Appendix G: Transportation Facilities Plan (TFP) 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 particular 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.

TMP strategies most directly supported by this program	How strategies are supported
	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 ~~costs nothing~~, 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[1]:

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 NE 51st Street bicycle facility improvements	$100,000
High Ranking. Staff will meet with Mayor in early 2013 to determine final list based on analysis of high ranking projects. Central Connector Phase 2 matching funds Bicycle wayfinding citywide Bicycle channelization Bicycle Facilities Design Manual update Education and encouragement	$1,072,965
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) 2013: $75,000 2014: $75,000	$150,000
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) 2013: $75,000 2014: $75,000	$150,000
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: 1) Replace pavement markings ($50,000) 2) Install new markings where needed ($100,000)	$150,000
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 Fund 1.0 Full-Time Employee to conduct the following activities: • 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.	$260,415
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 2013: $100,000 2014: $100,000	$200,000
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 2013: $150,000 2014: $150,000	$300,000
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) 2013: $1,200,000 2014: $1,200,000	$2,400,000
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	Walking is fundamental to achieving the community, economic development, and transportation visions for the Downtown and Overlake urban centers. 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. 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.
Neighborhood Access	Pedestrian improvements support a complete, connected system that provides access to urban centers, neighborhood businesses, parks, schools, transit, and neighbors. Pedestrian access is particularly important for youth, the elderly,

	and anyone else who may not drive.
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) 2013: $1,400,000 2014: $1,400,000	$2,800,000
Carry-forward	$1,650,000
Total	**$4,450,000**

Program expenditures:

In Design, 2013 NE 51st Street sidewalk from 158th Avenue NE to West Lake Sammamish Parkway 171st Avenue NE sidewalk on east side at NE 100th Street and curb ramps at end 172nd Avenue NE near Hartman Park NE 85th Street sidewalk from 165th Avenue NE to 120 feet east of 165th Avenue NE NE 88th Street sidewalk from 166th Avenue NE to roughly 120 feet east of 166th Avenue NE NE 95th Street sidewalk from Avondale Road to roughly 400 feet east of Avondale Road Preliminary design of 134th Avenue NE sidewalk from NE 75th Street to NE 80th Street 185th Avenue NE Low Impact Development/sidewalk	$1,850,000

High Ranking: Staff will meet with Mayor in early 2013 to determine final list based on analysis of high-ranking projects. Central Connector Phase 2 matching funds Redmond Way sidewalk between 142nd Avenue NE and 148th Avenue NE 156th Avenue NE sidewalk section on east side, south of NE 62nd Court Design of 159th Place NE sidewalk between Leary Way and Bear Creek Parkway Design of NE 88th Street sidewalk from 120 east east of 166th Avenue NE to 171st Avenue NE ADA improvements	$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) 2013: $50,000 2014: $50,000	$100,000
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 though 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) 2013: $100,000 2014: $100,000	$200,000
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 2013: $450,000 2014: $450,000	$900,000
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**

a. 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**