating requirements. |
| 88 | NE 76th Street Widening | NE 76th St | Avondale Road at northbound on ramp to SR 520 terminus | 178th Place NE | Widen roadway to include three 12' travel lanes and two bike lanes and 6' sidewalks, realign roadway to comply with COR minimum horizontal curve radius requirement. At the signalized intersection of Fred Meyer and Target, add crosswalk to west leg, use existing right run drop lane eastbound, re-aligned to account for roadway widening. At intersection of 76th and eastbound 520 ramps add a crosswalk enabling pedestrian and bicycle crossing. Improve transit amenities. |
| 90 | NE 76th Street Widening 178th Place to 185th Ave NE | NE 76th St | 178th Place NE | 185th Avenue NE | Widen roadway to include a 12' center turn lane, two 12' travel lanes and two 5.5' bike lanes and 6' sidewalks on both sides of roadway. Coordinate with Project 91. |
| 91 | NE 76th St Rechannalization | NE 76th St | 178th Place NE | 185th Avenue NE | Rechannelize roadway to include one 12-foot 2 way left-turn lane, one 14' shared lane in each direction. Coordinate with Project 90. |
| 96 | East Lake Sammamish Parkway and 187th Ave NE Signal | East Lake Sammamish Parkway at 187th Ave NE | | | Install new traffic signal. Improvements include southbound left-turn lane and reconstruct grade separated trail crossing. Design to accommodate Project 97. |

Table 20. Neighborhood projects (continued)

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|---|--|-----------------------------|--------------------|--|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 97 | East Lake Sammamish Parkway widening | East Lake Sammamish Parkway | Redmond Way | 187th Ave NE | Widen East Lake Sammamish Parkway from Redmond Way to 187th Avenue NE. Improvements include one through lane in each direction, left-turn lanes where needed, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, underground power, and right-of-way. |
| 98 | 187th Ave NE Widening | 187th Ave NE | East Lake Sammamish Parkway | Redmond Way | Widen 187th Ave NE from East Lake Sammamish Pkwy to Redmond Way. Improvements include one through lane in each direction, left-turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage. |
| 113 | 192nd Ave NE Extension | 192nd Ave NE Extension | NE 68th St | Union Hill Rd | Construct new 192nd Ave NE from NE 68th St to Union Hill Rd. Improvements include one through lane in each direction, left-turn lanes, bike lanes, sidewalks, street lights, traffic control, storm drainage, right-of-way and easements. |
| 127 | NE 95th St and Avondale Realignment | NE 95th Street at Avondale Road | | | Intersection realignment reduces skew, adds a north leg crosswalk, realigns east/west legs removing split-phasing and provides for north to south U-turns. |
| 129 | 188th Ave NE and Union Hill Right Turn Lane | 188th Avenue NE at NE Union Hill Road | | | Improve the intersection of 188th Ave NE at Union Hill Rd by building northbound exclusive right-turn lane. |
| 130 | Avondale Road and 180th Ave Reconfiguration | Avondale Road at 180th Avenue NE | | | Intersection reconfiguration to add eastern fourth leg serving Avondale Green subdivision and south leg crosswalk. Intersection also allows for north and south U turns. Includes 1,200 feet of new street connecting to 183rd Court NE. |
| 133 | Redmond Way and East Lake Sammamish Parkway Intersection Improvements | Redmond Way at East Lake Sammamish Parkway | | | At Redmond Way / E Lake Sammamish Pkwy, convert NB triple left turns (on ELSP) to 2 left turns and through to better spread traffic between the three lanes; Construct 2nd SB thru lane from 180th to ELSP. Coordinate with Project 244. |

Table 20. Neighborhood projects (continued)

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|--|---|----------------------|---------------------------------------|--|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 134 | NE 70th St and 176th Ave NE Truck Movement Enhancement | NE 70th Street at 176th Avenue NE | | | Improve the intersection geometry and traffic control for trucks and traffic operations at NE 70th St / 176th Ave NE (Note: coordinate with Sound Transit because East Link Draft EIS has proposed signaling this intersection). Coordinate with Southeast Redmond Light Rail Station Area Transportation Study. |
| 135 | 188th Ave NE and NE 65th St Intersection Improvements | 188th Avenue NE at NE 65th Street | | | Improve intersection operations and safety at the intersection of 188th Avenue NE and NE 65th Street including but not limited to sight distance and pedestrian crossing. |
| 136 | NE 84th St Stormwater Enhancement | 188th Avenue NE, 192nd Avenue NE north of NE Union Hill Rod, and NE 84th Street | | | Improve NE 84th Street and portions of 188th Avenue NE, and 192nd Avenue NE north of Union Hill Road to coordinate with a Natural Resources CIP project. |
| 140 | Redmond ITS Improvements | Citywide | | | Install ITS improvements to improve traffic operations and safety. Improvements include traffic signal controller update, detection system, traffic CCTV, signal communications, signal head update, signalized crosswalk and pedestrian detection system, and battery backup system. |
| 142 | Evans Creek Trail Extension | SE Redmond Trail | 188th Ave NE | 196th Ave NE south of Union Hill Road | Build extension of the Evans Creek Trail. |
| 143 | Bear Creek and Evans Creek Trail Extension | Along Bear Creek and Evans Creek north of NE Union Hill Road | Approx. NE 95th St | Union Hill Rd | Build extension of the Bear and Evans Creek Trail system. |
| 144 | Woodbridge Trail Connection | Approx. NE 76th Street | 192nd Ave NE | Arthur Johnson Park | Add trail connections from Woodbridge neighborhood to the SE Redmond Trail (At approximately NE 76th Street). |
| 145 | Woodbridge-to-Evans Creek Natural Area Trail | Woodbridge-to-Evans Creek Natural Area Trail | Evans Creek Trail | Evans Creek Natural Area | Add a trail from Woodbridge neighborhood to 196th Ave NE and the Evans Creek Natural Area. |

Table 20. Neighborhood projects (continued)

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|--|-------------------------------|------------------------|-----------------------------|--|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 147 | 185th Avenue NE-to-East Lake Sammamish Park Pedestrian Trail | 185th Avenue NE | Redmond Way | East Lake Sammamish Parkway | Add pedestrian trail from south terminus of 185th Ave NE to East Lake Sammamish Parkway and East Lake Sammamish Trail. |
| 148 | 180th Ave NE "Pedestrian Spine" | Pedestrian spine | 178th Place NE | NE 70th Street | Construct a "Pedestrian Spine" or corridor that connects the future light rail station and Southeast Redmond retail commercial area and other transit facilities in the vicinity. |
| 154 | Avondale Rd and Avondale Way Safety and Access Improvements | Avondale Road at Avondale Way | | | Realign intersection replacing slip lane with a pedestrian bulbout with bike lane continuing through in existing location. Add right-turn only lane to replace slip lane. Install crosswalks linking bus stops together. |
| 156 | Willows Road Widening North | Willows Road | NE 116th St | NE 124th St | Widen Willows Road from NE 116th St to NE 124th St. Improvements include 2 through lanes in each direction, left-turn lanes, bike lanes, curb, gutter, sidewalks, transit amenities, street lights, storm drainage, underground power, right-of-way and easement acquisition. |
| 158 | West Lake Sammamish Parkway Interim Improvements | West Lake Sammamish Parkway | NE 51st St | Bel-Red Road | Provide interim nonmotorized facilities by striping the west side of West Lake Sammamish Parkway between NE 51st Street and Bel-Red Road to include a bicycle lane and pedestrian path. Provide additional signage and street pavement markings for bicycles on the east side of the street. |
| 161 | Redmond Woodinville Road Widening | Red-Wood Road | 160th Ave NE Extension | NE 124th St | Widen Red-Wood Rd from intersection with new 160th Ave NE Extension near the Puget Power trail north to NE 124th St. Improvements include one through lane in each direction, left-turn and extended right-turn lanes if appropriate, access management, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, underground power and right-of-way acquisition. |
| 162 | Redmond Woodinville Road and NE 109th St Turn Lane | Red-Wood Road at NE 109th St | | | Add a northbound right-turn lane. |

Table 20. Neighborhood projects (continued)

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|---|-----------------------------|--------------------------|--------------------|---|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 178 | Willows Road Widening South | Willows Road | NE 90th St | NE 116th St | Widen Willows Rd from NE 90th St to NE 116th St. Improvements include two through lanes in each direction, center left-turn lanes/medians, bike lanes, curb, gutter, sidewalks, transit amenities, pedestrian crossings, street lights, storm drainage, underground power, right-of-way and easement acquisition. |
| 187 | 154th Place NE Widening and Safety Enhancement | 154th Pl NE | Redmond Woodinville Road | NE 116th St | Widen roadway to provide shoulder(s) wide enough to accommodate pedestrians and bicyclists. |
| 188 | 152nd Ave NE Staircase | 152nd Ave NE at Redmond Way | | | Construct staircase between Redmond Way and 152nd Avenue NE. Add bike runnel. |
| 189 | 151st Avenue NE Staircase | 151st Ave NE at Redmond Way | | | Construct staircase between Redmond Way and 151st Ave. Add bike runnel. |
| 190 | NE 95th Street Sidewalk | NE 95th St | Willows Road | 151st Ave NE | Construct sidewalk on south side of roadway including curb, gutter, and storm as applicable. |
| 191 | 151st Avenue NE Sidewalk | 151st Ave NE | NE 95th St | NE 92th St | Construct sidewalk on east side of roadway including curb, gutter, and storm as applicable. |
| 194 | 164th Ave NE Sidewalk | 164th Ave NE | NE 95th St | NE 99th St | Construct sidewalk on roadway including curb, gutter, and storm as applicable. |
| 197 | Idylwood Park and Transit Safety and Access Project | West Lake Sammamish Parkway | Bel-Red Road | NE 40th St | Construct sidewalk on north side of roadway. Include curb, gutter, and storm as applicable. |
| 198 | 154th Ave NE Sidewalk | 154th Ave NE | NE 85th St | NE 90th St | Construct 5' wide sidewalk on west side of 154th Ave. Include curb, gutter, and storm as applicable. |
| 199 | NE 87th Street Sidewalk | NE 87th St | Willows Road | 148th Ave NE | Construct sidewalk over existing ditch with existing 10' of ROW. Include curb, gutter, and storm as applicable. |
| 201 | Redmond Central Connector Segment III | Redmond Central Connector | NE 100th St | North City Limits | Complete the third segment of the Redmond Central Connector, including regional trail and aesthetic enhancements. |
| 204 | PSE Trail Improvements | Puget Sound Energy Trail | Sammamish River Trail | Avondale Road | Construct a hard surface regional trail with parallel soft surface trail. |

Table 20. Neighborhood projects (continued)

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|---|---------------------------|-----------------------------|-----------------------------|---|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 205 | 172nd Ave NE Trail | 172nd Ave NE | NE 111th St | NE 116th St | Construct a hard surface regional trail with parallel soft surface trail. |
| 206 | 171st Bike Boulevard | 171st PI NE / 172nd PI NE | 172nd Trail | NE 111th Street | Construct bicycle boulevard treatments such as bicycle related wayfinding signage and channelization, and median islands. |
| 207 | 172nd Trail Improvement | 172nd Trail | 104th Street | 172nd PI NE | Construct a hard surface regional trail with parallel soft surface trail. |
| 208 | Hartman Park Trail Enhancement | 172nd Ave NE | 171st Ave NE | NE 104th St | Construct a hard surface regional trail connection. |
| 210 | Trail at Ardmore Improvement | Trail at Ardmore | NE 24th St | 172nd Ave NE | Construct a hard surface regional trail with parallel soft surface trail, include design treatments to slow bicycle speeds along trail corridor. |
| 211 | PSE Trail Enhancement | Puget Sound Energy Trail | NE 93rd Ct | Puget Sound Energy Trail | Construct a hard-surface trail linking the existing PSE trail with 93rd Court and northern terminus of 142nd Avenue adjacent to Willows Creek Park through existing easement. Add regional bicycle wayfinding and shared lane markings from the end of the trail at 93rd Court to 132nd Avenue. |
| 213 | 106th Street Connection | NE 106th St | Red-Wood Road | Sammamish River Trail | Construct a trail linking the Sammamish River Trail with 106th Street. Add wayfinding and shared lane markings along 106th Street. Acquire easements. |
| 214 | NE 24th Street Rechannalization | NE 24th St | 172nd Avenue NE | West Lake Sammamish Parkway | Rechannalize to add bicycle lanes in both directions between West Lake Sammamish Parkway and 180th Avenue NE, and a cross section with an uphill bike lane and a downhill sharrow between 180th Avenue and 172nd Avenue NE/City Limit. Where space exists include on street parking in roadway cross section. |
| 215 | 180th Avenue NE Sidewalk and Bike Lanes | 180th Avenue NE | West Lake Sammamish Parkway | NE 24th Street | Enable nonmotorized connections to Audubon Elementary. Construct sidewalk on west side of roadway. Add bicycle lanes to both sides of roadway. Include curb, gutter, and storm. |

Table 20. Neighborhood projects (continued)

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|---|---|-----------------------------|--------------------------------|--|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 216 | Idylwood Shared Lane Markings | 174th Avenue, 175th Avenue, 28th Street | 172 Avenue NE | NE 24th Street | Add shared lane markings south on 174th Avenue and north on 175th Avenue, and in both directions on 28th Street, indicating proper positioning for cyclists along bike route connecting to 172nd Avenue and 24th Street. |
| 217 | 151st Ave NE Rechannelization | 151st Avenue, 95th Street | 90th Street at 151st Avenue | Willows Road at NE 95th Street | Rechannelize existing roadway to include bicycle lanes on both sides of roadway. |
| 218 | Avondale Road/ SR 520 Off Ramp Sidewalk | Westbound 520 to NE 76th St off ramp | Union Hill Road | NE 76th St | Provide sidewalk on west side of roadway, including curb gutter and stormwater as applicable. |
| 219 | Redmond Way to 142nd Ave NE Bike Blvd | 140th Ave NE, NE 84th St, 142nd Ave NE | Redmond Way | PSE Trail (Planned) | Linking up with future trail through Willows Creek Park, create bike boulevard per Bicycle Facility Design Guidelines. |
| 222 | 80th Staircase | NE 80th Street extension | 172nd Ave NE | Avondale Way | Construct staircase between Redmond Way and 80th Street. Add bike trough/ runnel. |
| 223 | NE 27th Place Trail Connection | NE 27th Place | 175th Avenue NE | 176th Place NE | Construct neighborhood sidewalk connection. |
| 225 | 152nd Ave NE Vertical Curb | 152nd Ave NE | NE 60th Street | 6400 Block | Replace roll up curb with vertical curb, improve sidewalk and create student load/unload zone that provides convenient access for children walking, biking and taking the bus to school. |
| 227 | 151st Avenue NE Sidewalk | 151st Ave NE | North of Old Redmond Road | End of 151st Ave NE | Construct sidewalk on one side of the street. |
| 228 | 134th Ave NE Sidewalk | 134th Ave NE | NE 75th St | NE 80th St | Construct sidewalk on one side of the street. |
| 229 | NE 83rd St Sidewalk | NE 83th St | 132nd Ave NE | 134th Ave NE | Construct sidewalk on one side of the street. |
| 234 | Avondale to Union Hill Rd Sidewalk | Avondale Way | North of Union Hill | Avondale Rd | Complete missing sidewalk on east side of Avondale Way north of Union Hill Rd. |
| 236 | 185 Avenue NE Sidewalk | 185th Ave NE | NE 68th St | NE 62nd Court | Complete missing sidewalk on west side of 185th Avenue NE near NE 68th Street, and south of NE 65th Street. |
| 237 | 68th St Sidewalk | NE 68th St | 180th Ave NE | 185th Ave NE | Complete missing sidewalk on both sides of NE 68th Street where missing. |

Table 20. Neighborhood projects (continued)

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|---|---|----------------------|---------------------------|---|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 238 | 176th Avenue NE Sidewalk | 176th Ave NE | NE 65th Street | NE 70th Street | Add sidewalk on 176th Avenue NE between NE 65th Street and NE 70th Street. |
| 242 | NE 70th Street Sidewalk | NE 70th St | Redmond Way | East Lake Sammamish Trail | Fill missing gaps in sidewalk on NE 70th St and provide wayfinding between Redmond Way and East Lake Sammamish Trail. |
| 244 | 180th Ave NE & Redmond Way Crosswalk Modifications | 180th Ave NE at Redmond Way | | | At Redmond Way/180th Ave NE, remove the diagonal crosswalk and move to the east/west legs; improve crosswalk on south leg with pedestrian refuge. Coordinate with Project 133. |
| 248 | 148th Ave NE Access Improvements | 148th Ave NE, Willows Rd to Redmond Way | | | Locate and construct pedestrian crossing and traffic signal to serve residents and office workers; access to bus stops at 148th Avenue and 87th Street (new Rapid Ride route). |
| 252 | 156th Ave NE Midblock Crossing | 156th Avenue NE (between 45th & 51st) | | | Construct a signalized mid-block crossing between NE 45th Street and NE 51st Street, utilizing existing median as a pedestrian median. Coordinate crossing with existing transit stops. |
| 253 | Bear Creek Trail & NE Union Hill Road Modifications | Bear Creek Trail | Union Hill Road | | Raise trail to enable use by avoiding flood water from Bear Creek. Remove trail surface, and install boardwalk. Raise enough to meet bike height needs. |
| 268 | Red-Wood Road Shoulder | Red-Wood Road (SR 202) | NE 109th Street | 116th Street NE | Construct 2,180' of paved shoulder along west side. Shift centerline to allow continuous striped shoulder on both sides for pedestrians and cyclists. |
| 271 | West Lake Sammamish Parkway & NE 24th Street Intersection Regrading | W Lake Sammamish Pkwy at NE 24th Street | | | Improve sight-distance by re-grading Northwest corner of intersection. |
| 275 | Redmond Way Sidewalk South | Redmond Way | 140th Ave NE | 145th Ave NE | Construct missing sidewalk on south side; solutions include extensive retaining walls or structured steel walkway with railing. Improve transit stop amenities. |

Table 20. Neighborhood projects (continued)

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|--|--|-----------------------------|--------------------|---|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 276 | 185th Ave NE & NE 68th Street Ped Improvements | 185th Avenue NE at NE 68th Street | | | Install traffic control, pedestrian crosswalks, and rain garden for employees in the area. |
| 278 | Bear Creek Parkway & 168th Ave NE Crosswalk | Bear Creek Parkway at 168th Avenue NE | | | Install crosswalk on west leg, providing access to Bear Creek Trail. |
| 280 | NE 80th Street & 165th Avenue NE Intersection Modification | NE 80th Street at 165th Avenue NE | | | Install pedestrian crossing on east side with sidewalk “bulbout” into street. |
| 282 | 151st Avenue NE & NE 90th Street Traffic Signal | 151st Avenue NE at NE 90th Street | | | Install traffic signal and provide for pedestrian crossings with bump-outs. Install Rapid Ride stop. |
| 291 | Bel-Red Road Widening | Bel-Red Rd | West Lake Sammamish Parkway | NE 40th Street | Widen Bel-Red Rd from West Lake Sammamish Pkwy to NE 40th St. Improvements include two through lane in each direction, left-turn lanes, bike lanes, curb, gutter, sidewalks, street lights and storm drainage. |
| 295 | 150th Avenue NE and 520 Trail Nonmotorized Connection | 150th Avenue NE | NE 60th Street | NE 51st Street | Construct hard surface nonmotorized connection between 150th Avenue NE and a planned 520 Trail access point north of NE 51st Street (on private property). The alignment of this nonmotorized connection follows the alignment of existing path on Microsoft’s private campus. This project would be coordinated with Microsoft and not require previously right-of-way or easements. |
| 297 | 152nd Avenue NE Bicycle Connection | 60th Street, 152nd Avenue, 68th Street | Old Redmond Road | 156th Avenue | Construct bicycle treatments such as bicycle related signage and channelization. |
| 300 | NE 116th Street & 154th Place NE Staircase | NE 116th Street | 154th PI NE | | Construct staircase between 116th Street/Red-Wood Road and 154th Place. Add bike runnel. |
| 309 | 8400 Block Trail | 8400 block | Redmond Central Connector | | Purchase right-of-way and construct pedestrian and bicycle trail connecting local streets to future Redmond Central Connector. |

Table 20. Neighborhood projects (continued)

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|---|------------------------------|----------------------|-----------------------------|---|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 316 | NE 84th Street Sidewalk | NE 84th Street | 140th Avenue NE | 142nd Avenue NE | Construct sidewalk to provide access to signal at Redmond Way. Ensure sidewalk facilitates safe pedestrian movements to and from intersection. Include curb, gutter, and storm treatments. |
| 321 | Willows Road Rechannelization | Willows Road | South of PSE Trail | NE 90th Street | Rechannelize to provide southbound bicycle lane. |
| 322 | Red-Wood Road Street Sidewalk | Red-wood Road south of 109th | NE 109th Street | Around NE 107th Street | Construct 420' sidewalk along west side using cantilevered structure (similar to Bel- Red Road near Microsoft campus). |
| 333 | Southeast Redmond Light Rail Station | | | | Construct a light rail station on the East Link line, including station platforms and entryways, and amenities including art, high quality pedestrian access and bicycle parking. Construct a large parking facility to intercept East King County vehicle commuters, effectively utilizing this station as the terminus station of the line for vehicle parking, reducing impacts on Downtown Redmond and the Downtown Redmond terminus station. |
| 336 | NE 65th Street Sidewalk | NE 65th Street | 176th Avenue NE | East Lake Sammamish Parkway | Construct sidewalk on north side of street to replace existing soft surface trail and improve intersection for pedestrians and bicyclists at 176th Avenue NE and NE 65th Street intersection. |
| 338 | Bike Parking Facilities in Bear Creek Park and Ride Lot | | | | Provide secure bike parking facilities at the Bear Creek Park and Ride. Work with King County Metro. |
| 340 | 148th Avenue NE and Old Redmond Road Intersection Improvement | | | | Extend the eastbound right turn lane by increasing length and channelization. |
| 344 | NE 51st Street and 154th Place NE Westbound Left-Turn Lane | NE 51st Street | 154th Ave NE | | Provide a westbound left-turn lane on NE 51st Street at the intersection of NE 51st and 154th Place NE. Improvement includes right-of-way acquisition. |
| 354 | NE 116th Street Shoulder Widening | NE 116th Street | Sammamish River | 154th Place NE | Widen the shoulder from the Sammamish River to 154th Place NE for cyclists and pedestrians. |

Table 20. Neighborhood projects (continued)

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|---|-----------------------------|----------------------|--------------------|---|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 357 | NE 87th Street Staircase and Sidewalk | | | | Connect NE 87th Street near 148th Avenue to 87th Street and 147th Avenue with a combination of staircases and sidewalk. |
| 358 | Avondale Road and 180th Avenue NE Crossing Enhancement | | | | Add crosswalk and two ADA ramps to the south leg of the intersection. |
| 361 | West Lake Sammamish Parkway Phase III Widening (Part 2) | West Lake Sammamish Parkway | NE 51st Street | Bel-Red Road | Widen West Lake Sammamish Parkway from NE 51st Street to Bel-Red Road. Improvements include two through lane in each direction, left-turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, underground power, right-of-way and extending the multi-use path on the east side of West Lake Sammamish Parkway. Coordinate with Project 157, part 1. |
| 364 | NE 76th Street Extension - Segment 2 | NE 76th Street | 188th Avenue NE | 192nd Avenue NE | Construct new NE 76th St from 188th Ave NE to 192nd Ave NE. Improvements include one through lane in each direction, left-turn lanes or medians to create a three lane section, bike lanes, sidewalks, street lights, traffic control, storm drainage, right-of-way and easements. Consider roundabout at 185th Ave and 76th St. |
| 365 | NE 73rd Street Extension - Segment 2 | NE 73rd Street | 188th Avenue NE | 192nd Avenue NE | Construct new NE 73rd St from 188th Avenue NE to 192nd Avenue NE. Improvements include one through lane in each direction, left-turn lanes, bike lanes, sidewalks, street lights, traffic control, storm drainage, right-of-way and easements. |
| 370 | NE 116th St Widening Segment I Phase II | NE 116th St | Red-Wood Road | 167th PI NE | Complete NE 116th St from Red-Wood Road to 167th Place NE. Improvements include one through lane in each direction, left-turn lanes, bike lanes, curb, gutter, sidewalks, equestrian trail, street lights, storm drainage, underground power, right-of-way, and easement acquisition. Improvements coordinate with Project 356: the construction of a roundabout at NE 116th Street and 162nd Avenue NE. Phase I is Project 76. |

Table 20. Neighborhood projects (continued)

| NEIGHBORHOOD PROJECTS | | | | | |
|-----------------------|--|----------|----------------------|-----------------------------|---|
| Project ID | Project Title | Location | Project Limits: From | Project Limits: To | Description |
| 374 | New SR 520 Auxiliary Lane at Various Locations | SR 520 | I-405 | West Lake Sammamish Parkway | Construct new auxiliary lanes at the following locations: 1) eastbound between the 148th Ave NE interchange and the NE 40th St interchange; 2) eastbound from NE 51st Street on-ramp to Westlake Sammamish Parkway off-ramp; and 3) westbound from Westlake Sammamish Parkway on-ramp to NE 51st Street off-ramp. |

Appendix F:

Design Guidance

Design guidance is an implementation tool for the street, transit, pedestrian, and bicycle system plans (Chapter 4). Together with system plans, this guidance helps clarify the intent for amending design standards and regulations contained in Redmond Zoning Code, Redmond Construction Design Standards, and other relevant documents as needed to be in alignment with the TMP. Also, design guidance directs the selection of engineering design parameter values for capital improvements, such as those included in the American Association of State Highway and Transportation Officials (AASHTO) Green Book.

Design guidance starts from streets, which is organized by street functional classifications (Figure 64). Table 21 includes important parameters for defining the street cross-section and refers to subsequent tables in this appendix for detailed guidance for system plans of transit, pedestrians, and bicyclists (Tables 22 to 30).

Street Design Guidance

In using the design guidance in Table 21, it is important to recognize the following:

1. Several design parameters affect street cross-section. These are: mid-block lane width, posted speed limit, and maximum number of general purpose lanes. Where there is a range between maximum and minimum values, the minimum value is preferred. Wide lanes, added turn lanes, and extended-length turn lanes will only be allowed following thorough evaluation of the land use context, multimodal context, right-of-way cost, and other compelling engineering considerations.
2. Table 21 is arranged by street classification. While functional classification is important in guiding street design, other controlling considerations include the land use context and the need to balance multimodal needs. Therefore, not all streets in the same functional classification may have uniform design. For example, in some cases, due to right-of-way constraints or the local context, streets may be narrower than other streets in the same functional classification.
3. There are exceptions to Table 21 parameters in cases where current conditions on certain streets differ from this table, where interim street improvements are made, or where there are unique site-specific design considerations. For example, the current posted speed limit on Willows Road (between NE 95th Street and north city limits) is 45 mph, higher than the maximum posted speed limit, 40 mph, for principal arterials. The Three-Year Action Plan provides direction for a speed limit revision study, which will review speed limits on select corridors to consider the interests of all street users. For new improvements, any such deviation from this table shall be documented through a thorough evaluation and deliberate decision process.

Table 21. Street design guidance

| Functional Classification | Principal Arterial | Minor Arterial | Collector Arterial | Connector | Local Access | Woonerf |
|---|--------------------|----------------|--------------------|-----------|--------------|-------------------------------|
| Maximum pedestrian crossing length | 75 feet | | | | | Not applicable |
| Maximum number of general purpose through lanes in each direction | 2 | 2 | 1 | 1 | 1 | 1 |
| Mid-block lane width (feet) | 11-12 | 10.5-11 | 10.5-11 | 10-10.5 | 10 | 10 max. 20 in both directions |
| Speed limit (mph) | 35-40 | 30-35 | 25-30 | 25 | 25 | 10 |

Roadway Functional Classification System

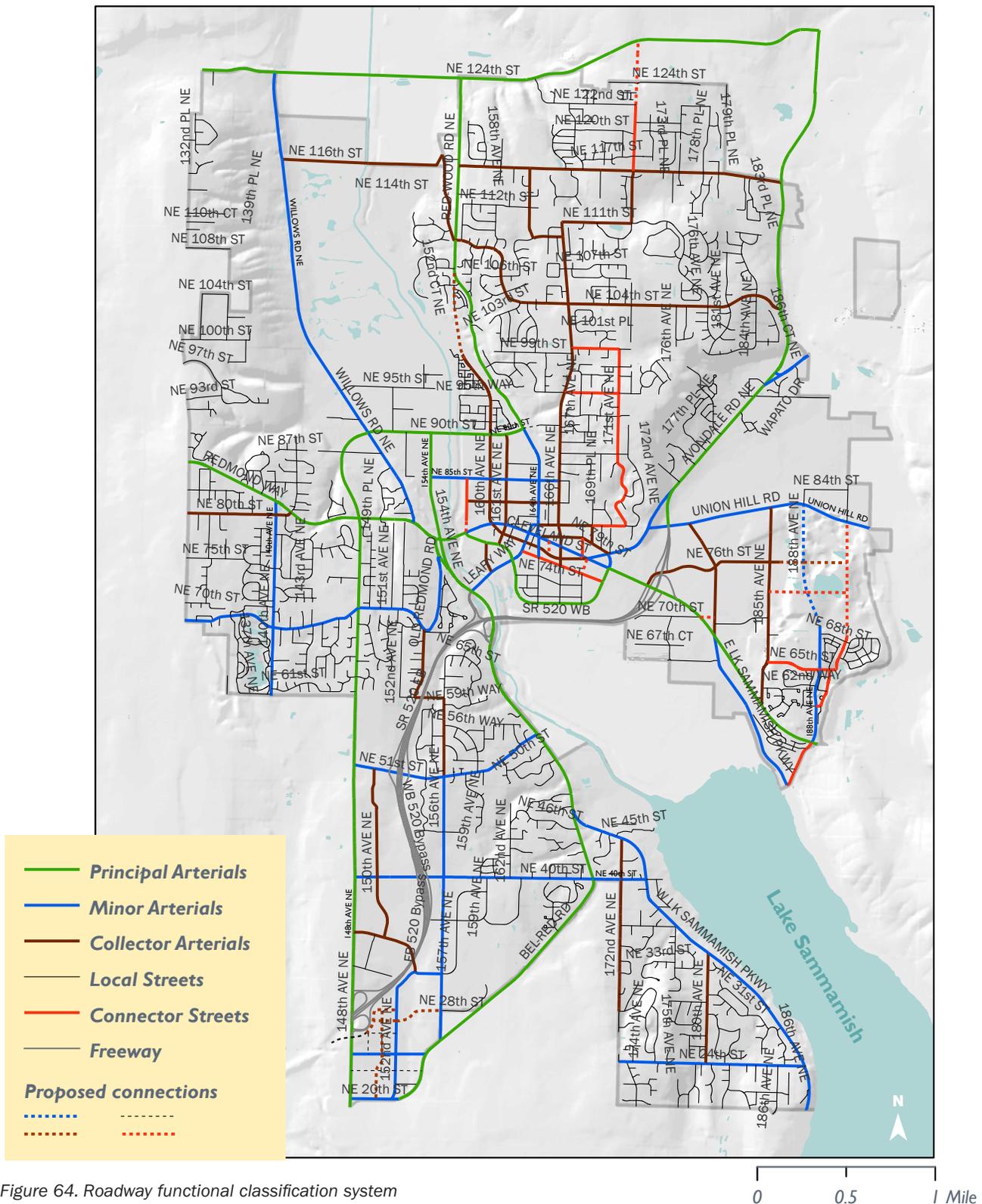


Table 21. Street design guidance (continued)

| Functional Classification | Principal Arterial | Minor Arterial | Collector Arterial | Connector | Local Access | Woonerf |
|---|---|----------------|--------------------|-----------|--------------|--|
| Access management | Maintain spacing between any adjacent streets and driveways of 150 feet. Only connect driveways from parcels to public streets with the lowest functional classification. | | | | | |
| Transit facilities | Refer to Tables 22 and 23 for design guidance. | | | | | |
| Bike facilities | Generally dedicated bike facilities on both sides of arterials; mixed with traffic for local access streets and woonerf. See Tables 24 through 27 for detailed design guidance. | | | | | |
| On-Street parking (7 - 8 feet in width, 8 feet preferred) | Generally discouraged along principal and minor arterials and encouraged along other types of streets. However, parking is encouraged regardless of functional classifications in three areas: Downtown Urban Center, Overlake Urban Center, and the Southeast Redmond light rail station area. | | | | | |
| Landscape strip | Stormwater bioretention swales, treatment planters, or other types of natural stormwater drainage treatment methods. See Table 29 for required width. | | | | | Stormwater facilities at edge or through pervious pavement |
| Sidewalks | Required for both sides of all streets. See Table 29 for design guidance. Design shall support natural infiltration of stormwater. Facility and landscaping locations are adjacent to the street to provide pedestrian buffers. | | | | | |

Transit Design Guidance

There are two categories of transit modal corridors in the transit system plan. They are high and medium demand transit modal corridors.

High Demand Transit Modal Corridors

These corridors include major arterials and SR 520, connecting Redmond’s urban centers and major neighborhood activity centers. These are recommended as high priority. They possess the highest demand for transit, have the highest levels of service today and into the future, and represent the local and regional transit spine. The person-carrying capacity of transit in these corridors is similar to an entire general purpose lane of travel and is critical to the functioning of the transportation system, particularly in the urban centers where transit is critical to the functioning of the entire transportation system and represents the most significant ability to accommodate peak travel growth. These corridors are the highest priorities for service hour and infrastructure investments, creating service that is fast, frequent, reliable, and easy to get to.

The transit service standard for these corridors is that they should contain one or more routes with a combined frequency of 15 minutes or better throughout the day. Wherever possible, service should be focused in these corridors.

Medium Demand Transit Modal Corridors

These corridors support active transit patronage and provide important coverage and local access functions throughout the city by providing convenient access to Redmond’s urban centers and the regional transit spine. These corridors may not see the City’s highest levels of service investment or ridership. Investments should focus on improving access to adjacent housing and important services in order to maximize this function.

Designated Transit Corridors

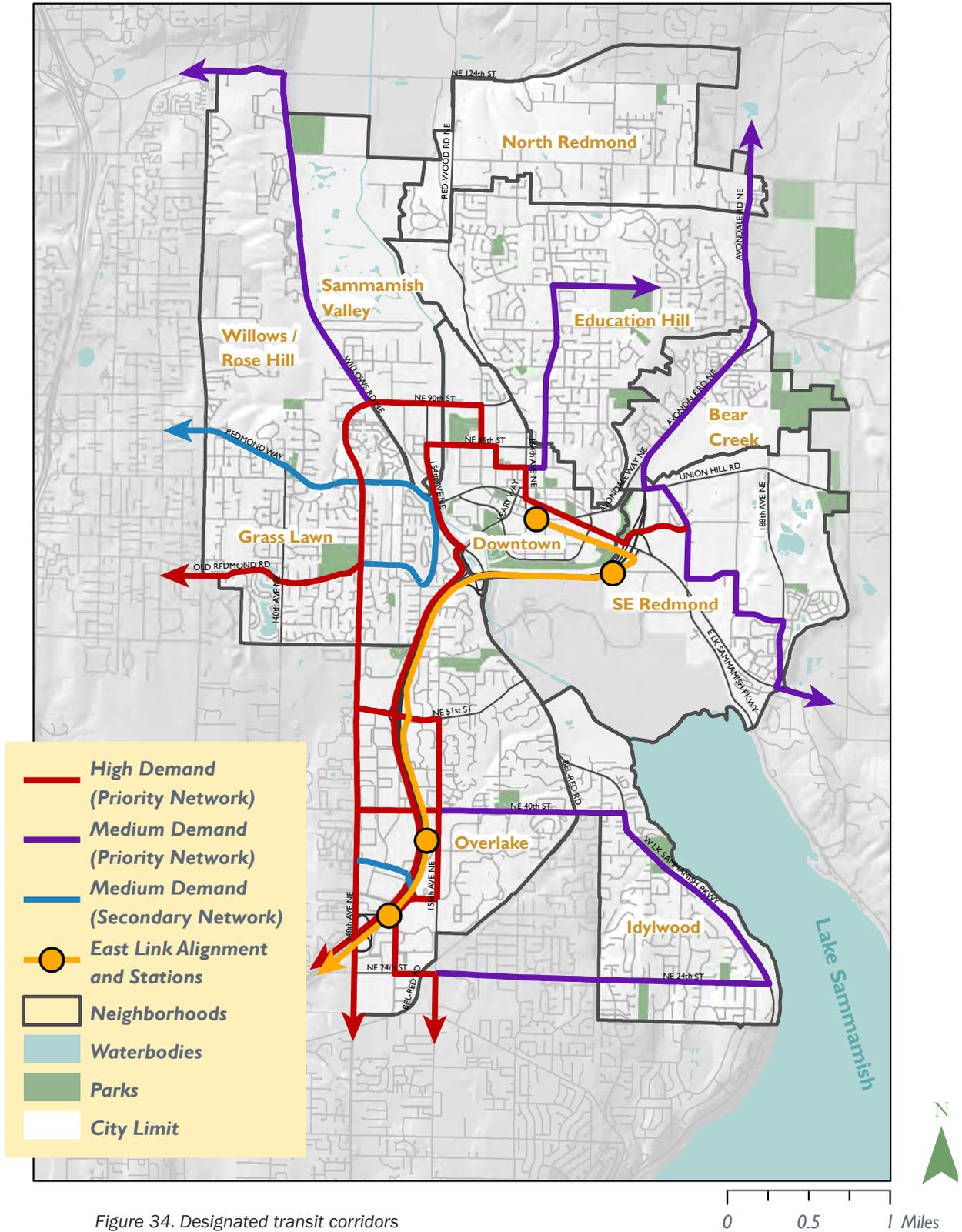


Figure 34. Designated transit corridors

The transit service standard for these corridors requires including one current or future route with a target of 30-minute frequency all day.

Table 22. Design guidance for high demand corridors

| Treatment | Definition | Intent | Standard |
|--|---|---|-------------|
| Queue Jump Lane | A bus only lane with a dedicated signal call that advances the bus only lane ahead of the general purpose lanes at a signalized intersection. | Improve speed and reliability. Emphasis on reliability in highly congested corridors. 5-25 percent reduction in travel times at a signal. | Recommended |
| Business Access and Transit (BAT) Lanes | A through lane exclusively for use by buses and general purpose right-turn movements. | Improve speed and reliability. Emphasis on reliability in highly congested corridors. 5-25 percent reduction in corridor travel times. | Recommended |

Table 23. Design guidance for both high and medium demand corridors

| Treatment | Definition | Intent | Standard |
|---------------------------------------|---|--|---|
| Transit Signal Priority (TSP) | Signal communication device used to trigger a bus only signal phase to speed bus movement. | Typically used for reliability, may also be used for speed. Up to 10 percent time savings at signals. | Recommended – High Optional – Medium |
| Bus-Supportive Roadway Surface | Roadway-wide or spot (bus stop or general purpose lane with bus traffic) pavement thicker and stronger than typical pavement. | Improves pavement life cycle. Also maintains bus service reliability and passenger comfort. | Required as pavement rehabilitation occurs – High Recommended – Medium |
| Bus Bulbs | Bus stop extended to be adjacent to travel lane where on-street parking or other roadway configuration would locate bus stop away from general purpose and require bus to pull out of general purpose lane to serve bus stop. | Removes the need for the bus to merge back into traffic and adds queuing space for riders at busy transit stops. Speed improvement of eight seconds per stop has been demonstrated locally. | Recommended – High Optional – Medium |
| Level Boarding Platforms | Boarding platform raised to height of bus floor. | Remove the need to hydraulically lift mobility-impaired passengers onto the vehicle. Only applicable for low floor buses with no stairs. Notable reliability benefit. | Optional – High Optional – Medium |
| Bus stop spacing | The distance between bus stops. | Balance access needs with improved speed by removing underutilized stops that do not meet spacing criteria. Stop consolidation to standard distance can improve route speed by 2-20 percent. | Approximately every 1,000 feet (both High and Medium). |

Bicycle System Map

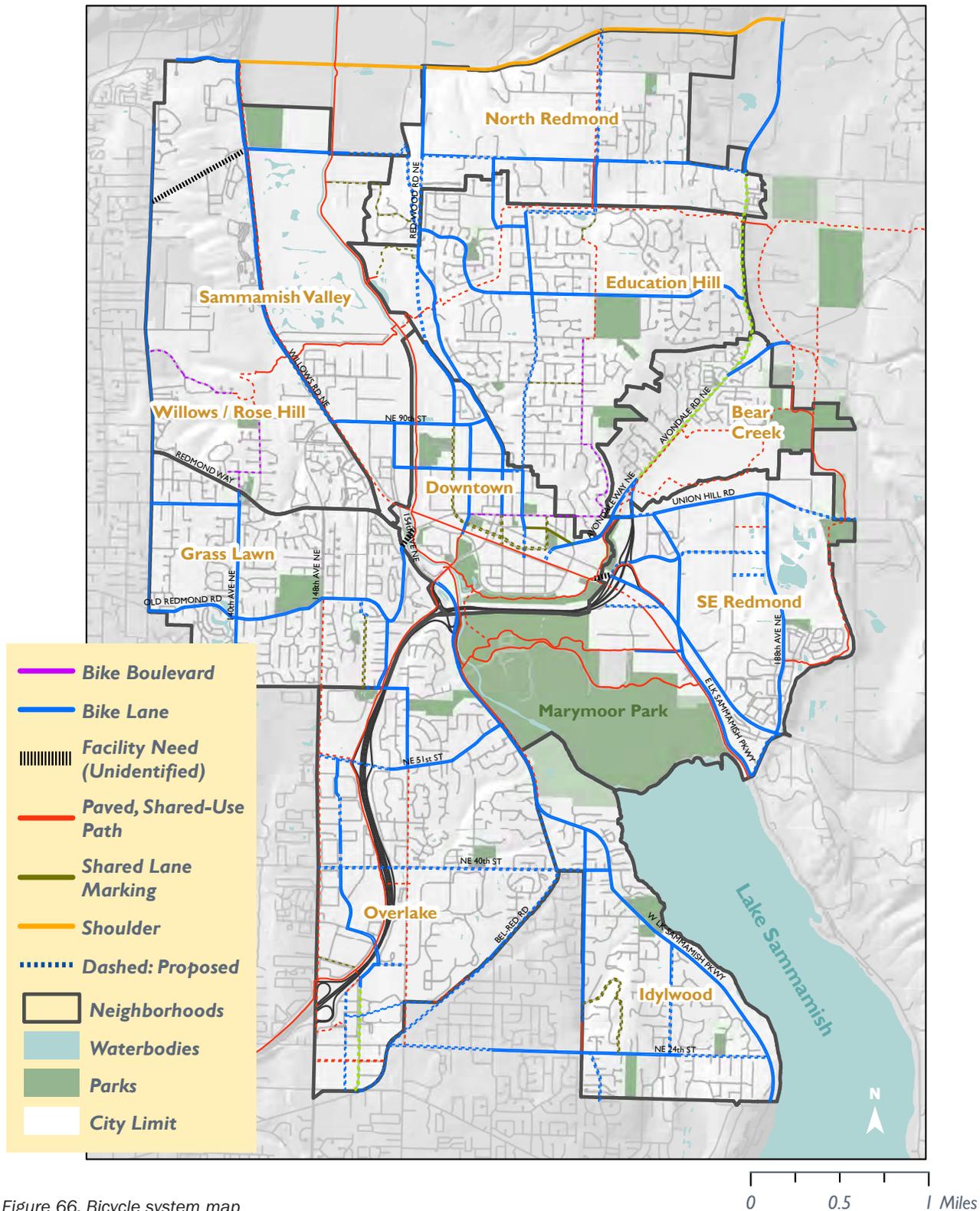


Figure 66. Bicycle system map

Table 23. Design guidance for both high and medium demand corridors (continued)

| Treatment | Definition | Intent | Standard |
|------------------------|--|--|---|
| Off-board fare payment | Fare payment device located at the bus stop. | Significant reduction in dwell times at high-volume stops. Speed improvement of one second per boarding passenger. | Recommended – High Optional – Medium |

Bicycle Design Guidance

An extensive toolbox of bicycle facilities will ensure that high comfort facilities along streets and continuing up to and through intersections are installed on key bicycle routes where feasible. A wide variety of other bicycle facilities should be available where street cross-sections are too constrained to allow high comfort bicycle facilities. This broad toolbox provides an important step forward by focusing not only on bicycle facilities that continue along corridors, but also enabling bicycle guidance and positioning for bicycles to proceed up to and even through street intersections. This is a challenge today. Bicycle lanes often end before an intersection once space in the street cross-section is too constrained, leaving many bicyclists uncomfortable and unsure how to proceed.

Design guidance for bicycle facilities is broken into four tables (24, 25, 26, and 27.) For corridors, the Modal Map and the Bicycle System Map (below) determine the facility type. Tables 24, 25, and 26 provide recommended design guidance. Table 27 provides design guidance for signal control and markings for bicycle travel. While corridor improvements are required, improvements at intersections are recommended. The Modal Map assigns a higher priority for bicycle intersection improvements that are on modal corridors, but these treatments should be applied anywhere warranted on the bicycle system.

These design standards will be reviewed under Action Plan item 13: Bicycle Facilities Design Manual Update.

Table 24. Tier 1 high comfort bicycle facilities

| Facility | Definition | Intent | Design Guidance |
|------------------------|--|--|--|
| Paved, Shared-Use Path | A two-way operation bike and pedestrian facility physically separated from motorized vehicular traffic. Typically significantly setback or entirely independent from roadways. | Physical separation from automobiles provides high comfort for bicyclists. | Width: 14 feet recommended 10-foot minimum Lighting: recommended to ensure facilities are safe and usable year round, particularly when it is dark during commuting times. Connections: Adjacent properties shall connect to adjacent paved, shared-use paths (exceptions may be granted because of topography or environmental conditions). Modal Conflicts: Segments with high numbers of modal conflicts require additional improvements. Solutions include widening or creating two parallel paved, shared-use paths, grade separating roads and paved, shared-use paths, and adding a centerline stripe. |

Table 24. Tier 1 high comfort bicycle facilities (continued)

| Facility | Definition | Intent | Design Guidance |
|--|---|--|--|
| Cycle Track | An exclusive bicycle facility that combines the user experience of a separated path with the on-street infrastructure of a conventional bike lane. Cycle tracks are found within or adjacent to a roadway but separated from motor vehicle traffic by a physical barrier, such as a curb or vehicle parking lane. | Physical separation from automobiles provides high comfort for bicyclists. | <p>One-way operation (recommended):</p> <p>Width: Recommended 6-8 feet, 5-foot minimum</p> <p>Intersections: Raised and protected cycle tracks transition to be adjacent to general purpose lanes at intersections.</p> <p>Two-way operation (not recommended):</p> <p>Width: Recommended 12-14 feet, 10-foot minimum</p> <p>Intersections: Significant intersection treatments, including bicycle signals and green bicycle lanes, strongly recommended</p> |
| Greenways/ Bicycle Boulevards | Streets with low motorized traffic volumes and speeds designated and designed to give priority to bicycles. Bicycles share streets with vehicles. | Utilize low-volume streets more effectively by engineering streets to be high comfort for bicycles. Automobiles and bicycles mix, with high comfort for bicycles due to low automobile speed and volume. | Vehicle volumes: recommended 1,000 ADT or less, maximum 3,000 ADT. |
| Buffered Bicycle Lanes | Bicycle lanes paired with a designated buffer space separating the bicycle lane from the adjacent motor vehicle travel lane and/or parking lane. | Greater separation from automobiles provides higher comfort for bicyclists than bicycle lanes with no buffer. | <p>Buffer width: minimum 2 feet</p> <p>Width: see “Bicycle Lanes” in Table 25.</p> |

Table 25. Tier 2 standard bicycle facilities

| Facility | Definition | Intent | Design Guidance |
|----------------------|--|---|--|
| Bicycle Lanes | A roadway lane designated exclusively for bicycle use. | Provide space in street cross-section dedicated for bicycle travel. | <p>Width (includes maximum 1-foot gutter pan and bicycle-friendly storm drains):</p> <p>6 feet recommended,</p> <p>5.5 feet standard,</p> <p>5-foot minimum on streets with over 30 MPH speed limit or streets with on-street parking (with minimum 7.5 feet on-street parking width),</p> <p>4-foot minimum when adjacent to curb and speed limit 30 MPH or lower</p> |
| Bike Runnel | A trough-shaped device integrated into staircase design that enables bicycles to be rolled up or down a staircase. | Enable bicycles to utilize staircases rather than staircases being a barrier. | <p>Locations: required at all public staircases</p> <p>Design: Adequate space and correct height to ensure that bicycle pedals and handlebars move freely.</p> <p>Additionally, the top of a staircase typically includes signage advising bicyclists of the staircase ahead.</p> |

Table 26. Tier 3 bicycle facilities

| Facility | Definition | Intent | Design Guidance |
|--|---|--|--|
| Shared Lane Markings (“Sharrows”) | A pavement marking that delineates where bicycles should be positioned. | Delineate where bicyclists should be positioned and link bicycle facilities together. This calls attention to automobiles that bicyclists are expected on this street more so than other shared streets. | Location: Place along the right side of the lane when bicyclist should be positioned on right side of lane. Place in center of lane when lane width is less than 14 feet and lane should be shared by vehicles and bicycles; maximum speed limit 30 MPH. |

Table 27. Intersection bicycle facilities

| Facility | Definition | Intent | Design Guidance |
|---------------------------------------|---|---|--------------------------------------|
| Green Bicycle Lanes | Bicycle lane or cycle track colored green, denoting conflict areas on bicycle facilities, such as at intersections and locations where vehicles or bicycles must merge across a lane. | Increase bicycle and automobile knowledge of conflict areas, promoting orderly merging of automobiles and bicycles. | Continue to or through intersection. |
| Bicycle Boxes | An area designated for bicyclists at the approach to intersections. Typically colored green. Box includes bicycle facility and rightmost general purpose lane. | Reduce threat of right hook collisions and proceed to front of intersection queue. | Continue to an intersection. |
| Intersection Crossing Markings | Pavement markings such as dashed lines the width of a bicycle lane or shared lane markings that position bicycles through an intersection. | Increase bicycle comfort by positioning bicycles and providing guidance on how to proceed through intersection. Bicycle facilities continue rather than end before intersections. | Continue through intersection. |

Pedestrian Design Guidance

Walking is an attractive travel choice when the public pedestrian network encourages easy, short walking trips to destinations (whether to a restaurant in an urban center, a bus stop, or a neighbor’s house); and when the pedestrian environment is comfortable and visually appealing. Table 28. Network Connectivity, ensures a pedestrian system that provides the shortest possible walking trip to destinations, not just a denser, finer-grained pedestrian network. This is a key element of achieving the neighborhood connections strategy. Design guidance (not already incorporated into the Zoning Code) that ensures a comfortable, aesthetically pleasing pedestrian environment is included in Table 29. Sidewalk Design Guidance, and Table 30. Pedestrian Crossing Design Guidance. The focus is on ensuring a comfortable width of sidewalk space (minimum through walkway) and on providing

Pedestrian Priority Zones

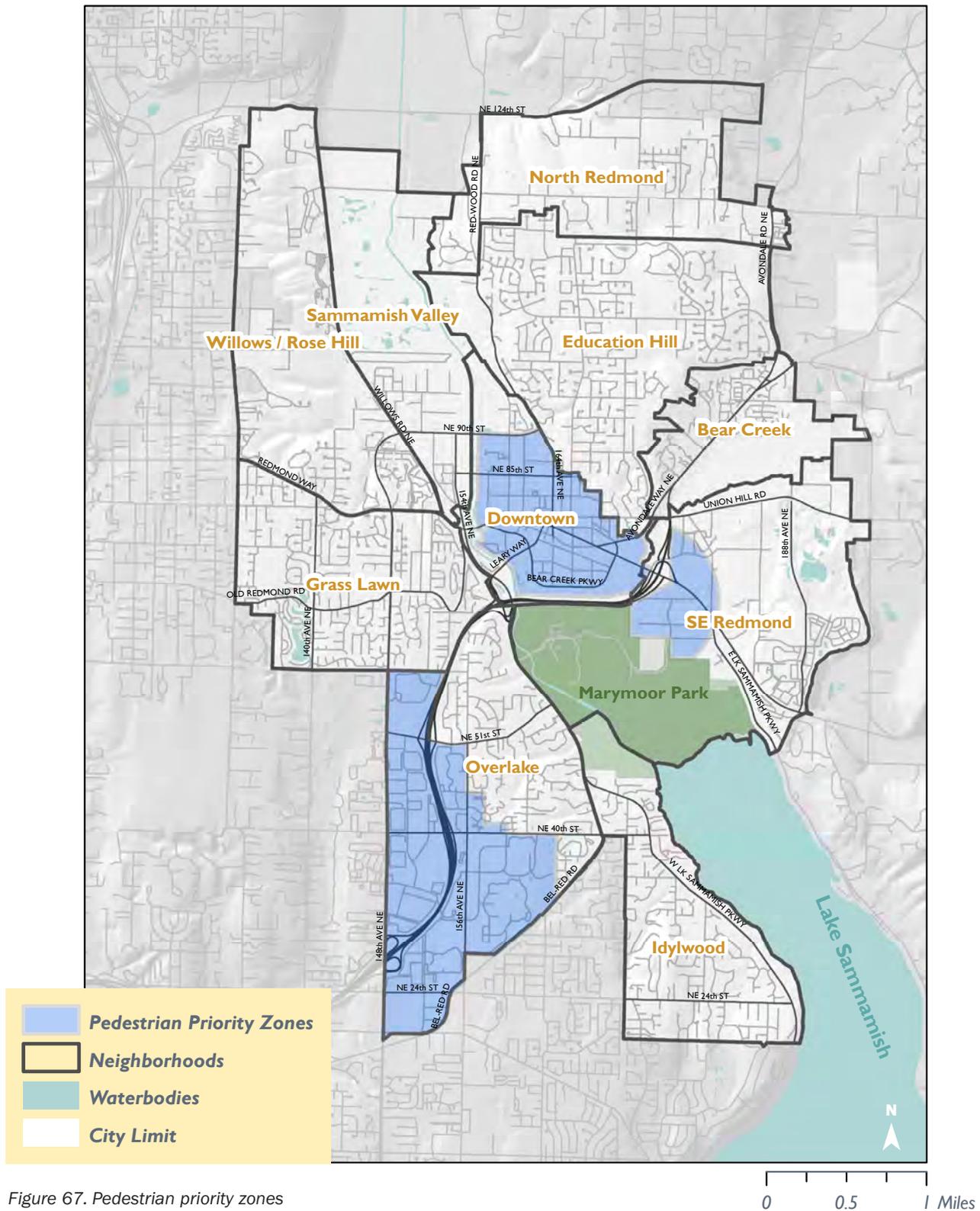


Figure 67. Pedestrian priority zones

crosswalks where pedestrian activity is anticipated, such as urban centers, transit stops, schools, and community parks.

The Pedestrian System Map shows areas of the city where the highest level of pedestrian activity is anticipated compared to areas where lower pedestrian activity levels are anticipated. Design standards in the pedestrian design guidance tables reflect these differences, enhancing the environment in urban areas (urban centers and light rail station areas) and also enhancing neighborhood character.

Table 28. Network connectivity

| Network Linkage Recommended | Intent and Illustration | Guidance |
|---|--|---|
| <p>Build any connection specifically identified in the Comprehensive Plan, Transportation Master Plan, or Parks, Arts, Recreation, Culture, and Conservation (PARCC) Plan.</p> | <p>Build specific network connections that have been identified through planning.</p>  | |
| <p>Connections to any public right-of-way or publicly accessible way will be built, connecting to all adjacent facilities at least once, and connecting a minimum of once per every 500 feet for a parallel facility.</p> | <p>Complete a dense, well-connected network.</p>  | |
| <p>Cul-de-sacs connect to any segment of the public pedestrian system and to other cul-de-sacs within 528 feet. Exception: connections are not required to existing cul-de-sacs built prior to 2013 when there is not already an established pedestrian connection.</p> | <p>Complete a dense, well-connected network. Disconnected cul-de-sacs are the most significant cause of low connectivity.</p>  | <p>Build minimum 5-foot-wide concrete (or width and material specified in the Comprehensive Plan, PARCC Plan, or elsewhere in TMP) pedestrian connection.</p> |
| <p>Main building entrance shall have a direct connection to the publicly accessible pedestrian system.</p> | <p>Provide direct, safe pedestrian connections from the pedestrian system to buildings.</p>  | |

Table 29. Sidewalk design guidance

| Facility | Definition | Intent | Urban Centers | Pedestrian Priority Zones (Outside Urban Centers) | Neighborhoods |
|--|--|---|---|---|---|
| Minimum Through Walkway | Area of sidewalk clear of any physical objects. | Ensure pedestrian facility accommodates pedestrian comfort and volume and is retained for pedestrian transportation. | 8-foot standard 6-foot minimum | 6-foot minimum | 5-foot minimum |
| Through Walkway Buffer | Distance from either side of clear zone of physical encroachment by walls, fences, above-grade utilities, and signs. | Ensure that clear zone continues in a linear fashion and obstructions do not reduce capacity and decrease comfort. | 1 foot | 1 foot | 1 foot |
| Through Walkway Taper | Linear geometric through walkway. | Ensure effective through walkway by retaining through walkway along pedestrian path of travel. Lack of through walkway taper can be a notable issue in urban centers. | 1.5:1 taper | 1.5:1 taper | 1:1 taper |
| Sidewalk Width: Principal, Minor, or Collector Arterial | Street space designated for pedestrians. Material is hard surface, typically concrete. | Pedestrian volume and comfort needs are met based on land use context. | See Redmond Zoning Code 21.10.150 and 21.12.150 – dated 2012. | 8-foot minimum, both sides of street. | 6-foot minimum both sides of street. Recommended: Additional width of pedestrian realm (combined width of sidewalk and furnishing zone) near schools and community parks. |

Table 29. Sidewalk design guidance (continued)

| Facility | Definition | Intent | Urban Centers | Pedestrian Priority Zones (Outside Urban Centers) | Neighborhoods |
|---|---|--|---|---|--|
| Sidewalk Width: Connector Arterial | Street space designated for pedestrians. Material is hard surface, typically concrete. | Pedestrian volume and comfort needs are met based on land use context. | See Redmond Zoning Code 21.10.150 and 21.12.150 – dated 2012. | 8-foot minimum both sides of street. | On both sides of street. Option 1: Attached to back of curb – 6-foot minimum. Option 2: Separated from curb by landscaping strip – 5-foot minimum. Recommended: Additional width of pedestrian realm (combined width of sidewalk and furnishing zone) near schools and community parks. |
| Furnishing Zone: Principal, Minor, or Collector Arterial | Space physically buffering the sidewalk from the street. Typically hardscape with trees in urban areas and typically a planting strip in neighborhoods. | Provide physical separation from vehicle and an attractive environment. Additionally this improves sight distance. | See Redmond Zoning Code 21.10.150 and 21.12.150 – dated 2012 | 5-foot minimum both sides of street. | 5-foot minimum both sides of street. |
| Furnishing Zone: Connector Arterial | Space physically buffering the sidewalk from the street. Typically hardscape with trees in urban areas and typically a planting strip in neighborhoods. | Provide physical separation from vehicle and an attractive environment. | See Redmond Zoning Code 21.10.150 and 21.12.150 – dated 2012. | 5-foot minimum both sides of street. | On both sides of street Option 1: Sidewalk attached to back of curb. Option 2: Sidewalk separated from curb by minimum 5-foot Furnishing Zone. |
| Pedestrian Amenities | Street furniture such as benches, newspaper stands, art, community boards, etc., and sidewalk cafes. | Support an engaging, vibrant area to walk and help create desired community character. | Recommended. | Recommended near retail. | Recommended near neighborhood commercial. |
| Pedestrian Scale Lighting | Street lighting oriented to pedestrian needs. | Lighting is necessary for a safe environment and can add to an attractive pedestrian environment. | Required. | Recommended. | Optional. |

Table 30. Pedestrian crossing design guidance

| Crossing Facility | Definitions | Intent | Urban Centers | Outside Urban Centers |
|--|---|--|---|--|
| Maximum distance between marked crossings | Distance between crosswalks with pavement markings. | Frequent pedestrian crossings of roadways are critical to pedestrian travel time and safety because of significant out of direction travel. | Maximum every 528 feet. Recommended every 250 feet to 330 feet. | Maximum every 1,320 feet. Recommended within 330 feet of pedestrian generators, including schools, community parks, and transit stop. |
| Signalized crosswalks at signalized intersections | A crosswalk with pavement markings located at a traffic signal. | Crosswalks at each leg of an intersection facilitate pedestrian movements, which is particularly important in areas with high volumes of pedestrians such as urban centers. When legs of an intersection are unmarked, a pedestrian is then forced to wait an extra cycle length, adding significant delay and pressure for the pedestrian to jaywalk. | Ladder style crosswalk strongly recommended at all legs of intersections. | Strongly recommended at all legs of intersection. |
| Curb Extensions | Extending the curb out to be adjacent to the general purpose lane. For example, moving the curb out from on-street parking to the general purpose lane. | Shorten crossing for pedestrian and increase visibility of pedestrian to improve safety and comfort. | Install in conjunction with on-street parking or as applicable for safety. | Consider installing in conjunction with on-street parking or as applicable for safety. |
| Slip Lane | A turn lane providing an unsignalized “free” right turn at a signalized intersection. | Facility reduces driver attentiveness to pedestrians and is uncomfortable for pedestrians. Stop building new slip lanes and retrofit existing slip lanes. | Retrofit existing slip lanes to add a compound curve (mountable by freight). Recommend no longer installing slip lanes. | Retrofit existing slip lanes to add a compound curve (mountable by freight). Recommend no longer installing slip lanes. |

Appendix G: Transportation Facilities Plan Programs

To ensure that the TFP program activities and performance are aligned with the TMP strategies, a program template has been developed to illustrate how each program supports the TMP strategies and community priorities and how each program operates based performance measures. All 15 TFP programs are described as below in the alphabetical order.

Bicycle Program

How Does This Program Support Strategies Needed to Achieve the Transportation Vision (Purpose)?

The Bicycle Program creates and implements plans, policies, and projects to make a successful bicycle system. This program will continue to build out the bicycle transportation network, including the installation of innovative facilities (based on national standards) that provide a safe and comfortable bicycling experience for users of all ages and ability. Education and encouragement (identified by the League of American Bicyclists as an improvement opportunity for Redmond) is also an important Bicycle Program activity. In order to build as much bicycle infrastructure as possible, this program will continue to leverage significant grant funding.

The Bicycle Program encourages bicycling as a safe, efficient, and attractive transportation mode in order to provide more mobility choices, increase access to our neighborhoods, and support our urban centers. Redmond is proud to call itself the *Bicycle Capital of the Northwest*.

What Transportation Master Plan Strategies Are Most Supported and How?

| TMP strategies most directly supported by this program | How strategies are supported |
|--|---|
| Prepare for Light Rail | Bicycle facilities are important for providing access to light rail stations at medium length trips where local transit service is either nonexistent or does not particularly meet user needs. Vehicle access will be limited due to cost and bulk, so transit, bicycle, and pedestrian choices are important to meet light rail demand. |
| Strong Support for Urban Centers | Bicycling is particularly effective at accommodating medium length trips within and to the urban centers. The bicycle network—which is nearly complete—provides a high level of connectivity that enables bicycling to be a significant travel choice within and to urban centers. Bikes are a natural component of the transportation system given Redmond’s bicycling culture and facilities. |
| Neighborhood Access | Bicycle improvements support a complete, connected system that provides access to urban centers, neighborhood businesses, parks, schools, transit, and neighbors. Bicycle access is particularly important for youth, the elderly, and anyone else who may not drive. |
| Travel Choices and Mobility | To significantly increase mode split away from vehicles, all transportation choices need to be provided. The full suite of transit, bicycling, and walking enables short to long trips to be taken 24 hours a day by people of all ages without a vehicle. Increased transit, bicycle, and pedestrian facility not only provide transportation choices, but also adjust mode split, thereby improving mobility. |

How Does This Program Support Community Priorities?

| Community Priorities | Comments |
|---------------------------|--|
| Infrastructure and Growth | Bicycles support short to medium length trips citywide and are increasingly time competitive with the automobile. Bicycling strengthens the transportation system by giving travelers an alternative to waiting in traffic. |
| Clean and Green | Bicycling improves health and emits no pollution, which is particularly important since the transportation sector is the main source of air pollution in the central Puget Sound region. |
| Community | Bicycle facilities provide more opportunity for people of all ages to visit neighbors, community facilities, and community meetings. |
| Safety | This program improves safety and comfort for bicyclists. A particular focus will be on providing safe, comfortable facilities for users of all ages and abilities, since the current bicycle lane system does not meet the comfort needs of the majority of the population. |
| Economic Diversity | A bicycle trip is inexpensive, leaving money in users' pockets. The savings can be substantial, since transportation is the second largest household cost. Bicycle activity supports local business through increased local shopping and foot traffic. Development costs are reduced because fewer vehicle parking stalls are necessary. |

How Do We Know This Program Is Working?

Bicycle ridership at City of Redmond screenline locations. (Outcome)

Status as a Bicycle-Friendly Community as reported by the League of American Bicyclists. (Outcome)

Percentage of Bicycle Priority Corridors completed. (Output)

Citywide total lane miles of on-street and off-street bike routes. (Output)

How Are Projects Prioritized Within This Program?

Projects are prioritized using numerous factors, including safety, access improvements for the disabled, proximity to pedestrian generators (urban centers, neighborhood centers, transit, schools, parks, senior facilities), light rail access, connectivity, whether the project fills a gap, whether existing facilities meet standards, maintenance conditions, feasibility, public support, and grant competitiveness.

Staff Recommended Revenue and Spending Plan for This Program in 2013 and 2014

2013 and 2014 Revenues

| | |
|--|--------------------|
| Transportation Capital Improvement Program (CIP) + 2012 carryover for project design | \$900,000 |
| Carry-forward | \$362,965 |
| Total | \$1,262,965 |

Program expenditures:

| | |
|--|--------------------|
| Design – 2013 | \$100,000 |
| NE 51st Street bicycle facility improvements | |
| High Ranking. Staff will meet with Mayor in early 2013 to determine final list based on analysis of high ranking projects. | \$1,072,965 |
| Central Connector Phase 2 matching funds | |
| Bicycle wayfinding citywide | |
| Bicycle channelization | |
| Bicycle Facilities Design Manual update | |
| Education and encouragement | |
| Program management | \$90,000 |
| Total | \$1,262,965 |

Bridge Program

How Does This Program Support Strategies Needed to Achieve the Transportation Vision (Purpose)?

The purpose of the Bridge Program is to maintain the structural integrity and safety of all 18 of the City’s bridges. Additionally, the program must comply with state and federal requirements. Construction, inspection, and maintenance records are maintained in a filing system in accordance with state guidelines. These records are also included in a State of Washington database. Bridge inspections are performed every two years for most bridges, and yearly for bridges with scouring potential. Bridge work orders are generated from inspections and prioritized; all work is then scheduled and completed.

What Transportation Strategies Are Supported?

| TMP strategies most directly supported by this program | How strategies are supported |
|--|---|
| Strong Support for Urban Centers | Bridges are part of the street network in Downtown and Overlake, and support land use in those centers. |
| Choices and Mobility | Provides mobility for cars, transit, pedestrians, and bikes. |
| Freight Mobility | Allows truck movements across rivers and creeks. |

How Does This Align with Community Priorities?

| Community Priorities | Comments |
|---------------------------|--|
| Infrastructure and Growth | Maintains bridges in a good and useable condition. |
| Safe City | Maintains bridges in a safe condition. |
| Responsible Government | Protects the City’s investment. |

How Do We Know This Program Is Working?

All bridge deficiencies are repaired or corrected in the order dictated by state and federal requirements.

What Criteria Should Be Used To Prioritize Projects Within a Program?

The Washington State Bridge Inspection Manual and the National Bridge Inspection Standards are used to prioritize repair and replacement projects.

Staff Recommended Revenue and Spending Plan for Program

2013 and 2014 revenues:

| | |
|--|--------------------|
| Transportation Capital Improvement Program (CIP) | \$150,000 |
| 2013: \$75,000 | |
| 2014: \$75,000 | |
| Grant | \$2,038,000 |
| Total | \$2,188,000 |

Project or activity list for this program

| | |
|--|--------------------|
| 2013: Annual/biannual inspection of all bridges. Design seismic retrofit the 148th Ave NE Bridge, which has received 100% grant funding. Prioritize remaining repairs. | \$500,000 |
| 2014: Annual/biannual inspection of all bridges. Construction of 148th Avenue NE Bridge seismic retrofit. Continue with cleaning and repairs. Repair/replace bridge on NE 95th Street. | \$1,688,000 |
| Total | \$2,188,000 |

Channelization Program

How Does This Program Support Strategies Needed to Achieve the Transportation Vision (Purpose)?

The purpose of the Channelization Program is to 1) install new pavement markings where they are missing and where they are most needed to provide an acceptable level of guidance for pedestrians, bicyclists, and motorists and 2) to repair crosswalks and stop bars. New markings provided by this program include lane lines, edge lines, crosswalks, stop bars, legends, and raised/reflective markers and other channelization needed to safely direct traffic on public roadways. Roadway channelization is provided to achieve adequate guidance in accordance with national standards as defined by the Manual on Uniform Traffic Control Devices (MUTCD). This program supports the effective use of Redmond's transportation infrastructure and the safety of the traveling public.

This shared fund account is also used by the Maintenance and Operations Center (MOC) to maintain the visibility of existing crosswalks and stop bars by refreshing these markings on an annual basis. This program does not currently fund MOC maintenance of other pavement legends, like bike symbols or turn arrows.

What Transportation Master Plan Strategies Are Most Supported and How?

| TMP strategies most directly supported by this program | How strategies are supported |
|--|---|
| Strong Support for Urban Centers | Urban centers have high levels of transportation demand from all modes, including automobiles, bicycles, and pedestrians. This requires significant care to provide roadway guidance. |
| Neighborhood Access | Markings help provide safe and orderly travel on the streets that connect neighborhoods. |
| Travel Choices and Mobility | Roadway markings are essential to providing safe facilities for bicycle and pedestrian mobility. |

How Does This Program Support Community Priorities?

| Community Priorities | Comments |
|---------------------------|---|
| Infrastructure and Growth | Pavement markings are a required component of public roadway infrastructure. The program expands with the growth of the roadway system. |
| Responsible Government | The government is obliged to provide clear, positive guidance to the multiple modes of transportation using public roadways in accordance with the MUTCD. |
| Safe City | Channelization markings provide clear guidance to improve safety for pedestrians, bicyclists, and motorists by reducing the likelihood of accidents. |

How Do We Know This Program Is Working?

The program measures success by the number of traffic accidents and user complaints attributable to pavement marking inadequacy. High accident locations are identified and evaluated yearly, and improvements to channelization markings are identified and implemented.

How Are Projects Prioritized Within This Program?

Requests from the community are evaluated and installed based on federal standards for channelization to provide clear and consistent guidance for all roadway users. Prioritization criteria include accident risk, potential severity of the collision, level of exposure for users, and mode encouragement.

Staff Recommended Revenue and Spending Plan for This Program in 2013 and 2014

2013 and 2014 Revenues

| | |
|--|------------------|
| Transportation Capital Improvement Program (CIP) | \$150,000 |
| 2013: \$75,000 2014: \$75,000 | |
| Total | \$150,000 |

Funds are shared by Traffic Operations Safety and Engineering and the MOC to install new channelization and to maintain existing crosswalks and stop bars. A portion of the funds are used for new channelization improvements suggested by staff and the community.

Project or Activity List for This Program

| | |
|--|------------------|
| 2013 & 2014: | \$150,000 |
| 1) Replace pavement markings (\$50,000) | |
| 2) Install new markings where needed (\$100,000) | |
| Total | \$150,000 |

Requests for channelization improvements are received and evaluated on an ongoing basis. Each year the Channelization Program installs new channelization at locations identified by staff and citizens. Individually, these requests are typically not large enough to warrant consideration by roadway striping contractors. Therefore, an annual contract grouping of 20 to 25 locations has proven to be the most effective and efficient way to accomplish these safety improvements. Last year \$13,000 was used to fund installation of new pavement markings, and the remainder was used by the MOC for repair of crosswalks and stop bars.

Capital Improvement Management Program

How Does This Program Support Strategies Needed to Achieve the Transportation Vision (Purpose)?

The Capital Improvement Management Program (CIM) advances the delivery of Transportation Facilities Plan (TFP) projects and programs through project development. Project development practices include planning, design, partnerships, and grant acquisition. These project development practices ensure that the delivery of the TFP is on track, which is part of the overall effort to implement the TMP strategies. Also, these project development practices provide opportunities to ensure that each project or program is delivered in accordance with the TMP strategies.

What Transportation Master Plan Strategies Are Most Supported and How?

The CIM Program focuses on advancing the TFP and completing the Three-Year Action Plan, which are part of the effort to implement all five TMP strategies. Therefore, this program supports all five strategies.

How Does This Program Support Community Priorities?

| Community Priorities | Comments |
|---------------------------|--|
| Infrastructure and Growth | This program advances the TFP, which provides the transportation infrastructure needed to support anticipated levels of growth in Redmond. |

How Do We Know This Program Is Working?

We will track the progress of this program using two performance measures:

- Leveraged Funding: Meet or exceed grant expectations
- Three-Year Action Plan Implementation: Meet or exceed the schedule

How Are Projects/Activities Prioritized Within This Program?

Activities in this program are consistent with or supportive of items in the TMP Three-Year Action Plan.

Staff Recommended Revenue and Spending Plan for This Program in 2013 and 2014

2013 and 2014 Revenues

| | |
|--|------------------|
| Transportation Capital Improvement Program (CIP) | |
| 2013: \$127,342 2014: \$133,073 | \$260,415 |
| Total | \$260,415 |

Project or activity list for this program

| | |
|--|------------------|
| 2013 & 2014 | \$260,415 |
| Fund 1.0 Full-Time Employee to conduct the following activities: <ul style="list-style-type: none"> • Conduct transportation grant research, development, applications, and administration. • Provide conceptual and preliminary engineering studies to position projects for grant applications, collaborate with outside agencies, and assist with developer requirements to implement TFP projects and maximize leveraging potential. | |
| Total | \$260,415 |

Engineering Contingency Program

How Does This Program Support Strategies Needed to Achieve the Transportation Vision (Purpose)?

The Engineering Contingency Program funds engineering and construction activities undertaken in response to emergency situations (e.g., a retaining wall failure) that occur during the year and that are not covered by other programs or operating budgets. This program is in place to provide immediate funding for those unexpected needs.

Funds from this program were most recently used to repair a failing rockery structure on NE 80th Street. There were no immediate plans or funds in place to fix the rockery when it began to collapse, so engineering contingency funds were used to make the repairs.

Another example of an Engineering Contingency Program activity is the funding of City staff and a consultant to assist the Washington State Department of Transportation with the SR 520 Corridor Planning Study, which was funded by the legislature due to consistent efforts made by the City of Redmond and other stakeholders along this corridor. To ensure that the City of Redmond's interests are reflected in this study including its process and that the results of this study improve the SR 520 corridor for Redmond residents and employees, this program contributed funding for staff time and consultant expenses between 2011 and 2012.

What Transportation Master Plan Strategies Are Most Supported and How?

| TMP strategies most directly supported by this program | How strategies are supported. |
|--|---|
| Travel Choices and Mobility | The repairs and situations that this program addresses improve the transportation system and therefore improve choices and mobility for Redmond residents, employees, and visitors. |

How Does This Program Support Community Priorities?

| Community Priorities | Comments |
|---------------------------|--|
| Infrastructure and Growth | Supports infrastructure and growth by repairing failing structures and addressing other emergency needs. |
| Safe City | Improves safety through the ability to quickly respond to emergency situations that, left unattended, may result in catastrophic failures. |

How Do We Know This Program Is Working?

Success measured by the City's ability to react in a timely fashion to engineering emergencies or unexpected needs.

How Are Projects Prioritized Within This Program?

Projects are selected and prioritized to address the most pressing immediate needs.

Staff Recommended Revenue and Spending Plan for this Program in 2013 and 2014

2013 and 2014 Revenues

| | |
|--|------------------|
| Transportation Capital Improvement Program | \$200,000 |
| 2013: \$100,000 2014: \$100,000 | |
| Carry-forward | \$650,000 |
| Total | \$850,000 |

Project or activity list for this program

| | |
|-------------------------------------|------------------|
| Transportation maintenance backlog | \$650,000 |
| Emergency and unexpected situations | \$200,000 |
| Total | \$850,000 |

Neighborhood Traffic Calming Program

How Does This Program Support Strategies Needed to Achieve The Transportation Vision (Purpose)?

The Neighborhood Traffic Calming (NTC) Program investigates, evaluates, and resolves smaller-scale traffic safety problems (excessive neighborhood speed or volume) and concerns regarding school children and pedestrians. It is a key part of the City’s commitment to the safety and livability of neighborhoods. This program provides direct customer service to residents and businesses through its systematic and proactive solutions. Investigations are the vital first step to determine if City funds need to be spent and how those funds can be spent most efficiently. It uses a “3Es” (education, enforcement, and engineering) approach to coordinate design, development, and implementation of context-sensitive, neighborhood-acceptable solutions within a given Capital Improvement Program (CIP) budget. This program coordinates its activities with police, citizens, businesses, and the school district. For example, the citywide school speed zone radar project was coordinated with the Redmond Police Department.

The national average cost of a single collision in 2005 dollars is \$3,246,192 per fatality, \$68,170 per injury, and \$5,000 per property damage collision. By mitigating against excessive risk, we protect the city, its people, and its property. This program fulfills goals and policies specified in the Redmond Comprehensive Plan, Zoning Code, and Transportation Master Plan.

What Transportation Master Plan Strategies Are Most Supported and How?

| TMP strategies most directly supported by this program | How strategies are supported |
|--|---|
| Strong Support for Urban Centers | Promotes safe and efficient movement of vehicles, bicyclists, and pedestrians, including improvements to crosswalks. |
| Neighborhood Access | Restores a safer quality of life to neighborhoods and their connections, including designated school walk routes, making travel more attractive and viable. |
| Travel Choices and Mobility | Traffic-calmed streets support travel choices for all modes. |

How Does This Program Support Community Priorities?

| Community Priorities | Comments |
|---------------------------|--|
| Infrastructure and Growth | By addressing safety concerns through cost-effective mitigations, the program improves the efficiency of the existing network. It also proactively reviews private developments to prevent future traffic problem areas. |
| Community Building | Maintains the livability of neighborhoods. Responsive to citizen concerns. |
| Safe City | Addresses traffic and pedestrian safety issues with education, enforcement, and engineering treatments. Directly contributes to building and maintaining a safe city |

How Do We Know This Program Is Working?

- We measure before and after changes in speed and/or cut-through traffic in project areas to confirm a return to safer operation.
- We evaluate customer satisfaction through project area surveys and changes to public demand for service in a given area.

How Are Projects Prioritized Within This Program?

Citizen complaints are evaluated using a combination of traffic studies, site visits, and community input. Locations are then ranked where speed, volume, or pedestrian safety risk exceeds commonly accepted engineering minimums and standard practices. We then prioritize project spending and timing based primarily on highest relative risk and available budget, while taking maximum advantage of the opportunity to coordinate activities with other programs, current and proposed CIP projects, grants, and private development projects.

Staff Recommended Revenue and Spending Plan for This Program in 2013 and 2014

2013 and 2014 Revenues

| | |
|--|------------------|
| Transportation Capital Improvement Program | \$300,000 |
| 2013: \$150,000 2014: \$150,000 | |
| Carry-forward | \$26,045 |
| Total | \$326,045 |

Parking Program

How Does This Program Support Strategies Needed to Achieve The Transportation Vision (Purpose)?

The Parking Program develops and implements plans, policies, projects, and management of parking in support of a successful “parking system” that improves access to businesses and services for customers, visitors, residents, students, and employees. This includes ongoing program development throughout the city and the management of on-street and publicly available off-street parking, currently implemented in Downtown. The Parking Program enables “right sizing” of the overall amount of parking needed to support economic vitality and to achieve our land use vision.

Parking is an important part of the overall transportation system. The amount, design, location, and management of parking have a significant impact on ease of access, economic viability, and resulting community character. An oversupply of parking wastes resources, limits the amount of land available for more valuable revenue-generating purposes, can impose a barrier to economic growth and development, and negatively impacts community character. Meanwhile, ineffectively managed parking negatively impacts access to businesses and services, affecting mobility and economic vitality. The Downtown parking study found that overall there is an adequate supply of parking in Downtown, but this supply had not been effectively managed. While less convenient parking stalls remained underutilized and available, high demand spaces near businesses were often occupied by employees and residents, leading to reduced access for visitors and customers. Through targeted implementation of time-limited and all-day parking in specific areas, overall parking availability and efficiency increased, improving access and economic vitality.

What Transportation Master Plan Strategies Are Most Supported and How?

| TMP strategies most directly supported by this program | How strategies are supported |
|--|---|
| Strong Support for Urban Centers | “Right sizing” parking through coordinated parking standards, coupled with proactive management, optimizes the value provided by limited parking inventory. It is critical in order to develop our urban centers in the long term and to provide an interim pathway while our urban centers transition from a suburban to a more urban environment. |
| Neighborhood Access | Improves neighborhood and regional access to Downtown. |
| Travel Choices and Mobility | Supports travel choices by reducing the overall amount of parking needed, improving the pedestrian environment. Reduces unnecessary vehicle trips in search of parking, and enables a “park once and walk” strategy, reducing overall vehicle demand and improving mobility. |

How Does This Program Support Community Priorities?

| Community Priorities | Comments |
|---------------------------|---|
| Infrastructure and Growth | Maximizes value provided by existing and future parking infrastructure, facilitating desired land use development. |
| Clean and Green | Reduces vehicle trips and reduces overall parking supply needed to support development, decreasing impervious surfaces and increasing water and air quality. |
| Business Community | Implemented in collaboration with the business community in order to support access for employees, freight and customers, and maximizes the productive use of land. |

How Do We Know This Program Is Working?

- For on-street and publicly available parking in high demand areas, this program targets an 85 percent occupancy rate, a rate at which stalls are well used but parking is perceived as available. Areas that are significantly above or below this rate warrant adjustments to program implementation.
- We monitor the level of business and customer satisfaction, with a target of 65 percent satisfied.

How Are Projects Prioritized Within This Program?

- Implements actions that are identified in adopted plans, including neighborhood plans.
- Promotes construction and management of parking infrastructure that supports urban center development.
- Responds to a need identified within the community (customer service).

Staff Recommended Revenue and Spending Plan for This Program in 2013 and 2014

2013 and 2014 Revenues

| | |
|--|------------------|
| Business Tax and parking permit revenues | \$249,900 |
| Total | \$249,900 |

Project or activity list for this program

| | |
|--|------------------|
| Management, monitoring and enforcement of on-street parking and the Downtown shared parking facility | \$194,200 |
| Parking program development, management and administration | \$55,700 |
| Total | \$249,900 |

Pavement Management Program

How Does This Program Support the Strategies Needed to Achieve the Transportation Vision (Purpose)?

The Pavement Management Program preserves and conducts all pavement related activities on our 144 miles of pavement. The program was created in the early 1980s when the City only maintained the residential street network. In 1996 we began maintaining the city’s entire street network. At the core of the program is a database/GIS system that tracks the history of construction and maintenance, as well as surface conditions that are surveyed every other year. Staff select street segments that are most in need of resurfacing or reconstruction and include those in the annual street repair and resurfacing project. The pavement manager for the yearly repair and resurfacing project coordinates with other City departments, private utilities, and developers to assure that all work involving pavement cuts is done prior to resurfacing. Yearly resurfacing and pavement repair projects are then designed and constructed. The program has historically resurfaced approximately three centerline miles per year. The average pavement condition has been maintained in a “Very Good Condition” (PCI score of 70 – 100).

What Transportation Strategies Are Supported?

| TMP strategies most directly supported by this program | How strategies are supported |
|--|---|
| Strong Support for Urban Centers | Well-maintained connections throughout Downtown and Overlake. |
| Neighborhood Access | Reliable access to and from neighborhoods. |
| Choices and Mobility | Well-maintained surfacing for all modes. |
| Freight Mobility | Adequate pavement sections to support trucks. |

How Does This Align with Community Priorities?

| Community Priorities | Comments |
|---------------------------|---|
| Infrastructure and Growth | Infrastructure is maintained in good condition, and new streets are added to the tracking system. |
| Safe City | Street surfaces are maintained in safe repair for all modes. |
| Responsible Government | Protects the City’s investment by maintaining the street network in good condition. |

How Do We Know This Program Is Working?

A pavement rating survey is completed every two years, and the average score is 77 of 100.

What Criteria Should Be Used To Prioritize Projects Within A Program?

Arterials are given top priority and then condition rating is used. Projects are also coordinated with current and future construction projects.

Staff Recommended Revenue and Spending Plan for Program: 2013 and 2014 Revenues

| | |
|--|--------------------|
| Transportation Capital Improvement Program (CIP) | \$2,400,000 |
| 2013: \$1,200,000 2014: \$1,200,000 | |
| Carry-forward | \$627,590 |
| Total | \$3,027,590 |

Project or activity list for this program

| | |
|---|--------------------|
| 2013: Finalize plans and advertise projects for six locations: NE 85th Street NE 51st Street NE 21st Street NE 24th Street | \$1,600,000 |
| 2014: Design and construct grant-funded project on 156th Avenue NE with matching funds of \$538,000. Rate pavement and create new list of overlay locations. Prepare final plans for new locations. | \$1,427,590 |
| Total | \$3,027,590 |

Project or activity list for this program

| | |
|--|------------------|
| Investigation of new and ongoing requests | ~ |
| Design and construction at major sites, working with affected neighbors to ensure context-sensitive neighborhood acceptable solutions; identified spot project and corridor locations for speed/volume control or pedestrian improvements (list subject to change as new sites are evaluated) include: NE 36th Street between 172nd Avenue NE and West Lake Sammamish Parkway; 173rd Avenue NE at NE 24th Street (south city limits); NE 80th Street between 132nd and 140th Avenues NE; NE 111th Street between 167th and 169th Avenues NE; 166th Avenue NE at NE 90th Street.. | \$303,000 |
| Minor sites mitigations sign and markings: Citywide. | \$2,045 |
| Speed, pedestrian, and volume studies for investigations and performance measures. | \$8,400 |
| Traffic safety education projects: schools (walk event), businesses (DigiPen Phase 2 and safety road show); general public (three new safety brochures); mailings | \$12,600 |
| Total | \$326,045 |

Pedestrian Program

How Does This Program Support Strategies Needed to Achieve the Transportation Vision (Purpose)?

The Pedestrian Program creates and implements plans, policies, and projects to make a successful pedestrian system. This program improves the safety and comfort of pedestrians by building new sidewalks and shared-use paths. Funds will continue to leverage grant money to maximize the amount of pedestrian infrastructure built per City of Redmond dollar.

The Pedestrian Program facilitates access to transit and encourages walking as a safe, efficient, and attractive transportation mode, providing more mobility choices, increasing access to our neighborhoods, and supporting our urban centers.

What Transportation Master Plan Strategies Are Most Supported and How?

| TMP strategies most directly supported by this program | How strategies are supported |
|--|---|
| Prepare for Light Rail | Walking is the foundation for successful light rail. Since parking around Redmond’s light rail stations will be limited due to cost and bulk, good walking routes are needed to help people access the line. The pedestrian system helps light rail riders in two ways: first by helping them reach light rail stations directly, and second by providing access to the transit lines that feed those stations. |
| Strong Support for Urban Centers | <p>Walking is fundamental to achieving the community, economic development, and transportation visions for the Downtown and Overlake urban centers.</p> <p>Redmond’s community and economic development visions call for vibrant, active streets—in other words, streets with high volumes of foot traffic. Active, vibrant spaces are also dependent on the presence of numerous activities in an attractive setting. Pedestrian facilities reduce the need for parking, allowing more space for retail businesses and other activities while lowering development costs.</p> <p>Walking is common in mixed-use urban center environments where it represents a significant portion of all trips, improving the overall efficiency of the transportation system. Walking can easily accommodate most short trips in mixed-use centers. Walking can also be a convenient choice for medium length trips to jobs from mixed-use areas.</p> |
| Neighborhood Access | <p>Pedestrian improvements support a complete, connected system that provides access to urban centers, neighborhood businesses, parks, schools, transit, and neighbors.</p> <p>Pedestrian access is particularly important for youth, the elderly, and anyone else who may not drive.</p> |
| Travel Choices and Mobility | Providing travelers with a full suite of options—including walking, bicycling, and transit—makes it easier for everyone to choose alternatives to the single occupancy vehicle. Increased use of these modes also improves the efficiency of the transportation system by taking cars off the road. |

How Does This Program Support Community Priorities?

| Community Priorities | Comments |
|---------------------------|---|
| Infrastructure and Growth | Pedestrian infrastructure facilitates short trips to and within urban centers, facilitates short to medium length trips to employment sites, and will enable the success of light rail. |
| Clean and Green | Walking improves health and emits no pollution, which is particularly important since the transportation sector is the main source of air pollution in the central Puget Sound region. |
| Community | Pedestrian facilities provide more opportunity for people of all ages to visit neighbors, community facilities, and community meetings. |
| Safety | This program improves safety for pedestrians along corridors, through sidewalk and shared-use path improvements, and at roadway crossings through intersection enhancements. |
| Economic Diversity | A walking trip costs nothing, leaving money in users' pockets. The savings can be substantial since transportation is the second largest household cost. Pedestrian activity supports local businesses through increased local shopping and foot traffic. Development costs are reduced because fewer vehicle parking stalls are necessary. |
| Responsible Government | This program supports the community vision for environmentally, economically, and socially sustainable transportation choices. |

How Do We Know This Program Is Working?

- Before-and-after pedestrian counts at select locations. (Outcome)
- Percent complete sidewalk: enhanced corridors. (Output)
- Connectivity (Output)

How Are Projects Prioritized Within This Program?

Projects are prioritized by considering these factors: safety, access improvements for the disabled, proximity to pedestrian generators (urban centers, neighborhood centers, transit, schools, parks, senior facilities), light rail access, connectivity, whether the project fills a gap, whether existing facilities meet standards, maintenance condition, feasibility, public support, and grant competitiveness.

Staff Recommended Revenue and Spending Plan for This Program in 2013 and 2014

2013 and 2014 Revenues

| | |
|--|--------------------|
| Transportation Capital Improvement Program (CIP) | \$2,800,000 |
| 2013: \$1,400,000 | |
| 2014: \$1,400,000 | |
| Carry-forward | \$1,650,000 |
| Total | \$4,450,000 |

Program expenditures:

| | |
|--|--------------------|
| <p>In Design, 2013</p> <p>NE 51st Street sidewalk from 158th Avenue NE to West Lake Sammamish Parkway</p> <p>171st Avenue NE sidewalk on east side at NE 100th Street and curb ramps at end 172nd Avenue NE near Hartman Park</p> <p>NE 85th Street sidewalk from 165th Avenue NE to 120 feet east of 165th Avenue NE</p> <p>NE 88th Street sidewalk from 166th Avenue NE to roughly 120 feet east of 166th Avenue NE</p> <p>NE 95th Street sidewalk from Avondale Road to roughly 400 feet east of Avondale Road</p> <p>Preliminary design of 134th Avenue NE sidewalk from NE 75th Street to NE 80th Street</p> <p>185th Avenue NE Low Impact Development/sidewalk</p> | \$1,850,000 |
| <p>High Ranking:</p> <p>Staff will meet with Mayor in early 2013 to determine final list based on analysis of high-ranking projects.</p> <p>Central Connector Phase 2 matching funds</p> <p>Redmond Way sidewalk between 142nd Avenue NE and 148th Avenue NE</p> <p>156th Avenue NE sidewalk section on east side, south of NE 62nd Court</p> <p>Design of 159th Place NE sidewalk between Leary Way and Bear Creek Parkway</p> <p>Design of NE 88th Street sidewalk from 120 east of 166th Avenue NE to 171st Avenue NE</p> <p>ADA improvements</p> | \$2,510,000 |
| Program management | \$90,000 |
| Total | \$4,450,000 |

Street Light Program

How Does This Program Support Strategies Needed to Achieve the Transportation Vision (Purpose)?

The Street Light Program (SLP) identifies, prioritizes, and installs lighting improvements in areas where users are most exposed, such as at crosswalks, intersections, and along walking routes. While the City requires the installation of proper street lighting as part of private development projects and the City's capital improvement projects, many areas of the city do not meet lighting standards today.

The Street Light Program supports the Neighborhood Access and Travel Choices and Mobility strategies by improving safety for pedestrians, bicyclists, and motorists. The SLP directly supports Neighborhood Access strategy by improving safety along walking routes, especially at unprotected crosswalks that are mostly located in neighborhoods. Inadequate lighting in these areas detracts from the community's sense of security and causes some people to avoid using city streets and sidewalks at night. Improving street lighting promotes the use of travel choices such as walking, bicycling, and transit.

What Transportation Master Plan Strategies Are Most Supported and How?

| TMP strategies most directly supported by this program | How strategies are supported |
|--|--|
| Neighborhood Access | Improves safety along walking routes, especially at unprotected crosswalks, which are mostly located in neighborhoods. |
| Travel Choices and Mobility | The improvements to lighting increase safety for pedestrians, bicyclists, transit users, and motorists. |

How Does This Program Support Community Priorities?

| Community Priorities | Comments |
|-----------------------------|---|
| Infrastructure and Growth | Street lights have been identified as an infrastructure component of the city's transportation system. The program improves infrastructure and promotes growth by improving safety in critical areas, especially for those users most at risk such as pedestrians and bicyclists. |
| Clean and Green Environment | The SLP researched the use of Light Emitting Diode (LED) street lights for the city that use less energy and have a much longer life expectancy than traditional bulbs. |
| Community Building | Promotes walking, bicycling, and transit in neighborhoods and between communities. |
| Safe City | Street lights improve visibility and safety at night for walkers, joggers, and bicyclists. |
| Economic Vitality | Creating a sense of security on city streets during the evening hours encourages more people to be outside, visiting others, and patronizing local businesses. |

How Do We Know This Program Is Working?

Staff has inventoried unprotected crosswalks that are unlit or underlit. The program's success would be measured by the reduction in the number of unlit or underlit crosswalks.

Dark areas are identified by citizen reports. All of the areas within the city that do not meet standard light levels are too substantial to create a comprehensive list at this time. However, citizen concerns about inadequate street lighting help to generate a priority list.

How Are Projects Prioritized Within This Program?

The criteria used are based on nationally recognized standards, such as the Illuminating Engineering Society (IES) Recommended Practices for Roadway (RP-8). Other factors that influence the prioritization include the volume of pedestrians, bicyclists, and motorists.

Staff Recommended Revenue and Spending Plan for This Program in 2013 and 2014

2013 and 2014 revenues:

| | |
|--|------------------|
| Transportation Capital Improvement Program (CIP) | \$100,000 |
| 2013: \$50,000 2014: \$50,000 | |
| Carry-forward | \$43,024 |
| Total | \$143,024 |

Project or activity list for this program

| | |
|---|------------------|
| Install street lights at remaining uncontrolled crosswalks. | \$36,000 |
| Enhance Sidewalk Program to help fund street light installation where new pedestrian improvements are planned without needed street light improvements. | \$58,000 |
| Respond to citizen requests to improve lighting in identified areas. | \$8,024 |
| Install additional lights at additional uncontrolled crosswalks. | \$41,000 |
| Total | \$143,024 |

Transportation Demand Management

How Does This Program Support Strategies Needed to Achieve the Transportation Vision (Purpose)?

The Transportation Demand Management (TDM) Program implements coordinated regulation and policies, and provides grants, partnership resources, and incentives to Redmond businesses and community members to manage user demand on a finite transportation system. Managing user demand maximizes mobility, supports economic vitality and growth, and improves travel choices and access for residents, visitors, employees, and freight.

With limited resources and the need to balance mobility, sustainability, and community character, it will not be possible to “build our way” out of congestion. Proactively managing travel demand to maximize the efficiency of current and future mobility infrastructure (roads, transit, bike, and pedestrian facilities) is critical to supporting growth and to achieving our future vision. Overall the TDM program has provided the person-carrying capacity equivalent of four freeway lanes during the peak commute hour, at a much lower cost and community and environmental impact. Successful implementation enables our existing and future infrastructure to be used more efficiently, ensuring that infrastructure supply is not sized to accommodate peak demand. Redmond is then able to attract and retain more employees, air quality is improved, and access is easier for residents, employees, freight, and customers. This results in an overall transportation system that is less expensive, more efficient, and more effective at meeting community needs.

What Transportation Master Plan Strategies Are Most Supported and How?

| | |
|----------------------------------|---|
| Prepare for Light Rail | Enhances current and future transit ridership, supporting the early development and transition of light rail station areas. |
| Strong Support for Urban Centers | Enhances mobility provided by current and future infrastructure, supporting growth and development as our urban centers transition from a suburban to a more urban environment. |
| Travel Choices and Mobility | Improves mobility and access to travel choices through resources, on-site support and partnerships with business and community leaders. |

How Does This Program Support Community Priorities?

| Community Priorities | Comments |
|---------------------------|--|
| Infrastructure and Growth | Maximizes person- and freight-carrying capacity provided by current and future infrastructure, leveraging the ability to support mobility and growth. |
| Clean and Green | Supports a transportation system that is more efficient and sustainable. |
| Business Community | Supports easier access for employees, freight, and customers; maximizes productive and efficient use of land; proactively provides a transition strategy for infrastructure we currently have and infrastructure we will eventually have to support economic growth. |
| Responsible Government | Provides high value for each public dollar invested, leverages and coordinates city, county, state and private resources. |

How Do We Know This Program Is Working?

- The share of travel by alternatives as measured by the Commute Trip Reduction (CTR) survey for large employers and sites with a Transportation Management Program agreement. This provides an overall indicator of the person-carrying efficiency of the City's mobility infrastructure.
- Direct measurement and tracking of participation in the R-TRIP, Think Redmond, and other innovative TDM programs, such as the Growth and Transportation Efficiency Center demonstration.
- The percentage of employees covered by a TDM program that provides on-site support for alternative travel choices with the goal of increasing coverage over time.

How Are Projects Prioritized Within This Program?

- Elements that meet the following criteria are given the highest priority:
- Have the highest potential to reduce single occupancy vehicle demand.
- Support Comprehensive Plan goals, in particular strategies that support development of Redmond's urban centers.
- Meet a need or gap identified by the community, or through the implementation of Redmond's Economic Development Strategy.

- Coordinate with the business community, leveraging private and City resources; for example, elements that enhance and support employer mobility programs.

Staff Recommended Revenue and Spending Plan for this Program in 2013 and 2014

2013 and 2014 Revenues

| | |
|---|--------------------|
| Business Tax | \$1,120,000 |
| Carryover grant funding from past Business Tax multiyear grants | |
| | \$1,085,224 |
| State CTR cost reimbursement (\$97,173 per year) | \$194,346 |
| King County Metro partnership | \$160,000 |
| Total | \$2,559,570 |

Project or activity list for this program

| | |
|--|--------------------|
| Local implementation of the Washington State Commute Trip Reduction (CTR) Program, which supports TDM programs at worksites with over 100 employees | \$194,346 |
| Implementation of Transportation Demand Management Program agreements for developments that meet trip generation thresholds, or developments that use a TDM program to achieve concurrency or to meet parking requirements | \$170,000 |
| Redmond Trip Resource and Incentive Program (R-TRIP), which provides resources and incentives directly to Redmond residents and employees, as well as resources and grants for business and community-initiated TDM programs | \$1,795,224 |
| Growth and Transportation Efficiency Center program, which coordinates transportation planning and demand management to support the development of Redmond's urban centers | \$400,000 |
| Total | \$2,559,570 |

Transit Service Program

How Does This Program Support Strategies Needed to Achieve the Transportation Vision (Purpose)?

The Transit Service Program provides partnership resources to improve important local and regional transit connections to our employment and urban centers. The purpose of the Transit Service Program is to enhance and support transit service as a real travel choice, increase the person-carrying capacity of our transportation system, and support the development of better neighborhood connections to major employment areas and our urban centers. This ongoing program leverages City resources in partnership with King County, neighboring cities, and the business community. In order to ensure that City resources provide a high return for each dollar invested, this program strategically directs transit service to targeted corridors that have little or no service today. Moderate City investments, therefore, significantly increase the usability and availability of transit with service that is connected with the larger regional transit network.

The program supports Transportation Master Plan strategies to prepare for light rail, support access to and from Redmond’s urban centers, and increase travel choices and mobility.

What Transportation Master Plan Strategies Are Most Supported and How?

| TMP strategies most directly supported by this program | How strategies are supported |
|--|---|
| Prepare for Light Rail | The program supports connections to future Sound Transit Link light rail station areas, helping build a market for this service. |
| Strong Support for Urban Centers | Improves local and regional connections to Downtown Redmond and Overlake. Routes currently funded provide service between Overlake, Kirkland, and Kenmore (Metro Route 244); and between Overlake, Bear Creek, Sammamish, and Issaquah (Metro Route 269). |
| Travel Choices and Mobility | Growing and fostering transit connections increases mobility and helps to promote transit as a real travel choice for those living and working in Redmond. |

How Does This Align with Community Priorities?

| Community Priorities | Comments |
|---------------------------|--|
| Infrastructure and Growth | Helps to increase mobility, access, and circulation, and increase the person-carrying capacity of our roadway infrastructure. Also helps develop and foster growing transit connections to support growth. |
| Clean and Green | Improving green transportation choices such as transit helps improve air quality, reduce congestion and energy consumption, and create a more efficient transportation system. |
| Economic Diversity | The program helps improve access to businesses in Redmond for customers, visitors, and employees. |

How Do We Know This Program Is Working?

The success of the program will be determined by measuring ridership on routes supported by this program with a goal of increasing the number of those who travel by transit in Redmond.

How Are Projects Prioritized Within This Program?

Projects must meet regional, local and first mile/last mile needs. In addition, projects that meet one of more of the following criteria are given the highest priority:

- Support access to and from urban centers and other major employment areas.
- Meet a need identified by the local business and/or residential community.
- Leverage partnerships to share costs and ensure success.
- Coordinate with regional transit agency strategic plans and guidelines.

Staff Recommended Revenue and Spending Plan for This Program in 2013 and 2014

2013 and 2014 Revenues:

| | |
|--------------------------------|------------------|
| Business Tax – New Initiatives | \$400,000 |
| Total | \$400,000 |

Project or activity list for this program:

| | |
|--|------------------|
| Partnership funding for enhanced service: Metro Route 244, Overlake-Kirkland-Kenmore, weekdays—five peak hour trips each direction (approximately \$65,000 annually). Metro Route 269, Overlake-Bear Creek-Sammamish-Issaquah, weekdays—15 to 16 peak hour trips each direction (approximately \$110,000 annually) | \$350,000 |
| Transit Program planning and administration | \$50,000 |
| Total | \$400,000 |

Transportation Concurrency Program

How Does This Program Support Strategies Needed to Achieve the Transportation Vision (Purpose)?

The Transportation Concurrency Program provides analysis tools and performance measure data to assist implementation of the TMP. The purpose of these analysis tools and performance measures is twofold: 1) to ensure that project and program delivery is aligned with the TMP strategies, and 2) to track TMP implementation to ensure that it achieves the transportation vision while meeting state requirements to provide sufficient capacity to accommodate growth.

What Transportation Master Plan Strategies Are Most Supported and How?

This program supports all of the TMP strategies by providing dashboard and other relevant performance measures.

How Does This Program Support Community Priorities?

| Community Priorities | Comments |
|---------------------------|--|
| Infrastructure and Growth | The data, measures, and analysis work provided by the Transportation Concurrency Program are essential to tracking how well the transportation system supports the City's land use vision and growth targets. The data also helps decision makers prioritize project and program expenditures, and to develop and maintain transportation infrastructure and services. |

How Do We Know This Program Is Working?

- Concurrency is continuously monitored.
- Analysis tools are updated.
- System performance measures are current.

How Are Projects/Activities Prioritized Within This Program?

The Transportation Concurrency Program is a set of on-going activities established by the Transportation Master Plan, so there is not a prioritization process.

Staff Recommended Revenue and Spending Plan for This Program in 2013 and 2014

2013 and 2014 Revenues

| | |
|--|------------------|
| Transportation Capital Improvement Program (CIP) | \$200,000 |
| 2013: \$100,000 | |
| 2014: \$100,000 | |
| Total | \$200,000 |

Project or activity list for this program

| | |
|---|------------------|
| Concurrency: Monitor and update plan-based concurrency to ensure that Redmond is meeting its established transportation level of service. | \$60,000 |
| BKR Model update: The Bellevue-Kirkland-Redmond travel model is a computerized simulation of travel activity maintained by the City of Bellevue and made available to the City of Redmond for an annual fee. The BKR model provides information for the City of Redmond plan-based concurrency system, and provides on-going feedback to the City on traffic conditions and patterns. | \$50,000 |
| Traffic counting: The City counts traffic at key locations throughout Redmond to calibrate the BKR model and generate a record of actual travel trends. | \$60,000 |
| Cost estimation: Update the project cost estimation tool. | \$30,000 |
| Total | \$200,000 |

Targeted Safety Improvement Program

How Does This Program Support Strategies Needed to Achieve the Transportation Vision (Purpose)?

The primary purpose of the Targeted Safety Improvement Program (TSIP) is to identify existing and potential traffic safety problem areas and implement projects to prevent incidents, injuries, deaths, and their related losses. This is achieved through proactive collision prevention, reactive collision response, and multimodal safety consistent with the Transportation Master Plan. TSIP is a systematic approach to funding the highest priority multimodal safety needs. The annual construction of improvements ensures

that the highest priority safety needs are regularly met for all travel modes. This provides improved overall safety to the community.

What Transportation Master Plan Strategies Are Most Supported and How?

| TMP strategies most directly supported by this program | How strategies are supported |
|--|---|
| Strong Support for Urban Centers | Promotes safe and efficient movement of vehicles, bicyclists, and pedestrians, including crosswalk improvements. |
| Neighborhood Access | Restores a safer quality of life to neighborhoods and their connections, including designated school walk routes, making travel more attractive and viable. |
| Travel Choices and Mobility | Street improvements including bike lanes and sidewalks support travel choices for all modes. |

How Does This Program Support Community Priorities?

| Community Priorities | Comments |
|---------------------------|---|
| Infrastructure and Growth | By addressing safety concerns through cost-effective mitigations, the program improves the efficiency of the existing network. |
| Community Building | Maintains the livability of neighborhoods. Responsive to citizen concerns. |
| Safe City | Addresses traffic and pedestrian safety issues with education, enforcement, and engineering treatments. Directly contributes to building and maintaining a safe city. |

How Do We Know This Program Is Working?

The Targeted Safety Improvement Program has built six projects over the past four years leveraging \$3.5 million. Evaluating projects is essential to understanding how successful and cost-effective these efforts are in reducing and preventing traffic collisions. Delivery of projects through this program is reflected both in the TMP annual performance monitoring report (“Mobility Report Card”), as well as in CIP monitoring. Measurement methods will depend upon the original conditions, mitigation goal, and type of mitigation undertaken. Collision rates can be compared at sites where data is available. At proactive locations more subjective measures may be used including before and after conditions.

How Are Projects Prioritized Within This Program?

Safety improvements are reviewed, cross-referenced with the High Accident Location Report, and ranked. Top-ranked projects are those that have simple solutions and low cost, and will successfully reduce future risk.

Staff Recommended Revenue and Spending Plan for This Program in 2013 and 2014

2013 and 2014 Revenues

| | |
|--|--------------------|
| Transportation Capital Improvement Program | \$900,000 |
| 2013: \$450,000 | |
| 2014: \$450,000 | |
| Carry-forward from 2012 | \$150,000 |
| Total | \$1,050,000 |

Project or activity list for this program

| | |
|---|--------------------|
| 2013 Construction of NE 87th Street/148th Avenue NE pedestrian crossing. Construction of NE 40th Street/SR 520 improvements. 166th Avenue NE, NE 85th Street to NE 100th Street Prepare plans for new list of projects to be approved in December. | \$600,000 |
| 2014 Flashing Beacons for Bear Creek Parkway pedestrian crossings at 164th Avenue NE Red-Wood Road from NE 109th Street to NE 116th Street 156th Avenue NE mid-block crossing at NE 45th Street Willows Road and NE 91st Street. | \$450,000 |
| Total | \$1,050,000 |

Undergrounding of Overhead Utilities Program

How Does This Program Support Strategies Needed to Achieve the Transportation Vision (Purpose)?

The Undergrounding of Overhead Utilities Program provides funding to complete undergrounding of overhead utilities, according to the Redmond Comprehensive Plan, Zoning Code, and Transportation Master Plan, to improve reliability, safety, and aesthetics. The funds from this program are typically added to ongoing sidewalk or road improvement projects to achieve a more complete conversion of aerial utilities to underground in a given area. Funds from this program were most recently used to complete the undergrounding of overhead utilities on NE 79th Street near Anderson Park. Money was

added to a sidewalk project to complete the conversion to a logical stopping point. The program dollars are kept in reserve until there is sufficient funding to move forward on a stand-alone project or to contribute funds to a capital improvement project. This program fulfills goals and policies specified in the Redmond Comprehensive Plan, Zoning Code, and Transportation Master Plan.

What Transportation Master Plan Strategies Are Most Supported and How?

| TMP strategies most directly supported by this program | How strategies are supported |
|--|---|
| Strong Support for Urban Centers | Supports the creation of urban areas in Downtown and Overlake by improving aesthetics and providing reliable utility connections. |

How Does This Program Support Community Priorities?

| Community Priorities | Comments |
|---------------------------|--|
| Infrastructure and Growth | Supports infrastructure and growth by providing improved reliability for power, telephone, and cable TV systems. |
| Safe City | Improves safety by reducing roadside hazards along city streets, as utility poles are removed when overhead utilities are placed underground |

How Do We Know This Program Is Working?

The success of the program is measured by the amount of overhead line placed underground over time.

How Are Projects Prioritized Within This Program?

Projects are selected and prioritized to achieve the highest return per dollar spent.

Staff Recommended Revenue and Spending Plan for this Program in 2013 and 2014

2013 and 2014 Revenues

| | |
|--|------------------|
| Transportation Capital Improvement Program (CIP) 2013: \$50,000 2014: \$50,000 | \$100,000 |
| Total | \$100,000 |

Project or activity list for this program

| | |
|--|------------------|
| Undergrounding of utilities as identified through the prioritization process. Staff are currently looking for opportunities to contribute funds toward public projects to complete missing pieces of overhead-to-underground conversion. | \$100,000 |
| Total | \$100,000 |

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Appendix H: Extended TFP Project Descriptions

| Project ID | Name | Description |
|------------|---|--|
| 5 | Overlake Village Bicycle-Pedestrian Bridge | Provide a new pedestrian and bike connection over SR 520 between the Overlake Village light rail station and NE 31st Street west of SR 520. Coordinate with Projects 181 and 43. |
| 6 | Overlake Transit Center Pedestrian and Bike Bridge | Provide a new pedestrian and bike connection over SR 520 between the Overlake Transit Center and west side of SR 520 and 520 Trail (in the vicinity of the NE 38th Street alignment) and the SR 520 Trail, integrating with the future light rail station. Ensure public access between the 520 Trail and the Overlake Transit Center. Coordinate with existing transit stops. |
| 8 | 520 Trail Grade Separation at NE 40th St | Grade separate 520 Trail at NE 40th Street. |
| 10 | 520 Trail Grade Separation at NE 51st St | Grade separate 520 Trail at NE 51st Street. |
| 31 | 148th Ave NE and NE 51st Street Westbound Right-Turn Lane | Add a second right-turn lane from westbound NE 51st Street to northbound 148th Avenue NE. |
| 39 | 148th Ave NE and NE 20th St Turn Lanes | Add second westbound left turn and second eastbound left turn lanes. Associated with Projects 41 and 264 |
| 41 | 148th Ave NE and SR 520 Freeway Access Lane | Create third northbound through lane on 148th Ave NE from NE 22nd St to SR 520 eastbound on-ramp using primarily existing right-turn lanes and modify SR 520 eastbound on-ramp to allow HOV access. At NE 24th St and 148th Ave NE intersection add right turn lane on northbound approach, and extend right turn lane on westbound approach. |
| 46 | 150th Ave NE and NE 51st Street Traffic Signal | Add north leg (on private property) to intersection of 150th Avenue NE and NE 51st Street and signalize this intersection. The intent is for improvement on the north leg on campus to include two southbound left-turn lanes, one through lane in each direction, bike lanes, sidewalks, transit amenities, street lights, utilities, and stormwater drainage. Relocate eastbound transit stop to far side of new intersection. |

Extended TFP Project Descriptions (continued)

| Project ID | Name | Description |
|------------|--|--|
| 47 | 152nd Avenue NE Main Street - Segment 1 (East) | Implement a multimodal pedestrian corridor concept on 152nd Avenue NE from NE 26th Street to NE 31st Street to create a lively and active signature street in the Overlake Village. The cross section for the improvements would include one through lane in each direction, turn lanes as necessary, on-street parking and pedestrian and bicycle facilities as described in the Appendix 7 in the Redmond Zoning Code. Other improvements include intersection improvements at NE 24th , NE 26th, NE 27th, and NE 28th Streets, storm drainage, LID, street lighting, pedestrian amenities, transit amenities, right-of-way, easements, and utilities. Locate arterial transit stop within immediate access of the Overlake Village light rail station. Part 1, Project 47, includes half-street improvements by developer of the former Group Health site. Part 2, Project 363, includes half-street improvements for the other half-street by future developers. |
| 50 | 156th Ave NE & Bel-Red Road Southbound Right-Turn Lane | Add southbound right-turn lane on 156th Ave NE. |
| 58 | NE 40th St Streetscape Segment II | Resize vehicular lane width to 11 feet, raise the sidewalk on the south side of the bridge and reduce this sidewalk to 9 feet and enhance pedestrian realm by eliminating the traffic barrier between the south sidewalk and vehicular lane, and add 5.5-foot bike lanes in both directions. Improvements include two travel lanes, two turn lanes, one bike lane, and one sidewalk in each direction of the street, and streetscape including gateway wayfinding and art elements. |
| 60 | NE 40th St Streetscape Segment III | Add bike lanes on both sides. Improvements include two vehicular lanes in each direction, one turn lane, bike lanes and 8 foot sidewalks with planter strips on both sides, planter strip, streetscape including gateway wayfinding and art elements, stormwater treatments, street lights, utilities, and easement acquisition. Coordinated with Project 59. |
| 61 | NE 40th St Rechannelization Segment IV | Within existing right-of-way and easements, resize vehicular lane width to 10 feet and add a 5 foot bike lane in the westbound direction. Improvements include sidewalks in both directions, a 5 foot bike lane in the westbound direction, one 10 foot vehicular lane in both directions, an 11 foot turn lane, streetscape, stormwater treatments, street lights, and utilities. |
| 71 | West Lake Sammamish Parkway Roundabout | Removing exiting traffic signal at Bel- Red Road and West Lake Sammamish intersection. Install two-lane roundabout at Bel-Red Road, West Lake Sammamish intersection and improve pedestrian facilities and provide treatments for terminus of multi-use path along eastside of roadway. Coordinate with Project 157. |
| 72 | 140th Avenue NE and Redmond Way Turn Lanes | Add second northbound left turn lane and extend bicycle lanes from NE 80th Street through the intersection of 140th Avenue NE and Redmond Way. Construct sidewalk on 140th Avenue north of the intersection up to NE 84th Street. |
| 73 | Union Hill Rd Phase III Widening | Widen Union Hill Rd from 188th Avenue NE to eastern city limits. Improvements include 2 through lanes in each direction, left-turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, underground power and utility pole relocation, right-of-way and easement acquisition. |

Extended TFP Project Descriptions (continued)

| Project ID | Name | Description |
|------------|--|---|
| 76 | NE 116th St Widening Segment I Phase I | Complete bicycle facilities as well as the sidewalk on the north side of NE 116th Street between Red-Wood Road and 167th Place NE. Improvements coordinate with Project 356: the construction of a roundabout at NE 116th Street and 162nd Avenue NE. Phase II is Project 370. |
| 78 | 188th Ave NE Extension | Construct new 188th Ave NE arterial from NE 65th Street to Union Hill Rd. Improvements include one through lane in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, transit amenities, street lights, storm drainage, right-of-way and easement acquisition. |
| 79 | 185th Ave NE Extension | Construct new 185th Ave NE arterial from NE 80th Street to Union Hill Road. Improvements include one through lane in each direction, left-turn lanes, sidewalks, street lights, storm drainage, right-of-way, easements, and traffic signal at Union Hill Road. |
| 81 | 164th Ave NE Extension | Construct new 164th Ave NE from NE 76th St to Cleveland St. Improvements include one through lane in each direction, bike lanes, parking, sidewalks, transit facilities, street lights, storm drainage, right-of-way and easements. |
| 83 | SR 202 Rechannelization | Reconfigure 164th Ave NE from NE 80th to NE 87th St to one through lane in each direction, center left-turn lane, bike lanes, pedestrian amenities, and transit facilities. |
| 84 | Redmond Way Bridge Modifications and Additions Over Bear Creek | Rechannelize bridge, replacing the sidewalk on the south side of bridge with a second eastbound left-turn lane. Build a ped/bike bridge on the south side of bridge, designed to accommodate a future connection between Bear Creek Trail and East Lake Sammamish Trail. Improvements include two through lanes in each direction on Redmond Way and NE 76th Street, two eastbound left-turn lanes to NE 76th Street, one eastbound right turn lane to westbound SR 520 on-ramp, one sidewalk on north side of the bridge, a pedestrian/bike bridge street on the south side of the bridge, lights, storm drainage, utilities, right-of-way, and easements. |
| 89 | NE 76th Street & 178th Place NE Intersection Improvements | Widen intersection to allow right-turn, left-turn, and through lanes in all directions, Improve turning radii for trucks at intersection of NE 76th St / 178th Pl (especially SB to EB, and WB to NB), widen 178th lanes to north of intersection to avoid impacts to well house, add bicycle lanes through intersection in all directions, improve sight distance, stormwater, utilities, and property needs such as easements. Install vehicle detection and traffic cameras. |
| 92 | NE 76th Street Extension (Segment 1) | Construct new NE 76th St from 185th Ave NE to 188th Ave NE. Improvements include 1 through lane in each direction, left-turn lanes or medians to create a 3 lane section, bike lanes, sidewalks, street lights, traffic control, storm drainage, right-of-way and easements. Consider roundabout at 185th Ave and 76th St. |

Extended TFP Project Descriptions (continued)

| 95 | 166th Ave NE Rechannelization | Reconfigure 166th Ave NE from NE 85th St to NE 104th St to one through lane in each direction, center left-turn lane and bike lanes. Collaborate with pavement management for its resurfacing needs. Add pedestrian crossings coordinated with bus stops. |
|------------|---|---|
| Project ID | Name | Description |
| 99 | NE 70th St Extension Phase I | Provide the right-of-way and interim street improvements on the new NE 70th Street from Redmond Way to 180th Avenue NE. Coordinate with phase II, Project 360, which is street improvements up to City standards |
| 111 | NE 124th St and 162nd Pl NE Signal | Construct a new traffic signal at 124th Avenue NE and 162nd Place NE. Includes the addition of turn lanes on NE 124th and modifications on 162nd Place for sight distance. Must meet signal warrant. |
| 112 | NE 73rd Street Extension - Segment 1 | Construct new NE 73rd St from 185th Avenue NE to 188th Avenue NE. Improvements include one through lane in each direction, left-turn lanes, bike lanes, sidewalks, street lights, traffic control, storm drainage, right-of-way and easements. |
| 114 | NE 80th Street Trail Connection | Construct new NE 80th Street Trail from 185th Avenue NE to 188th Avenue NE. Improvements include 12 foot paved, shared use path situated in a 20 foot wide easement or right-of way. |
| 115 | Redmond Way and Cleveland Street Couplet Conversion | <p>Convert Redmond Way from 160th Avenue NE to Avondale Way to one through lane in each direction and center turn lane with west end having two westbound starting at 161st Avenue NE and east end having two eastbound lanes starting at 168th Avenue NE. Convert Cleveland Street to one through lane in each direction. Relocate transit stops to Redmond Way. Improvements include curb extensions, widened sidewalks, shared lane markings, pedestrian amenities, transit amenities, gateway treatments, wayfinding, and realignment of street at eastern and western ends to improve traffic flow. Improve the rightmost lane on westbound Redmond Way to be a Business and Transit access lane.</p> <p>Support the Sound Transit Route 545, and a queue jump between 168th Avenue NE and the Redmond Way Bear Creek Bridge. Provide intersection modifications and ITS improvements in order to convert both streets from one-way to two-operation to improve grid system in downtown.</p> |
| 116 | Cleveland Streetscape | Improve Cleveland Street to a pedestrian-friendly Main Street. Improvements include one through lane, parking, and sidewalk in each direction, mid-block crossings, street lights, utilities, stormwater treatments, public art, bicycle racks, pedestrian amenities, street furnishing, trees, traffic and wayfinding signs, and realignment of street at eastern and western ends to improve traffic flow. |
| 155 | NE 31st Street Bike Lanes (Design) | Design bike lanes and intersection improvements from the NE 36th St Bridge roundabout to NE 156th Street |
| 157 | West Lake Sammamish Parkway Phase III Widening (Part 1) | Acquire any needed right-of-way and extend the multi-use path on the east side of West Lake Sammamish Parkway. Coordinate with Projects 71 and 361. |
| 163 | SR 202 and NE 124th St Intersection Improvements | Widen NE 124th Street adding additional east/west lanes, modify the traffic signal and connect to the city's traffic management center. In addition, bicycle lanes, sidewalks, and a storm collection and treatment system will be added. |

Extended TFP Project Descriptions (continued)

| Project ID | Name | Description |
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| 175 | NE 27th Street and NE 28th Street New Connection | Construct a new east west NE 27th Street between 152nd Avenue NE and 156th Avenue NE with a three-lane public roadway (narrowing to two lanes adjacent to the future park) with parking and bike lanes along both sides of the street, and intersection improvements at 152nd Ave NE and 156th Ave NE. The 156th intersection improvements will include frontage improvements on the west side of 156th from about 300 feet north of the intersection to about 700 feet south of the intersection. |
| 200 | Redmond Central Connector Segment II | Complete the second segment of the Redmond Central Connector, including regional trail and aesthetic enhancements. |
| 254 | 161st Ave NE Extension | Construct new 161st Ave NE from Bear Creek Pkwy Extension to Redmond Way. Improvements include one through lane in each direction, left-turn lanes, bike lanes, parking, sidewalks, street lights, storm drainage, right-of-way, easements and traffic signals at Cleveland St and Bear Creek Pkwy. |
| 264 | 148th Ave NE & NE 24th Street Turn Lanes | Add left-turn lanes to make dual left-turn lanes on the eastbound and westbound approaches on NE 24th Street at 148th Avenue. |
| 315 | SR 520/148th Interchange Overlake Access Ramp and Trail Connection: City of Redmond Local Street Portion | Construct Access Street between the Overlake Access Ramp terminal and 152nd Avenue NE. Improvements on Overlake Access Street and NE 28th Street include one vehicular lane in each direction, parking, sidewalks, and left-turn lanes at the intersection of NE 28th Street and 152nd Avenue NE. Vehicular lanes are 11-foot wide on Overlake Access Street and NE 28th Street. Sidewalks on NE 28th Street are 14-foot wide. Sidewalks on the Overlake Access Street are 12-foot wide. Parking lanes are 7-foot wide. Coordinate with the terminal of Overlake Access Ramp Project 2). |
| 323 | Redmond Central Connector Phase I | Complete the first segment of the Redmond Central Connector, including regional trail and aesthetic enhancements. Remove rail. Coordinate with the Downtown Stormwater Trunkline Project. |
| 324 | Downtown Shared Parking Facility | Shared parking facility at the intersection of Leary Way and Bear Creek Parkway. Intent is to provide a shared parking resource within the downtown, and facilitate 'right sizing' of private segregated parking in the downtown urban center. |
| 327 | Cleveland Street Sidewalk Maintenance | Address significant sidewalk maintenance issue caused by street trees by replacing sidewalk. This is an interim treatment of the couplet conversion. |
| 339 | NE 95th Street Bridge Replacement | Replace the NE 95th Street Bridge over Bear Creek. Improvements shall comply with environment requirements. |
| 349 | NE 24th Street and Bel-Red Road Southbound Right-Turn Lane | Provide a southbound right-turn lane at the intersection of NE 24th Street and Bel-Red Road. |
| 353 | NE 40th Street Sidewalk Rehabilitation | Replace sidewalks along the north side and part of the south side along the NE 40th Street between 164th Court and Bel-Red Road. |

Extended TFP Project Descriptions (continued)

| Project ID | Name | Description |
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| 355 | 152nd Avenue NE Main Street -Segment 2 | Implement a multi-modal pedestrian corridor concept on 152nd Avenue NE from NE 24th Street to NE 26th Street to create a lively and active signature street in the Overlake Village. The cross section for the improvements would include one through lane in each direction, turn lanes as necessary, on-street parking and pedestrian and bicycle facilities as described in the Appendix 7 in the Redmond Zoning Code. Other improvements include intersection improvements at NE 24th , NE 26th, NE 27th, and NE 28th Streets, storm drainage, LID, street lighting, pedestrian amenities, transit amenities, right-of-way, easements, and utilities. Locate arterial transit stop within immediate access of the Overlake Village light rail station. |
| 356 | NE 116th Street and 172nd Avenue NE Roundabout | Construct a roundabout at NE 116th Street and 172nd Avenue NE. Improvements include sidewalks, bike lanes, vehicular lanes, stormwater, utilities, and street lights. |
| 360 | NE 70th Street Extension Phase II | Construct new NE 70th St from Redmond Way to 180th Ave NE. Improvements include one through lane in each direction, left-turn lanes, sidewalks, street lights, storm drainage, right-of-way and easements. Coordinate with phase I, Project 99, right-of-way dedication and interim street improvements. |
| 363 | 152nd Avenue NE Segment 1 (West) | Implement a multi-modal pedestrian corridor concept on 152nd Avenue NE from NE 26th Street to NE 31st Street to create a lively and active signature street in the Overlake Village. The cross section for the improvements would include 1 through lane in each direction, turn lanes as necessary, on-street parking and pedestrian and bicycle facilities as described in the Appendix 7 in the Redmond Zoning Code. Other improvements include intersection improvements at NE 26th, NE 27th, and NE 28th Streets, storm drainage, LID, street lighting, pedestrian amenities, transit amenities, right-of-way, easements, and utilities. Locate arterial transit stop within immediate access of the Overlake Village light rail station. Part 1, Project 47, includes half-street improvements by the developers of the future Group Health site. Part 2, Project 363, includes half-street improvements for the other half-street by future developers. |
| 367 | 148th Avenue Arterial Pavement Reconstruction Preservation | Reconstruct portions of and provide overlay of 148th Avenue from SR 520 to Redmond Way . Make drainage improvements where needed. Examine roadway channelization for improved efficiencies. |

Appendix I: Glossary and Acronyms

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| BRT | See “Bus Rapid Transit” |
| Budget by Priorities | An organizational budgeting process in which spending proposals (“offers”) are ranked and funded by the decision-making body based on a previously identified set of priorities or criteria. |
| Buildout Plan | The City of Redmond’s complete long-term list of planned transportation system improvements. |
| Bus Rapid Transit | An enhanced bus system that operates on bus lanes or other transitways in order to combine the flexibility of buses with the efficiency of rail. |
| Capital Improvement Program | A six-year plan for future capital expenditures which identifies each capital project, including anticipated start and completion dates, and allocates existing funds and known revenue sources. The CIP is updated and adopted annually as part of the City budget. |
| Capital Investment Strategy | A hybrid planning and budgeting document that summarizes known City of Redmond capital investment needs for the following 18 years. |
| CIP | See “Capital Improvement Program.” |
| CIS | See “Capital Investment Strategy.” |
| Commute Trip | A trip made from an employee’s residence to a work site for a regularly scheduled workday. |
| Commute Trip Reduction | It is a requirement of the Washington State Clean Air Act that major employers develop and implement programs that will reduce the number of times their employees drive alone to work. The goals of commute trip vehicle miles traveled per employee and proportion of single occupant automobiles were a 15 percent reduction by January 1, 1995, a 25 percent reduction by January 1, 1997, and a 35 percent reduction by January 1, 1999. |
| Complete Streets | Streets which are designed and operated to enable safe, attractive, and comfortable access and travel for all users, including pedestrians, bicyclists, motorists, and public transportation users of all ages and abilities. |
| Comprehensive Plan | The long-range plan used as a guide for the physical, economic, and social development of Redmond. |
| Concurrency | A requirement of the 1990 Growth Management Act (RCW 36.70A.070(6)) that the City must enforce an ordinance precluding development approval if a development would cause the transportation LOS to fall below the City’s adopted LOS standard, unless revenues are secured to complete mitigating transportation improvements or strategies within six years. If a development fails to meet the concurrency test, supplemental mitigation in the form of transportation improvements or strategies will be required to accommodate the impacts of the development and allow it to achieve concurrency. Transportation Demand Management (TDM) and other mobility strategies may be used. Maintaining transportation concurrency means implementing transportation improvements in proportion to the level of new development as required by Comprehensive Plan Transportation Policy TR-3 and regulations in RZC 21.52, Transportation Standards. |
| Congestion | A condition under which the number of vehicles using a facility is great enough to cause reduced speeds and increased travel times. |
| CTR | See “Commute Trip Reduction.” |

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| Development | The division of a parcel of land into two or more parcels; the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any structure; any mining, excavation, grading, landfill, drainage, removal of vegetation, or disturbance of land or water; and use of land or water or the intensification or extension of the use of land or water. |
| East Link | A voter-approved project to expand light rail from Downtown Seattle to East King County with stations serving Mercer Island, Bellevue, and Redmond. |
| Freight | The movement of goods from one place to another. |
| GMA | See “Growth Management Act.” |
| Growth and Transportation Efficiency Center | A defined boundary of dense mixed development with major employers, small businesses, and residential units, within an established urban growth area. Local jurisdictions in Washington State may establish GTECs in order to receive state funding for programs that provide greater access to employment and residential centers while decreasing the proportion of commuters driving alone during peak periods on the state highway system. |
| Growth Management Act | Refers to the 1990 State Growth Management Act (ESHB 2929) as amended, requiring urban counties and the cities within them to develop comprehensive plans to deal with growth in Washington State over the next 20 years. The GMA is codified at RCW 36.70A and other chapters. |
| GTEC | See “Growth and Transportation Efficiency Center.” |
| High Occupancy Vehicle | Generally, a vehicle carrying more than one person, including a carpool, vanpool, or bus. |
| HOV | See “High Occupancy Vehicle.” |
| Impact Fee | A payment of money required as a condition of development approval to pay for capital improvements needed to serve new growth and development and is: reasonably related to the new development that creates additional demand and need for capital improvements; a proportionate share of the cost of the public improvements; and used for improvements that reasonably benefit the new development. |
| Intelligent Transportation System | A broad range of wireless and wire line communications-based information and electronics technologies intended to improve transportation safety and mobility. |
| ITS | See “Intelligent Transportation System.” |
| Level of Service | A measure of a public facility or service’s operational characteristics used to gauge its performance. |
| LID | See “Low Impact Development.” |
| Light Rail | A form of urban rail public transportation that generally has more flexibility in capacity and design speed than heavy rail and metro systems, and higher capacity and speed than traditional street-running tram or bus systems. Light rail systems usually use electric rail cars operating either above, below, and at grade in the right-of-way, separated from other traffic but sometimes mixed with other traffic in city streets. |
| Local Street | A street which provides for localized traffic circulation, access to nearby arterials, and access to neighborhood land uses. |
| LOS | See “Level of Service.” |
| Low Impact Development | A term used to describe a land planning and engineering design approach to managing stormwater runoff. LID emphasizes conservation and use of on-site natural features to protect water quality. This approach implements engineered small-scale hydrologic controls to replicate predevelopment conditions through infiltrating, filtering, storing, evaporating, and detaining runoff close to its source. LID is similar to “On-site Stormwater Management,” a term used by the Washington State Department of Ecology. |

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| Master Plan | A long-term outline of a project or government function. |
| Metropolitan Planning Organization | A federally mandated organization of elected officials in urbanized regions with 50,000 or more population that provide a forum for local decision-making on transportation issues of a regional nature. |
| Mixed Use | The presence of more than one category of use in a structure; for example, a mixture of residential units and offices in the same building. |
| Mobility | The movement of people and goods. The two mobility measures that are used in the transportation concurrency system are (1) mobility units (MU) and (2) person miles of travel (PMT). |
| Mobility Unit | A measurement unit that is used to express the level of travel demand on the transportation system generated by a land use(s), or the unit increase in the ability to travel on the transportation system due to the increased supply of transportation improvements, such as those on the City's six-year plan, Transportation Facility Plan (TFP), or Buildout Transportation Facility Plan (BTFP). |
| Mode | A type of transportation, such as pedestrian (walking), bicycle, automobile, or transit (bus). |
| Mode Split | The statistical breakdown of travel by alternate modes, usually expressed as a percentage of travel by single occupant automobile, carpool, transit, etc. Mode choice goals are used to help people in the public and private sectors make appropriate land use and transportation decisions. |
| MPO | See "Metropolitan Planning Organization." |
| Multimodal | A term referring to accessibility by a variety of travel modes, typically pedestrian, bicycle, transit, and automobile modes, but may also include water and air transport modes. |
| Pavement Condition Index | A numerical index between 0 and 100 that indicates the quality of a section of pavement. |
| PCI | See "Pavement Condition Index." |
| Pipeline Development | Projects that are permitted and/or funded but not yet complete. |
| Priority Corridor | A route along which a particular mode is given design priority. |
| PSRC | See "Puget Sound Regional Council." |
| Puget Sound Regional Council | A regional planning and decision-making body for growth and transportation issues in King, Kitsap, Pierce, and Snohomish Counties. Under federal transportation law, the Council is the Metropolitan Planning Organization (MPO), responsible for regional transportation planning and programming of federal transportation funds in the four counties. It is also the designated Regional Transportation Planning Organization (RTPO) for the four counties. PSRC manages the adopted regional transportation strategy, Transportation 2040. |
| Roundabout | A circular intersection with yield control at entry, which permits a vehicle on the circulatory roadway to proceed, and with deflection of the approaching vehicle counter-clockwise around a central island. |
| R-Trip | A commute options program partnership between the City of Redmond, King County, the Greater Redmond Transportation Management Association, and Redmond businesses that offers information, programs, and incentives to assist Redmond's commuters and residents in choosing alternatives to driving alone. |
| Screenline V/C | A measure of traffic demand on a segment of roadway versus that roadway's maximum theoretical capacity. |

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| Shared Street | A roadway where all users share the street. The mixing expands the realm of public space that can be used for activities or provide a greater area for walking and bicycling within a smaller right-of-way. All users yield to one another, and vehicle speeds are kept to a minimum through design and regulation. The basis for this concept of the Dutch woonerf, which roughly translates into “residential yard.” |
| Single Occupancy Vehicle | A vehicle carrying one person. |
| Sound Transit 2 | A \$17.8 billion funding package, approved in 2008 by Puget Sound-area voters, that funds a variety of mass transit improvements including the East Link light rail extension. |
| Sound Transit 3 | A potential future funding package that would extend the Puget Sound-area mass transit network. |
| SOV | See “Single Occupancy Vehicle.” |
| ST2 | See “Sound Transit 2.” |
| ST3 | See “Sound Transit 3.” |
| Standard Detail | A standardized engineering specification. |
| Stormwater | Water that is generated by rainfall and is often routed into drain systems in order to prevent flooding. |
| Strategy | An approach or method that, when used for transportation purposes, incorporates the use of transportation facilities, projects, programs, and services to provide mobility for people and goods, and thus maintain the City’s adopted transportation Level-of-Service (LOS) standard. |
| Streetscape | The visual character of a street as determined by elements, such as structures, access, greenery, open space, view, etc. |
| Sustainability | Meeting the needs of the present without compromising the ability of future generations to meet their own needs. |
| TDM | See “Transportation Demand Management.” |
| TFP | See “Transportation Facilities Plan.” |
| TIB | See “Transportation Improvement Board.” |
| TIP | See “Transportation Improvement Program.” |
| TMP | See “Transportation Master Plan.” |
| TOD | See “Transit-Oriented Development.” |
| Transit | Public transportation; referring in this document to public bus, trolley, and light rail, but not vanpools. |
| Transit-Oriented Development | A dense, walkable residential development type that features easy access to mass transit and retail. |
| Transportation Demand Management | Public and private programs to manage demand based on transportation supply. TDM measures are frequently directed toward increasing the use of public transportation, carpools and vanpools, and nonmotorized travel modes. |
| Transportation Facilities Plan | The long-range plan identifying transportation facilities, programs, projects, and services that are necessary to provide for the mobility of people and goods from new development allowed by the Redmond Comprehensive Plan and the Redmond Zoning Code. The planning horizon of the TFP typically ranges between 12 to 20 years. |
| Transportation Improvement Board | An independent state agency that distributes and manages street construction and maintenance grants to 320 cities and urban counties throughout Washington State. |
| Transportation Improvement Program | A six-year funded program of transportation improvements. The TIP is updated and adopted annually. |
| Transportation Master Plan | A planning document describing the City of Redmond’s approach to delivering its transportation program, projects, and actions in the 18 years following the year of adoption. |

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| Urban Center | Defined in the Countywide Planning Policies as an area for focusing growth and aligning a high capacity transit system. To be designated an urban center, an area must have a land area between 0.5 and 1.5 square miles and must be able to support a minimum of 15,000 jobs at a minimum density of 50 jobs per gross acre and a minimum residential density of 15 households per acre. |
| Vanpool | An organized ridesharing arrangement in which a number of people (typically six to 15 people) travel together between fixed points on a regular basis in a van. Expenses are shared, and there is usually a regular volunteer driver. |
| Vehicle Miles Traveled | A measurement of forecasted travel demand; equivalent to one car, bus, or truck traveling one mile. |
| Vision Blueprint | See “Capital Investment Strategy.” |
| VMT | See “Vehicle Miles Traveled.” |
| Washington State Department of Transportation | The state-level agency responsible for building, maintaining, and operating the state highway and ferry systems; and that works with others to maintain and improve local roads, railroads, airports, and multimodal alternatives to driving. |
| Wayfinding | Maps, signs, and other methods of signage that assist people in navigation. |
| WSDOT | See “Washington State Department of Transportation.” |