Redmond
WASHINGTON

TRANSPORTATION MASTER PLAN

CREATING CHOICE. CONNECTING COMMUNITY.

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Redmond
WASHINGTON

Connected Community
Enhanced Livability
Environmental Sustainability

Letter from Mayor Angela Birney

We are committed to providing safe, multimodal, accessible and sustainable transportation choices in Redmond. The Transportation Master Plan helps implement this vision, which is outlined by the Redmond 2050 Comprehensive Plan update. It establishes a strategic and actionable framework for improving connectivity, expanding our network of bike lanes and pedestrian walkways, and enhancing public transit options. In alignment with the Redmond Environmental Sustainability Action Plan, it prioritizes investment in multimodal transportation options that will reduce traffic congestion, lower our carbon footprint, and create a healthier, more vibrant community.

As Redmond continues to grow, leading to more people, jobs, and activities throughout the City, it is important to ensure we have an efficient, safe, and comfortable transportation system. The Transportation Master Plan outlines how we can make it easier, safer, and more sustainable to get around via walking, biking, using shared scooters and e-bikes, taking transit, or driving. Strategies and actions in the plan aim to ensure students can walk and bike safely to school, light rail and buses can be reliable and efficient, and that local businesses can thrive because people and goods can move easily. In addition, actions in the plan support clean air and sustainable travel, while preparing for new technologies.

Most importantly, this plan reflects the feedback of the Redmond community. Over the past five years, community members have shared their hopes and priorities for Redmond, including safer streets, reliable transit, better bike connections, and more walkable neighborhoods. The Transportation Master Plan turns your input into a clear path forward.

With this plan, we continue to put safety and accessibility at the forefront of the City's transportation system, fostering more opportunities for the community to gather and collaborate. The adoption of the Transportation Master Plan builds toward Redmond's future transportation vision, supporting a city where people of all ages and abilities can get where they need to go in ways that are safe, sustainable, and enjoyable.

In partnership,

Angela Birney
Mayor, City of Redmond

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ACKNOWLEDGEMENTS

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- HNTB
- Parametrix
- Toole Design

COMMITTEES

- Redmond Pedestrian and Bicycle Advisory Committee (PBAC)

COMMUNITY BASED ORGANIZATIONS (CBOS)

- Africans on the Eastside
- BigHug
- Disability Empowerment Center
- Eastside for All
- Eastside Native American Education Program (ENAEP)
- Global Social Business Partners
- Indian American Community Services (IACS)
- King County Promotores Network
- Pride Across the Bridge
- United Hub

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EXECUTIVE SUMMARY

WHAT IS THE TRANSPORTATION MASTER PLAN?

The Washington State Growth Management Act (GMA) requires cities to coordinate land use and transportation as part of their comprehensive planning efforts and for local transportation planning to be consistent with state and regional transportation plans with the goal of providing efficient multimodal transportation systems. Redmond 2050, the City's comprehensive plan, includes a transportation element that establishes a transportation vision and policies to guide Redmond's transportation system development over the next 25 years.

The Redmond Transportation Master Plan (TMP) is a strategic functional plan of Redmond 2050. It advances the Redmond 2050 transportation policies by identifying the projects, programs, and investments that are needed to realize a multimodal transportation system that supports Redmond's transition from "suburb to city" and embodies the City's guiding principles of resilience, equity and inclusion, and sustainability. **Figure 1** on the next page shows framework for Redmond's transportation system development - from vision to implementation.

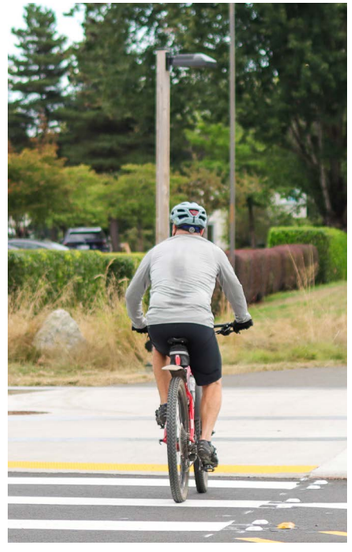
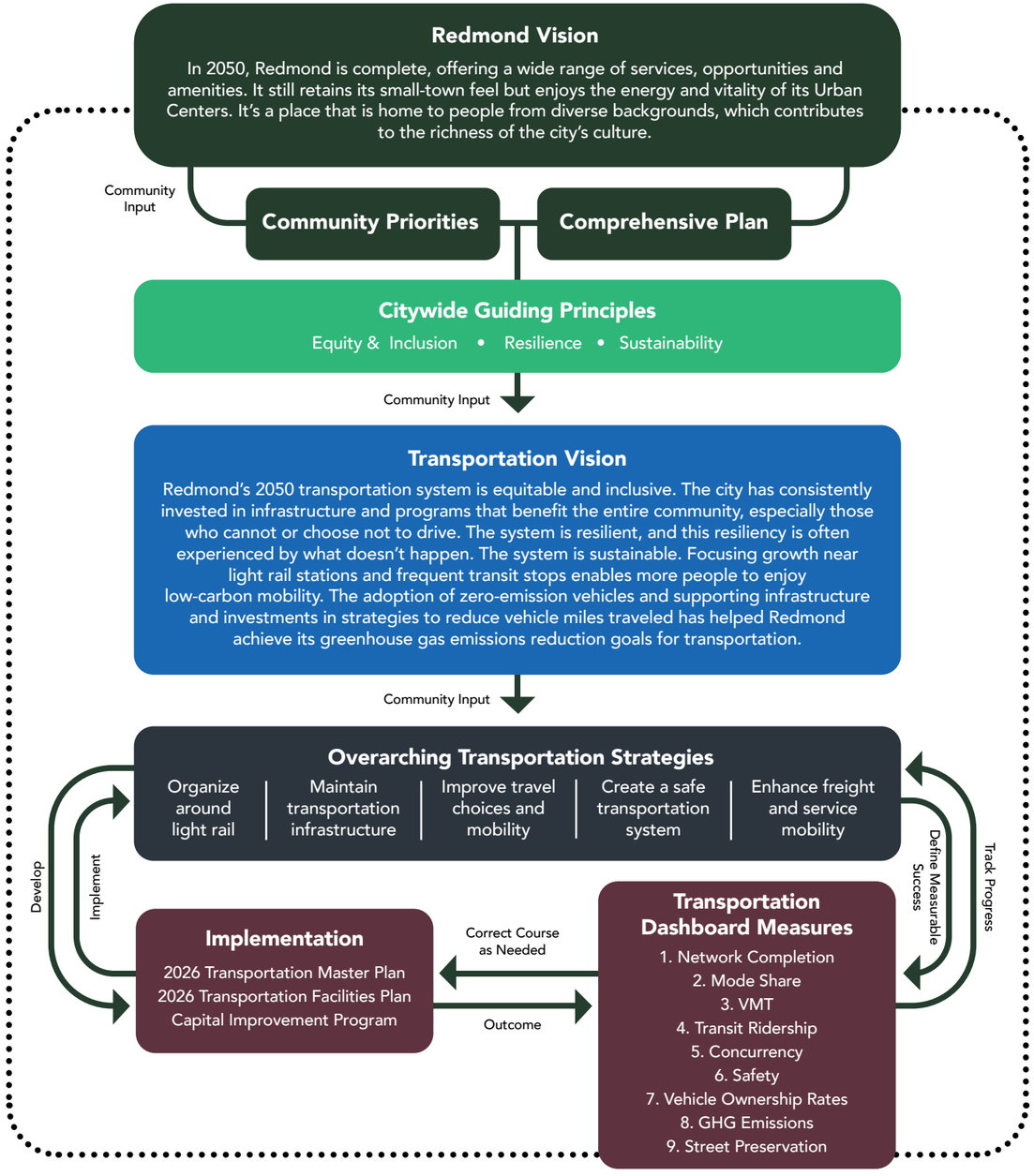


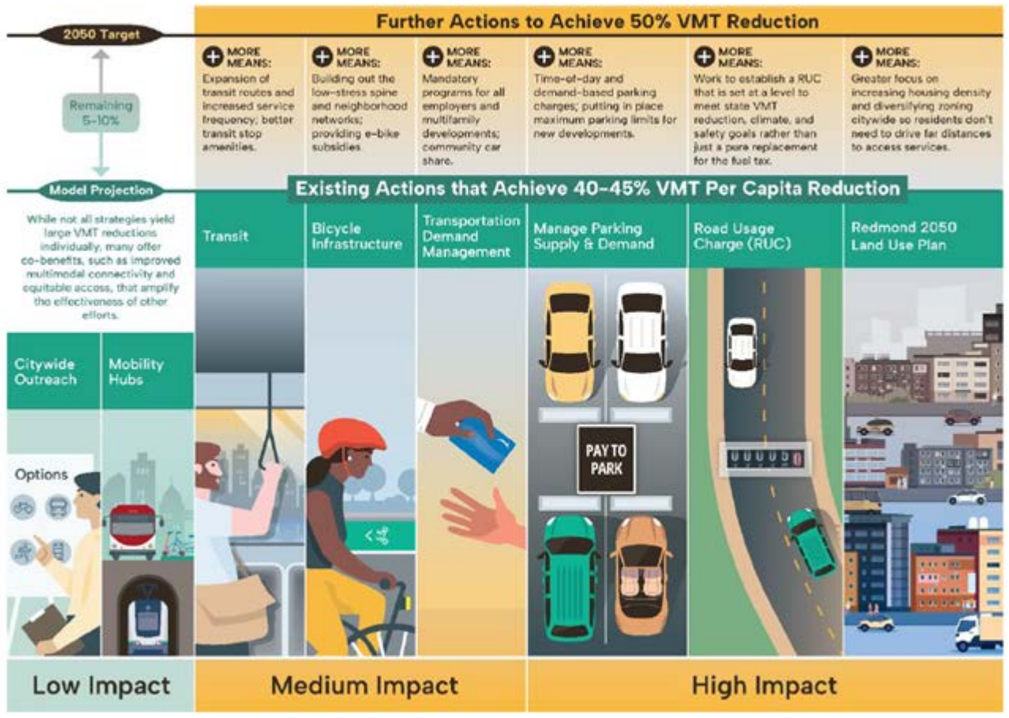
FIGURE 1 | TRANSPORTATION SYSTEM DEVELOPMENT FRAMEWORK



HOW DOES THE TRANSPORTATION MASTER PLAN ADVANCE REDMOND'S SUSTAINABILITY GOALS?

Redmond 2050 sets a goal for reducing greenhouse gas emissions from the transportation sector by 71 percent. The Transportation Master Plan contains many strategies and actions that will contribute to greenhouse gas reductions and a more sustainable Redmond. Reducing the number of vehicle miles traveled (VMT) is the most impactful way to reduce greenhouse gas emissions (GHGs). Figure 2 shows the relative impact of TMP actions that are focused on VMT reduction. These actions align with the actions under the City's Environmental Sustainability Action Plan "Big Move" focused on providing accessible and sustainable transportation that encourages community members to choose low-carbon transportation options.

FIGURE 2 | RELATIVE IMPACT OF KEY VMT REDUCTION STRATEGIES



HOW DOES THE TRANSPORTATION MASTER PLAN ADVANCE REDMOND'S SAFETY GOALS?

Redmond has committed to eliminating serious and fatal traffic-related injuries by 2035 and adopted the Safer Streets Action Plan that provides a roadmap for achieving this goal. The TMP reinforces the Safe System approach that serves as the foundation for the City's transportation safety efforts with actions focused on reducing vehicle speeds and vehicle miles traveled, designing streets to be safe for the most vulnerable users (i.e., people walking, rolling, and biking), using technology to reduce conflicts, and keeping Redmond's transportation assets in a good state of repair.

FIGURE 3 | SAFE SYSTEM APPROACH

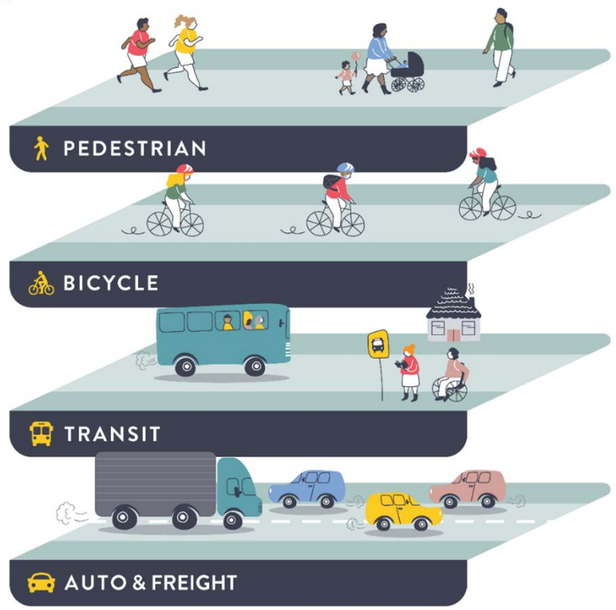
WHAT IS INCLUDED IN THE TRANSPORTATION MASTER PLAN?

The TMP consists of 14 sections, each containing an assessment of existing conditions and strategies and actions that will contribute to a safe, resilient, sustainable, and equitable multimodal transportation system over the next 25 years. Key themes, strategies and actions from each section are provided on the following pages.

STREET SYSTEM PLAN

FIGURE 4 | LAYERED NETWORK APPROACH

Image Credit: Fehr and Peers



KEY THEMES

- Move the most people and goods possible within the existing street system while also minimizing environmental harms and negative community impacts.
- Reduce vehicle miles traveled (VMT) and greenhouse gas emissions (GHG).
- Apply a layered Complete Streets approach to planning, designing, operating, and maintaining streets that enable safe access and accommodation of all users regardless of age or ability.

KEY STRATEGIES AND ACTIONS

- Implement an integrated multimodal transportation system that safely and efficiently serves all travel modes.
- Apply a Safe Systems Approach to the transportation system.
- Apply advanced, but proven, technological solutions to maximize the effectiveness, efficiency, and safety of the transportation system.
- Balance the design and implementation of Complete Streets with emergency response benchmarks.

PEDESTRIAN PLAN

KEY THEMES

- Accessibility: keeping Redmond's pedestrian system safe and comfortable for people of all ages and abilities and meeting or exceeding ADA requirements.
- Connectivity: filling gaps in the pedestrian network with sidewalk and sidewalk alternatives, off-street connections, and closing the distance between low-stress pedestrian crossings.

KEY STRATEGIES AND ACTIONS

- Complete Redmond's pedestrian network by filling sidewalk gaps.
- Construct prioritized low-stress pedestrian crossings.
- Identify and prioritize locations for new or improved neighborhood connections outside of Urban Centers.
- Ensure safe and accessible pedestrian travel through construction areas.
- Implement street design and operational enhancements to reinforce Pedestrian Priority Zones in Urban Centers.

BICYCLE PLAN

KEY THEMES

- Connect all key destinations within the City with low stress bikeways by making consistent progress toward bicycle network completion by 2035.
- Shift short vehicle trips to bicycling and micromobility.
- Implement safe and high-comfort bicycle facilities for people of all ages and abilities, prioritizing a Spine network that connects to urban centers and light rail.

KEY STRATEGIES AND ACTIONS

- Connect bicycle facilities to light rail and bus
- Promote e-bikes with lending libraries and financial incentives.
- Provide convenient, plentiful, and secure bike parking.
- Employ lower-cost, quick-build solutions where possible for more rapid network implementation.

TRANSIT SYSTEM PLAN

KEY THEMES

- Encourage transit ridership through more frequent service, better first-last mile options, and enhanced stop amenities.
- Connect people to light rail easily and safely, especially via bus and active travel modes.
- Build effective coordination between the city and regional transit agencies.

KEY STRATEGIES AND ACTIONS

- Prioritize pedestrian and bicycle network safety and mobility improvements within a half-mile walkshed and 3-mile bikeshed of frequent transit stops.
- Establish Mobility Hubs that promote enhance multimodal first/last mile connections to transit..
- Bring more frequent and flexible transit service to Redmond.

FREIGHT AND GOODS DELIVERY PLAN

KEY THEMES

- Ensure freight and goods delivery access is available to all Redmond residents and businesses.
- Reduce overall GHG emissions by implementing electric or low emissions delivery and pick up systems .
- Promote freight delivery strategies that minimize disruptions and impacts to the surface transportation network and livable Urban Centers.

KEY STRATEGIES AND ACTIONS

- Consider efficient and safe truck movement in all street planning and design.
- Restrict or discourage truck traffic where incompatible.
- Adopt innovative strategies to provide for safe and enhanced freight movement, reduced emissions, and application of clean technology.
- Implement strategies to reduce number of trips and conflicts associated with package deliveries.

SYSTEM MAINTENANCE AND PRESERVATION

KEY THEMES

- A well-maintained transportation system prevents network disruptions.
- Maintaining sidewalks, curb ramps, and bikeways supports safe and equitable access.
- Transportation system maintenance prolongs the life of system assets and helps prevent harmful substances from entering sensitive areas.

KEY STRATEGIES AND ACTIONS

- Establish a Maintenance Level of Service Standard for infrastructure assets.
- Plan for and adequately fund maintenance and preservation of Redmond's transportation system.
- Explore alternative approaches to addressing bikeway, sidewalk, and shared use path maintenance needs.

CURBSPACE AND PARKING MANAGEMENT

KEY THEMES

- When managed together, effective curb and parking management optimizes parking utilization, decreases time spent searching for parking, and reduces congestion.
- Manage curb space in Redmond equitably with consideration of community benefits and other modes and manage on-street parking to provide equitable access to businesses, services, public spaces, and transit.

KEY STRATEGIES AND ACTIONS

- Develop a comprehensive curbside management plan for Redmond's three urban centers.
- Manage on-street parking in Redmond to optimize utilization of the City's limited on-street parking inventory.
- Support a shared parking program for off-street parking areas in Redmond with public parking components or parking areas that are shared between neighboring land uses.

TRANSPORTATION DEMAND MANAGEMENT

KEY THEMES

- Shifting trip modes in Redmond and working with private sector partners to establish behavior change reduces congestion as the city grows.
- Providing and promoting travel options decreases household transportation costs and reduces greenhous e gas emissions and congestion.

KEY STRATEGIES AND ACTIONS

- Educate and emphasize the options and benefits of existing and planned public transit service through the City of Redmond transportation demand management program and partnerships with local organizations.
- Revisit regulations and management of Mobility Management Plans and meet statewide Commute Trip Reduction requirements.
- Support parking changes that encourage individuals to consider non-drive-alone transportation options.

E-MOBILITY STRATEGY

KEY THEMES

- Electrification reduces GHGs that contribute to climate change and associated negative impacts on environment, infrastructure, and community.
- Access to charging infrastructure should be available to all Redmond community members regardless of socioeconomic status.

KEY STRATEGIES AND ACTIONS

- Focus on equitable access when considering E-mobility infrastructure investments.
- Explore publicly available e-bike charging opportunities.

EMERGING TRENDS AND TECHNOLOGY

KEY THEMES

- Consider community safety, privacy, and accessibility before deploying new technologies in Redmond.
- New technologies can be used to reduce greenhouse gas emissions, environmental impacts of the transportation system, and support more efficient use of resources.

KEY STRATEGIES AND ACTIONS

- Employ newly adopted technology in service of safety, maintenance, and multimodal travel choices for pedestrians, cyclists, and motorists.
- Develop staff skills and knowledge of advanced analytical tools that will advance transportation options, safety, and efficiency.
- Form partnerships with emerging mobility services, technology services, platforms, and neighboring jurisdictions to advance safety and mobility.

MONITORING PROGRESS

KEY THEMES

- Performance monitoring is the regular measurement and reporting of the results of projects, programs, and policies.
- Performance measurement reveals whether City activities are achieving the strategies and citywide principles set forth in the TMP and gives decision makers the information they need to change course if necessary.

KEY STRATEGIES AND ACTIONS

- Dashboard performance measures include: Network Completion, Mode Share, Vehicle Ownership Rates (including EVs), Vehicle Miles Traveled (VMT), Transit Ridership, Safety, and Street and Sidewalk Condition.
- Other transportation- and land use-related performance measures that will help track progress toward reductions greenhouse gas emissions are identified in the Environmental Sustainability Action Plan and include electric vehicle ownership, commute distance, and jobs:housing ratio.

TRANSPORTATION FACILITIES PLAN

KEY THEMES

- Long-term financially constrained list of projects to ensure multimodal transportation capacity is developed concurrently with development.

KEY STRATEGIES AND ACTIONS

- Bikeways such as separated bicycle lanes, shared use paths, and bicycle boulevards.
- Sidewalk improvements and safe pedestrian crossings.
- Transit speed and reliability improvements.
- Capacity projects to ensure freight mobility and relieve congestion.

HOW DID THE COMMUNITY GIVE FEEDBACK ON THE TRANSPORTATION MASTER PLAN?

4,500

Total interactions from 2020-2025 with community members via questionnaires, community events, committee meetings, focus groups, and open houses

2 Light Rail Station Opening Events

3 Open Streets Festivals

5 Open Houses

5 Events (4 focus groups and 1 open house) tailored to Redmond's Community-Based Organizations (CBOs) through partnership with Eastside for All

2 Road Safety Assessments

8 Focus Groups or Roundtable Sessions

6 Pedestrian and Bicycle Advisory Committee (PBAC) meetings discussing the TMP

Approximately **382** responses to community questionnaires

Throughout the Transportation Master Plan, community members' stories and ideas will befeatured as Community Member Highlights. Look to these highlights for a spotlight on Redmond's engaged and thoughtful community!

INTRODUCTION

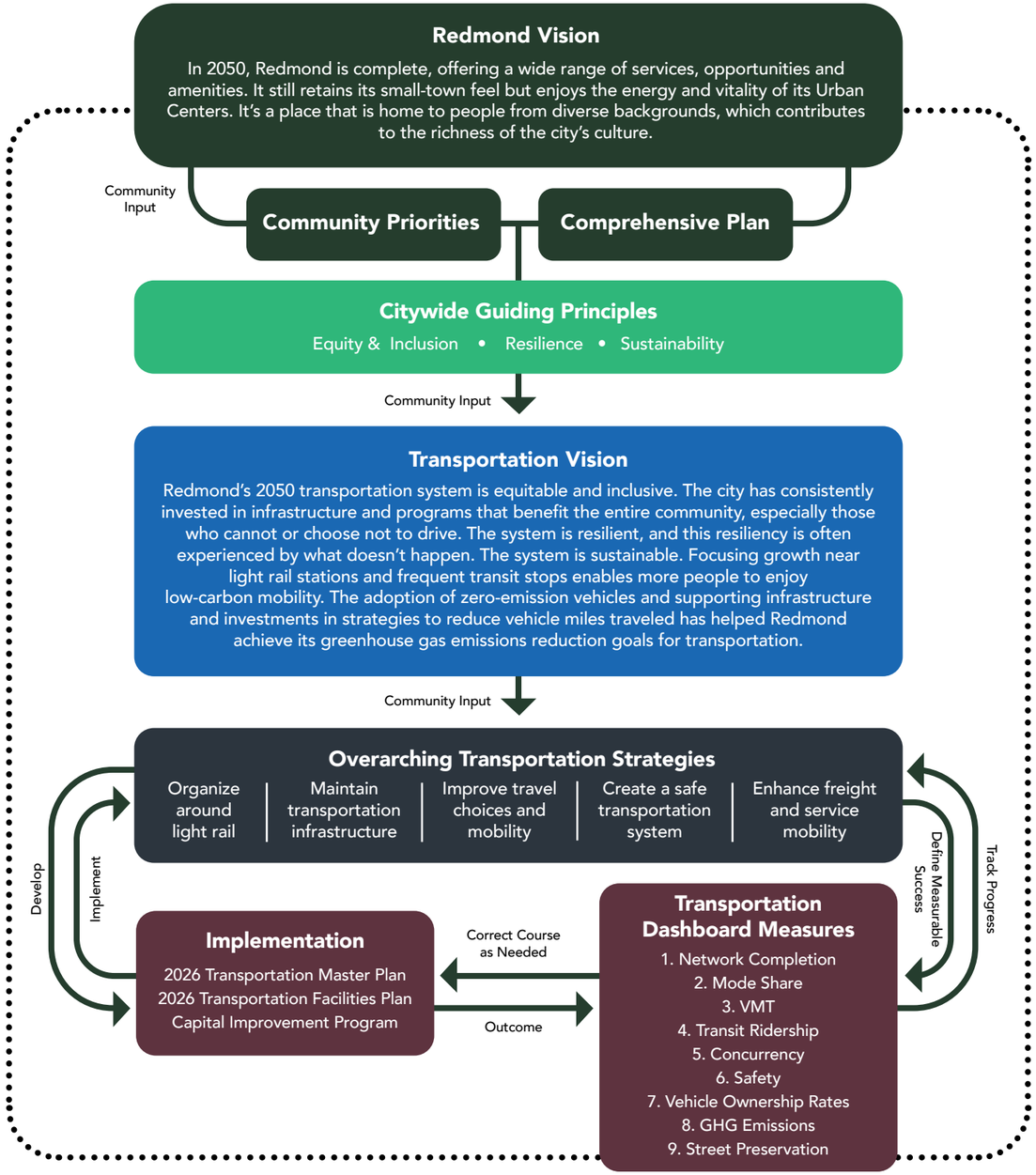
The Redmond Transportation Master Plan (TMP) is a strategic functional plan of Redmond 2050, the City's Comprehensive Plan. It guides Redmond's transportation projects, programs, and investments over the next twenty-five years. The strategies and actions in the TMP are focused on building a multimodal transportation system and shifting community travel behaviors to support Redmond's transition from "suburb to city" and achieve the City's guiding principles of resilience, equity and inclusion, and sustainability.

The Redmond 2050 Transportation Element provides the policy framework for a transportation system that supports the City's land use plan and prioritizes more affordable transportation options that reduce greenhouse gas emissions and vehicle miles traveled. As a strategic functional plan, the TMP specifies the steps that need to be taken to implement Redmond 2050 policies. Figure 1 shows how the Redmond Vision established by the Redmond community relates to community priorities, Redmond 2050, Citywide Guiding Principles, the Transportation Vision, Overarching Transportation Strategies, and finally how the TMP advances implementation to achieve the vision.

Much has changed since Redmond last updated its TMP in 2013. Since that time, the City and Sound Transit have come together to build and operate four new Link light rail stations. Downtown Redmond has been transformed by the conversion of Redmond Way and Clevland Street to two-way streets, the latter functioning as the main street of a vibrant downtown. New advanced adaptive traffic signals have been installed at key intersections in the downtown area, helping to reduce travel times, lower emissions due to less idling, and improve pedestrian safety through adaptive crosswalk timing. And the City has adopted the Safer Streets Action Plan, a roadmap for achieving the goal of eliminating traffic-related deaths and serious injuries by the year 2035.

Redmond is one of the fastest growing cities in Washington. With this growth comes greater demands on the city's transportation system. A multimodal transportation system that builds on the significant investments in Link light rail and provides a range of safe, affordable, and accessible travel options will ensure that people are able to meet their everyday needs, and Redmond continues to provide its community members a high quality of life.

FIGURE 1 | TRANSPORTATION SYSTEM DEVELOPMENT FRAMEWORK



FIVE OVERARCHING STRATEGIES

The centerpiece of this framework approach is a set of five overarching strategies that are embedded in the Redmond 2050 Policy Framework, the vision narrative, and throughout the TMP. Each strategy describes the core activities needed to achieve the desired outcomes. Dashboard measures will be used to evaluate progress on these strategies over time and are explained in detail in Section 13, Monitoring Progress. These five strategies provide the basis for the identification of projects and programs to be completed by 2050. Implementation activities needed to achieve each strategy will be guided by the principles of resilience, equity and inclusion, and sustainability.

The five overarching strategies are:

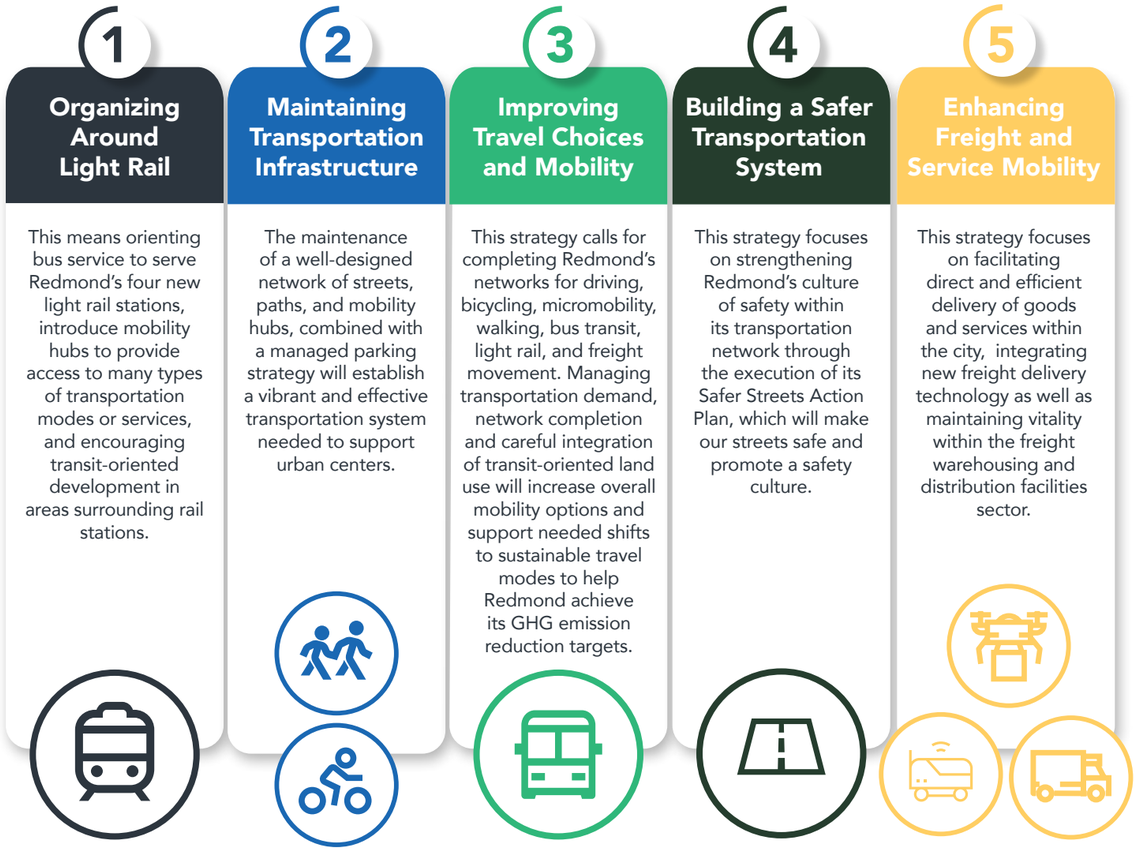


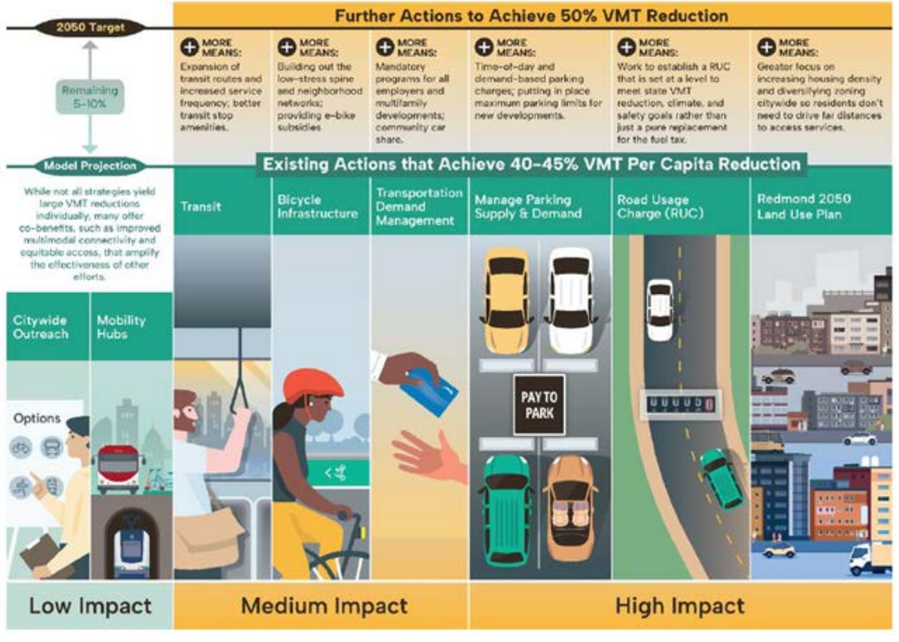
FIGURE 2 | FIVE OVERARCHING TRANSPORTATION STRATEGIES

Reducing Vehicle Miles Traveled and Greenhouse Gas Emissions

Vehicle miles traveled (VMT) is a measure of the total miles driven and an indicator of how well land uses are integrated with transportation options such as walking, biking, rolling, and transit. Most vehicle miles traveled in Redmond are from personal vehicles. Reducing VMT will help Redmond achieve a **71 percent reduction** in greenhouse gases from the transportation sector[1] as established in Redmond 2050. VMT reduction is a key strategy defined in the Environmental Sustainability Action Plan (ESAP), which sets a target for VMT reduction of 50% between 2017 and 2050. The Safer Streets Action Plan also identifies VMT reduction as a key strategy to improving transportation safety as it reduces the potential for crashes, particularly between vehicles and people walking, biking, and rolling.

Reaching Redmond's VMT reduction goals will require a combination of actions that vary in terms of their impact. While some actions drive significant changes, they are often the most difficult to implement due to political, operational, or community concerns, and may require a longer time to realize. Figure 3 illustrates the key VMT reduction strategies identified in the TMP. **These same strategies are echoed in the ESAP as "big moves" related to transportation sector greenhouse gas reduction**. It is important to note that while not all actions lead to a large reduction in VMT alone, many provide co-benefits such as improved multimodal connectivity, more equitable access, and overall increase in community livability.

FIGURE 3 | RELATIVE IMPACT OF KEY VMT REDUCTION STRATEGIES



[1] The transportation sector contributes nearly a quarter of the Redmond community's greenhouse gas emissions,.

Community Engagement

The strategies and actions identified in the TMP are directly informed by the feedback received from the Redmond community both during the Redmond 2050 Comprehensive Plan and Redmond Transportation Master Plan update processes. The Redmond community and other stakeholders were asked about what transportation challenges they are facing and how they would like to see the Redmond transportation system better meet their needs. This outreach included tabling events at Derby Days and Open Streets Festivals, light rail opening day events, the Redmond Pedestrian and Bicycle Advisory Committee meetings, and other open houses. Outreach included the following:

- Over approximately 4,500 total interactions from 2020-2025 with community members via questionnaires, community events, committee meetings, focus groups, and open houses.
- 2 Light Rail Station Opening Events.
- 3 Open Streets Festivals.
- 5 events (4 focus groups and 1 open house) tailored to Redmond's Community Business Organizations (CBOs) through partnership with Eastside for All.
- 2 Road Safety Assessments.
- 5 Open Houses.
- 8 Focus Groups or Roundtable Sessions.
- 6 Pedestrian and Bicycle Advisory Committee (PBAC) meetings discussing the TMP.
- Approximately 382 responses to community questionnaires.

Appendix A provides a full summary of how the community was engaged and key findings from this engagement.

FIGURE 4 | TRANSPORTATION MASTER PLAN COMMUNITY OUTREACH EVENTS

How People Move in Redmond Today and Tomorrow

Redmond is served by two transit agencies (King County Metro and Sound Transit), with public buses and four light rail stations. There are 75 miles of bicycle network, 39 miles of developed trails, and 249 miles of sidewalk within the city. Commute Trip Reduction surveys done prior to the Covid-19 pandemic showed increasing commuter use of transit, with nearly 18% of commuters reportedly riding the bus by the 2019/2020 survey, and nearly 3% commuting via bike. While both rates dropped significantly in the 2021/2022 survey, telework share grew from 5% to 41%. The 2024/2025 survey shows similar trends, with over 5% of commuters utilizing transit (light rail and bus) and 2% commuting by bike. Although the telework share dropped from 2021/2022—at 36% for 2024/2025—it still remains a significant factor in commute trends. As employers and jobs in Redmond shift back to in-person work, light rail connects to Seattle, and community demand for more transportation choices grows, Redmond seeks to expand resources and investment to ensure that transit, cycling, micromobility, and other sustainable transportation modes are prioritized.

Redmond is a growing city, with a 2024 population of 80,040. By 2050 it is projected there will be over 118,000 residents and an additional 24,800 housing units, and nearly 30,000 additional jobs. An influx of this size will put strain on the existing transportation system. Investing in space-efficient travel modes, such as bike lanes and high-capacity transit, is the most sustainable way to manage what would otherwise result in extreme congestion if personal vehicle use was to continue to be the dominant mode of travel. There is no financially feasible way to build enough street capacity to accommodate ever-increasing vehicle volumes nor would this approach maintain Redmond's high quality of life and environmental stewardship goals.

While cars are likely to continue to be a significant way in which people get around Redmond in the year 2050, things may look very different with the advent of autonomous vehicles (AVs). AVs have the potential to shift the entire ownership model of cars, moving away from personal ownership to an on-demand system not unlike Uber or Lyft today (see Section 12 – Emerging Trends and Technology for more discussion on AVs). Regardless of the future of cars, a critical fact is that over 50% of trips taken within Redmond are less than three miles, which suggests that other modes such as walking, biking and rolling can replace a significant number of vehicle trips. It will require the City to prioritize investments in safe and comfortable infrastructure, as well as creating incentives, new policies, and awareness-building programs to encourage this shift to non-auto travel modes.

Key Partnerships

While the City of Redmond operates and maintains over three hundred and fifty lane miles of paved streets, it also partners with other agencies such as King County and the Washington State Department of Transportation to ensure that regional roads within and adjacent to Redmond are allowing community members to get to where they need to go safely and efficiently. Redmond also collaborates closely with neighboring cities to ensure seamless intercity travel. Redmond has many miles of multi-use trails many of which are operated by other agencies such as King County. Transit service in Redmond is provided by King County Metro, Sound Transit, and a variety of private operators, which requires constant partnership to ensure Redmond community members' needs are being met and Redmond's street system facilitates reliable and fast service. While the City is not able to directly control some aspects of its transportation system these partnerships allow it to coordinate and ensure the needs of the Redmond community are being met.

Related Plans and Guiding Policy

Transportation Facilities Plan (TFP)
The Transportation Facilities Plan (TFP) is the long-range financially constrained list of the transportation capital needs identified to provide the transportation capacity needed to support projected population and employment growth, also known as concurrency. It represents the supply for Redmond's Transportation Impact Fee program. The TFP has been updated with the TMP update and prioritized to align with Redmond 2050 guiding principles and overarching transportation strategies. This 25-year Transportation Facilities Plan is financially constrained by the revenue forecast for the same period consistent with the Washington State Growth Management Act.

Transportation Improvement Program (TIP)
The six-year Transportation Improvement Program (TIP) is a short-range planning document that is updated annually based on needs identified by the community and analyses conducted by the City. It represents Redmond's current complete list of needed projects and programs for the next six years. Many projects in the TFP will also appear in the TIP. Typically, projects listed in the first three years of the document are shown as having secured funding while projects in the last three years can be partially or completely unfunded. Many opportunities for grant funding require that projects are included on a TIP to be eligible to receive funding.

Safer Streets Action Plan
The Safer Streets Action Plan, adopted by the City of Redmond in April 2025, is a roadmap to achieving zero traffic-related fatalities and serious injuries in the city. Creating a safety culture is critical to achieving the City's goals of zero fatal and serious injury crashes and will require partnership and active participation of City staff, community-based organizations, employers, and everyone using Redmond's transportation system. The City has committed to a 50 percent reduction in fatal and serious injury crashes by the end of the year 2030 and eliminating all fatal and serious injury crashes by 2035.

PSRC Vision 2050 and Regional Transportation Plan
Puget Sound Regional Council (PSRC)'s Vision 2050 is the four-county plan that outlines regional growth trends. Redmond is expected to support the region's vision with the Redmond 2050 Comprehensive Plan, and by extension, the Transportation Master Plan. The Redmond Transportation Master Plan aligns with the PSRC Vision 2050 by ensuring that its transportation-related provisions conform to the Growth Management Act and are consistent with multicounty planning policies. This alignment is crucial for effective regional planning and development, as it helps to address the regional growth strategy and ensure that local transportation plans meet the broader goals set forth in Vision 2050. The PSRC's Regional Transportation Plan (RTP) is designed to implement these growth strategies, and the transportation plan in Redmond is expected to support this alignment by incorporating necessary adjustments and improvements to enhance transportation efficiency and accessibility within the region.

King County Multicounty Planning Policies
The Redmond Transportation Master Plan aligns with King County's Multicounty Planning Policies by focusing on enhancing the city's transportation infrastructure to meet the evolving needs of its residents. The plan emphasizes the importance of a sustainable transportation system, addressing climate change, and ensuring equity in transportation access. It also aligns with King County's broader goals for public transportation, including the King County Metro Transit Development Plan 2024-2029, which outlines the strategic direction for public transportation services in King County. The plan aims to create a transportation system that is safe, accessible, and environmentally friendly, contributing to the overall well-being of the region.

CREATING COMPLETE STREETS IN REDMOND

The Complete Streets concept provides a multimodal approach to roadway design and safety that considers all users of the transportation system. A street can be considered "complete" when it provides the necessary space and infrastructure for all users to travel safely and comfortably along the same street. Complete Streets may include dedicated bicycle lanes, transit lanes, and sidewalks to accommodate multimodal users alongside vehicles. Complete Streets emphasize comfort and safety with the addition of lighting, landscaping, trees and foliage, or street furniture. Redmond has embraced a layered Complete Streets network, recognizing that every street may not be able to provide the desired level of service for all travel modes. More details on this approach can be found in the Street System Plan. Additionally, Redmond's Complete Streets concept focuses on vehicle speed reduction as a means to allow for safe travel for all modes. By lowering vehicle speeds Redmond's citywide street system promotes safety and comfort for all users.

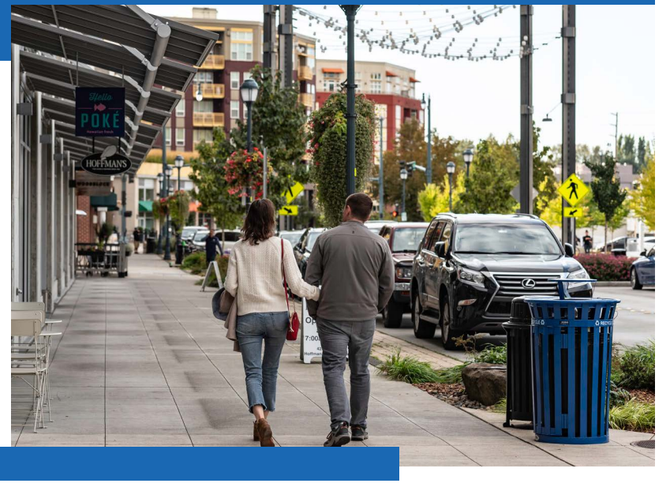
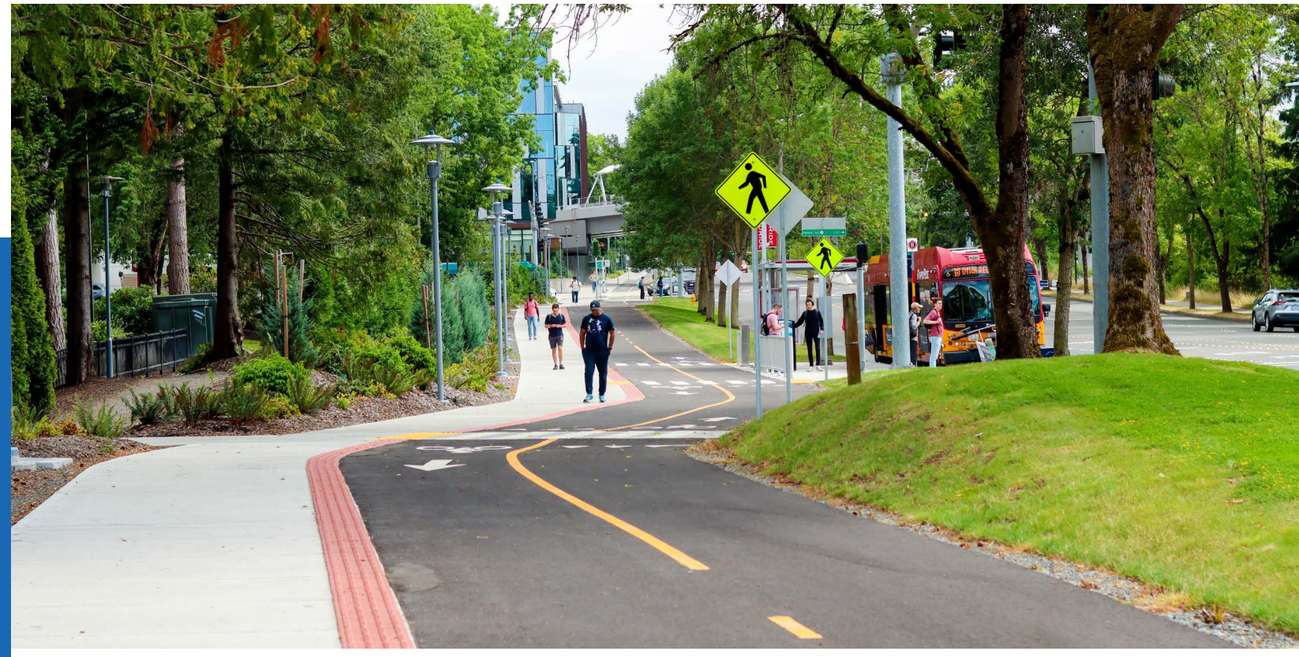


FIGURE 5 | REDMOND'S CLEVELAND STREET (LEFT) AND ADJACENT DOWNTOWN PARK (RIGHT) ARE THE RESULT OF A COMPLETE STREETS APPROACH THAT SUPPORTS COMMUNITY CONNECTION.

FIGURE 6 | THE 156TH AVENUE NE CYCLE TRACK FURTHERS COMPLETE STREET PRINCIPLES ON 156TH AVENUE NE IN OVERLAKE



The modal network recommendations in this Transportation Master Plan are grounded in the layered Complete Streets concept, meaning that individually a given street may not provide the highest level of service for every travel mode, but together, the entire transportation network meets the needs of all travel modes in terms of access, mobility, and safety.

Transportation Equity

Equity refers to how individuals are given tools specific to their needs and socioeconomic status to move towards similar outcomes. An equitable transportation system is one that ensures equal access to safe, reliable, and affordable transportation options and aims to eliminate barriers that prevent people from accessing essential services and opportunities. Beyond the TMP's emphasis on developing a multimodal system that provides a variety of safe and reliable transportation options for people of all ages and abilities, equity measures have been considered in prioritization of the Transportation Facilities Plan and will be applied during annual updates to the Transportation Improvement Plan starting in 2026. Equity measures include socioeconomic factors such as age, income, car ownership, disability, cost burden, and other measures such as job and housing density.

How to Read This Document

The sections of the Transportation Master Plan focus on different transportation modes or elements of the transportation system. Each section includes strategies and actions for furthering the Redmond 2050 Vision for Redmond's transportation network.

1. **Executive Summary** – Overview of the Transportation Master Plan and key themes and strategies.

2. **Introduction** – Provides context for Redmond's existing and future transportation system.

3. **Street System Plan** – Redmond's layered Complete Streets approach and optimizing the roadway network for multimodal safety and comfort.

4. **Pedestrian Plan** – Focuses on accessibility and connectivity on Redmond's pedestrian network of sidewalks, shared use paths, crossings, and neighborhood connections.

5. **Bicycle Plan** – Outlines how Redmond will connect the bicycle/micromobility network to transit and other key destinations with high-comfort bikeways for all ages and abilities.

6. **Transit System Plan** – Establishes Redmond's future transit vision and goals for citywide and regional transit connectivity.

7. **Freight and Goods Delivery Plan** – Provides strategies to ensure freight and delivery access is available, efficient, and reduces greenhouse gas emissions.

8. **System Maintenance and Preservation** – Provides context and strategies for the maintenance of Redmond's transportation system and facilities.

9. **Curbspace and Parking Management** – Explores how Redmond will manage and optimize curbspace, on-street parking, and off-street parking for equitable access of all transportation modes.

10. **Transportation Demand Management** – Focuses on strategies to shift travel modes in Redmond away from drive-alone vehicles and toward more sustainable travel modes such as transit, walking, and biking.

11. **E-Mobility Strategy** – Outlines Redmond's strategy for implementing electric mobility (e-mobility), including electric vehicles, charging infrastructure, and micromobility devices.

12. **Emerging Trends and Technology** – Explores how Redmond can implement new technologies to create a more efficient and sustainable transportation system.

13. **Monitoring Progress** – Outlines how Redmond will monitor progress on the various goals and initiatives established in the Transportation Master Plan.

14. **Transportation Facilities Plan (TFP)** – A Long-term financially constrained list of projects to ensure multimodal transportation capacity is developed concurrently with development.

15. **Appendices**
    A. Community Involvement
    B. Multimodal Level of Service
    C. Estimated Multimodal Level of Service Impacts to State-Owned Facilities
    D. Travel Demand Forecast
    E. Impacts to Neighboring Jurisdictions
    F. Design Guidance

STREET SYSTEM PLAN

Transportation Master Plan

STREET SYSTEM PLAN

INTRODUCTION

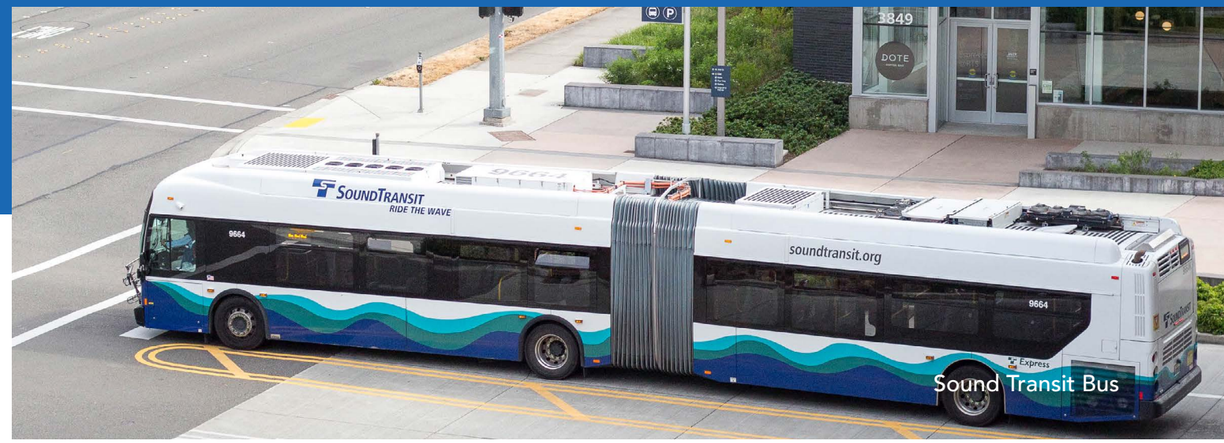
Streets are the backbone of the multimodal transportation system in Redmond. People use Redmond's streets to move around and address their daily needs. Movement comes in many ways—walking, cycling and scooters, mobility devices, public transit, and driving—and streets function to serve all these ways, 24 hours a day, seven days a week. Redmond's street system plan supports Redmond's preferred land use pattern as presented in Redmond 2050 by providing multimodal access, and conversely, Redmond's land use plan supports the transportation system by creating more compact development that makes walking, biking, micromobility, and taking transit an easy and cost-effective means of travel.

In Redmond's Urban Centers, the streets not only provide mobility, but also comprise the public realm. The quality of the public realm—streets, sidewalks, plazas, and other publicly accessible spaces—influences Redmond's livability, economy, safety, and public health.

The street network also provides an important stormwater management and environmental services function, and through the integration of green stormwater infrastructure and healthy street trees, can help mitigate pollution and the urban heat island effect.

ADVANCING REDMOND 2050 GUIDING PRINCIPLES

This section contains strategies for maximizing the City's return on investment in its transportation system. This means moving the most people and goods possible within the existing street system while also minimizing environmental harms and other negative community impacts. Redmond 2050 establishes three Guiding Principles: Equity and Inclusion, Sustainability, and Resilience. The Street System Section identifies strategies that support these principles and align with Redmond 2050 transportation policies.



Sound Transit Bus

RESILIENCE

- Maintain the street network in a state of good repair to support the mobility and access needs of all modes. Use advanced technology to improve the operations and efficiency of the multimodal transportation system. (TR-5, TR-9 and TR-26)
- Strategies supporting the Guiding Principle of Resilience include: Strategy 5, Strategy 6, Strategy 7

SUSTAINABILITY

- Shifting vehicle trips to transit, walking, and biking will help Redmond achieve its greenhouse gas reduction targets and provide other environmental benefits. (TR-36, TR-38, TR-39)
- Strategies supporting the Guiding Principle of Sustainability include: Strategy 1, Strategy 2, Strategy 4, and Strategy 5

EQUITY & INCLUSION

- Implement modal corridors to achieve a more equitable allocation of transportation system resources and ensure safe access for people of all ages and abilities. (TR-10, TR-13, TR-14, and TR-16)
- Strategies supporting the Guiding Principle of Sustainability include: Strategy 3, Strategy 8, and Strategy 9

AN INTEGRATED "COMPLETE STREETS" APPROACH

Redmond applies an integrated Complete Streets approach to planning, designing, building, operating, and maintaining streets that enable safe access and accommodation of all users, regardless of mode, age, or ability, including motorists, freight, pedestrians, bicyclists, people with disabilities, children, older residents, and transit riders.

Redmond's Complete Streets Policy states: all transportation projects shall provide **appropriate accommodation** for persons of all ages and of all abilities, including bicyclists, pedestrians, transit users, as well as automobiles, freight, and buses, in comprehensive and connected networks defined in the City's Transportation Master Plan; provided, that such accommodation shall take into account and complement the local context and character of the community and land use.

Examples of appropriate accommodation for transportation projects include, but are not limited to:

- Sidewalks for pedestrians.
- Bike lanes for bicyclists or scooters.
- Special bus lanes or signal operations for transit service.
- Comfortable, safe, and accessible public transportation stops.
- Frequent and safe crosswalks.

These features, and others, work together to create a safe and efficient transportation network for all users.

OVERVIEW OF REDMOND'S STREET SYSTEM AND ASSETS

Elements of the street system are classified by the character of service they provide for planning, design, construction, and operational purposes. The system recognizes that most travel involves movement through a network of streets and each piece of the network exists to provide a combination of mobility and land use access. For example, a principal arterial is more focused on providing through movement mobility than it is direct access to adjacent land uses. On the other end of the spectrum, a local access street provides direct access to many individual land uses.

A street's design and operation are based on its functional classification. However, it is also important for streets to respond to the character of adjacent land uses and the activity they generate. In other words, a street with a singular functional classification may vary in its design and operations based on adjacent land uses and the different modes of travel that are expected to use the street. This is often referred to as context-based design.

The following section provides a definition of the street functional classification in Redmond. Attributes associated with each functional class are summarized in Table 1. Figure 1 is a map of Redmond's street functional classification.

Freeway
State Route 520 is part of the State Highway System and connects Redmond with the region. The SR 520 Freeway provides limited access, allowing traffic to move more freely, and is designed and intended to carry heavy volumes of traffic at high speeds, including a relatively large percentage of trucks. Interconnections with other roadway classifications are accomplished through grade-separated interchanges.

Principal Arterial
A principal arterial provides capacity and continuity for travel between different areas of the city and adjacent jurisdictions. Principal arterials provide direct connections to freeways or other principal arterials. Adjacent land uses may include residential and commercial areas, open space, public lands, industrial sites, and institutional sites. While principal arterials provide important connections between Redmond and the broader region, their function is not solely the through movement of motor vehicles. The through movement of motor vehicles on principal arterials must be balanced with the need to safely serve all travel modes and respond to the adjacent land context, which varies.

Minor Arterial
A minor arterial provides for travel between different areas of the city but does not have the capacity and significance of principal arterials. Minor arterials typically connect with other minor arterials, principal arterials, and collector arterials. Adjacent land uses may include residential property, schools, public parks, retail and commercial uses, or public institutions.

Collector Arterial
A collector arterial receives traffic from connector streets and local streets and provides access to principal and minor arterials. Collector arterials 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, terminating only at principal arterials, minor arterials, or other collector arterials. Like minor arterials, adjacent land uses may include residential property, schools, public parks, retail and commercial uses, or public institutions.

Connector Streets
Connector streets are specially designated local streets that provide for direct vehicle, bicycle, and pedestrian connections between adjacent neighborhoods, and between neighborhoods and commercial areas. Connectors typically 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 access streets.

Local Access Streets
Local access streets provide direct connections to and within neighborhoods and typically terminate at connector streets or collector arterials. These streets provide for direct vehicle, bicycle, and pedestrian access to neighborhood commercial and residential land uses. Local streets do not serve regional trips and provide no route continuity beyond the areas they connect.

Shared Streets
Shared streets are slow-speed streets shared by pedestrians, cyclists, and vehicles. 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. Washington Senate Bill 5595 gives local agencies legal authority to create shared streets that feature speed limits as low as 10 mph and allows pedestrians to walk in the middle of the street. Vehicles would be allowed on these streets, but they must yield the right-of-way to pedestrians.

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 or as an alternative to building conventional sidewalk where there may be environmental or cost constraints. 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 components that help create a people-oriented space can include:

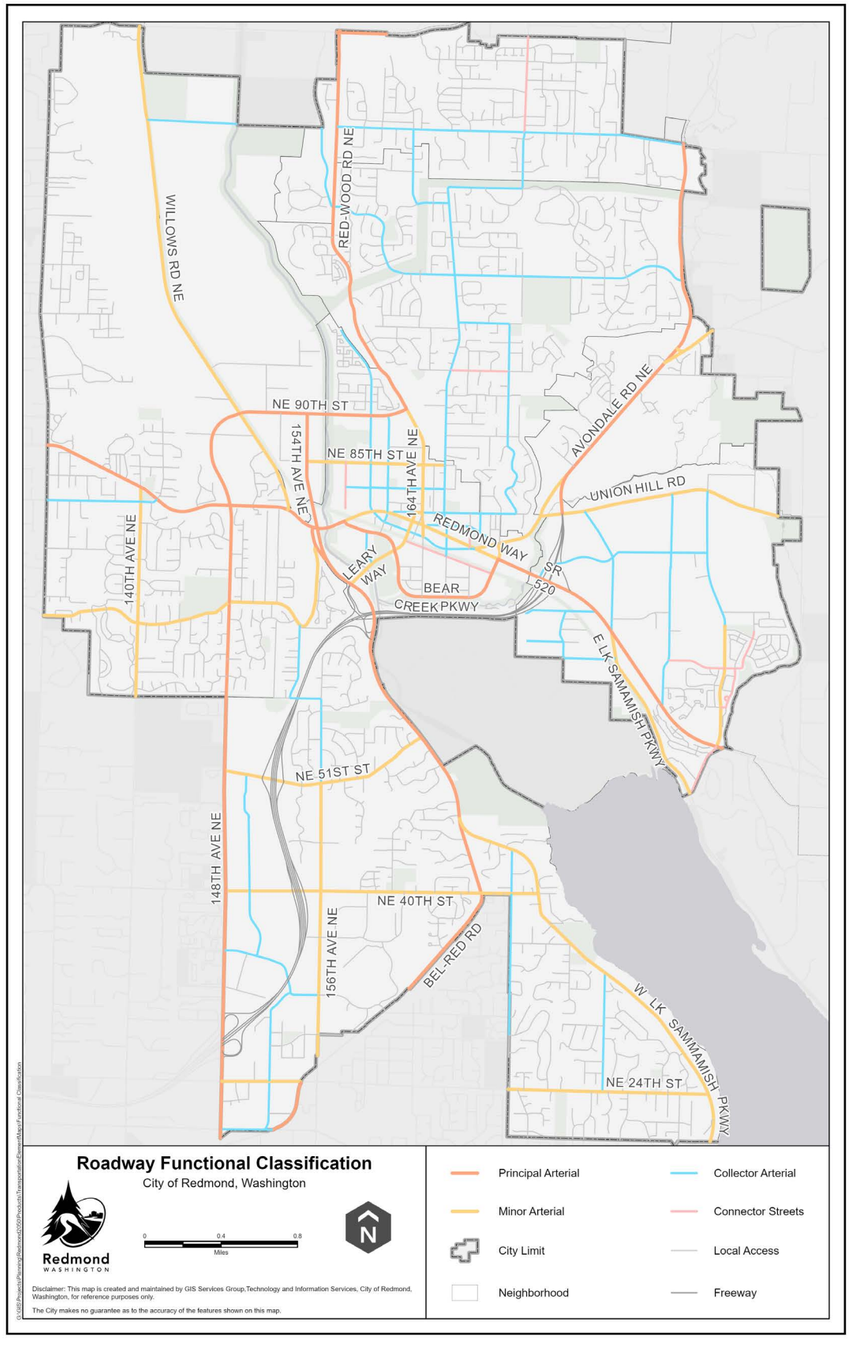
- Special paving and surface treatment to identify these streets as unique people places.
- Flush or reduced curb height and nonexistent curb sidewalk to encourage pedestrians to use the entire street rather than street edges.
- Narrow vehicular lanes to create a safe and comfortable environment for 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 with attention paid to pedestrians who are deaf-blind.
- Pedestrian-scale lighting.

TABLE 1 | SUMMARY OF STREET FUNCTIONAL CLASSIFICATIONS ATTRIBUTES

	Transportation Mode						Typical Trip Type Served		
Functional Classification	Vehicle	Transit	Bicycle	Pedestrian	Traffic Calming/ Speed Mgmt	On-Street Parking	Regional	Citywide/ Local	Neighborhood
Freeway	✓	✓					✓	✓	
Principal Arterial	✓	✓	◐	✓	◐		✓	✓	
Minor Arterial	✓	◐	◐	✓	◐	◐		✓	✓
Collector Street	✓	◐	◐	✓	✓	◐		✓	✓
Connector Street	✓	◐	◐	✓	✓	◐		✓	✓
Local Access Street	✓		◐	✓	✓	✓			✓
Shared Street	✓		◐	✓	✓	◐			✓

KEY: ✓ Prevalent ◐ Common/Possible

FIGURE 1 | REDMOND ROADWAY FUNCTIONAL CLASSIFICATION



Redmond's Transportation Assets

Redmond's transportation assets represent a level of investment that has been made to ensure the safe and efficient movement of goods and people. Some key transportation assets are listed in Table 2 but there are others. Each asset must be managed and maintained to sustain a defined level of service. This level of service is defined by the modal networks and priorities identified in the Transportation Master Plan and tracked at the community-level by the performance measures discussed in the Section 13 – Performance Measures. Redmond's *Transportation System Asset Management Plan* further identifies Redmond's transportation assets and how they should be managed and maintained to achieve the desired level service (or priority) and performance defined in the Transportation Master Plan.

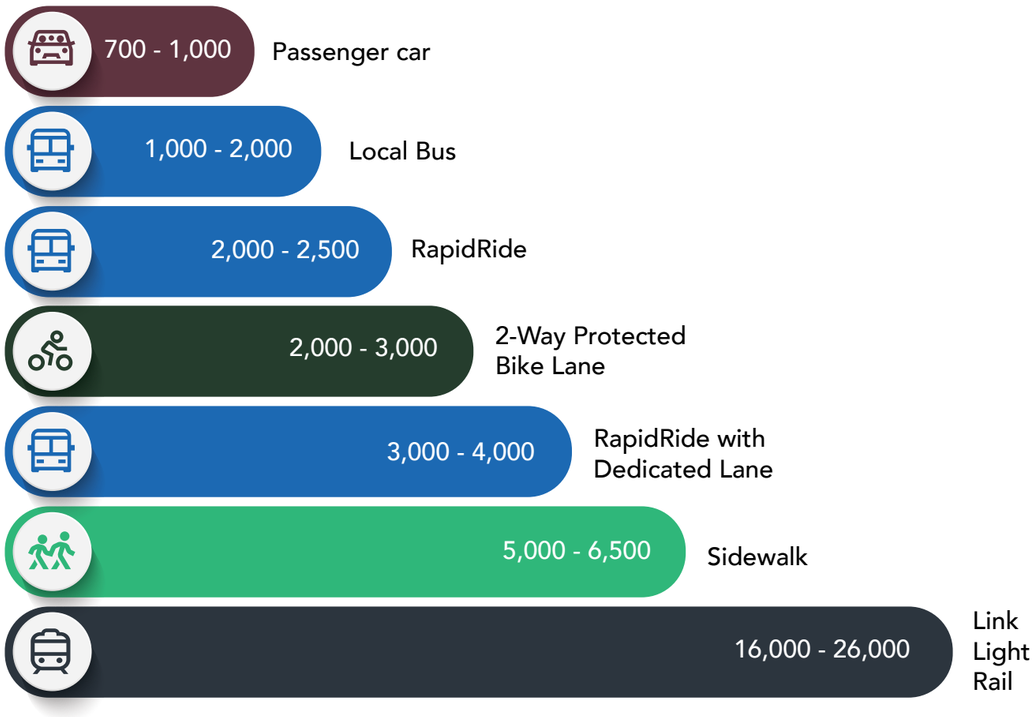
TABLE 2 | REDMOND TRANSPORTATION ASSETS – EXISTING CONDITIONS

Transportation Asset	Quantity (Number/Mileage)
Street Centerline	152 miles
Sidewalk	240 miles
Bike Lanes	61.7 miles
Separated Bike Lanes	2.7 miles
Bridges	20
Traffic Signals	112
City-owned Streetlights	2,100
Street Signs	9,301

More details on assets that comprise the pedestrian, bicycle, transit, and freight modal networks is provided in those respective sections of the TMP. A more comprehensive list of transportation assets and asset performance targets are in the City of Redmond *Transportation System Asset Management Plan*.

Multimodal Level of Service
Redmond 2050 policies state that streets are to collectively serve all modes of travel including passenger vehicles, trucks, transit, bicycles, and pedestrians, and that people walking, biking, and taking transit should be prioritized. Providing more travel options within Redmond's street (and trail) network aligns with Redmond 2050 Guiding Principles (Equity and Inclusion, Resilience, Sustainability), is more cost effective than adding vehicle capacity (i.e., widen streets, add more lanes), and will contribute to a more livable Redmond. Figure X illustrates that transit, walking, and biking provide more people-moving capacity than passenger cars operating in the same amount of space (10-ft lane width). Investments in Link light rail, King County Metro bus service, and better pedestrian and bicycle infrastructure will provide people living, visiting, and working in Redmond with more options, thereby relieving congestion and its many negative impacts.

FIGURE 2 | PEOPLE-MOVING CAPACITY OF REDMOND TRANSPORTATION MODES (PERSONS PER HOUR PER DIRECTION, 10-FT LANE WIDTH).



Redmond has long been recognized as a leader in multimodal transportation planning. Specifically, Redmond adopted the first plan-based multimodal transportation concurrency level of service (MMLOS) standard in 2008. This MMLOS standard is still in use today and many communities throughout Washington State have emulated Redmond's plan-based multimodal concurrency standard.

Redmond's MMLOS standard for transportation concurrency is rooted in the City's multimodal Transportation Facilities Plan (TFP) (see Section 14). The TFP is prepared in conjunction with the Comprehensive Plan's Land Use Element and considers the growth in population and employment within Redmond and the neighboring jurisdictions. Unlike systems that focus solely on the performance of the vehicle network, Redmond's MMLOS concurrency standard tracks implementation of the multimodal improvements identified in the TFP and requires that new investments are built ahead of or at-pace with growth identified in the Comprehensive Plan. By way of example, Redmond can accommodate 20 percent of planned growth (demand) so long as it has built or committed funding (public or private) to build 20 percent of the transportation improvements (supply) defined in the TFP. The City's target for a supply to demand ration is 1.05 to ensure concurrency. Historically, supply has well-exceeded demand.

System Performance
Redmond's multimodal concurrency is a broad measure of its transportation system performance as it tracks the ability of the system to provide mobility and access to the wide range of new and existing land uses throughout the city. This is tracked using the TFP as discussed above. There are several other measures that are used to track the performance of Redmond's transportation system such as network completion and mode share, which are discussed in Section 13 – Monitoring Performance.

Safety
Everyone traveling in Redmond should be able to get to their destination safely regardless of where they live or how they chose to travel. As shown in Figure 3 , the number of vehicle crashes, including serious and fatal crashes, involving bicyclists and pedestrians have generally declined over the past 10 years. Figure 4 also shows a similar downward trend for vehicle-only crashes.

As Redmond develops and creates a transportation system that invites more people to walk, bike, roll, and take transit it must also take proactive steps to ensure that conflicts between all road users are minimized and the city meets its goal for eliminating all serious injury and fatal crashes by 2035. Redmond's *Safer Streets Action Plan* is framed around the Safe System approach and identifies specific actions centered on safe street design, safe speeds, safe vehicles, safe road users, land use, and post-crash care. Strategies and actions in the Transportation Master Plan are also aligned with the Safe System approach.

Overlake Village Pedestrian and Bicycle Bridge

FIGURE 3 | BICYCLE AND PEDESTRIAN SERIOUS AND FATAL CRASHES (2015-2024)

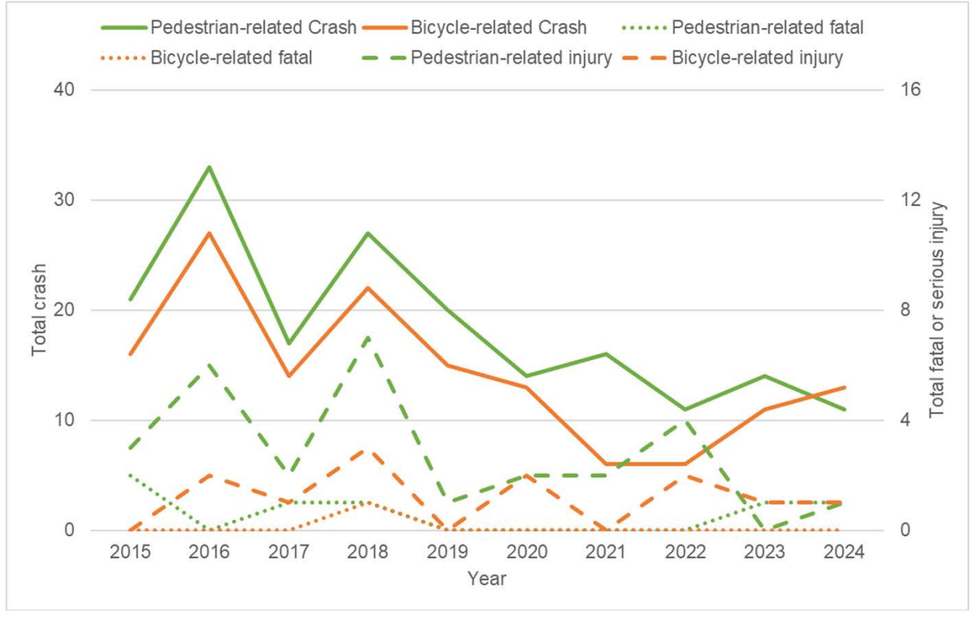
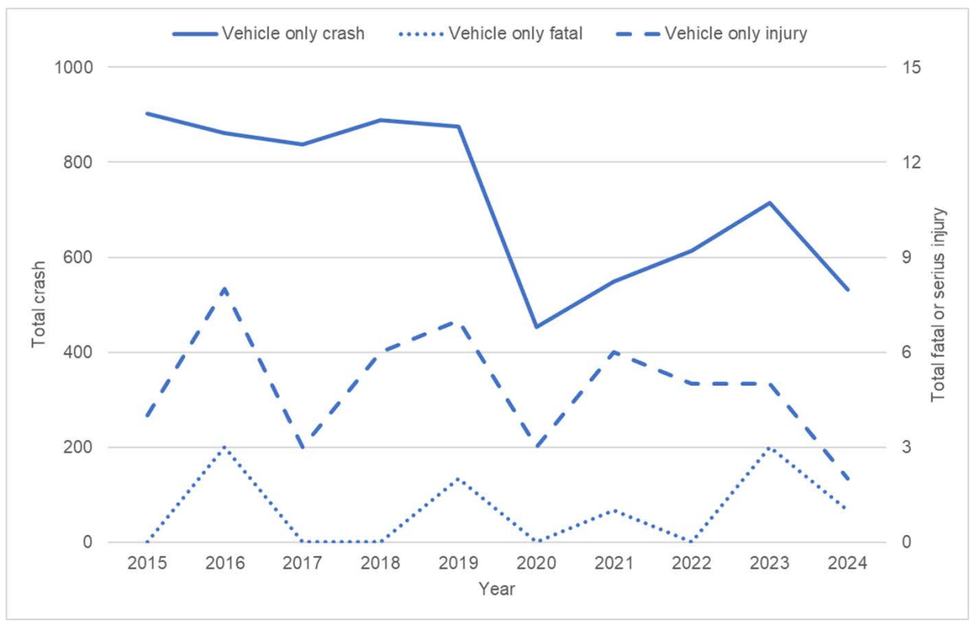


FIGURE 4 | VEHICLE ONLY CRASHES (2015-2024)



STRATEGIES AND ACTIONS

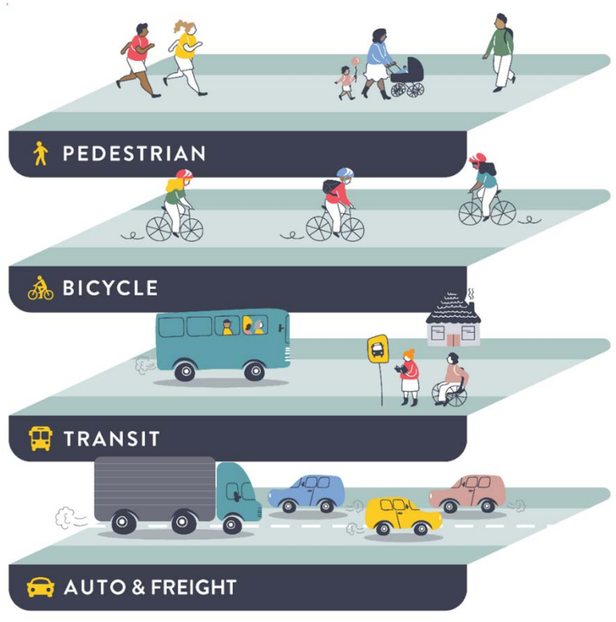
Strategy 1: Implement an integrated multimodal transportation system that safely and efficiently serves all travel modes.

Redmond's streets serve all modes of travel including passenger vehicles, trucks, buses, bicyclists, and pedestrians. While cars will continue to serve as a prevalent mode of travel for many people living in and visiting Redmond, reorienting Redmond's street system to better serve walking, biking, and public and private transit will allow the city to grow without experiencing extreme congestion. It also will help Redmond meet its goals around reducing vehicle miles traveled and greenhouse gas emissions, and creating a more vibrant, livable, and connected community.

An integrated multimodal transportation system ensures that the mobility and access needs of all people and modes are met while also recognizing that every mode of travel or function can't be prioritized on every street due to both spatial and operational constraints. Therefore, a layered network approach (Figure 5) is necessary to appropriately respond to land use contexts and help balance the diverse and competing needs of pedestrians, bicyclists, drivers, transit, and freight within constrained rights-of-way. Redmond's multimodal transportation system is based on this layered network approach.

FIGURE 5 | LAYERED NETWORK APPROACH

Image Credit: Fehr and Peers



Modal Integration
A modal integration analysis was conducted on the modal networks that comprise Redmond's transportation system – bicycle, pedestrian, freight, transit, auto – to identify where right-of-way, operational or other constraints create conflicts in terms of accommodating priority modes. This analysis revealed that some corridors are already serving priority corridors well while in other cases infrastructure or operational improvements are needed to make the corridor (or segments within corridors) function better for the priority mode(s). Figure 5 shows the planned integrated modal corridors network and Figure 6 shows segments where improvements are needed to achieve modal network integration. Though not shown as a modal corridor type, the pedestrian network, and the infrastructure that supports safe and convenient travel by foot or mobility assistance device, are a priority throughout the Redmond transportation system. Pedestrian Priority Zones correspond with Redmond's Urban Centers where pedestrian infrastructure needs to support the highest levels of pedestrian activity. See Section 4 for more information on the pedestrian network.

Table 3 lists the modal corridors and describes the improvements that are needed to achieve the modal network objectives. Table 3 is intended to show where improvements are needed to achieve a layered Complete Streets network and which mode(s) would benefit from the planned improvements. The Transportation Facilities Plan (TFP) and Transportation Improvement Plan (TIP) will prioritize improvement projects so Redmond 2050 goals around sustainability, equity and inclusion, and resiliency are implemented. These Plans directly inform the Capital Improvement Program.

Strategy 1 supports the following Redmond 2050 policies:

- **TR-5:** Design and build a transportation system that can be efficiently operated and maintained.
- **TR-13:** Develop a transportation system that minimizes negative health and environmental impacts to all, especially those who have been disproportionately affected by past transportation decisions.
- **TR-23:** Adopt and implement a street plan in the Transportation Master Plan that results in multimodal access and connectivity in Redmond and the region. Require that all streets be complete streets, built to accommodate travel modes as defined in the Transportation Master Plan, and be no wider than necessary.
- **TR-24:** Maintain a street classification system in the street plan that is designed to move people by a variety of modes and support Redmond's preferred land use pattern. Classify streets according to function so that system capacity may be properly allocated by mode and planned street improvements will be consistent with those functions.

Recommended Actions

Action 1A	Update the Transportation Facilities Plan (TFP) and the Transportation Improvement Plan to reflect identified improvements within modal corridors to ensure that corridors are implemented through the Capital Investment Program or by new development. (Planning)
Action 1B	Prioritize the TFP and Transportation Improvement Plan to reflect Redmond 2050 goals around sustainability, equity and inclusion, and resiliency. (Planning)
Action 1C	Conduct further study and analysis on modal corridors as needed to develop preliminary designs and cost estimates to advance Capital Improvement Program integration and securing grants and other external funding as appropriate. (Planning, Public Works)

FIGURE 6 | PLANNED INTEGRATED MODAL CORRIDORS NETWORK

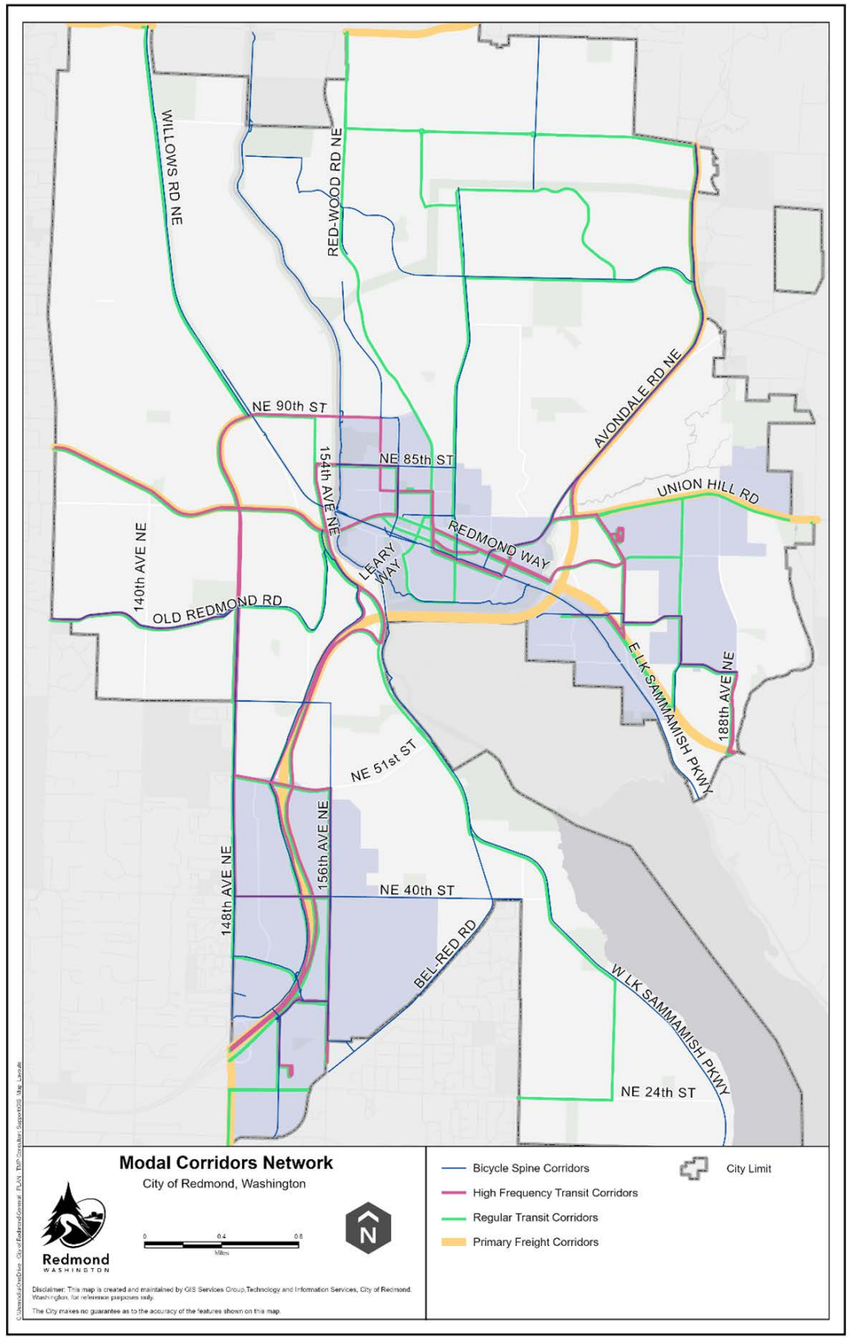


FIGURE 7 | MODAL CORRIDORS PROJECT IDENTIFICATION MAP

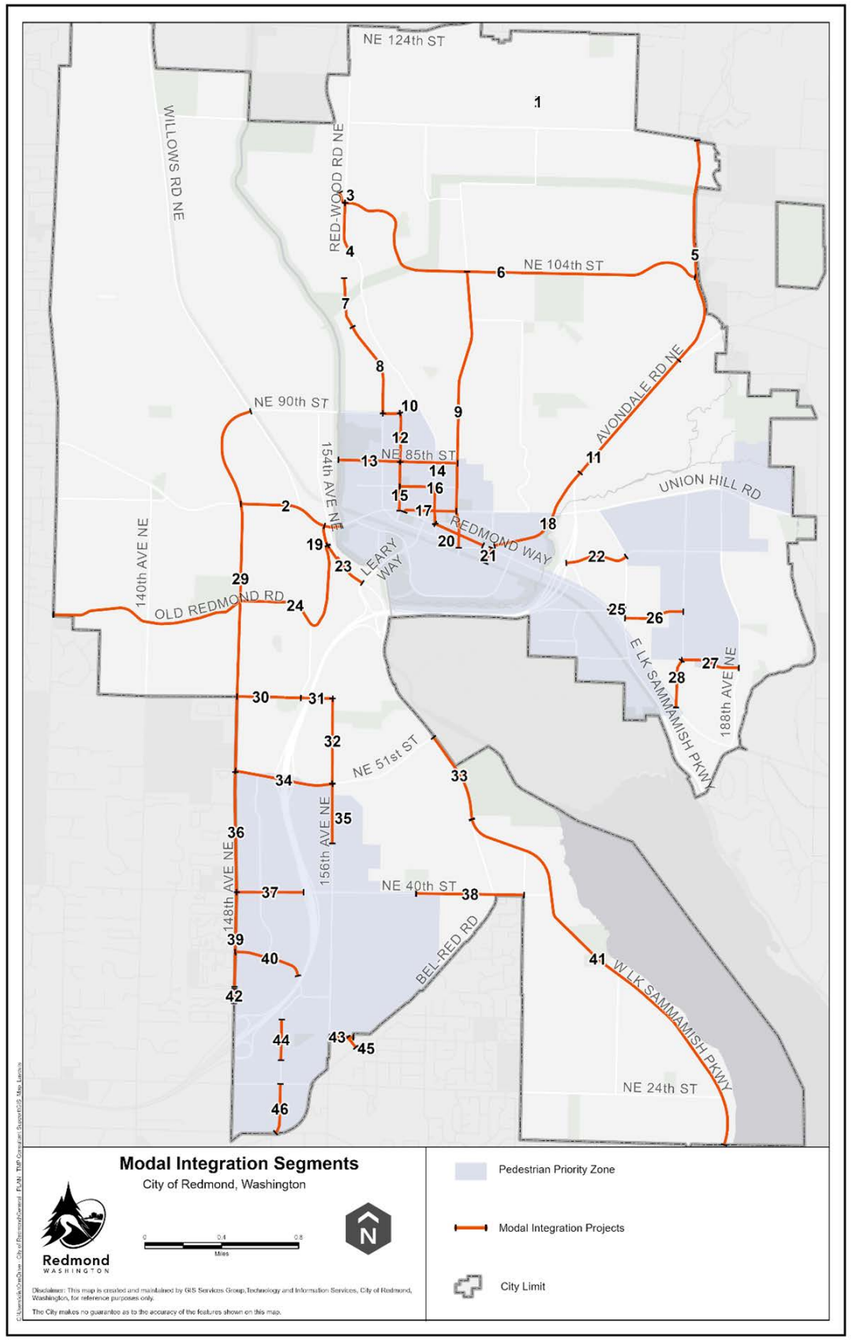


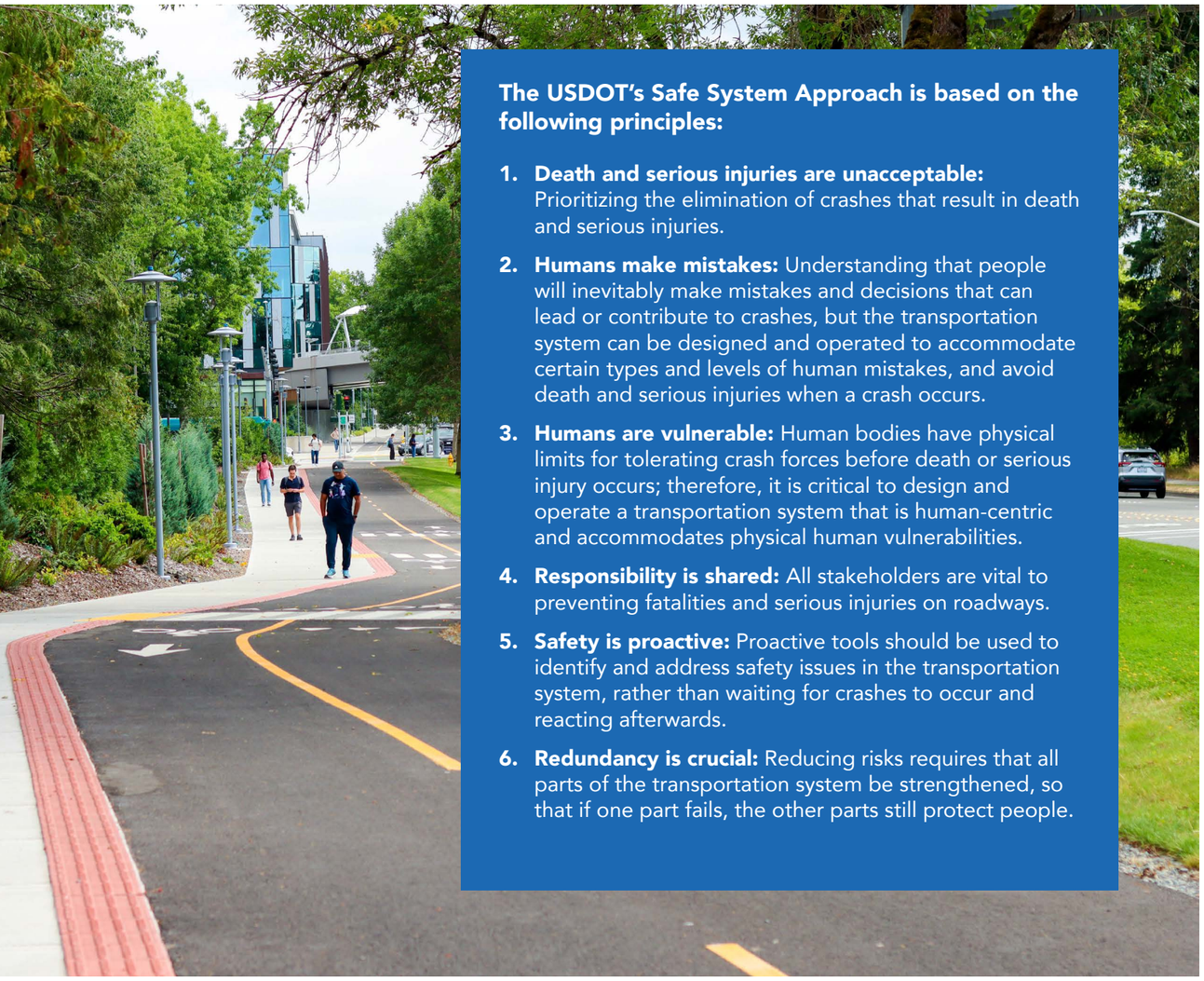
TABLE 3 | MODAL CORRIDORS PLANNED IMPROVEMENTS

Segment ID	Corridor	Functional Classification	Planned Future Bikeway (Spine Network)	High Frequency Transit Corridor	Primary Freight Route Corridor	Priority Low Stress Crossing	TFP Project	Planned Improvements
1	172nd Ave NE from NE 117th St to 18000 block	Connector Street						Construct a shared use pathway.
2	Redmond Way from 148th Ave NE to Sammamish River Trail	Principal Arterial	X	X	X			Evaluate shared use path.
3	Redmond-Woodinville Rd NE from NE 106th St to NE 109th St	Principal Arterial		X				Widen road to provide continuous sidewalk, separated bike lanes, and transit priority at intersections. Evaluate adding turn lane at NE 109th St.
4	Avondale Rd NE from NE Novelty Hill Rd to NE 116th St	Principal Arterial		X	X	X	X	Further study required to determine feasibility of a shared use path or other separated bikeway. The project should ensure that any changes to the cross-section consider transit treatments to improve speed and reliability.
5	NE 109th St/160th Ave NE/NE 104th St from Red-Wood Rd NE to Avondale Rd NE	Collector Arterial	X					Remove the existing on-street parking to construct either a two-way separated bike lane on the north side of the street, or one-way separated bike lanes in each direction.
6	160th Ave NE from Road End to NE 102nd Way	Collector Arterial	X					Construct a shared-use pathway. This project will provide an off-road alternative to Redmond-Woodinville Rd NE, and connect multiple housing developments. Water main project opportunity.
7	160th Ave NE from NE 90th St to Road End	Collector Arterial	X					Construct parking-separated bike lanes.
8	166th Ave NE from Cleveland St to NE 104th St	Collector Arterial	X					Construct separated bike lanes in each direction by removing the existing TWLTL, or provide a two-way separated bike lane on one side of the street. Evaluate the safety of uphill versus downhill cyclists to determine appropriate design.
9	NE 90th ST from 160th Ave NE to 161st Ave NE	Principal Arterial	X					Upgrade existing bike lanes to provide vertical separation.
10	Avondale Rd NE from Avondale Way NE to NE Novelty Hill Rd	Principal Arterial	X	X	X	X		Further study required to determine feasibility of a shared use path or other separated bikeway. The project should ensure that any changes to the cross-section consider transit treatments to improve speed and reliability.
11	161st Ave NE from NE 90th St to NE 85th St	Collector Arterial	X					Construct a separated bike lane by removing the existing TWLTL or on-street parking. Consider transit access along the corridor to improve safety between bikes and buses. Waterline replacement opportunity.
12	NE 85th St from 161st Ave NE to Sammamish River Trail	Minor Arterial	X					Near-term, pilot a demonstration project of parking-protected separated bike lanes on one-side of street, removal of parking and separated bike lane on opposite side. During the pilot program, monitor modal conflicts at existing driveways and crossings, and develop safety improvements to be implemented during construction of the long-term project.
13	NE 85th St from 166th Ave NE to 161st Ave NE	Minor Arterial	X					Near-term, pilot a demonstration project of parking-protected separated bike lanes on one-side of street, removal of parking and separated bike lane on opposite side. During the pilot program, monitor modal conflicts at existing driveways and crossings, and develop safety improvements to be implemented during construction of the long-term project.
14	161st Ave NE from NE 85th St to Redmond Way	Collector Arterial	X	X				Construct a separated bike lane by removing the existing TWLTL or on-street parking. Consider transit access along the corridor to improve safety between bikes and buses. Waterline replacement opportunity.
15	NE 83rd St/164th Ave NE from 161st Ave NE to Redmond Way	Minor Arterial		X				Heavy bus movements NBL/NBT and WBR at NE 83rd St/164 Ave NE. After East Link Restructure is implemented, evaluate if any improvements are needed for transit speed and reliability. The driveways on the south side of NE 83rd St may conflict with westbound buses.
16	NE 80th St from Redmond Way to 166th Ave NE	Collector Arterial	X					Construct a separated bike lane by replacing parking, narrowing lanes, and widening the road at spot locations. Waterline replacement opportunity.
17	Avondale Way NE from Redmond Way to Avondale Rd NE	Principal Arterial	X	X		X		Further study required to determine feasibility of a shared use path on north side. Challenges on this segment include vehicle congestion and high-frequency transit routes. The project should ensure that any changes to the cross-section consider transit treatments to improve speed and reliability.
18	W Lake Sammamish Pkwy/ Redmond Way from Sammamish River Trail to Old Redmond Rd	Principal Arterial	X	X	X			Construct a shared-use pathway.
19	Redmond Way from 168th Ave NE to 164th Ave NE	Minor Arterial		X				Consider implementing transit Intelligent Transportation System (ITS) strategies for the section of 164th between Cleveland and Redmond Way, such as extending green time for buses. Consider extending the southbound left turn pocket at 164th Ave NE/Cleveland St to accommodate bus turning movements, or extending this turn pocket and removing the NBL at 164th Ave NE/Redmond Way to eliminate some general-purpose vehicle conflict with buses traveling northbound through. Add second westbound lane and parking on the north side of Redmond Way between 168th Avenue and 166th Avenue. Project would include one travel lane, on-street parking, sidewalk, right-of-way, utilities and streetscape improvements. Waterline replacement opportunity.
20	Amli Development Trail from NE 76th St to Redmond Way	N/A	X				X	Construct a shared use pathway as a part of development.
21	NE 76th St from SR 520 to 180th Ave NE	Collector Arterial		X			X	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.
22	W Lake Sammamish Pkwy from Old Redmond Rd to 520 Bike Trail	Principal Arterial	X	X	X			Construct a shared-use pathway.
23	Old Redmond Rd from W Lake Sammamish Pkwy NE to 132nd Ave NE	Minor Arterial	X	X		X		Construct separated bike lanes and evaluate transit access along the corridor to minimize conflicts with buses. Waterline replacement opportunity.
24	NE 70th St to 180th Ave NE Connector from Redmond Way to 180th Ave NE	Connector Street	X	X			X	Construct a shared-use pathway as a part of new arterial street construction. Construct a new transit-only street connection on NE 70th Street between 180th Avenue NE and Redmond Way.
25	NE 68th St from 180th Ave NE to 185th Ave NE	Connector Street	X	X				Construct a separated bike lane by replacing the existing on-street parking, and consider future connection through development to the east to connect with 188th Ave NE.

Segment ID	Corridor	Functional Classification	Planned Future Bikeway (Spine Network)	High Frequency Transit Corridor	Primary Freight Route Corridor	Priority Low Stress Crossing	TFP Project	Planned Improvements
26	NE 65th St from 185th Ave NE to 188th Ave NE	Connector Street	X	X				Construct a separated bike lane by replacing the existing on-street parking.
27	185th Ave NE from NE 65th St to Redmond Way	Collector Arterial	X	X		X		Construct a separated bike lane by replacing narrowing vehicle travel lanes. Some segments may require re-purposing existing travel lanes. Consider transit access along the corridor to improve safety between bikes and buses. Waterline replacement opportunity.
28	148th Ave NE from Old Redmond Rd to NE 51st St Extend to Willows Rd	Principal Arterial	X					Construct a shared use pathway that extends from NE 51st St to Bridle Crest Trail, then to Old Redmond Rd. Extend facility to Willows Rd. Regional trail, minimum 12' wide with 2' graded area. Consider bus queue jumps along 148th Ave where appropriate for bus volumes. Waterline replacement opportunity.
29	NE 60th St from 154th Ave NE to 148th Ave NE	Collector Arterial	X					Construct a shared-use pathway. Waterline replacement opportunity
30	NE 60th St from 154th AVE NE to 156th AVE NE	Collector Arterial	X					Construct a separated bike lane.
31	156th Ave NE from NE 51st St to NE 60th St	Minor Arterial	X					Construct a separated bike lane by reconfiguring the cross section to include a southbound parking-protected bike lane, two travel lanes, and a buffered northbound bike lane.
32	W Lake Sammamish Pkwy from Bel-Red Rd to NE 51st St	Principal Arterial	X					Construct a shared-use pathway. Implement "quick-build" two-way path on east side of corridor. Construct a roundabout at West Lake Sammamish Parkway and Bel-Red Road. Stormwater replacement opportunity.
33	NE 51st St from 520 Trail to 520 Trail	Minor Arterial		X		X	X	Grade separate the 520 Trail at NE 51st Street.
34	156th Ave NE from 4300 Block to NE 51st St	Minor Arterial	X	X			X	Extend the current shared use pathway from its terminus on the 4300 block of 156th Ave NE to NE 51st St. Evaluate if the B Line is getting stuck in congestion trying to merge from the NB curb lane to the NBL turning lanes at NE 40th St/156th Ave NE to identify potential speed and reliability improvements.
35	148th Ave NE from NE 51st St to NE 40th St	Principal Arterial	X			X		Construct a shared use pathway by acquiring ROW to build an off-street trail on the east side of the street or expanding the existing sidewalk. Regional trail, minimum 12' wide with 2' graded area. Consider bus queue jumps along 148th Ave where appropriate for bus volumes. Waterline and stormwater replacement opportunity.
36	NE 40th St from 148th Ave NE to SR 520	Minor Arterial	X				X	Construct a shared-use pathway. Regional trail minimum 12' wide with 2' graded area.
37	NE 40th St from 163rd Ave NE to 172nd Ave	Minor Arterial	X				X	Construct a shared-use pathway. Shared path on the south side of 40th Street with segments of cycle track where appropriate. Waterline replacement opportunity.
38	148th Ave NE from NE 40th St to NE 31st St	Principal Arterial	X					Construct a shared use pathway by acquiring ROW to build an off-street trail on the east side of the street or expanding the existing sidewalk. Regional trail minimum 12' wide with 2' graded area. Waterline replacement opportunity.
39	NE 36th St from 148th Ave NE to SR 520	Collector Arterial	X					Construct separated bike lanes.
40	W Lake Sammamish Pkwy from Southern City Limit to Bel-Red Rd	Minor Arterial	X					Construct a separated bikeway using combination of bike lane and shared-use pathway. Waterline replacement opportunity.
41	148th Ave NE from NE 31st St to NE 31st Way	Principal Arterial	X			X		Construct a shared use pathway.
42	NE 28th Ave NE from 156th Ave NE to Shared-Use Path between Bel-Red Road and NE 28th St	Collector Arterial	X					Remove TWCTL install 2-way separated bike lane on south side.
43	152nd Ave NE from NE Hopper Way to Da Vinci Ave NE	Collector Arterial	X	X			X	Construct a separated bike lane. Consider transit access along the corridor to improve safety between bikes and buses. Implement 152nd Avenue NE main street from 2600 Crossing to Plaza Street / DaVinci to create a lively and active signature street in the Overlake Village consistent with the Overlake Village Street Design Guidelines. Regional trail minimum 12' wide with 2' graded area.
44	SUP between Bel-Red Road and NE 28th St from Bel-Red Rd to NE 28th St	N/A	X					Construct a shared-use pathway by re-purposing public ROW right on the COB/COR border. Or consider widening the existing, narrow, soft surface trail to the west of the Capgeni North America building to provide a connection between the two adjacent bikeways.
45	152nd Ave NE from NE 20th St to NE 24th St	Collector Arterial	X				X	Construct a separated bike lane by removing the landscaped buffer or on-street parking. Consider transit access along the corridor to improve safety between bikes and buses. Implement a multi-modal pedestrian corridor concept on 152nd Avenue NE from NE 20th Street to NE 24th Street to create a lively and active signature street in the Overlake Village consistent with the Overlake Village Street Design Guidelines. Regional trail minimum 12' wide with 2' graded area.

Strategy 2: Apply a Safe Systems Approach to the transportation system

The City of Redmond is committed to and invested in the improvement of transportation safety on its streets, sidewalks, trails, and other transportation facilities. Redmond's 2024 Safer Streets Action Plan was developed using the Safe System Approach to identify policies, programs, and projects that will improve safety on Redmond's transportation network. Applying the guiding principles of the Safe System Approach, the City's goal is to eliminate fatal and serious injury crashes. With the adoption of the Safer Streets Action Plan, Redmond is committing to a 50 percent reduction in fatal and serious injury crashes by the end of the year 2030 and is committed to eliminating all fatal and serious injury crashes by the end of the year 2035.



The USDOT's Safe System Approach is based on the following principles:

1. **Death and serious injuries are unacceptable:** Prioritizing the elimination of crashes that result in death and serious injuries.
2. **Humans make mistakes:** Understanding that people will inevitably make mistakes and decisions that can lead or contribute to crashes, but the transportation system can be designed and operated to accommodate certain types and levels of human mistakes, and avoid death and serious injuries when a crash occurs.
3. **Humans are vulnerable:** Human bodies have physical limits for tolerating crash forces before death or serious injury occurs; therefore, it is critical to design and operate a transportation system that is human-centric and accommodates physical human vulnerabilities.
4. **Responsibility is shared:** All stakeholders are vital to preventing fatalities and serious injuries on roadways.
5. **Safety is proactive:** Proactive tools should be used to identify and address safety issues in the transportation system, rather than waiting for crashes to occur and reacting afterwards.
6. **Redundancy is crucial:** Reducing risks requires that all parts of the transportation system be strengthened, so that if one part fails, the other parts still protect people.

Strategy 2 supports the following Redmond 2050 policies:

- **TR-2:** Develop a Vision Zero Action Plan that incorporates a whole-City and whole-community approach to achieving zero deaths and serious injuries.
- **TR-16**: Prioritize the comfort, safety, and convenience of people using pedestrian and bicycle facilities over other users of the transportation system. Establish standards for bicycle and pedestrian facilities to attract users of all ages and abilities. Prioritize improvements that address safety concerns, connect to centers or transit, create safe routes to school, and improve independent mobility for those who rely disproportionately on the pedestrian and bicycle network.

Recommended Actions

Action 2A	Design roadway environments using proven safety countermeasures to mitigate human mistakes and account for injury tolerances, to encourage safer behaviors, reduce vehicle speeds, and to facilitate safe travel by the most vulnerable users. (Public Works)
Action 2B	Promote safer speeds in all roadway environments through a combination of thoughtful, equitable, context-appropriate roadway design, targeted education, outreach campaigns, and enforcement (See Strategy 4) (Public Works, Police)
Action 2C	Wherever possible, separate travel modes moving at different speeds (i.e. pedestrians, bicyclists, and vehicles) to minimize conflicts. These separations can occur in space (i.e. sidewalks, separated bike lanes, or dedicated vehicle turn lanes) or in time (i.e. protected pedestrian or bicycle phases at intersections). (Public Works)
Action 2D	Increase the visibility of road users through infrastructure changes such as high-visibility pedestrian crossings, leading pedestrian intervals, and street lighting. (Public Works)
Action 2E	Increase the attentiveness of road users through infrastructure changes such as rumble strips, roundabouts (see Strategy 5), automated enforcement, and warning devices such as Rectangular Rapid Flashing Beacons (RRFBs). (Public Works)

Strategy 3: Balance the design and implementation of Complete Streets with emergency response benchmarks.

Redmond's transportation planners and engineers are focused on saving lives and reducing injuries by creating a safe transportation system that minimizes conflicts between different street users and the kinetic forces of vehicles to reduce harm when crashes do occur. Redmond's first responders are focused on saving lives by quickly responding to medical calls, fires, vehicle crashes and other emergencies. The risks that a transportation system can pose to its users, particularly its most vulnerable users such as people walking and biking, must be weighed along with other community risks that may require an emergency response.

In Redmond there is strong public support for "Complete Streets" that allow people to walk, roll, bicycle, and take transit easily, safely, and comfortably. This is achieved through the provision of separated bikeways, sidewalks, shorter street crossings, slower vehicle speeds, less delay to cross the street, and a variety of other street design and operational strategies discussed throughout this Plan. Sometimes these Complete Street elements are seen to be at odds with emergency response time targets, however, there are proven strategies to achieve both safer street designs and fast emergency response times.

The Redmond 2050 Capital Facilities Element calls for appropriately located fire stations in relation to where growth is happening in the city. The Fire Functional Plan (2025-2050) identifies new fire station construction and relocations to meet a 6-minute service coverage benchmark and other identified needs. Service coverage is informed by development patterns and the time it takes for units to arrive on the scene, the latter of which can be impacted by traffic patterns (and time of day) and traffic operations.

Strategy 3 supports the following Redmond 2050 policies:

- **TR-8:** Design and build a resilient transportation system. Develop and update incident and disaster prevention and recovery strategies and coordinate them with local and regional partners.

- **TR-25**: Establish and implement standards in the Transportation Master Plan for the design, construction, and operation of streets. Ensure that the standards address modal plans; context-sensitive design; environmental protection; property access; continuity of the street pattern; block size; access management; curb lane use; utilities placement; parking for cars, bicycles, buses, and other vehicles; and the comfort and safety of all users.

Recommended Actions

Action 3A	Use context-appropriate, street-scale compatible emergency response apparatus to meet emergency response time targets using a transportation system that prioritizes the safety and accessibility of people walking, rolling, bicycling, and using transit. (Fire)
Action 3B	Employ street design and operational strategies to minimize impacts to emergency response times, including: • Bikeways of sufficient width to accommodate street-scale compatible emergency response apparatus. Use mountable curbs and other strategies at intervals to allow emergency vehicles to easily enter/exit bikeway. • Setback stop bars at intersections to accommodate lane encroachment of large right-turning vehicles such as fire apparatus, buses, and trucks. • Parking restrictions and other measures to ensure sufficient space for equipment deployment. • Avoid certain traffic calming treatments on priority emergency routes or use designs that accommodate the wider axle width and larger turning radius of emergency response apparatus.

Strategy 4: Reduce vehicle operating speeds

There is a direct correlation between vehicle speed and the severity of injury when vehicle crashes occur, particularly for people not traveling inside vehicles, i.e., people walking, biking, and rolling, so called vulnerable road users. Existing posted speeds in Redmond range from 25 mph to 45 mph. As Redmond grows and transitions to a more urban environment that invites more people to walk, bike, and take transit, there is a need to evaluate speeds, determine where speeds should be reduced, and identify what operational and design changes need to be made to get motorists to drive slower.

Strategy 4 supports the following Redmond 2050 policies:

- **TR-2:** Develop a Vision Zero Action Plan that incorporates a whole-City and whole-community approach to achieving zero deaths and serious injuries.

- **TR-16**: Prioritize the comfort, safety, and convenience of people using pedestrian and bicycle facilities over other users of the transportation system. Establish standards for bicycle and pedestrian facilities to attract users of all ages and abilities. Prioritize improvements that address safety concerns, connect to centers or transit, create safe routes to school, and improve independent mobility for those who rely disproportionately on the pedestrian and bicycle network.

- **TR-27**: Maintain a traffic control program based on the fundamentals of education, enforcement, and engineering for evaluating and responding to traffic safety and operational concerns. Maintain standards for maximum desirable traffic speeds and volumes. Apply a hierarchy of traffic control responses based on the severity of the traffic problem.

Recommended Actions

Action 4A	Establish target speeds (i.e., desired safe speed) of 25 to 30 mph for most arterial and collector streets. A maximum target speed of 35 mph should typically only be applied where there are no land uses or transit services generating walking or biking activity.
Action 4B	Reduce motorists' operating speeds using a range of interventions including physical traffic calming, channelization, automated and officer enforcement, education, and awareness (e.g., speed feedback signs), and in certain cases, signal timing. (Public Works, Police)
Action 4C	Lower the posted speed on Local Access (neighborhood streets) from 25 mph to 20 mph. (Public Works)
Action 4D	Consider shared streets with speed limits less than 20 mph as a sidewalk alternative on local streets where there environmental or cost constraints to implementing conventional sidewalks or where bicycle boulevards are planned. (Public Works, Planning)

Strategy 5: Apply a roundabout-first approach to intersection operations

A roundabout is a circular intersection with traffic flowing one-way, counterclockwise, around a central island. Roundabouts are an alternative to a traffic signal or stop-controlled intersection. Roundabouts are a proven safety countermeasure because they substantially reduce crashes that result in serious injury or death. Roundabouts promote lower speeds, reduce conflicts, lead to improved operational performance, continue to provide safe traffic operations during power outages, and can be designed to meet a wide range of traffic conditions due to their versatility in size, shape, and design.

The City of Redmond has a Roundabout Design Manual and has implemented several roundabouts, including at NE 31st Street, NE 36th Street, and 152nd Avenue NE, and at two locations along NE 116th Street (at 162nd Avenue NE and 172nd Avenue).

Roundabouts may not be appropriate or feasible in all instances, but due to their many advantages, the City of Redmond (and new development) will first evaluate the feasibility of roundabout construction before considering a stop-or signal-controlled intersection.

Strategy 5 supports the following Redmond 2050 policies:

- **TR-8:** Design and build a resilient transportation system. Develop and update incident and disaster prevention and recovery strategies and coordinate them with local and regional partners.

- **TR-27**: Maintain a traffic control program based on the fundamentals of education, enforcement, and engineering for evaluating and responding to traffic safety and operational concerns. Maintain standards for maximum desirable traffic speeds and volumes. Apply a hierarchy of traffic control responses based on the severity of the traffic problem.

Recommended Actions

Action 5A	Update the Roundabout Design Manual to incorporate current best practice, features to ensure roundabout operations are intuitive to the user (e.g., signage), approved Public Right of Way Accessibility Guidelines, and a prescribed process for evaluating the feasibility and cost-benefit of roundabout versus other traffic control. (Public Works)
Action 5B	Develop a roundabout plan. A first step would be to identify existing signal locations where equipment or geometric upgrades are needed, there are a high number of crashes or other factors that could be mitigated with a roundabout. (Public Works, Planning)
Action 5C	For all new development for which a traffic impact analysis would trigger a new signalized or stop-controlled intersection, first evaluate roundabout implementation as the preferred option. (Public Works, Planning)

Roundabout on NE 116th St

Strategy 6: Apply advanced, but proven, technological solutions to maximize the effectiveness, efficiency, and safety of the transportation system

Technologies such as high-definition traffic cameras and intelligent transportation systems (ITS) work to improve the efficiency and safety of Redmond's transportation system. Emerging technologies such as vehicle-to-everything (V2X) promise to further enhance road safety and traffic efficiency while reducing pollution and saving energy. Technological solutions will have an increasingly important role to play as Redmond grows and must move more people and goods through a street network that is not growing. More discussion of technology and its role in planning, operating, and maintaining Redmond's transportation system is included in Section 12 – Emerging Trends and Technology.

Strategy 6 supports the following Redmond 2050 policies:

- **TR-3:** Maintain flexibility in the face of technological innovation, changes in mobility patterns, natural disasters, and other sources of uncertainty and disruption.

- **TR-26**: Use advanced technology to improve system efficiency, disseminate traveler information, and improve data collection for system management.

Recommended Actions

Action 6A	Continue to invest in intelligent transportation systems and asset management systems to improve traffic safety and operations. (Public Works)
Action 6B	Evaluate emerging technologies such as V2X to determine how and when the city should promote deployment. (Planning, Public Works)

Strategy 7: Make timely investments to extend the life and performance of the street system

Neglected infrastructure can impose significant economic burdens on Redmond. Poor road conditions and deteriorating streets reduce productivity by increasing travel times and vehicle maintenance costs. Inadequate infrastructure also leaves communities vulnerable to extreme weather events, potentially causing extensive damage to the natural environment and disrupting local economies. These issues can lead to decreased property values, reduced business investments, and diminished overall economic growth, highlighting the critical importance of proactive infrastructure maintenance. It is imperative to make needed and timely investments in the street network infrastructure to minimize risk and increased costs. More specific maintenance-related discussion, strategies, and actions is included in Section 8 - Maintenance and System Preservation.

Strategy 7 supports the following Redmond 2050 policies:

- **TR-7:** Maximize the safety benefits of transportation system maintenance.
- **TR-46:** Develop and maintain a detailed revenue forecast that funds the ongoing maintenance, operation, and delivery of the transportation system at an adequate level of service.

Recommended Actions

Action 7A	Use outputs from the citywide asset management systems to help plan for future capital investments and maintenance activities. (Public Works)
Action 7B	Use the asset management plan and associated data management systems to identify opportunities to bundle street and utility projects to reduce costs and minimize disruption to the transportation system. (Public Works)
Action 7C	Build resilient transportation infrastructure to withstand the effects of climate change. For major capital projects, commit to conducting climate risk assessment related to materials, life cycle, etc. (Public Works)

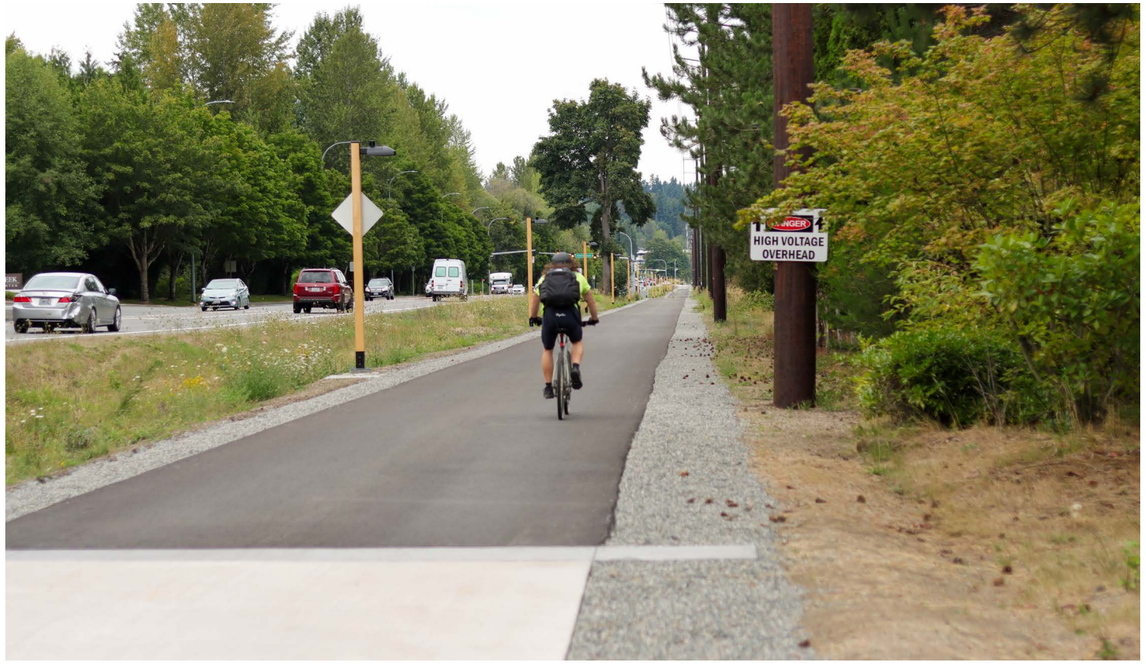
Strategy 8: Preserve and add green infrastructure within Redmond's street network

Green infrastructure refers to natural vegetative systems and green technologies that provide economic, environmental, health, and social benefits. Green infrastructure within the street network includes trees, bioswales, bioretention cells, rain gardens, and permeable pavement. Green Infrastructure can provide a wide degree of ecological, social, and economic benefits for Redmond. These benefits include:

- Encouraging a varied and rich natural habitat.
- Enhancing stormwater management using natural ecosystem functions and processes.
- Contributing to more livable streets through improved aesthetics and urban cooling.

Strategy 8 supports the following Redmond 2050 policies:

- **TR-13:** Develop a transportation system that minimizes negative health and environmental impacts to all, especially those who have been disproportionately affected by past transportation decisions.
- **TR-39**: Improve surface and groundwater quality by reducing stormwater runoff, minimizing impervious surface area from transportation facilities, providing water quality treatment for transportation facilities, and removing fish barriers.



Recommended Actions

Action 8A	Coordinate street improvements with the Stormwater and Surface Water System Plan to identify opportunities for green infrastructure and transportation project integration. (Public Works, Planning)

Strategy 9: Preserve and add tree canopy within the public right-of-way

Over 20 percent of Redmond's land area is public rights-of-way, most of which are developed with street infrastructure. Streets often have trees planted adjacent to sidewalks and it is within the City's development code to ensure that this is the case for all new street construction. Street trees offer many benefits from a transportation perspective, including encouraging motorists to drive slower, providing shade for people walking, and can even reduce maintenance costs by keeping street surfaces cooler and reducing temperature fluctuations. They also provide environmental benefits such as stormwater intercept and uptake, carbon sequestration, and reducing urban heat island effect. Lastly, there are numerous other community benefits that trees offer from increased property values to lower energy bills to noise abatement. Many mature trees in Redmond that were planted decades ago would now be considered the "wrong" species for the street environment due to their growth characteristics and structural integrity. Furthermore, many trees were planted in native soils not conducive to healthy tree growth in the constrained conditions typical of the street environment. As a result, these trees have caused sidewalk upheavals that contribute to inaccessible sidewalks, as well as damaged street and utility infrastructure. In some cases,large tree species were planted too close to intersections causing visual obstructions and requiring a high level of maintenance to maintain safety.

Strategy 9 supports the following Redmond 2050 policies:

- **TR-78:** Enhance green space, tree canopy, habitat quality, and natural drainage systems.
- **TR-79**: Increase Redmond's tree canopy to 40% of city's land area by 2050.
- **TR-81**: Design and construct City capital projects to maximize tree canopy.
- **TR-84**: Require street trees along all arterial streets and along local streets designated in neighborhood policies. Select, place, and install street trees to maximize tree life, provide shade to sidewalk users, and reduce safety hazards.
- **TR-86**: Maintain and enhance a street tree maintenance program on arterial streets and City-owned trees.

Recommended Actions

Action 9A	Adopt a street tree preservation policy and formal evaluation process for all capital projects and development projects where there are mature street trees that requires an evaluation of the full street tree value and determination of appropriate preservation measures, which could include relocating the tree, replacing the tree with one or more minimum 20 inch dbh tree, or contributing to the planting of trees in a proximate location.
Action 9B	Evaluate the use of rubber pavers or other adaptable surfaces around trees as a flexible solution for maintaining accessibility while promoting mature tree health. (Parks, Public Works)
Action 9C	Bring street trees into the asset management system. (Public Works)

PEDESTRIAN PLAN

Transportation Master Plan

Throughout the Transportation Master Plan, the term "walking" refers to people walking or rolling with a wheelchair, stroller, or any type of mobility device. Furthermore, the term "pedestrian" refers to any individual walking or rolling. Redmond's transportation network aims to be inclusive and accessible to all walkers, rollers, and users of personal mobility devices.

INTRODUCTION

By 2050, active transportation modes including walking and rolling will serve as fundamental pillars of Redmond's sustainable, equitable, and resilient transportation system. These modes advance the City's goals for reducing carbon emissions, improving mobility, and fostering community cohesion.

In alignment with the Redmond 2050 Transportation Vision Statement and the Comprehensive Plan Guiding Principles, walking and rolling will enable affordable, low-carbon mobility. The emphasis on active transportation prioritizes safety, accessibility, and inclusion, ensuring all residents—regardless of age, ability, or income—can navigate the city with ease. Investments in pedestrian and bicycle infrastructure will support Redmond's efforts to achieve a 71% reduction in greenhouse gas emissions from the transportation sector, reflecting the city's commitment to environmental sustainability (Redmond 2050 -Transportation Element)

ADVANCING REDMOND 2050 GUIDING PRINCIPLES

RESILIENCE

- The pedestrian network prioritizes mobility for those who cannot or choose not to drive, which in turn allows for less wear and tear on Redmond roadways and allows for reduced vehicle congestion. (Redmond 2050 FW-TR-2)
- Strategies in this section supporting the Guiding Principle of Resilience include: Strategy 3, Strategy 6, Strategy 7

SUSTAINABILITY

- The pedestrian network creates low-impact, self-sufficient transportation that minimizes dependence on fossil fuel and enhances public health. (Redmond 2050 FW-TR-4)
- Strategies in this section supporting the Guiding Principle of Sustainability include: Strategy 1

EQUITY & INCLUSION

- Accessible curb ramps, traffic-calming measures, and Americans with Disabilities Act (ADA)-compliant pathways ensure mobility for all residents. (Redmond 2050 TR-10)
- Strategies in this section supporting the Guiding Principle of Equity include: Strategy 2, Strategy 4, Strategy 5, Strategy 8, Strategy 9

DESIGNING A PEDESTRIAN NETWORK THAT WORKS FOR EVERYONE

Walking is the oldest and most human-centered form of transportation. Walking is arguably the best way to fully experience a place,but it is also the most basic form of transportation that should be accommodated in the safest, most convenient, and dignified way possible. The following are guiding principles that should underpin all pedestrian facility planning, design, and implementation:

- The walking environment should be safe and comfortable. Sidewalks, crossings, and shared-use paths should be free of hazards and minimize conflicts with vehicular traffic and external factors such as protruding architectural elements, utility vaults,or vegetation. The pedestrian network should provide additional separation from vehicle travel lanes with higher speeds and volumes. Adequate sidewalk width that is clear of obstacles should be provided to allow people to comfortably walk or roll in social groups and engage with the surrounding walking environment.

- The pedestrian network should be accessible. Sidewalks, shared-use paths, curb ramps, and crosswalks should ensure the mobility of all users by accommodating the needs of people regardless of age or ability. In areas with specific needs (e.g., schools), improvements should accommodate the needs of the target population.

- The pedestrian network should connect to places people want to go. The pedestrian network should provide continuous direct routes and convenient connections between destinations such as homes, schools, shopping areas, public services, recreational opportunities, and transit.

- The pedestrian network should be clear and easy to use with intuitive way finding signage. Sidewalks, shared-use paths, and crossings should allow people of all abilities to easily find a direct route to a destination with minimal delays.

- The pedestrian environment should include inviting public spaces that contribute to complete neighborhoods. Good design should integrate with and support the development of complementary uses and should encourage preservation and construction of art, landscaping, and other items that add value to public ways. These components might include open spaces such as plazas, courtyards and squares, and amenities like street furniture, banners, art, plantings, and special paving. Along with historical elements and cultural references, complementary uses should promote a sense of place. Public activities should be encouraged, and the municipal code should permit commercial activities such as dining, vending, and advertising on sidewalks when they do not interfere with safety and accessibility. The pedestrian environment is a key component to develop and enhance Redmond's complete neighborhoods.

Design Needs of Pedestrians of All Ages and Abilities

People walking and rolling in Redmond have different needs and abilities, and the transportation network should be inclusive to all. Age is a major factor that affects pedestrians' physical and cognitive abilities. For example, children have lower eye height and tend to walk at slower speeds than adults walk. They also perceive the environment differently at various stages of their cognitive development, and continue to develop a sense of depth perception, judgment, and critical thinking as they grow. Older adults may walk more slowly, might have slower reflexes, and may require assistive devices for stability, sight, and hearing. While the type and degree of mobility impairment varies greatly across the population, the transportation system should accommodate these users to the greatest extent feasible. Table 1 summarizes mobility barriers faced by different disability groups, the challenges they present, and relevant recommendations for pedestrian design that better accommodates these users.

TABLE 1 | BARRIERS, CHALLENGES AND DESIGN CONSIDERATIONS FOR PEDESTRIANS WITH DISABILITIES

Barriers (Disability Groups Affected)	Challenges for Facility Users	Design Solution
Mobility Barriers (Wheelchair and Walking Aid Users)	Propelling over uneven or soft surfaces	Firm, stable and non-slippery travel surfaces and structures, including ramps or beveled edges
	Cross-slopes cause wheelchairs to veer downhill	Cross-slopes to less than two percent
	Long distances between accessible and comfortable street crossings. Insufficient crossing time intervals	More low-stress and accessible street crossings. Longer pedestrian signal cycles, shorter crossing distances, and median refuge islands
	Long distances with no place to sit and rest	Seating
	Speeding traffic leaving little time for pedestrians to react	Speed control, traffic calming
Hearing Barriers (Deaf and Hard of Hearing)	Oncoming hazards at locations with limited sight lines (e.g. driveways, angled intersections, right-turn slip lanes) and complex intersections	Longer pedestrian signal cycles, clear sight distances, highly visible pedestrian signals and markings
Vision Barriers (Blind or Low Vision)	Indirect paths and poorly placed obstacles	Guide strips, detectable warning surfaces, and safety barriers
	Changing environments, including construction detours, that make reliance on memory more difficult	
	Low illumination levels	Guide strips, detectable warning surfaces, and safety barriers
	Absence of non-visual indicators (e.g. sound and texture)	Accessible text (larger print and raised text), accessible pedestrian signals (APS)
Cognition Barriers (Neurodiverse individuals)	Complex walking environments with a wide range of information types	Signs with pictures, universal symbols, and colors, rather than text

OVERVIEW OF REDMOND'S PEDESTRIAN SYSTEM

Sidewalk Network
The City of Redmond has a high coverage of sidewalks on arterials and transit routes, with sidewalks on one or both sides of the street across approximately 92% of the city's arterial network, as shown in Table 2. Approximately 89% of Redmond's local streets include sidewalks on one or both sides of the street, as shown in Table 3. More information about the City's goals to increase sidewalk coverage on the local street network can be found in the Strategies in this section.

TABLE 2 | EXISTING SIDEWALK NETWORK ON ARTERIAL STREETS

Street Type	Arterial Street		Arterial Streets with Transit Routes	
	Approximate Sidewalk Miles	Percent	Approximate Sidewalk Miles	Percent
No sidewalk on either side of street	6	9%	3	8%
Sidewalk on one side of street	18	24%	6	16%
Sidewalk on both sides of street	46	67%	29	76%
Sidewalk on one or both sides of street	64	91%	35	92%

TABLE 3 | EXISTING SIDEWALK NETWORK ON NON-ARTERIAL/LOCAL ACCESS STREETS

Local Streets (City of Redmond Owned)	Approximate Sidewalk Miles	Percent
No sidewalk on either side of street	14	11%
Sidewalk on one side of street	9	7%
Sidewalk on both sides of street	104	82%
Sidewalk on one or both sides of street	113	89%

The City of Redmond continuously monitors the condition of the sidewalk network. In 2024, Redmond used the Sidewalk Scan program that measures the condition of sidewalks. Based on the evaluation, a sidewalk condition index (SCI) was developed and adopted using the quantity, type, and severity of distresses on a sidewalk. SCI rates sidewalk quality into 7 categories: excellent, good, fair, poor, very poor, serious, and failed. SCI serves as an important indicator for the maintenance and replacement decisions of the City's sidewalk network. More information on the SCI of Redmond's sidewalk network can be found in Section 8 (Maintenance).

Trail and Off-Street Connections Network
The City of Redmond has an extensive park and trail system. Redmond's trail network provides comfortable pedestrian connections through and between many of Redmond's neighborhoods. Many of Redmond's trails offer special recreation features, including equestrian riding and opportunities for hiking.

The existing trail system within the city of Redmond totals approximately 58 miles, approximately 48% of which (or 30 miles) are paved. Table 4 summarizes the city's paved trails by the agency that owns and operates them.

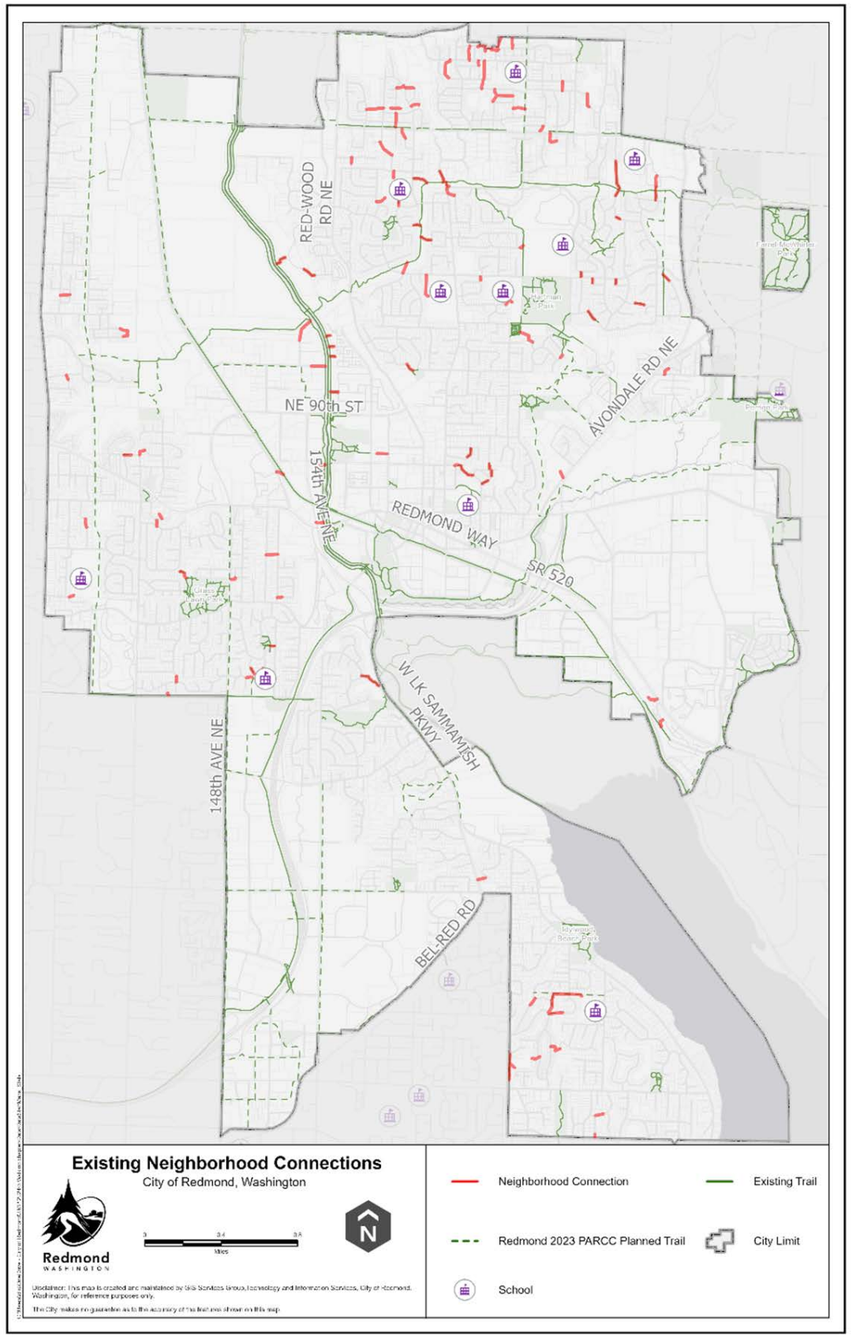
TABLE 4 | REDMOND PAVED TRAILS BY AGENCY

Ownership Agency	Paved Trail (miles)	Soft Surface Trail (miles)
Washington State Department of Transportation (WSDOT)	5	0
King County	9	3
City of Redmond	16	23
Other (i.e. City of Bellevue)	0.5	2

In addition to Redmond's paved and unpaved recreational trail network, the city's pedestrian network also consists of short off-street pathways that often connect dead-end streets. These neighborhood connections offer more direct access to local destinations, and in some cases, allow people to avoid Redmond's busiest streets. Many of these neighborhood connections do not have official street or trail names. Figure 1 below shows a neighborhood connection pathway in the Education Hill neighborhood adjacent to a signed pedestrian crossing. More information about neighborhood connections can be found in the Strategies and Actions section in this section. A map of the neighborhood connections in Redmond is shown in Figure 2.

FIGURE 1 | NEIGHBORHOOD CONNECTION IN EDUCATION HILL

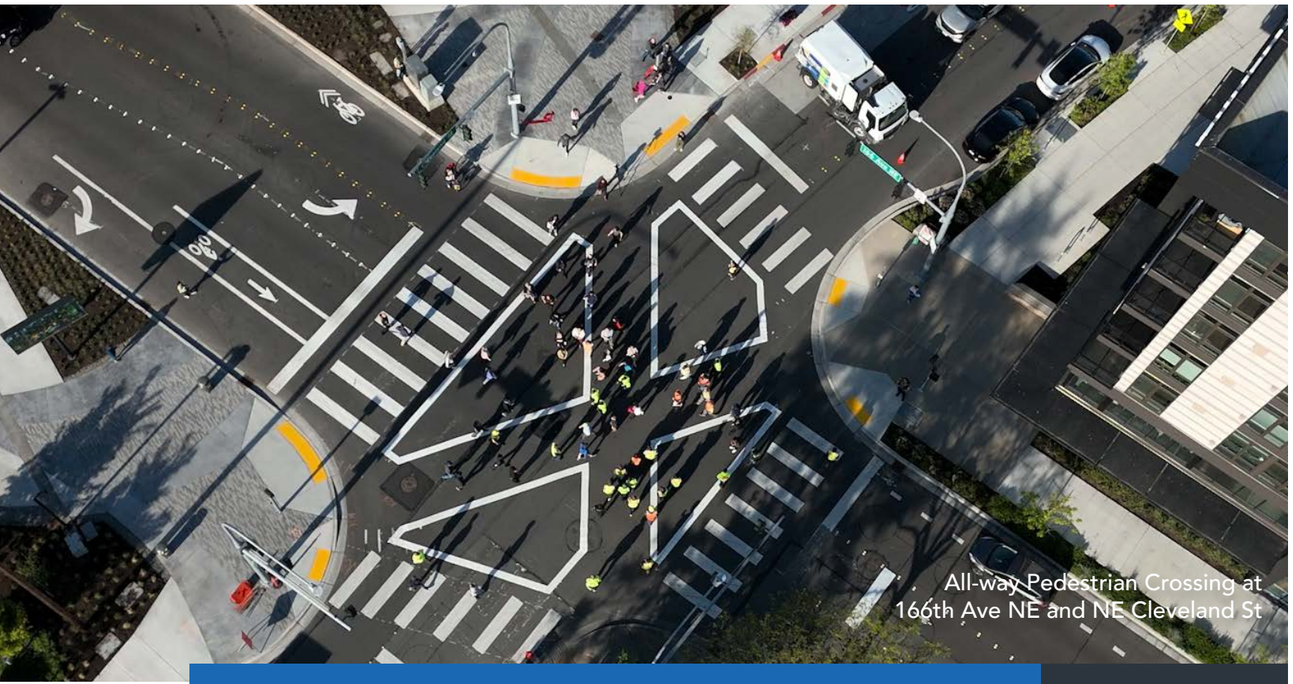
FIGURE 2 | NEIGHBORHOOD CONNECTIONS



Pedestrian Crossings
A Low Stress Pedestrian Crossing (LSPC) provides safe and comfortable infrastructure for pedestrians to cross a roadway mid-block or at an intersection. While Redmond's pedestrian network includes many pedestrian crossings[1], not all are considered Low Stress Pedestrian Crossings (LSPCs). Low-stress pedestrian crossings (LSPCs) are marked crosswalks that include signalized intersections, roundabouts, Rectangular Rapid Flashing Beacon (RRFB) crossings, High Intensity Activated Crosswalk (HAWK) signal crossings, all-way stop control (AWSC) intersections, and may also have geometric features such as raised crossings, curb extensions or crossing islands that reinforce pedestrian visibility, reduce crossing distance and achieve better driver compliance with stopping for pedestrians entering or walking in a crosswalk.

Redmond's current network of LSPCs includes 112 signalized intersections, 40 existing RRFB crossings, and two HAWK signal crossings. This inventory was taken for intersection crossings and does not include highway crossings such as pedestrian bridges.

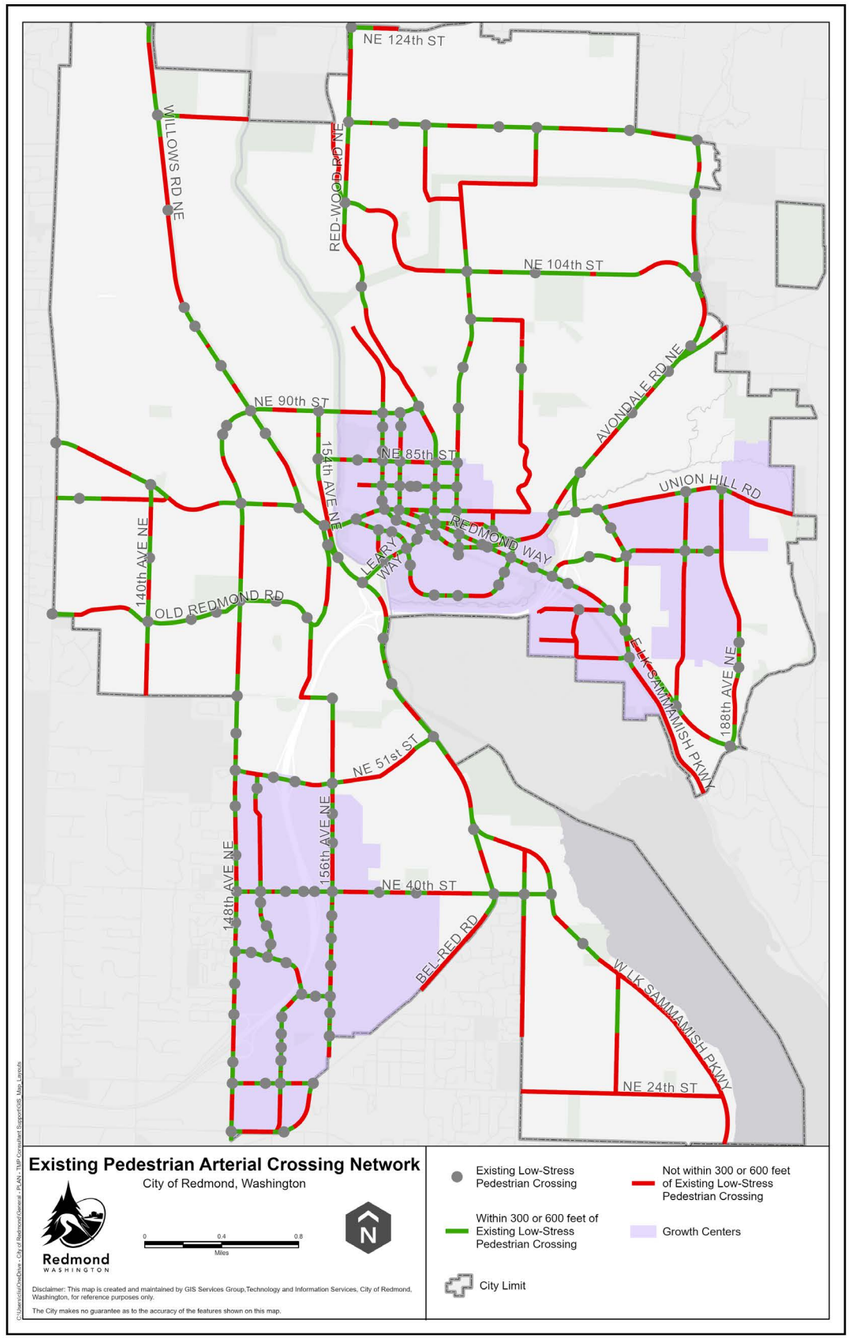
A summary of pedestrian crossings along the existing arterial network is shown on Figure 3. See Strategy 2 for more discussion on Redmond's future pedestrian crossing improvements.



All-way Pedestrian Crossing at 166th Ave NE and NE Cleveland St

[1] All intersections on Redmond's arterial and local street network are considered legal pedestrian crossings even if not marked with a crosswalk, unless pedestrian crossing is explicitly prohibited with clear signage.

FIGURE 3 | EXISTING ARTERIAL PEDESTRIAN CROSSINGS



Curb Ramps
Curb ramps play a vital role in Redmond's pedestrian infrastructure by ensuring accessibility for all users, particularly individuals with disabilities using mobility assistance devices. These ramps provide a smooth transition between sidewalks and streets, supporting safer and more equitable mobility across the city.

The City of Redmond is committed to improving accessibility and meeting the requirements of the Americans with Disabilities Act (ADA). To achieve this, the City evaluates curb ramps across the network, identifying areas that need upgrades or new installations.

Currently, curb ramp upgrades are primarily completed through capital improvement projects and private development, where upgrades are required when road resurfacing occurs. The City also operates a curb ramp program that targets bi-annual ramp replacements, focusing on priority locations such as areas near schools and transit centers. Additionally, the City is developing an ADA Transition Plan, which will serve as a strategic framework for prioritizing future curb ramp replacements to enhance accessibility across the community. More information about the development of the City's ADA Transition Plan can be found in Strategy 7.

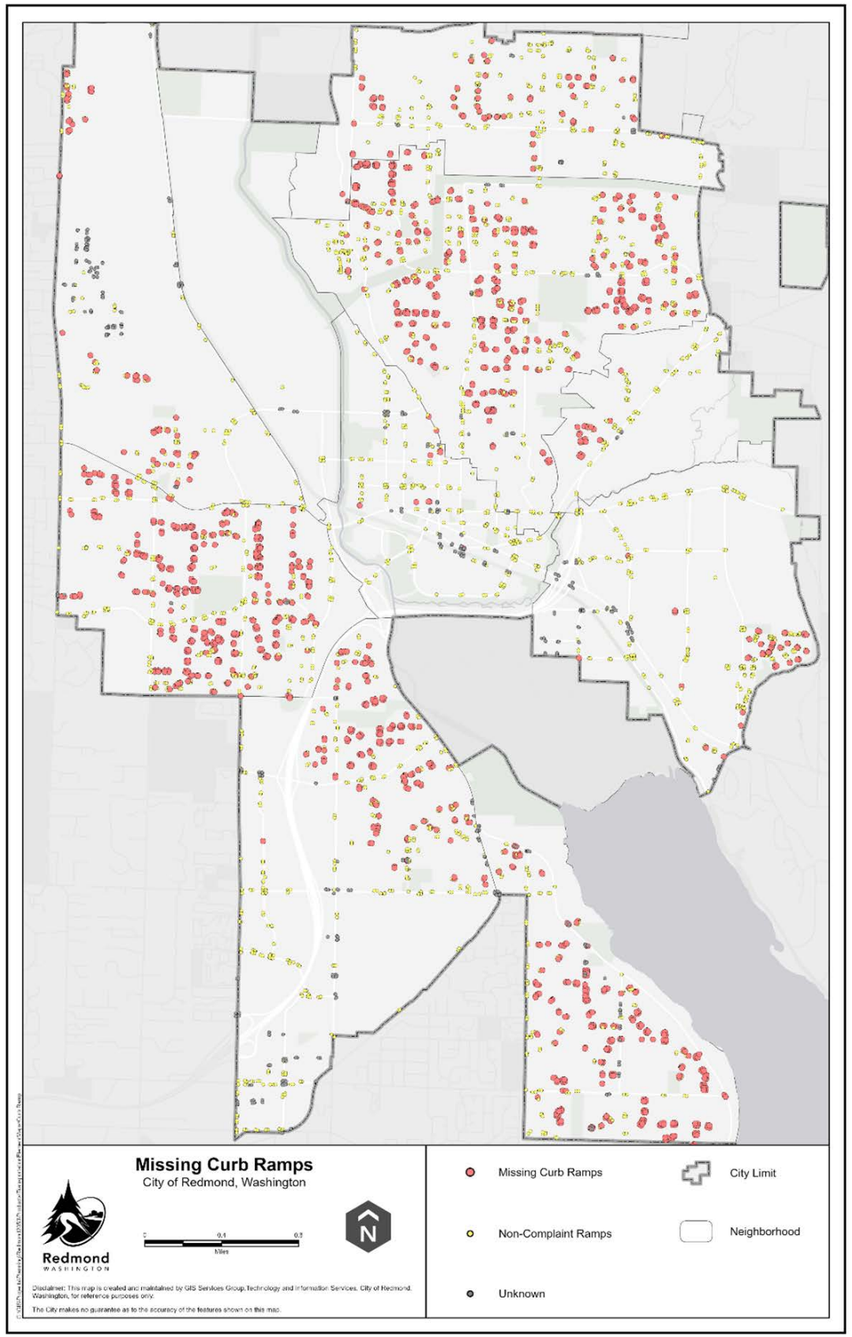
Compliant Curb Ramps
Compliant curb ramps meet all ADA standards, including proper slope, width, landing area, alignment, and the presence of detectable warning surfaces. These ramps ensure accessibility and safety for all users, including those with mobility impairments or visual disabilities.

Non-Compliant Curb Ramps
Non-compliant curb ramps do not meet one or more ADA standards, which can create barriers to accessibility or pose safety risks. Common issues include excessively steep slopes, absence of detectable warning surfaces, inadequate width, or deterioration of ramp surfaces.

The data highlights that 49% of Redmond's curb ramps are currently non-compliant, while an additional 27% of intersections lack ramps entirely. Approximately 14% of ramps meet ADA standards, with an additional 2% deemed compliant to the maximum extent practicable due to site-specific constraints. About 8% of curb ramps are currently in design or recently constructed and documentation has not been completed.

Figure 4 includes a summary of missing and non-compliant curb ramps in Redmond.

FIGURE 4 | MISSING AND NON-COMPLIANT CURB RAMP LOCATIONS



Pedestrian Amenities

Street Trees

Redmond's tree canopy creates an inviting and comfortable walking environment throughout the city. Street trees provide shade and comfort while helping meet Redmond's climate goals. The presence of street trees blocks sunlight from reaching the sidewalk and roadway network, reducing heat and air pollution at ground level. Additionally, the presence of street trees can provide visual "friction" that can encourage drivers to travel at slower speeds.

Street trees are a required component of Redmond's frontage improvements that apply to new development in the City. Tree roots of mature trees have caused accessibility challenges along many streets throughout Redmond. For all new tree plantings in the right-of-way it is important to choose tree species that are appropriate for streetscapes and use structural soils or other beneficial materials to prevent future impacts to sidewalk from tree roots. Section 3 – Street System Plan includes more discussion on tree preservation and related actions. More information about Redmond's accessibility challenges and future goals can be found in Strategy 6 below.

Lighting

In 2024, the City of Redmond has approximately 5,281 streetlights in operation, which are owned by Puget Sound Energy (PSE), the City, or private individuals. The City manages an annual Street Lighting Program to improve lighting conditions in specific areas, such as school zones or residential neighborhoods. Annual improvements are generally based on community members' Requests for Service (or Q-Alerts) and are addressed by the Public Works Department. The City retrofitted all City-owned streetlights from high-pressure sodium (HPS) to light-emitting diode (LED) lights in 2018 and 2019. In 2022, the City began retrofitting 226 HPS PSE-owned streetlights with LED lights in Redmond's business district. LED lights provide better visibility than HPS lights, have a longer life-cycle, thus reducing maintenance costs, and are more energy-efficient. The lighting upgrade project was completed in 2023 and the upgrades are estimated to save the City approximately $13,000 per year in energy consumption.

In addition to the traditional lighting system, the City is exploring new solar lighting technology and identified potential test locations for installation. Once installed, the City will continue to monitor the success of solar lighting at these locations and will consider implementation on a wider scale.

Redmond's trail network is partially lit, with some trails containing pedestrian lighting and others relying on ambient light from nearby streetlights. Trails with pedestrian lighting include portions of the Redmond Central Connector and the Evans Creek Trail. Other trails that rely on ambient light from streetlights include the Bear Creek Trail and the Powerline Trail, among others.

Wayfinding

The City's wayfinding signage network includes a variety of sign types, installed primarily in Downtown Redmond and Overlake. The City's signage varies in look and function, with some directional signs pointing trail and sidewalk users to nearby destinations. Some signs include approximate distances by bike or by foot, while others only list destinations.

The City's Parks & Recreation Department is assessing wayfinding signage and developing a wayfinding plan in 2025/2026. As this plan develops, it will be important to reevaluate and update the pedestrian system wayfinding signage to maintain consistency with other wayfinding efforts. More information about the City's wayfinding goals is discussed in Strategy 9 below.

Other Amenities

Additional amenities can contribute to a more comfortable and dignified pedestrian experience, including seating, rest areas, structures that provide shade, and facilities such as water fountains or restrooms. These elements make the pedestrian experience more comfortable, safe, and inviting for people of all ages and abilities. The City of Redmond includes these amenities at City parks and other gathering spaces. The City should continue to identify locations where these amenities would be well used, including transit stops or Mobility Hubs. More information on Mobility Hubs can be found in Section 6 – Transit.

Development of Pedestrian Network in Urban Centers

Redmond's pedestrian network is developed and enhanced by new development meeting requirements in the Redmond Zoning Code (RZC). The pedestrian system continues to change and improve, especially in the Overlake and Marymoor neighborhoods that continue to see rapid growth and redevelopment. Redmond's development requirements enhance the pedestrian experience by requiring safe and comfortable pedestrian facilities along the frontage of any new development. The RZC includes specific requirements for the Downtown, Overlake, and Marymoor centers that will continue to support the walking environment as these areas develop.

STRATEGIES AND ACTIONS

Strategy 1: Complete Redmond's pedestrian network by filling sidewalk gaps and prioritizing new connections

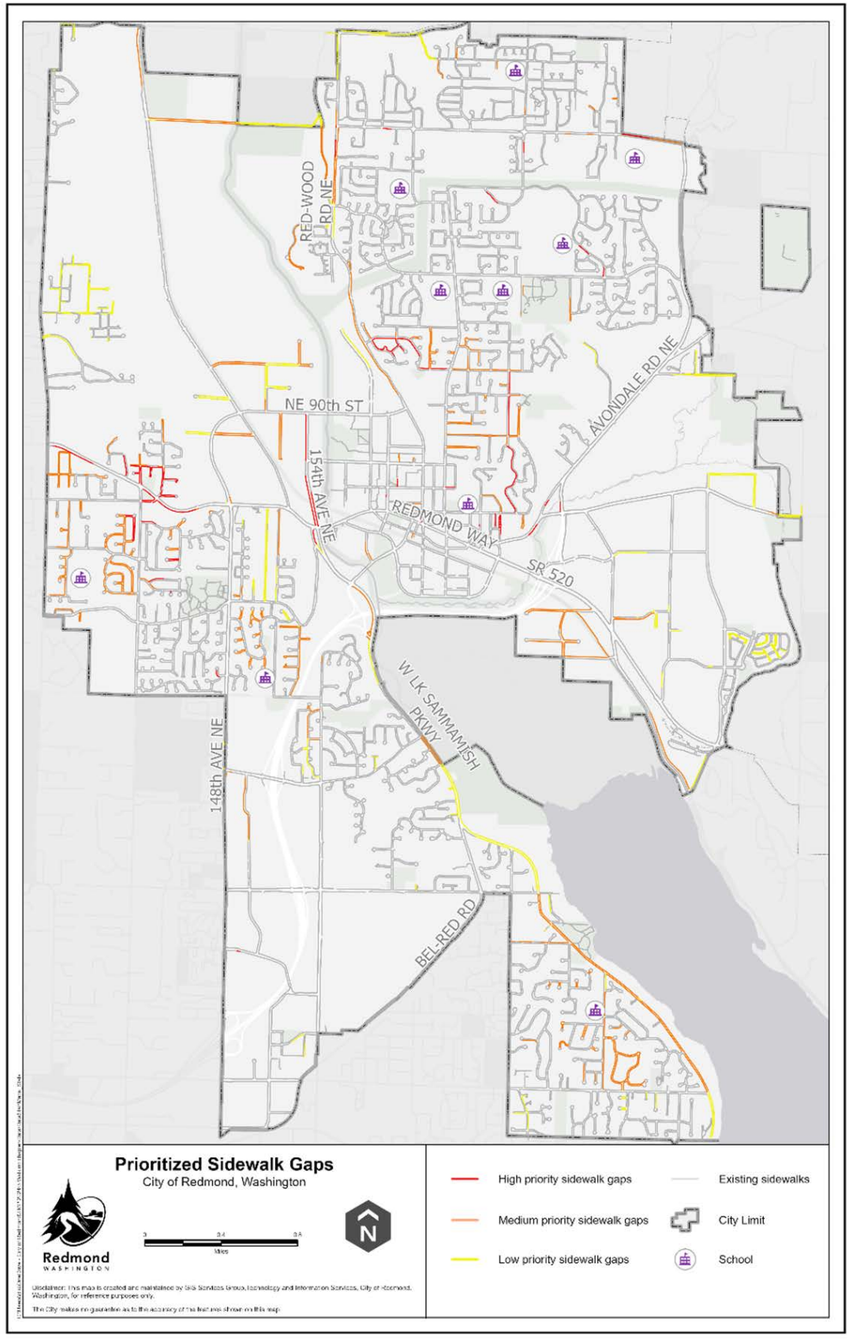
The City's strategic focus on completing connected pedestrian networks in neighborhoods and urban centers to provide direct access to transit, schools, employment, and services will improve safety and reduce reliance on vehicles. Redmond's pedestrian network currently includes sidewalk gaps where portions of sidewalks are missing on one or both sides of the street. The City will work to fill these gaps, connecting walking routes and establishing safe and comfortable pathways for active transportation. The City's goal is to provide safe and comfortable pedestrian facilities along all streets with traditional sidewalks or alternative sidewalk strategies. A discussion of sidewalk alternatives can be found in Strategy 5 below. Figure 5 illustrates existing gaps in Redmond's sidewalk network. These gaps have been prioritized for improvement based on the following criteria:

1. Presence of a transit route with priority given to frequent routes.
2. Within a school walk zone.
3. Within a Pedestrian Priority Zone.
4. Along a principal, minor, or collector arterial.
5. Equity analysis.
6. Presence of a connection to a trail or park facility.
7. Along High Injury/High Risk Network.
8. In the 6-year Transportation Improvement Program.
9. Number of community requests.

Many existing sidewalks in Redmond also do not meet the City's sidewalk standard or ADA requirements. The latter will be identified in the evaluation conducted for the ADA Transition Plan. Existing sidewalks that don't meet standards are often reconstructed through new development or capital projects. Redmond has been fortunate to have had a high level of commercial and residential development. Any development must pay transportation impact fees and may also be required to build infrastructure that has been identified in the City's Transportation Facilities Plan or determined to be necessary to mitigate impacts to the transportation system. The implementation timeline for these projects tends to be longer as it depends on new development occurring and often new development projects can take several years to construct from the time of initial application.

As Redmond continues to grow there will be more opportunities to leverage this growth to fill gaps in the pedestrian network. In some cases, where sidewalks are severely damaged and new development is unlikely to occur, a capital project may be developed to reconstruct the sidewalk to current standards. In addition, the City's concrete crew, which was funded by the voter-approved Transportation Benefit District is also addressing smaller-scale sidewalk maintenance and gap filling.

FIGURE 5 | PRIORITIZED SIDEWALK GAPS



Strategy 1 supports the following Redmond 2050 policies:

- **FW-TR-3:** Complete the accessible and active transportation, transit, freight, and street networks identified in the Transportation Master Plan in support of an integrated and connected transportation system.

- **TR-16**: Prioritize the comfort, safety, and convenience of people using pedestrian and bicycle facilities over other users of the transportation system. Establish standards for bicycle and pedestrian facilities to attract users of all ages and abilities. Prioritize improvements that address safety concerns, connect to centers or transit, create safe routes to school, and improve independent mobility for those who rely disproportionately on the pedestrian and bicycle network.

Recommended Actions

Action 1A	Complete the citywide pedestrian network by filling sidewalk gaps. (Public Works, Planning)
Action 1B	Upgrade existing sidewalks that do not meet ADA requirements or the City's current sidewalk standard through new development, capital improvement projects, and through the work of City's concrete crew. (Public Works)

Strategy 2: Construct prioritized low-stress pedestrian crossings

Low-stress pedestrian crossings (LSPCs) are marked crosswalks that include signalized intersections, roundabouts, Rectangular Rapid Flashing Beacon (RRFB) crossings, High Intensity Activated Crosswalk (HAWK) signal crossings, all-way stop control (AWSC) intersections, and may also have geometric features such as raised crossings, curb extensions or crossing islands that reinforce pedestrian visibility, reduce crossing distance and achieve better driver compliance with stopping for pedestrians entering or walking in a crosswalk. Low Stress Pedestrian Crossings (LSPCs) were analyzed and classified based on whether the LSPC was located within one of the City's designated urban centers (Downtown, Marymoor Village, or Overlake) or in Redmond's other neighborhoods. Where the distance between existing LSPCs exceeds 300 feet within urban centers or 600 feet outside of urban centers, one or more new LSPCs are recommended to be installed. Figure 6 shows the future pedestrian arterial crossing network including recommended priority LSPC locations. LSPC priorities are based on proximity to key destinations including frequent transit stops, or points of interest including schools, libraries, parks, and healthcare services. The addition of these recommended new LSPCs will improve network connectivity making it easier and safer for people to access transit and neighborhood destinations.

Locations for recommended priority future low-stress pedestrian crossings are summarized in Table 5, including whether the crossing serves a priority point of interest or high frequency transit stop. As noted in the table, some of these locations already have crossing infrastructure in place, which makes it easier to implement additional improvements to achieve low-stress pedestrian crossing standards at these locations. In addition, the City should consider shortening crossing distances with curb bulbs or installing raised crosswalks where applicable to enhance the implementation of low-stress pedestrian crossings.

FIGURE 6 | EXISTING AND PRIORITY FUTURE ARTERIAL PEDESTRIAN CROSSINGS

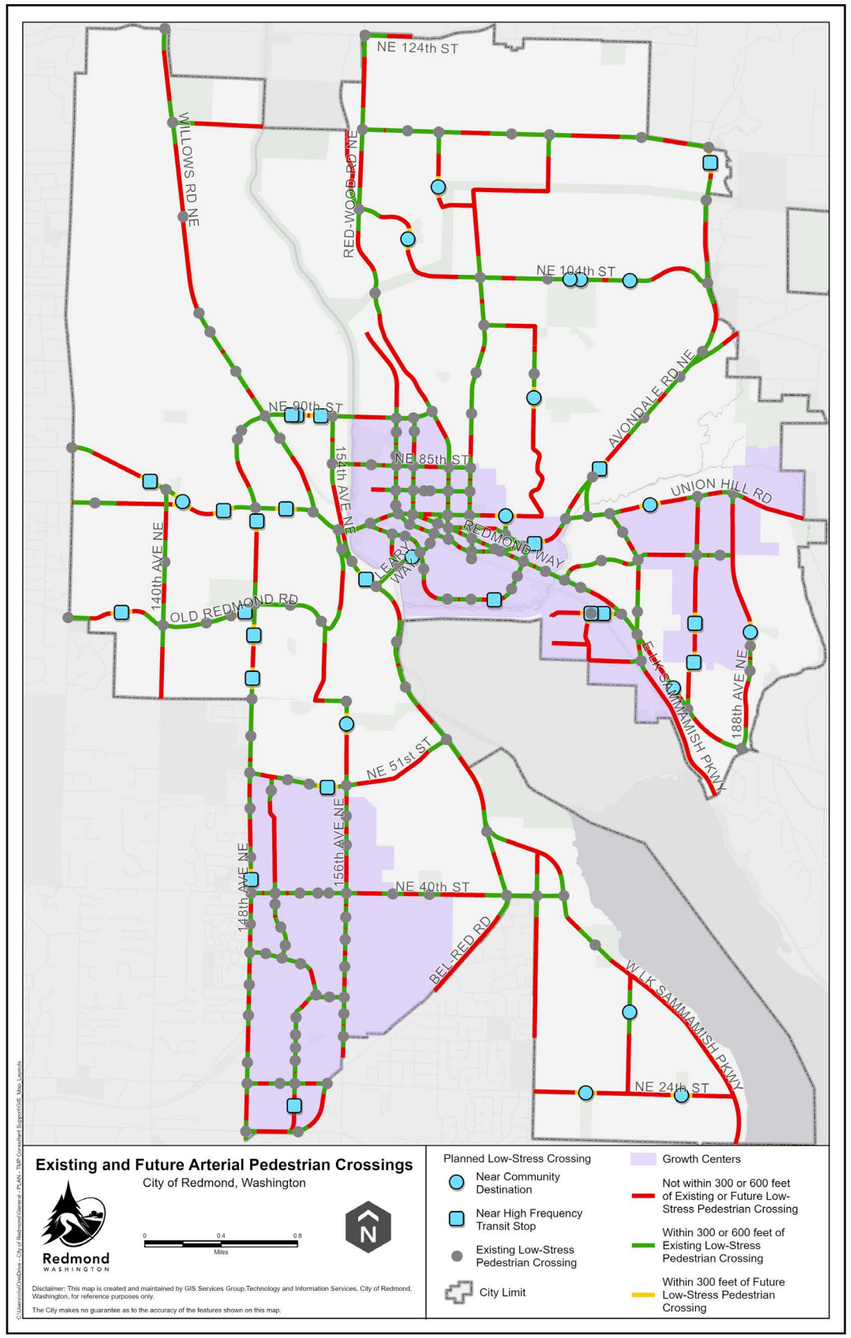


TABLE 5 | PRIORITY LOCATIONS FOR FUTURE LOW-STRESS PEDESTRIAN CROSSINGS

ID	Destination Type	Name	Arterial Road Name	Midblock or Intersection?	Extents	Existing Crossing?
1	Hospital	Swedish Hospital	NE Union Hill Road	Midblock	NE Union Hill Road between 178th Place NE & 185th Avenue NE, approximately 1000 ft east of 178th Place of NE	No
2	Park	Viewpoint Open Space Park	NE 24th Street	Intersections	NE 24th Street & 176th Court NE	No
3	Park	Viewpoint Neighborhood ParkPark	NE 24th Street	Intersection	NE 24th Street & 184th Avenue NE	No
4	Park	Westside Park	156th Avenue	Intersection	156th Avenue NE & NE 58th Place	Yes
5	Park	Southeast Redmond Park	188th Avenue NE	Intersection	188th Avenue NE & NE 68th Street	No
6	Park	Park	Redmond Way	Intersection	Redmond Way & 142nd Avenue NE	No
7	Park	Nike Park	171st Avenue NE	Intersection	171st Avenue NE & NE 92nd Street	Yes
8	Park	Meadow Park	160th Avenue NE	Intersection	160th Avenue NE & NE 107th Way	Yes
9	Park	Heron Rookery	Leary Way	Midblock	Approximately 150 ft east of 159th Place	No
10	Park	Hartman Park	NE 104th St	Midblock	Approximately 618 ft east of 172nd Ave NE	Yes
11	Park	Marymoor Connector Trail	Redmond-Fall City Rd NE	Midblock	Approximately 437 ft northeast of Marymoor connector trail access	No
12	School	Redmond Elementary School	NE 80th Street	Intersection	NE 80th Street & 169th Avenue NE	Yes
13	School	Norman Rockwell Elementary School	162nd Avenue NE	Midblock	162nd Avenue NE between NE 109th Street/NE 110th Street & NE 112th Street, approximately 600 ft north of NE 109th Street/ NE 110th Street	No
14	School	John James Audubon Elementary School	180th Ave NE	Midblock	Approximately 437 ft north of NE 30th St	Yes
15	School	Redmond High School	NE 104th St	Midblock	Approximately 413 ft west of 178th Ave NE	Yes
16	High Frequency Bus Stop	Avondale Road NE & NE 114th Street	Avondale Road NE	Midblock	Avondale Road NE between NE 116th Street & NE 113th Street, approximately 430 ft south of NE 116th Street	No
17	High Frequency Bus Stop	Avondale Road NE & NE 85th Place	Avondale Road NE	Intersection	Avondale Road NE & NE 85th Place	No
18	High Frequency Bus Stop	Avondale Way NE & 170th Place NE	Avondale Way NE	Midblock	Avondale Way NE between NE 79th Street & NE Union Hill Road, approximately 250 ft east of NE 79th Street	No
19	High Frequency Bus Stop	Future Transit Stop - Route 269	NE 70th Street	Midblock	NE 70th Street between 176th Avenue NE & Redmond Way, approximately 335 ft east of 176th Avenue NE	No
20	High Frequency Bus Stop	Future Transit Stop - Route 269	NE 70th Street	Intersection	NE 70th Street & 176th Avenue NE	No
21	High Frequency Bus Stop	West Lake Sammamish Parkway NE & Leary Way	West Lake Sammamish Parkway NE	Midblock	West Lake Sammamish Parkway NE between Leary Way & 154th Avenue NE, approximately 350 ft west of Leary Way	No
22	High Frequency Bus Stop	148th Avenue NE & NE Redmond Way	148th Avenue NE	Midblock	148th Avenue NE between Redmond Way & NE 76th Street, approximately 365 ft south of Redmond Way	No
23	High Frequency Bus Stop	NE Redmond Way & 140th Avenue NE	Redmond Way	Intersections	Redmond Way & 139th Avenue NE	No
24	High Frequency Bus Stop	NE Redmond Way & 145th Avenue NE	Redmond Way	Intersection	Redmond Way & 145th Avenue NE	No
25	High Frequency Bus Stop	NE Redmond Way & Willows Road NE	Redmond Way	Midblock	Redmond Way between NE 82nd Street & 150th Court NE, approximately 195 ft east of NE 82nd Street	No
26	High Frequency Bus Stop	NE 90th Street & 151st Avenue NE	NE 90th Street	Midblock	NE 90th Street between 152nd Avenue NE & 151st Avenue NE, approximately 260 ft east of 152nd Avenue NE	No
27	High Frequency Bus Stop	NE 90th Street & 154th Avenue NE	NE 90th Street	Midblock	NE 90th Street between 154th Avenue NE & 152nd Street, approximately 330 ft west of 154th Avenue NE	No
28	High Frequency Bus Stop	148th Avenue NE & NE 61st Way	148th Avenue NE	Intersection	148th Avenue NE & NE 61st Court/NE 61st Way	No
29	High Frequency Bus Stop	148th Avenue NE & NE 66th Street	148th Avenue NE	Intersection	148th Avenue NE & NE 66th Street	No
30	High Frequency Bus Stop	NE Old Redmond Road & 147th Court NE	Old Redmond Road & 147th Court NE	Intersection	Old Redmond Road & 147th Court NE	No
31	High Frequency Bus Stop	NE Old Redmond Road & 137th Avenue NE	Old Redmond Road & 147th Court NE	Midblock	Old Redmond Road between 137th Avenue NE & 138th Avenue NE, approximately 100 ft east of 137th Avenue NE	Yes
32	High Frequency Bus Stop	NE 51st Street & 154th Avenue NE	NE 51st Street Court NE	Intersection	NE 51st Street & 154th Avenue NE/154th Place NE	No
33	High Frequency Bus Stop	148th Avenue NE & NE 40th Street	148th Avenue NE	Midblock	148th Avenue NE between NE 40th Street & NE 51st Street, approximately 380 ft north of NE 40th Street	No
34	High Frequency Bus Stop	NE 65th Street & 185th Avenue NE	185th Avenue NE	Intersection	185th Avenue NE & NE 65th Street	No
35	High Frequency Bus Stop	185th Avenue NE & NE 68th Street	185th Avenue NE	Midblock	185th Avenue NE between NE 68th Street & NE 67th Court, approximately 230 ft south of NE 68th Street	No
36	High Frequency Bus Stop	152nd Avenue between NE 20th Street and NE 24th Street	152nd Avenue NE	Midblock	152nd Avenue between NE 20th Street and NE 24th Street	No
37	High Frequency Bus Stop	Bear Creek Parkway & 168th Avenue NE	Bear Creek Parkway	Intersection	Bear Creek Parkway & 168th Avenue NE	Yes
38	High Frequency Bus Stop	151st Avenue NE & NE 90th Street	151st Avenue NE	Intersection	151st Avenue NE & NE 90th Street	Yes
38	Other	NE 104th St & 179st Ave NE	NE 104th St	Intersection	NE 104th St & 179st Ave NE	Yes

Strategy 2 supports the following Redmond 2050 policies:

- **TR-14**: Prioritize transportation investments that reduce household transportation costs, such as investments in transit, bicycle and pedestrian system access, capacity, and safety.

Recommended Actions

Action 2A	Construct low-stress pedestrian crossings, beginning with the highest priority locations. (Public Works)
Action 2B	Develop a process for continuing to identify and implement additional low-stress pedestrian crossings based on need as Redmond's transportation network continues to develop. (Planning, Public Works)

Strategy 3: Improve guidance on crosswalk design and develop a process for determining appropriate crossing treatments

As discussed in Strategy 2, low-stress pedestrian crossings are needed at many locations citywide, with 30 locations identified and prioritized in Table 5 above. Standardizing low-stress crosswalk design and processes would advance implementation of these low-stress pedestrian crossings. Design strategies to achieve low-stress crossings include shortening the crossing distance with curb extensions or crossing islands, reducing the speed of approaching vehicles with speed humps or raised crossings, and increasing visibility and awareness using active warning devices. In addition, signalized intersections can achieve safer and more comfortable pedestrian crossings by implementing automatic pedestrian signal phases (as opposed to push buttons), leading pedestrian intervals, shorter traffic signal cycles (to reduce pedestrian wait times), right- and left-turn restrictions at certain locations, no turn on red and pedestrian scrambles, where appropriate and applicable. Ensuring sufficient lighting at crossings also helps to ensure low-stress crossings at night. These strategies are consistent with the guidance described in Redmond's Safer Streets Action Plan.

Redmond can also achieve safer pedestrian crossing behaviors through awareness and education. For example, in partnership with the City's SchoolPool Program, proper crossing awareness strategies can be made available to families that take part in the program and can be distributed more broadly to families of school-age children in Redmond.

Strategy 3 supports the following Redmond 2050 policies:

- **TR-16**: Prioritize the comfort, safety, and convenience of people using pedestrian and bicycle facilities over other users of the transportation system. Establish standards for bicycle and pedestrian facilities to attract users of all ages and abilities. Prioritize improvements that address safety concerns, connect to centers or transit, create safe routes to school, and improve independent mobility for those who rely disproportionately on the pedestrian and bicycle network.

Recommended Actions

Action 3A	Establish a citywide standardized process or adopt existing guidance such as the FHWA STEP Guide to determine appropriate pedestrian crossing treatments based on street characteristics, including number of vehicle lanes, speed, and contextual factors. (Public Works)
Action 3B	Include safe crossing behavior guidance as part of the city's SchoolPool program materials and general community safety messaging. (Planning, Communications)

Strategy 4: Identify and prioritize locations for new or improved neighborhood connections outside of Urban Centers

As shown in Figure 2 above, Redmond's pedestrian network includes many off-street pathways that provide neighborhood connections for pedestrians and bicyclists. The City's Streets Division maintains many of these neighborhood connections, or Special Purpose Pathways, while others are maintained by Homeowners Associations or other entities. The City should work to continually evaluate and maintain existing connections to ensure they meet accessibility standards and provide a comfortable experience. Figure 7 shows planned new street and neighborhood connections that would enhance pedestrian network connectivity. These connections will be implemented with future development or as capital projects and should be built according to the City's shared use path standard. Appendix G includes a list of these connections along with maps showing a closer up view.

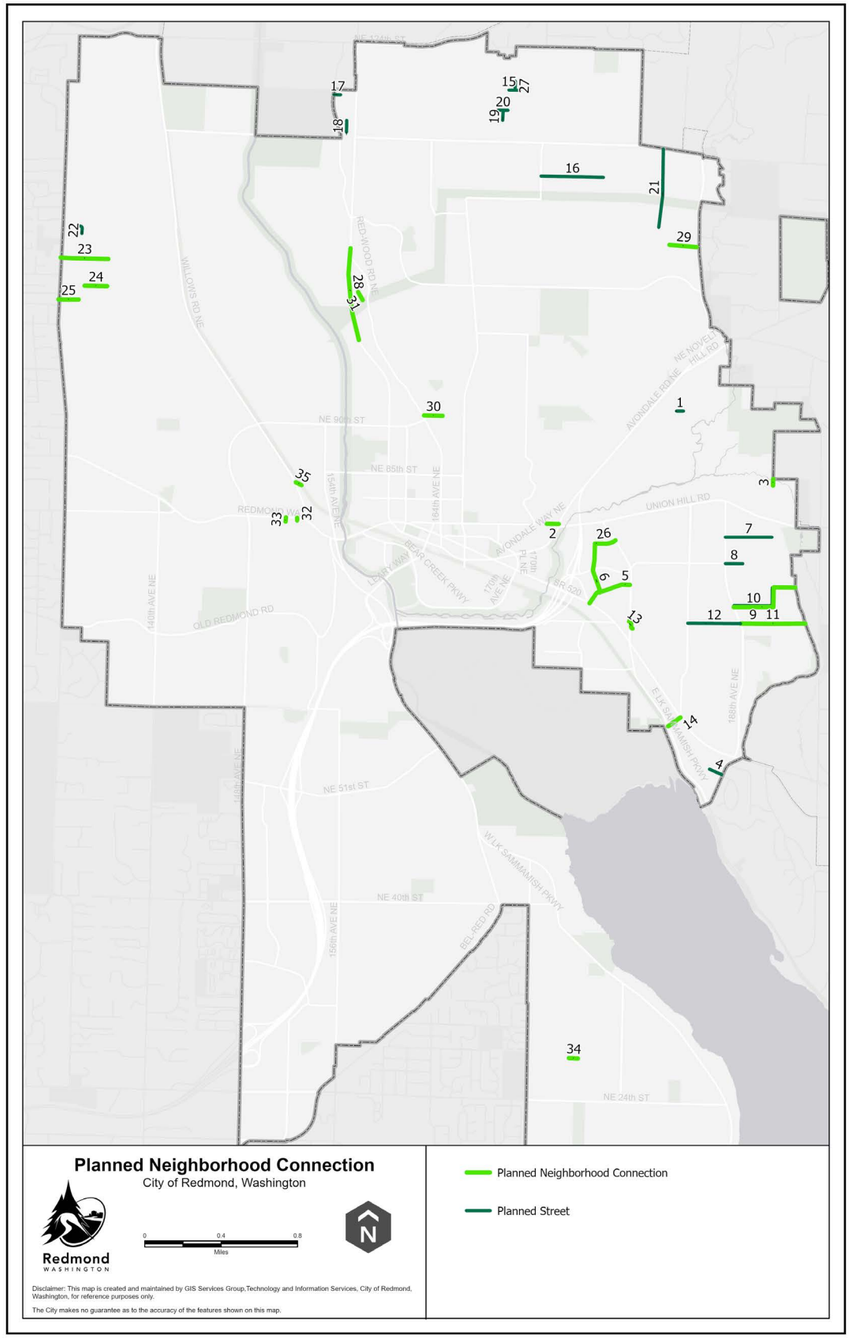
Strategy 4 supports the following Redmond 2050 policies:

- **TR-14**: Prioritize transportation investments that reduce household transportation costs, such as investments in transit, bicycle and pedestrian system access, capacity, and safety.

Recommended Actions

Action 4A	Evaluate all off-street neighborhood connections for safety, accessibility, and comfort, tracking any accessibility barriers as well as steep topography, overgrown vegetation, poor lighting, or other challenges to mobility. (Public Works, Planning)
Action 4B	Maintain existing off-street neighborhood connections to meet and exceed ADA standards. (Public Works)
Action 4C	Identify locations where additional neighborhood connections would enhance connectivity. (Planning)

FIGURE 7 | PLANNED NEIGHBORHOOD CONNECTIONS



Strategy 5: Identify and prioritize locations for implementing sidewalk alternatives outside of Urban Centers

The City aims to provide safe and comfortable pedestrian facilities on all streets in Redmond, through conventional sidewalks (i.e., elevated above street grade with curb) or through sidewalk alternatives. As shown in Figure 5 above, there are sidewalk gaps throughout Redmond, which present barriers to comfortable pedestrian travel. Less than 10% of Redmond arterials have segments where there are no sidewalk facilities on either side of the street. More missing sidewalks in Redmond are on non-arterial streets. While some sidewalk gaps will be filled through required frontage improvements for new development others will need to be addressed through City-led capital projects. However, filling all sidewalk gaps with conventional sidewalks (curb with sidewalk elevated above street grade) will require significant amounts of funding. Furthermore, many of the streets that lack sidewalks have environmental constraints (shoreline, wetland, steep slopes) or have narrow public rights-of-way that would require property acquisition to construct a sidewalk.

The City will evaluate lower-cost alternative sidewalk strategies on a case-by-case basis where conventional sidewalks may not be feasible to install in a timely and cost-effective manner. Sidewalk alternatives could include barrier-separated walkways, shared street or potentially other design solutions. Redmond's focus on lowering vehicle speeds will also contribute to more comfortable and safer walking environments. There is precedent for sidewalk alternatives in Redmond. Redmond land use code has allowed for non-standard concrete curb and gutter in specific locations and land use scenarios. Appendix F offers decision and design guidance for sidewalk alternatives.

Strategy 5 supports the following Redmond 2050 policies:

- **TR-14:** Prioritize transportation investments that reduce household transportation costs, such as investments in transit, bicycle and pedestrian system access, capacity, and safety.

Recommended Actions

Action 5A	Develop and adopt a sidewalk alternative decision process and design guidance that considers vehicle speed, vehicle volume, roadway classification, land uses, environmental goals and constraints, and other factors. Couple this effort with development of a traffic calming toolkit and potentially a dedicated program that would fund and implement lower-cost safety improvements. (Public Works, Planning)

Strategy 6: Establish a consistent approach to reinforcing Pedestrian Priority Zones through street design and operations

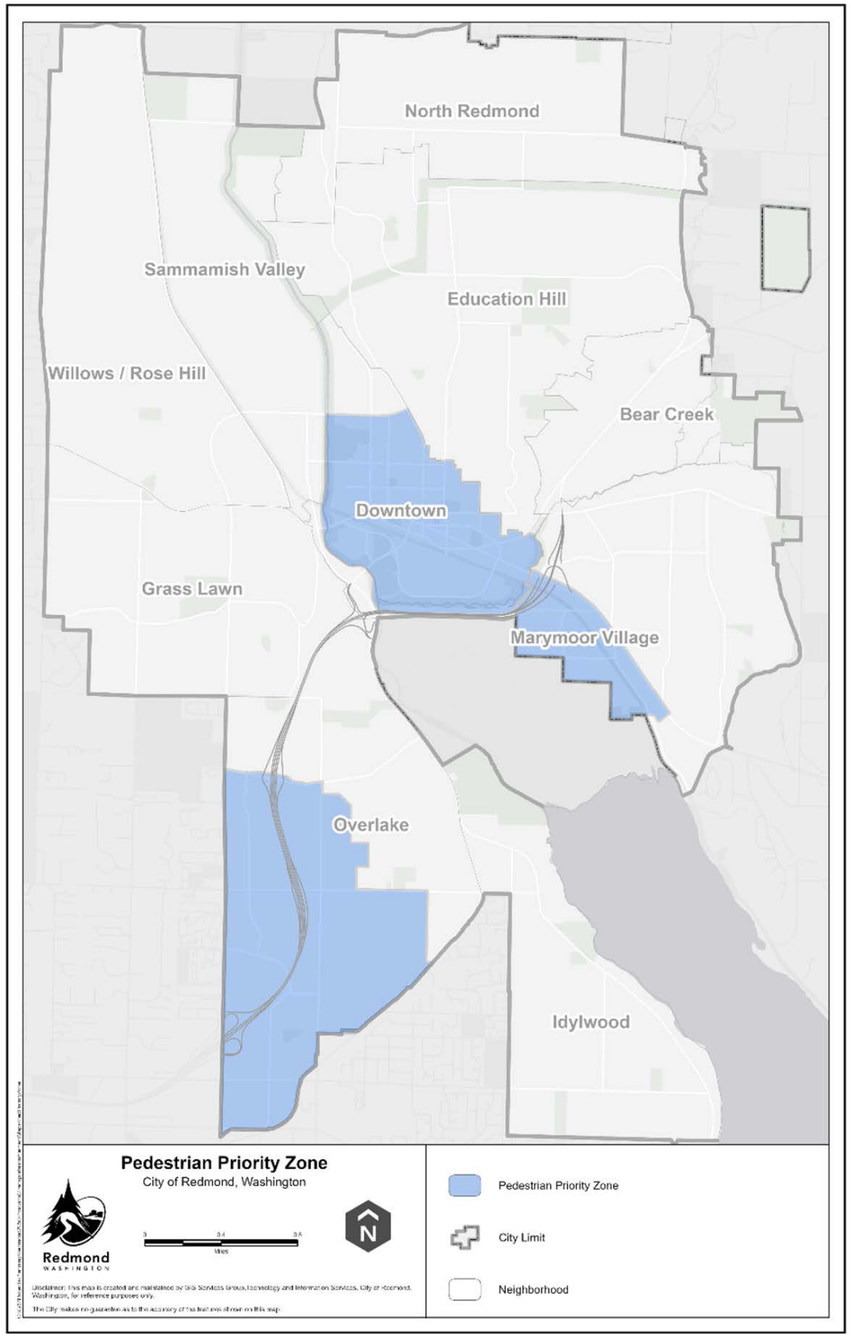
Pedestrian Priority Zones are intended to provide vibrant streetscapes and quality pedestrian environments that support high levels of pedestrian activity and economic vitality. These zones are designed to enhance pedestrian comfort and safety through targeted infrastructure improvements, pedestrian-prioritized traffic operation, and amenities that add interest. By prioritizing foot traffic, Pedestrian Priority Zones support Vision Zero goals and foster equitable access to urban spaces.

Designated Pedestrian Priority Zones overlap with Redmond's three Urban Centers: Downtown, Overlake, and Marymoor Village. While Pedestrian Priority Zones have been designated at least since 2013, and many improvements have been made to create inviting and safe pedestrian-oriented streets within Urban Centers, there is a need to better define street design and operational strategies that should be consistently deployed to achieve the intended purpose of Pedestrian Priority Zones. The Pedestrian Priority Zones are intended to prioritize a comfortable pedestrian experience through street design and operational strategies, including the following:

- **Street design strategies:** traffic calming measures such as narrower streets, raised crossings, landscaping, and pedestrian-scale lighting.
- **Operational strategies:** automatic pedestrian signal phases (as opposed to push buttons), leading pedestrian intervals, shorter traffic signal cycles (to reduce pedestrian wait times), right- and left-turn restrictions at certain locations, no turn on red and pedestrian scrambles (where appropriate and applicable).

These street design and operational strategies are impactful in terms of creating an environment in which it is evident to all users that pedestrian mobility is prioritized over all other modes of travel. Prioritizing pedestrian mobility and safety aligns closely with the goals and recommendations outlined in the Safer Streets Action Plan, ensuring that the pedestrian network evolves to meet safety and accessibility objectives citywide.

FIGURE 8 | REDMOND PEDESTRIAN PRIORITY ZONES



Strategy 6 supports the following Redmond 2050 policies:

- **TR-11**: Use signage and other wayfinding techniques that meet regulatory requirements while reaching those with limited English proficiency or limited sight, especially near transit stations and stops.

Recommended Actions

Action 6A	Add signage consistent with the Downtown Pedestrian Priority Zone to denote the boundaries of the Overlake Pedestrian Priority Zone and Marymoor Pedestrian Priority Zone. (Public Works)
Action 6B	Consistent with recommendations in the Safer Streets Action Plan, develop a list of recommended operational and street design strategies that prioritize pedestrian mobility within Pedestrian Priority Zones. Operational strategies would include but are not limited to automatic pedestrian signal phases (as opposed to push buttons), leading pedestrian intervals, shorter traffic signal cycles (to reduce pedestrian wait times), right- and left-turn restrictions at certain locations, no turn on red, and pedestrian scrambles, where appropriate and applicable. Street design strategies would include but are not limited to raised crosswalks/intersections, curb extensions, narrowed streets, and other traffic calming measures. (Planning, Public Works)
Action 6C	Explore opportunities for increased frequency of temporary street closures in Redmond's centers for open street festivals and other events that highlight pedestrian priority. (Planning, Public Works)
Action 6D	Consistent with recommendations in the Safer Streets Action Plan, consider implementing a High Visibility Enforcement program within all three Pedestrian Zones to focus on education of the requirements for drivers to yield to pedestrians in crosswalks. (Police, Communications)

Strategy 7: Develop a Right-of-Way ADA Transition Plan

The City of Redmond is committed to creating a fully accessible transportation system. An ADA Transition Plan will serve as a strategic framework to identify, prioritize, and implement upgrades across the City's pedestrian network, including sidewalks, curb ramps, and signals. This plan will ensure compliance with Americans with Disabilities Act standards.

The development of the Right-of-Way ADA Transition Plan will be led by the Public Works Department and will focus on the following efforts:

- **Conducting Field Assessments:** Evaluating existing pedestrian infrastructure related to curb ramps, sidewalks, and signal pushbuttons to evaluate data accuracy for transition plan.
- **Prioritizing Upgrades:** Identifying a prioritization strategy that includes focus on areas with high pedestrian traffic, proximity to transit, schools, and public facilities.
- **Securing Funding:** Pursuing local, state, and federal funding opportunities to support the replacement of non-compliant ramps, sidewalks and signal pushbuttons.
- **Establishing a Phased Implementation Plan:** Developing a timeline for upgrades, with a focus on addressing the highest priority needs first and achieving compliance over time.
- **Engaging Stakeholders:** Consulting with individuals with disabilities, advocacy groups, and the broader community to ensure the plan reflects diverse needs and priorities.

The ADA Transition Plan will be a key step in addressing accessibility challenges across Redmond's pedestrian network. By committing to this effort, the City is taking proactive steps to meet ADA standards and ensure that all residents, regardless of ability, have safe and equitable access to Redmond's transportation network.

Strategy 7 supports the following Redmond 2050 policies:

- **TR-15:** Adopt and implement a plan for active and accessible transportation and an ADA Transition Plan as part of the Transportation Master Plan that results in connected neighborhoods with safe, comfortable, and convenient access to opportunity in Redmond and the region.
- **TR-17:** Ensure that all sidewalks and curb ramps are accessible to all people, including those with disabilities.

Recommended Actions

Action 7A	Develop an ADA Transition Plan for the City of Redmond's public right-of-way. (Public Works, Planning)
Action 7B	Develop performance measures and processes to track the removal of accessibility barriers based on recommendations in the ADA Transition Plan. (Public Works, Planning)

Strategy 8: Upgrade pedestrian lighting with a focus on areas with high pedestrian activity

Pedestrian lighting is an important component of the overall comfort and safety of a sidewalk or other walking facilities. In 2019, the City of Redmond began evaluating elementary school walking routes in need of street lighting upgrades. The city identified seven elementary schools that were in need of lighting upgrades along frequent walking routes:

1. **John James Audubon Elementary**
2. **Clara Barton Elementary**
3. **Albert Einstein Elementary**
4. **Horace Mann Elementary**
5. **Redmond Elementary**
6. **Norman Rockwell Elementary**
7. **Benjamin Rush Elementary**

To maintain safe walking routes, the City began upgrading high-pressure sodium (HPS) streetlights to light-emitting diode (LED) streetlights in the vicinities of the schools. The upgrade process began in 2021, and as of 2025, upgrades are complete at Redmond Elementary School and slated to be completed in the near-term at Norman Rockwell Elementary School. The City plans to continue to work to upgrade the street lighting around these elementary schools and other middle and high schools citywide.

In addition to school walking routes, other areas of high pedestrian activity should be prioritized for lighting upgrades, including near high-frequency transit stops,parks, and potentially along some shared use paths and neighborhood connections.

Strategy 8 supports the following Redmond 2050 policies:

- **TR-10:** Implement transportation programs, projects, and services that support the independent mobility of those who cannot or choose not to drive.

Recommended Actions

Action 8A	Fund the Street Lighting Program at a higher level and seek grant funding to accelerate the upgrading of streetlights to LED. (Public Works, Planning)
Action 8B	Complete the upgrading of HPS streetlights to LED streetlights along all school walking routes in Redmond. (Public Works)
Action 8C	Establish a prioritization process for pedestrian lighting upgrades citywide that includes frequent transit routes, parks, and other destinations that generate pedestrian activity. (Public Works, Planning)
Action 8D	Evaluate the provision of lighting on shared use paths and neighborhood connections utilizing best practices to reduce skyglow and environmental impacts. (Planning, Public Works)

Strategy 9: Ensure safe and accessible pedestrian travel through construction areas

Redmond's growth has resulted in high levels of construction activity particularly in its urban centers where walking is intended to be a primary mode of travel. Often construction activities impact pedestrian accessibility by closing sidewalks or pathways. The City is making changes to better ensure the provision of accessible pedestrian routes through construction areas. For example, the City's recently adopted fee structure for Right of Way Use permitting incentivizes developers to minimize their impacts on the public right-of-way.

Detailed traffic control plans that include consideration for pedestrian accommodations such as accessible detours, protected pathways, and temporary crosswalks are required of all development. These plans must be reviewed and approved before work begins. Redmond's inspection and compliance processes play a critical role in ensuring that contractors adhere to approved plans. City inspectors monitor construction sites to ensure safety standards are met, including verifying the placement of temporary infrastructure like detour routes, signage, lighting, and safe crossings. Redmond can leverage GIS platforms and digital tools to provide real-time updates to residents, improving communication.

Strategy 9 supports the following Redmond 2050 policies:

- **TR-17:** Ensure that all sidewalks and curb ramps are accessible to all people, including those with disabilities.

Recommended Actions

Action 9A	Improve processes to ensure accessible pedestrian routes are provided with all construction projects. (Public Works) • Develop standards and requirements for accessible pedestrian detour routes for all construction projects within or impacting the public right of way and train inspectors on requirements. Requirements should be based on Manual for Uniform Traffic Control Devices (MUTCD), Public Right of Way Accessibility Guidelines (PROWAG), other available best practice guidance, and any specific requirements developed by the City of Redmond. • Modify existing approval conditions to clarify that pedestrian detour routes must be provided on the side of the street on which the development project is occurring during all stages of development unless it is documented to be infeasible or unsafe. • Ensure real-time information is pushed out to the Redmond community regarding any closures that impact the pedestrian system. Ensure pedestrian infrastructure is fully restored following the completion of construction and that facilities are ADA-compliant.

Strategy 10: Improve consistency in pedestrian wayfinding signage

Clear and consistent wayfinding helps people navigate the transportation system. For people walking and biking, wayfinding can be especially helpful for understanding the best routes for getting to key destinations such parks, schools, transit, and shopping. As such, wayfinding can be an effective tool for encouraging active travel. Redmond's wayfinding network guidelines have not been updated since the Redmond Bicycle Wayfinding Design Manual was developed in 2015. Prior to this, the Downtown Redmond Wayfinding Manual and Overlake Wayfinding Design Manual were developed in 2006 and 2009, respectively. Redmond includes a variety of different wayfinding signage that can be inconsistent, as shown in Figure 8 below. The City should work to adjust signage for consistency and clarity throughout parks, facilities, and the public right-of-way. The Redmond Parks & Recreation Department will begin a parks and facilities wayfinding signage analysis and update in 2025. The pedestrian network wayfinding signage should maintain consistency in look, design, and functionality with signage at Redmond Parks and Recreation while providing an intuitive signage network for those using pedestrian facilities citywide. To the extent possible, Redmond's wayfinding network should intuitively merge with the signage used by neighboring jurisdictions and King County. A unified wayfinding approach will improve clarity and create a more intuitive experience for residents and visitors navigating the broader Eastside network.

FIGURE 8 | WAYFINDING SIGNAGE IN REDMOND

Strategy 10 supports the following Redmond 2050 policies:

- **TR-17:** Supports Redmond 2050 TR-11: Use signage and other wayfinding techniques that meet regulatory requirements while reaching those with limited English proficiency or limited sight, especially near transit stations and stops.

Recommended Actions

Action 10A	Based on results of citywide wayfinding effort, undergo a citywide pedestrian wayfinding signage update focusing on clarity and modernization and prioritizing key destinations including all four Redmond light rail stations. (Parks, Planning)
Action 10B	Seek to promote consistency in wayfinding design and functionality across jurisdictional boundaries through coordination with regional partners such as King County, neighboring Eastside cities, and regional transit agencies.

BICYCLE PLAN

Transportation Master Plan

INTRODUCTION

Bicycling (and the use of other micromobility devices) will play a key role in creating a more sustainable, equitable, and livable Redmond. The bicycle provides a level of efficiency, affordability, accessibility, and freedom of movement unmatched by other forms of transportation while integrating easily with transit systems. Advancements in electric bike (e-bike) technology, affordability, and accessibility stand to further increase the importance of biking. The keys to unlocking the potential of bicycling in Redmond is to provide a bike network that most people feel safe using and conveniently connects people to where they need to go, and providing secure and convenient bike parking at destinations. By doing so, Redmond can encourage more people to bike more often while driving less.

What is Micromobility?

Micromobility refers to a range of small, lightweight devices operating at speeds typically below 15 mph. Micromobility includes both human-powered and electric scooters, bicycles, skateboards, one-wheels, hoverboards, cargo bikes, trikes and other similar devices. These devices offer flexible mobility and can provide efficient first-last mile connections to transit, and thus are an important component of Redmond's transportation system. In Redmond, micromobility devices are generally expected to operate within bikeways and trails, and not on sidewalks. While this section largely discusses bicycles, all network strategies pertain equally to micromobility.

HOW BICYCLING SUPPORTS REDMOND 2050 GUIDING PRINCIPLES

Equity and Inclusion

The Bicycle Network Strategy presented in this section will allow people of all ages and abilities to get from anywhere to everywhere by bicycle, or other micromobility device, safely, directly, and comfortably. In doing so, all Redmond community members will have an affordable, efficient, and healthy transportation option that complements other sustainable travel modes such as walking and transit.

Sustainability and Resilience

Redmond 2050 sets goals of a 50% reduction in per capita vehicle miles traveled (VMT)[1] and 71% reduction in transportation sector greenhouse gasses (GHG)[2] by 2050. The Redmond Environmental Sustainability Action Plan (2020) identifies intermediate targets to help move toward the 2050 goals. Namely, reducing GHG transportation emissions 50% by 2030 and reducing single-occupancy vehicle trips by 30% by 2025. Shifting trips from driving to biking can help Redmond achieve these goals and is a key objective of Redmond's Bicycle Strategy. Promoting new technologies such as the e-bike will create opportunities for increased mode shift away from motor vehicles (both internal combustion and electric). In addition to reducing VMT and GHG emissions, shifting more trips to active travel and public transportation will offer other benefits like reduced congestion, more community space, improved air quality, and improved public health.

[1] From 2017 levels.
[2] From 2011 levels.

FIGURE 1 | MICROMOBILIY SUCH AS E-SCOOTERS ARE A FLEXIBLE TRAVEL OPTION SUPPORTED BY THE BIKEWAY NETWORK.

Image Credit: City of Redmond

Goals and Performance Measures

Shifting vehicle trips to bicycling and micromobility is one component of a larger strategy to reduce vehicle miles traveled, particularly single occupancy vehicle trips. To shift trips from driving to biking, Redmond must expand and enhance its bikeway network and make biking an attractive choice, especially for short trips. The following outcome goals and related performance measures will be used to track and evaluate Redmond's implementation of this Bicycle Strategy, especially the development and expansion of the bikeway network.

Outcome Goal	Measures
Bicycle and micromobility mode share at 15% of all trips in urban centers by 2035	Bicycle and Micromobility mode share in Downtown Bicycle and Micromobility mode share in Overlake Bicycle and Micromobility mode share in Marymoor Village
Bicycle and micromobility mode share at 5% of all trips within city of Redmond by 2035	Bicycle mode share city wide for all trips
Connect all key destinations within the City with low stress bikeways by making consistent progress toward bicycle network completion by 2035	Network completion is expressed as the percent of planned bicycle network complete, including measures for spine network, local network, and total network completion.

BICYCLING IN REDMOND TODAY

Estimates from the 2022 American Community Study and Move Redmond's recent surveys of Redmond employees, suggest that only 2% of work trips are by bicycle. Researchers and practitioners have categorized people based on their confidence interacting with motor vehicle traffic while biking. While the percentage varies by community, a national survey found that about 5 out of every 10 adults in major urban areas, labeled as "Interested but Concerned" riders, would like to ride a bicycle but do not currently do so, primarily due to concerns about traffic safety.[4]

The 2024 Bicycle Friendly Community Public Survey[5] received over 300 responses from Redmond community members about their experiences using Redmond's bicycle network. Of the survey responders, approximately 70% ride a bike in Redmond. Survey respondents use bicycle travel for varying purposes in Redmond, with approximately 35% primarily taking transportation or utilitarian trips (commuting, running errands, etc.), approximately 30% primarily riding a bicycle for recreation or leisure, and approximately 25% primarily riding a bicycle for exercise or fitness.

The City of Redmond's focus for the development of the bicycle network is serving people of all ages and abilities, which means building bikeways that are comfortable for the Interested but Concerned population. This strategy will encourage more bicycle trips, which will advance the City's goals around VMT and GHG reduction, while creating a more equitable transportation system that provides affordable and healthy travel options.

[4] Dill, J, and Nathan McNeil, 2016, Revisiting the Four Types of Cyclists: Findings from a National Survey, Transportation Research Record: Journal of the Transportation Research Board, 2587, Retrieved from https://journals.sagepub.com/doi/10.3141/2587-11

[5] League of American Bicyclists 2024 Bicycle Friendly Community Public Survey

Existing Bike Network

Bicycle facility types in Redmond include:

- **Bicycle boulevard:** Streets with low vehicle traffic volumes and speeds, designed to give bicyclists priority by using signs, pavement markings, traffic calming, and improved crossings of arterial streets. They are also referred to as neighborhood greenways, slow streets, or bicycle priority streets.
- **Bike lane:** A portion of the street that has been designated for preferential or exclusive use by bicycles by pavement markings and, if used, signs .
- **Buffered bike lane:** A bike lane with pavement markings delineating a buff er space between the bike lane and adjacent motor vehicle lane or parking lane. The buff er may include vertical elements (flexible posts, precast curbs, etc.) placed in the buff er space at regular intervals.
- **Separated bike lane:** A bicycle facility physically separated from vehicle traffic and distinct from the sidewalk. The physical separation includes a designed vertical element between the motor vehicle traffic and the bikeway; these vertical elements may include curb (i.e. the curb of a sidewalk or intermediate-level bike lane), concrete buff er curbs, parking, or other elements that provide similar levels of protection.
- **Shared lane:** A lane where vehicles and bicycles share operating space.
- **Shared use path:** A facility used by pedestrians, bicyclists, and other modes of active transportation in an exclusive right of way with minimal crossflow by motor vehicles.
- **Sidepath:** A facility used by pedestrians, bicyclists, and other modes of active transportation that is physically separated from vehicle traffic on a parallel street and is within the street right-of-way.

More information on bicycle facility design and characteristics can be found in the City of Redmond's Bicycle Facility Design Manual.

The existing bicycle network is comprised of 98.8 miles of bikeways[6] of varying condition and suitability for people of all ages and abilities. This includes:

- 73.5 miles of bicycle lanes (includes buffered bike lanes)
- 2.5 miles of separated bicycle lanes
- 4.2 miles of shared lanes/bicycle boulevard
- 15.2 miles of paved shared use pathways

In addition to the formal bike network, other streets in Redmond can serve people biking. At low volumes and speeds of traffic, many people feel safe and comfortable sharing the street with traffic or crossing the street in unmarked crossings. As traffic speed and volumes increase, their perception of safety degrades significantly, resulting in a feeling of increased stress and discomfort.

[6] Includes funded bikeways to be constructed by 2027, including NE 40th St and 156th Ave NE shared use paths.

Progress Made

Redmond has made notable progress in implementing important bikeway network connections over the past decade through both its capital investment program and requirements for new development. These investments include two new bridges over SR 520 at the Redmond Technology Center and Overlake Village light stations, substantial completion of the Redmond Central Connector, the striping of miles of bike lanes, and bringing e-bike/scooter share to the city. These accomplishments and others contribute to Redmond being the "Bicycle Capital of Washington", but there is much more work that needs to be done to honestly be able to claim that title. The work that needs to be done is the focus of this section.

Level of Traffic Stress

Redmond's existing bikeways were assessed to determine their relative level of comfort using a bicycle Level of Traffic Stress (LTS) analysis, which factors vehicle speeds, vehicle volumes and the degree to which bicyclists are separated from vehicle traffic.[7] Higher vehicle speeds and volumes and less separation between bicyclists and vehicles results in stress and discomfort for bicyclists and according to research and feedback received from the Redmond community. Figure 3 shows the LTS of Redmond's existing bicycle network.

The results of the LTS analysis based on 2024 conditions show that 79% of the existing bicycle network is high stress.[8] That means many of the major bicycle connections in Redmond are LTS 3 or 4. Research and real world examples show that LTS 1 and 2 bikeways are what will get a greater proportion of the population to feel comfortable bicycling.

What is Level of Traffic Stress?

The Level of Traffic Stress (LTS) analysis, based on a methodology developed by Mekuria, Furth, and Nixon (2012), is a system that rates road segments or crossings based on the level of stress they place on bicyclists, ranging from LTS 1 (minimal stress) to LTS 4 (high stress). LTS 1 and 2 are considered suitable for most bicyclists, including children and Interested but Concerned riders, as they involve minimal interaction with traffic. LTS 3 and 4 are for more confident bicyclists, with LTS 4 being the most stressful, requiring high levels of skill and tolerance for high-speed traffic. The overall LTS for a route is determined by the highest stress level encountered along the route's segments.

The updated Redmond Bicycle Facility Design Manual (2023) designates the "Interested but Concerned" bicyclist as the design user. Recent bikeway network investments reflect the City's focus on building out a low-stress network, including separated bicycle lanes recently constructed on 156th Avenue NE and 152nd St Avenue NE, the protected intersection at 152nd Avenue and NE 24th Street, shared use path on NE 40th St, and the pedestrian and bicycle bridge connections to the Overlake Village Light Rail Station and the Redmond Technology Light Rail Station.

[7] Mekuria, Maaza C. , Peter G. Furth, and Hilary Nixon. 2012. "LOW-STRESS BICYCLING and NETWORK CONNECTIVITY." Https://Transweb.sjsu.edu/Sites/Default/Files/1005-Low-Stress-Bicycling-Network-Connectivity.pdf. Mineta Transportation Institute. May 2012.

[8] Includes funded bikeways to be constructed by 2027.

FIGURE 2 | SEPARATED BIKE LANES LIKE THIS ONE ON 156TH AVE NE PROVIDE A HIGHER LEVEL OF COMFORT AND SAFETY AND ATTRACT BICYCLISTS OF ALL AGES AND ABILITIES.

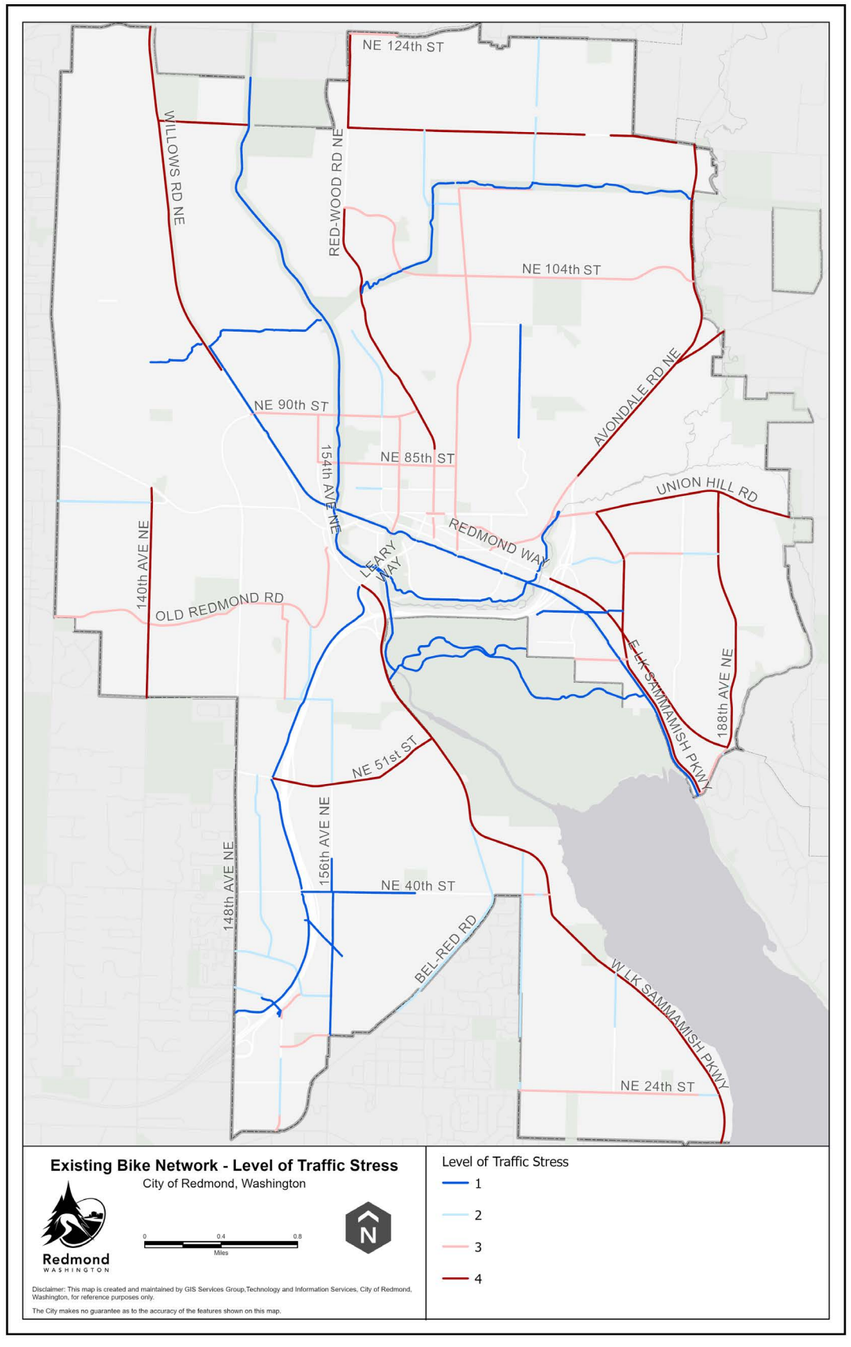
Image Credit: City of Redmond

OPPORTUNITIES FOR SHIFTING TRIPS FROM VEHICLES TO BICYCLES AND MICROMOBILITY

Converting short motor vehicle trips of less than 2 miles to bicycling and micromobility offers a significant opportunity to reduce Vehicle Miles Traveled (VMT) and greenhouse gas (GHG) emissions.

In Redmond, areas with high numbers of short motor vehicle trips have been identified as key locations for targeted policies and infrastructure improvements that can encourage a shift from motor vehicle trips to more sustainable modes of transportation such as bicycling, micromobility, walking, and transit. The data suggests that Downtown Redmond, Overlake, and Southeast Redmond are the primary destinations for short motor vehicle trips under 2 miles. These areas, and routes connecting to these areas, are ripe for improved bicycle connections to facilitate access to the new light rail stations and other destinations and reduce reliance on motor vehicles.

FIGURE 3 | EXISTING BIKE NETWORK LEVEL OF TRAFFIC STRESS.



ENCOURAGING MORE PEOPLE TO BICYCLE

When people are faced with the choice of whether to bike or take another mode of transportation for a trip, research suggests that there are several major categories of reasons that influence people's choice. These reasons may include:

- Physical ability
- Seeing people biking
- Understanding benefits
- Automobile ownership
- Weather
- Topography
- Trip length
- Bicycle ownership or presence of bikeshare
- Traffic stress along the entire route
- Crashes
- Personal skill level
- Personal security
- Theft
- Access to transit

The relative weight between the above factors will vary by a person's individual needs and abilities. However, the aforementioned research indicates that the Interested but Concerned population (about half of all people) cite **traffic safety concerns as the main barrier to bicycling more**, and cite low-stress infrastructure (LTS 1 or 2) as the types of bikeways they feel comfortable using. This indicates that to increase bicycle mode share among the largest group of potential bicyclists, people need access to safer, lower-stress bicycling facilities.

Peer City Focus: Palo Alto, CA

The City of Palo Alto is similar to Redmond in terms of demographics, size and having an abundance of tech companies. Palo Alto is a Gold Bicycle Friendly Community and is currently updating its Bicycle and Pedestrian Transportation Plan (BPTP) to be completed in 2025.

Many of Palo Alto's proposed BPTP Update programs align with Redmond's TMP strategies and actions, including: developing a wayfinding plan, conducting an inventory of bike parking and monitoring bike parking usage, and implementing a proactive speed management program to lower speed limits and design speeds on streets within the city's bike network. Additionally, Palo Alto continues to focus on building high-comfort bikeways, especially as first/last mile connections to rapid transit at Caltrain stations. Palo Alto's Traffic Calming Program identifies speed management and multimodal safety measures that can be implemented quickly, and the City is prioritizing the addition of staff to this program who can focus on administering quick-build efforts.

The 2024 Bicycle Friendly Community Public Survey asked respondents what their top priorities would be to make Redmond a better community for bicyclists. Three key themes emerged: providing more bicycle lanes and bicycle paths, improving existing bicycle lanes to add protection for cyclists, and reducing vehicle speeds. Of the approximately 300 responses, 234 listed additional bike paths or bike lanes as a high priority, 179 listed improving existing bike lane protection, and 77 listed reducing vehicle speeds or providing traffic calming options. This data enforces that increasing bike lane milage and bike lane protection (e.g., making bike lanes more comfortable/less stressful) are high priorities for community members.

[9] Schneider, Robert J. "Theory of Routine Mode Choice Decisions: An Operational Framework to Increase Sustainable Transportation." Transport Policy, vol. 25, 2013, pp. 128–137., doi:10.1016/j.tranpol.2012.10.007.

[10] Sanders, Rebecca L., and Belinda Judelman. "Perceived Safety and Separated Bike Lanes in the Midwest: Results from a Roadway Design Survey in Michigan." Transportation Research Record: Journal of the Transportation Research Board, vol. 2672, no. 36, 2018, pp. 1–11., doi:10.1177/0361198118758395.

[11] League of American Bicyclists, 2024 Bicycle Friendly Community Public Survey

STRATEGIC APPROACH TO INCREASING THE NUMBER OF PEOPLE BICYCLING

Cities around the world have achieved their goals to increase the number of bicycling trips (i.e., mode shift) by applying focused strategies to improve bicycle network connectivity and comfort. While some of the examples that are show cased in this section may differ in size or urban form from Redmond, the commonality they all share is they have moved the needle in creating a more connected, high comfort bicycle network or have policies or programs that have increased bicycle ridership. These strategies can be wholly or partially applied in Redmond to significantly increase bicycle ridership.

Strategy 1: Convert Short Trips to Bicycle Trips

For daily weekday trips exclusively within the city, the median trip only lasts five (5) minutes and is 1.4 miles long. Approximately 68% of these trips occur by private automobile, 25% by walking, 1% by bike, and less than 1% by public transit.[12] Focusing on providing bicycle infrastructure to serve trips under approximately 2 miles in length can maximize the mode shift return on investment. Short trips between 0.5 – 2 miles is a distance range where bicycling and micromobility can be the preferred mode of transportation, as they can be faster and more flexible than driving or using public transit and more time competitive than walking. Making biking (and micromobility) the most convenient choice for these short trips will encourage more people to bicycle and maximize the City's return on investment of bicycle infrastructure, reduce vehicle trips, and reduce GHG emissions. Complementary land use policies that support mixed use development and neighborhood siting of educational and care- facilities provides residents access to a variety of nearby destinations that are easier to get to by bicycle. Redmond 2050 embraces this "complete neighborhood concept" and expands mixed-use development opportunities throughout the city.

Short Trip Focus

Austin's 2014 and 2023 Bicycle Plans focused on expanding bicycle facilities on routes with high concentrations of short trips in central Austin as well as to destinations such as schools, parks, business, and shopping districts in neighborhoods throughout the city. Protected bicycle lanes to transit stations and secure bicycle parking at these stations support linking shorter bicycle trips with longer trips on transit. Separated bicycle facilities, urban trails, and "quiet streets" with traffic calming devices for motor vehicles and wayfinding signage for bicyclists are key features of Austin's bicycle infrastructure.

Strategy 1 supports the following Redmond 2050 policies:

- **TR-10:** Implement transportation programs, projects, and services that support the independent mobility of those who cannot or choose not to drive.
- **TR-14:** Prioritize transportation investments that reduce household transportation costs, such as investments in transit, bicycle and pedestrian system access, capacity, and safety.

[12] Replica, Spring 2025.

Recommended Actions

Action 1A	Prioritize bike infrastructure investments in areas where most short trips are occurring (Downtown Redmond, Overlake, and Southeast Redmond) (Planning)
Action 1B	Implement Redmond 2050 land use policies that reduce distances between residences and destinations that serve people's every day needs and support (Planning): • Higher residential densities • Transit-oriented development • Mixed-use development • Reduced parking requirements
Action 1C	Support Transportation Demand Management (See Section 10) and Safe Routes to Schools programs that encourage bicycling and walking, and reduce traffic volumes around schools. [13] (Planning)

FIGURE 4 | BICYCLING AND MICROMOBILITY ARE EASY AND FLEXIBLE WAYS TO ACCESS THE SERVICES AND AMENITIES OFFERED BY MIXED USE DEVELOPMENT

Image Credit: City of Redmond

Bicyclist Safety

Building safe bicycle infrastructure and reducing vehicles speeds are the most effective strategies for making bicycling a safe mode of transportation. Good bikeway design and slower vehicle speeds promote safe interactions between bicyclists, micromobility users, pedestrians, and vehicles. Education does have a role to play in bicycle safety and should be focused on basic bicycle handling skills, understanding laws, e-bikes, and familiarizing people with new bicycle infrastructure such as bicycle signals, bike boxes, separated bike lanes, etc. Section 10 – Transportation Demand Management includes actions that address bicycle safety education (also as means of encouraging bicycling) and the Safer Streets Action Plan also includes an action focused bicycle safety.

Actions 3C in the Bicycle Plan and 5I in the Transportation Demand Management section in the Transportation Master Plan address bicyclist safety education.

Strategy 2: Connect to Light Rail and Bus

Creating low-stress bikeway connections to bus stops and light rail stations is an impactful "first-last mile" strategy to increase access to transit for both local and regional trips.

The new Overlake Village, Redmond Technology, Downtown Redmond, and Marymoor Village light rail stations are fantastic opportunities to connect bicycling with transit. Projected ridership of the East Link extension is 43,000-52,000 daily riders by 2026[14] . Building bicycle facilities that connect with these stations will expand the catchment area of the stations, help form new habits for light rail passengers to reach the station by bicycle and help grow transit ridership. Bicycle facilities that connect stations to destinations such as grocery stores, daycare centers, and schools will allow for trip chaining en route between transit and residences. These facilities are prioritized for implementation as described later in this section.

All Sound Transit and King County Metro buses have bicycle racks on which riders connecting by bicycle can place their bikes to have them transported to their destination. Ensuring that bus stops are accessible by the low-stress bikeway network can encourage bike to bus and bus to bike trips, particularly for more regional bus trips.

Strategy 2 supports the following Redmond 2050 policies:

- **TR-16:** Prioritize the comfort, safety, and convenience of people using pedestrian and bicycle facilities over other users of the transportation system. Establish standards for bicycle and pedestrian facilities to attract users of all ages and abilities. Prioritize improvements that address safety concerns, connect to centers or transit, create safe routes to school, and improve independent mobility for those who rely disproportionately on the pedestrian and bicycle network.

Recommended Actions

Action 2A	Prioritize high-comfort bicycle facilities that connect to light rail and bus stops. (Planning, Public Works)
Action 2B	Provide sufficient secure bicycle parking at transit centers and mobility hubs (see Section 6 - Transit). (Planning)
Action 2C	Ensure consistent availability of bike/scooter share at Transit Centers. (Planning)

[13] "City of Austin Bicycle Plan." 2023. https://www.austintexas.gov/sites/default/files/files/Transportation/Adopted%202023%20Bicycle%20Plan_FULL.pdf.

[14] "Downtown Redmond Link Extension | Project Map and Summary | Sound Transit." Www.soundtransit.org, www.soundtransit.org/system-expansion/downtown-redmond-link-extension.
Kager, Roland. 2022. Review of The Bike+Train Land-Use/Transportation System. Presented at the Planning the Cycling City Summer Course, July 2022.

FIGURE 5 | THE NEW REDMOND TECHNOLOGY STATION BRIDGE CONNECTS BIKEWAYS, TRANSIT, AND EMPLOYMENT CENTERS

Image Credit: City of Redmond

Strategy 3: Promote E-Bikes and E-Scooters

The growing popularity of electric bikes (e-bikes) can be attributed to their ability to overcome challenging terrain and cover longer distances, making them a viable alternative to motor vehicles. The City of Redmond currently has a contract with a vendor that provides e-scooters and e-bikes for rent throughout the city. This service has proven to be very popular, with over 282,000 rides completed since the pilot program began in 2019. The median distance per trip has increased from 0.5 miles in 2020 to 0.9 miles in 2024, proving that Redmond's Shared Micromobility program is a viable first-last mile transportation mode.

Personal e-bike ownership is rapidly growing in the US and is expected to grow more than 15 percent annually between 2023 and 2030[15]. The rate of e-bike adoption (and its impact on greenhouse gas emissions and vehicle miles traveled) depends on the cost of e-bikes, individual choices, and the provision of infrastructure that is safe and comfortable for e-bike users.

[15] U.S. E-bike Market Size, Share & Trends Analysis Report By Propulsion Type, By Drive Type, By Application, By Battery, By End-use (Personal, Commercial), And Segment Forecasts, 2023 - 2030

An e-bike lending libraries is a strategy Redmond should explore to provide opportunities for more people to see what it is like to ride an e-bike. Such libraries lend e-bikes for an extended period of time (typically 1 to 3 months) so people can experience an e-bike and have time to use it for a variety of trip purposes to discover how they can effectively integrate an e-bike into their daily travel demands.

Another way the City of Redmond can further influence e-bike adoption by providing financial incentives for people to purchase e-bikes. The Rocky Mountain Institute (RMI) developed a calculator that allows users to explore the potential benefits of e-bike incentives of various funding amounts and time horizons. The table below illustrates potential incentive scenarios and anticipated outcomes in terms of reductions in vehicle miles traveled and greenhouse gas emissions.

The RMI calculator estimates that replacing 25% of weekly car trips under 3 miles and 10% of trips under 5 miles with e-bikes over the next 10 years could reduce CO2 emissions and vehicle miles traveled (VMT) by 17% in Redmond. This tool can help Redmond assess the potential impact of various e-bike incentive programs. For example, with an annual $150,000 incentive over 10 years, annual citywide GHG reduction equates to approximately 3%. When annual incentives increase to $500,000 and $1,000,000 over 10 years, GHG reduction increases to 9% and 17%, respectively. More details are included in the appendix of the report.

E-bike

E-Bike Incentives

Denver has gained recognition for its successful e-bike incentives. The city launched an e-bike voucher program in April 2022, offering $400 vouchers for all residents and up to $1,200 for income-qualified individuals, with additional funds for e-cargo bikes. Since its launch, Denver has invested $4.7 million, providing vouchers to 4,734 residents.

A survey of recipients suggested notable changes in transportation habits, with participants riding an average of 26 miles per week and replacing 3.4 vehicle trips, collectively reducing vehicle miles traveled by 100,000 miles per week. Lower-income recipients were particularly active, averaging 32 miles per week.

Washington State DOT is launching its own e-bike rebate program in 2025. This program will offer qualifying applicants rebates for either $1,200 or $300 depending on household income. They expect to give out about 8,500 vouchers, an amount far less than expected demand.

Recommended Actions

Action 3A	Support the establishment of e-bike lending libraries. (Planning)
Action 3B	Offer financial incentives for e-bike purchase at time of purchase.[16] • Prioritize extensive and early outreach about e-bike incentive programs among lower income populations. • Keep the e-bike incentive program application process simple and easy. • Leverage relationships with local bike shops to support e-bike incentive program rollout and promote local purchase of e-bikes. • Make a plan for how to collect data from individuals once they have purchased the e-bike.[17] (Planning)
Action 3C	Educate the community about e-bike and e-motorcycle safety practices and local regulations. Develop safety and etiquette campaign that targets e-bike users and clarifies laws and possible enforcement actions around e-motorcycles. Bicycle safety education is discussed more in Section 10 – Transportation Demand Management and the Safer Streets Action Plan. (Planning, Communications)
Action 3D	First draft and pass a City Ordinance defining what are e-bikes v e-motorcycles, who may operate them, and detail specific responsibilities of parents and children (16 and under) along with clear enforcement details. In parallel, advocate for a statewide legislation that addresses these same e-bike issues to create uniformity within Washington State.

Strategy 3 supports the following Redmond 2050 policies:

- **TR-13:** Develop a transportation system that minimizes negative health and environmental impacts to all, especially those who have been disproportionately affected by past transportation decisions.

FIGURE 6 | SHARED E-SCOOTERS AND E-BIKES ARE INCREASINGLY POPULAR IN REDMOND

Image Credit: City of Redmond

Strategy 4: Implement a High Comfort, Spine Network

The Spine Network (Figure 14) provides the primary, most direct connections between all of Redmond's neighborhoods and one or more Urban Centers. It is envisioned to be comprised of high comfort bikeways (level of traffic stress 1 and 2), including trails such as the Redmond Central Connector, Sammamish River Trail, and East Lake Sammamish Trail, separated bike lanes such as 156th Ave NE and Bel Red Rd, and bicycle boulevards such as 150th Ave NE in the Grass Lawn neighborhood.

Implementation of the Spine Network is a high priority as these routes are expected to have the highest return on investment in terms of ridership given their directness to the major destinations people want to connect to. Some corridors on the Spine Network will take longer to implement due to costs while other segments can be more rapidly implemented using low-cost, "quick-build" materials. See Bicycle Network Strategy below.

Bicycle wayfinding and enhanced lighting along bikeways and shared use paths are investments that can increase the appeal of biking. Wayfinding signage helps direct bicyclists to key destinations. Good lighting and visibility at bicycle parking areas, on shared use trails, and at intersections will help enhance safety, personal security, and comfort.

Strategy 4 supports the following Redmond 2050 policies:

- **TR-10:** Implement transportation programs, projects, and services that support the independent mobility of those who cannot or choose not to drive.
- **TR-13:** Develop a transportation system that minimizes negative health and environmental impacts to all, especially those who have been disproportionately affected by past transportation decisions.
- **TR-16:** Prioritize the comfort, safety, and convenience of people using pedestrian and bicycle facilities over other users of the transportation system. Establish standards for bicycle and pedestrian facilities to attract users of all ages and abilities. Prioritize improvements that address safety concerns, connect to centers or transit, create safe routes to school, and improve independent mobility for those who rely disproportionately on the pedestrian and bicycle network.

[16] If e-cargo bikes receive a different level of incentive, try to make the definition of e-cargo bike as objective as possible.

[17] City and County of Denver et al. Review of Denver's 2022 Ebike Incentive Program Results and Recommendations.

Recommended Actions

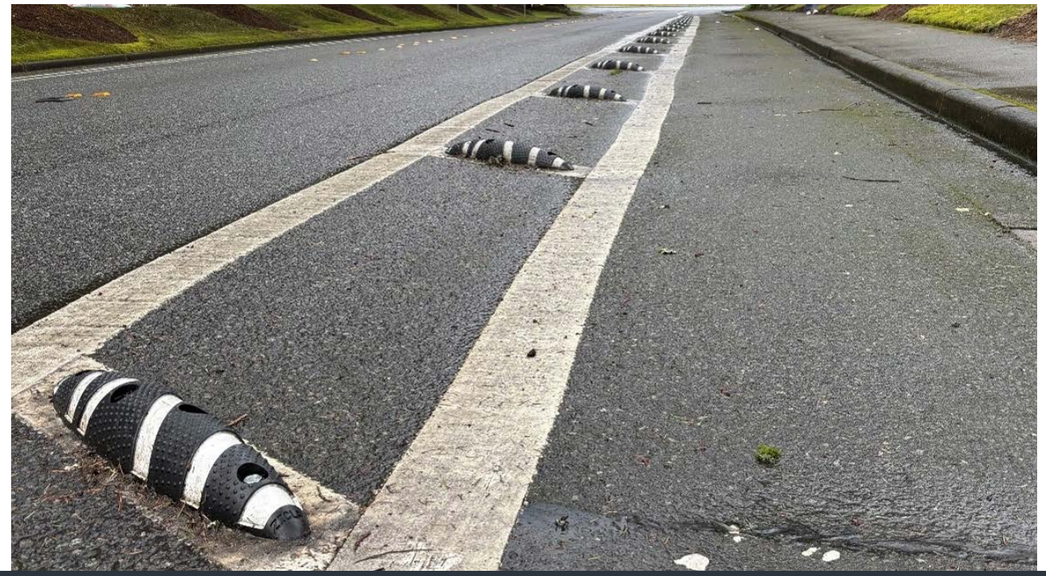
Action 4A	Complete "Spine Network" to include 100% high comfort bicycle facilities by 2035. (Planning)
Action 4B	Install wayfinding, lighting, and other features such as lean bars, bicycle near-side signals to enhance safety and comfort on the Spine Network. (Public Works)
Action 4C	Install traffic diverters and traffic calming interventions on bike boulevards to complete local neighborhood network. (Public Works)
Action 4D	Craft tailored messaging with compelling case studies and data to support bike network build out, especially when tradeoffs might be involved.[18] (Planning)
Action 4E	Deploy quick build and pilot projects. [19] (Public Works, Planning)
Action 4F	Evaluate quick build and pilot projects, iterate designs as needed. (Planning)
Action 4G	Develop effective maintenance strategies for all bikeways (See Section 8-Maintenance and Preservation). (Public Works)
Action 4H	Update quick build and pilot projects with more durable, permanent infrastructure. (Public Works, Planning)
Action 4I	Update the Bicycle Wayfinding Design Manual (2015) to align with current best practices and design standards. (Planning)
Action 4J	Consider safe accommodation of higher speed e-bikes and micromobility devices in bikeway and street design to reduce conflicts between people traveling at significantly different speeds.

[18] "The Final Mile." 2022. Peopleforbikes.org. 2022. https://finalmile.peopleforbikes.org/.

[19] Streetfilms®. 2019. "Jersey City Uses Surveys, Rides & Tactical Urbanism to Generate a Bike Master Plan." YouTube. August 15, 2019. https://www.youtube.com/watch?v=G3I1_ud5c94.

FIGURE 7 | QUICK BUILD MATERIALS SUCH AS THESE "ARMADILLOS" ON THE 150TH AVE NE BIKE LANE CAN BE USED TO ROLL OUT NEW HIGHER COMFORT BIKEWAYS MORE RAPIDLY

Image Credit: City of Redmond



Quick Build, Funding, and Communication

Jersey City, New Jersey, successfully implemented 10 miles of protected bike lanes in one year using quick-build materials, completing about a quarter of its planned bike network. Seattle used similar techniques for a rapid roll out of separated bike lanes on 2nd and 4th Avenues, with 4th Avenue recently receiving a permanent upgrade.

In 2020, the Cambridge, MA City Council amended its Cycling Safety Ordinance, setting ambitious requirements for 25 miles of separated bike lanes within seven years. Using a "quick build" approach with lightweight materials like flex posts and on-street parking lanes, the City rapidly installed 14.22 miles of separated lanes in four years.

In addition to infrastructure funding, coalition building, and targeted messaging are key to gaining community support for more rapid bike network expansion. The People for Bikes "Final Mile" program illustrates this point.

Strategy 5: Implement the Neighborhood Bikeway Network

The Neighborhood Bikeway Network provides local connections between neighborhood destinations such as schools and parks, connects people to the Bicycle Spine Network and provides first-last mile connections to transit. The Neighborhood Bikeway Network is comprised primarily of bike boulevards, bike lanes, and short off-street paved pathway connections. Low vehicle speeds achieved through traffic calming, wayfinding signage to help people navigate the network, and safe crossings of major streets are important components of the Neighborhood Bikeway Network. Infrastructure investments for the Neighborhood Bikeway Network include traffic calming, signage, pavement markings, and in some cases may require enhanced crossing treatments such as signals, crossing islands, etc. at major street crossings.

Strategy 5 supports the following Redmond 2050 policies:

- **TR-10:** Implement transportation programs, projects, and services that support the independent mobility of those who cannot or choose not to drive.
- **TR-13:** Develop a transportation system that minimizes negative health and environmental impacts to all, especially those who have been disproportionately affected by past transportation decisions.
- **TR-16:** Prioritize the comfort, safety, and convenience of people using pedestrian and bicycle facilities over other users of the transportation system. Establish standards for bicycle and pedestrian facilities to attract users of all ages and abilities. Prioritize improvements that address safety concerns, connect to centers or transit, create safe routes to school, and improve independent mobility for those who rely disproportionately on the pedestrian and bicycle network.

Recommended Actions

Action 5A	Prioritize implementation of the neighborhood bikeway network providing access to schools and parks.
Action 5B	Pair bicycle boulevard implementation with neighborhood traffic calming and shared streets to maximize safety benefits to neighborhoods.
Action 5C	Implement clear wayfinding to help users navigate the neighborhood bikeway network and neighborhood connections (see Pedestrian Plan) and connect to schools, parks, and the bicycle spine network.

FIGURE 8 | PATHWAYS SUCH AS THIS ONE CONNECTING TO 161ST COURT NE ENHANCE THE NEIGHBORHOOD BIKEWAY AND PEDESTRIAN NETWORKS BY PROVIDING MORE DIRECT ROUTING AND ACCESS TO SCHOOLS AND OTHER NEIGHBORHOOD DESTINATIONS.

Strategy 6: Balance Modes

Fulfilling Redmond 2050 goals and policies, and shifting trips from motor vehicles to bicycles requires making bicycling a competitive choice for travel in Redmond. Achieving this requires taking actions to rebalance Redmond's transportation system to strive for modal parity i.e., how Redmond allocates its public right of way and financial investments. It is important to consider how the entire population's transportation needs are being served, especially those unable to drive and those who choose not to (potentially up to 25 percent of the driving age population[20]).

Balancing modes requires various actions that may reduce the convenience of driving, such as reducing motor vehicle speeds or space allocated to vehicle traffic or parking to create safer and more comfortable conditions for bicycling, as well as enacting various policies to discourage driving, especially for short trips (reducing car parking availability, charging more for parking, etc.).[21, 22]

Strategy 6 supports the following Redmond 2050 policies:

- **TR-15:** Adopt and implement a plan for active and accessible transportation and an ADA Transition Plan as part of the Transportation Master Plan that results in connected neighborhoods with safe, comfortable, and convenient access to opportunity in Redmond and the region.

Recommended Actions

Action 6A	Implement traffic calming and traffic diversion measures to create higher comfort conditions for bicyclists of all ages and abilities (Public Works).
Action 6B	Establish parity in transportation funding and street space allocation to achieve mode shift and equity goals. For example, if the goal is to achieve 15 percent bicycle mode share, it would be reasonable to spend at least 15 percent of transportation funding on building a high comfort bike network. (Planning, Public Works)
Action 6C	Within constrained corridors evaluate the expected costs and benefits of removing vehicle lanes to create space for high comfort bikeways, taking into account safety, vehicle congestion, VMT and GHG reduction. (Planning, Public Works)
Action 6D	Prioritize high comfort bicycle access over on-street parking (see Section 9 – Curbspace Management). (Public Works)
Action 6E	Evaluate bicycle signal timing at intersections to align with vehicle signal timing and balance the operations between vehicle and bicycle movements so bicycles can travel efficiently along the bikeway. (Public Works)

[20] Nondrivers: Population, Demographics & Analysis, Final Report, January 31st, 2023 nondriversstudyfinalreportsummaryreport.pdf

[21] https://www.portland.gov/Transportation/What-Are-Neighborhood-Greenways.

[22] JAQUISS, NIGEL . 2003. "Lots of Trouble the Turf War over Portland's Parking Spaces Heats Up." Willamette Weekly. June 3, 2003. https://www.wweek.com/portland/article-2124-lots-of-trouble.html#:~:text=From%201975%20until%201997%2C%20Portland,the%20cap%20was%20a%20boon

Changing Priorities

Portland, Oregon expanded its bike network in the 1990s by leveraging traffic calming and diversion in residential areas, creating a network of 100 miles of neighborhood greenways that are considered the "backbone of the city's Safe Routes to School network" and connect neighborhoods, parks, schools, business districts, and residences.

In addition to its neighborhood greenway program, Portland has a long history of supporting multimodal trips to its downtown central business district when it began limiting motor vehicle parking availability in the 1970s to address air quality issues. From 1975 to 1997, Portland maintained a cap on the total number of parking spaces allowed Downtown, even as the metro area's population increased by 50%.

Strategy 7: Provide Convenient, Plentiful, and Secure Bike Parking

The bicycle can be a door-to-door travel mode if bicycle parking is sufficient for both short- and long-term needs at neighborhood commercial centers, grocery stores, schools, transit facilities, and multi-family housing. Bike parking should be ubiquitous, easy to use, and free or very low-cost.

Strategy 7 supports the following Redmond 2050 policies:

- **TR-10:** Implement transportation programs, projects, and services that support the independent mobility of those who cannot or choose not to drive.

Recommended Actions

Action 7A	Conduct inventory of existing public bike parking and update inventory as new bike parking is installed. (Planning)
Action 7B	Explore partnerships to establish an on-demand secure bike parking system throughout the city with initial focus within Urban Centers. (Planning)
Action 7C	Incentivize existing multi-family housing to retrofit property to include secure bicycle parking inside property or contribute to other secure, sheltered parking facilities in the public right of way adjacent to the property. (Planning)
Action 7D	Retrofit existing public facilities such as parks and schools to provide secure and easy to access bicycle parking. Partner with Lake Washington School District to ensure that secure bike parking is provided for e-bikes and other high-value micromobility devices. (Planning)
Action 7E	Collaborate with Sound Transit to ensure sufficient secure bicycle parking is provided at light rail stations as bicycle use grows. (Planning)
Action 7F	Create a city program for short-term bicycle parking, for example, providing businesses and organizations bike racks within the adjacent public right-of-way upon request, which could include conversion of an on-street parking spot(s) to a bicycle parking corral where multiple bicycles can be parked[23, 24] (Planning)
Action 7G	Update City of Redmond Long-term Bicycle Parking Guidelines and Bicycle Parking Requirements and Standards in the Redmond Municipal Code to reflect best practices and bicycle owner feedback. (Planning)

[23] "Apply to Install Bike Racks on the Sidewalk." 2018. Portland.gov. 2018. https://www.portland.gov/transportation/walking-biking-transit-safety/apply-install-bike-racks-sidewalk.

[23] "Apply to Install Bike Racks in the Street." 2024. Portland.gov. 2024. https://www.portland.gov/transportation/walking-biking-transit-safety/apply-install-bike-racks-street.

[24] "Bicycle Parking | Ddot." 2022. Dc.gov. 2022. https://ddot.dc.gov/page/bicycle-parking.

FIGURE 9 | SECURE BIKE PARKING CONVENIENTLY LOCATED IN THE STREET ENCOURAGES PEOPLE TO USE BICYCLES FOR RUNNING ERRANDS AND ACCESSING SERVICES.

Image Credit: Cycle Hoop

Retrofitting Bike Parking

Portland's Bureau of Transportation (PBOT) offers a bike parking program in commercial districts, allowing property owners to request up to two free bike racks for installation on the sidewalk in front of the property, with additional racks available for $150 each. PBOT also has a program that converts on-street parking spots into bike corrals (groups of 6-12 racks), which can accommodate 12-24 bikes in the space of one or two parking spots. These corrals are prioritized at street corners to increase parking, improve pedestrian crossings, and boost business visibility.

BICYCLE NETWORK STRATEGY

Equity and Inclusion

The bicycle network strategy includes planned new connections and upgrades to existing bikeways to create higher comfort bikeways. The network builds upon the existing bikeways in Redmond and past planning efforts, with the ultimate goal of people of all ages and abilities being able to get from anywhere to everywhere by bike or other micromobility devices. The build out of the Spine Network and a local neighborhood network will support this goal. The prioritized implementation of the bicycle network will maximize the opportunity to convert short driving trips to biking. The bicycle network also includes connections to surrounding communities such as Bellevue, Kirkland, Sammamish, and Woodinville and their bikeways.

The planned bicycle network is grounded in the following principles:

- **Connected:** It is possible to get from anywhere to everywhere by bicycle. Emphasis is placed on creating a Spine Network and connecting people to light rail, schools, major employment centers, and commercial centers.
- **Direct:** Going by bicycle offers the most direct route to important destinations.
- **Cohesive:** Similar designs provide consistency, so bicyclists, pedestrians, and motorists know what to expect when they encounter a bicycle facility.[25]
- **Safe and Comfortable:** On streets with high motor vehicle traffic volumes and speeds, high comfort, separated bicycle lanes or shared use paths are provided. Protected intersections and other treatments provide safer continuity for bicycle facilities at intersections. Bicycle boulevards provide further comfort on streets with lower traffic volumes and speeds.
- **Multimodal:** Bicycling and other forms of micromobility is a viable mode for many people to reach light rail stations and bus stops for trips 0.5 – 3.0 miles in length, with high comfort bicycle facilities provided to all existing and future light rail stations and other mobility hubs. Bicycle racks on buses support connections to transit in areas not connected by light rail.

The Bicycle Spine Network

Figure 14 below shows the foundation of Redmond's planned network of bikeways, a Bicycle Spine Network, which includes key links providing connectivity from and within each of Redmond's neighborhoods to key destinations and activity centers. The Spine Network will consist of high comfort (LTS 1 or LTS 2) bicycle facilities—primarily shared-use pathways, separated bike lanes, and bicycle boulevards. The City of Redmond's goal is to complete the Spine Network by 2035, recognizing that some corridors that have significant physical or environmental constraints and high costs could take longer to implement. Currently, 57% of the planned Spine Network is high-stress (including bikeways to be constructed by 2027).

The Neighborhood Bikeway Network

This network will connect people's homes to neighborhood schools, parks, the Bicycle Spine Network, and serve as first-last mile connections to bus routes. It will focus on traffic calming and be comprised primarily of bike boulevards, enhanced bike lanes on streets with speeds 25 mph or lower, and short off-street paved pathway connections.

[25] The 2023 updated Bicycle Facility Design Manual will support consistency in the design and construction of future bicycle facilities in Redmond.

Bikeway Types

Figure 15 later in this section shows the planned bicycle network, identifying existing bikeways and planned bikeways by bikeway type (e.g., separated bike lane, shared use path, etc.). These bikeway types, their design parameters, and compatibility with various contexts and conditions are explained in the Bicycle Facility Design Manual (2023). Figure 10, Figure 11, Figure 12, and Figure 13 illustrate some examples of existing high comfort bikeways in Redmond.

FIGURE 10 | SEPARATED BIKE LANE ON 152ND AVENUE NE

Image Credit: City of Redmond

FIGURE 11 | TRAFFIC CALMED BICYCLE BOULEVARDS SUCH AS THIS ONE ON 152ND AVENUE NE IN REDMOND PROVIDE IMPORTANT CONNECTIONS BETWEEN HOMES AND NEIGHBORHOOD DESTINATIONS LIKE SCHOOLS AND PARKS.

Image Credit: Toole Design

The Right Device in the Right Place

Redmond's bikeway network strategy is focused on accommodating people of all ages and abilities. At the same time, there are many types of micromobility devices and e-bikes that travel at speeds exceeding 20 mph that may impact the safety and comfort of people walking and casually biking.

Currently, in King County class 3 e-bikes (with speeds up to 28 mph) are not allowed on trails unless they parallel highways (e.g. 520 trail) and the speed limit for all trail users is 15 mph. Class 3 e-bikes and micromobility devices that exceed 20 mph may not be compatible with bike lanes intended for people of all ages and abilities. Users of faster speed e-bikes and micromobility may be better accommodated in vehicle lanes where the posted speed limit is 25-30 mph. However, prohibiting such devices from operating in bike lanes would require enforcement action.

There are also education and engineering approaches to reducing conflicts between users on higher speed devices and those traveling at slower speeds. For example, encouraging higher speed users to slow down when approaching slower users and use their voice or bell when passing. From an engineering perspective, designing wider bikeways that allow more room for passing or provide dedicated space for faster devices may be a solution to explore.

FIGURE 12 | REDMOND'S SHARED USE PATHS (REDMOND CENTRAL CONNECTOR TRAIL SHOWN HERE) ARE POPULAR TRANSPORTATION AND RECREATIONAL FACILITIES.

Image Credit: City of Redmond

FIGURE 13 | WAYFINDING SIGNAGE HELPS BICYCLISTS NAVIGATE THE NETWORK AND CONNECT TO THEIR FINAL DESTINATION.

Image Credit: City of Redmond

FIGURE 13 | SPINE NETWORK

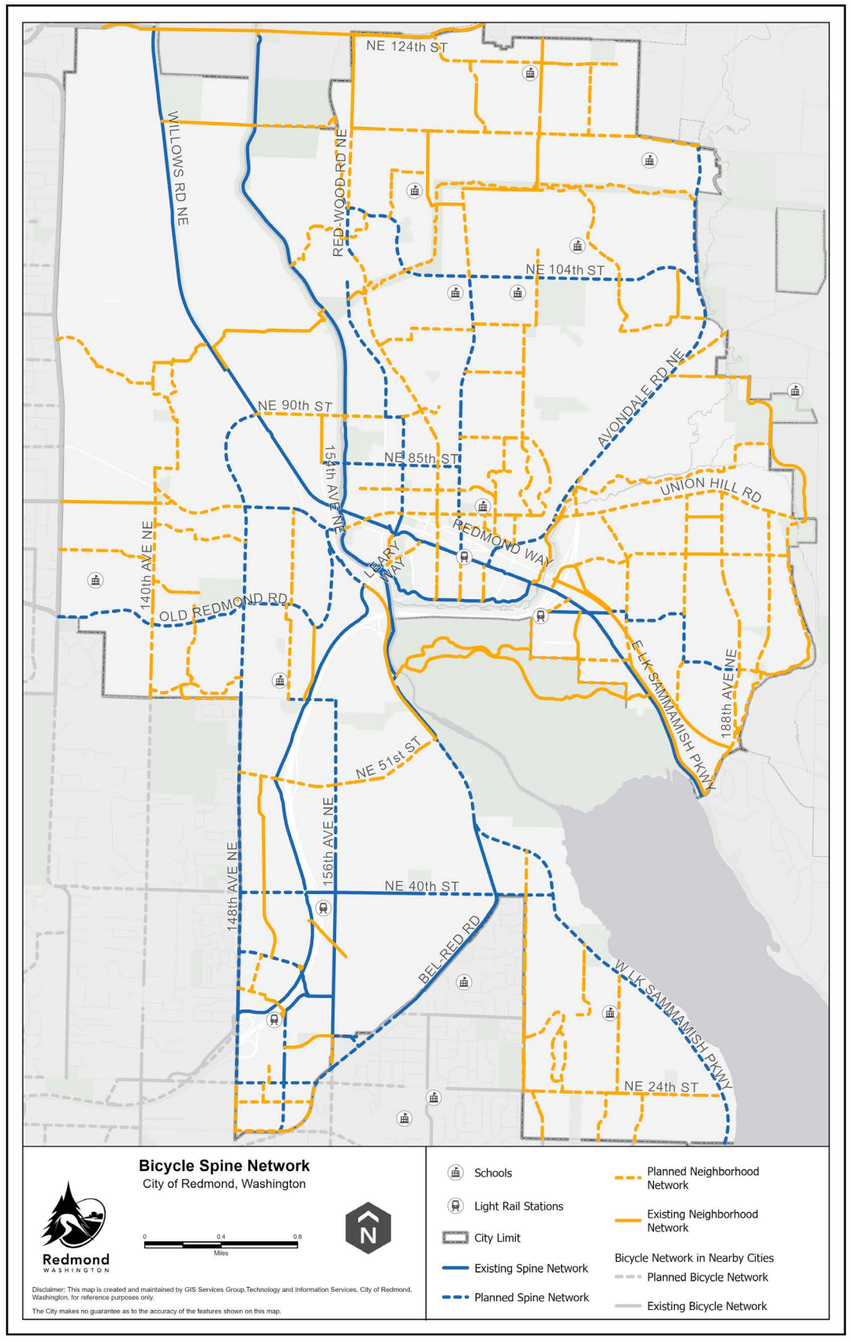
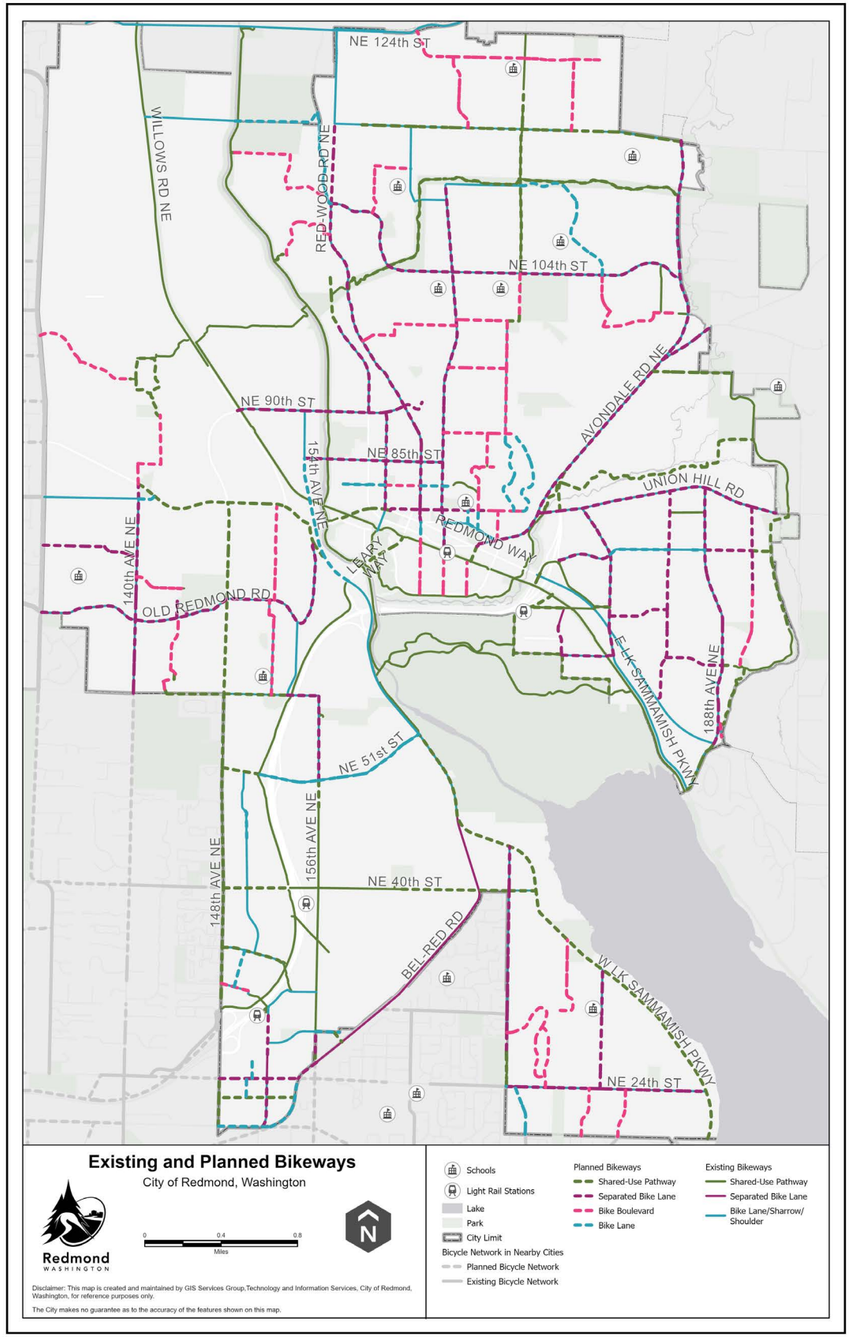


FIGURE 15 | EXISTING AND PLANNED BICYCLE FACILITIES



Implementation

The City of Redmond will focus on implementing the Spine Network and other high priority projects identified in Figure 16 below. However, the City will also consider other factors when deciding what to build each year, such as the feasibility and cost of each project; opportunities to "piggyback" on other capital projects (e.g., stormwater); and time needed to plan, apply for grant funding, and conduct engineering and design.

NEAR-TERM VS. LONG-TERM IMPLEMENTATION

To maximize bicycle and micromobility ridership the City of Redmond needs to implement a connected network of low-stress bikeways that connect people to destinations and allow them to meet their everyday needs, including schools, transit, parks, shopping, and services. Communities that have had the most success in significantly increasing the number of people bicycling have strategically invested in building out their bike networks and doing so quickly. Often these cities have relied on so called rapid implementation with a focus on using lower- cost quick build materials. While some critical connections in the planned bicycle network can be accomplished in the near-term (0-5 years) using rapid implementation methods, others will be longer-term (5-10 years or more) due to physical or environmental constraints and associated high costs.

IMPLEMENTATION THROUGH CAPITAL PROJECTS

Typically, bikeway projects such as separated bike lanes, shared use paths, and bicycle boulevards are implemented through the City's capital improvement program, which dedicates City funds to implement capital projects (i.e., major infrastructure projects). These types of projects tend to have longer implementation timeframes as it may take time to allocate sufficient City funds to cover the total project costs given many other competing capital project funding needs and/or secure grant funding. Examples of bikeways that have been implemented in this way include the Bel-Red buffered bike lanes and Redmond Central Connector Trail.

IMPLEMENTATION THROUGH DEVELOPMENT

Redmond has been fortunate to have had a high level of commercial and residential development. Any development must pay transportation impact fees and may also be required to build infrastructure that has been identified in the City's Transportation Facilities Plan or determined to be necessary to mitigate impacts to the transportation system. The implementation timeline for these projects tends to be longer as it depends on new development occurring and often new development projects can take several years to construct from the time of initial application. Several key segments of Redmond's Bicycle Spine Network have been built by development, including shared use paths on NE 40th St and 156th Ave NE and separated bike lanes on 152nd Ave NE. As Redmond continues to grow there will be more opportunities to leverage this growth to build the planned bikeway network.

RAPID IMPLEMENTATION

More rapid implementation of bikeways is possible, in some cases. Such projects use lower cost quick build materials (e.g., flexible posts, c-curb) to separate bicyclists from motor vehicles. Projects that do not require modifications to other infrastructure such as traffic signals, drainage, etc., and that can be designed and implemented by City staff are typically the best candidates for rapid implementation. Many parts of the Neighborhood Bikeway Network are good candidates for more rapid implementation, however it is necessary to prioritize these connections given the extensiveness of the network and budget limitations. The City will look for these rapid implementation opportunities to close priority gaps in the bikeway network in the nearer-term until funding can be secured for longer-term, more permanent solutions.

PRIORITIZATION FRAMEWORK

Planned bicycle facilities have been prioritized using a framework that reflects the goals and strategies outlined earlier in this section. Specifically, the following metrics were used to prioritize segments of the bicycle network for implementation:

- **Safety:** Locations with high density of fatal and serious injury (FSI) crashes received higher priority.
- **Equity:** This metric prioritized projects that would serve people with greater needs for active transportation, based on the City of Redmond's Opportunity Dashboard. The Opportunity Dashboard uses socioeconomic data such as age, income, car ownership, disability, cost burden, and other measures such as job and housing density.
- **Proximity to key destinations** (transit, schools, daycare centers, parks, and grocery stores): Prioritizes projects close to clusters of pedestrian and bicycle activity centers.
- **Comfort:** Facilities designed to serve All Ages and Abilities provide a higher level of comfort and may attract more users. On steep streets, providing higher comfort is even more important to serve all users.
- **Route Connectivity:** Connection to one or more existing bikeways or modal corridors serves to extend the bike network and increase the ability for people to use the network to access destinations.
- **Topography:** Factors hilly routes into the prioritization of bicycle facility projects.
- **Spine Network:** Projects along the Spine Network receive additional priority.
- **Short trip density areas:** Locations where the highest density of short trips occur have the greatest potential for mode shift to reduce VMT and GHG emissions. Facilities in hilly areas with high short trip density may receive higher priority because if an area is flat, we may see more trip conversion from vehicle to bikes.

Table 1 below provides a summary of the planned bicycle facility mileage by bikeway type and priority level. The planned bikeway network includes 72.8 miles total of planned bikeways, including 22.4 miles of shared-use pathways and 29.3 miles of separated bike lanes. The planned Spine Network includes 24.7 miles of bikeways.

FIGURE 16 | PRIORITIZED BICYCLE NETWORK

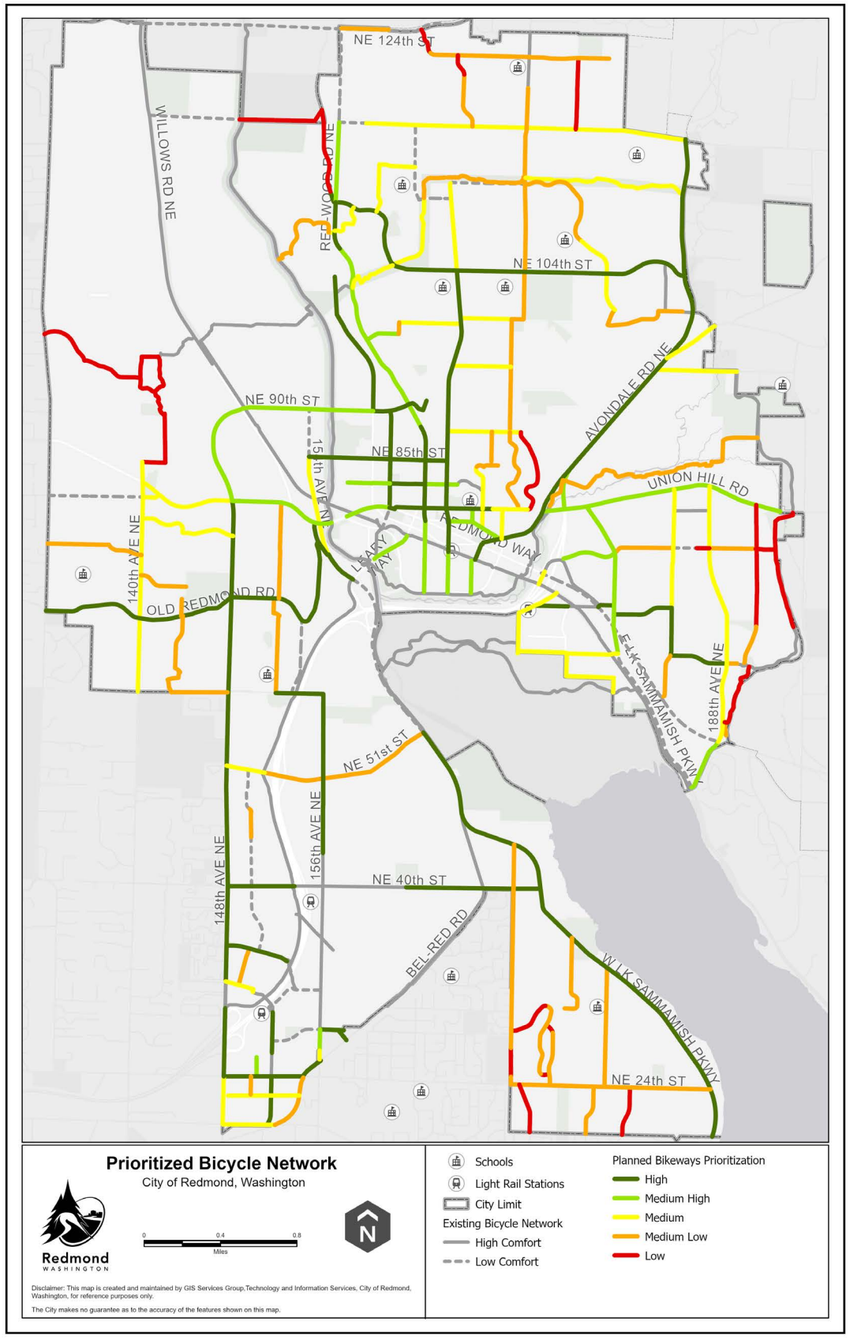


TABLE 1 | PLANNED BICYCLE NETWORK MILEAGE BY BIKEWAY TYPE AND PRIORITY LEVEL

Priority Level → / Bikeway Type ↓	High No. Miles	Medium High No. Miles	Medium No. Miles	Medium Low No. Miles	Low No. Miles	Total No. Miles by Bikeway Type
Shared-Use Pathway	8.9	1.82.5	7.6	3.2	1.6	23.7
Separated Bike Lane	15.9	4.7	4.9	3.6	0.4	29.5
Bicycle Boulevard	0.2	1.1	3.7	6.8	1.9	13.8
Bike Lane	0.6	0.6	1.4	3.3	1.7	7.5
Total No. Miles by Priority	**25.5**	**8.8**	**17.2**	**16.9**	**5.6**	**74.8** Total Miles Planned Bikeways
Spine Network	22.5	2.4	1.0	0.0	0.0	**26** Total Miles Spine Network

Spine Network

The Spine Network consists of separated bike lanes, shared use paths, and bicycle boulevards on low-speed, low-volume neighborhood streets. Table 2 below summarizes the remaining segments of the Spine Network and the anticipated timeframe (Near-term, or 0-5 years and Long-term, or 5-10 years) for their implementation. Some segments with near-term implementation timeframes may be good candidates for more rapid implementation (0 – 2 years), which will be determined by staff capacity, street work capabilities, and whether there are major costs items related to drainage, signals, etc.

TABLE 2 | SPINE NETWORK IMPLEMENTATION SCHEDULE

Street Name	From	To	Planned Bikeway	Status	Timeframe
148th Avenue NE	Old Redmond Rd	NE 60th Streets	Shared-Use Path	Planned	5 - 10 years
148th Avenue NE	NE 51st Street	NE 40th Street	Shared-Use Path	Planned	5 - 10 years
148th Avenue NE	NE 40th Street	NE 31st Street	Shared-Use Path	Planned	0 - 5 years
148th Avenue NE	NE 24th Street	3000 Block	Shared-Use Path	Planned	5 - 10 years
148th Avenue NE	Old Redmond Rd	NE 40th Street	Shared-Use Path	Planned	5 - 10 years
148th Avenue NE	Willows Road	Old Redmond Rd	Shared-Use Path	Planned	5 - 10 years
152nd Avenue NE	NE Hopper Wy	Da Vinci Avenue NE	Seperated Bike Lane	Planned	0 - 5 years
152nd Avenue NE	NE 20th Street	NE 24th Street	Seperated Bike Lane	Planned	5 - 10 years
160th Avenue NE	NE 90th Street	Road End	Seperated Bike Lane	Planned	0 - 5 years
160th Avenue NE	Road End	NE 102nd Way	Shared-Use Path	Planned	5 - 10 years
NE 109th Street / 160th Avenue NE / NE 104th Street	Red-Wood Road NE	Avondale Road NE	Seperated Bike Lane	Planned	5 - 10 years
161st Avenue NE	NE 90th Street	Redmond Way	Seperated Bike Lane	Planned	0 - 5 years
28th Avenue NE	156th Avenue NE	Shared-Use Path between Bel-Red Road and NE 28th Street	Bike Lane	Planned	0 - 5 years
NE 36th Street	148th Avenue NE	SR 520	Seperated Bike Lane	Planned	0 - 5 years
Old Redmond Rd	W Lake Sammamish Parkway NE	132nd Avenue NE	Seperated Bike Lane	Planned	0 - 5 years
W Lake Sammamish Parkway NE	Bel-Red Road	NE 51st Street	Shared-Use Path	Planned	0 - 5 years
W Lake Sammamish Parkway NE	Southern City Limit	Bel-Red Road	Shared-Use Path	Planned	5 - 10 years
W Lake Sammamish Parkway NE	Old Redmond Rd	Redmond Way	Shared-Use Path	Planned	0 - 5 years
166th Avenue NE	Cleveland Street	NE 91st Street	Seperated Bike Lane	Planned	5 - 10 years
Avondale Road NE	Redmond Way	NE Novelty Hill Road	Seperated Bike Lane	Planned	5 - 10 years
Avondale Road NE	NE Novelty Hill Road	NE 116th Street	Seperated Bike Lane	Planned	5 - 10 years
NE 40th Street	163rd Avenue NE	172nd Avenue	Shared-Use Path	Constructed by 2028	0 - 5 years
NE 40th Street	148th Avenue NE	SR 520	Shared-Use Path	Planned	0 - 5 years
NE 40th Street	172nd Avenue NE	W Lake Sammamish Parkway NE	Seperated Bike Lane	Planned	0 - 5 years
NE 85th Street	166th Avenue NE	Sammamish River Trail	Seperated Bike Lane	Constructed by 2027	0 - 5 years
NE 70th ST to 180th Avenue NE Connector	Redmond Way	180th Avenue NE	Shared-Use Path	Constructed by 2026	0 - 5 years
NE 90th Street	160th Avenue NE	161st Avenue NE	Seperated Bike Lane	Planned	5 - 10 years
Red-Wood Road NE	NE 106th Street	NE 109th Street	Seperated Bike Lane	Planned	5 - 10 years
Redmond Way	148th Avenue NE	Sammamish River Trail	Shared-Use Path	Planned	0 - 5 years
154th Avenue NE	Old Redmond Road	Leary Way/ SR 520 Trail	Shared-Use Path	**Planned**	0 - 5 years
154th Place NE	NE 110th Place	Red-Wood Road NE	Shared-Use Path	**Planned**	5 - 10 years
156th Avenue NE	NE 51st Street	NE 60th Street	Seperated Bike Lane	Planned	0 - 5 years
166th Avenue NE	Cleveland Street	NE 76th Street	Shared-Use Path	Planned	0 - 5 years
180th Avenue NE	NE 70th Street	NE 68th Street	Seperated Bike Lane	Planned	0 - 5 years
185th Avenue NE	NE 68th Street	NE 65th Street	Seperated Bike Lane	Planned	0 - 5 years
Amli Development Trail	NE 76th Street	Redmond Way	Shared-Use Path	Planned	0 - 5 years
NE 60th Street	154th Street NE	156th Street NE	Seperated Bike Lane	Planned	0 - 5 years
NE 60th Street	154th Street NE	148th Street NE	Seperated Bike Lane	Planned	0 - 5 years

Street Name	From	To	Planned Bikeway	Status	Timeframe
NE 60th Street	154th Street NE	156th Street NE	Shared-Use Path	Planned	0 - 5 years
NE 65th Street	185th Street NE	188th Street NE	Shared-Use Path	Planned	0 - 5 years
NE 68th Street	180th Street NE	185th Street NE	Seperated Bike Lane	Planned	0 - 5 years
NE 80th Street	Redmond Way	164th Avenue NE	Seperated Bike Lane	Planned	0 - 5 years

Related Plans, Policies, and Programs

The Bicycle Network implementation is supported by several complementary plans, policies, and programs, including:

- **Bicycle Facility Design Manual (2023):** The recently updated manual provides design guidance for bikeways to ensure consistent design of new bikeways in Redmond. Notably, the design user for the Manual is the "Interested but Concerned" bicyclist, someone who is not comfortable with bike lanes and may bike on sidewalks if bike lanes are provided. These bicyclists prefer LTS 1 or 2, off-street or separate bikeways or quiet traffic-calmed residential streets.
- **City of Redmond Municipal Code: 12.06 Complete the Streets:** Code requiring all transportation projects to provide appropriate accommodation for persons of all ages and all abilities, including bicyclists, pedestrians, transit users, as well as automobiles, freight and buses, in comprehensive and connected networks defined in the City's Transportation Master Plan.
- **City of Redmond Municipal Code: 21.52.010 Transportation Concurrency:** All proposed new developments are required to analyze its impacts to the transportation system. If the new development is located in an area identified in the Transportation Facilities Plan for an improvement, such as a planned bikeway or sidewalk, the developer would be required to incorporate this as part of the project or pay impact fees to the City for its implementation. Many of Redmond's existing bikeways have been constructed as part of new development through the Transportation Concurrency program.
- **City of Redmond Municipal Code: 21.52.020 Mobility Management Program:** Requires building owners to implement a mobility management program to reduce the level of traffic generation during the a.m. and p.m. peak hours. Requires all development applications that warrant transportation mitigation to comply with this code's requirements.
- **City of Redmond Municipal Code 21.40.020 Bicycle Parking Requirements and Standards:** Purpose is to (1) Promote bicycling as an important and integral mode of transportation which enables healthy lifestyles, is affordable, and reduces greenhouse gas emissions; (2) Provide requirements and standards efficient and safe bicycling parking meeting the parking needs of specific uses; and (3) Provide the necessary bicycle parking facilities for a bicycle-friendly community.
- **Safer Streets Action Plan (2025):** This plan provides a roadmap for achieving zero fatal and serious injury crashes in Redmond. Grounded in the Safe System approach, it identifies policy, programmatic, a high risk network where safety improvements should be prioritized, and provides details on infrastructure improvements that should be made on specific corridors.
- **Redmond School Pool Program:** City of Redmond active travel to school encouragement program that works with Lake Washington School District schools located in Redmond to provide marketing materials, education on alternative commuting safety topics, and ideas for events like Walk to School Days to encourage a reduction in drive alone trips to school and Bike Rodeos to learn about road safety and bike handling.
- **Parks, Arts, Recreation, Culture, and Conservation (PARCC) Plan:** This plan identified completing and expanding trail system connections as one of the highest capital project priorities during the community engagement process, and walking was the top activity for Redmond residents. The plan supports improving trail access for transportation options as essential to maintaining a healthy and livable community and promoting alternatives to motor vehicle use.
- **Stormwater and Surface Water System Plan:** The City of Redmond Stormwater and Surface Water Systems Plan (SSWSP) guides actions to reduce and prevent flooding, protect and restore natural habitat, keep pollutants away from fish and wildlife, protect our drinking water aquifer, and keep our lake, river, and streams healthy for everyone to enjoy. The SSWSP identifies where stormwater and water system infrastructure needs be built or replaced, which can present opportunities to make modifications to the street, including construction of bikeways. Capital transportation projects are also opportunities to upgrade stormwater and water system facilities.
- **Transportation Facilities Plan:** The Transportation Facilities Plan (TFP) guides transportation investments that the City of Redmond expects to deliver by 2050.
- **Six-Year Transportation Improvement Program:** The six-year Transportation Improvement Program (TIP) is an annual planning document that outlines Redmond's transportation projects and programs for the next six years, based on the city's Comprehensive Plan and Transportation Facility Plan. It includes a list of projects with secured or expected funding, with the first three years typically fully funded, and the last three years often partially or completely unfunded.

PLANNING FOR MAINTENANCE OF REDMOND'S BIKEWAY NETWORK

As Redmond plans and builds new bikeways, there will be a need for additional maintenance, potentially requiring increased staffing levels, additional funding, and/or the development of new maintenance protocols to maintain a level of service that supports safe and comfortable bicycling and micromobility use. This is particularly true for separated bike lanes that may require more frequent seasonal maintenance, specialized equipment, and have more pavement markings and other features requiring periodic maintenance and replacement. It is important for the City to proactively plan and account for these needs. Section 8 – Maintenance and Preservation provides more discussion on maintenance of the bikeway network.

TRANSIT SYSTEM PLAN

Transportation Master Plan

INTRODUCTION

This section establishes a transit vision and strategies for achieving this vision. This section describes how Redmond will work to:

1. Influence regional transit investments in the community;
2. Make investments in street system infrastructure to optimize transit service and projects in Redmond; and finally,
3. Make investments in first/last mile solutions.

Redmond's transit network serves all Redmond community members, including residents, commuters, and visitors. In this section, references to the transit network include fixed-route bus and light rail routes provided by King County Metro and Sound Transit. With the recent growth and opening of the Sound Transit Link Light Rail 2 Line, the vision for Redmond's future builds on better regional connectivity and calls for more connections to neighboring jurisdictions and more frequent service. The transit network also includes flexible options that deviate from a fixed route.

Transit trips have steadily increased since the precipitous decline in transit ridership during and following the COVID-19 pandemic. At the same time, travel demand and patterns have changed with more people working from home. The times of day when people use transit are more distributed rather than being primarily focused during peak commute travel times. As the Puget Sound Region grows, the destinations people want to connect to are changing. Redmond's transportation planning accommodates for a level of uncertainty, as the city acknowledges that travel patters continue to be in a state of flux. A reevaluation of transit routes and service to accommodate new travel behaviors is needed and the City of Redmond will be an active participant in these conversations with regional transit agencies. transit agencies.

Transit is an essential element of the transportation system in Redmond which serves several important functions:

- Primary method of travel for Redmond community members who rely on transit for their daily travel needs.
- Affordable travel option.
- Provides freedom to live in, work in, and visit vibrant urban areas without the hassle of finding and paying for vehicle parking.
- Essential to supporting the Redmond 2050 land use vision.
- Key to supporting City goals for reducing greenhouse gas emissions and vehicle miles traveled.

ADVANCING REDMOND 2050 GUIDING PRINCIPLES

Redmond 2050 establishes three Guiding Principles: Equity and Inclusion, Sustainability, and Resilience. The Transit Section identifies strategies that support these principles, as shown below.

RESILIENCE

- Increased transit ridership decreases single-occupant vehicle trips, which in turn allows for less wear and tear on Redmond roadways and allows for reduced vehicle congestion. (See Redmond 2050 FW-TR-2)
- Strategies supporting the Guiding Principle of Resilience include: Strategy 1, Strategy 4,and Strategy 7

SUSTAINABILITY

- Increasing transit access and ridership enables more people to enjoy low-carbon mobility. (See Redmond 2050 FW-TR-4)
- Strategies supporting the Guiding Principle of Sustainability include: Strategy 3, Strategy 8, and Strategy 9

EQUITY & INCLUSION

- Transit access provides an equitable and affordable non-auto transportation mode available to every Redmond community member. (See Redmond 2050 TR-10)
- Strategies in this section supporting the Guiding Principle of Equity include: Strategy 2, Strategy 4, Strategy 5, Strategy 8, Strategy 9

OVERVIEW OF REDMOND'S TRANSIT SYSTEM

Transit Service in Redmond

Transit service in Redmond is provided by King County Metro (Metro) and Sound Transit, with 11 Metro routes and 4 Sound Transit routes serving stops in Redmond. Metro, established in 1973, serves approximately 260,000 passengers per day.[1] Sound Transit is an independent transit authority that was created by the King, Pierce, and Snohomish County Councils with the purpose of establishing a network of light rail, bus, and commuter heavy rail services. Both agencies offer targeted transit options for populations with specific mobility needs.

King County Metro fixed-route bus service includes a variety of service levels, as defined in Table 1. Based on Metro's 2021 Service Guidelines, routes are classified into six service levels defined by the frequency and span of service provided.

[1] Source: Average weekday daily boardings, 2024, Metro ridership performance report

TABLE 1 | SUMMARY OF TYPICAL SERVICE TYPES

Service Level	Service Level Frequency (Minutes between trips)				Days of Service	Daily Hours of Service
	Peak Period	Off-Peak Period	Night	Weekend		
Very frequent or RapidRide	≤10 minutes	≤15 minutes	≤15 minutes	≤15 minutes	7 days	16 - 24 hours
Peak frequent	≤15 minutes	≤30 minutes	≤30 minutes	≤30 minutes	7 days	16 - 24 hours
Local	≤30 minutes	≤30 minutes	≤60 minutes	≤60 minutes	5 - 7 days	12 - 18 hours
Hourly	≤60 minutes	≤60 minutes			5 days	8 - 12 hours
Peak only	8 trips per day minimum				5 days	Peak

Source: Metro Connects 2021 Service Guidelines

TABLE 2 | KING COUNTY METRO ROUTES SERVING REDMOND

Route	Service Area	Service Type	Approximate Weekday Hours of Service
B	Redmond, Overlake Crossroads, Bellevue	RapidRide	4:00 a.m. – 1:00 a.m.
222	Cottage Lake, Redmond Technology Station	Local*	5:30 a.m. – 12:00 a.m.
223	Eastgate P&R, Downtown Redmond Station	Frequent*	5:00 a.m. – 12:00 a.m.
224	Redmond, Duvall	Hourly	5:00 a.m. – 8:00 p.m.
225	Kenmore, Kingsgate, Totem Lake, Redmond, Overlake	Local	6:00 a.m. – 10:30 p.m.
226	Bellevue, Overlake, Crossroads, Lake Hills, Bellevue College, Eastgate P&R	Local	5:30 a.m. – 12:00 a.m.
245	Kirkland, Houghton, Overlake, Crossroads, Bellevue College, Eastgate, Factoria	Frequent	6:00 a.m. – 11:30 p.m.
249	Redmond Technology Station, Overlake, South Kirkland, Bellevue, Beaux Arts, South Bellevue Station	Local	6:00 a.m. – 7:00 p.m.
250	Avondale, Bear Creek P&R, Redmond, Kirkland, Bellevue	Frequent	5:00 a.m. – 11:30 p.m.
251	Woodinville P&R, Marymoor Village Station	Local	6:00 a.m. – 9:00 p.m.
269	Issaquah, Pine Lake, Sahalee, Bear Creek P&R, Overlake	Local	6:45 a.m. – 7:00 p.m.

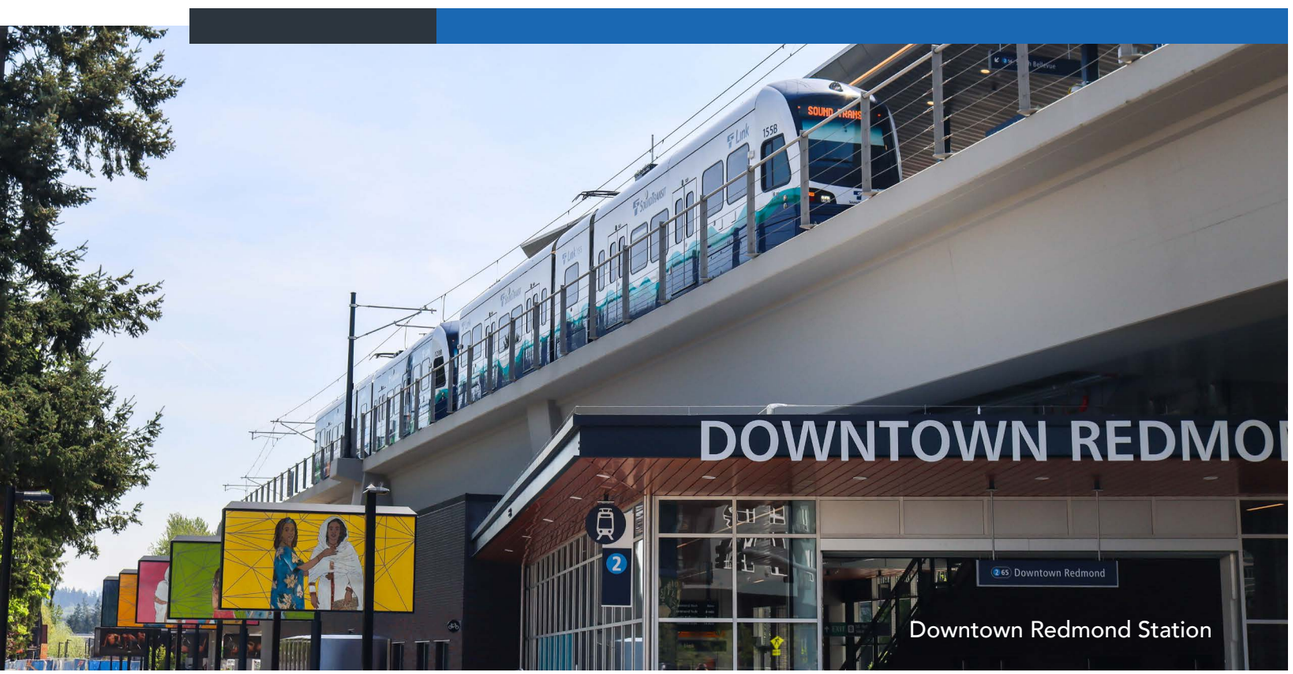
Source: King County Metro East Link Connections Network, as of adoption in March 2025
*Route will be implemented with the East Link Connections Network, anticipated in fall 2025

Sound Transit began serving customers in 1999 and now carries approximately 127,000 passengers per weekday across all Link Light Rail, ST Express Bus, Sounder Train, and T Line Light Rail modes[2].

TABLE 3 | SOUND TRANSIT ROUTES SERVING REDMOND

Route	Service Area	Service Type	Hours of Service
2 Line	Redmond, South Bellevue, Seattle, Lynnwood*	Link Light Rail	6:00 a.m. – 10:00 p.m.
542	Redmond, University District	Local	5:30 a.m. – 11:15 p.m.
544	Overlake, South Lake Union	Peak Only**	6:30 a.m. – 9:30 a.m. 3:30 p.m. – 6:30 p.m.
545	Redmond, Downtown Seattle	Frequent	4:30 a.m. – 12:35 a.m.

Source: King County Metro East Link Connections Network, as of adoption in March 2025
*2 Line will connect to Seattle and Lynnwood with the completion of the Eastlink Extension I-90 segment, anticipated in spring 2026
**Route will be implemented with the East Link Connections Network, anticipated in fall 2025



[2] Source: Average weekday boardings, 2024, Sound Transit Ridership System Performance Tracker

FIGURE 1 | EXISTING TRANSIT NETWORK

Figure 1 illustrates Redmond's existing transit network. This map incorporates Metro's East Link Connections Network, adopted in March 2025.

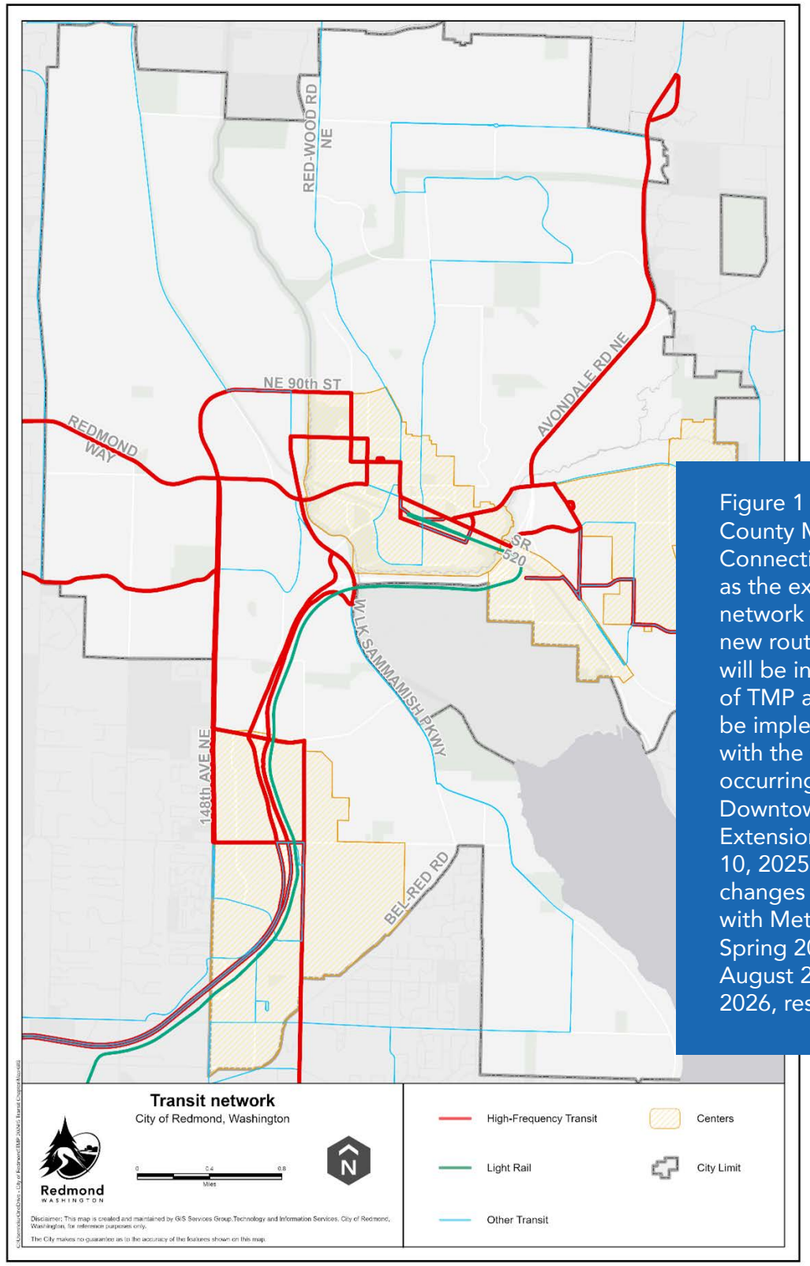


Figure 1 includes King County Metro's East Link Connections Network as the existing transit network as it is anticipated new routes and revisions will be in place by the time of TMP adoption. ELC will be implemented in phases, with the first changes occurring alongside the Downtown Redmond Link Extension opening on May 10, 2025. Additional route changes are anticipated with Metro's Fall 2025 and Spring 2026 Service in August 2025 and March 2026, respectively.

As shown in Table 4 below, the 2 Line and B Line lead Redmond's fixed transit routes for route-wide average daily ridership. Other commonly utilized transit routes in Redmond include the 545 to Seattle and the 245 to Kirkland and Bellevue. It should be noted that transit service routes and scheduling are determined by King County Metro and Sound Transit, respectively, and are outside of the City of Redmond's control and subject to change.

TABLE 4 | REDMOND TRANSIT ROUTES WITH HIGHEST WEEKDAY RIDERSHIP

Route	Service Provider	Service Type	Average Weekday Daily Boardings for the entire route
2 Line	Sound Transit Link Light Rail	Link Light Rail	5,650
B Line	King County Metro RapidRide	RapidRide	4,790
545	Sound Transit Express	Frequent	4,740
245	King County Metro	Frequent	3,000
554	Sound Transit Express	Local	2,670
250	King County Metro	Frequent	2,380
542	Sound Transit Express	Local	1,330
221	King County Metro	Local	1,030
269	King County Metro	Local	870
225	King County Metro	Local	570

Source: King County Metro, 2024

TABLE 5 | REDMOND TRANSIT STOPS WITH HIGHEST DAILY BOARDINGS

Stop ID Number	Stop Name	Routes Serviced	Average Daily Boardings
71335	SR 520 Ramp & NE 40th St	542E, 545E, 566E	834
71961	NE 83rd St & 161st Ave NE	221, 250, 672	592
81755	Bear Creek P&R Access Rd & 178th Pl NE	250, 269, 545E, 982E	399
71954	NE 83rd St & 161st Ave NE	545E	393
68398	156th Ave NE & NE 40th St	245, 672	287
71341	SR 520 Ramp & NE 51st St	542E, 545E	268
71960	Redmond Transit Center Access Rd & NE 83rd St	221, 542E	240
73758	NE 85th St & 160th Ave NE	542E, 545E	200
72487	Redmond Way & 166th Ave NE	250, 545E	167
71346	Redmond Tech Station Access Rd & 156th Ave NE	245, 672	157
71331	152nd Ave NE & Overlake P&R Access Rd	221, 249, 672	142
71326	152nd Ave NE & Overlake P&R Access Rd	221, 249, 269, 672	140
72456	West Lake Sammamish Pkwy NE & Leary Way NE	542E, 545E	135
72305	NE 76th St & 177th Pl NE	269, 545E	122
68498	156th Ave NE & Redmond Technology Station Access Rd	245, 672	116
98750	NE 83rd St & 161st Ave NE	250	110
71345	Redmond Technology Station Access Rd & 156th Ave NE	225, 249, 566E	108
71322	NE 24th St & Bel-Red Rd	249, 672	99
73407	NE 40th St & 148th Ave NE	225, 269, 672	84
71336	SR 520 Ramp & NE 40th St	542E, 545E, 566E, 982E	82

Source: King County Metro, 2024

TABLE 5 | REDMOND TRANSIT STOPS WITH HIGHEST DAILY BOARDINGS

Stop ID Number	Stop Name	Routes Serviced	Average Daily Boardings
2-62	Overlake Village Station	2 Line	362
2-63	Redmond Technology Station	2 Line	1,366
2-64	Marymoor Village Station	2 Line	TBD
2-65	Downtown Redmond Station	2 Line	TBD

Source: Sound Transit, May 2024 through February 2025

The Connection between Transit and Land Use

Redmond will accommodate most of its future growth in jobs and housing in Downtown, Overlake Village, and Marymoor Village centers. With increased density in these areas comes changes to the transportation context, and therefore the transit network. Redmond will bring a multimodal approach to its centers, prioritizing transit, walking, and biking over auto capacity.

Transit vehicles are highly space-efficient and allow Redmond to accommodate growth while meeting increases in travel demand. Shifting drive-alone trips to transit will support and accommodate Redmond's growth throughout the city and especially within centers. Transit is necessary to support the vibrant, dense, walkable Downtown that is emerging in Redmond, and will be critical to the success of Overlake Village and Marymoor Village as they grow. Increased transit use also supports Redmond's Environmental Sustainability Action Plan (ESAP) goals and desired outcomes.

Demand for transit is linked to the land uses near transit service. More homes, jobs, schools, and other activities (origins and destinations) with safe and convenient access to transit increases the number of potential transit riders. As a result, the number of transit trips increases. Aligning transit service levels with land use has many benefits for local communities and helps Redmond realize its economic, environmental, and equity goals. Four characteristics that support transit demand include:

- **Density:** More people and activities in an area increase the number of potential riders.
- **Mix of uses:** More types of uses in an area increase the number of potential origins and destinations, such as home, work, school, shopping, medical, and transit connections, at all times of day.
- **Connections:** More compact development with good multimodal connections for walking and biking increases access to nearby transit service.
- **Transit supportive policies and programs:** These might include zoning changes, affordable housing incentives, and removal of parking requirements. Policies and programs in a corridor or subarea can support the development of equitable transit-oriented communities, improve access for all people—particularly historically disadvantaged communities and people of color—and increase the number of potential riders. These would be consistent with Metro's Equitable Transit-oriented Communities policy.

Aligning service levels with land use helps ensure transit service is productive and supports the demand for service. Local jurisdictions can improve transit service levels and increase demand by implementing the four land use characteristics above. Examples of supporting actions include:

- Rezoning land within walking distance of transit routes to allow for higher densities and more types of uses. Redmond implemented rezones in Overlake (November 2024), Downtown (June 2025), and Marymoor Village (June 2025) to accommodate additional growth. In addition, Redmond implemented transit-oriented development (TOD) focus areas in each of these three centers where additional height and density are possible.
- Establishing policies and programs to increase the amount of affordable housing and reduce the displacement of existing residents near transit service (e.g. affordable housing incentives). Redmond 2050 has prioritized the expansion of affordable housing as a key pillar of the Housing Element.
- Removing or reducing parking minimums for new development near transit service. With the adoption of Redmond 2050 in November 2024, Redmond removed parking minimums for multifamily development within the city's centers.
- Improving street and sidewalk connections around bus stops and corridors.

As shown in the Figure 2 and Figure 3 below, under existing conditions, 43% of Redmond's total housing units were within a 0.5-mile walkshed of a frequent transit stop; however, using Redmond 2050 land use and population growth projections, Redmond is projected to have 54% of total housing units within a 0.5-mile walkshed of frequent transit in 2050. Considering this growth, it is important to acknowledge the need for more frequent transit in Redmond as well as the need for safe and accessible walking and biking connections to frequent transit stops.

FIGURE 2 | EXISTING CONDITIONS HOUSING UNITS WITHIN 0.5-MILE WALKSHED OF FREQUENT TRANSIT

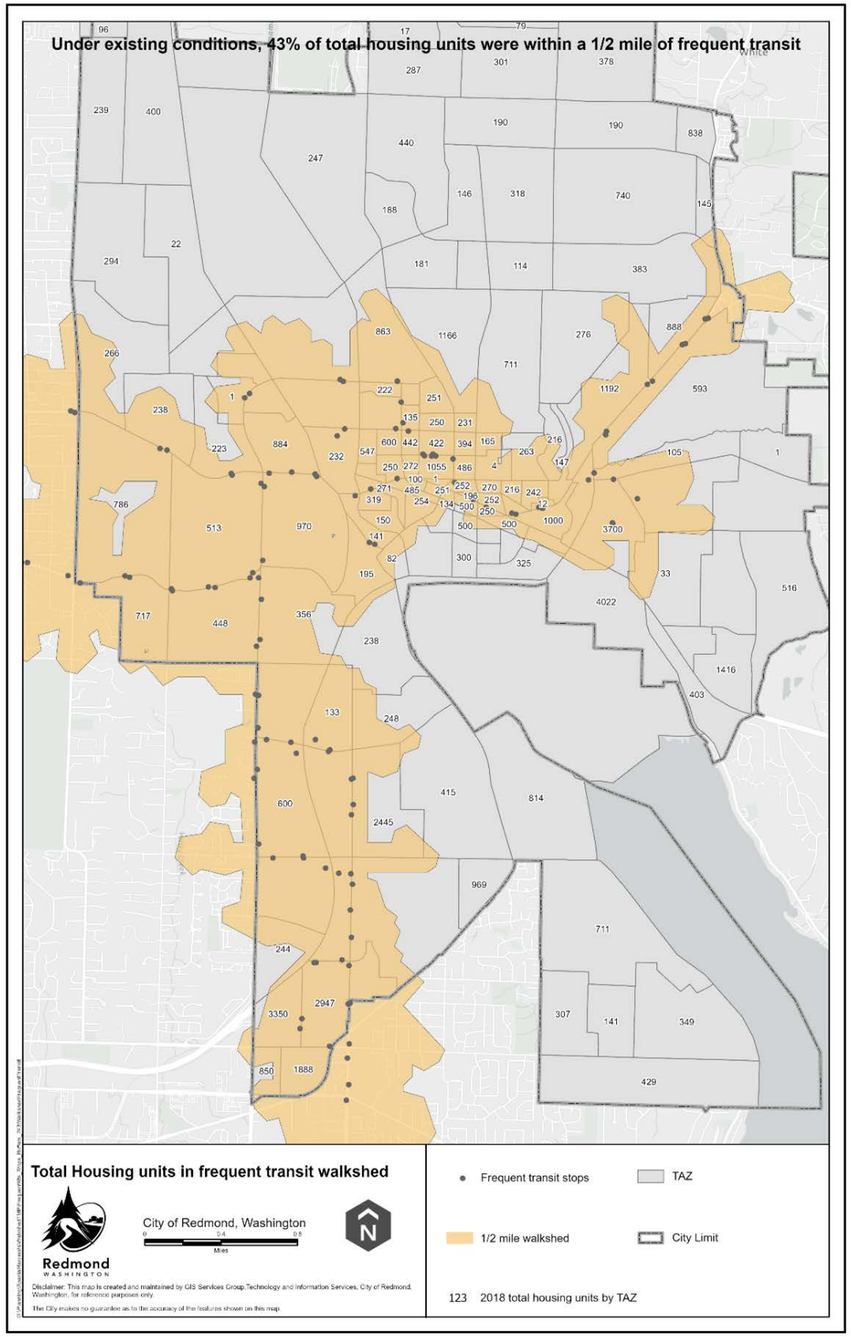
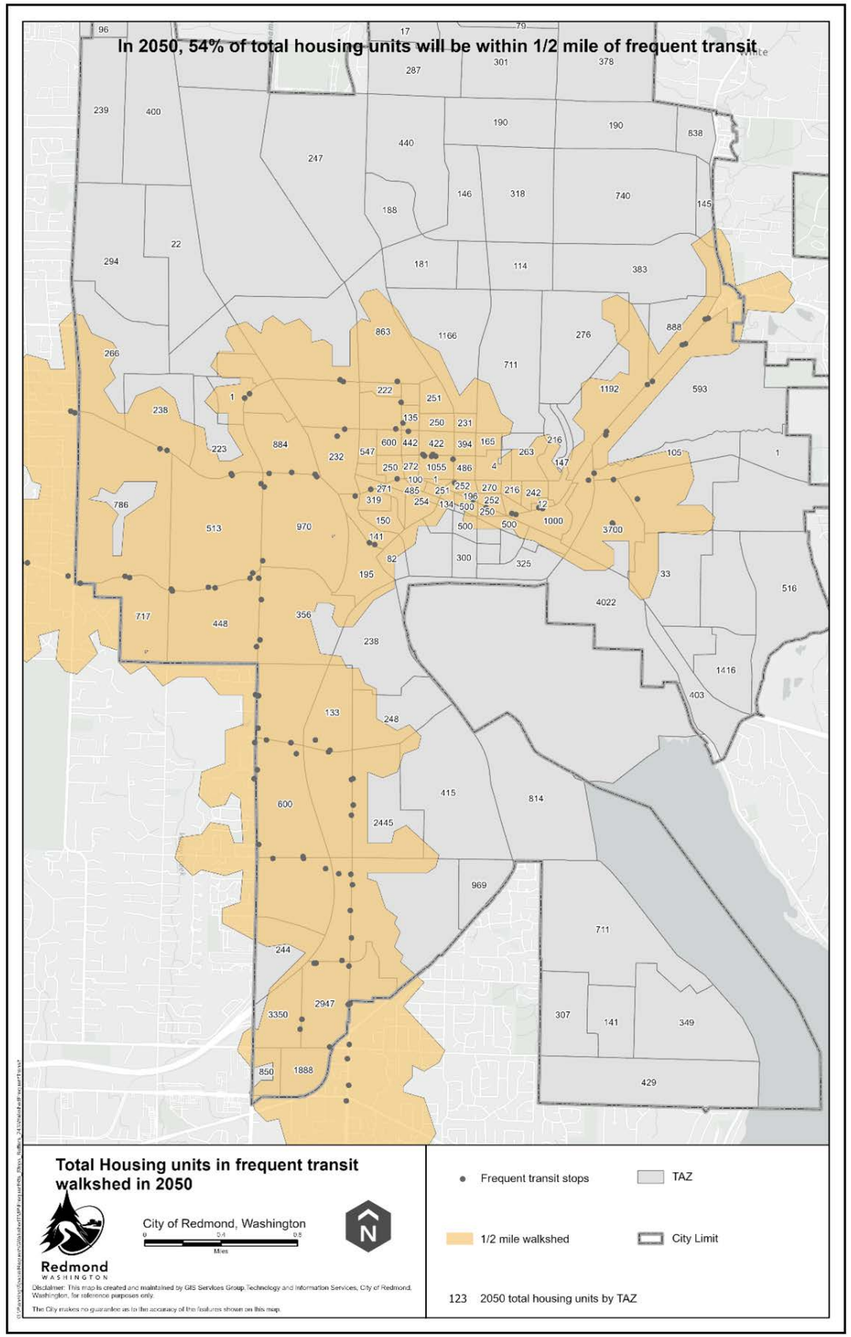


FIGURE 3 | PROJECTED 2050 HOUSING UNITS WITHIN 0.5-MILE WALKSHED OF FREQUENT TRANSIT



Park & Ride Facilities

TABLE 6 | REDMOND PARK & RIDE FACILITY UTILIZATION

Park & Ride Facility	Available Parking Spaces	Occupied Parking Spaces	Average Daily Utilization
Redmond Transit Center	377	330	88%
Bear Creek Park & Ride	283	112	40%
Redmond Technology Center Garage	314	TBD*	TBD*
Overlake Park & Ride	203	77	38%
Marymoor Village Garage	TBD*	TBD*	TBD*

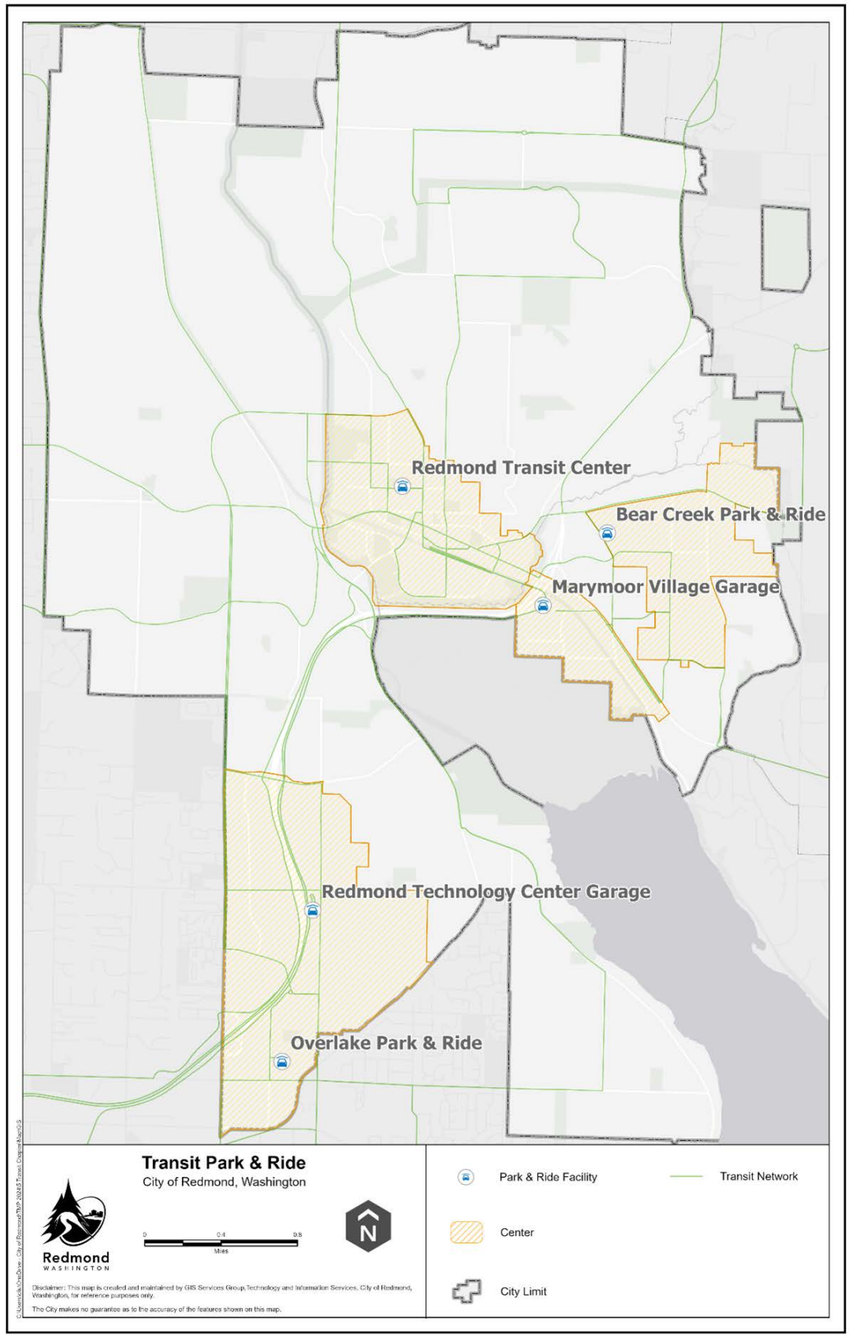
Source: King County Metro, 2024
*Note: Complete occupancy and utilization data not yet available. Data to be updated when Downtown Redmond Link Extension is operational.

"WHY DO YOU PREFER BIKING, WALKING, OR TAKING TRANSIT OVER DRIVING?"

"There are several different reasons, but honestly driving is such a stressful activity for me that, even though I have a drivers license, I'd rather just avoid it entirely—to my own benefit, but also to that of everyone else on the road. Not owning a car also saves a significant amount of money which I can instead save up or put toward other expenses. And it undoubtedly has by far the biggest impact on my personal carbon footprint."

- Tj Horner

FIGURE 4 | EXISTING PARK & RIDE LOCATIONS



FUTURE TRANSIT RIDERSHIP PROJECTIONS

Ridership Growth Trends

Throughout the Puget Sound region, transit ridership is expected to grow in the coming years. Based on the Puget Sound Regional Council (PSRC) Regional Transportation Plan (RTP) for 2022-2050, continued growth to the regional transit system and to boardings is expected. By 2050, PSRC anticipates that approximately 36% of all households will live within 0.25 mile of the region's anticipated 2050 high-capacity transit system (up from 9% in 2018) and 59% of households will live within 0.5 mile of high-capacity transit in the region (up from 25% in 2018). Based on a sensitivity test of PSRC's regional travel demand model, implementation of multimodal access improvements (such as improving walk/bike access to transit stations) could result in an approximate 40% increase in transit boardings.

Based on housing and employment growth projections in Redmond 2050, Redmond's growth is anticipated primarily within the city's centers of Downtown, Overlake, and Marymoor. Given the expansion of light rail to Overlake in April 2024 and to Marymoor and Downtown Redmond in May 2025, the city anticipates these centers will draw increased transit, walking, and biking trips. Significant transit changes are coming to the Eastside in 2025 and 2026 as Sound Transit's 2 Line extends across Lake Washington to Seattle and into downtown Redmond. To prepare for this expansion, Sound Transit and King County Metro developed East Link Connections, a coordinated effort to redesign transit service across the Eastside. This process aims to integrate Metro's updated bus network with the new 2 Line, and improve connections between Seattle, Mercer Island, downtown Bellevue, the Spring District, Overlake, and downtown Redmond. Because these service changes take effect late 2025/early 2026, East Link Connections serves as the foundation for Redmond's Strategic Transit Plan Network described in Strategy 1 below.

East Link Connections introduces two additional frequent service routes[3] to the current transit service in Redmond, enhancing both regional and local connections. Route 269, which currently operates between Redmond and Issaquah, will see increased frequency and be extended to Mercer Island instead of terminating in Issaquah. Route 542, which currently connects Redmond to the University of Washington, will also operate more frequently. Additionally, a new Route 544 (which replaces the existing Route 545) will provide a high-frequency connection between Overlake and South Lake Union.

In addition to these service changes, the existing frequent routes serving Redmond today—including the 245, 250, and RapidRide B-Line—will remain in place.

While these service changes will improve regional and local transit access, the project team's analysis of East Link Connections revealed gaps in service for Redmond's existing population, including:

- Limited route options and less frequent service along Willows Road NE than along other key Redmond modal corridors.
- Service gap for residents north of downtown due to limited transit access along Redmond-Woodinville Road NE and infrequent service.
- Lack of transit connections to Downtown for residents in Southeast Redmond.
- Limited service for areas of Overlake and Idylwood.

[3] Frequent service routes are defined as routes with a headway of 15 minutes or less during peak hours.

In the interim time period before King County Metro updates their Long Range Transit Plan, Metro Connects, the City of Redmond can continue to identify transit enhancements that will improve multimodal connectivity. Strategy 3 and Strategy 6 below discuss Mobility Hubs and flexible transit options that can bring transit connectivity outside of traditional fixed-route transit. Additionally, the Bicycle Strategy presented in Section 5 of this plan outlines methods for promoting nonmotorized mobility in Redmond.

STRATEGIES AND ACTIONS

Strategy 1: Establish a Strategic Transit Plan Network that Complements Redmond's Growth Vision in Redmond 2050.

Strategy 1 supports the following Redmond 2050 policies:

- **FW-TR-3:** Complete the accessible and active transportation, transit, freight, and street networks identified in the Transportation Master Plan in support of an integrated and connected transportation system particularly for more regional bus trips.
- **TR-18:** Adopt and implement a transit system plan in the Transportation Master Plan that connects people to homes, education, jobs, goods and services, and other opportunities in Redmond and the region, especially those who lack affordable mobility options.

The Strategic Transit Plan Network builds on the East Link Connections to establish priorities for future transit improvements, ensuring alignment with other modal networks and Redmond's long-term growth vision. The East Link Connections network was analyzed to determine how well it serves Redmond's current population and how it will accommodate future growth. With transit propensity mapping, census data, and Redmond 2050 land use projections, key service gaps were highlighted that could limit access to frequent and reliable transit.

Additionally, the project team reviewed King County Metro's Long Range Transit Plan, Metro Connects, to identify additional bus routes, service areas, and connections that could further enhance transit access. While Metro Connects is the current vision for transit service over the next 30 years, the plan will be updated in 2026. This Strategic Transit Plan identifies Redmond's vision for future transit service, which the City will use to communicate their priorities during the forthcoming Metro Connects update.

In addition to evaluating how the East Link Connections network will serve Redmond's existing population, analysis of projected household and job growth in Redmond was used to assess future transit access. While most of the projected growth is expected to occur within 0.25 miles of a bus stop or 0.5 miles of a Link station in the East Link Connections network, key service gaps remain:

- Service gap for expected residential and job growth adjacent to Bel-Red Road and NE 40th Street. [4]
- Limited transit connections to Link stations for growth along Willows Road NE.

[4] The Microsoft Campus is primarily served by an internal shuttle program rather than public transit.

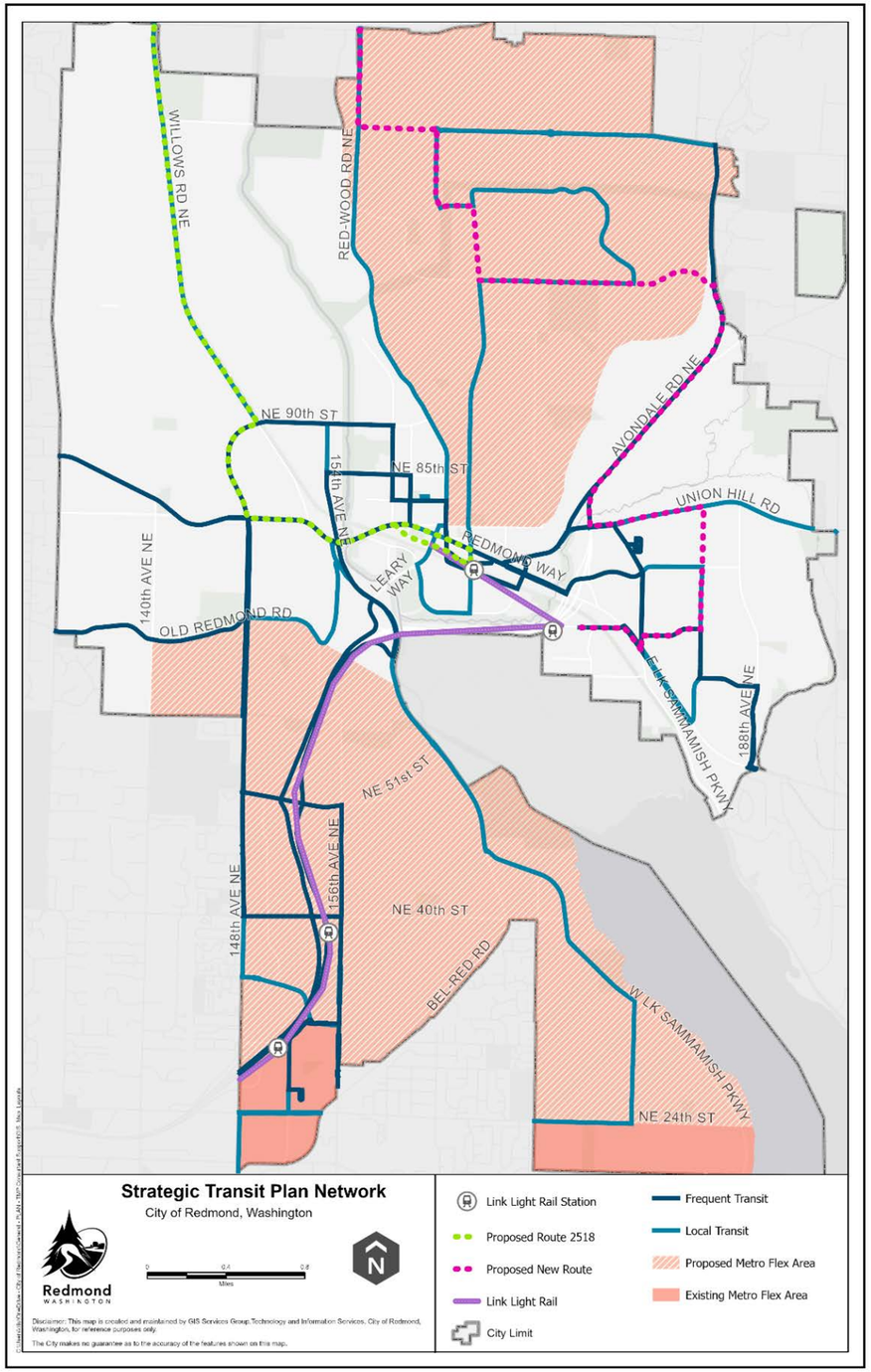
The Strategic Transit Plan network shown below identifies the need for the following priorities, detailed in the remaining Strategies of this section:

- **Increased service frequency** – Aiming for all routes to operate at least every 15-20 minutes.
- **Stronger connections** – Enhancing transit links between Education Hill, Willows Road NE/NE 90th Street, downtown Redmond, and regional destinations like Woodinville and Totem Lake.
- **Metro Flex service** – Continuing to prioritize on-demand service in areas where fixed-route transit is not feasible or practical.

In addition to the proposed expansion of the Metro Flex service area, the Strategic Transit Plan builds upon the East Link Connections network by adding two new frequent routes. The first, Route 2518 from Metro Connects, would enhance regional connectivity between downtown Redmond and Edmonds, serving Totem Lake, Woodinville, Bothell, Lake Forest Park, and Mountlake Terrace while also improving transit access along the Willows Road NE corridor to support anticipated job growth. This route would replace the relatively infrequent Route 930. The second proposed route would connect downtown Redmond to Kenmore via Education Hill. Expanding transit options to this neighborhood.

Beyond adding these routes, the city advocates for more frequent service to advance the city's goal of 15-20-minute frequency on all routes serving Redmond. The remaining East Link Connections routes align with the city's identified transit needs and are therefore incorporated into the Strategic Transit Plan Network. The Strategic Plan Network is shown in Figure 5.

FIGURE 5 | STRATEGIC TRANSIT PLAN NETWORK



Recommended Actions

Action 1A	Advocate to King County Metro for better service frequency (e.g., 15-20 minute headways) on Redmond transit routes, especially focusing on local routes. (Planning)
Action 1B	Collaborate with neighboring jurisdictions (such as Bellevue, Kirkland, Woodinville, and Sammamish) to align transit priorities and communicate these priorities to King County Metro in a unified manner. (Planning)
Action 1C	Explore models and methods for City of Redmond to pay King County Metro for additional transit service if regional funding timeframes are insufficient for meeting Redmond community needs. (Planning)

Strategy 2: Promote seamless connections to light rail and bus networks

Strategy 2 supports the following Redmond 2050 policies:

- **TR-16:** Prioritize the comfort, safety, and convenience of people using pedestrian and bicycle facilities over other users of the transportation system. Establish standards for bicycle and pedestrian facilities to attract users of all ages and abilities. Prioritize improvements that address safety concerns, connect to centers or transit, create safe routes to school, and improve independent mobility for those who rely disproportionately on the pedestrian and bicycle network.

Redmond 2050 includes the goal to create a citywide transportation system that is designed for people. This includes enabling affordable and sustainable mobility options. By organizing around light rail and promoting transit accessibility, Redmond's transit network aspires to seamlessly connect community members from all Redmond neighborhoods to light rail.

Recommended Actions

Action 2A	Prioritize pedestrian and bicycle network safety and mobility improvements within a half-mile walkshed and 3-mile bikeshed of frequent transit stops. (Planning, Public Works)
Action 2B	Establish regular coordination meetings between agency staff from Sound Transit, King County Metro, and the City of Redmond to discuss mobility needs. (Planning)
Action 2C	Work with Sound Transit to establish designated micromobility parking zones at all light rail stations in Redmond. (Planning)

Strategy 3: Establish Mobility Hubs that promote multimodal first/last mile connections and enhance micromobility usage

Strategy 3 supports the following Redmond 2050 policies:

- **TR-19:** Implement transit to connect people in all Redmond neighborhoods to centers, light rail, and other neighborhoods, considering a full suite of transit options appropriate to the land use context.
- **TR-21:** Use transit to support equitable, inclusive, sustainable, and resilient transit-oriented communities, especially in Downtown, Overlake, and Marymoor Village.

Mobility Hubs are established and designated locations that bring together many types of transportation modes or services to promote alternative modes to driving alone. For example, a Mobility Hub could include any of the following:

- **Bicycle options:** Long-term and short-term bicycle parking and storage; connection to separated bicycle lanes or multiuse trails.
- **Transit options:** Fixed route or flexible transit service.
- **Shared mobility options:** Micromobility designated parking; shared e-bikes or e-scooters available; carshare parking; or designated rideshare pick-up and drop-off zones.
- **Vehicle options:** Passenger pick-up/drop-off; Community Van parking.
- **Amenities:** Benches or street furniture; restrooms; water fountains; options for buying a snack or beverage; free Wi-Fi. The level of amenity would depend on scale and level of service of available transportation options.

Mobility Hubs can have a regional transportation focus, or can focus on neighborhood connections, as shown in the Figure 6 below:

FIGURE 6 | MOBILITY HUB TYPES (CREDIT: FEHR & PEERS)

Neighborhood Hub

The smallest type of mobility hub, providing simple and comfortable amenities to accommodate walking, biking, and using motorized personal transportation devices and transit access for local communities.

Regional Hub

A robust type of mobility hub co-located at Link light rail stations, providing the most features and amenities. They will support the largest number of people from within and outside of Redmond.

Table 7 includes a comparison of mobility hub attributes.

TABLE 7 | REDMOND MOBILITY HUB COMPARISON

Mobility Hub Element	Regional Mobility Hub	Neighborhood Mobility Hub
Primary Objective	Facilitate connections to employment and recreation within Redmond and in surrounding cities for those living in, working in, and visiting Redmond	Facilitate residential connections to surrounding Redmond neighborhoods and to centers
Potential Location Type	Light rail stations, transit centers, and park & rides within Redmond's centers	Residential neighborhoods, shopping centers, schools, or other neighborhood destinations outside of Redmond's centers
Example Locations to Consider	Overlake Village Station, Redmond Technology Station, Downtown Redmond Station, Marymoor Village Station	Redmond Transit Center, Bear Creek Park & Ride, Avondale Road PCC shopping center, Hartman Park, NE 76th Street Fred Meyer or Target shopping centers, Grass Lawn Park
Target Trip Types	Regional and Local Trips	Local Trips

Establishing designated Regional and Neighborhood Mobility Hubs in Redmond will provide connections between Redmond's transportation networks and facilitate pedestrian and bicycle connections, in addition to encouraging transit use. Redmond's light rail stations currently serve as Regional Mobility Hubs in practice, and undertaking the following strategies will establish the title of Regional Mobility Hub and continue to prioritize these locations for multimodal connectivity.

Recommended Actions

Action 3A	Support new development and tactical strategies that deliver a rich mix of retail services, eating establishments, pop-ups, activated public gathering spaces, and amenities at and around light rail stations. (Planning)
Action 3B	Develop a process for identifying and prioritizing Neighborhood Mobility Hub locations. (Planning)

Strategy 4: Promote transit stop facility comfort and safety

Strategy 4 supports the following Redmond 2050 policies:

- **TR-20:** Work with transit providers and community members to address:
  - Placement of shelters and lighting at bus stops, including accessibility for people using mobility assistance devices; and
  - Student access to and from school and school-related activities.

The safety and comfort of transit users are critical for a successful transit network. Transit riders should feel that a transit system is an easy and intuitive transportation option. If the transit system offers convenient, safe, clean, and comfortable facilities at bus stops and onboard transit vehicles, then community members are more likely to use it. Dignity should be at the core of the transit experience in Redmond, meaning transit users should feel like their safety, comfort, and convenience matters and has been considered in the way that transit stops are designed and the amenities they provide.

Many of Redmond's bus stops are not ADA-compliant, and do not include a shelter, bench, or other street furniture sufficient lighting. The City will work with Metro to bring more comfortable and accessible bus stop facilities to Redmond to create a more dignified transit experience and encourage more transit use.

Redmond requested community feedback on transit access via an online questionnaire in early 2025, ahead of the Downtown Redmond Link Extension opening on May 10, 2025. The questionnaire focused on how community members choose to access transit and what current barriers to transit ridership exist in Redmond. The questionnaire received 261 responses.

Of the 261 respondents, 63% ride bus transit and 79% ride light rail transit in Redmond, with the majority riding transit between a few times per week and a few times per month. Of those taking transit, work, social events, and errands are popular destinations. In addition, approximately 30% indicated that they utilize bus service to access regional transit networks such as Link Light Rail service.

The questionnaire responses indicated that the most impactful barriers to transit ridership in Redmond are frequency of bus service, prevalence of bus stops within walking distance to riders' origins and destinations, and improved lighting or weather protection at bus stop facilities.

Redmond community members weighed in on how they feel about the City's current transit network:

> "Metro Flex, please! Education Hill is a tough area for us in terms of transit. The one-way loop makes getting to downtown difficult. Ed Hill to RSCC is a 7-minute drive, a 33-minute walk, and a 33-minute bus ride. Why would I choose the bus?"

> "I'm thrilled with all of the transit options available from Redmond Transit Center, would appreciate more frequent buses and safety checks at night so I can go to events downtown."

> "Cannot wait for the light rail to begin."

> "I would ride transit/bus to Seattle more frequently if my local bus stop was more frequent instead of 30-minute gaps. AND ran later in the night after events. Currently I drive a mile and park at the transit [Park & Ride]."

Recommended Actions

Action 4A	Establish a city capital program that allows the city to easily partner with King County Metro on bus stop facility improvements that could include shelters, benches, lighting, and ensuring stops are fully ADA-accessible. (Planning, Public Works)

Strategy 5: Encourage education of transit options and ease of information on transit use

Strategy 5 supports the following Redmond 2050 policies:

- **TR-22:** Integrate transit facilities and services and non-motorized infrastructure with public spaces and private developments to create safe and inviting waiting and transfer environments. Consider opportunities for public arts and culture amenities in these areas.
- **TR 11:** Use signage and other wayfinding techniques that meet regulatory requirements while reaching those with limited English proficiency or limited sight, especially near transit stations and stops.

Encouraging transit ridership also involves improving access to information and awareness about Redmond's transit system. If community members can easily access resources that clearly explain their transit travel options, then transit ridership will become more readily available and accessible. The Transportation Demand Management (TDM) section (Section 10) of the Transportation Master Plan expands upon this concept with strategies that will reduce drive-alone trips in Redmond and encourage transit use. These TDM strategies will improve awareness of transit in Redmond and improve accessibility to transit.

Recommended Actions

Action 5A	Manage and update GoRedmond resources to ensure that the website and program are easy to understand and utilize by all Redmond community members, regardless of language or other barriers. (Planning)
Action 5B	Educate and emphasize the options and benefits of existing and planned public transit service through the City of Redmond transportation demand management program and partnerships with local organizations. (Planning)

Strategy 6: Bring more flexible transit service to Redmond

Strategy 6 supports the following Redmond 2050 policies:

- **TR-19:** Implement transit to connect people in all Redmond neighborhoods to centers, light rail, and other neighborhoods, considering a full suite of transit options appropriate to the land use context.

Flexible transit programs offer additional sustainable mobility options to access transit for those living in areas that are not as well-served by frequent or local bus and light rail routes. King County Metro has four flexible transit programs, including:

DART (Dial-A-Ride Transit): Fixed-route service operated under contract with Hopelink; can go off-route to pick up and drop off passengers within a defined service area. Uses a smaller transit vehicle that is equipped for wheelchairs and bicycles. Requests for rides taken on first-come first-serve basis via online form up to 30 days in advance, at least 2-hours before pick-up time.

Community Van: Program providing a van for pre-scheduled trips. Rides must have at least 2 riders and must be matched with a volunteer driver. Rides must be scheduled at least 2 days in advance. Redmond's Community Van program in partnership with Hopelink includes 2 vans stationed in the city and is looking to expand to 3 vans total.

Vanpool and Vanshare: Vanpool joins 5 or more commuters who share a similar route and schedule and provides a van for a direct route commute in areas where fixed-route options are not available. Vanshare connects commuters with similar routes and schedules to split driving and connects to another mode of public transportation.

Metro Flex: An on-demand transit service providing rides within multiple King County neighborhoods. Service is currently limited to service areas in Juanita, Kent, Othello, Rainier Beach/Skyway, Renton Highlands, Tukwila, Issaquah, and Sammamish. Rides must start and end within the service area. This service provides another option for people to connect to transit and other points of interest in areas that are difficult to serve with traditional fixed route bus service.

As a part of the East Link Connections network, King County Metro is proposing a two-year pilot Metro Flex service area that covers the southeast area of Overlake and northeast Bellevue.
Based on the expected future growth along Bel-Red Road and NE 40th Street east of SR 520, and 148th Avenue NE west of SR 520, this plan proposes expanding the Metro Flex service area (as shown in the Redmond Strategic Plan Network – see Strategy 1) to provide transit access to these growing communities. Note also that these areas are identified as "Highest Equity Priority Areas" by King County Metro as part of the East Link Connections project.

Education Hill is another area of the city with high demand for better transit service; the East Link Connections includes just one non-frequent fixed bus route to serve the neighborhood. This area is expected to grow quickly with new middle housing and mixed-use developments. Redmond has applied for a Regional Mobility Grant to provide on-demand shuttle service to a portion of this neighborhood, and if the program is successful, it could be a candidate area for Metro Flex operations in the future. The Redmond Strategic Transit Plan Network (see Strategy 1) shows the proposed service area for future Metro Flex service, covering Education Hill and parts of the North Redmond neighborhood.

Recommended Actions

Action 6A	Promote participation in Redmond's existing flexible transit programs, including Community Van, Vanpool, Paratransit, and Metro Flex. Continue to work with Metro and Hopelink to spread Community Van program awareness and encourage participation in the volunteer driver program. (Planning)
Action 6B	Advocate for expansion of Metro Flex to Redmond neighborhoods outside of the Overlake service area with fewer connections to frequent transit routes. Prioritized neighborhoods for future Metro Flex include Education Hill, Rose Hill/Willows, and Idylwood (as shown on the Strategic Transit Plan Network in Strategy 1). (Planning)

Strategy 7: Identify and prioritize transit-supportive capital projects

Strategy 7 supports the following Redmond 2050 policies:

- **TR 14:** Prioritize transportation investments that reduce household transportation costs, such as investments in transit, bicycle and pedestrian system access, capacity, and safety.
- **TR-51:** Ensure that all transportation planning and investment decisions:
  - Support the preferred land use pattern contained in the Land Use Element.
  - Advance equity and inclusion, sustainability, resiliency, and safety.
  - Advance the strategies of organizing around light rail, maintaining transportation infrastructure, improving travel choices and mobility, and enhancing freight and service mobility; and
  - Leverage funding.

Although Metro and Sound Transit determine the ultimate transit service networks in Redmond, the City of Redmond can influence bus operations through the design of local streets and transit access through the design of the transportation network around bus stops, especially pedestrian and bicycle connections. A transit-supportive local transportation network holds equal importance to transit service in determining the quality of transit mobility. The purpose of this strategy is to identify capital projects with the potential to benefit the speed, reliability, and accessibility of Redmond's transit system.

Transit speed, meaning the average travel time between two given points, determines whether a route is time-competitive with other modes of travel including driving. A transit route that offers time savings over driving has obvious benefits, especially for riders who have the option of selecting other modes.

Reliability is another important factor that includes the consistency of trip lengths on a given route. A common symptom of low reliability is bus bunching, in which some of the buses fall behind in their schedule (usually due to congestion), to the point of overlapping with later trips. This can leave passengers waiting for extended periods of time for a bus. Chronic unreliability forces riders to build extra time into their trip to compensate, decreasing the attractiveness of transit. Eventually riders may shift to other, more reliable forms of transportation. It also consumes more financial resources from the transit agency by forcing them to run additional trips in response. Service that is unreliable is more expensive to operate and provides a lower quality of service to the customer. Nationally as congestion increases and there is more demand on our roadways, communities that do not invest in speed and reliability fall behind. To achieve Redmond's transportation vision, it is important to get ahead of this trend and make the prudent, forward-thinking investments to ensure that our transit service gets better, faster, and more reliable over time.

Congestion analysis was conducted to identify where frequent transit routes may encounter significant vehicle congestion and assessed how all routes access light rail stations, a key component of Redmond's future transit network. The analysis revealed likely candidates for transit speed and reliability improvements.

Table 8 summarizes potential transit supportive capital projects in Redmond. The potential projects listed that are not currently included in a Redmond planning document will be evaluated for inclusion in the Transportation Facilities Plan (TFP) or existing Capital Improvement Program project. In addition to these recommended projects, Redmond should continue to collaborate with King County Metro and Sound Transit to monitor transit speed and reliability and identify additional improvements as needed after the East Link Connections network is implemented. Reconfiguring vehicle lanes to Bus and Transit-only (BAT) lanes should be explored, particularly for the RapidRide B line and other frequent transit routes. While BAT lanes could result in general purpose traffic delay such prioritization of transit aligns with Redmond 2050 policies.

TABLE 8 | POTENTIAL REDMOND TRANSIT-SUPPORTIVE PROJECTS

Project ID	Project	Description	Transit-Supportive Component
1	150th Ave NE/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. North leg improvements include two southbound left-turn lanes, one through lane in each direction, bike lanes, sidewalks, transit amenities, streetlights, utilities, and stormwater drainage. Relocate eastbound transit stop to far side of new intersection.	Transit stop amenities, possible transit signal phasing
2	Adaptive Signal System – Overlake	Install and support an adaptive signal system which utilizes software to adjust signal timings to traffic volumes in real time. Includes signals throughout Overlake.	Transit signal phasing
3	Adaptive Signal System – South-east Redmond	Install and support an adaptive signal system which utilizes software to adjust signal timings to traffic volumes in real time. Includes signals in Southeast Redmond and on Avondale Road.	Transit signal phasing
4	Adaptive Signal System – Neigh-borhood Arterials	Install and support an adaptive signal system which utilizes software to adjust signal timings to traffic volumes in real time.	Transit signal phasing
5	NE 70th Street/ Redmond Way intersection	Consider building out the westbound approach of the NE 70th Street/Redmond Way intersection for general purpose traffic with turn restrictions that would limit left turns, or for transit traffic only. Building out this intersection approach provides a more reliable and less circuitous route for buses to access Marymoor Village station instead of navigating through the Redmond Way/180th Avenue NE intersection.	Transit-only lane and transit signal phasing
6	156th Avenue NE between NE 36th Street and NE 40th Street	Evaluate if the B Line is delayed trying to merge from the northbound curb lane on 156th Avenue NE to the northbound left turn lanes at NE 40th Street/156th Avenue NE. Consider a queue jump or transit only left turn lane at the NE 40th Street/156th Avenue NE intersection if congestion is an issue. This lane could also be utilized by private shuttles, if there is adequate capacity.	Transit only-lane and transit signal phasing
7	SR 520 Restriping	Restripe SR 520 in the northbound/eastbound direction at the NE 40th Street exist to add a peak-only hard shoulder for northbound transit. Would require coordination and partnership with WSDOT.	Transit-only lane

Project ID	Project	Description	Transit-Supportive Component
8	Redmond Way between 168th Avenue NE and 164th Avenue NE	Consider implementing additional transit Intelligent Transportation System (ITS) strategies for the section of 164th Avenue NE between Cleveland Street and Redmond Way, such as transit green time extension. To accommodate the heavy southbound left bus turning movement at 164th Avenue NE/Cleveland Street, consider extending the southbound left turn pocket for additional storage, or extending the turn pocket by removing the northbound left turn at 164th Avenue NE/Redmond Way. Eliminating the northbound left turn may help to eliminate some general-purpose vehicle conflict with buses traveling northbound through.	Transit signal phasing
9	164th Avenue NE/NE 83rd Street intersection	After the East Link Restructure is implemented, evaluate if any improvements are needed for transit speed and reliability at the intersection of NE 83rd Street/164th Avenue NE. This intersection serves multiple high frequency bus routes traveling northbound left/through, and westbound right.	Transit only lane and/or transit signal phasing
10	148th Avenue NE between Old Redmond Road and NE 40th Street	After the East Link Restructure is implemented, evaluate transit speed and reliability along the corridor and consider bus queue jumps at intersections.	Transit signal phasing
11	Avondale Road between Avondale Way and NE Novelty Hill Road	If the street is reconstructed or modified, consider adding queue jump lanes at signalized intersections.	Transit only lane and/or transit signal phasing
12	Willows Road between NE 90th Street and NE 124th Street	In conjunction with the Willows Road Widening project (see line 4), add northbound bus only or HOV only lane, replacing one general purpose lane south of 9900 Block and replacing bike lanes from 9900 Block to 124th Street following completion of the Redmond Central Connector trail.	Transit only lane

Recommended Actions

Action 7A	Partner with Metro and Sound Transit to identify transit-supportive capital projects that can be incorporated into Redmond's capital planning processes. (Planning)
Action 7B	Consider transit improvements when planning capital projects with roadway repaving or redesign. (Public Works, Planning)
Action 7C	Prioritize implementation of transit signal phasing and/or queue jumps within Redmond's centers. (Public Works, Planning)

Strategy 8: Create regular coordination between private transit operators and agencies in Redmond

Strategy 8 supports the following Redmond 2050 policies:

- **TR-19:** Implement transit to connect people in all Redmond neighborhoods to centers, light rail, and other neighborhoods, considering a full suite of transit options appropriate to the land use context.

In addition to the public transit agencies operating in Redmond (Sound Transit and King County Metro), some of Redmond's major employers also operate their own private transit shuttles. These private transit operators offer shuttles for employees commuting to and from large technology industry campuses in Redmond. With more knowledge about private employer shuttle ridership, the City of Redmond can better understand the full scope of transit usage in the city.

Recommended Actions

Action 8A	Track private employer shuttle ridership data via Commute Trip Reduction program participation to better understand private transit shuttle operations and tailor the City's transportation demand management efforts. (Planning)
Action 8B	Establish metrics such as origin-destination data to track private transit shuttle usage on a regular basis. (Planning)

Strategy 9: Maintain consistency with King County Metro and Sound Transit policies to align Redmond's vision with the regional transit landscape

Strategy 9 supports the following Redmond 2050 policies:

- **FW-TR-5:** Influence regional transportation decisions and leverage regional transportation investments in support of Redmond's transportation policy objectives.

Continuity in policy and planning efforts across agencies will help bring Redmond's transit goals to reality in a more efficient manner. Redmond's efforts should align with King County Metro's and Sound Transit's.

long range planning efforts including Metro Connects, the Metro Service Guidelines, the Metro Strategic Plan, the Sound Transit Regional Transit Long-Range Plan, and the Sound Transit Development Plan 2024-2029. Redmond should also have a strategic approach to influencing Metro's and Sound Transit's long-range plans so that they align with the city's objectives. Redmond already incorporates many of Metro's policies for transit planning, including:

- Prioritizing improvements for people to walk/bike/roll safely to connect to transit service within half-mile walkshed and 3-mile bikeshed of frequent transit.
- Including Transportation Demand Management strategies that support transit use (see Section 10 for TDM strategies).
- Planning for increased density within a quarter mile of frequent transit service, such as RapidRide or Link light rail.
- Including a mix of residential, commercial, and institutional land uses within a quarter mile of transit service.
- Including housing policies for reductions in parking requirements and zoning flexibility to increase density within one-quarter mile of RapidRide and frequent transit.
- Including housing policies for anti-displacement including incentives for affordable housing development near transit.

Metro recommends additional transit planning policies that the City of Redmond does not yet actively incorporate into the city's processes, as shown in the Recommended Actions below.

Recommended Actions

Action 9A	Prioritize transit speed & reliability in project prioritization process (see Strategy 7) (Public Works, Planning).
Action 9B	Consider curb management and parking strategies that remove or reduce parking near transit stops to facilitate bus operations in future parking management implementation work and as part of the Curbspace Management Plan (Public Works, Planning).
Action 9C	Accommodate bus layover to support growth in fixed route transit service (Public Works, Planning).
Action 9D	Consider implementing electric charging infrastructure that could be utilized by an electrified bus fleet (see Section 11 for E-Mobility strategies) (Planning, Sustainability, Public Works).

"WHAT EXCITES YOU MOST ABOUT REDMOND'S GROWING ACTIVE TRANSPORTATION NETWORK?"

FREIGHT AND GOODS DELIVERY PLAN

Transportation Master Plan

INTRODUCTION

The movement of freight and goods is a critical component of Redmond's transportation system. Between long-haul arrivals and last-mile deliveries, Redmond's entire street system is used in the movement of goods. The Southeast Redmond Industrial Center is an important freight hub for the Eastside, where long-haul trucks arrive with goods that are then sent to destinations across the Eastside in smaller vehicles. E-commerce is expected to have sustained growth resulting in more package deliveries to residents. Between 2017 and 2050, the Puget Sound Regional Council forecasts that freight transported within Washington state will increase by more than 40%, and that imports and exports will grow by more than 50%. These trends point to a need to maintain Redmond's designated truck routes to ensure timely and reliable movement of goods and to be forward thinking in terms of new approaches and technologies last-mile delivery solutions.

ADVANCING REDMOND 2050 GUIDING PRINCIPLES

RESILIENCE

- Promote freight delivery strategies that minimize disruptions and impacts to the surface transportation network and livable Urban Centers. (TR-28, TR-29)
- Strategies supporting the Guiding Principle of Resilience include: Strategy 1, Strategy 2

SUSTAINABILITY

- Reduce overall GHG emissions by implementing electric or low emissions delivery and pick up systems. (TR-31, TR-38)
- Strategies supporting the Guiding Principle of Sustainability include: Strategy 4, Strategy 5

EQUITY & INCLUSION

- Ensure freight and goods delivery access is available to all Redmond residents and businesses. (TR-28, TR-29)
- Strategies supporting the Guiding Principle of Equity and Inclusion include: Strategy 1, Strategy 3

FREIGHT AND GOODS MOVEMENT IN REDMOND TODAY

Redmond's freight route network consists of truck routes that connect to regional truck routes and provide local access to industrial areas such as the Southeast Redmond Industrial Center. Lacking direct rail and port access, Redmond's freight network is completely road-based.
The Redmond truck route system is based on the Washington State Department of Transportation's Freight and Goods Transportation System (FGTS). The FGTS features a ranking system of truck routes based on volume data and estimated tonnage. T-1 and T-2 class routes, or primary truck routes, are recognized as the highest volume and tonnage truck routes in the State, carrying at least four million tons of gross truck tonnage per year. Secondary truck routes are made up of T-3 and T-4 truck routes. T-3 class truck routes carry between 300,000 to 4 million tons per year. T-4 class truck routes carry at least 100,000 to 300,000 tons per year.

Redmond maintains a 39.7-mile four-tiered freight route system that includes local arterials. The 7.3-mile section of SR 520 freeway within the city limits is maintained by WSDOT and included as part of the City's freight route network. These routes currently have higher volumes of trucks and are predicted to have higher volumes of trucks in the future. Truck routes also connect the major industrial and commercial area in the Southeast Redmond neighborhood and support the movement of goods between manufacturing companies and regional truck routes, which are important to the economic vitality of manufacturing and freight distribution companies in Redmond. All truck routes are built to a standard that accommodates heavy truck loads and may be designed to also provide safe access for people walking, biking and taking transit as is discussed in Section 3- Street System Plan.

It should be noted that two FGTS-designated T-3 truck routes are not included in the City's truck route network. These are West Lake Sammamish Parkway, from the Bellevue City Limits to Bel-Red Road and NE 116th Street, from Avondale Road NE to SR 202. The reason for excluding these two routes is that they operate in heavily residential neighborhoods and there are alternative truck routes. These are corridors where the city will take future action to discourage through truck traffic.

Figure 1-1 below shows a map of the Redmond truck route system. Table 1-1 below summarizes Redmond's truck route system miles by truck route classification.

FIGURE 1-1 | REDMOND TRUCK ROUTES

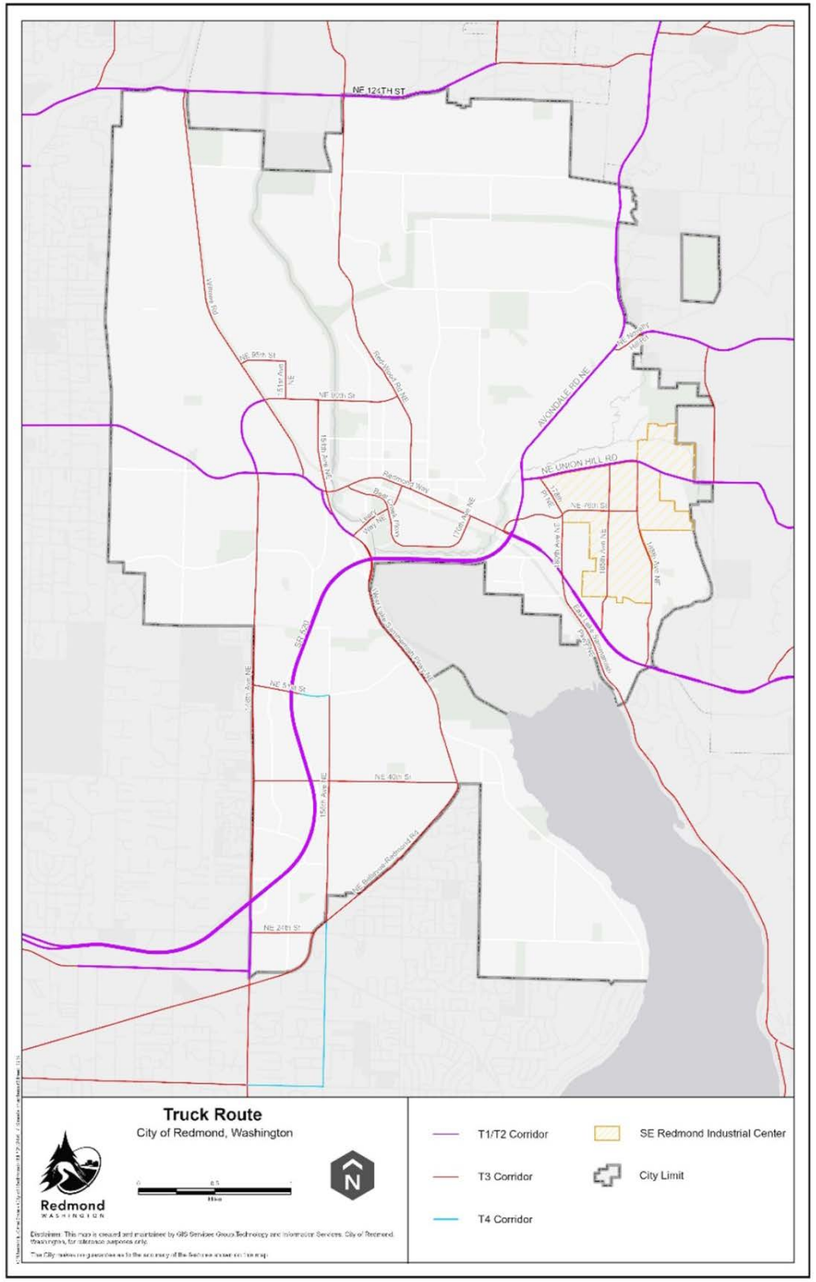


TABLE 1-1 | REDMOND TRUCK ROUTE SYSTEM

Truck Route Classification	Centerline Miles
(Primary) T1/T2 Truck Route	17.9 (including 7.3 miles of SR 520)
(Secondary) T3 Truck Route	28.9
(Secondary) T4 Truck Route	0.2
	Total Miles: 47.0

PRIMARY TRUCK ROUTES (T-1 AND T-2) INCLUDE:

- 148th Ave NE, from south city limits to SR 520
- 148th Avenue NE, from Redmond Way to Willows Road
- West Lake Sammamish Parkway NE, from Leary Way NE to Redmond Way
- Avondale Road, from NE Union Hill Road to north city limits
- NE Union Hill Road, from Avondale Road NE to east city limits
- Redmond Way, from 132nd Avenue NE to West Lake Sammamish Parkway NE

Secondary Truck Routes (T3 and T-4) include:

- 148th Avenue NE, from SR 520 to Redmond Way
- NE 90th Street, from Willows Road to SR 202 (Redmond-Woodinville Rd NE)
- 151st Avenue NE, from NE 90th Street to NE 95th Street
- NE 95th Street from 151st Ave NE to Willows Road
- West Lake Sammamish Parkway NE, Bel-Red Road to Leary Way NE
- 154th Avenue NE, from West Lake Sammamish Parkway NE to NE 90th Street
- 156th Avenue NE, from NE 28th Street to NE 40th Street
- 156th Avenue NE, from NE 40th Street to NE 51st Street
- Bear Creek Parkway, from Redmond Way to 168th Ave NE PVT
- 170th Avenue NE, from 168th Ave NE to SR 202 (Redmond Way)
- East Lake Sammamish Parkway NE, from South City Limits to SR 202 (Redmond Way)
- 180th Avenue NE from SR 202 (Redmond Way) to NE 76th Street
- 178th Place NE, from NE 76th Street to NE Union Hill Road
- 185th Avenue Northeast from SR 202 (Redmond Way) to NE Union Hill Road
- 188th Place NE, from SR 202 (Redmond Way) to NE Union Hill Road
- Bel-Red Road from NE 20th Street (City Limits) to NE 24th St (City Limits)
- Bel-Red Road, from 3200 Block (City Limits) to NE 40th Street
- Bel-Red Road, from NE 40th St, West Lake Sammamish Parkway NE
- Leary Way NE, from West Lake Sammamish Parkway, Redmond Way
- NE 124th Street, from SR 202 (W C/L), East City Limits
- NE 24th Street, from 148th Avenue NE (C/L), Bellevue-Redmond Rd (C/L)
- NE 40th Street, from 148th Avenue NE, SR 520
- NE 40th Street, from SR 520, Bel-Red Road
- NE 51st Street, from 148th Avenue NE, SR 520
- NE 76th Street, from SR 202 (Redmond Way) to 180th Ave NE
- NE 76th Street, from 180th Ave NE to 188th Ave NE
- NE Novelty Hill Road, from Avondale Road NE to East City Limits
- Redmond Way from West Lake Sammamish Parkway NE to SR 202 (164th Avenue NE)
- Willows Road from Redmond Way to NE 124th Street (Kirkland City Limits)
- NE 51st Street, from SR 520 to 156th Avenue NE

STRATEGIES AND ACTIONS

Strategies in the Freight and Goods Delivery Plan support the following Redmond 2050 policies:

- **TR-28:** Adopt and implement a freight plan in the Transportation Master Plan that results in the safe and efficient movement of goods and services to, from and within Redmond. Consider the needs of freight operators, businesses, residents, and consumers.
- **TR-29:** Monitor freight and service delivery patterns and adjust transportation system operations if warranted.

Strategy 1: Maintain Designated Primary and Secondary Truck Routes:

Redmond's freight network includes a two-tier street system comprising:

- **Primary T-1 and T-2 Truck Routes:** Key routes for high truck volumes, directly connecting Redmond with regional highways such as SR 520 and SR 202. These roads are designed for durability with features like strong pavement to support heavy vehicles. A minimum travel lane width of 11 feet is prioritized along these routes to provide more operating space for larger freight vehicles.
- **Secondary T-3 and T-4 Truck Routes:** These streets will generally operate with lower truck volumes and weight and provide more local access to businesses. A minimum travel lane width of 11 feet is prioritized along these routes to provide more operating space for larger freight vehicles but there is more flexibility to reduce lane widths.

Recommended Actions

Action 1A	Consider efficient and safe truck movement in all street planning and design. (Planning, Public Works)

Strategy 2: Restrict or Discourage Truck Traffic Where Incompatible

Whereas all Redmond streets are open to some degree of truck traffic – whether through truck traffic on major roads or last mile delivery on local streets – there may be streets where certain types of truck traffic is incompatible with surrounding land uses or other expected transportation modes.

Recommended Actions

Action 2A	Establish internal policies and procedures for restricting or discouraging truck traffic in corridors where such traffic is deemed incompatible with surrounding land users and/or transportation modes. (Public Works)

Strategy 3: Investigate Options for Improving Freight Data Collection

Redmond uses traditional multi-modal traffic count methods for collecting freight data, which are time consuming, expensive and don't capture the performance of new and emerging freight movement strategies. New technologies, such as using commercial vehicle truck fleet data and other technology sources such as onboard GPS-enabled navigation systems, and cellphone-derived data supplied by third-party vendors for tracking vehicles may provide more efficient ways to collect freight data that can be used to better manage freight vehicle performance, thereby improving mobility on local city streets.

Recommended Actions

Action 3A	Explore and adopt new technologies or data sources to better track freight movement within the City. (Planning)

Strategy 4.1: Adopt innovative strategies to provide for safe and enhanced freight movement, reduced emissions, and application of clean technology.

Recommended Actions

Action 4.1A	Dedicated Loading Zones and Parking Regulations: Reduce congestion in high-demand areas like Downtown through strategically placed loading and unloading zones combined with improved parking regulations ensures smooth freight delivery operations and fair usage of high-demand urban areas. (Public Works)
Action 4.1B	Curb Space Delivery Reservations: As Redmond's Urban Centers attract more residents and businesses, demand for curb space will continue to intensify. Efficient, safe, and timely delivery of goods to businesses is critical to supporting thriving businesses and livable Urban Centers. As part of its overall curb space management efforts, the city will explore the use of an app-based curb space delivery reservation system where curb space demands are highest within Urban Centers. Preference within specific zones in Urban Centers could be given to zero-emission delivery vehicles. (Public Works, TIS)
Action 4.1C	Urban Micro-Consolidation Centers (UMCCs): UMCC's are locations where deliveries within a certain radius are dropped and reconsolidated to be delivered by more sustainable last-leg modes. They may be located within the public right-of-way or off-street sites. The City will work with shipping and logistic providers and support siting of UMCCs within or proximate to its Urban Centers where there are higher concentrations of package deliveries. (Planning, Public Works)
Action 4.1D	Parcel Lockers and Pickup Points: Explore regulatory or incentive-based approaches to implementation of parcel lockers and/or pickup points in Urban Centers to reduce the number of individual deliveries and resultant congestion and curbspace demand generated by delivery vehicles. Parcel lockers are convenient, centralized locations where consumers retrieve packages, cutting down on individual deliveries. Amazon Locker is an example of a parcel locker service. Pickup points are locations where online orders or parcels can be sent to or dropped off. This service is also known as out-of-home delivery. Customers can choose the pickup location based on their convenience and schedules. UPS Stores are an example of a pickup point. (Planning)

Strategy 4.2: Autonomous Goods Delivery

Commercial unmanned aerial vehicles (UAV, aka drones) are already being used in some communities to deliver goods to businesses and customers. The main concerns over commercial drone use have to do with legal liability, public safety, and negative externalities such as noise pollution and disturbing plant and animal life. Regulations and rulemaking applicable to UAVs is evolving at the federal-level and could potentially impact or preempt regulatory areas currently under local control, including land use and zoning powers, nuisance laws, and establishing no-fly zones. The final rule is expected to be issued in early 2026.

Commercial drone

Personal Delivery Devices (PDDs) are small autonomous vehicles that offer door-to-door delivery services. PDDs can offer an alternative to larger delivery vehicles and help reduce single-occupancy vehicle trips. PDDs promise to offer greater accessibility to delivery services while reducing delivery-based street congestion and emissions, however ensuring safety and accessibility of pedestrians and other users of Redmond's streets is critically important. PDD operation in Redmond would require a right-of-way permit and be subject to criteria to ensure safety and accessibility. These criteria and other permit requirements would need to be developed and codified.

Personal delivery device (PDD)

Recommended Actions

Action 4.2A	Develop regulations to support safe, efficient delivery of goods by Unmanned Aerial Vehicle (UAV) to the extent not pre-empted by applicable federal (e.g., Federal Aviation Administration) and state regulations. Regulations should support and balance livability, safety, privacy, accessibility the pedestrian network, and economic development, and hold operators accountable for safe and orderly deployment. (Planning, Police)
Action 4.2B	Develop regulations to support safe, efficient delivery of goods by Personal Delivery Devices (PDDs). Regulations should address maximum speed and weight of PDDs, where they can operate, applicable traffic rules, visibility, and obligations of operators to rapidly respond to mechanical malfunction. (Planning, Public Works)

Strategy 4.3: Emissions Reduction and Clean Technology

Recommended Actions

Action 4.3A	Support expansion of EV charging infrastructure and explore establishing zero-emission delivery zones inside Urban Centers to promote zero emission last-mile freight and goods delivery. (Planning, Sustainability)
Action 4.3B	Promote the use of light-urban delivery vehicles including e-cargo bikes, trikes, and quadricycles through sensible regulation and bikeway, pathway, and sidewalk design that accommodates such vehicles. Redmond may look to national or state efforts to create policy and definitions for low-impact urban logistics including potentially charging fees for operators not using such vehicles for local deliveries or exempting light-urban delivery vehicles from any delivery fee that could be implemented at the state or local level. (Planning)
Action 4.3C	Advocate for legislative change in Washington State to allow local jurisdictions to apply climate impact fees to high-emission goods delivery vehicles. (Planning)

Strategy 5: Consider Application of Freight-and-Bus Only Lanes

In the Puget Sound region, jurisdictions and transit agencies have adopted a strategy to reconfigure travel lanes on congested arterials to allow for special use conditions. One of these strategies are Business and Transit-only Lanes, or BAT lanes, which are curb lanes used only by right-turning vehicles and buses. This type of reconfiguration would improve the speed and reliable of transit and freight while removing slower operating transit and freight vehicles from general purpose lanes thereby, improving operations for all vehicles.

Recommended Actions

Action 5A	Explore opportunities for establishing BAT lanes to improve transit reliability and more efficient goods movement. As an initial trial, Willows Road, a designated Secondary truck route, may present an opportunity for a variation of BAT lanes that would also permit freight vehicles. A northbound freight and bus only lane (FAB lane) would be added by re-purposing existing bike lanes (no longer needed with the Redmond Central Connector) north of the 9900 Block to 124th Street and replacing one general purpose lane south of 9900 Block. (Planning, Public Works)

RELATED PLANS OR POLICIES

- WSDOT Freight System Plan—Freight Policies
- Puget Sound Regional Council, Regional Transportation Plan, Freight Policies
- King Countywide Planning Policies-Freight

SYSTEM MAINTENANCE AND PRESERVATION

Transportation Master Plan

INTRODUCTION

A well-maintained transportation system is critical to ensuring that all people living in, working in, or visiting Redmond can get around safely, conveniently, and comfortably. It is also critical to Redmond's long-term fiscal well-being and sustainability goals. Redmond's transportation infrastructure is aging, highlighting the importance of maintenance and lifecycle planning. The City must proactively assess, plan and budget maintenance and repair needs so that infrastructure can be maintained at or returned to identified level of service.

ADVANCING REDMOND 2050 GUIDING PRINCIPLES

RESILIENCE

- A well-maintained transportation system prevents network disruptions.
- Strategies supporting the Guiding Principle of Resilience include: Strategy 2, Strategy 3, and Strategy 5

SUSTAINABILITY

- Transportation system maintenance prolongs the life of system assets and helps prevent harmful substances from entering sensitive areas.
- Strategies supporting the Guiding Principle of Sustainability include: Strategy 1 and Strategy 2

EQUITY & INCLUSION

- Maintaining sidewalks, curb ramps, and bikeways supports safe and equitable access
- Strategies supporting the Guiding Principle of Equity include: Strategy 1and Strategy 4

FREIGHT AND GOODS MOVEMENT IN REDMOND TODAY

The City of Redmond maintains a wide range of transportation-related assets that require periodic maintenance, repair, or replacement. These assets are discussed in other sections of the TMP and summarized below:

TABLE 1 | SUMMARY OF TRANSPORTATION SYSTEM ASSETS

Asset	Number/Mileage
Street Centerline Miles	152
Street Lane Miles	364
Bridges	20
Sidewalks	240
Curb ramps	1308
Bike lanes	61.7
Separated bike lanes	2.7
Neighborhood Connections (Special Purpose Pathways)	5.8
Traffic Signals	112
Street Lights	2100 City-owned and 2700 PSE-owned
Signs	9,301
Pavement Markings	14,180 Markings (X-walk, Stop Bar, Legends)

Maintenance and Preservation Needs

Redmond's transportation system requires constant maintenance. The Public Works Department engages in a variety of maintenance activities, including pothole and pavement repair, ensuring signs and markings are visible, street lighting is operational, street sweeping, snow and ice response, and vegetation management. Routine maintenance of the system is prioritized based on quantitative measures such as Pavement Condition Index (PCI), the anticipated life cycle of a given asset, and inspections. The Public Works Department also responds to community requests or identified safety risks.

The City of Redmond is contending with aging infrastructure that requires more maintenance than current funding levels can address. Although regular maintenance is carried out each year, a funding gap exists. Addressing the funding gap is critical and actions such as the development of asset management plans and condition analysis will assist in identifying where to allocate limited resources to provide maximum benefit.

Pavement Management

The City oversees approximately 364 lane miles of pavement, representing an infrastructure asset with a replacement value of $300+million.

To monitor pavement condition, the City uses the Pavement Condition Index (PCI), a standardized method for evaluating roadway health. PCI scores categorize pavement as being in very good, good, poor, or very poor condition. A PCI above 70 indicates a street is in good condition, while a PCI below 55 signifies poor condition, often characterized by widespread cracking, ruts, and potholes. Figure 1 provides a visual representation of the PCI scale.

FIGURE 1 | VISUAL EXAMPLES OF PAVEMENT CONDITION

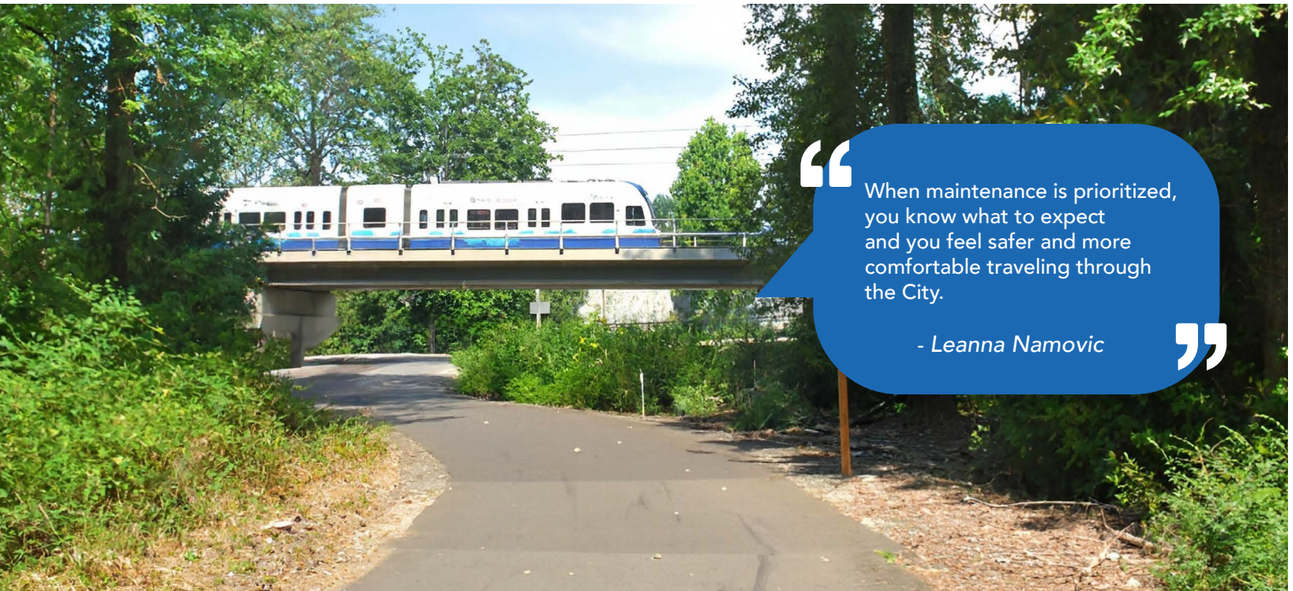
Currently, Redmond's average PCI is 65—below the level of service target of 70. This figure has declined over the past two decades, largely due to an increase in vehicular traffic, the growth of the system, and underinvestment in pavement management. Preliminary estimates suggest that bringing the network back to a PCI of 70 and maintaining it through 2050 would require an average annual investment of $11 million.

About 30% of the City's principal arterials are in poor condition with a PCI below 55. These roadways serve as high-capacity corridors for vehicular traffic and often support transit routes and truck traffic. Several arterials have up to four through lanes and additional turn lanes. Examples include Avondale Road, Redmond Way, and Bellevue-Redmond Road. Rehabilitation of streets that are in poor condition typically involves full-depth removal and replacement at an estimated cost of $700,000 per lane mile. Preventative maintenance treatments such as crack sealing help to extend the life of pavement and reduce costs associated with full-depth removal and replacement. Minor arterials often connect major corridors and have less traffic than principal arterials. Collector arterials carry traffic from local roads to the arterial network. Examples include NE 40th Street and NE 116th Street. Approximately 40% of the City's minor and collector arterials have a PCI below 70, and about 12% fall below a PCI of 55. Over the next five years, more than half of these roads are expected to require major rehabilitation. The PCI of Redmond's arterial network is shown in Figure 2.

In contrast, Redmond's local and neighborhood streets are generally in better shape and are prime candidates for preventative maintenance. Techniques such as slurry seals, chip seals, and crack sealing are cost-effective ways to extend pavement life and are most effective when applied to roads with a PCI over 70. Currently, about 240 lane miles in Redmond meet this criterion.

To slow deterioration, the Public Works Department is expanding its crack seal program and has begun applying slurry seals to neighborhood streets. Still, without increases in funding, maintaining a citywide PCI of 70 will be a challenge. Projections show that by 2030, over 55% of the arterial network could have a PCI below 55, and the citywide network average may fall below that threshold within the next decade.

In response to these challenges, the City is developing a formal Pavement Strategic Plan. This strategic plan will explore funding scenarios, maintenance techniques, and resource needs to improve and preserve the condition of Redmond's roadway infrastructure for the long term.



> When maintenance is prioritized, you know what to expect and you feel safer and more comfortable traveling through the City.
>
> *- Leanna Namovic*

FIGURE 2 | ARTERIAL PAVEMENT CONDITION INDEX (PCI)

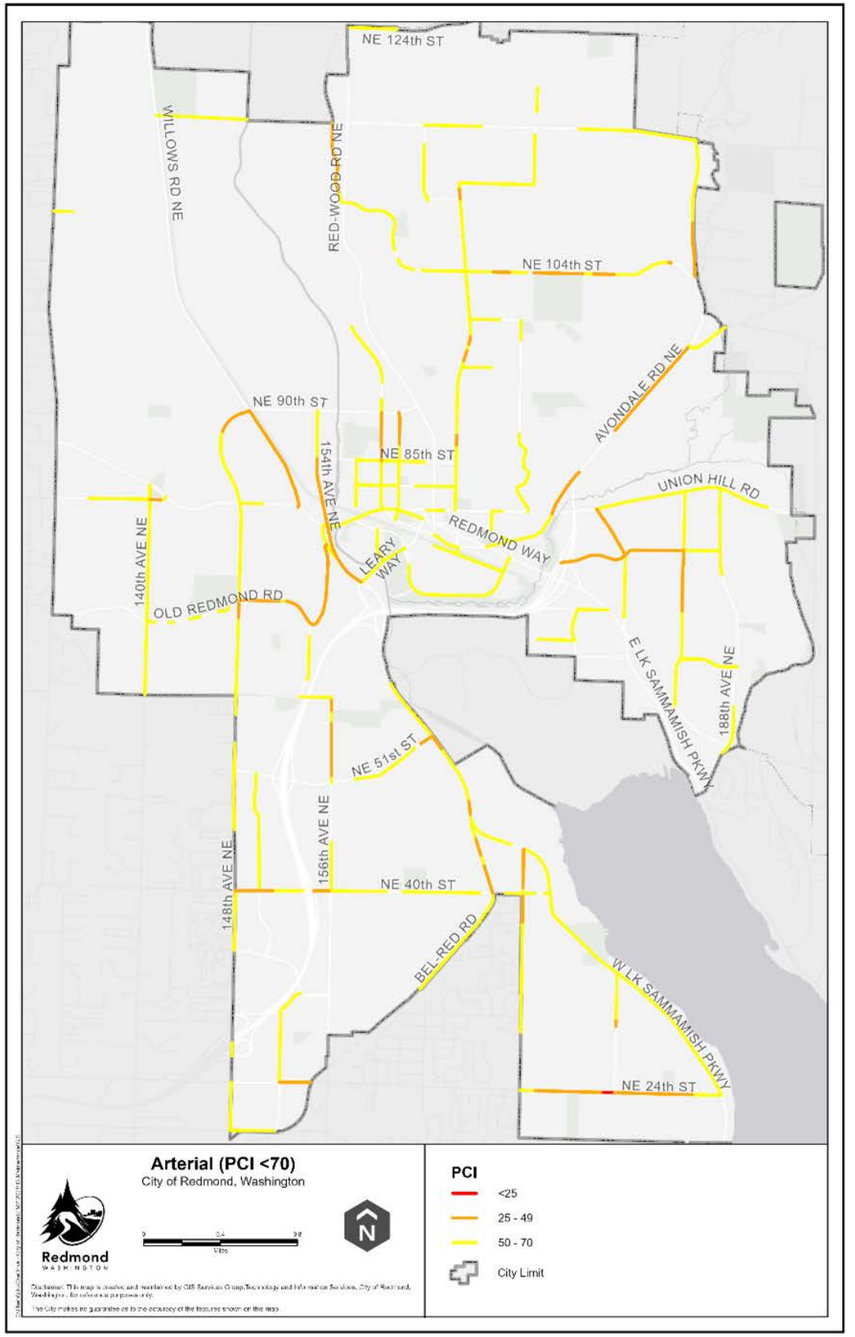
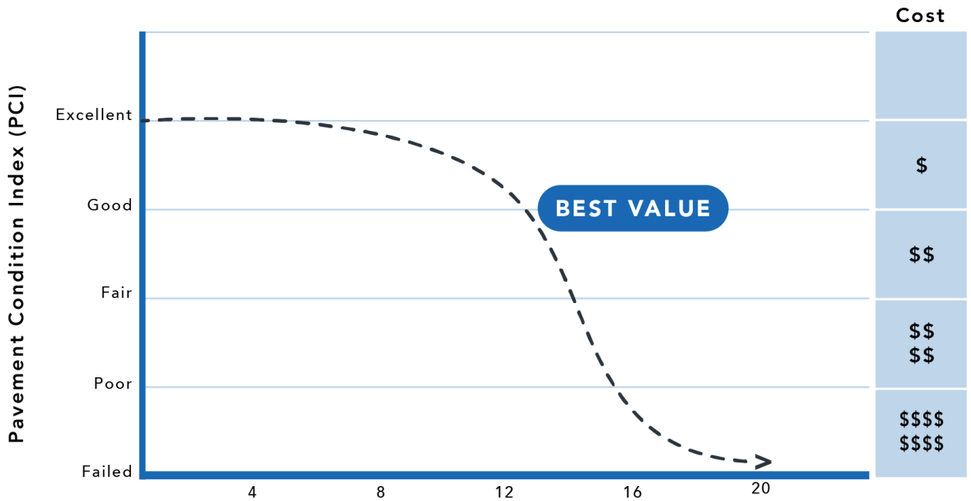


FIGURE 3 | PAVEMENT PRESERVATION CONCEPT

CREDIT: CITY OF REDMOND



Sidewalks

Redmond has over 240 miles of sidewalks and continues to construct sidewalks to fill gaps in the sidewalk network and provide better access to transit, schools, parks, and other destinations people want to walk and roll. Sidewalk condition varies throughout the city. In areas where a substantial amount of new development is occurring, older sidewalks are replaced and new sidewalks are constructed, so sidewalk conditions are generally good. In older areas of the city, such as parts of downtown and some residential neighborhoods, sidewalks may be in poor condition due to tree root upheaval and other factors.

Redmond's trees are part of what makes it a livable community. Many trees along Redmond's streets and sidewalks were planted decades ago. A combination of inadequate soil structure for tree root growth and inappropriate tree species selection has resulted in sidewalks that have major heaves and cracks, creating challenging conditions for people using mobility devices or pushing strollers. Fortunately, much more is now understood about soil structure and tree selection, which is currently being applied in new sidewalk projects that include street trees, so these conditions can be avoided in the future. However, many damaged sidewalks in Redmond will need to be reconstructed to meet ADA requirements and make them accessible. An example of a sidewalk that is being reconstructed due to damage from adjacent trees is NE 40th St.

NE 40TH ST BEFORE AND AFTER SIDEWALK RECONSTRUCTION

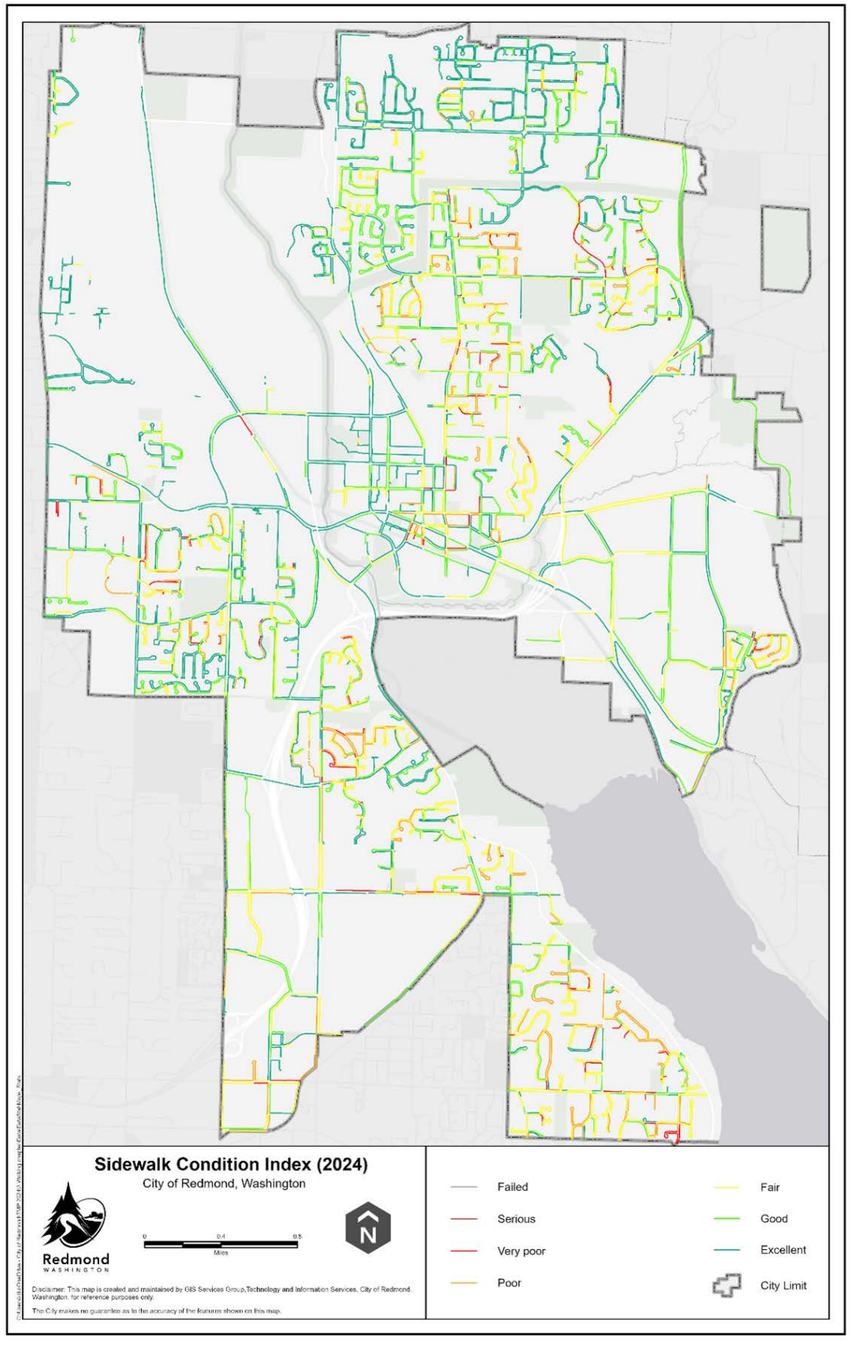
In 2024, the City collected sidewalk condition data for arterial streets, which is summarized in Table 2. Over half of arterial sidewalks are in good to excellent condition. Sidewalks found to be in fair to failed condition will be prioritized for repair or replacement by the City's concrete crew or will be replaced as part of capital improvement or development projects. See Table 1 and Figure 4 below for a summary of Redmond's Sidewalk Condition Index data.

In 2025-2026, the City will develop its Americans with Disabilities Act (ADA) Transition Plan for the Public Right-of-Way, which will identify deficiencies in the pedestrian network that impact accessibility and make it difficult or impossible for persons with disabilities to travel using this network. The plan will identify a list of sidewalks, paths, accessible push buttons, and curb ramps that need to be repaired or replaced to comply with the ADA and requirements in the Public Right-of-Way Accessibility Guidelines (PROWAG). Sidewalks with Sidewalk Condition Index (SCI) of Fair to Failed will be evaluated to determine whether they exceed ADA thresholds.

TABLE 1 | SUMMARY OF TRANSPORTATION SYSTEM ASSETS

Asset	Length (miles)	Percent of Total Sidewalk Network
Excellent (93-100)	40.83	43%
Good (85-92)	26.71	28%
Fair (71-84)	20.65	22%
Poor (55-70)	5.18	5%
Very Poor (30-54)	1.55	2%
Serious (11-29)	0	<1%
Failed (0-10)	0.02	<1%

FIGURE 4 | SIDEWALK CONDITION INDEX



TRENDS IMPACTING SYSTEM MAINTENANCE AND PRESERVATION NOW AND IN THE FUTURE

Impacts of Heavier Vehicles

As the level of transit service increases in Redmond, so too do the impacts of heavy buses on pavement condition. These impacts are most pronounced at bus stops where buses decelerate and accelerate, applying additional forces on the underlying pavement structure. Asphalt pavement, which comprises the majority of Redmond's arterial street network, is particularly susceptible to the impacts of heavy buses.

Heavier passenger vehicles also negatively impact pavement conditions. The average weight of a passenger vehicle in the U.S. has been trending upward since the early 1980s. The average weight across all passenger vehicle types is just over 4,000 pounds. As the number of heavier passenger vehicles increases, street pavement will deteriorate more quickly, requiring more frequent maintenance.

Changing the city's arterial street standard to be concrete instead of asphalt is a strategy that can extend pavement life, but concrete is more costly. Applying a concrete standard along frequent transit routes, at intersections, or at bus stops may be another more cost-effective strategy to reduce long-term maintenance costs. The use of asphalt and concrete both comes with environmental benefits and drawbacks; the use of these materials can be evaluated for alignment with the priorities of the Environmental Sustainability Action Plan (ESAP).

FIGURE 5 | CONCRETE BUS PADS REDUCE IMPACTS OF HEAVY BUSES ON PAVEMENT

Multimodal Streets Require a Different Maintenance Approach

As Redmond streets are redesigned to better accommodate walking, biking, transit, and auto traffic the methods and equipment that are used to maintain streets must also change. For example, the TMP Bicycle Strategy calls for a network of high comfort bikeways, many of which will be separated bike lanes. Separated bike lanes typically can't be swept with conventional street sweepers, so they require smaller specialized sweepers or other equipment, and additional staff resources since the sweeping would be a separate activity from sweeping the adjacent street. Similarly, snow removal for separated bike lanes requires special equipment and additional staff resources. Table 3 compares maintenance costs of conventional bike lanes (i.e., no vertical elements between the bike and vehicle lanes) and separated bike lanes.

Multimodal streets also may incorporate features such as pavement markings, signage, vertical delineators, etc. which require maintenance. Each of these features has a life cycle and needs to be replaced on a routine basis. Further, multimodal streets that divide available street space create more constrained conditions to conduct maintenance.

TABLE 3 | MAINTENANCE COST COMPARISON BETWEEN CONVENTIONAL AND SEPARATED BIKE LANES

Category	Open Bike Lanes (per mile/year)	Separated Bike Lanes (per mile/year)
Sweeping & Debris Removal	$500-$2,000	$2,000–$5,000
Snow Removal (where applicable)	$1,000–$3,000	$2,500–$6,000 (May require dedicated staff or closing facility until conditions improve)
Markings & Signage Maintenance	$200–$700	$300–$1,000
Barrier/Planter/Bollard Maintenance	N/A	$500–$2,000
Equipment Depreciation (Annual Share)	Minimal (shared sweeper fleet)	Moderate–High (dedicated sweeper fleet)
Total Annual Maintenance (Estimate)	$1,700–$5,700	$5,300–$14,000

More People Walking, Biking, and Rolling Requires a Higher Level of Maintenance

Redmond's transportation policies and planning efforts are focused on encouraging more people to walk, bike, and roll. These human-powered modes of travel are more susceptible to injurious crashes resulting from poorly maintained infrastructure – whether it's a crack in the pavement, or ice on a sidewalk. To maintain a safe system, it is important to establish a higher maintenance standard for sidewalks, bike lanes, and multiuse trails.

Reducing Environmental Impacts

Redmond's Environmental Sustainability Action Plan (ESAP) calls for increasing City-led tree planting on public properties (including public rights-of-way) and increasing the use of pervious pavement. Both actions have maintenance implications. More trees result in the need for more vegetation management (e.g., pruning, clearing tree litter). Over time, trees can also impact sidewalks and streets; however, better planting techniques and proper tree species selection can minimize these impacts. Pervious pavement, which is more appropriate for low volume parking lots, maintenance access roads, and sidewalks, requires different maintenance practices than more traditional pavements to prevent these pavements from being clogged by dirt, moss, etc., which compromise their pervious function.

As Redmond continues to grow and prioritize sustainability, transitioning the maintenance fleet toward electric-powered vehicles is a key strategy to reduce environmental impacts, enhance operational efficiency, and align with climate goals. By converting an increasing share of its vehicle inventory to electric models, Redmond can lower greenhouse gas emissions, decrease dependency on fossil fuels, and potentially realize long-term cost savings through reduced fuel consumption and simplified routine maintenance.

Electric maintenance vehicle

However, electrifying the fleet also introduces new operational considerations. Maintenance personnel may require specialized training to safely handle high-voltage equipment and address the diagnostic needs of electric drivetrains. Infrastructure investments, such as installing charging stations at municipal facilities, represent up-front costs that must be integrated into the City's capital planning. Additionally, thoughtful scheduling and route planning will be necessary to account for charging times and vehicle ranges, ensuring that critical maintenance tasks remain on track.

Over time, these costs can be offset by savings from less frequent vehicle servicing and reduced fuel expenditures. Grants, rebates, and other funding opportunities may further streamline this transition. By systematically evaluating vehicle types, developing a phased replacement schedule, and monitoring performance, Redmond can maintain a strong and reliable maintenance program while embodying the City's commitment to a cleaner, more sustainable future.

STRATEGIES AND ACTIONS

Strategies in the System Maintenance and Preservation section support the following Redmond 2050 policies:

- **TR-14:** Strategies in the System Maintenance and Preservation section support the following Redmond 2050 policies:
- **TR-17:** Ensure that all sidewalks and curb ramps are accessible to all people, including those with disabilities.

Strategy 1: Establish a Maintenance Level of Service Standard for Infrastructure Assets

For sidewalks, federal laws and guidelines such as the Americans with Disabilities Act (ADA) and the Public Right of Way Accessibility Guidelines (PROWAG), establish accessibility standards that dictate when assets such as sidewalks and curb ramps need to be maintained for accessibility. For other assets, a level of service standard - both for seasonal maintenance and longer-term system maintenance - is established by the City. A level of service standard may be tied to safety, longevity, aesthetics, user comfort, and other factors. This standard, in turn, dictates the frequency and level of maintenance performed.

Seasonal Maintenance

Recommended Actions

Action 1A	Establish asset management plans that include a level of service maintenance standard for all transportation system assets and incorporate them into the City's asset management system. (Public Works)
Action 1B	Modify seasonal maintenance practices, staffing, and budget to meet the established level of service standard. (Public Works)

Strategy 2: Plan for and adequately fund maintenance and preservation of Redmond's transportation system.

Ensuring sidewalks, streets, and other transportation assets are well-maintained is critical to achieving a safe, multimodal network. Funding for ongoing maintenance and preservation in Redmond is drawn from various sources—the General Fund, the Transportation Benefit District (TBD), and grant programs—which can fluctuate in availability from year to year. As the city grows and travel demands increase, allocating sufficient, stable funding is essential to meet safety and mobility goals. Robust financial support for maintenance not only addresses immediate repair needs but also helps avoid more costly overhauls in the future.

Capital Projects

For new capital projects, long-term maintenance costs are calculated, and sufficient budgets are set aside during the capital improvement program (CIP) project scoping phase to ensure there is sustainable funding for the maintenance requirements. Maintenance costs should account for all aspects of life-cycle asset management and replacement.

Transportation Benefit District

Redmond's Transportation Benefit District (TBD) was formed in 2023 to fund maintenance and improvements to city streets, public transportation, strategies aimed at maximizing safety and traveling choices, and other transportation projects designed to reduce congestion. The TBD is funded through a sales tax of 1/10th of one percent. In its first year, Redmond's TBD generated approximately $5 million and is expected to generate a similar amount each year. TBD funds have been used to improve the City's capabilities to build and repair sidewalks, curb ramps, and other transportation features typically constructed of concrete, and augmenting paving projects with additional resources to expand existing scope.

Grants

The City has received federal funding for pavement preservation projects via the Puget Sound Regional Council (PSRC) grant competitions, which occur in even years. Grant amounts are generally in the range of $1.3 and $1.5 million, and typically include separate design and construction phases. Pavement Condition Index for the road segment is the biggest factor in scoring for these grants, with a PCI of 50-59 receiving the highest points. Roads must be functionally classified (i.e., part of the arterial network) to be eligible, with higher functional classes receiving higher points. Freight routes and bus service can also contribute to higher scores.

Project Piggybacking

As Redmond's stormwater, sewer, and water utilities age, there is a need to replace underground infrastructure that is placed within the street right-of-way. These utility projects offer opportunities to resurface streets, fix sidewalks, and conduct other maintenance activities. Asset management planning efforts will allow the City to better align priority infrastructure projects and identify opportunities to achieve cost savings by piggybacking different types of infrastructure projects occurring within the same corridor. The City should also continue to coordinate with private development projects and Puget Sound Energy (PSE) projects to find opportunities for project piggybacking.

Recommended Actions

Action 2A	Incorporate, as standard practice, the cost of annual maintenance into all operational budgets. Update existing cost-estimation tools and CIP processes to ensure accurate maintenance costs are identified early and long-term funding is appropriately allocated as part of the biennial budget process. (Public Works)
Action 2B	Establish a Project Transportation Maintenance Fund to ensure sustained financial support for maintaining Redmond's transportation system, preventing deferred maintenance and unexpected funding shortfalls. (Public Works)
Action 2C	Create an asset management dashboard that more easily allows identification of opportunities to combine infrastructure maintenance/replacement projects across functional areas and coordinate with non-City utility providers and private development. The dashboard may also be used to report on capital project and programmatic efforts. (Public Works)

Redmond's Concrete Crew Improves Pedestrian Access While Saving the City Money

Redmond's newly formed Concrete Crew is already demonstrating the value of relying on internal resources to address the City's infrastructure needs. Their recent work at the 90th Street and Woodinville-Redmond Road intersection illustrates both the flexibility and cost-effectiveness this approach can offer. After a car accident damaged a traffic signal pole, the crew quickly removed the old foundation, prepared a new one, and took the opportunity to remove and replace the curb and gutter at the corner. They also upgraded two ADA-compliant wheelchair ramps and repaired sections of sidewalk to restore safe and accessible conditions for all users.

Without this in-house capability, these repairs would have required a lengthier contracting process and higher overall costs, likely delaying completion and inconveniencing residents. In addition to saving time and money, the project showcased strong coordination between the Concrete Crew and the Traffic Operations and Safety Engineering Division, reflecting the benefits of enhanced collaboration within the City's maintenance operations. By investing in a dedicated crew, Redmond can respond more rapidly to unanticipated infrastructure needs, maintain higher quality standards, and reduce reliance on outside contractors, ultimately supporting a more resilient and efficient transportation system.

Strategy 3: Explore alternative approaches to addressing bikeway, sidewalk, and shared-use path maintenance needs

Community-driven maintenance initiatives

As the City continues to build out its active transportation network and encourages year-round walking and biking, the maintenance needs for sidewalks, paths, and bikeways will continue to grow. This is particularly true for seasonal maintenance such as the clearing of leaves or other tree litter, and snow and ice removal from sidewalks and bikeways to maintain safe and accessible facilities. City maintenance crews may not always be able to address these seasonal maintenance needs in a timely manner. In some communities across the US community organizations have formed to address certain maintenance needs such as trimming vegetation and clearing debris from sidewalks and bike lanes. Examples include StreetFixers in Seattle, which organizes groups of people to sweep, rake, trim vegetation, etc. to make sidewalks and bikeways more passable.

Another approach to community-driven maintenance initiatives is to establish an "Adopt-a-Neighbor" program, which pairs neighbors who are unable to rake or shovel their sidewalk with volunteers who are willing to help.

City-subsidized sidewalk maintenance

The Revised Code of Washington 35.70.020 establishes that it's the responsibility of the abutting property owner to bear the burden and expense of constructing or repairing existing sidewalks along the side of any street or public place. This approach to sidewalk maintenance can lead to inequitable outcomes and often results in maintenance being deferred or not happening at all unless there are complaints from the public or a compliance program in place. In Redmond, adjacent property owners are responsible for maintaining the sidewalk in front of their homes, but historically there has been little enforcement or formal procedure in place to address degrading conditions. The City remains ultimately responsible for ensuring the sidewalks are safe for all users, and it typically responds to customer requests on a case-by-case basis to provide temporary or interim fixes.

To ensure an accessible sidewalk network the City should enforce the city ordinance requiring adjacent property owners to address sidewalk conditions that are impacting accessibility. Property owners can choose to hire a contractor or request the City to make the repair and be billed for the work. In some cases, repairing or replacing a sidewalk can be a financial burden to lower-income households. Income-qualifying households could have a portion, or all of the costs covered by the City using funds from the Transportation Benefit District.

Recommended Actions

Action 3A	Assess the viability of establishing volunteer programs such as "Adopt-a-Neighbor" for seasonal sidewalk maintenance or "Adopt-a-Bike-Lane" program where organized groups commit to performing seasonal maintenance activities such as leaf clearing within defined segments. (Planning, Public Works)
Action 3B	Develop a policy and guidelines to facilitate community-driven maintenance initiatives and ensure that such initiatives are safe for participants and meet defined level of service maintenance standards. (Planning, Public Works)
Action 3C	Increase compliance efforts for inaccessible sidewalks and establish a program to assist property owners in addressing sidewalk maintenance needs, which could include providing a list of contractors, having City crews conduct the maintenance activity and bill the property owner, and establishing an income-qualifying sidewalk maintenance subsidy program. (Public Works)

Prioritizing Transportation Infrastructure Maintenance

Redmond's transportation system should serve everyone equitably, ensuring that no person or neighborhood is left behind due to historical underinvestment or physical barriers. Older residential areas can sometimes lack the infrastructure and maintenance levels found in newer developments, resulting in uneven conditions for sidewalks, streets, and transit access. Redmond's approach to equity in transportation maintenance focuses on identifying and prioritizing high-need locations to ensure a consistent and reliable level of service throughout the city.

To achieve this, the City considers demographic data, infrastructure conditions, and community input to guide where resources are most urgently required. Areas with a greater proportion of older adults, people with disabilities, or households without access to a personal vehicle may receive additional attention for sidewalk repairs, curb ramp upgrades, and street resurfacing. Beyond physical improvements, Redmond will continue to refine how it engages with these neighborhoods—whether by holding workshops in multiple languages, meeting people where they are, or partnering with local organizations to identify and address maintenance concerns. By applying an equity lens to all aspects of maintenance and preservation, the City seeks to create a transportation network that works for every resident, regardless of age, ability, or income.

Strategy 4: Coordinate Regional Shared Use Path Maintenance

Redmond is fortunate to have several regional shared use paths that serve both a recreation and transportation function. These include the SR 520 Trail, West Lake Sammamish Trail, and East Lake Sammamish Trail, and Pipeline Trail. These trails are owned and maintained by other entities, including WSDOT, King County, and PSE, respectively. The condition of trails can impact the safety and comfort of users, as well as people's willingness to use them. The City of Redmond has a role to play in advocating for consistent trail maintenance that meets its level of service standard and potentially partner with the agencies who own and operate regional trails to help expedite maintenance activities.

FIGURE 6 | MANY SHARED USE PATHS IN REDMOND ARE MAINTAINED BY OTHER AGENCIES

Recommended Actions

Action 4A	Document maintenance needs on regional shared use path facilities. (Parks)
Action 4B	Coordinate with agencies to understand their maintenance schedules for regional trail facilities, and to potentially enter into maintenance agreements that would allow the City of Redmond (or its contractors) to perform maintenance and be compensated by the trail owner. (Parks, Public Works)

Strategy 5: Assess Feasibility of Shifting Major Maintenance Activities to Off-Peak Hours

As Redmond transitions from a suburb to a city, the activity and demands on its streets will continue to increase, adding to the complexity of performing maintenance and resulting in greater disruptions to traffic from maintenance activities. Shifting maintenance activities that require street or lane closures or other significant modifications to traffic flow to off-peak hours is a strategy to mitigate traffic impacts, but doing so would be a fundamental shift for Redmond's maintenance crews.

If the City were to pursue off-peak maintenance, several considerations would need to be evaluated. Such a shift may necessitate redefining roles to oversee night or weekend work, as well as engaging in discussions with labor unions regarding contract terms and work schedules. Pilot programs could be conducted to determine whether scheduling certain maintenance activities outside of peak hours effectively reduces congestion, remains cost-effective, and is operationally feasible. Coordination with other agencies would also be needed to minimize noise or other disturbances to businesses and residents. In addition, the City would need to ensure adequate budgeting for any specialized equipment, training, and ongoing performance monitoring. Although not a preferred approach, implementing off-peak maintenance could be further examined as the demands on Redmond's transportation system continue to grow.

Recommended Actions

Action 5A	Establish criteria that would help determine when off-peak maintenance may be justified. Such criteria may relate to the scale and duration of the maintenance activity, anticipated impacts on traffic, emergency response times, businesses, and whether there are viable detour routes. (Public Works)
Action 5B	Investigate and document the resources needed to stand up a night maintenance crew on an as-needed basis. (Public Works)

CURBSPACE AND PARKING MANAGEMENT

Transportation Master Plan

INTRODUCTION

With the growth of transportation network companies (TNCs) and associated curbside pickups and drop-offs, online shopping and associated package deliveries, as well as transit, accessibility, and vehicle storage, there is high demand for curb space. Curb space is the part of the street that marks the transition from the space where people and vehicles travel to the space where people walk on the sidewalk and adjacent land uses. Curb space is also the place where both movement and access may conflict, but where both movement and access are needed to serve convenience and commerce.

Curb space management seeks to inventory, optimize, allocate, and manage curb space to maximize mobility, safety, and access for the wide variety of curb demands. By comparison, parking management focuses on the use of the curb for parking purposes but also addresses off-street parking (i.e., parking lots and garages). When managed together, effective curb and parking management optimizes parking utilization, decreases time spent searching for parking, and reduces congestion.

To meet the needs of its curb space, the City of Redmond is developing a curbside management plan for Redmond's three urban centers—Downtown Redmond, Marymoor Village and Overlake Village. This system will balance the needs of various curbside uses, including ridesharing, loading, and unloading zones, outdoor dining, City maintenance, commercial garbage collection, fire access, Americans with Disabilities Act compliant (ADA) parking spaces, deliveries, vendors, planned bikeways, and time-limited parking for visitors.

ADVANCING REDMOND 2050 GUIDING PRINCIPLES

Redmond 2050 establishes three Guiding Principles: Resilience, Equity and Inclusion, and Sustainability. The Curb Space and Parking Management strategies identified in this section support these principles, as shown below.

RESILIENCE

- Maintain flexibility in the face of technological innovation, changes in mobility patterns, natural disasters, and other sources of uncertainty and disruption. (See Redmond 2050 FW-TR-33)
- Strategies supporting the Guiding Principle of Resilience include: Strategies 5, 7, and 9.

SUSTAINABILITY

- Establish off-street parking requirements that prioritize space for people, housing, jobs, services, recreation, amenities, and environmental sustainability. (See Redmond 2050 FW-TR-35)
- Strategies supporting the Guiding Principle of Sustainability include: Strategies 1, 2, and 8.

EQUITY & INCLUSION

- Ensure that all sidewalks and curb ramps are accessible to all people, including those with disabilities . (See Redmond 2050 TR-17)
- Strategies supporting the Guiding Principle of Equity include: Strategies 3, 4, and 6.

Existing Conditions

Redmond is a growing city with a vision for future growth in employment and housing primarily occurring in the City's three urban centers in Downtown Redmond, Marymoor Village, and Overlake Village. Curb space is a key piece of Redmond's transportation infrastructure and will help support Redmond's future growth and provide access to everyday needs and important destinations for residents, customers, visitors, and employees. Management of the city's curb space and parking resources can help contribute to transportation goals for equitable mobility, improving access to transportation choices, and building a more sustainable transportation system.

Early in 2025, the City completed an inventory to document existing parking conditions in its three urban centers—Downtown Redmond, Overlake Village, and Marymoor Village. The report provides a foundation for updating the City's parking management strategies and policies, aligning them with the recently adopted Redmond 2050 Comprehensive Plan.

Downtown Redmond and Overlake Village have higher population densities than Marymoor Village, which has a smaller population owing to the presence of Marymoor Park. Out of the three, Overlake Village is the largest neighborhood with 7,000 residents and more than 45,000 jobs, followed by Downtown Redmond with 6,000 residents and 10,000 jobs.

The 2023 American Community Survey states that the primary commuting travel choice of Redmond residents, employees, and visitors is the single occupancy vehicle, with 53% of all trips. Approximately 25% of Redmond community members work from home one or more days per week. Transit usage follows next at 10%. However, these figures likely do not reflect the ebb and flow of traffic and parking in the city throughout the day. This is because Redmond has various commercial office spaces, especially in Overlake Village and Downtown Redmond, attracting commuters from outside the city who are not captured in travel surveys.

As of April 2025, Redmond has four fully operational Sound Transit Link light rail Line 2 stations, serving this segment of Link Light Rail. It is anticipated that the Lake Washington segment of Line 2, which will be operational in spring 2026, will provide important connections to Seattle and cities north and south, which will change the Redmond parking system dynamics for years to come.

Downtown Redmond
On-Street Parking:

The Downtown Redmond urban center has a total of 12,800 parking spaces 1,130 of which are on-street spaces. In 2024, peak on-street parking occupancy for the entire area occurred at 12 PM when 70% of spaces were occupied, while the least number of spaces were occupied at 4 PM with half the spaces empty. This is up from 2019 when on-street parking in downtown peaked at 62.5% occupancy. Taken together, the overall occupancy remained within the 50-70% band in the hours surveyed. That is well below the 85% industry threshold.[1]

TABLE 1 | ON-STREET PARKING INVENTORY BY TYPE – DOWNTOWN REDMOND

Parking Space Type	Parking Space Type	Percent of Total
Unrestricted Parking	410	36.3%
Time Limited	625	55.3%
Loading Zones	55	4.9%
Other (ADA, Business only, Motorcycle Only, Future resident)	34	3.0%
Total Spaces	1,130	100.0%

[3] 85% parking threshold: This level of occupancy in a parking zone is an industry-wide standard for optimum occupancy to balance parking demand and supply. At this level of occupancy, the supply of parking is efficiently used while also providing some parking availability.

In Downtown Redmond there are ten times as many off-street parking spaces compared to on-street locations. These 11,429 public and private parking spaces are spread among 164 facilities, with their capacities ranging from 5 to 851 spaces.

Like on-street parking occupancy, off-street occupancy peaks late in the morning to early afternoon and then trends down during the rest of the day. While occupancy varies among parking facilities the occupancy of all off-street facilities together is just over 50% during peak times.

The City has had a parking permit program since November 2009. This program offers monthly permits for on-street parking without time limits in certain areas of downtown. Permits are issued on a first come-first serve basis. There are currently no programs specifically for residential parking permit or employee permit programs.

Parking revenue is collected from the on-street parking permit program and at the City-owned Redmond Central Connector lot.

Marymoor Village

Marymoor Village is the smallest of the three urban centers and consequently also has the least parking capacity, with a total of 3,028 parking spaces distributed between on street and off-street locations.

On-Street Parking:

Marymoor Village has 216 on-street parking spaces. Table shows that all 180 open spaces have no time limitations. At the time of the survey in early 2025, thirty-six spaces were unavailable for parking due to construction-related activities and therefore were not included in the occupancy analysis.

TABLE 2 | ON-STREET PARKING INVENTORY BY TYPE - MARYMOOR VILLAGE

Parking Space Type	Number of Spaces	Percent of Total
Unrestricted Parking	180	83%
Under Construction	36	17%
Total Inventory	216	100.0%

The average occupancy across all on-street spaces during the survey period from 9 AM to 8 PM peaked at 50% at 11 AM, and then reaching sparse occupancy after 3 PM, hovering around 15% for the remainder of the period. It is expected that as new development occurs in Marymoor Village demand for parking and other curb uses will increase.

Off-Street Parking:

Like the other urban centers, most parking availability in Marymoor Village is in off-street facilities — 2,812 spaces. Similarly, the ownership of most of these spaces is private, with only 77, or less than 3% of the spaces, are being provided by public agencies. While the Marymoor Village Station Parking Garage wasn't open at the time of the inventory, it opened in early May 2025. It contains 1,400 parking stalls. Occupancy at off-street facilities is like that at on-street spaces in that the levels are low and go down further as the day progresses. They peak at 50% at 11 AM and reduce to 28% by 7 PM.

Overlake Village

On-Street Parking:

Overlake Village is a subarea within the southernmost portion of the Overlake Metro Center. Within this area there are 134 on-street spaces. The land use of this area is currently dominated by lower density office commercial and car-oriented retail (with surface parking) but is rapidly transitioning to mixed-use residential. Of the on-street parking spaces,129 of 134 spaces are unrestricted parking, three are loading zones, and two are for emergency vehicles only. In contrast to Downtown, there are zero restricted, ADA-only, and permit spaces in Overlake Village.

TABLE 3 | ON-STREET PARKING INVENTORY BY TYPE - OVERLAKE VILLAGE

Parking Space Type	Number of Spaces	Percent of Total
Unrestricted parking	129	95.8%
30-minute Loading Zone	3	2.5%
Emergency Vehicle Only	2	1.7%
Total Spaces	134	100.0%

Parking occupancy reaches its peak in the evening at 7 PM at 83%. This is well after the commute-related peak hours and nearly reaches the 85% occupancy threshold Parking demand is associated with residents choosing not to park within the buildings in which they live. The lowest occupancy is observed at 3 PM with 65% of all the spaces occupied.

Off-Street Parking:

There are 6,635 off-street spaces . More than 90% of these off-street lots are privately-owned, while less than 10% are present in publicly owned facilities, these being the King County Metro Overlake Park-and-Ride lot and the Sound Transit Redmond Technology Station Parking Garage.

Unlike the late evening peak occupancy observed for on-street spaces, the off-street facilities follow a more expected peak hour trend during the day. However, overall occupancy itself is low, reaching a high of 37% around 11 AM and down to 24% at 7 PM.

GOALS FOR PARKING MANAGEMENT

As described below, Redmond has five goals for managing the City's parking supply while supporting other City goals related to Redmond's urban centers and a sustainable and equitable transportation system. The Strategies and Action steps defined below will provide implementation steps to help achieve Redmond's curb space and parking management goals.

1. Effectively manage parking to facilitate access to businesses, services, and residences in Redmond's urban centers.
2. Support safe and comfortable multimodal access to, from, and around on- and off-street parking facilities.
3. Manage curb space in Redmond equitably with consideration of community benefits and multiple transportation modes and manage on-street parking to provide equitable access to businesses, services, public spaces, and transit.
4. Manage and design Redmond's future parking system to support the land use and transportation vision and goals for a sustainable community.
5. Use innovative parking management strategies and technologies to manage Redmond's future parking system.

Effectively manage parking to facilitate access to businesses, services, and residences in Redmond's urban centers.

Redmond will take a coordinated approach to parking via land use and zoning code strategies to "right size" parking requirements for new development. The City will also work to implement proactive parking management that optimizes the value of Redmond's limited public parking inventory. As Redmond's urban centers continue to grow around transit, there will be more demand for parking near destinations, such as retail and light rail stations. The Downtown Parking Management Strategic Plan found that, overall, there is an adequate supply of parking in Downtown Redmond and recommended parking management strategies to more efficiently utilize available parking. Managing parking facilities so that the most convenient spaces are available to priority users, such as customers or freight deliveries, will help support local businesses in urban centers. Parking management strategies, such as paid parking and time limits that are consistent between the city's urban centers, will allow Redmond to target a specific curbside parking occupancy rate that balances utilization and availability. Easily understandable restrictions, enforcement, and parking availability could help improve perceptions of parking convenience and availability in high-demand areas.

Support safe and comfortable multimodal access to, from, and around on- and off-street parking facilities.

Parking access interacts with other travel modes, in particular, people walking, rolling, and biking. Parking should be incorporated into street design to maximize roadway safety and should be designed around pedestrian and bicycle facilities to help minimize conflicts with vehicles. Public parking on Redmond's streets is subject to City standards defined in the Redmond Zoning Code (see Section 21.52 and Appendix 2).

Driveway access to off-street parking facilities can create conflicts with pedestrians and cyclists where access points mix with vehicular modes. The vehicular access locations for new development are regulated by the development standards in the Redmond Zoning Code. This includes design standards that regulate distance from other driveways and intersections, turning radii, and design aspects that affect how driveways interact with multiple modes of transportation. The standards should align closely with Redmond's transportation goals and priorities to minimize conflicts.

Manage curb space in Redmond equitably with consideration of community benefits and other modes and manage on-street parking to provide equitable access to businesses, services, public spaces, and transit.

Curb space is a limited public asset that serves many functions in Redmond's transportation system. Redmond will strive to allocate curb space equitably and in a way that considers community needs and benefits from potential uses based on the local neighborhood context. Because there are competing demands for curb space in Redmond's urban centers, the City will work to manage a finite inventory of curbside parking and loading spaces to consider diverse community needs.

Management of Redmond's parking system should promote equitable outcomes in the community. Effective management of the city's parking inventory can help ensure more uniform utilization of public parking in Redmond's urban centers. In areas with high parking demand, targeted strategies can improve access to transit, public spaces, and other destinations from parking areas. A curb space management strategy that allocates curb space equitably, manages Redmond's finite supply of on-street parking effectively, and leaves space for multiple transportation modes and curb space uses can better respond to community needs.

Manage and design Redmond's future parking system to support the land use and transportation vision and goals for a sustainable community.

Implementing a coordinated approach to parking that decreases new off-street parking in Redmond reduces potential impacts on the local community and natural environment and supports the City's environmental sustainability goals. The vision for the future of Redmond's transportation system is a sustainable multimodal network, with growth focused on light rail and frequent transit.
With Redmond 2050, minimum parking requirements have been eliminated within urban centers. Integrating parking into streetscape standards that include space for landscaping, green stormwater infrastructure, and other sustainable travel modes such as walking and biking would help the City create a more sustainable transportation system.

Use innovative parking management strategies and technologies to manage Redmond's future parking system.

Innovations in technology are changing the way parking is managed. This includes methods for collecting and monitoring data on parking, communicating with people trying to access parking, and integrating parking with other elements of intelligent transportation systems. Novel practices have been implemented by other Washington cities in the past two decades that allow for dynamic pricing based on fluctuations in parking demand throughout the day, flexible parking payment systems, and integration with a variety of platforms. Redmond will consider emerging best practices for managing parking using technologies that can support broader curb space management strategies and the City's transportation goals.

STRATEGIES AND ACTIONS

Strategy 1: Develop a comprehensive curbside management plan for Redmond's three urban centers that prioritizes on-street curb space functions based on land use context, access and mobility needs, placemaking, and other functions.

Curb space is in high demand in Redmond, and parking is only one potential use of the City's limited curb space resources. Different neighborhood contexts in Redmond have competing priorities for curb space; Redmond's urban centers have the most competing needs for curb space.

As shown in Table 4 below, curb space priorities are presented by land use. The different curb space uses are categorized broadly on the overall intent and function of the curb space and do not correlate with a particular mode of travel. Planning Priorities, while not a specific use, include public infrastructure and capital projects that are defined priorities of investment for both the City and partner agencies.

1. **City Planning Priorities:** Investments in public facilities included in plans from the City and partner agencies regardless of curb use. City Planning Priorities include investments by the City and other partner agencies, such as green stormwater infrastructure; bus facilities, lanes, and layover; and bike lanes or other improvements specifically included in plans by the City or partner agencies.
2. **Safety:** Daylighting for intersection safety and pedestrian crossings and pedestrian and bicycle safety improvements.
3. **Parking:** Time-limited, paid, or unrestricted on-street parking.
4. **Access:** Bus stops, passenger loading, bike parking, bike or scooter share, emergency and service vehicle access.
5. **Goods Movement:** Commercial loading areas or package or food deliveries.
6. **Activation:** Parklets, dining areas, public art, street furniture, or other pedestrian amenities.

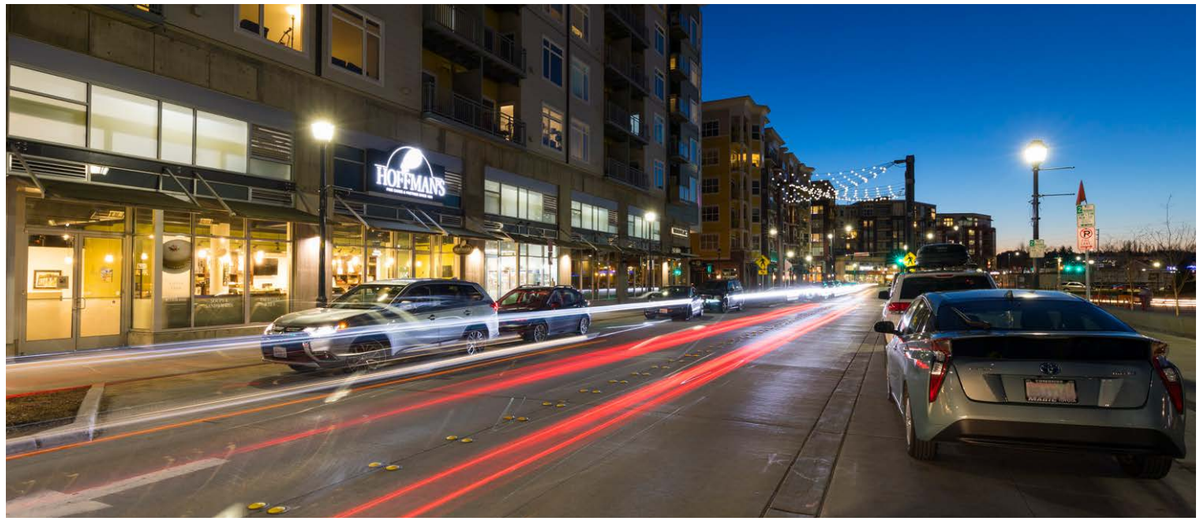


TABLE 2 | CURB SPACE PRIORITIES

Priority	Residential*	Mixed- Use	Main Street	Office and Commercial	Industrial
1	City Planning Priorities				
2	Safety				
3	Access	Access	Access	Access	Goods Movement
4	Parking	Activation	Activation	Goods Movement	Access
5	Goods Movement	Goods Movement	Goods Movement	Activation	Parking
6	Activation	Parking	Parking	Parking	Activation

*Land Use Definitions:

Residential: Predominantly residential uses, including detached and attached single-family housing and multifamily apartment buildings with limited retail or other nonresidential uses (excluding parking) at street level.

Mixed Use: Mixed-use neighborhood streets with a combination of residential, retail, office uses at street level, with lower pedestrian traffic or at lower densities than Main Street contexts (defined in 3).

Main Streets: Mixed-use areas with predominantly retail and commercial services at ground level and heavy pedestrian traffic.

Office and Commercial: Areas with predominantly retail and office functions regardless of density, including shopping centers and office campuses.

Industrial: Areas with predominantly light industrial, warehousing, distribution and logistics, or businesses that include small-scale manufacturing or fabrication on site.

A Curbside Management Plan is currently under development and will consider how to balance the many needs of curbside uses, including ridesharing, loading, and unloading zones, outdoor dining, City maintenance, commercial garbage collection, fire access, ADA parking needs, deliveries, planned bikeways, and time-limited parking for visitors. Another emerging curb use is electric vehicle (EV) charging, which should generally be excluded from areas with higher curb use demand. The Environmental Sustainability Action Plan and Section 12, E-Mobility, discuss EV charging in more detail.

The five goals for the future of Redmond's parking system described earlier in this document are intended to balance the community's parking needs with Redmond's urban centers and the future of the City's transportation system. Redmond 2050 envisions the City's urban centers as hubs of residential, commercial, and cultural activity. Downtown is and will remain the civic heart of Redmond; Overlake has begun to transform into a regional hub for technology, research, and development; and Marymoor Village is developing into a transit-oriented and inclusive community.

Strategy 1 supports the following Redmond 2050 policies:

- **TR-34:** Implement comprehensive on-street parking management programs that at a minimum address underutilized parking, shared parking, transit access parking, wayfinding, and localized parking imbalances. Manage parking demand using strategies like time limits and pricing.

Recommended Actions

Action 1A	Develop a comprehensive urban center curbside management plan based on the curb space priorities established in the TMP. (Public Works, Planning)
Action 1B	Implement programs and strategies identified in urban center curbside management plan and other planning documents, including the TMP, that impact curb space. (Public Works, Planning)

Strategy 2: Manage on-street parking in Redmond to optimize utilization of the City's limited on-street parking inventory.

Redmond should pursue parking management strategies that balance systemwide consistency and sensitivity to the local context in the City's three urban centers of Downtown Redmond, Marymoor Village, and Overlake. Both on-street and off-street parking facilities seek to ensure that the available parking supply is optimized and used efficiently, and that the overall parking system is functioning well for users. When compared to the inventory of private, off-street lots and garages, Redmond has a limited supply of on-street parking. On-street parking is generally targeted to those who need immediate short-term access to nearby businesses. Off-street parking facilities can offer customers, employees, and residents more time to park their car, larger capacity to accommodate more vehicles.

Redmond will continue to manage on-street parking as a valuable public resource through existing City programs and new efforts to increase parking efficiency. The City's goal in implementing these parking management strategies should be to keep parking in high-demand areas within the optimal range of parking occupancy rates between 70% and 85%. The following actions will help the City manage its parking system.

Strategy 2 supports the following Redmond 2050 policies:

- **TR-34:** Implement comprehensive on-street parking management programs that at a minimum address underutilized parking, shared parking, transit access parking, wayfinding, and localized parking imbalances. Manage parking demand using strategies like time limits and pricing.

Recommended Actions

Action 2A	Revise parking permit program to better meet parking needs and reflect market pricing. (Police, Planning)
Action 2B	Implement a paid parking system in high-demand parking areas of Redmond's urban centers with metering and mobile payment options to ensure parking turnover, which benefits businesses, and generate revenue for a parking enterprise fund to make the parking program self-sustaining rather than supporting the program from the City's General Fund. (Police, Public Works, Planning)
Action 2C	Expand the Downtown Redmond Time-Limited Enforcement Zone to include on-street parking in the Anderson Park area of downtown. (Police)
Action 2D	Create parking management and enforcement areas in Marymoor Village and Overlake Village that include time-limited parking and paid parking. (Police)

Strategy 3: Implement a parking system that is user-friendly and easy to navigate.

To be successful, the overall parking system should be easy to use and understand for people who live, work in, or visit Redmond. Through a review of the current system, it has been determined that the development and implementation of a wayfinding system that is easy to identify, navigate, and understand should be considered. A wayfinding system for parking could be integrated with other wayfinding and signage in Redmond designed for motor vehicles. Attributes of successful parking signage and wayfinding systems include user friendly designs, clear messaging, simple icons to ensure drivers can understand the information quickly. An effective wayfinding system directs drivers efficiently to parking facility entrances, exits and available spaces, saving time and reducing unnecessary circling and resultant congestion and emissions.

Parking location information should also be readily available online on the City's website and could also be made available through an easy-to-use application or popular mapping applications.

Parking restrictions that are consistent and easy to understand will also help the public understand parking management and enforcement in Redmond's urban centers. The following actions will make Redmond's parking system more user-friendly and understandable as parking management efforts expand outside of downtown.

Strategy 3 supports the following Redmond 2050 policies:

- **TR-35:** Establish off-street parking requirements that prioritize space for people, housing, jobs, services, recreation, amenities, and environmental sustainability. Reduce or eliminate minimum required parking regulations near high-frequency transit, in centers, for middle housing, and near neighborhood-based businesses. Maintain a process and decision criteria to allow the granting of parking ratios above or below required ratios.

Recommended Actions

Action 3A	Develop a legible wayfinding system that directs drivers to off-street public parking and potentially includes real-time availability information. (Planning, Public Works)
Action 3B	Create uniform parking restrictions and regulations throughout the city as parking management programs expand to new areas. (Police)
Action 3C	Encourage development and integration of local parking system information for web-based map apps. (Police, Planning)

Strategy 4: Enforce clear and understandable parking restrictions in Redmond's urban centers.

Enforcement is critical for the effective implementation of parking management strategies. Expansions of time-limited parking and the implementation of paid parking will require enforcement. The goal of parking enforcement is to ensure that the parking management systems and programs are operating as intended.

The Redmond Police Department enforces parking restrictions, including fire lanes, loading zones, disabled parking and will be increasing parking enforcement efforts with the growth of the parking management program in all urban centers and the implementation of paid parking in specific areas within urban centers. The Police Department also manages contracts for enforcement of City-owned off-street parking facilities.

The following actions will help the City enforce clear and understandable parking regulations in Redmond's urban centers.

Strategy 4 supports the following Redmond 2050 policies:

- **TR-35:** Establish off-street parking requirements that prioritize space for people, housing, jobs, services, recreation, amenities, and environmental sustainability. Reduce or eliminate minimum required parking regulations near high-frequency transit, in centers, for middle housing, and near neighborhood-based businesses. Maintain a process and decision criteria to allow the granting of parking ratios above or below required ratios.

Recommended Actions

Action 4A	Ensure parking signage and restrictions are consistent and easy to understand throughout the city so that time limits, restrictions, and enforcement are clear to users. (Police)
Action 4B	Implement a paid parking system in areas of high parking demand that tracks vehicle information for consistent enforcement of time limits and parking rates. (Police)

Strategy 5: Further align parking regulations with goals for affordable, people-centered urban centers.

Right-sizing the amount of available parking and effectively managing parking are critical for achieving Redmond's transportation and land use vision. The design of on-and-off street public parking on Redmond's streets is regulated by street and access standards in the Redmond Zoning Code (Section 21.52 and Appendix 2). Standard design specifications for streets, including on-street parking, are applied to different street types. Parking design and location should also reflect other goals of the City's transportation system, including complete pedestrian and bicycle networks and high-quality transit.

Dedicated structured parking is expensive to construct and increases the cost development, which is passed on to tenants. As an acknowledgement of this cost and to promote more affordable housing, Redmond 2050 code updates adopted in December 2024 eliminated parking minimum requirements for new residential developments in urban centers. Despite the elimination of parking minimums, new development may still build parking to meet what is understood to be the current market demand for parking. Often this results in the overbuilding of parking, perpetuating the increased costs associated with parking. Many communities are also establishing parking maximums, or an upper limit for the number of spaces allowed for specific uses. Parking maximums ensure that new development right-sizes parking facilities to support more affordable housing, reduce vehicle miles traveled, and generally, support the creation of more people-centered communities. Consideration should be given to eliminating parking minimums and establishing parking maximums citywide.

Other strategies that could be effective in managing parking supply include:

- Regulating and Pricing: Implement pricing strategies that increase the costs for longer parking durations to reduce demand and congestion.
- Data Analytics: Utilizing data to analyze parking trends and optimize pricing and demand management strategies.

Strategy 5 supports the following Redmond 2050 policies:

- **TR-25:** Establish and implement standards in the Transportation Master Plan for the design, construction, and operation of streets. Ensure that the standards address modal plans; context sensitive design; environmental protection; property access; continuity of the street pattern; block size; access management; curb lane use; utilities placement; parking for cars, bicycles, buses, and other vehicles; and the comfort and safety of all users.

Recommended Actions

Action 5A	Continue to regularly evaluate parking requirements, including parking maximums, elimination of citywide parking minimums, time-based pricing strategies, and other policies to more effectively manage parking supply and align with City goals and priorities for the transportation system and affordable, people-centered development. (Planning)
Action 5B	Use data analytics to understand parking demand and optimize pricing. (Planning)

Strategy 6: Designate accessible parking spaces to meet community needs.

Redmond's parking system includes some disabled parking stalls, but the City does not have a standard or policy for providing designated disabled parking spaces as part of public on-street parking. To meet U.S. Access Board Public Right-of-Way Accessibility standards, the City will need to establish a standard ratio of designated disabled parking spaces. Access to nearby pedestrian crossings and entrances to major destinations should also be considered when locating designated disabled parking stalls.

All streets with public on-street parking should have designated disabled parking spaces on the same block perimeter. The City should prioritize implementation of disabled parking standards in Redmond's urban centers. The following actions will help Redmond address existing community needs for accessible on-street parking.

Strategy 6 supports the following Redmond 2050 policies:

- **TR-35:** Establish off-street parking requirements that meet the U.S. Access Board Public Right of Way standards, which prioritize space for people, housing, jobs, services, recreation, amenities, and environmental sustainability. Reduce or eliminate minimum required parking regulations near high-frequency transit, in centers, for middle housing, and near neighborhood-based businesses. Maintain a process and decision criteria to allow the granting of parking ratios above or below required ratios.

Recommended Actions

Action 6A	Through the Curbside Management Plan, evaluate where there are deficiencies in designated disabled parking spaces and identify where additional spaces should be in Downtown Redmond, Marymoor Village, and Overlake Village. (Public Works)
Action 6B	Design designated disabled parking spaces so as to minimize distance to pedestrian crosswalks and other access points, and to minimize conflicts with bicyclists and micromobility users if adjacent to a bikeway. (Public Works)

Strategy 7: Work with community, transit agency, and local business partners in the development and execution of parking plans in station areas that foster equitable, inclusive, sustainable and resilient transit-oriented communities.

Redmond currently has partnerships with community organizations and employers in Redmond. The City should continue to build and strengthen relationships with its current partners and work with other agencies to help manage the parking system. Sound Transit manages the parking facility at the Redmond Technology Station, which contains spaces for 300 cars and 44 spaces for bicycles. King County manages parking at Marymoor Park, and Sound Transit manages parking at a 1,400-stall parking structure at the Marymoor Village light rail station. Partnerships with both agencies are important to Redmond's parking management initiatives in Marymoor Village. Partnerships with other major employers like Microsoft and organizations could help achieve the transportation goals in Marymoor Village and Overlake.

City partnerships with community members, local organizations, and employers are important to the success of the parking management program. Redmond should continue to strengthen relationships with local organizations and other agencies and enhance collaboration among different City departments through the actions described below.

Strategy 7 supports the following Redmond 2050 policies:

- **TR-33:** Adopt and implement a parking plan in the Transportation Master Plan that supports the development of equitable, inclusive, sustainable, and resilient transit-oriented communities. Consider the needs of older adults, families with small children, and people with disabilities in the design of parking.

Recommended Actions

Action 7A	Partner with King County and Sound Transit to manage parking near Marymoor Park and the Marymoor Village light rail station, and coordinate on Transportation Demand Management efforts to encourage access by non-SOV modes. (Planning, Police)
Action 7B	Continue to engage with community organizations, King County, and employers in Redmond's urban centers to develop parking management programs that will effectively serve the Marymoor Village and Overlake communities. (Planning)

Strategy 8: Support a shared parking program for off-street parking areas in Redmond with public parking components or parking areas that are shared between neighboring land uses and/or development.

Shared parking allows a single parking resource to be shared between different adjacent land uses to take advantage of different periods of peak parking demand. Shared parking reduces the total amount of parking necessary to accommodate demand by balancing the peaks in demand within an area. This can take the form of a single private lot shared between two or more nearby uses or a central parking area for a neighborhood or district.

Shared parking is currently allowed in the Redmond Zoning Code and can be used by developers to reduce the overall amount of parking provided within a single development. For shared parking arrangements to be successful, the peaks in parking demand for different uses should be balanced and should not happen concurrently. For example, shared parking between office and retail uses is often successful because the demands for the two uses occur at different times.

Some developments in Redmond's urban centers currently have shared parking arrangements or a public parking component. These may be shared between uses in the same development or between neighboring developments through arrangements between property owners and managers or lease agreements with individual tenants.

The City will be implementing a shared parking pilot program to optimize the use of existing parking facilities and reduce congestion. Funded by a 2026 Washington State Regional Mobility Grant, the pilot will test connecting underused parking in the evening hours with those in need of parking, offering a reliable parking solution while supporting small businesses and improving access to downtown businesses and light rail transit.

Strategy 8 supports the following Redmond 2050 policies:

- **TR-34:** Implement comprehensive parking management programs that at a minimum address underutilized parking, shared parking, transit access parking, wayfinding, and localized parking imbalances. Manage parking demand using strategies like time limits and pricing.

- **TR-35:** Establish off-street parking requirements that prioritize space for people, housing, jobs, services, recreation, amenities, and environmental sustainability. Reduce or eliminate minimum required parking regulations near high-frequency transit, in centers, for middle housing, and near neighborhood-based businesses. Maintain a process and decision criteria to allow the granting of parking ratios above or below required ratios.

Recommended Actions

Action 8A	Work with property managers and developers to understand opportunities for shared parking as part of existing and incoming development. (Planning)
Action 8B	In the near-term develop a shared parking pilot program in downtown, where developers can make underutilized parking available to the public or other nearby uses. (Planning)
Action 8C	Support an expanded shared parking program in all urban centers by facilitating connection between demand and supply, providing information to interested parties, and promoting shared public parking facilities through wayfinding, mapping, and other channels. (Planning)

Strategy 9: Monitor parking occupancy and utilization in Redmond's urban centers and the performance of the City's parking and curb space management programs.

The evolution of development in Redmond's urban centers will change the way people use parking. Regular monitoring of the program will help the City understand shifts in parking utilization and the effectiveness of parking management programs.

The following actions will help the Redmond achieve its objectives for parking management efforts in its urban centers.

Strategy 9 supports the following Redmond 2050 policies:

- **TR-25:** Establish and implement standards in the Transportation Master Plan for the design, construction, and operation of streets. Ensure that the standards address modal plans; context sensitive design; environmental protection; property access; continuity of the street pattern; block size; access management; curb lane use; utilities placement; parking for cars, bicycles, buses, and other vehicles; and the comfort and safety of all users.

- **TR-34:** Implement comprehensive parking management programs that at a minimum address underutilized parking, shared parking, transit access parking, wayfinding, and localized parking imbalances. Manage parking demand using strategies like time limits and pricing.

Recommended Actions

Action 9A	Monitor the effectiveness of parking management strategies in urban centers and adjust parking programs based on observed patterns in peak demand and response to implementation of paid parking and time limits in the future. (Planning)
Action 9B	Conduct a parking study for Marymoor Village and Overlake Village after the Sound Transit Link 2 Line light rail service to Seattle begins in early 2026 to establish a baseline inventory and occupancy and utilization rates with light rail service. (Planning)

TRANSPORTATION DEMAND MANAGEMENT

Transportation Master Plan

WHAT IS TRANSPORTATION DEMAND MANAGEMENT?

Transportation Demand Management (TDM) is a general term for strategies that result in a more efficient and sustainable use of transportation resources. Many programs and projects within TDM aim to provide more competitive transportation options than driving alone in order to reduce trips and improve traffic congestion. Traditionally, TDM has been seen as a tool to manage and mitigate peak period congestion with an emphasis on impacting commuters. Over time, TDM has expanded to apply more broadly to policies and programs designed to support and incentivize healthier, more environmentally sustainable transportation behaviors.

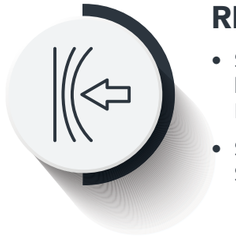
The Covid-19 pandemic resulted in a drastic shift to telework and hybrid work schedules. Between 2019 and 2022, state Commute Trip Reduction (CTR) surveys found that the percent of telework grew from 5% to 41%. While telework is still prominent and likely to remain in many sectors, many companies and organizations have shifted back to a higher expectation of in-office time, and some are beginning to require all employees to be back in office full time. Redmond has also grown significantly, with a population that has increased to over 80,000 residents bringing about an increase in traffic. TDM is a strategy to reduce all vehicle traffic within the city, not just single occupancy vehicle commuters who are going to and from work.

CITY OF REDMOND TRANSPORTATION DEMAND MANAGEMENT EFFORTS

Redmond's TDM team engages residents and employers through existing programs like Commute Trip Reduction (CTR), Mobility Management Program (MMP), and SchoolPool, and is always looking for new ways to encourage community members to travel using more sustainable modes than driving. A major focus of the City's TDM efforts is getting community members to and from Redmond's four light rail stations in Downtown, Marymoor, and Overlake urban centers. These stations connect Redmond community members to surrounding cities and regional destinations without the need for a car. TDM strategies for getting people to light rail include building out safe and comfortable networks for people to get around by foot, bicycle, and micromobility, and for community members for whom walking, biking or scooting are not options, making riding transit easy by providing route information and transit passes while also advocating for more frequent and comprehensive bus service and first- last-mile solutions. Other TDM and first-last-mile strategies the City is pursuing include promoting e-bikes through rebate programs and lending libraries or subscriptions, secure bike parking and e-bike charging, clear wayfinding to help people navigate the transportation network, flexible microstransit, and establishing mobility hubs where multiple travel modes converge with convenient and comfortable amenities. GoRedmond is the City of Redmond's go-to site for community members and employers to find the most current information on getting around Redmond using a variety of travel modes.

ADVANCING REDMOND 2050 GUIDING PRINCIPLES

Redmond 2050 establishes three Guiding Principles: Equity and Inclusion, Sustainability, and Resilience. The Transportation Demand Management Section identifies strategies that support these principles, as shown below.



RESILIENCE

- Shifting trip modes in Redmond and working with private sector partners to establish behavior change reduces congestion as the city grows (see Redmond 2050 FW-TR-3, FW-TR-)
- Strategies supporting the Guiding Principle of Resilience include: Strategy 2 and Strategy 5

SUSTAINABILITY

- Decreasing drive-alone rates in Redmond decreases overall greenhouse gas emissions by shifting vehicle trips to transit, walking, and biking. (See Redmond 2050 FW-TR-21, FW-TR-31)
- Strategies supporting the Guiding Principle of Sustainability include: Strategy 1, Strategy 2, Strategy 4, and Strategy 5

EQUITY & INCLUSION

- A variety of transportation options and sufficient education and advertisement of them allows for all Redmond residents and visitors to get around the community, regardless of personal circumstances. (See Redmond 2050 TR-10, FW-TR-13)
- Strategies supporting the Guiding Principle of Resilience include: Strategy 2 and Strategy 5

STRATEGIES

Strategy 1: Reduce the number of trips starting and ending in Redmond that utilize drive-alone methods and shift trip method choice to transit, carpooling, biking (or other micromobility), and walking through education and incentives.

As the Redmond population and job market grows, the increase of trips in, out, and through Redmond will outpace the vehicle capacity of Redmond streets. Balancing all modes of transportation, including driving, public transit, biking and other micromobility will be key to ensuring that all Redmond community members are able to reach their destinations efficiently and safely.

Redmond's transportation demand management efforts can reduce the number of drive-alone trips by creating opportunities for people to learn more about what travel options are available and how they could use these options for a variety of trip purposes. Redmond's transportation demand management programs also provide incentives to encourage people use other modes of travel.

Recommended Actions

Action 1A	Manage and update the City of Redmond transportation demand management website (GoRedmond) and program to educate and inform community members about their options for getting to light rail and other destinations using a variety of travel options, including transit, micromobility, biking, carshare, microtransit, etc. Ensure that the website and program are easy to understand and utilize by all Redmond community members, regardless of language or other barriers. (Planning)
Action 1B	Support small businesses not impacted by Washington State Commute Trip Reduction requirements in providing commute alternatives and benefits for their employees. This includes things such as creating grants for bike racks or other infrastructure on site, assistance with navigating transit pass options for employees, support efforts to facilitate carpooling or other ride sharing, and other creative options for small businesses. (Planning)
Action 1C	Educate and establish an older adult mobility program through the Redmond Senior programs to assist with transit education and encouragement and develop programming to assist older adults in using a variety of transportation methods other than private vehicles. This program could include transportation options for traveling to medical appointments, shopping, and other activities. (Planning)

Strategy 1 supports the following Redmond 2050 policies:

- **TR-10:** Implement transportation programs, projects, and services that support the independent mobility of those who cannot or choose not to drive.
- **TR-30:** Use TDM techniques to achieve efficient use of transportation infrastructure, increase person-carrying capacity, reduce air pollution, and accommodate and facilitate further growth.
- **TR-31:** Establish TDM program requirements in the Transportation Master Plan that address Commute Trip Reduction Act requirements, support City mode split goals, address participation in transportation management associations, address mitigation funding from developments requiring TDM, and incorporate TDM support for non-commute/non-employer-based sites such as schools. Establish proactive methods for the City to enforce TDM program requirements.
- **TR-36:** Implement transportation programs, projects, and services to achieve a 71 percent reduction in greenhouse gas emissions from the transportation sector from 2011 to 2050.

Strategy 2: Develop regulations within the City to support and redevelop Mobility Management Plans and meet statewide requirements.

Mobility Management Plans (MMP's) are a tool in Redmond where new developments are required to create plans and tools for their residents and employees to reduce drive-alone rates, effectively improving traffic, reducing parking demand, reducing the environmental impact of driving, and supporting Redmond community members in their efforts to utilize transit and non-driving methods of transportation. MMPs have been a central part of transportation demand management work in Redmond but historically have lacked attention beyond initial completion. As building use and commute patterns have shifted over time, many MMP's have become less effective than originally written, and readdressing the MMP could benefit those who are working and visiting the location as well as the greater Redmond community around it. Revisiting MMP requirements and taking a more firm, yet supportive, approach to compliance will help ensure the MMP's are effectively meeting their targets and contributing to the City's overarching goals around reducing vehicle miles traveled and greenhouse gas emissions while also encouraging new development. Regulations can also be used to support the City in meeting the statewide Commute Trip Reduction Act requirements and supporting businesses beholden to them within city limits.

Recommended Actions

Action 2A	Support the implementation of Mobility Management Plans for new development in Redmond, taking a flexible approach that aligns with Redmond's goals around affordable housing, better parking management, environmental preservation, and promoting more sustainable transportation options. (Planning)
Action 2B	Redevelop Mobility Management Plan requirements to allow for greater flexibility depending on site type. Allow for differing requirements depending on whether building will be commercial, mixed-use, residential, or other types to best fit the needs of the residents and surrounding neighborhood. Develop renewal time frame and requirements to ensure existing and future structures have MMP's relevant to their uses throughout their lifetime as building occupants and the surrounding neighborhood change. (Planning)
Action 2C	Maintain and implement the Redmond Commute Trip Reduction Plan to assist with reaching state mandated CTR targets among Redmond's largest employers. (Planning)

Strategy 2 supports the following Redmond 2050 policies:

- **TR-30:** Use TDM techniques to achieve efficient use of transportation infrastructure, increase person-carrying capacity, reduce air pollution, and accommodate and facilitate further growth.
- **TR-31:** Establish TDM program requirements in the Transportation Master Plan that address Commute Trip Reduction Act requirements, support City mode split goals, address participation in transportation management associations, address mitigation funding from developments requiring TDM, and incorporate TDM support for non-commute/non-employer-based sites such as schools. Establish proactive methods for the City to enforce TDM program requirements.
- **TR-38:** Implement transportation programs, projects, and services to meet air quality standards established in state and federal clean air laws, including the Commute Trip Reduction Law (RCW 70.94.521), and requirements of Section 173-420 Washington Administrative Code (WAC): "Conformity of Transportation Activities to Air Quality Implementation Plans."

Strategy 3: Incorporate transportation demand management strategies into neighborhood plans.

With the completion of the Redmond 2050 Comprehensive Plan, planning efforts within Redmond will shift to neighborhood plans to ensure that the non-urban center neighborhoods in the city are also effectively prepared to grow. Priorities for neighborhoods in Redmond are often different, as some are more residential in character and others are commercial and employment hubs within the city. Redmond neighborhoods are going to see growth and an increase in travel demand, and maintaining acceptable travel times and expanding travel options is an important quality of life factor for Redmond residents and visitors. Many of these plans will center around the corridors connecting different neighborhoods and communities in Redmond, and TDM can play a key role in ensuring that plans focus on making these corridor connections safe and accessible for a wide variety of travel modes.

The Redmond 2050 plan also emphasizes and supports complete neighborhoods, where there are shops, services, and other places to meet your basic needs within a short walk or bicycle ride from residences. Supporting this type of neighborhood development supports TDM goals by allowing individuals in the community to meet their needs without needing to get in a car and drive to a store or other location.

Recommended Actions

Action 3A	Ensure that transportation demand management strategies are incorporated into individual neighborhood plans. (Planning)
Action 3B	Invest in complete neighborhood design to improve connectivity, wayfinding, and safe and comfortable walking and biking infrastructure to support transportation demand management and reduce personal vehicle use in neighborhoods outside of urban centers. (Planning)
Action 3C	Continue to support transit use and access in urban centers and ensure that parking management strategies match the needs of the community and businesses. (Planning)

Strategy 3 supports the following Redmond 2050 policies:

- **TR-18:** Adopt and implement a transit system plan in the Transportation Master Plan that connects people to homes, education, jobs, goods and services, and other opportunities in Redmond and the region, especially those who lack affordable mobility options.
- **TR-19:** Implement transit to connect people in all Redmond neighborhoods to centers, light rail, and other neighborhoods, considering a full suite of transit options appropriate to the land use context.
- **TR-23:** Adopt and implement a street plan in the Transportation Master Plan that results in multimodal access and connectivity in Redmond and the region. Require that all streets be complete streets, built to accommodate travel modes as defined in the Transportation Master Plan, and be no wider than necessary.
- **TR-30:** Use TDM techniques to achieve efficient use of transportation infrastructure, increase person-carrying capacity, reduce air pollution, and accommodate and facilitate further growth.
- **TR-31:** Establish TDM program requirements in the Transportation Master Plan that address Commute Trip Reduction Act requirements, support City mode split goals, address participation in transportation management associations, address mitigation funding from developments requiring TDM, and incorporate TDM support for non-commute/non-employer-based sites such as schools. Establish proactive methods for the City to enforce TDM program requirements.

Strategy 4: Support parking changes that encourage individuals to consider non-drive-alone transportation options.

One factor that many people consider when deciding to drive somewhere is what the parking situation at their destination will be. While applying parking time limit restrictions, metered parking, and other management strategies can be a frustrating experience for some, it is an important transportation demand management tool for shifting individual behavior to non-vehicle modes, such as transit or bicycle. While most strategies pertaining to parking are addressed in the curb space management section, it is important to recognize the influence that parking and transportation demand management have on each other and highlight strategies pertaining to transportation demand management that can support parking efforts in Redmond.

Recommended Actions

Action 4A	Prioritize parking for non-drive-alone vehicles, such as registered carpools and vanpools in key locations, such as workplaces, entertainment hubs, and regional transit centers. (Planning, Public Works)
Action 4B	Implement more restrictive on-street parking management strategies in Redmond within urban centers to encourage less long term on-street vehicle storage. (Police, Planning)

Strategy 4 supports the following Redmond 2050 policies:

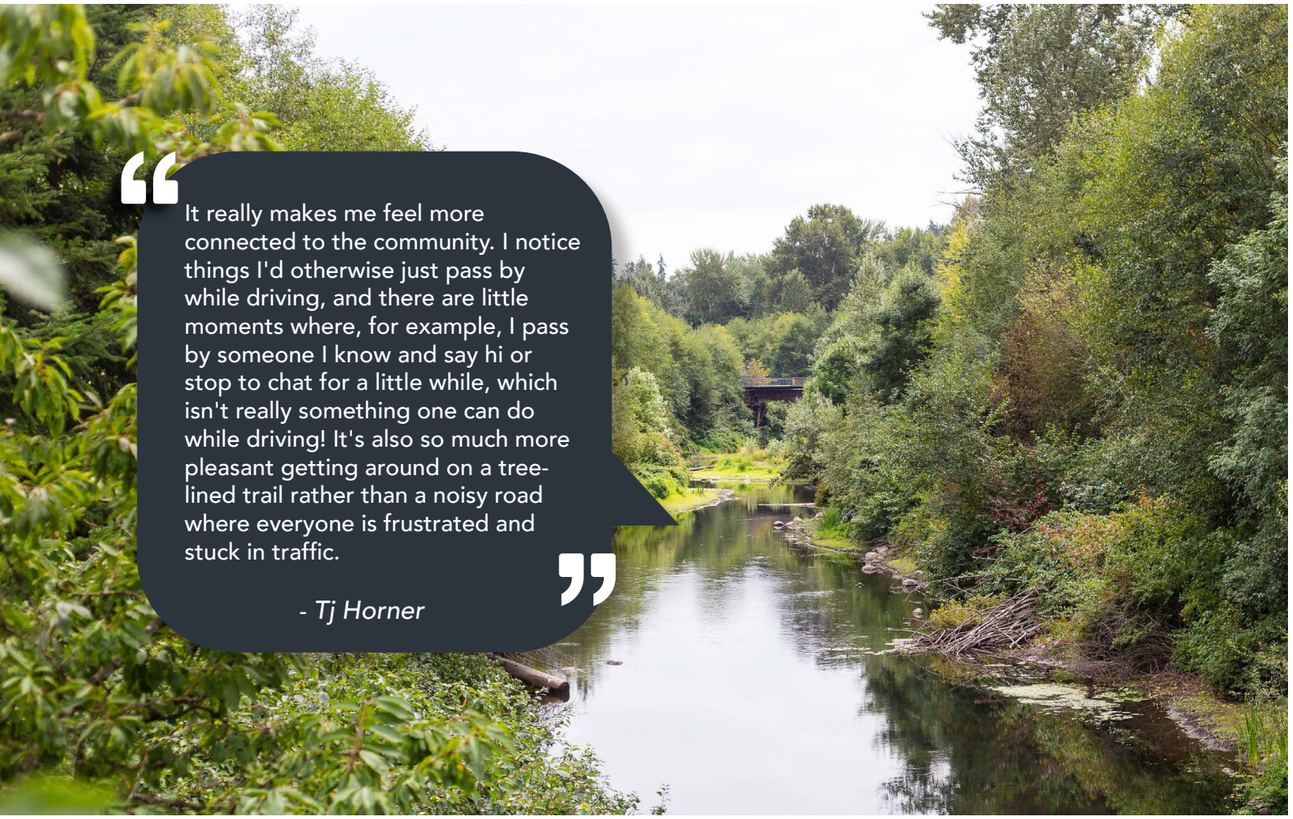
- **TR-33:** Adopt and implement a parking plan in the Transportation Master Plan that supports the development of equitable, inclusive, sustainable, and resilient transit-oriented communities. Consider the needs of older adults, families with small children, and people with disabilities in the design of parking.
- **TR-34:** Implement comprehensive parking management programs that at a minimum address underutilized parking, shared parking, transit access parking, way finding, and l localized parking imbalances. Manage parking demand using strategies like time limits and pricing.
- **TR-35:** Establish off-street parking requirements that prioritize space for people, housing, jobs, services, recreation, amenities, and environmental sustainability. Reduce or eliminate minimum required parking regulations near high-frequency transit, in centers, for middle housing, and near neighborhood-based businesses. Maintain a process and decision criteria to allow the granting of parking rations above or below required ratios.

Strategy 5: Emphasize transportation demand management strategies to combat traffic congestion and safety concerns in school zones throughout Redmond.

The safety and accessibility of students within Redmond is especially important as the city grows. Traffic around school drop-off and pick-up times is often high and can cause significant back-ups within neighborhoods. It can also impact the safety of students who choose to walk or bike to school. As Redmond grows, an emphasis on shifting school traffic away from private vehicles to buses, walking, and biking will contribute to safer and happier journeys through school zones.

Safe Routes to School is a national campaign to provide safe routes for active travel for children to get to and from school, via walking, biking, or other forms of rolling. Washington state and King County support these efforts and offer a variety of funding opportunities for local jurisdictions to implement programs and projects to encourage active transportation. Within Redmond, the SchoolPool program works to encourage students to walk, bike, bus, or carpool to school in an effort to support our student's safety on their commute.

"HOW DOES CHOOSING TO BIKE, WALK, OR TAKE TRANSIT MAKE YOUR DAY BETTER?"



Recommended Actions

Action 5A	Strengthen relationships and partner with the Lake Washington School District to work collaboratively on effective strategies to increase student safety during transportation to and from school. (Planning)
Action 5B	Develop and/or update Redmond municipal codes to include traffic mitigation plans for individual schools and school zones within Redmond, including compliance procedures. (Planning)
Action 5C	Continue to manage and promote the Redmond SchoolPool program through partnerships with King County Metro. (Planning)
Action 5D	Develop a Safe Routes to School plan in conjunction with King County Metro's SchoolPool funding. (Planning)
Action 5E	Apply for WSDOT Safe Routes to School grants to enact projects and pilot programs to enhance student safety near schools and encourage a greater number of students (and their families) to walk and bike to school. (Planning, Public Works)
Action 5F	Continue to utilize Parent Teacher Student Association (PTSA) and school support for existing programs and to develop opportunities for student and/or youth lead leadership of Safe Routes efforts. (Planning)
Action 5G	Coordinate with CIP efforts to ensure that school safety related projects are sufficiently prioritized in the project matrix. (Planning, Public Works)
Action 5H	Network and develop working relationships with other organizations such as Safe Routes to School or Partnership and nearby jurisdictions that have experience with similar programs to apply lessons learned and increase efficacy of safe routes to school efforts. (Planning)
Action 5I	Establish a bicycle education curriculum in Redmond schools that is in alignment with Washington State's Statewide School-Based Bicycle Education Program and addresses e-bike safety and regulations. (Planning)

Strategy 5 supports the following Redmond 2050 policies:

- **TR-30:** Use TDM techniques to achieve efficient use of transportation infrastructure, increase person-carrying capacity, reduce air pollution, and accommodate and facilitate further growth.

E-MOBILITY STRATEGY

Transportation Master Plan

E-MOBILITY STRATEGY

INTRODUCTION

The City is committed to creating an accessible, safe, and low-carbon transportation system. At the heart of this strategy is the development of walkable, bikeable neighborhoods and connecting community members to transit, as outlined in Redmond 2050 and other sections of the Transportation Master Plan.

While reducing vehicle trips is at the core of the City's strategy, we also recognize that vehicles will continue to play a role in Redmond's transportation system. To achieve the community goal of net zero greenhouse gas emissions by 2050, Redmond must electrify vehicle and micromobility trips and transition away from carbon-based fossil fuels. Similarly, Redmond already has a higher EV adoption rate than much of the state, and the City must ensure EV infrastructure keeps pace to accommodate upcoming state mandates that require all new light duty vehicle sales to be electric starting in 2035.

The E-Mobility Strategy outlines Redmond's goals for advancing electric-mobility and EV infrastructure, while also acknowledging the need to reduce vehicle trips overall. The City's E-Mobility Strategy builds upon the work established in the City's Environmental Sustainability Action Plan (ESAP), the City's roadmap to reduce greenhouse gas emissions to net zero by 2050. The ESAP identifies actions to reduce emissions across multiple sectors, including the transportation system, which is the second largest source of emissions in Redmond.

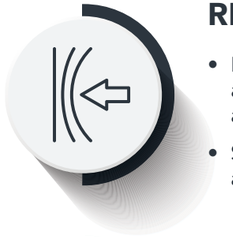
The City's approach to E-Mobility policy development has included data analysis, research of other cities, community questionnaires, and roundtable discussions with community members, all aimed at identifying challenges, opportunities, and potential solutions for the future of E-Mobility in Redmond. Special emphasis is placed on reaching historically marginalized and underserved communities, ensuring their perspectives are central to the city's long-term mobility planning. While early adopters—primarily single-family homeowners—have had the advantage of home charging, many residents, particularly those in multifamily housing or underserved communities, face significant barriers to EV ownership and charging access. As demand for EVs grows, ensuring a comprehensive and equitable charging network is essential for meeting climate goals and supporting Redmond's evolving transportation needs.

The E-Mobility Strategy will help Redmond prioritize programming and investments in EV infrastructure, pursue partnerships and funding opportunities, and establish policies that remove barriers to adoption. To ensure that these policies reflect the needs of the community, the City has implemented an engagement-driven approach by gathering input from key stakeholders, including residents, businesses, advisory councils, property owners, and community-based organizations.

A thoughtful E-Mobility Strategy represents a crucial step toward addressing critical transportation needs, reducing transportation emissions, expanding clean mobility options, and ensuring that Redmond remains at the forefront of sustainable urban development.

ADVANCING REDMOND 2050 GUIDING PRINCIPLES

Redmond 2050 establishes three Guiding Principles: Resilience, Equity and Inclusion, and Sustainability. The E-Mobility Section identifies strategies that support these principles, as shown below.



RESILIENCE

- Electricfication reduces greehouse gas emissions that contribute to climate change and associated negative impacts on environment, infrastructure, and community. (FW-TR-2 and CR-28)
- Strategies supporting the Guiding Principle of Resilience include: Strategy 2 and Strategy 3

SUSTAINABILITY

- Increasing E-Mobility infrastructure contributes to reduced GHGs and forwards Redmond's sustainability and climate goals. (FW-CR-3 and CR-28)
- Strategies supporting the Guiding Principle of Sustainability include: Strategy 4, Strategy 5, and Strategy 6

EQUITY & INCLUSION

- Access to EVs, e-bikes, micromobility, and charging infrastrucutre should be available to all Redmond community members regardless of socioeconomic status. (FW-CR-1 and CR-2)
- Strategies supporting the Guiding Principle of Equity include: Strategy 1 and Strategy 6

REDMOND'S E-MOBILITY INFRASTRUCTURE LANDSCAPE

Redmond continues to make progress to increase use of e-mobility options, as outlined in the City's Environmental Sustainability Action Plan (ESAP). This E-Mobility Strategy is intended to complement the work the ESAP is undertaking, specifically in the transportation realm with the goal to reduce transportation emissions and enhance community mobility.

E-mobility is growing in Redmond – from high EV adoption rates, growing EV infrastructure, and micromobility solutions that rely on clean electricity. Key e-mobility existing conditions are outlined below.

EV Infrastructure

Redmond is a leader in EV adoption. The City has prioritized EV adoption within its own operations, while also advancing multiple policies to increase access for community members. Key accomplishments include:

- A commitment to transition the municipal vehicle fleet to clean vehicles. As of late 2025 the City's fleet includes 16 EVs, 5 plug in hybrid EVs, 18 hybrids, and the state's first electric fire apparatus.
- Expanding fleet charging infrastructure, which now includes 25 fleet chargers. The City reduced its fleet's carbon footprint 14% since 2011 while saving thousands of dollars in fuel expenses.
- Updating the Redmond Zoning Code to require 100% EV ready parking in multifamily developments.
- Offering 12 public chargers to support community charging.

Micromobility

Micromobility refers to a range of small, lightweight devices operating at speeds typically below 15 mph. Micromobility can include both human-powered and electric scooters, bicycles, skateboards, one-wheels, hoverboards, cargo bikes, trikes and other similar devices. These devices offer flexible mobility and can provide efficient first-last mile connections to transit, and thus, are an important component of Redmond's transportation system. A first-last mile connection or transportation option refers to the mode of travel chosen for the first mile and/or last mile of one's journey.

After launching in summer 2019 as a pilot, the City's Shared Micromobility program has been a successful first-last mile mobility option for Redmond community members from 2019 through 2024. In 2024, City staff identified a primary vendor to manage the permanent program. The permanent program began on January 1, 2025, with Lime as the City's sole vendor.

Since 2019, the Shared Micromobility program has served over 300,000 riders, with a median trip length of 0.8 miles, confirming that micromobility is a viable first-last mile trip mode in Redmond. On average, 136 micromobility vehicles (e-scooters and e-bikes) are deployed each day (approximately 10-15% of which are e-bikes).

The City of Redmond currently has no designated charging infrastructure for e-bikes or personal micromobility devices. In partnership with Lime and Sound Transit, designated shared micromobility parking areas are established at all of Redmond's light rail stations; however, these areas do not include charging.

More information about the City's micromobility and bicycle strategy can be found in Section 5 – Bicycle Plan.

City Review and Summary of Trends

As cities across the U.S. adapt to increasing EV adoption, many have developed policies and infrastructure plans to support transportation electrification. This section reviews EV strategies implemented by cities similar in size, urban structure, and mobility needs to Redmond. The review highlights best practices, policy trends, and implementation strategy, offering a roadmap for potential actions.

This high-level review found that cities leading in EV adoption typically have:

- Clear EV readiness policies integrated into broader climate and transportation plans.
- Stakeholder partnerships with utilities, transit agencies, and private developers.
- A strong emphasis on financial incentives and grant awards.

A detailed review of five cities provides insights into how communities are planning for EV adoption, infrastructure deployment, and policy development. Table 1 summarizes the outcomes of the city analysis.

TABLE 1 | COMPARATIVE ANALYSIS OF MUNICIPAL EV INFRASTRUCTURE (2024)

City	Population	Approx % Existing Single Family Land Use	Light-Duty Vehicles	EVs	EV %	L2 Ports	DC Fast Ports	Chargers/ 100 EVs
Redmond, WA	82,380	46%	54,000[1]	**5,700[1]**	**11%**	**92**	**19**	**2**
Culver City, CA	41,000	29%	34,850	**8,792**	**25%**	**209**	**54**	**3**
Centennial, CO	106,883	58%	85,100	**4,954**	**6%**	**87**	**20**	**2**
Dublin, OH	49,000	16%	41,393	**1,348**	**3%**	**83**	**6**	**7**
Newton, MA	88,000	61%	57,919	**4,484**	**8%**	**90**	**10**	**2**
Seattle, WA	760,000	62%[2]	460,000	**34,000**	**7%**	**1,514**	**102**	**6**

Notes: It should be noted that WA, CA, CO, and MA have mandates requiring EV adoption by a stated date.
[1] Data based on data.wa.gov "Electric Vehicle Population Map" and estimate of light duty vehicles based on city average.
[2] Includes both Neighborhood Residential and Residential Small Lot zoned areas

Trends shared by the five cities include:

- **Strong Focus on Infrastructure Deployments and Public Engagement:** All five cities prioritized investments in **EV charging infrastructure deployments and public outreach, engagement and education** programs that make EV charging easy to find and use, supporting increased adoption. In suburban communities, investments in public charging stations often support residential and commuter EV users. Cities also developed campaigns to inform the public about EV benefits and incentives, ensuring equitable access and widespread adoption.
- **Widespread Adoption of Foundational Policies:** Four out of five cities have enacted policies that support systemic change and long-term impact. Cities are updating zoning rules to ensure new buildings include EV charging, simplifying permitting to speed up installations, and setting goals to transition city-owned vehicles to electric. Specific policies include **Municipal Fleet Electrification Goals and Initiatives, Streamlined EV Infrastructure Permitting Process, EV Readiness Ordinances** (requiring new developments to include EV charging infrastructure), and Zoning and Code Updates (ensuring future land uses and developments can accommodate EV infrastructure). **Grant Application Strategies** are also widely used to secure federal and state funding for EV strategy implementation. These steps help cities stay ahead of growing demand and make EV adoption a natural part of the City's transportation system.
- **Moderate Use of Incentives and Adoption Targets:** Only three out of the five cities use targets or incentives to support adoption. Strong policies lay the groundwork for an EV-friendly city, but financial incentives and outcome-based goals may help speed up adoption. **Local Electrification Incentives,** such as rebates for home chargers or discounted charging make EVs more affordable. **Motorist EV adoption targets** help cities measure and focus on what matters most, making progress toward higher EV penetration. Not all cities use these tools, likely due to limited funds or concerns about being held accountable for measures they can only influence, not directly control.
- **Limited Focus on Long-Term Climate Action and Workforce Development Initiatives:** Only two cities **Incorporated EV Strategies into their Climate Action Plans** explicitly detailing EV-related GHG reduction goals and **Developed EV Charging Station Guidelines.** And only one city addressed **Workforce Development Initiatives.** This could point towards cities not yet fully connecting EV strategies to climate, accessibility or training and economic development outcomes, leaving room for future growth.
- **Other Considerations:** Cities tend to focus on priorities suited to their unique needs, resources and community demands. Most cities are seeking scalable, adaptable growth in city-led E-Mobility efforts, offering tailored pathways to expand EV accessibility and sustainability. Cities are also seeking public-private partnerships to expand charging infrastructure for homeowners and residents. These partnerships can come from Puget Sound Energy (PSE) or other private sector entities. Public-private partnerships will be important in expanding charging infrastructure.

Community Feedback

Feedback from the Redmond community has been a key piece of developing the E-Mobility Strategy. Community feedback was solicited through a series of focused roundtable discussions in Fall 2024. Participants were recruited through an application process advertised via City communication channels. Each session, facilitated by a third-party and supported by City staff, targeted specific groups: EV owners and enthusiasts from underserved communities, multifamily building residents, commuters, and property managers. These sessions, held at the Redmond Senior and Community Center and City Hall, aimed to ensure diverse community representation and gather valuable insights for the City's future E-mobility initiatives.

During the E-mobility roundtable sessions, Redmond community members engaged in facilitated discussions, sharing their experiences and ideas. Their insightful feedback highlighted the benefits and challenges they face as EV owners or enthusiasts residing in or traveling to Redmond. Additionally, they proposed solutions to enhance Redmond's E-mobility, providing valuable input for the City's future strategies.

Benefits of E-mobility noted by the participants include:

- EVs offer significant cost savings, including lower operating costs, less frequent fill-ups, and reduced maintenance expenses, with government incentives further encouraging ownership.
- Environmentally, EVs contribute to a reduced carbon footprint and lower greenhouse gas emissions, supporting climate action.
- Charging at home, work, or public charging sites provides convenience.
- The variety of stylish and high-performing EVs catering to different budgets and needs continues to grow.

Challenges in E-mobility noted by the participants include:

- Limited availability of public chargers, long wait times, high public charging costs, and maintenance issues that affect infrastructure accessibility.
- Multifamily residential areas often lack adequate charging infrastructure, and communication barriers with property management and utility companies complicate installations.
- High installation costs, financial barriers, and permitting and regulatory restrictions for property owners and HOAs cause significant obstacles to EV ownership.

STRATEGIES

Strategy 1: Apply an equity lens when considering E-mobility infrastructure and focus on equitable access.

The City must center E-Mobility policies and investments on equity, which is a priority for the community, and a gap in the market. In the context of EV adoption and charging infrastructure, it is important for the community that investments are targeted to support those whose needs are greatest, such as people with limited means to purchase higher priced EVs and infrastructure, people who have difficulty navigating information related to EV ownership, and residents of multifamily housing whose barriers are greatest when accessing or installing charging infrastructure. This recommendation aligns with actions other cities are taking and addresses community roundtable participants' suggestion to ensure equitable access to EV charging infrastructure.

Strategy 1 supports the following Redmond 2050 policies:

- **FW-CR-1:** Develop partnerships and programs to rapidly and equitably reduce greenhouse gas emissions and create a thriving, climate resilient community.

  CR-2: Prioritize equitable City investments, policies, programs, and projects so vulnerable and underserved communities lead the clean energy transition and are resilient to climate change.

- **CR-6:** Partner with regional organizations and underserved communities to equitably advance programs and policies to achieve net zero greenhouse gas emissions and resilient communities.

  CR-8: Encourage and support businesses in adopting sustainable business practices while attracting and supporting businesses that embrace Redmond's environmental sustainability goals.

- **CR-29:** Work with utility providers and other partners (such as developers and EV companies) to expand electric vehicle (EV) charging infrastructure across the City, ensure that people have equitable access to EV charging where they need it, and expand EV charging readiness for buildings.

- **TR-10:** Implement transportation programs, projects, and services that support the independent mobility of those who cannot or choose not to drive.

Recommended Actions

Action 1A	Ensure the needs of low-income and presently disadvantaged communities are prioritized within City E-Mobility actions, even for programs with broad community benefits.
Action 1B	Continue to engage populations of interest to understand their needs and perspectives, including young people and low-income people.
Action 1C	Track the potential development of and look for opportunities to participate in a regional "Mobility Wallet" program where individuals can use funds for transportation needs, including EV charging.
Action 1D	Continue to track grant funding opportunities, including the Washington State Climate Commitment Act to expand infrastructure and access to E-mobility opportunities.

Strategy 2: Assess policy opportunities to support electric vehicles

Many community members described specific areas where the City can take direct action to support EV drivers and property owners to simplify the regulatory landscape. The City can help simplify the permitting process and update local zoning and city codes to improve access to charging infrastructure. This recommendation aligns with actions other cities are taking and addresses community roundtable participants' suggestions to support property owners and HOAs, update zoning, permitting, and building codes, and develop and support regulatory strategies.

Strategy 2 supports the following Redmond 2050 policies:

- **CR-29:** Work with utility providers and other partners (such as developers and EV companies) to expand electric vehicle (EV) charging infrastructure across the City, ensure that people have equitable access to EV charging where they need it, and expand EV charging readiness for buildings.
- **TR-37:** Account for fleet electrification and the need for publicly-accessible electric vehicle charging infrastructure in the design of the transportation system to encourage a shift to more efficient and zero emission vehicles.

Recommended Actions

Action 2A	Engage stakeholders to evaluate and inform e-mobility policy benefits and tradeoffs.
Action 2B	Support the installation of e-mobility infrastructure by providing clear informational resources and exploring opportunities to streamline permitting process.
Action 2C	Partner with Washington State legislators to align state EV regulatory framework with the priorities of Redmond communities (i.e. increased charging access at regional job centers, improved codes and standards to allow flexibility and effective outcomes on EV readiness for new developments, etc.).
Action 2D	Advocate for state and regional policies that ensure electric infrastructure and grid capacity can keep pace with anticipated EV demand. Partner with policymakers to address barriers, such as insufficient electrical capacity or slow infrastructure upgrades, that could limit the pace of EV adoption.
Action 2E	Promote and support shared-use and alternative access models for electric vehicles, such as EV car-share programs, subscription services, and charging-as-a-service, to expand mobility options without requiring personal vehicle ownership.
Action 2F	Provide resources to the Redmond community educating about the safety risks associated with EVs, including their weight, acceleration, and relative quietness, especially compared to gas vehicles. These resources can be provided via the Go Redmond program, the City's sustainability program, and City communication efforts.

Strategy 3: Explore and expand e-mobility infrastructure

Expanding access to charging infrastructure is a critical community priority. The City can explore partnerships with private sector businesses, utilities, and other local and regional public agencies to support E-Mobility infrastructure, such as charging facilities or micromobility and e-bike secured parking. This recommendation aligns with actions other cities are taking and addresses community feedback.

Strategy 3 supports the following Redmond 2050 policies:

- **CR-29:** Work with utility providers and other partners (such as developers and EV companies) to expand electric vehicle (EV) charging infrastructure across the City, ensure that people have equitable access to EV charging where they need it, and expand EV charging readiness for buildings.
- **TR-37:** Account for fleet electrification and the need for publicly-accessible electric vehicle charging infrastructure in the design of the transportation system to encourage a shift to more efficient and zero emission vehicles.
- **CR-8:** Encourage and support businesses in adopting sustainable business practices while attracting and supporting businesses that embrace Redmond's environmental sustainability goals.

Recommended Actions

Action 3A	Explore partnerships with car share programs to offer EV car share sites in Redmond.
Action 3B	Assess opportunities to increase charging infrastructure deployments at sites identified as priority locations.
Action 3C	Work with businesses, property owners, and utilities to expand charging station access on private properties.
Action 3D	Encourage local employers to offer workplace charging incentives to their employees.
Action 3E	Explore public-private financing models that allow businesses to offset charger installation costs through tax incentives and grants.
Action 3G	Develop an implementation roadmap to align funding with EV charging program priorities and leverage public-private partnerships for cost-sharing opportunities.
Action 3H	Develop a comprehensive set of policies to effectively manage City owned charging infrastructure to support the ongoing maintenance, management, and expansion of infrastructure and programming.

Strategy 4: Adopt innovative strategies to reduce emissions and expand the application of clean technologies to freight movement that maintain consistency with City freight and delivery priorities.

As discussed in Section 7 – Freight and Goods Delivery, the adoption of EV charging infrastructure extends to facilities that can benefit delivery vehicles and reduce last-mile emissions. By establishing zero-emission delivery zones and encouraging the use of electric delivery vehicles, Redmond can further advance GHG reduction goals across a variety of transportation networks.

Strategy 4 supports the following Redmond 2050 policies:

- **CR-29:** Work with utility providers and other partners (such as developers and EV companies) to expand electric vehicle (EV) charging infrastructure across the city, ensure that people have equitable access to EV charging where they need it, and expand EV charging readiness for buildings.
- **TR-29:** Monitor freight and service delivery patterns and adjust transportation system operations if warranted.
- **CR-8:** Encourage and support businesses in adopting sustainable business practices while attracting and supporting businesses that embrace Redmond's environmental sustainability goals.

Recommended Actions

Action 4A	Support expansion of EV charging infrastructure and explore establishing zero-emission delivery zones inside Urban Centers to promote zero emission last-mile freight and goods delivery (for more information, see Section 7 Strategy 4.3).
Action 4B	Promote the use of light-urban delivery vehicles including e-cargo bikes, trikes, and quadracycles through sensible regulation and bikeway, pathway, and sidewalk design that accommodates such vehicles. Redmond may look to national or state efforts to create policy and definitions for low-impact urban logistics including potentially charging fees for operators not using such vehicles for local deliveries (for more information, see Section 7 Strategy 4.3).

Strategy 5: Explore e-bike charging opportunities.

As discussed in Section 5 – Bicycle Network Strategy, e-bikes, e-scooters, and other personal micromobility devices have grown in popularity due to their ability to overcome challenging terrain and cover longer distances. These devices have become a viable alternative to motor vehicles and have the potential to reduce VMT and GHGs and contribute toward Redmond's sustainability goals. Offering e-bike and other personal micromobility users convenient public charging opportunities would further promote their use.

Strategy 5 supports the following Redmond 2050 policies:

- **CR-8:** Encourage and support businesses in adopting sustainable business practices while attracting and supporting businesses that embrace Redmond's environmental sustainability goals.
- **CR-30:** Promote dense, mixed-use, and transit-oriented developments (TOD) through incentives or requirements for transportation demand management (TDM) measures, including minimizing parking structures in favor of transit, rideshare, walking, and biking.
- **CR-31:** Implement and enforce commute trip reduction programs and partner with transit agencies to expand, maintain, and enhance multimodal transit services and related facilities, including better first mile/last mile access to transit. Work with third-party programs and businesses to increase the availability, accessibility, and convenience of shared mobility options (such as bike share, scooter share, or car share) and maintain affordability of services.
- **TR-22:** Integrate transit facilities and services and non-motorized infrastructure with public spaces and private developments to create safe and inviting waiting and transfer environments. Consider opportunities for public arts and culture amenities in these areas.

Recommended Actions

Action 5A	Explore providing e-bike charging with secure bicycle parking.
Action 5B	Explore adding e-bike charging infrastructure to publicly managed EV charging facilities.
Action 5C	Include e-mobility charging infrastructure in the development of neighborhood Mobility Hubs (see Section 6 Strategy 3)
Action 5D	Explore partnerships with transit agencies to establish e-mobility charging at transit centers and light rail stations where applicable (see Section 6 Strategy 3).

EMERGING TRENDS AND TECHNOLOGY

Transportation Master Plan

INTRODUCTION

The Redmond 2050 Comprehensive Plan states that in 2050 Redmond's transportation system is resilient, sustainable, equitable and inclusive. The convergence of transportation technological innovations in data analysis and management, automation and electrification has the potential to make the City's transportation system not only more efficient, but also greener, safer and more inclusive. In Redmond, technology will be supporting many of the strategies defined in the City's Safer Streets Action Plan by reducing vehicle speeds, helping transportation system designers understand crash risk through data obtained from advanced cameras and software systems, and will make vehicles and interactions between vehicles and people outside of vehicles safer. Data collection and analysis using new technologies will allow planners and engineers to better monitor traffic operations; manage maintenance; and identify network deficiencies that need to be fixed. Technology will also support individuals as they plan their routes and best mode of travel, find parking, and get real-time information to help them navigate a multimodal transportation system to move throughout Redmond and connect to regional systems.

ADVANCING REDMOND 2050 GUIDING PRINCIPLES

Redmond 2050 establishes three Guiding Principles: Resilience, Equity and Inclusion, and Sustainability. The Emerging Trends and Technology Section identifies strategies that support these principles, as shown below.

RESILIENCE

- Technology can support a resilient transportation system and safe access for all users as travel demand and patterns change over time and during major disruptions caused by natural disasters or other events. (See Redmond 2050 FW-TR-2)
- Strategies supporting the Guiding Principle of Resilience include: Strategy 2 and Strategy 5

SUSTAINABILITY

- New technologies can be used to reduce vehicle trips, optimize traffic, and manage transportation assets, resulting in reduced greenhouse gas emissions and environmental impacts, and more efficient use of resources. (See Redmond 2050 FW-TR-4)
- Strategies supporting the Guiding Principle of Sustainability include: Strategy 4

EQUITY & INCLUSION

- As new technologies are deployed in Redmond, it's essential to address the safety and accessibility of all (See Redmond 2050 TR-10).
- Strategies supporting the Guiding Principle of Equity include: Strategy 1, Strategy 3, and Strategy 6

EMERGING TRENDS IN TRANSPORTATION TECHNOLOGY

Technology is driving many of the emerging trends in transportation systems and service delivery. From autonomous vehicles to shared micromobility to artificial intelligence, new technologies are providing both opportunities and challenges for cities. In most cases, cities like Redmond have the authority to manage new technologies and ensure that technological advancements translate into safer, more equitable and more resilient and sustainable transportation systems. However, it remains to be seen how much authority local agencies will have over where and how some technologies such as autonomous vehicles may be deployed. Technology has and will continue to offer new capabilities and approaches to transportation planning and system management in Redmond.

Current Transportation Technology Systems at the City of Redmond

The following transportation technology systems at the City of Redmond are used to manage and deliver transportation services.

Asset Management and Condition Monitoring

Technology can help Redmond manage and monitor the condition of transportation-related assets such as sidewalks, street trees, signals, and streetlights. These systems aim to optimize asset utilization, ensure proper maintenance, and track work performed in Public Works, Parks, and Facilities. Asset management plans include elements for the state of local infrastructure (inventory, valuation, age, and condition) systems levels of service, asset management strategy) practices, procedures, tools, demand supportability, and lifecycle management and risk, financing strategy, and guidance for the continued improvement and monitoring of the plan. More information on asset management can be found in Section 13 – Monitoring Progress.

Client Relationship Management

Client Relationship Management systems manage and enhance communication, engagement, and interactions with the public. The City uses QAlert to manage all citizen requests and inquiries – including those that are transportation-related. Requests are catalogued by the City and are then dispatched to the appropriate department depending on their context.

Intelligent Transportation Systems

Intelligent Transportation Systems (ITS) offer a data-driven approach to improving the safety, efficiency, and sustainability of transportation networks. By integrating advanced technologies such as sensors, communication networks, data analytics, and real-time monitoring, ITS enable smarter management of transportation infrastructure and vehicles. These systems aim to optimize traffic flow, reduce congestion, enhance safety, and improve overall user experience for both drivers and pedestrians.

The City of Redmond has used ITS for several years to great success, though enhancements can help to make the transportation system more efficient and effective and improving the safety and performance of the multimodal transportation system. Areas that should be considered for future investments include continued advancements in traffic signal systems, flashing crosswalk beacon and school zone technology and strategies to make the fiber optic infrastructure more efficient and effective to support traffic operations and safety systems operated by the City.

Traffic Data Management and Analysis

Traffic Analysis systems comprise analytical tools and methodologies to assess and understand traffic pattern, behaviors, and characteristics. Traffic simulation models can predict development impact on traffic and analyze signal timings at intersections. Other software can report on and analyze traffic-related statistics in Redmond, such as traffic collision data to assist in planning efforts. The City of Redmond uses a variety of these technologies to support traffic monitoring and reporting, travel demand modeling and safety analysis, among other activities.

FIGURE 1 | CITY OF REDMOND TRAFFIC OPERATIONS CENTER

City of Redmond Traffic Operations Center

The City's Traffic Operations Safety and Engineering Division staff monitor traffic conditions throughout the City from the Traffic Management Center (TMC). The TMC operates during City Hall business hours and monitors traffic and activity on public streets using traffic cameras at many of the City's traffic signal locations. Interested parties can get on-line access to still photo images from Redmond's traffic cameras at roughly 70 intersections across the City (as of December 2024), showing traffic conditions on City streets in real-time. The TMC also provides information to the traveling public via its network of overhead electronic message signs.

Transportation Modeling and Forecasting

Transportation modeling and forecasting involves the use of mathematical models and data analysis techniques to simulate and predict current and future year transportation patterns, demand, and outcomes. Models and forecasts provide insight into traffic flows, congestion, transit ridership, travel behavior, and future transportation needs.

For many years, the City of Redmond has used the Bellevue-Kirkland-Redmond travel demand forecasting model, referred to as the BKRCast model, to conduct multimodal transportation planning studies such as Sound Transit's Sound Move plan, GMA planning requirements and other efforts. Derived from the Puget Sound Regional Council's SoundCast model, the BKR model is an activity-based travel demand model configured to depict travel behaviors that depend on the built environment and demand from other users.

While the City of Redmond has been a partner with Bellevue and Kirkland, it has wrestled with the challenge of providing staff to operate and use the model outputs to meet its planning needs. As the City moves forward to work to fulfill the planning needs called for in Redmond 2050, it will need to address these challenges to make full use of this unique and effective planning tool.

Emerging Technology Trends

Artificial Intelligence

Artificial intelligence (AI) has the potential to enhance the efficiency of transportation systems and improve data-driven decision making in transportation planning. AI can be used to analyze large amounts of data from various sources.

AI-powered algorithms will play a more prominent role in optimizing traffic flows, improving safety in the public right-of-way, predicting transportation demand, and even personalizing mobility experiences for users. Cities will increasingly deploy AI to support management of truck fleet operations, ensuring they're in the right place at the right time. Expect AI to also enhance real-time curb management, reducing congestion and enabling seamless deliveries in busy urban areas.

Big Data

Large datasets from various sources like traffic sensors, GPS tracking, and mobile phone data provide opportunities to gain insights into traffic patterns, trip length and purpose, identify congestion, optimize routes, predict future traffic conditions, and inform infrastructure development decisions. Leveraging big data may lead to more efficient and effective transportation systems.

Goods Delivery Reservations

Technology that can leverage surveillance tools, historical trends on utilization rates, dynamic pricing information and curbside reservations can support more efficient deliveries, optimize access to businesses and smooth the flow of traffic.

Dynamic Pricing

Dynamic pricing is a technology that would allow the City to adjust prices for parking, tolls, and other transportation systems in real-time based on market conditions and demand. It can help optimize capacity of the transportation system.

Drones

Drones can be used to complement or replace traditional traffic sensors, such as cameras, loops, or radars. Drone-based imaging can also be used in combination with artificial intelligence and machine learning to analyze video data and create optimal, cost-effective solutions that would support the work of transportation planners. Drones are also being used for goods delivery, especially in last mile delivery. Within the City of Redmond, the Police Department is already using drones as part of their emergency response.

Autonomous Vehicles

In research conducted by the American Planning Association, autonomous vehicles (AVs) could have a large impact on the automobile/small truck markets in the US. It is estimated that approximately 50% of cars will be AVs by the year 2040. This could cause a reduction in privately owned vehicles of over 43%. One shared AV could replace up to 9-to-11 private vehicles. This reduction in privately owned vehicles could have substantial benefits, including cost savings for households and allowing for the reallocation of space currently dedicated to parking and larger volumes of vehicle traffic to other uses such as greenspace and housing.

With the efforts into deploying and testing the viability of AVs in major cities around the U.S. underway, there is interest in developing policies to manage this new technology to ensure it aligns with local values and priorities around traffic safety, emergency response, and equity. The cities of Bellevue and Seattle have collaborated in the creation of an automated vehicle technology vision to address shared regional values and goals. From this vision a joint strategic policy and technical document has been prepared and multi-agency discussions about extending the vision and policies to more jurisdictions, including the City of Redmond, are underway. More information on autonomous drones and personal delivery devices can be found in Section 7 – Freight and Goods Delivery.

Vehicles Connected to Everything (V2X)

Vehicles connected to everything (V2X) is technology that enables vehicles and wireless devices to communicate with each other, roadside infrastructure, and even nearby pedestrians and cyclists. These technologies have the potential to make a more safe, secure, and efficient transportation system. Examples of recent deployments using V2X technology include:

- A pedestrian crossing warning system for bus operators (Cleveland OH)
- Cloud-based digital advanced hazard warning alerting system for motorists (Connecticut)
- School bus signal priority (V2I) application that detects the approaching vehicles and extends green light signal phase (Fulton Co. Georgia)
- Reduced speed school zone warning application (Columbus OH)

Redmond Data Governance Strategy Project

The City of Redmond is undertaking a Data Governance and Strategy project to build a citywide framework for managing data as a strategic asset. This initiative will enhance how data is collected, classified, accessed, and used, with a strong focus on accuracy, security, and accessibility. The Data Governance Strategy Project will implement and emphasize strong data privacy standards.

By establishing a Data Governance Committee, implementing data classification policies, and defining clear access protocols, the City aims to reduce inefficiencies, ensure compliance with legal and privacy standards, and improve decision-making across departments.

As the Transportation Master Plan is developed and implemented, this parallel effort in data governance will help ensure that transportation decisions and investments are guided by accurate, well-managed information.

The USDOT has recently released its national plan to accelerate the deployment of V2X technology. The Plan is focused on road safety, mobility, and efficiency through technology that enables vehicles and wireless devices to communicate with each other and with roadside infrastructure. These technologies can enable a more safe, secure, and efficient transportation system while maintaining privacy and consumer protection. The Plan will contribute to the Safe System Approach adopted by the USDOT's National Roadway Safety Strategy, which is also the foundation for Redmond's Safer Streets Action Plan. More engagement with the community and technology partners would be needed before any V2X deployment occurs in Redmond.

Mobility as a Service

Mobility as a Service (MaaS) is a type of service that enables users to plan, book, and pay for multiple types of mobility services through an integrated platform. Transportation services from public and private providers are combined through a unified gateway, usually via an app or website, that creates and manages the trip and payments, including subscriptions, with a single account. The key concept behind MaaS is to offer travelers flexible mobility solutions based on their travel needs, thus "mobility as a service" also refers to the broader concept of a shift away from personally owned modes of transportation and towards mobility provided as a service.

Telematics

Telematics is a method of monitoring cars, trucks, equipment and their assets using GPS technology and on-board diagnostics to plot the asset movements on a computerized map. The City is using telematics to report on duration of City fleet vehicle use and diagnose technical issues for vehicle servicing needs. Telematics may also be used to monitor driver behavior (e.g., hard braking, speed, rapid acceleration, etc.) to focus City efforts around promoting driver safety.

Other Trends

Road User Charging

Road usage charging (RUC) applies fees to motorists based on the distance traveled or travel within specific corridors or zones. It is an alternative to a fuel tax from which revenues have steadily declined due to improved fuel efficiency and growth in the EV market. RUC can be used to fund road maintenance and construction as well as alternatives to driving alone. RUC can also be an effective tool for disincentivizing driving during certain times of day or within specific areas or corridors. Dynamic road usage charging opens new possibilities for managing automated vehicles by adjusting charges in real-time based on traffic conditions and vehicle occupancy.

STRATEGIES AND ACTIONS

Strategy 1: Employ technology in service of citywide goals, ensuring newly adopted technologies support priorities of safety, maintenance, and multimodal travel choices for pedestrians, cyclists, and motorists.

Thriving communities rely on the effective movement of people and goods. The Redmond transportation system is evolving to meet the transportation needs of those who walk, roll, ride a bike, drive a car or truck, or take transit.

Strategy 1 supports the following Redmond 2050 policies:

- **FW-TR-1:** Plan, design, build, operate, and maintain a safe transportation system that advances an equitable, inclusive, sustainable, and resilient community by providing for the mobility and access needs of all.
    - **TR-3:** Maintain flexibility in the face of technological innovation, changes in mobility patterns, natural disasters, and other sources of uncertainty and disruption.

Recommended Actions

Action 1A	Develop a citywide Intelligent Transportation System plan to build upon existing ITS systems and strategically apply advanced technology to improve mobility, reduce collisions, and enhance sustainability. (Public Works)
Action 1B	Prepare a report that evaluates V2X technology and provides an assessment of the potential benefits and costs of the technology if implemented in Redmond. (Planning)

Strategy 2: Explore new and varied data sources to support strategic decision making and improve transportation system operations.

A variety of new data sources continue to be made available to public agencies that can be used to more effectively plan and manage transportation systems. For example, "Big Data", or large and comprehensive data sets may be analyzed computationally to reveal patterns, trends, and associations, especially relating to human behavior and interactions. Such data provides transportation planners with new capabilities to make more informed decisions on how to optimize the transportation system for different users and travel demands, which can reduce congestion and emissions and improve safety for all users.

Redmond 2050 Policies that support strategy 2:

- **FW-TR-6:** Identify level-of-service standards for transportation infrastructure and fund maintenance, repair, and replacement costs to meet them. Proactively manage and maintain transportation assets in a way that minimizes lifecycle costs and results in replacement or renovation in advance of need.

Recommended Actions

Action 2A	Support evidence-based decision making by using "big data" analytics to better understand travel patterns and demand and optimize the transportation network. (Planning, TIS)

Strategy 3: Develop staff skills and knowledge of advanced analytical tools and evaluation techniques that will advance transportation options, safety, and efficiency.

The City of Redmond uses the Bellevue-Kirkland-Redmond (BKR) model to help estimate future transportation vehicle and person demand on the local city and transit highway networks. Over the years, the model has been used to evaluate the impacts of population and job growth, identify auto, transit and carpool demand, plus calculate traffic impact fees for new developments. The model has been instrumental in evaluating the impacts of a future (and now operating) Sound Transit Link light rail service on the Eastside of Lake Washington. The City will continue to use the model to forecast system performance and provide data that planners can use to target new multimodal transportation investments in areas of high growth.

Strategy 3 supports the following Redmond 2050 policies:

- **TR-26:** Use advanced technology to improve system efficiency, disseminate traveler information, and improve data collection for system management.
- **TR-11:** Maintain a traffic control program based on the fundamentals of education, enforcement and engineering for evaluating and responding to traffic safety and operational concerns. Maintain standards for maximum desirable traffic speeds and volumes. Apply a hierarchy of traffic control responses based on the severity of the traffic problem.

Recommended Actions

Action 3A	Leverage the use of the Bellevue-Kirkland-Redmond regional travel demand model to support transportation planning analysis needs. Evaluate the usefulness of the model to address the planning needs of the city and make recommendations on the role and function of the model for future use, including how it may be supported or supplanted by big data. (Planning)
Action 3B	Promote the sharing of transportation-related data through an open data portal and APIs to allow third-party developers to create useful transportation apps and services. (TIS, Planning)

Strategy 4: Formulate public-private partnerships to implement innovative, ambitious, and scalable pilots that utilize new technologies and help meet the goals of the City of Redmond around transportation safety, efficiency, travel choices, or further citywide sustainability efforts.

Public/private partnerships traditionally have proven to be a good tool to test new strategies for local governments. These partnerships can provide several benefits such as:

- Provide access to private capital, innovation, and efficiency of technology for governments.
- Provide investment opportunities for the private partner with public sector guarantees for private companies.
- Help to increase mobility, economic growth, jobs, safety, equity and environmental protection as public goals.
- Provide a reasonable return on investment, critical infrastructure, and economic growth as private goals.
- Provide access to additional capital and technical expertise for governments.

Despite the above benefits, there could be some challenges to consider before entering a public-private partnership (PPP). These may include:

- Misalignment of interests. While public entities prioritize social welfare, private firms are profit-driven, which can lead to conflicts. Transparent contracts and regulatory oversight are essential to maintain balance.
- Another significant challenge is risk distribution. If risks are not shared equitably, either party can suffer setbacks.
- Additionally, PPPs may involve complex regulatory and legal landscapes, which can delay projects. Navigating these complexities requires robust governance frameworks, clear legislative guidelines, and efficient dispute resolution mechanisms.

Strategy 4 supports the following Redmond 2050 policies:

- **TR-10:** Implement transportation programs, projects, and services that support the independent mobility of those who cannot or choose not to drive.
- **TR-12:** Implement transportation programs, projects, and services that prevent and mitigate the displacement of communities that have been disproportionately harmed by past transportation siting decisions, as well as those at high risk of displacement.

Recommended Actions

Action 4A	Form partnerships with emerging mobility services, technology services, platforms, and neighboring jurisdictions to advance safety and mobility. (Planning, Public Works, TIS)

Strategy 5: Leverage technological advancements in support of multimodal travel strategies.

The advance of technology has given travelers many opportunities to make the best choices about how to use the transportation system. However, the simple question of "How do I get from point A to point B in the shortest amount of time?" is not so simple to answer. As shown in the graphic below, people who live, work and recreate in Redmond have many things to consider when determining their best transportation choices. Tools such as Google Maps, ORCA cards, and OneBusAway, a real-time bus tracker application have made using the public bus system simple and responsive. Integrating traveler information through Mobility as a Service (MaaS) technology to support travel on other modes is still relatively new and while they will continue to get better, local governments can support these efforts by providing a regulatory regime that is flexible and making public generated data accessible to the greatest extent possible.

Strategy 5 supports the following Redmond 2050 policies:

- **TR-26:** Use advanced technology to improve system efficiency, disseminate traveler information, and improve data collection for system management.

Recommended Actions

Action 5A	Work with partners and vendors to implement integrated Mobility as a Service (MaaS) platforms that combine public transit, ridesharing, bike-sharing, and car-sharing services to promote multimodal transportation and reduce dependency on private vehicles. Work to ensure that these platforms align with the City's goals and guidelines for safety and equity. (Planning)

Strategy 6: Adopt regulations for the use of new technologies that support transportation safety, equity, and efficiency.

As new technologies emerge it is critical that the City evaluate them to determine how they can advance Redmond's transportation vision and what new regulations may need to be put in place to ensure these technologies offer a net benefit to the Redmond community and any potential negative impacts to people, property or City operations are mitigated. One such case is the advent of managing the use of autonomous vehicles (AVs) in the City, which can include personal delivery devices and drones. Other technologies such as automated traffic enforcement and road usage charges could improve street safety and transit reliability, and create long-term sustainable transportation funding sources as gas tax revenue continues to decline, respectively.

Strategy 6 supports the following Redmond 2050 policies:

- **TR-10:** Implement transportation programs, projects, and services that support the independent mobility of those who cannot or choose not to drive.

Recommended Actions

Action 6A	Evaluate new technologies to understand potential positive and negative impacts on Redmond's transportation system, safety, equity, and overall community livability and develop regulations in support of community goals. Join state and national efforts to advocate for local control and regulation of AVs, drones, and other technologies that may adversely impact transportation infrastructure, safety, and community livability. (Planning)
Action 6B	Investigate and consider adoption of the Seattle/Bellevue Automated Vehicle Strategic Vision Plan to better prepare for the introduction of automated vehicles. (Planning)
Action 6C	Support efforts to expand the use of automated enforcement to improve safety and transit reliability. (Police, Planning)
Action 6D	Keep apprised of and support efforts at the State and County levels to explore road usage charges. (Planning)

MONITORING PROGRESS

Transportation Master Plan

INTRODUCTION

Performance monitoring and reporting is the regular measurement, analysis, and reporting of the results of projects, programs, and policies. It is an integral part of the City of Redmond's approach to delivering the Transportation Master Plan (TMP), and offers several benefits for the City and stakeholders:

Direction: Performance measurement reveals whether City activities are achieving the strategies and citywide principles set forth in the TMP. If they are not, the process gives decision makers the information they need to change course.

Accountability: Community members can judge how well the City of Redmond is delivering public services and whether those services are creating value for the public. Additionally, the City can use performance measurement data to improve efficiency within departments.

Motivation: Seeing progress toward goals can energize staff, decision makers, and the public. Communication: The results of a performance measurement system can form the basis of a discussion among community stakeholders, and elected officials about the progress toward achieving the community's vision for Redmond.

Funding: Performance measurement reveals relative return on investment for the efforts the City makes to improve its transportation system and where the City may want to adjust its level of investment.

DASHBOARD MEASURES

The strategies and actions identified in the TMP are all aimed at achieving a more resilient, equitable, and sustainable transportation system. Seven performance measures have been identified to track progress towards these aims. These are referred to as the "dashboard" measures:

1. Network Completion
2. Mode Share
3. Vehicle Ownership Rates
4. Vehicle Miles Traveled (VMT)
5. Transit Ridership
6. Safety
7. Street and Sidewalk Condition

These seven measures are central to the evaluation of the progress of the TMP and will be highlighted in the City's data dashboard.

Other transportation- and land use-related performance measures that will help track progress toward reductions in greenhouse gas emissions identified in the Environmental Sustainability Action Plan, including electric vehicle ownership, commute distance, and jobs:housing ratio.

NETWORK COMPLETION

The TMP identifies bicycle and pedestrian networks that highlight active transportation routes that connect major local and regional destinations. The networks also help the City allocate limited street space, and in some cases, they establish design standards and service levels to ensure adequate mobility for active modes.

Progress toward the completion of these two networks is an indication that the City is successfully delivering the Transportation Facilities Plan (TFP – see Section 14) and implementing a multimodal transportation system. The network completion measures reflect policies in Redmond 2050 that call for prioritizing walking, biking, and taking transit and TMP strategies focused on improving access to transit and Urban Centers and enhancing safety, particularly for active modes. It also indicates progress toward implementing the City's Complete Streets policy, which requires that projects accommodate active transportation users.

PERFORMANCE MEASURES

- Bicycle network completion is defined as percent of planned low stress bicycle network completed in (i) spine, and (ii) neighborhood networks.
- Two measures are included in the pedestrian network completion, (i) percent of arterials that have sidewalks on both sides, and (ii) number of planned low-stress crossings complete.

MODE SHARE

Redmond's street network can be considered a limited resource as it is constrained by development and environmental features, and the amount of financial resources the City is willing or able to dedicate to its expansion. Today, the single occupancy vehicle (SOV) is the most common form of travel in Redmond. While drive-alone trips can be convenient, they are an inefficient way to use this limited resource, and they contribute disproportionately to congestion. The City of Redmond seeks to provide a range of transportation options so that residents, employees, and visitors can choose alternatives to the SOV when this makes sense and, in doing so, can prevent congestion and its many negative impacts.

Mode share is an indicator of how well the City and other agencies have provided attractive transportation choices for the public, and whether Redmond's urban centers are successfully accommodating the increase in travel demand that accompanies growth. But, like transit ridership, non-SOV mode share is influenced by external factors, and the City's influence on this measure is limited.

PERFORMANCE MEASURES

- Mode share is defined as the percentage of daily trips made by each travel mode (i.e., walking, bicycling, transit, driving alone, and carpooling) within the city. Two measures are monitored, including all trips and commute-only trips.

VEHICLE OWNERSHIP RATE

Vehicle ownership rate can be an indicator of household income as well as the accessibility and viability of other modes of travel such as walking, biking, and transit. The easier and cheaper (in terms of time and money) it is for people to walk, bike, or take transit, the more households may choose to own fewer or no vehicles. This measure directs the City to improve air quality, reduce traffic congestion, and build a more sustainable and resilient urban environment.

PERFORMANCE MEASURES

- Vehicle ownership rate is defined as the number of vehicles registered per capita during previous calendar year.

VEHICLE MILES TRAVELED (VMT)

Tracking VMT helps the City assess the efforts to reduce car dependency and prioritize investments in public transit and active transportation. Reducing VMT in Redmond is necessary to make progress on the goals related to greenhouse gas reduction, safety, and sustainability.

PERFORMANCE MEASURES

- VMT is a unit to measure the total number of miles made by all motor vehicles in the City on an average weekday. To capture the increase in the population, VMT per capita is reported annually.

TRANSIT RIDERSHIP

Increasing transit ridership has multiple benefits for the City of Redmond and the region and is a critical component of the City's growth strategy, which directs most additional housing and employment to the Downtown, Marymoor, and Overlake urban centers. With proper design and service level standards, transit systems can move large numbers of people quickly and comfortably.

A trend of increasing transit ridership can demonstrate the success of transit access and speed and reliability improvements, direct service purchases by the City, and education and encouragement efforts by the City and its partners. It also helps the City monitor transit demand considering changes in service levels and system capacity.

PERFORMANCE MEASURES

- Transit ridership is measured as average weekday boardings for all (i) bus and (ii) light rail stops within the Redmond city limits, respectively. Vanpools, carpools, and other forms of paratransit are not included. Data is provided by King County Metro and Sound Transit annually.

SAFETY

Ensuring the safety of all people is a fundamental goal for the City as it builds and maintains the transportation system. Traffic-related injuries and deaths have a variety of causes, including how transportation infrastructure is designed, operated and maintained, as well as the behaviors of the people using the transportation system. The City can create a transportation system that minimizes the risk of crashes occurring and the severity of crashes if and when they do occur. Examples of things the City can do to enhance safety include providing sidewalks and crossing facilities where they are needed, reducing vehicles speed limits and installing traffic calming treatments, and reconfiguring streets and intersections with known safety issues. Safety data will be used to determine whether the City of Redmond is maintaining its strong safety record, particularly among more vulnerable road users such as people walking, biking, and taking transit even while it encourages more people to use these modes of travel.

PERFORMANCE MEASURES

- Safety considers two measures, (i) the number of total crashes, and (ii) the number of serious injuries and fatalities by mode. The data is collected from WSDOT and Redmond Police Department and is reported annually.

STREET AND SIDEWALK CONDITION

The transportation system requires constant maintenance to function effectively. The City conducts a wide range of activities to preserve the physical and information technology components of this system, the most costly of which is the preservation of roadway and sidewalk pavement. Deferred pavement maintenance can lead to far more costly repairs once road surfaces become degraded.

Adequate pavement condition is essential to the proper functioning of the roadway network for private travel and for freight operations.

PERFORMANCE MEASURES

- Street and sidewalk condition is presented as the percent of streets/sidewalks in poor (need immediate maintenance), fair (need maintenance but the segments are still safe to use), and good (no maintenance needed) conditions. Street pavement condition is updated every other year, while sidewalk condition is updated every 3 to 5 years.

TRANSPORTATION FACILITIES PLAN

Transportation Master Plan

INTRODUCTION

The Transportation Facilities Plan (TFP) is a long-range financially-constrained plan for capital investments that have been identified to provide a complete and well-maintained transportation system. It is the foundation for Redmond's concurrency program which ensures that public facilities and services are adequate to support new development without decreasing locally-established levels of service. Concurrency is a key goal of the Washington State Growth Management Act (GMA). Each project listed in the TFP has been prioritized into near-, medium-, and longer-term based on how well it supports Redmond 2050.

REVENUE SOURCES AND FORECAST

Investments in Redmond's transportation system are made using a variety of revenue sources. Each revenue source has been forecasted through 2050. The forecast makes assumptions about basic considerations, such as the state of the economy, whether the City would continue to devote that revenue source to transportation, new revenue sources, and rate changes. The first five years of the TFP revenue forecast are derived from the revenue projections in the 2026-2030 Capital Investment Program (CIP) approved through the Budgeting by Priorities process in 2024. The remaining years (2031-2050) are calculated based on a flat rate (does not include inflation) to match revenue projections to moderate growth in revenues that reflect a conservatively growing economy and do not include any increases to rates or new sources of revenue.

OVERVIEW OF REVENUE SOURCES AND ASSUMPTIONS

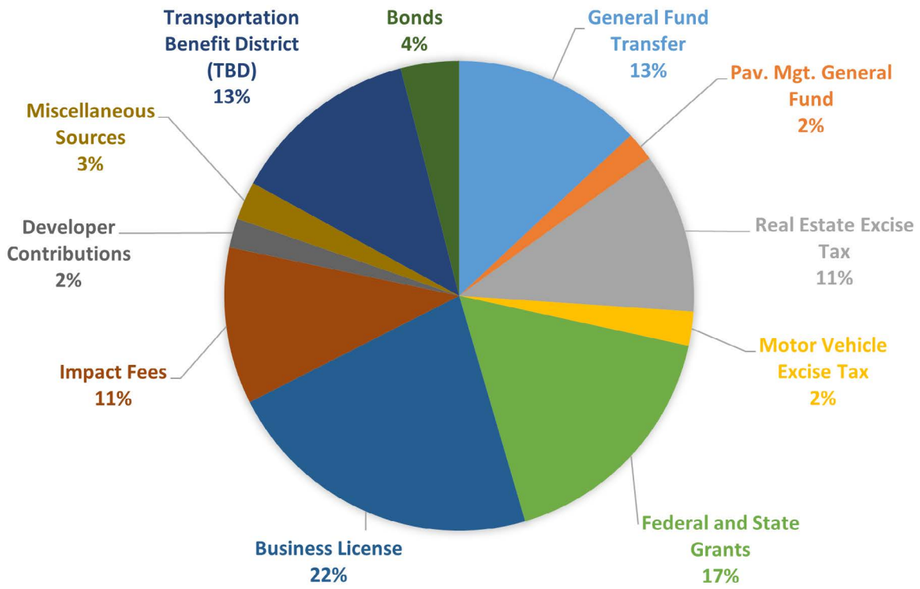
The City's transportation investments are supported by a variety of revenue sources (Table 1) that include:

- City taxes and fees – General funds from property and sales taxes, Business Transportation Tax, transportation impact fees, etc.
- Funds from other governmental agencies – Grants from state and federal transportation agencies, cost participation by other cities in Redmond projects, and transfers of funds pursuant to agreements.
- Developer payments – Funds provided by developers to ensure access and mitigate site-related transportation impacts.
- Miscellaneous – Interest earnings, carry-forward fund balances associated with projects initiated

TABLE 1 | TFP REVENUE FORECAST (2026-2050)

Revenue Source	Forecast ($M) 2026-2050	Percent	Description of Source
General Fund Transfer	63.1	14%	Council appropriation from City general fund
Pav. Mgt. General Fund	7.5	2%	Council appropriation from City general fund
Real Estate Excise Tax	49.4	11%	Tax on property sales in Redmond
Motor Vehicle Excise Tax	10.6	2%	State transportation funds to Redmond
Other Jurisdictions	0.0	0%	Cost participation by other agencies in Redmond projects
Federal and State Grants	81.4	18%	Cost participation grants for specific projects
Business License	101.4	22%	Employment based tax - Redmond employers
Impact Fees	49.5	11%	Transportation impact fee cash payments by developers; or construction value by developers
Developer Contributions	8.5	2%	Value of developer payments or construction for specific projects; not impact fee credited
Miscellaneous Sources	12.8	3%	Interest earnings, rent, surplus property, revenue for completed projects for concurrency
Transportation Benefit District (TBD)	63.0	14%	Council approve 1/10th of 1% sales tax earmarked for transportation projects
Bonds	17.4	4%	Issuance of debt to finance transportation projects
	464.4	**100%**	

FIGURE 1 | FORECASTED TFP REVENUE SOURCES (2026-2050)



Individual revenue sources are described in more detail below:

- **General Fund:** This revenue source is comprised of sales tax, property tax, utility tax, and other licenses and fees. Transportation currently receives approximately 40 percent of the 5 percent General Fund revenues that are transferred to the CIP functional areas (minus development revenues and significant one-time collections). However, one-time monies can be received to support specific transportation capital projects. Forecast Assumption: assumes continuation of City Council appropriation at 40 percent of the 5 percent General Fund transfer to Transportation.
- **Transportation Benefit District (TBD):** Comprised of one tenth of one percent of sale tax collections, used exclusively for funding maintenance and improvements to city streets, public transportation, strategies to maximize safety and traveling choices, parking facilities, and other transportation projects designed to reduced congestion. Forecast Assumptions: assumes a steady increase in sale tax collections over time, while factoring in the rising cost of operational costs covered by the TBD.
- **Pavement Management General Fund Transfer:** By policy, $300,000 per year is transferred from the General Fund to the Pavement Management Program for the preservation of roadway asphalt. Forecast Assumption: assumes General Fund transfer will continue at historical level of $300,000 per year.
- **Real Estate Excise Tax (REET):** REET is a tax on all sales of real estate at a rate of 0.5 percent of the selling price of a property within Redmond city limits. King County collects REET funds for the City and distributes them to the City. REET is restricted to expenditures on capital projects. Transportation currently receives approximately 25 percent of the REET tax. Forecast Assumption: assumes transportation will continue to receive 25 percent of REET collected in the city.

- **Motor Vehicle Fuel Tax (Gas Tax):** In Washington State, cities receive a portion of the state-collected gasoline tax. Gas tax is imposed as a fixed amount per gallon of gas purchased and is dedicated to transportation capital improvements. Forecast Assumption: assumes continuation.
- **Transfers from Other Jurisdictions:** Cost participation from other agencies in Redmond projects. Forecast Assumption: based on historical collections.
- **Business License Fees:** Currently, a $153 fee is assessed per employee to businesses operating in Redmond to support transportation and transportation demand management projects. Forecast based on estimated growth in employment. Business license fees are instrumental in leveraging grants. Forecast Assumption: assumes continuation at rate of $153/FTE (full-time equivalent) and is projected to grow by approximately 1.2 percent per year, commensurate with projected employment growth in the city.
- **Impact Fees:** The City collects impact fees from developers for their impact on the transportation system. Impact fees are dedicated to transportation capital improvements that provide new capacity. The fees cannot pay for existing deficiencies in level of service for the public facilities or normal maintenance and repairs. Impact fee revenue is subject to credits for developer-constructed improvements for capacity projects within the TFP. Impact fee revenue is a blend of developer constructed improvements (credits to impact fees) and cash payments based on land use. Impact fees are instrumental in leveraging grants. Forecast Assumption: assumes a consistent rate of collections; fees per unit could increase over time, but the diminishing availability of land for new developments would negate any potential increases in the forecast.
- **Developer Contributions:** Comprised of cash payments towards specific projects or the value of developer constructed improvements that exceed impact fee credits. Forecast assumption: based on existing developer agreements or known contributions to specific projects. Forecast does not speculate contributions into the future beyond known agreements.
- **Federal and State Grants:** Contributions by a federal or state government to support a particular transportation improvement. Each grant has specific rules and guidelines about what type of projects they will fund. Grants generally require a funding match that the City must contribute towards the cost of the project. If a project uses federal funds the level of analysis, documentation, outreach, and commitment is generally more detailed or stringent. Forecast assumption: grants that have been awarded are included in the first six years. Future grant revenue forecast is conservative at 18 percent of revenue vs. a historical level closer to 25 percent.
- **Bonds:** Comprised of long-term debt instruments issued to raise funds for building or improving infrastructure. Forecast Assumptions: assumes sporadic use in the issuance of bonds to fund major transportation projects.
- **Miscellaneous Sources:** Comprised of interest earnings on cash balances in the transportation fund, rental income, surplus property sales, other miscellaneous sources, and carryforward fund balances associated with projects initiated in prior years. Forecast Assumptions: assumes a consistent rate of sources. Miscellaneous sources are hard to predict and demonstrate limited growth over time.

OVERVIEW OF FORECAST AND GROWTH ASSUMPTIONS – 2026-2050

Forecast Assumptions

- Forecasts flat to moderate growth in revenues that reflect a conservatively growing economy.
- The forecast does not include any increases to rates or new sources of revenue.
- Revenues and project costs also include the portion of CIP-funded projects that have occurred prior to 2026 and are continuing into the 2026-2050 timeframe.
- Ensures debt obligations are paid from existing revenues.

DEVELOPMENT OF THE TRANSPORTATION FACILITIES PLAN

The TFP is part of the overall City of Redmond Capital Investment Strategy (CIS) or "Vision Blueprint", which is a comprehensive listing of all public infrastructure projects needed and funded through 2050. Transportation is the largest of the individually funded capital plans and integral to coordinating with the other capital projects within the city, particularly with utility projects, stormwater improvements, and parks and trails. Transportation tends to provide a framework for how to consider the design and timing of many other City capital projects so all of the City infrastructure can be integrally designed and provided in the most efficient manner possible.

The prioritization of specific transportation projects includes those expected to make meaningful progress towards advancing the City vision for transportation. Individually, all capital improvements in the TFP are closely aligned with Redmond 2050's five overarching strategies: Organize around light rail, maintain transportation infrastructure, improve travel choices and mobility, create a safe transportation system, enhance freight and service mobility.

The TFP is balanced across travel modes. Figure 1 indicates that the City of Redmond continues to focus on multimodal improvements to provide travel choices and mobility while making significant strides to complete infrastructure for pedestrians and bicyclists. Vehicular capacity improvements at critical locations are included to relieve congestion and support freight mobility. While the City does not control transit service it can enhance street design and operations to improve transit speed and reliability, which represents 2% of the TFP. The TFP is also balanced across urban centers and neighborhoods. Approximately 13% of all TFP projects are located in neighborhoods outside of urban centers (Figure 2).

FIGURE 1 | INVESTMENT BY MODE

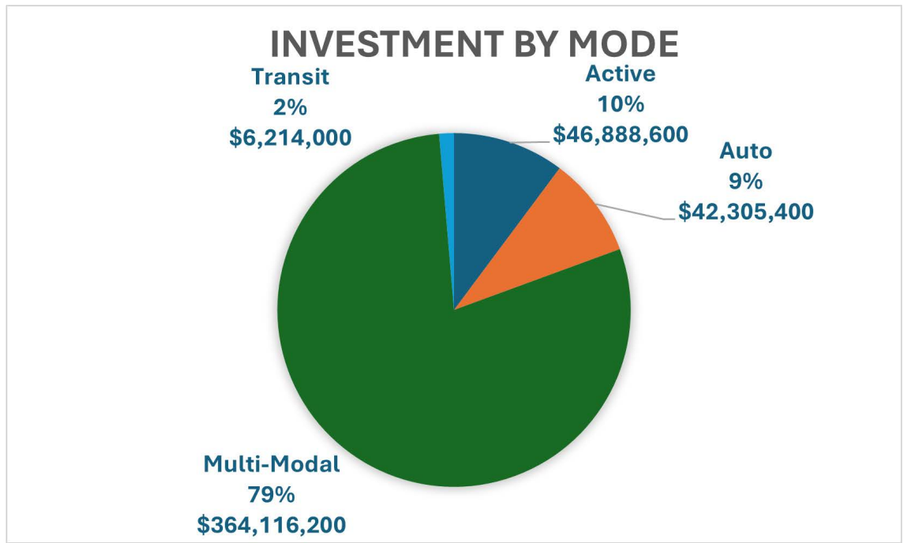


FIGURE 2 | INVESTMENT BY NEIGHBORHOOD

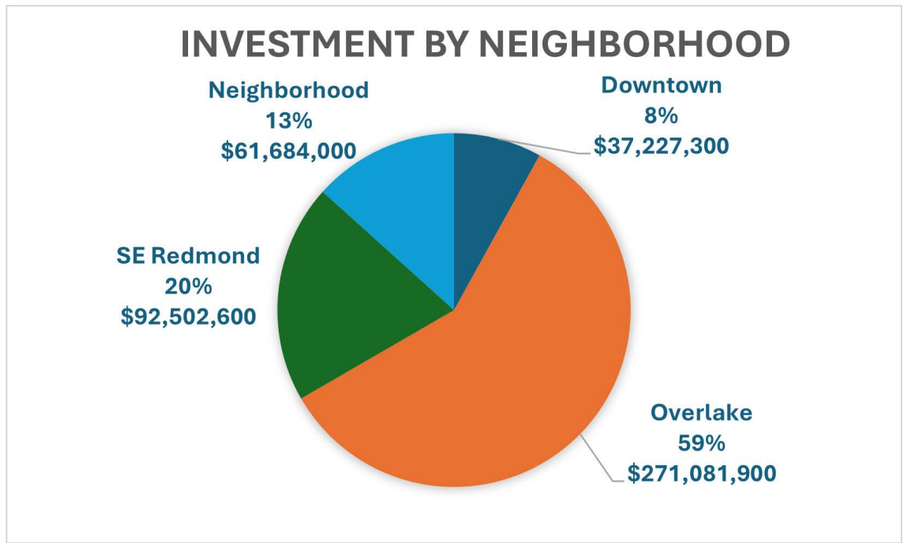


TABLE 2 | DOWNTOWN

ID	Name	From	To	Description	Estimate	Neighbor-hood	Expected Timeframe	Source	Significant Support for These Strategies	
119	Avondale Way Extension	Redmond Way	NE 76th St	Construct an extension of Avondale Way south of Redmond Way to provide access to parking associated with new development. Extend pedestrian, bicycle and fire access only to NE 76th St. Incorporate utilities, street lights, trees, signs, and stormwater treatments.	$12,445,300	Downtown	Near Term	Transportation Master Plan	1	3
371	Redmond Way Widening	168th Ave NE	168th Ave NE	Add second westbound lane and parking on the north side of Redmond Way between 168th Avenue and 166th Avenue. Project would include one travel lane, on-street parking, sidewalk, right-of-way, utilities and streetscape improvements	$13,240,000	Downtown	Medium Term	Downtown East-West Corridor Study		3	5
170	158th Ave NE Extension	Redmond Way	NE 83rd St	Construct new 158th Ave NE from Redmond Way to NE 83rd St. Improvements include 1 through lane in each direction, parking, sidewalks, street lights, pedestrian amenities, transit stop amenities, storm drainage, right-of-way and easements.	$13,240,000	Downtown	Long Term	Transportation Master Plan		3	5
					$37,227,300.00					

1. Organizing Around Light Rail
2. Maintain Transportation Infrastructure
3. Improve Travel Choices and Mobility
4. Building A Safer Transportation System
5. Enhancing Freight and Service Mobility

TABLE 3 | OVERLAKE

ID	Name	From	To	Description	Estimate	Expected Timeframe	Source	Significant Support for These Strategies
310	Lumiere - NE 24th to NE 26th	NE 24th St	Hopper St	Construct Lumiere Access Street from 24th Street to Hopper Street in accordance with Overlake Village Design Standards, including 1 travel lane, parking lane and sidewalk in each direction.	$13,338,000	Medium Term	Overlake Master Plan	1 3 4 5
311	DaVinci - NE 27th to NE 28th	Hopper St	Shen St	Construct DaVinci neighborhood street from Turing Street to Shen 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.	$9,776,000	Medium Term	Overlake Master Plan	1 3 4 5
312	DaVinci - NE 24th to NE 26th	NE 24th St	Hopper St	Construct DaVinci neighborhood street from 24th Street to Hopper 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.	$22,484,000	Medium Term	Overlake Master Plan	1 3 4 5
313	Hopper Street	152nd Ave NE	DaVinci	Construct Hopper Street Access Street from DaVinci to 152nd Ave in accordance with Overlake Design Standards, including 1 travel lane, parking lane and sidewalk in each direction.	$19,742,000	Near Term	Overlake Master Plan	1 3 4 5
314	Turing Street	NE 27th St	152nd Ave NE	Construct Access Street in accordance with Overlake Village Design Standards, including 1 travel lane, parking lane and sidewalk in each direction.	$34,830,000	Medium Term	Overlake Master Plan	1 3 4 5
315	Shen Street	Hopper St	152nd Ave NE	Construct new street: Shen Street from Hooper Street to 152nd Avenue NE.	$10,750,000	Medium Term	Overlake Master Plan	1 3 4 5
502	24th St Multimodal Imp from 148 to Bel-Red	148th Ave NE	Bel-Red Rd	Add new cycle tracks and sidewalks to 24th Street between 148th Avenue and Bel-Red Road, see Overlake South Plan.	$9,560,000	Medium Term	Transportation Master Plan	1 3 4
288	151st Ave NE South-Da-Vinci	NE 20th St	NE 24th St	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.	$9,923,000	Medium Term	Overlake Village South Infrastructure Planning Report	1 3 4 5
289	NE 22nd St, West	148th Ave NE	152nd Ave NE	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. Coordinate with Overlake South Plan.	$20,950,000	Medium Term	Overlake Village South Infrastructure Planning Report	1 3 4 5
290	NE 22nd St, East	152nd Ave NE	Bel-Red Rd	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. Coordinate with Overlake South Plan.	$8,270,000	Medium Term	Overlake Village South Infrastructure Planning Report	1 3 4 5
1150	Lumiere Ave	NE 20th St	NE 24th St	Lumiere Ave from NE 20th St to NE 24th St	$31,425,000	Medium Term	Overlake Village South Infrastructure Planning Report	1 3 4 5
56.01	NE 40th St Shared Use Path - West	148th Ave NE	SR 520	Shared use path on the south side of 40th Street from 148th Avenue to the 520 Trail	$9,483,500	Near Term	Transportation Master Plan	1 3 4 5
47.01	152nd Ave NE Main Stree-et North	2600 Crossing	NE 31st St	Implement 152nd Avenue NE main street from 2600 Crossing to Plaza Street / DaVinci 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. Other improvements include storm drainage, LID, street lighting, pedestrian amenities, transit amenities, right-of-way, easements, and utilities. New traffic signal at 152nd Ave and Davinci Ave. New frontage improvements and intersecti-on approach on the east side.	$12,846,042	Near Term	Overlake Master Plan	1 3 4
62.01	NE 40th St Improvements	163rd Ave NE	WLSP	Add paved trail on south side of 40th Street from 163rd Avenue to West Lake Samma-mish Parkway	$7,107,000	Near Term	Overlake Master Plan	1 3 4
49	152nd Ave NE Main Street South of 24th	NE 24th	NE 20th St	Implement a multi-modal pedestrian cor-ridor 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 consistent with the Over-lake Village Street Design Guidelines. 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. Other improvements include storm drainage, LID, street lighting, pedestrian amenities, transit amenities, right-of-way, easements, utilities and signalized intersection at DaVinci and 152nd Ave NE.	$11,005,300	Medium Term	Overlake Master Plan	1 3 4
51.01	156th Ave NE Shared Use Path	NE 40th St	NE 51st St	Construct shared use path on the east side of 156th Avenue from 40th Street to 51st Street	$9,306,100	Near Term	Transportation Master Plan	1 3 4 5
1151	NE Koll Drive	152nd Ave NE	DaVinci	NE Koll Drive (2100 block) from Da Vinci Ave to 152nd Ave - private street but publicly accessible	$3,521,000	Near Term	Overlake Village South Infrastructure Planning Report	1 3 4
66.01	51st St Shared Use Path	148th Ave	SR 520	Provide multi-use trail on north side of NE 51st St between 148th Ave NE and SR 520.	$3,015,000	Medium Term	Transportation Master Plan	3 4
389	West Lake Sammamish Parkway Roundabout	West Lake Sammamish Parkway		Construct a roundabout at West Lake Sammamish Parkway and Bel-Red Road	$8,720,800	Near Term	Overlake Residential Area Neighborhood Plan	4
172	150th Ave NE Bicycle Lane Completion	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 road-way to west and build retaining walls.	$2,972,000	Near Term	Transportation Master Plan	3 4

ID	Name	From	To	Description	Estimate	Expected Timeframe	Source	Significant Support for These Strategies
10	SR 520 Trail Grade Separation at NE 51st St	520 Trail		Grade separate the 520 Trail at NE 51st Street.	$8,417,000	Long Term	Overlake Residential Area Neighborhood Plan	3 4
31	148th Ave NE and NE 51st St Right Turn Lanes	520 Trail	148th Ave NE	Add a second right turn lane from westbound NE 51st Street to Northbound 148th Avenue NE.	$2,883,000	Long Term	Overlake Master Plan	5
46	150th Ave NE & NE 51st St Signal	NE 51st St		Add north leg to intersection of 150th Ave and 51st St and signalize this intersection.	$2,696,000	Long Term	Overlake Master Plan	
					$273,020,742			

1. Organizing Around Light Rail
2. Maintain Transportation Infrastructure
3. Improve Travel Choices and Mobility
4. Building A Safer Transportation System
5. Enhancing Freight and Service Mobility

TABLE 4 | SE REDMOND & MARYMOOR

ID	Name	From	To	Description	Estimate	Expected Timeframe	Source	Significant Support for These Strategies
378	173rd Ave NE Connection	NE 67th St	NE 70th St	Construct collector arterial (see RZC Appendix 8AA).	$6,243,900	Medium Term	Marymoor Subarea Infrastructure Planning Report	1 3 4
392	NE 70th St Retrofit	173rd Ave NE	Redmond Way	Construct collector arterial street (see RZC Appendix 8A). North half of street to be completed as part of DRLE	$6,580,000	Near Term	Greater SE Redmond Area Transportation Study	1 3 4
360	NE 70th Street Extension Phase 2 Construction	Redmond Way	180th Ave NE	Construct a new street connection up to City standards on NE 70th Street between 180th Avenue NE and Redmond Way, consider transit only street.	$4,800,000	Medium Term	Marymoor Subarea Infrastructure Planning Report	1 3 4
382	176th Ave NE Retrofit-LW Tech Segment	6600 BLK	NE 65th St	Widen Roadway Per Appendix 8A	$2,159,200	Medium Term	Marymoor Subarea Infrastructure Planning Report	1 3 4
384	NE 65th St Retrofit	Marymoor Park boundary	East Lake Sammamish Parkway	Retrofit collector arterial (see RZC Appendix 8A)	$18,731,700	Long Term	Marymoor Subarea Infrastructure Planning Report	1 3 4
386	NE 67th St Retrofit	173rd Ave NE	176th Ave NE	Retrofit collector arterial (see RZC Appendix 8A)	$12,487,800	Medium Term	Marymoor Subarea Infrastructure Planning Report	1 3 4
404	176th Ave NE Retrofit-67th Segment	6600 BLK	NE 67th St	Widen Roadway Per Appendix 8A	$1,079,600	Medium Term	Marymoor Subarea Infrastructure Planning Report	1 3 4
405	176th Ave NE Retrofit-Middle Segment	NE 67th Ct	NE 69th Ct	Widen Roadway Per Appendix 8A	$3,160,400	Medium Term	Marymoor Subarea Infrastructure Planning Report	1 3 4
406	176th Ave NE Retrofit- North Segment	NE 69th Ct	NE 70th St	Widen Roadway Per Appendix 8A	$2,750,700	Medium Term	Marymoor Subarea Infrastructure Planning Report	1 3 4
90	NE 76th St Widening 178th to 185th	178th Pl NE	185th Ave 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 91.	$3,473,000	Long Term	NE 76th St Corridor Study	4 5
88	NE 76th St Widening 520 to 178th Pl	EB 520 Ramp	178th Pl 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.	$6,145,000	Long Term	NE 76th St Corridor Study	4 5

ID	Name	From	To	Description	Estimate	Expected Timeframe	Source	Significant Support for These Strategies
	188th Multi-modal Path	Union Hill Road	NE 70th St	Construct a multi-modal path way on the east side of 188th Ave from Union Hill Road to NE 70th Street	$3,270,000	Near Term	Transportation Master Plan	1 3 4
	NE 77th Street	188th Ave NE		Construct new street with curb/ gutter/sidewalk/landscape strip, lighting, and storm drainage East of 188th Ave NE	$4,214,000	Near Term	Transportation Master Plan	3 5
	NE 72nd Street	188th Ave NE		Construct new street with curb/gut-ter/sidewalk/landscape strip, lighting, and storm drainage East of 188th Ave NE	$2,107,000	Near Term	Transportation Master Plan	3 5
	188th Ave Intersection Improvements	NE 70th St	NE 77th St	Intersection improvements as necessary due to traffic volumes. May include roundabouts or signals	$6,198,100	Near Term	Transportation Master Plan	3 4 5
	187th Ave Widening	Redmond Way	East Lake Sam-mamish Parkway	Widen 187th Ave NE from Redmond Way to East Lake Sammamish Park-way. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, streetlights, and storm drainage.	$1,897,200	Medium Term	Transportation Master Plan	1 3 4
					$92,502,600			

1. Organizing Around Light Rail
2. Maintain Transportation Infrastructure
3. Improve Travel Choices and Mobility
4. Building A Safer Transportation System
5. Enhancing Freight and Service Mobility

TABLE 5 | NEIGHBORHOOD

ID	Name	From	To	Description	Estimate	Neighbor-hood	Expected Timeframe	Source	Significant Support for These Strategies
339	NE 95 St. Bridge Replace-ment	NE 95th St		NE 95th Street Bridge Replacement. Consider bridge only for walking and biking.	$884,000	Bear Creek	Near Term	Bear Creek Neighborhood Plan	3 4
	Avondale Road and 180th Ave Reconfi-guration	Avondale Road	183rd Ave	Intersection reconfiguration to add eastern fourth leg serving new subdivision and south leg crosswalk. Intersection also allows for north and south U-turns. Includes 1200' of new street connection to 183rd Court NE.	$4,681,500	Bear Creek	Long Term	Transportation Master Plan	3 4
1063	Red-Wood Rd and NE 109th St Improve-ments	Red-Wood Rd		North-Souths Corridors Study: This project would reconfigure the eastbound and westbound approaches to provide a dedicated left-turn lane and a shared through/ right-lane. This would be paired with removal of the split phasing at the intersection and extension of the westbound bicycle lane through the intersection.	$1,456,000	Education Hill	Medium Term	North-South Corridor Study	3 4
75	NE 116th St Widening Segment II	167th PL	179th PL	Widen NE 116th St from 176th Ave to 178th Ave NE. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, underground power, right-of-way and easement acquisition.	$10,665,000	North Redmond	Long Term	North Redmond Neigborhood Plan	3 4
77	NE 116th St Segment III	179th PL	Avon-dale Rd	NE 116th St Segment III. Location: NE 116th Street (East End) from 179th Avenue NE to Avondale Rd. Description: Widen remaining sections of NE 116th St from 179th Avenue to Avondale Road. Improvements include 1 through lane in each direction, left turn lanes, bike lanes, curb, gutter, sidewalks, street lights, storm drainage, underground power, right-of-way and easement acquisition.	$22,825,000	North Redmond	Long Term	North Redmond Neigborhood Plan	3 4
370	NE 116th St Widening Segment I, Phase II	Red-Wood Rd	167th Pl 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, 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 ID # 76.	$6,856,000	North Redmond	Long Term	North Redmond Neigborhood Plan	3 4

ID	Name	From	To	Description	Estimate	Neighbor-hood	Expected Timeframe	Source		Significant Support for These Strategies
111	124th St and 162nd Pl Inter-section Improve-ments	162nd Pl NE		Construct a new traffic signal at 124th Ave NE and 162nd Pl NE. Includes the addition of turn lanes on NE 124th and modifications on 162nd Pl for sight distance. Expected to meet signal warrant with pending development, Alternatively, build roundabout. Just outside City limits.	$4,950,000	North Redmond	Medium Term	North-South Corridor Study		3 4
362	172nd Ave NE Extension	NE 124th St	NE 128th St	172nd Ave NE gate opening at NE 124th St and associated improvements (#122)	$1,450,000	North Redmond	Medium Term	North-South Corridor Study		4
	Redmond Woodin-ville Road Widening	Powerline Trail	NE 124th St	Widen Red-Wood Road from PSE Powerline Trail to NE 124th Street. Improvements include 1 through lane in each direction, left turn lanes at specific intersections, access management, separated bike lanes, curb, gutter, sidewalks, streetlights, storm drainage, and utility undergrounding.	$6,502,900	North Redmond	Long Term	North-South Corridor Study	1	3 4
1182	Willows North Bus Lane	90th Street	124th Street	Add northbound bus only or HOV only lane. Replaces one general purpose lane south of 9900 Block and replaces bike lanes from 9900 Block to 124th Street - cannot remove bike lanes until Redmond Central Connector complete providing new, more comfortable bike facility.	$1,414,000	Willows-Rose Hill	Near Term	North-South Corridor Study	1	3 4
					$61,684,400					

1. Organizing Around Light Rail
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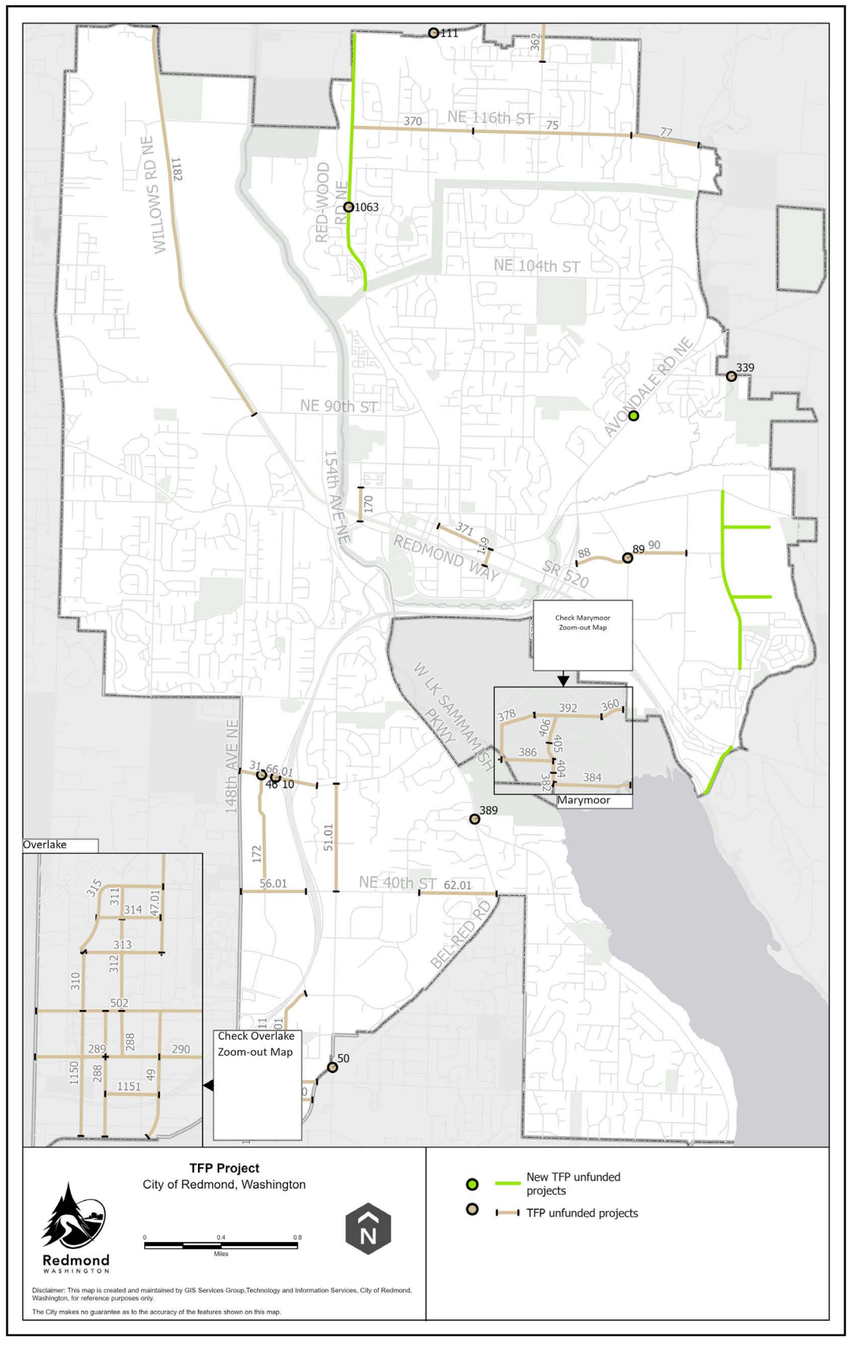
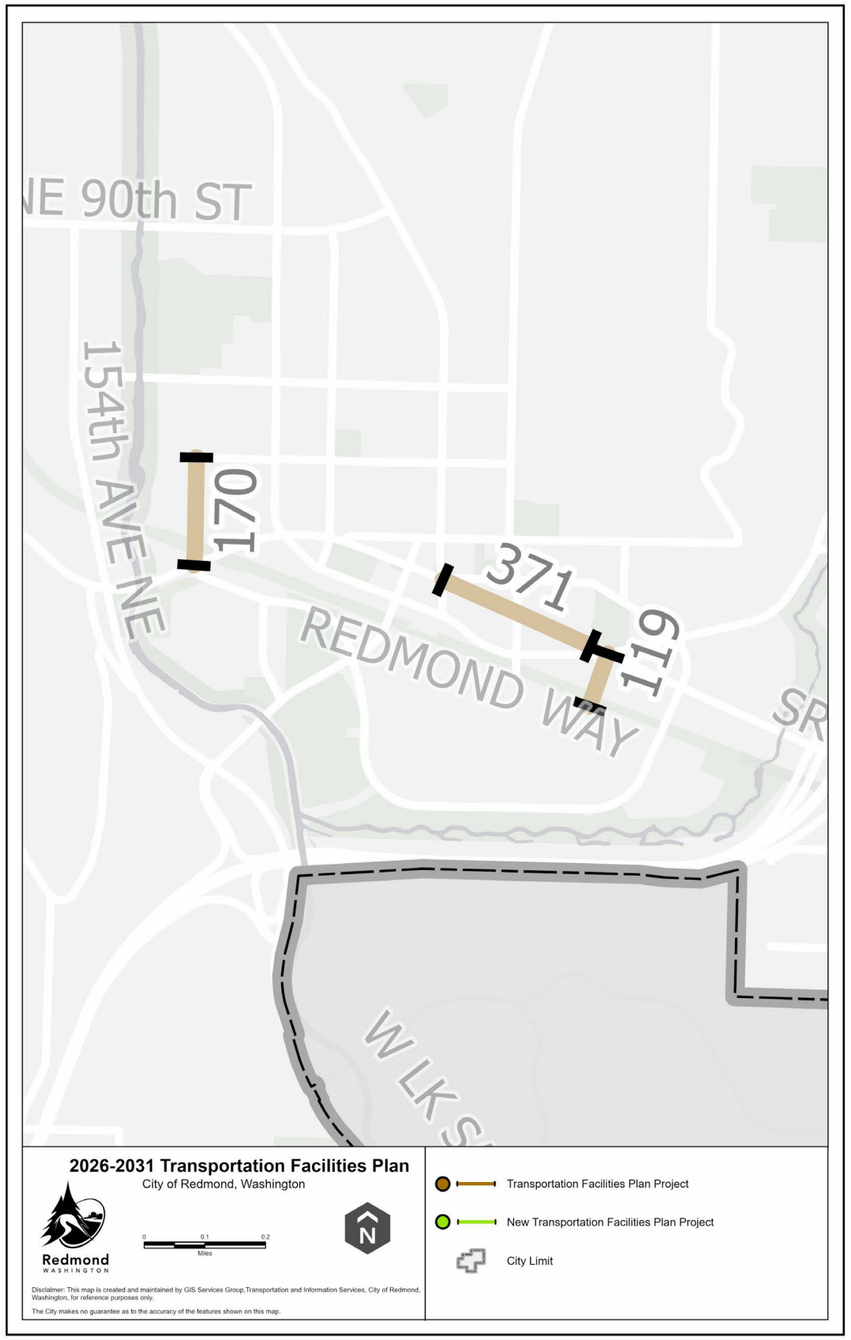
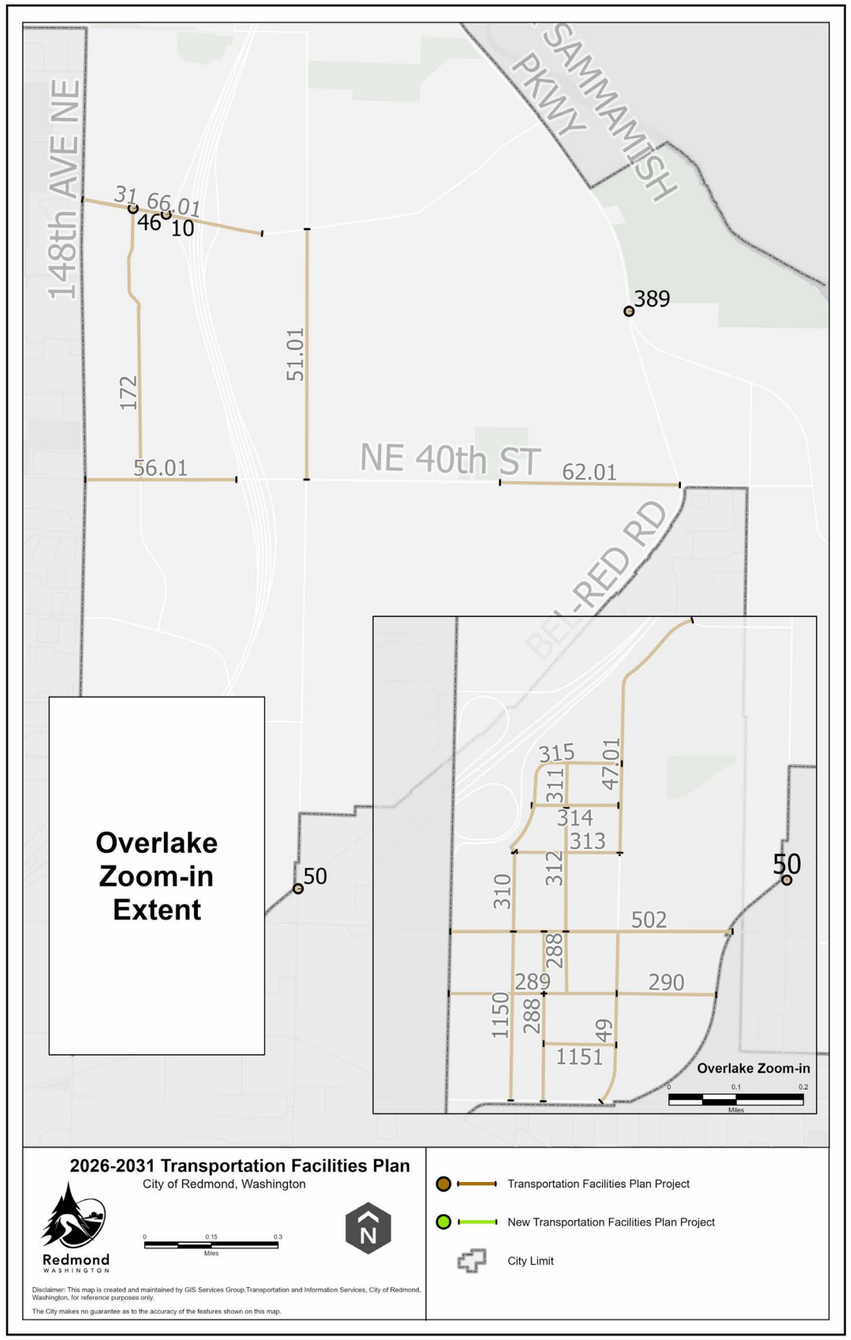
MAP 1 | 2026-2031 TFP PROJECTS CITYWIDE



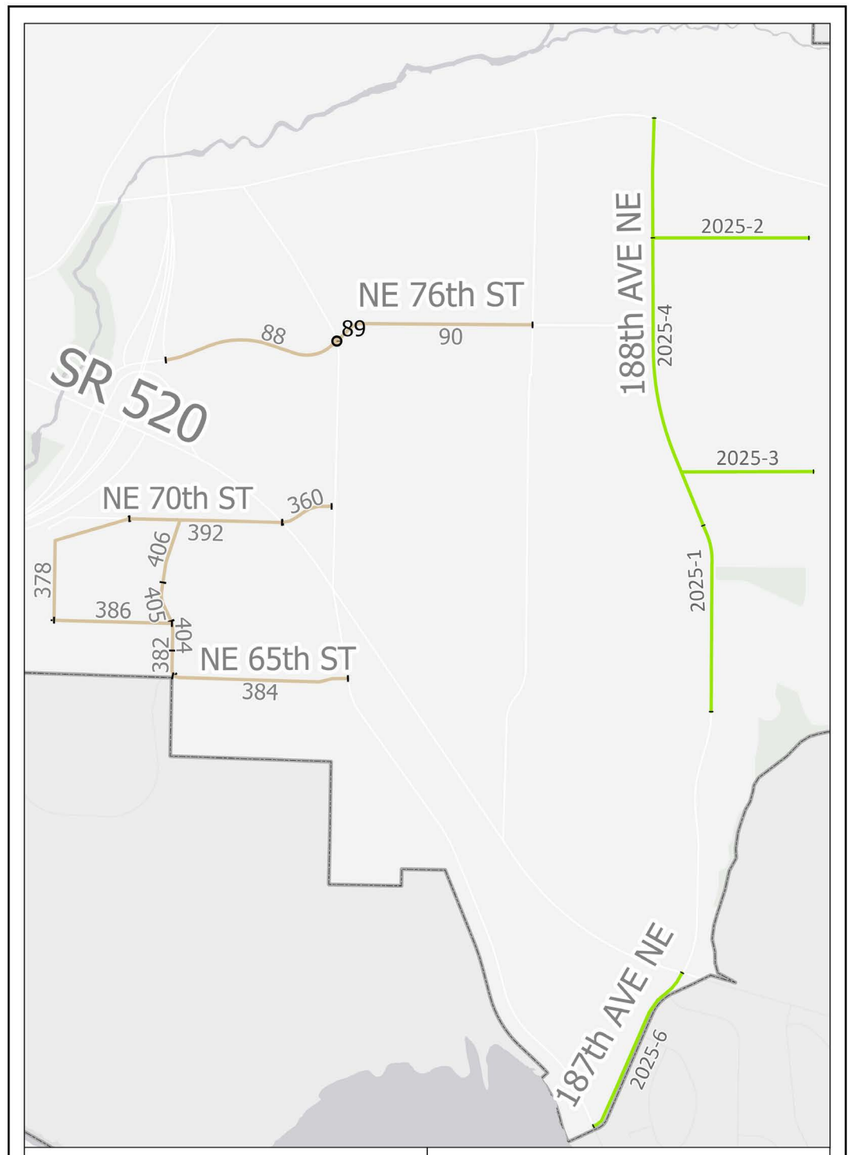
MAP 2 | 2026-2031 TFP PROJECTS - DOWNTOWN



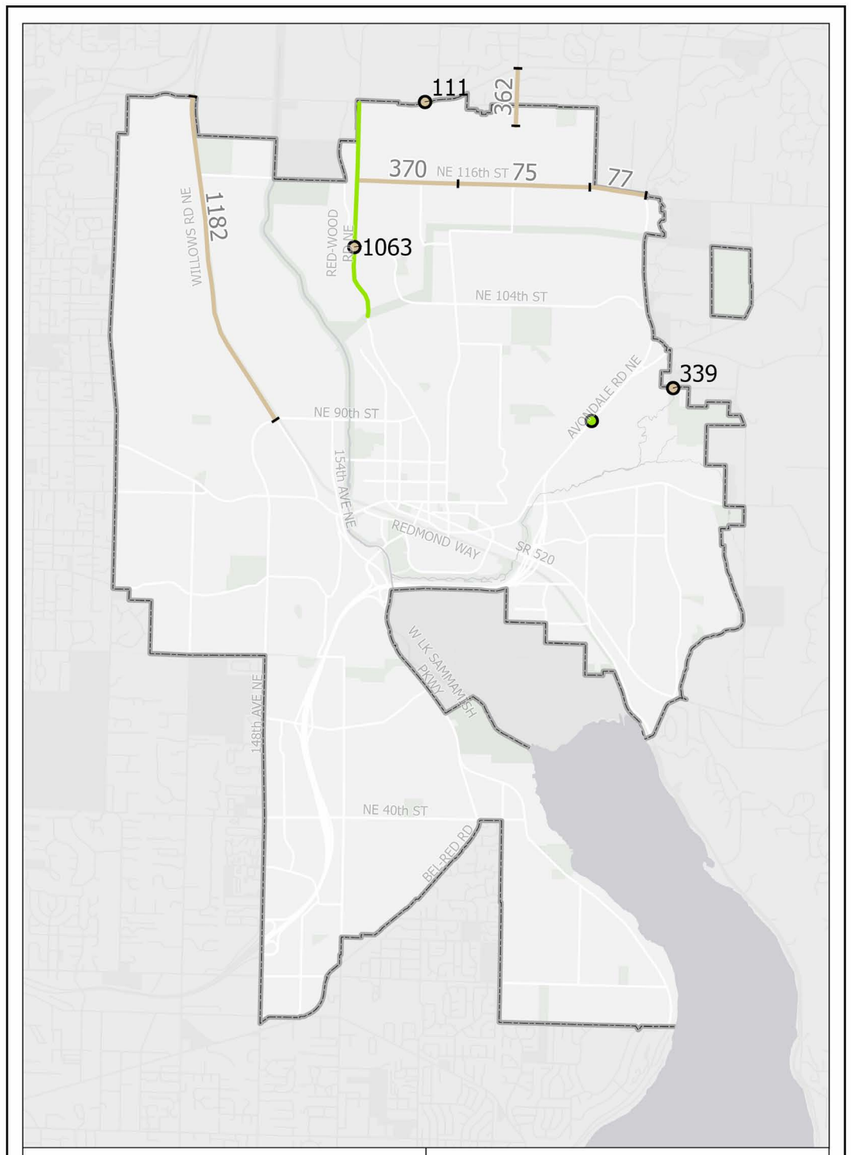
MAP 3 | 2026-2031 TFP PROJECTS - OVERLAKE



MAP 4 | 2026-2031 TFP PROJECTS - SE REDMOND/MARYMOOR



MAP 5 | 2026-2031 TFP PROJECTS - NEIGHBORHOODS



APPENDICES

Transportation Master Plan

APPENDIX A

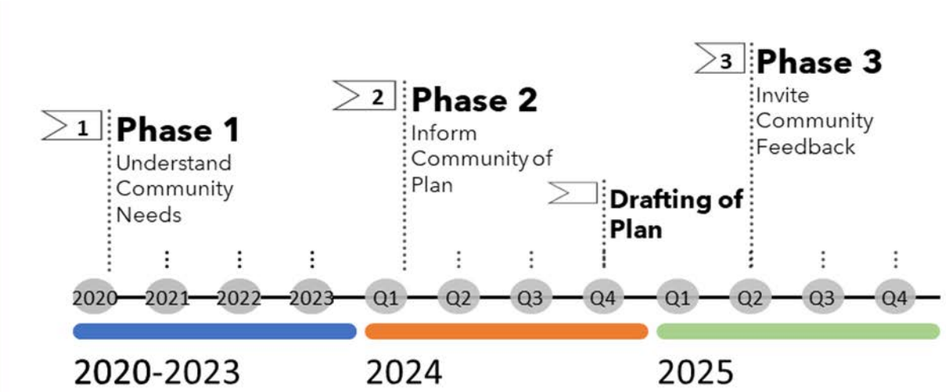
COMMUNITY ENGAGEMENT SUMMARY

The City of Redmond's Transportation Master Plan (TMP) identifies strategies and actions for implementing the transportation vision and policies in Redmond 2050. It shapes the way the City plans and invests in the transportation system and how people get around Redmond.

COMMUNITY ENGAGEMENT GOAL

The City engaged the Redmond community throughout the TMP development process to accurately understand community needs and desires and ensure these are reflected in strategies and modal networkrecommendations. This includes talking with community members to better understand their needs, explaining the TMP creation process, and allowing for community feedback prior to adoption of the plan.

TIMELINE FOR COMMUNITY ENGAGEMENT



TMP Community Engagement Timeline

Phase 1: Understand Community Needs

The first phase of community engagement took place from 2020-2023 and was focused on understanding the needs of the community regarding transportation in Redmond. This engagement took place through a variety of methods, including the Redmond 2050 plan outreach. The Redmond 2050 engagement process resulted in hundreds of interactions with community members. Specific to transportation questions were asked about community members' mobility needs and what they would like to see more of to improve their daily transportation experience. This feedback resulted in the formulation of the transportation vision and policies in the Transportation Element of the Redmond 2050 Comprehensive Plan. The Transportation Element of Redmond 2050 serves as the foundation for the TMP. TMP specific engagement also took place through the Capital Projects Ideas mapping activity (Spring 2020), Routes to Rails project (Spring 2023), and Derby Days questionnaire (2023). More information about these projects can be found at Transportation Master Plan Engagement | Redmond, WA

Phase 1 Engagement Activities

- **Spring 2020: Capital Projects Mapping Activity**
  - Understand community transportation needs as part of Redmond 2050 outreach. The City provided an interactive online map to solicit community ideas for where the City can improve transportation and mobility.
  - Approximately 107 community interactions
- **Spring 2023: Routes to Rails Engagement**
  - Gather feedback via an online questionnaire to develop transportation safety improvements, including wayfinding signage at the Heron Rookery Trail and traffic calming measures at the 161st Avenue NE/Bear Creek Parkway intersection, as well as implementing an additional pedestrian crossing at the 166th Avenue NE/NE 79th Street intersection.
  - Approximately 108 community interactions
- **July 15, 2023: 2023 Derby Days**
  - Gather feedback on challenging locations for transportation and multimodal access.
  - Approximately 500 community interactions
- **August 26, 2023: 2023 Open Streets Festival**
  - Understand community transportation needs and multimodal access challenges at future light rail station locations
  - Approximately 300 community interactions

Phase 2: Inform Community of Plan and Gather Feedback

The second phase of community engagement took place from April 2024 – August 2024 and is focused on informing the community about the TMP creation process and how they can stay involved. This includes staff being present at a variety of community events with materials to inform the community that TMP development is still underway and ensuring them that transportation is a priority for the City. This also includes sharing how the community can stay involved during the TMP development process, including through attending City Council and Planning Commission meetings, as well as participating in the Redmond Pedestrian and Bicycle Advisory Committee. This phase may also include a small degree of seeking feedback on specific strategies to be included in the TMP.

Phase 2 Engagement Activities

- **March 11, 2024 – April 26, 2024: City of Redmond Parking Questionnaire**
  - Understand the impact of current parking restrictions on residents and visitors of Redmond's Downtown, Overlake, and Southeast Redmond neighborhoods.
  - Approximately 140 community interactions
- **April 17, 2024: Microsoft Transportation Open House**
  - Help community understand how to access Downtown and Overlake from the light rail, inform of TMP writing process.
  - Approximately 85 community interactions
- **April 27, 2024: Sound Transit 2 Line Opening**
  - Help community understand how to access Downtown and Overlake from the light rail, inform of TMP writing process.
  - Over 1,000 community interactions
- **May 11, 2024: Community Road Safety Assessment**
  - Get community feedback regarding safety of pedestrians in Redmond neighborhoods to influence the strategies within the Active Transportation sections of the TMP (and Safety Action Plan).
  - Approximately 35 community interactions
- **May 13, 2024: Redmond Pedestrian and Bicycle Advisory Committee Transit Open House**
  - Help community understand how to access Downtown and Overlake from the light rail, inform of TMP process, strengthen community accessibility to Move Redmond, Sound Transit, Metro, and Hopelink.
  - Approximately 30 community interactions
- **May 15, 2024: City of Redmond Staff Sustainability Fair**
  - Share resources for accessing bicycle facilities, transit facilities, and multimodal transportation resources.
  - Approximately 100 community interactions
- **May 17, 2024: Bike Everywhere Day**
  - Help community understand how to access Downtown and Overlake from the light rail, inform of TMP process.
  - Approximately 100 community interactions
- **May 22, 2024 and June 5, 2024: Road Safety Assessment**
  - Get staff feedback regarding safety of pedestrians in Redmond neighborhoods to influence the strategies within the Active Transportation sections of the TMP and Safer Streets Action Plan.
  - Approximately 20 community interactions
- **June 22, 2024: Open Streets Festival (Overlake)**
  - Help community understand how to access Downtown and Overlake from the light rail, inform of TMP process.
  - Approximately 130 community interactions

- **July 13, 2024: 2024 Derby Days Festival**
  - Help community understand how to access Downtown and Overlake from the light rail, inform of TMP process.
  - Approximately 754 community interactions
- **August 17, 2024: Open Streets Festival (Downtown)**
  - Help community understand how to access Downtown and Overlake from the light rail, inform of TMP process.
  - Approximately 300 community interactions
- **Fall 2024: City of Redmond Parking Questionnaire**
  - Gather feedback to understanding opportunities and challenges for implementing parking management strategies in Redmond's urban centers.
  - Approximately 100 community interactions
- **November 2024: Fall 2024 Redmond Schools Parent/Guardian Transportation Questionnaire**
  - Gather community feedback from Redmond families to understand how students travel to and from schools and support transportation safety improvements.
  - Approximately 133 community interactions
- **December 2024: Electric Vehicle Ready Community Questionnaire**
  - Gather feedback to understand what Redmond residents and visitors need for electric vehicles and charging resources.
  - Approximately 149 community interactions
- **December 2024: Pedestrian and Bicycle Advisory Committee Meeting**
  - Gather feedback and share initial ideas for the Bicycle Strategy of the Transportation Master Plan.
  - Approximately 10 community interactions
- **December 2024: E-Mobility Roundtable Sessions**
  - Gather targeted feedback from electric vehicle user groups via four roundtable sessions to inform the E-Mobility Strategy of the Transportation Master Plan.
  - Approximately 24 community interactions

Phase 3: Invite Community Feedback and Share Results

The third and final phase of community engagement for the Redmond TMP took place from May-July 2025 and focused on sharing the draft TMP with the community and getting their feedback. This was a chance for staff to share with community members what types of strategies and actions were being proposed and how they relate to the feedback and needs identified in the initial two phases of engagement. Activities during this phase of engagement focused on informing people how to access and review the TMP and demonstrating how strategies will help achieve transportation targets set by the City. Engagement also included education for the community regarding how the TMP funnels into other plans and City initiatives.

Phase 3 Engagement Activities

- **January 13, 2025: Pedestrian and Bicycle Advisory Committee Meeting**
  - Discuss the Transportation Demand Management (TDM) and Transit sections of the TMP.
  - Approximately 10 community interactions
- **December 2024: E-Mobility Roundtable Sessions**
  - Gather targeted feedback from electric vehicle user groups via four roundtable sessions to inform the E-Mobility Strategy of the Transportation Master Plan.
  - Approximately 24 community interactions
- **March 10, 2025: Pedestrian and Bicycle Advisory Committee Meeting**
  - Discuss the Freight & Goods Delivery section of the TMP.
  - Approximately 10 community interactions
- **April 8, 2025: Eastside for All Focus Group #1**
  - Gather input and hold strategy development discussion with Community Based Organizations.
  - Approximately 12 community interactions
- **April 14, 2025: Transit Open House**
  - Share progress on the TMP and provide TDM resources through the GoRedmond program and in partnership with Move Redmond and Hopelink.
  - Approximately 30 community interactions
- **April 22, 2025: Eastside for All Focus Group #2**
  - Gather input and hold strategy development discussion with Community Based Organizations.
  - Approximately 12 community interactions
- **April 29, 2025: Eastside for All Focus Group #3**
  - Gather input and hold strategy development discussion with Community Based Organizations.
  - Approximately 12 community interactions
- **May 6, 2025: Eastside for All Focus Group #4**
  - Gather input and hold strategy development discussion with Community Based Organizations.
  - Approximately 12 community interactions
- **May 10, 2025: Downtown Redmond Link Extension Station Opening Event**
  - Share progress on the TMP and provide TDM resources through the GoRedmond program.
  - Approximately 500 community interactions
- **June 9, 2025: Pedestrian and Bicycle Advisory Committee Meeting**
  - Discuss the Streets Plan and Transit Plan sections of the TMP.
  - Approximately 10 community interactions
- **July 14, 2025: Pedestrian and Bicycle Advisory Committee Meeting**
  - Discuss the Pedestrian Network section of the TMP.
  - Approximately 10 community interactions

- **September 8, 2025: Eastside for All Transportation Master Plan Open House**
  - In partnership with Eastside for All, share TMP progress and results from Spring 2025 Focus Groups with Community Business Organizations.
  - Approximately 55 community interactions
- **September 29, 2025: Community-wide Transportation Master Plan Open House**
  - Share TMP progress and gather feedback from the community.
  - Approximately 17 community interactions

Key Findings

Throughout outreach and engagement for Redmond 2050 and the Transportation Master Plan, several key themes stood out from a variety of community members. The following represent a summary of the ideas and feedback heard from community members throughout the process:

- More reliable transit is needed in Redmond, especially in residential neighborhoods outside of urban centers.
- More high comfort separated bicycle facilities are needed in Redmond.
- Protected bicycle lanes help bicyclists and drivers feel safer.
- Create or promote intentional transportation education opportunities for specific groups and the community at-large.
- Increase opportunities for transportation information to be shared in multiple languages and in visual formats.
- Partnerships with other community resources, such as Hopelink or the King County Library, are important.
- Increased transit connections between eastside cities would be valuable and appreciated.
- Increased bicycle and pedestrian connections to existing transit networks would be valuable and appreciated.
- Emphasize safety and comfort at transit hubs through increased lighting, seating, and restroom access.
- Increase education of existing transit networks and provide easier access to transit resources.
- Many sidewalks can be broken or bumpy and provide navigation barriers for those with mobility challenges.
- Redmond needs better and safer sidewalk access through and/or around construction zones.
- Providing seating options along common pedestrian routes can make walking a much more pleasant option.
- Limiting right-turns on red for vehicles make intersections safer for pedestrians.
- Redmond needs more safe and secure bicycle storage.
- Clearer signage and more protection for bikes and pedestrians are needed in modal conflict zones such as shared use paths and bus stop facilities.
- Electric vehicle (EV) chargers can be expensive, and are often unavailable at multi-family housing locations.
- Current EV programs are directed towards high-income families. These programs need better access for people of all socioeconomic backgrounds.
- More education about Redmond's micromobility program is needed, including how to use shared e-bikes and e-scooters.
- Parking rules can be confusing, which can lead to increased ticketing.
- Parking restrictions and regulations should be clear and intuitive for all.
- Emergency response and access is an important consideration for all modes of transportation.

APPENDIX B

MULTIMODAL LEVEL-OF-SERVICE STANDARDS

The Growth Management Act (GMA) (RCW 36.70A) requires that communities establish a level of service (LOS) standard for all locally owned roads and locally or regionally operated transit routes. The GMA gives wide latitude to communities about how to go about establishing LOS standards and does not prescribe any specific methodology. The primary function of establishing an LOS standard is to ensure that the community builds new infrastructure in a way that keeps pace with growth. The GMA amended by HB 1181 in 2023 to ensure that communities adopt LOS standards that focus more on just vehicle travel—in other words, communities must adopt multimodal LOS or MMLOS standards.

In addition to GMA requirements, PSRC's multi-county planning policies also require that communities consider all modes when planning.

HOW LOS STANDARDS ARE USED

Before identifying MMLOS recommendations for Redmond, it is important to understand how LOS standards can be used by jurisdictions. There are two main ways that LOS standards are used:

- Transportation Concurrency – Transportation concurrency, often simply referred to as concurrency, is a fundamental element of the GMA. When LOS is referred to in the GMA, it is specifically related to transportation concurrency. At its core, the transportation concurrency LOS standard is established within the Transportation or Capital Facilities Element of the Comprehensive Plan to ensure that there is adequate transportation infrastructure in place to serve the planned growth identified in the Land Use Element. As noted earlier, the GMA does not prescribe a specific LOS standard, which is a recognition that communities may have differing expectations of how the transportation system functions and what constitutes a satisfactory LOS.
- Development Review and Permitting – Another area where LOS standards are frequently applied is for development review. In this case, the LOS standard is applied when preparing a transportation impact analysis or environmental impact statement. If the development causes the LOS standard not to be met or worsens an already substandard condition, mitigation can be identified to reduce or eliminate the conditions that caused the LOS standard violation. Permitting requirements can be set to require that LOS standards are met which can include frontage improvements, off-site mitigation, or a fee-in-lieu contribution.

  After the passage of the GMA in 1990, communities generally adopted vehicle LOS standards that were used for both transportation concurrency and development review and permitting. In other words, the same metric and standard were applied to both transportation concurrency and for a transportation impact analysis.

MMLOS IN REDMOND

Within the transportation planning community, Redmond has long been recognized as a leader in multimodal transportation planning. Specifically, Redmond adopted the first plan-based multimodal transportation concurrency LOS standard in 2008. This MMLOS standard is still in use today and many communities throughout Washington State have emulated Redmond's plan-based concurrency LOS standard.

Redmond's Transportation Concurrency LOS Standard

Redmond's LOS standard for transportation concurrency is rooted in the city's multimodal Transportation Facilities Plan (TFP). The TFP is prepared in conjunction with the Comprehensive Plan's Land Use Element and considers the growth in population and employment within Redmond and the neighboring jurisdictions. Unlike systems that focus on the performance of the vehicle network, Redmond's concurrency standard tracks implementation of the improvements identified in the TFP and requires that the city build new investments ahead of or at-pace with growth identified in the Comprehensive Plan.

A simple way to think of Redmond's transportation concurrency LOS standard is as follows:

- Redmond can accommodate 20 percent of planned growth so long as it has built or committed funding to build 20 percent of the transportation improvements defined in the TMP.

Since the TFP is fundamentally multimodal, Redmond's transportation concurrency LOS standard is also multimodal since it does not focus on building infrastructure solely for vehicles.

MMLOS ENHANCEMENTS FOR REDMOND

As part of Redmond 2050, Redmond is refining the way that transportation system supply and demand are calculated, shifting from a calculation based on person-miles traveled to a calculation based on person trips. This change is to simplify calculations and align with the proposed changes to Redmond's transportation impact fees, which are used, in part, to fund new transportation infrastructure using a one-time fee paid for by new development.

Of the other TMP performance measures that relate to MMLOS, they each have merit in evaluating the performance of the transportation system and identifying new projects.

- **Connectivity** – this performance measure can help to identify areas of Redmond that are physically proximate, but where the actual travel distance is long. The classic example is of a cul-de-sac neighborhood that might be a few hundred feet from a shopping area, but it might be more than a mile to get to that shopping area because there are no roads, paths, or sidewalks connecting the two. Connectivity is a key measure being explored by WSDOT as the agency looks to adopt MMLOS metrics and standards. This performance measure does not need to be recalculated frequently as it is complex to calculate and does not change unless a new connection is made.

›REDMOND 2050

- **Network Completion** – this is an important measure of how complete the street, active transportation, and transit networks are relative to an "ultimate" build-out condition.
- **Mode Share** – calculating the share of travel by means other than SOV travel is required for regional growth centers by the PSRC multi-county planning policies. This performance metric will be maintained to monitor progress on shifting how people travel through denser land uses and more multimodal connectivity.
- **Vehicular Congestion** – the current metric measured in average seconds of delay per mile is useful for a traffic engineer but may not be understandable to the layperson. This performance measure will be changed for how vehicular congestion is calculated using standard measures from the Highway Capacity Manual for intersection delay or roadway segment delay. Bellevue, for example uses both intersection volume/capacity ratios and HCM roadway segment delay to calculate vehicle delay. It is important to note that it is not recommend to adopt a vehicular congestion LOS standard, but measuring vehicle congestion as part of a multimodal approach to identifying transportation projects is an important aspect of multimodal transportation planning.
- **Transit Ridership** – given the level of investment in transit in Redmond and surrounding communities. The City's current approach of reporting data from King County Metro and Sound Transit will continue.
- **Safety, Environment, and Street Preservation** – these performance measures are important for the city to track but are less-related to MMLOS.

LEVEL OF TRAFFIC STRESS FOR MMLOS

One innovation that has occurred since the last TMP update is the idea of the Level of Traffic Stress, or LTS, as an MMLOS performance measure. LTS is similar to vehicle LOS in that it can consider various features of a sidewalk, roadway, bike lane, cycletrack, or trail and calculate how well it accommodates active modes (walking, biking, scooters, wheelchairs, etc.). However, unlike vehicle LOS and earlier active mode LOS calculations, it is not based on how crowded an active mode facility is, rather it is based on how comfortable people are using that facility.

The idea of LTS stems from research in the 1990s from the Mineta Transportation Institute at San Jose State University in California. Initially, the research focused on bicycling and found that many people were uncomfortable bicycling in a vehicle lane on busier streets with higher speeds. In fact, some people were uncomfortable enough to determine that bicycling was not a viable means of travel for them, even though it was permissible under the law. Similar findings were made for bicycle lanes—while they can work well on smaller, slower, lower-volume streets, most people do not feel comfortable bicycling in a bike lane on a high-speed arterial street. This lack of comfort pushes some people who might bike to drive instead. Since the initial work on bicycle LTS, the idea has also spread to pedestrian travel. Similarly, greater separation from fast, high-volume vehicle travel makes walking more comfortable and thus a more viable means of traveling between places. LTS is measured on a scale of 1 to 4, with 1 being the most comfortable and 4 being the least comfortable. Often LTS 1 is referred to as a facility where small children or the elderly would feel completely comfortable traveling and LTS 4 is where people will only travel out of absolute necessity. Keep in mind that it may not always be feasible to achieve LTS 1 when considering impacts to adjacent land uses, the cost to build a facility, or environmental issues. Therefore, cities that have adopted LTS tend to have a range of LTS targets, much like cities sometimes allow for poor vehicle operations in certain areas in consideration of other constraints.

BICYCLE LEVEL OF TRAFFIC STRESS

The Redmond Bicycle Design Manual provides guidance on bicycle facility selection by analyzing characteristics of the street to determine the appropriate bicycle facility type for that street. Bicycle Level of Traffic Stress (LTS) is a key component that aims to address the needs, skills, and desires of a wide range of bicyclists. Figure 1 shows different levels of comfort with bicycling and the surveyed percentage of the population that falls within them. The "Interested but Concerned" percentage of the population - those who would like to ride a bicycle more but have concerns about their personal safety - is the largest percentage of the population and so is the design user for the facilities and treatments as shown in the manual.

A bicyclist's perception of their personal safety riding on a given street is greatly influenced by their proximity to and interaction with motorized traffic. At low volumes and speeds of traffic, many people feel safe and comfortable sharing the street with traffic or crossing the street in unmarked crossings. As traffic speed and volumes increase, their perception of safety degrades significantly, resulting in a feeling of increased stress and discomfort.

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FIGURE 1 | BICYCLE FACILITY DESIGN USER PROFILES

Comfort Typology of Bicyclists

Design User Profile	Non-Bicyclist	Interested but Concerned	Somewhat Confident	Highly Confident
Bicycling Preferences	Uncomfortable bicycling in any condition, have no interest in bicycling, or are physically unable to bicycle.	Often not comfortable with bike lanes, may bike on sidewalks even if bike lanes are provided; prefer off-street or separate bicycle facilities or quiet or traffic-calmed residential roads. May not bike at all if bicycle facilities do not meet needs for perceived comfort.	Generally prefer more separated facilities, but are comfortable riding in bicycle lanes or on paved shoulders if need be.	Comfortable riding with traffic, will use roads without bike lanes.
Percent of Population	31-37%	51-56%	5-9%	4-7%

Note: the percentages above reflect only adults who have stated an interest in bicycling.

A bicycle level of traffic stress (LTS) rating from 1 to 4 is used in Redmond's Bicycle Design Manual to classify streets based on how stressful they are for riding a bicycle, with LTS 1 being the least stressful and LTS 4 being the most stressful.

Table 1 shows the LTS rating system created for the City of Redmond's streets. The LTS ratings consider characteristics of the street including posted speed limit and the amount of motor vehicle traffic (Average Annual Daily Traffic, or AADT) as well as characteristics of the bicycle facility on the street.

TABLE 1 | BICYCLIST LEVEL OF TRAFFIC STRESS ON STREETS IN CITY OF REDMOND

Roadway Characteristics		Type of Bicycle Facility						
Posted Speed[1]	AADT	Mixed Traffic	Bicycle Boulevard	Bicycle Lane[2,3] (painted)	Buffered Bike Lane[2,3] (painted >/=2')	Buffered Bike Lane[4] (with vertical elements)	Separated Bike Lane[5] or Sidepath	Shared Use Path
< / = 20	<1500	1	1	1	1	1	1	1
	1501-3000	2	2	1	1	1	1	
	3001-6000	2	n/a	2	2	2	1	
25	<1500	1	2	1	1	1	1	
	1501-3000	2	2	2	1	1	1	
	3001-6000	3	n/a	2	2	2	2	
	6000+	3	n/a	3	2	2	2	
30	<1500	3	n/a	2	2	2	2	
	1501-3000	3	n/a	2	2	2	2	
	3001-6000	3	n/a	2	2	2	1	
	6000+	3	n/a	3	3	3	2	
35	<1500	4	n/a	4	3	2	1	
	1501-3000	4	n/a	4	3	2	1	
	3001-6000	4	n/a	4	3	3	1	
	6000+	4	n/a	4	3	3	2	
> / = 40	Any	4	n/a	4	3	3	2	

Notes:

1. Table assumes operating speeds are similar to posted speeds. If they differ, use operating speed rather than posted speed.
2. On-street parking adjacent to the bicycle facility increases the level of traffic stress.
3. Number of driveways and volume of turning motor vehicles increase the level of traffic stress.
4. Buffer includes intermittent vertical elements (precast curbs, flexible posts, etc).
5. Bike lane separated from motor vehicle traffic by a landscape strip, parking, or other robust vertical protection.

Table adapted from: Mekuria, Maaza C.; Furth, Peter G.; Nixon, Hilary (2012) *Low-stress bicycling and network connectivity:* Mineta Transportation Institute. *WSDOT Design Bulletin Designing for Level of Traffic Stress* (2022) and NACTO *Urban Bikeway Design Guide.* Bicycle facility types as defined in the City of Redmond Bicycle Design Manual (2023).

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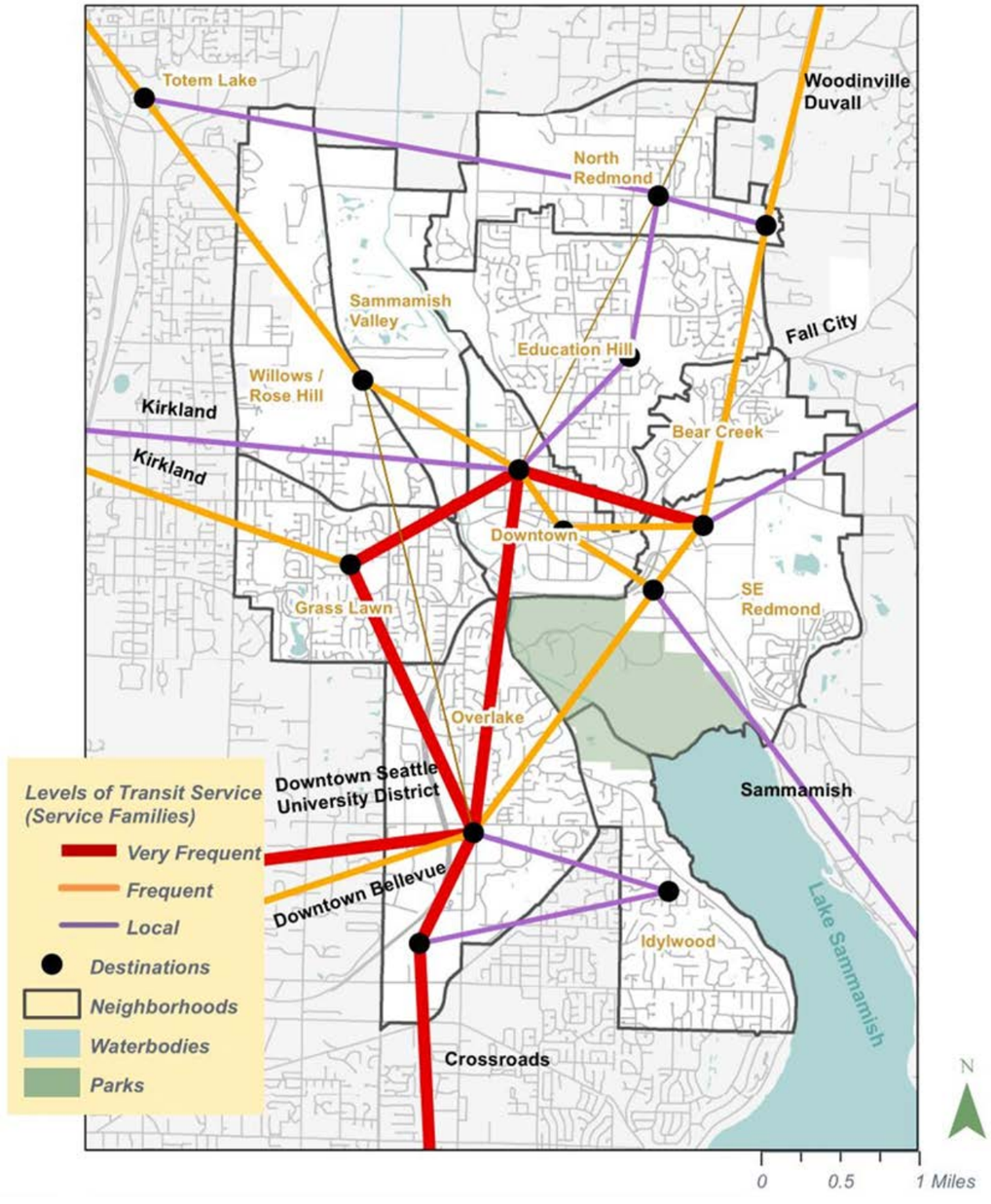
TRANSIT LEVEL OF SERVICE STANDARDS AND PRIORITY CONNECTIONS

The priority connections and service standards in the following map identify the most important local and regional connections for Redmond and the levels-of-service needed to meet community needs. The following process was used to develop the priority connections and service standards:

- Identify priority connections between key destinations, including neighborhood centers and major regional destinations, based on travel needs and demand, and desired connections between transit services.
- Apply network design principles, focusing on providing frequent transit service that connects Redmond's centers to the region, and Redmond neighborhoods to centers and the regional transit spine. Each connection is designed to meet a wide variety of user groups and trip purposes, and meet the needs of multiple markets.
- Identify preferred travel paths that represent a balance between travel speed and coverage (access to transit) for Redmond's centers and neighborhoods.
- Set appropriate "Service Families" that define the desired level of service in terms of the frequency of service by time of day. These standards are established by identifying potential transit demand based on population and employment density measures (persons and jobs per acre), as well as overall travel demand measures (all-day person trips) along the corridor.

FIGURE 2



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VEHICLE MILES TRAVELED (VMT)

The HB 1181 (2023) amendments to the GMA require cities to identify actions that cities can take to reduce VMT as part of future Comprehensive Plan updates. In the Redmond 2050 EIS, an analysis was performed on VMT in Redmond. The results are shown in **Table 2.**

TABLE 2 | AVERAGE WEEKDAY VMT, TOTAL AND PER CAPITA

Existing Condition		2050 No Action		2050 Preferred Alternative	
VMT	VMT per Capita	VMT	VMT per Capita	VMT	VMT per Capita
540,500	8.7	695,200	6.9	766,490	6.6

Redmond has established a 50% per-capita VMT reduction target from 2017 levels by 2050. It is anticipated to remain steady at 7,300 miles per person per year without local action. This VMT reduction target is set in consideration of ongoing vehicle electrification strategies and policies at the state and federal and local levels. The VMT reduction targets may need to be revised once WSDOT or PSRC establish state and regional VMT targets in the coming years.

APPENDIX C

ESTIMATED MULTIMODAL LEVEL-OF-SERVICE IMPACTS TO STATE-OWNED FACILITIES

The Growth Management Act requires that jurisdictions evaluate the impact of planned land use and transportation network changes on state facilities. As part of the Environmental Impact Statement (EIS) for 2050 Redmond Comprehensive Plan update, the City of Redmond performed a multimodal transportation impact analysis across the entire city, including the two state routes that travel through Redmond: SR 202 and SR 520. This memorandum summarizes the findings of the multimodal LOS impacts on these two facilities.

CONTEXT

SR 202 travels through much of the city as either a Principal or Minor Arterial. It extends from the north city limit at NE 124th Street where it is also known as Redmond-Woodinville Road into Downtown Redmond where the road name changes to 164th Avenue NE. SR 202 then turns east and follows the alignment Redmond Way/Redmond-Fall City Road until it leaves the city just east of 188th Avenue NE.

SR 520 runs as a freeway from the city limit at 148th Avenue NE to its terminus at the intersection of Union Hill Road/Avondale Road.

IMPACT SUMMARY

Impacts to state owned facilities in Redmond were assessed by comparing the 2050 No Action alternative (which assumes that the current Comprehensive Plan remains unchanged) to the Action Alternatives. The EIS presents the full analysis for all three Action Alternatives, but for brevity, only the Preferred Alternative is presented in this memorandum. The 2019 Existing Conditions data is also presented for context.

Impacts are described quantitatively from the perspective of vehicle traffic operations and qualitatively for active modes and transit. Note that this analysis also considers MMLOS metrics related to Level of Traffic Stress (LTS) described in Appendix B.

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Traffic Operations

Traffic operations were specifically evaluated at two intersections along SR 202 as part of the EIS (intersections are where arterial streets are most constrained and are commonly the basis for traffic operations impact assessments):

- Redmond Way/NE 70th Street
- Redmond Way/East Lake Sammamish Parkway

Freeway operations are evaluated along segments of roadway and two sections of SR 520 were evaluated as part of the EIS:

- West of 148th Avenue NE
- East of West Lake Sammamish Parkway

For simplicity, traffic operations results are converted from a quantitative measurement of traffic flow to a letter grade that describes the degree of congestion during the PM peak hour. LOS A represents a virtually empty road and LOS F indicates heavy congestion where the demand for travel exceeds the capacity of the road. Specific details on the LOS thresholds and quantitative units of measurement are provided in the EIS. WSDOT has set a LOS target of LOS E for SR 202 and LOS D for SR 520. These LOS targets seek to maximize the utilization of the roadway while keeping traffic congestion levels in a range that is typical for a large urban area.

The PM peak hour traffic operations results are summarized in **Table 1.**

TABLE 1 | STATE OWNED FACILITY LOS

State Facility	Existing (2019) Conditions	2050 No Action	2050 Preferred Alternative
SR 202: Redmond Way/ NE 70th Street	LOS B	LOS D	LOS F
SR 202: Redmond Way/ E Lake Samm Pkwy	LOS E	LOS F	LOS F
SR 520: West of 148th Ave NE*	LOS C	LOS D	LOS E
SR 520: East of W Lake Samm Pkwy*	LOS B	LOS B	LOS B

Note:
* The peak direction of travel in the PM peak hour is eastbound. The results in this table are for eastbound travel only.

The results in Table 1 show that LOS is expected to degrade, indicating more traffic congestion by 2050 because of growth in Redmond and the region as a whole. The Preferred Alternative shows more LOS degradation at SR 202/Redmond Way/NE 70th Street and SR 520 west of 148th Avenue NE compared to the No Action Alternative. This additional traffic congestion is generally attributable to the fact that the Preferred Alternative has a greater level of population and employment growth compared to the No Action Alternative. As described in the Comprehensive Plan EIS, under the No Action Alternative, Redmond would not be able to accommodate its share of regional population or employment growth, which is inconsistent with regional planning policies and requirements set forth by PSRC.

The higher levels of growth under the Preferred Alternative would result in more traffic congestion, but it is important to consider that the Preferred Alternative has lower per-capita vehicle miles traveled (VMT) and higher non-private vehicle mode share compared to the No Action alternative. In other words, while Redmond would be accommodating more residents and jobs with the Preferred Alternative, the travel would be more efficient from the perspective of fewer people driving and more people waking, rolling, biking, or using transit. Reducing dependance on driving and the environmental impacts of vehicle travel is an important goal of the Comprehensive Plan.

Transit Ridership

Based on data in the EIS, transit ridership is anticipated to grow between 2019 and 2050, with the highest levels of transit ridership under the Preferred Alternative. Additional people riding transit, particularly light rail, will reduce the impacts on WSDOT facilities; therefore, higher transit ridership is identified as a benefit to state owned facilities. **Table 2** summarizes average weekday transit boardings occurring anywhere in Redmond under the three scenarios.

TABLE 2 | CITYWIDE TRANSIT RIDERSHIP

Transit Ridership	Existing (2019) Conditions	2050 No Action	2050 Preferred Alternative
Average Weekday Boardings	11,000	26,500	28,800

Active Modes

Similar to transit ridership, additional growth in population and employment will increase the number of walking, rolling, and bicycling trips in Redmond. In addition, much of the growth planned for 2050 is expected to be in transit-oriented, mixed-use neighborhoods where people tend to use active modes more. The Comprehensive Plan EIS did not specifically evaluate active mode share, but it does track non-SOV mode share for all trips and commuting trips. The results are presented in **Table 3.**

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TABLE 3 | CITYWIDE NON-SOV MODE SHARE

Mode Share	Existing (2019) Conditions	2050 No Action	2050 Preferred Alternative
Non-SOV Mode Share – All Trips	55%	56%	56%
Non-SOV Mode Share – Commute Trips	36%	43%	44%

The higher non-SOV mode shares under the 2050 Preferred Alternative are beneficial to state owned facilities from the perspective of reducing vehicular demand. However, additional people walking, rolling, and biking on or parallel to some state facilities could be an issue if there are not comfortable places for active mode users to travel. Along SR 520, this is not an issue because of the SR 520 trail and Bear Creek Trail, that parallel the freeway. Additionally, portions of Redmond Way are parallel to the Redmond Central Connector trail and many of the sidewalks through Downtown Redmond have parking and or landscape buffers to separate pedestrians from vehicle traffic. However, there are segments of Redmond-Woodinville Road (see **Figure 1**) and Redmond-Fall City Road that have unbuffered bike lanes and basic attached sidewalks that (while better than no facility) are not likely to meet WSDOT's target for LTS 2 or better on these facilities. To mitigate this potential impact to LTS, Redmond will look for opportunities to identify parallel bicycle routes, opportunities to enhance the pedestrian environment, and/or roadway improvements to improve active mode infrastructure in conjunction with WSDOT.

FIGURE 1 | VIEW NORTH ALONG REDMOND-WOODINVILLE ROAD SHOWING STANDARD BIKE LANES AND AN UNBUFFERED SIDEWALK (SOURCE: GOOGLE, 2023)

APPENDIX D

TRAVEL DEMAND FORECAST

BACKGROUND

The City of Redmond's Comprehensive Plan update develops a comprehensive and multimodal vision for the future and will guide the City's transportation investments and activities through 2050. This memo delves specifically into the travel demand modeling undertaken to support the Comprehensive Plan update, and the associated model outputs that were analyzed. Specifically, the results of the travel demand modeling were used to inform and refine the projects included in the Transportation Facilities Plan

PERFORMANCE MEASURES

The performance measures shown in **Figure 1** are used to demonstrate the City's progress toward meeting its transportation goals. The travel demand model was used to analyze selected measures under a 2050 timeframe, including mode share, transit boardings, congestion, and air quality. The City considered several future land use alternatives, as documented in the Redmond 2050 Environmental Impact Statement (EIS). For the sake of brevity, the travel demand modeling results for just the Preferred Alternative are presented here. As part of the TMP update some changes to performance measures have been made, including adding vehicle miles traveled (VMT), and removing vehicle congestion and connectivity measures.

Mode Share

Currently, the single occupancy vehicle (SOV) is the most common form of travel in Redmond. The City of Redmond seeks to provide a range of transportation options so that residents, employees, and visitors can choose alternatives to the SOV and, in doing so, can reduce congestion and negative environmental consequences of driving.

To track progress on the goal of providing alternative transportation options, the City of Redmond set a target in 2013 that 53% of all trips and 45% of commute trips be taken via a non-SOV mode by 2030. As shown in **Table 1**, under the 2050 analysis horizon, 44% of commute trips are estimated to be made by non-SOV modes, missing the 2030 target by 1%. The share of all trips made by non-SOV modes is forecasted to be 56%, which surpasses the 2030 target. Under the Preferred Alternative, households and jobs are more concentrated near transit, including the new Link light rail stations in Overlake, Marymoor, and Downtown, which results in the higher non-SOV mode share for all trips. Redmond employment centers in Overlake and Downtown draw employees from across the Seattle-Bellevue metro region, and non-SOV modes may be less practical for some commuters, particularly those located away from high-frequency transit. This result indicates that there is room for transportation demand management strategies and the opportunity for further enhancements to the already widespread employer shuttle programs active in Redmond

TABLE 1 | MODE SHARE, 2050 PREFERRED ALTERNATIVE

Scenario	Non-SOV Mode Share	
	All Trips	Commute Trips
2030 Target	53%	45%
2050 Preferred Alternative	56%	44%

Transit

Transit ridership is defined as average weekday boardings for all transit stops/stations within Redmond. This includes boardings on Metro and Sound Transit buses, as well as Link light rail since service to Redmond will be operational by 2025.

Table 2 summarizes the 2030 target transit boardings and the 2050 Preferred Alternative. The Preferred Alternative is expected to have about 2,000 more daily transit boardings than the 2030 target. Increasing transit ridership is a critical component of the City's growth strategy for the Preferred Alternative, which directs most additional housing and employment to the Downtown and Overlake urban centers.

TABLE 2 | DAILY TRANSIT BOARDINGS, 2050 PREFERRED ALTERNATIVE

Scenario	Daily Transit Boardings
2030 Target	26,700
2050 Preferred Alternative	28,800

While it is notable that there are forecast to be more transit trips under the 2050 Preferred Alternative than the 2030 target, it is worth considering that there are another 20 years of growth in employment and population between the 2030 target and the 2050 Comprehensive Plan horizon. If we were to scale the 2030 target according to employment and population growth, we would find the forecasted 2050 target to be around 34,600 daily transit boardings, which is greater than the forecasted transit boardings in the 2050 Preferred Alternative.

Congestion

Vehicular congestion is expressed as the average delay (in minutes and seconds) incurred during a one-mile trip on principal, minor, and collector arterials in Redmond during the p.m. peak hour (5 p.m.-6 p.m.). **Table 3** summarizes the arterial delay per mile for the 2030 target and the 2050 Preferred Alternative. Arterial delay under the Preferred Alternative is projected to be 56 seconds, ten seconds more than the 2030 target of 46 seconds.

While the Preferred Alternative does not meet the 2030 target, the City acknowledges that delay for roadways users will continue to grow as long as the number of jobs and housing units reliant on SOV travel increases in Redmond. Travelers can avoid peak-period delay by choosing travel modes that are not subject to congestion like biking, walking, or transit that operates in its own lane/right-of-way; shifting the timing of trips; and by reducing unnecessary trips during peak periods. Realistically, Redmond cannot expand roadways to hold congestion levels constant in the future as many streets are already built out to the edge of the right-of-way. While there may be limited and strategic widening of roadways and intersections to address bottlenecks, widespread road widenings that would impact many homes and businesses are counter to the City's growth strategy.

TABLE 3 | PEAK HOUR ARTERIAL DELAY, 2050 PREFERRED ALTERNATIVE

Alternative	Arterial Delay per Mile
2030 Target	46 seconds
2050 Preferred Alternative	56 seconds

Level of Service

Level of Service (LOS) is a qualitative measure that assesses the operational conditions of a roadway or intersection. The Highway Capacity Manual (HCM) is a widely used reference for evaluating and defining LOS. It categorizes LOS from A to F, with A representing free-flow conditions and F indicating congestion and conditions where demand exceeds the supply during the analysis period (typically the peak hour of the day). The City of Redmond has not set a target for intersection LOS, as it is impractical to provide a target LOS at all intersections during the peak hour when considering fiscal, environmental, and right-of-way constraints. It is important to note that every property in the City of Redmond has a roadway/vehicular connection and that the overall capacity of the transportation system increases when more people choose to walk, bike, or take transit, which take up far less space and fewer resources than driving a vehicle.

Because there is no 2030 target to compare the 2050 Preferred Alternative against, **Table 4** summarizes the expected traffic operations at key study intersections for the 2050 Preferred Alternative and the 2050 No Action Alternative. Under the Preferred Alternative, all study intersections are expected to operate at LOS E or F. Intersections that would operate with higher delay under the Preferred Alternative than the No Action Alternative are shown in bold. The traffic operations results for intersections near the city limits of Redmond also provide an indication of how traffic volumes and congestion may be affected in neighboring jurisdictions.

TABLE 4 | INTERSECTION LEVEL OF SERVICE, 2050 PREFERRED ALTERNATIVE

ID	Intersection	LOS / Delay (seconds)	
		2050 No Action	2050 Preferred Alternative
1	NE 124th St/Willows Rd	F / >120	F / >120
2	NE 90th St/Willows Rd	F / 104	F / 104
3	Redmond Way/148th Ave NE	F / >120	F / >120
4	Leary Way/W Lake Sammamish Pkwy	E / 65	E / 65
5	Union Hill Rd/Avondale Way	F / >120	F / >120
6	NE 70th St/Redmond Way (SR 202)	F / >120	F / >120
7	Redmond Way (SR 202)/E Lake Sammamish Pkwy	F / 106	F / 106
8	NE 51st St/148th Ave NE	F / 85	F / 85
9	NE 40th St/148th Ave NE	E / 63	E / 63
10	NE 24th St/148th Ave NE	F / 116	F / 116

ID	Intersection	LOS / Delay (seconds)	
		2050 No Action	2050 Preferred Alternative
11	NE 20th St/148th Ave NE	F / >120	F / >120
12	NE 24th St/152nd Ave NE	E / 61	F / 93
13	NE 40th St/156th Ave NE	E / 68	E / 73
14	Turing St/156th Ave NE	F / 117	F / >120
15	Bel-Red Rd/156th Ave NE	E / 69	E / 62

Note: All study intersections are signalized.
Source: Fehr & Peers, 2023.

Table 4 shows that several intersections are expected to operate with greater levels of delay and lower LOS scores under the 2050 Preferred Alternative compared to the 2050 No Action Alternative. The primary reason for this difference is the 2050 Preferred Alternative includes about 10,000 greater households, and 15,000 greater jobs than the 2050 No Action Alternative.

Table 5 shows projected 2050 volumes and LOS under the No Action Alternative and the Preferred Alternative for SR 520. Compared to the No Action Alternative, the Preferred Alternative would increase SR 520 volumes up to 7%, with the largest increase occurring in the eastbound direction east of West Lake Sammamish Parkway. However, this roadway segment is still expected to operate at LOS C[1]. The increased housing and job growth concentration in the Overlake and Downtown areas under the Preferred Alternative result in higher volumes on SR 520 west of 148th Ave NE, and LOS could fall to LOS E in both directions at this location. In addition, the increased volumes under the Preferred Alternative could exacerbate the eastbound queue spillback from the signals at NE Union Hill Road/ Avondale Road and SR 202/East Lake Sammamish Parkway.

[1] This eastbound segment of SR 520 experiences PM peak hour congestion under 2023 conditions, but this is due to queues spilling back from the intersections Avondale Road and Union Hill Road and SR 202 and East Lake Sammamish Parkway. The freeway segment of SR 520 has enough capacity to meet current and future travel demands.

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TABLE 5 | SR 520 OPERATIONS, 2050 PREFERRED ALTERNATIVE

Location	2050 No Action			
	2050 No Action		2050 Preferred Alternative	
	EB	WB	EB	WB
East of West Lake Sammamish Parkway	4,250 / B	3,530 / B	4,540 / C	3,650 / B
West of 148th Avenue NE	5,540 / D	5,580 / D	5,620 / E	5,750 / E

Note: EB = eastbound and WB = westbound.
Source: Fehr & Peers, 2023.

WSDOT also considers the number of additional trips that may be added to a state highway segment. Per Design Manual Section 1130.09(2)(a), WSDOT considers a proposal to have a probable significant adverse impact to the state highway system if it meets either or both of these thresholds:

- Addition of ten (10) or more AM or PM peak-hour vehicle trips assigned to an individual approach leg to a state highway intersection.
- Addition of twenty-five (25) or more AM or PM peak-hour vehicle trips assigned to a state highway segment (2-way travel) or intersection (total 25 trips all legs).

Based on the projected growth, it is expected that the Preferred Alternative would exceed those thresholds on SR 520 from its terminus at Avondale Rd NE to I-405, SR 202 from NE 80th Street to NE 124th Street, and I-405 from NE 8th Street in Bellevue to NE 128th Street in Kirkland.
The increase in travel on WSDOT facilities is not driven solely by growth in Redmond. The surrounding cities and unincorporated King County are all expecting growth over the coming decades in line with the regional growth strategy outlined by PSRC.

Air Quality

The Comprehensive Plan recognizes the environment as a community priority. Transportation Element policies strive to improve access to environmentally friendly travel choices like walking, biking, and transit, and through individual project design. The following measures, which focus on air quality and vehicle-miles-traveled (VMT), provide insight into whether the transportation system in and around Redmond is doing its part for the environment.

The Preferred Alternative could result in approximately 65% more total greenhouse gas (GHG) emissions than the 2050 No Action Alternative. The increase in transportation emissions of the Preferred Alternative is driven by both the higher number of households and jobs as well as the type; the Preferred Alternative includes higher numbers of retail and industrial jobs as well as single family homes relative to the other alternatives.

Per capita emissions in the 2050 Preferred Alternative would be roughly 6% higher than in the 2050 No Action Alternative. The No Action Alternative is expected to generate approximately 208 MTCO2e per Redmond resident/employee, while the Preferred Alternative is expected to generate approximately 221 MTCO2e per Redmond resident/employee (driven by the energy emissions associated with greater employment growth).

TABLE 6 | LIFESPAN GHG EMISSIONS (MTCO2E)

Type of Emissions	2050 No Action	2050 Preferred Alternative
2030 Target	901,300	1,507,000
2050 Preferred Alternative	9,547,400	15,611,800
2030 Target	1,091,100	1,965,400
2050 Preferred Alternative	11,539,800	19,084,200
Emissions Per Capita	**208**	**221**

Notes: Data above reflects emissions expected to be generated by new development and does not include existing land uses and transportation. Lifespan emissions assume an average building lifespan of 62.5 years.
Sources: King County SEPA GHG Emissions Worksheet completed by Fehr & Peers, 2023; BKR Travel Demand Model and EMFAC2021 database analysis completed by Fehr & Peers, 2023.

Because the City's energy, fossil fuel, and GHG emissions goals are based on total reductions, the Preferred Alternative is less likely to meet the City's targets than the No Action. However, the contribution of the increment of growth under the Preferred Alternative should be considered relative to both the No Action Alternative's planned growth as well as the existing land uses. The primary differences in growth and land use between the No Action and Preferred Alternative is that the Preferred Alternative would meet the Puget Sound Regional Council multi-county growth requirements for the City, while No Action would not. Moreover, the projected emissions per capita are expected to be less than similar development located elsewhere in the region given Redmond's proximity to light rail connecting to residential and employment centers around the region.

Vehicle Miles Traveled

The City aims to reduce per capita VMT by at least 50% by 2050. The travel demand model was used to assess the likelihood of achieving this goal under each alternative. For this analysis, VMT was summarized for all trips generated by households in Redmond (including the miles traveled both within and outside city limits).[2] Results for the Existing Condition and the 2050 Preferred Alternative are summarized in **Table 7**.

[2] Note that this is a different type of VMT summary than referenced in the GHG emissions section which includes 100% of VMT for trips that occur entirely within Redmond and 50% of VMT for trips that have only one end in Redmond, such as a commute trip made by someone who lives in Redmond but works outside Redmond).

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The Preferred Alternative would result in an increase of total VMT by over 41% compared to the Existing Condition, but the per capita VMT would decrease by 24%. The increase in total VMT is in line with projected population and job growth in the Preferred Alternative. The 24% reduction in VMT per capita in the Preferred Alternative as compared to the Existing Condition would not meet the City's goal of 50% reduction by 2050. To achieve this goal, broader action at the county and state level would likely be required to address factors beyond the City's control.

TABLE 7 | DAILY VEHICLE MILES TRAVELED

Existing Condition		2050 Preferred Alternative	
VMT	**VMT per Capita**	**VMT**	**VMT per Capita**
540,500	8.7	766,490	6.6

Note: Per capita calculation is based on total projected population in Redmond.
Source: Fehr & Peers, 2023.

APPENDIX E

IMPACTS TO NEIGHBORING JURISDICTIONS

BACKGROUND

As part of the Redmond 2050 Comprehensive Plan Update a transportation evaluation was conducted in support of an Environmental Impact Statement (EIS). The EIS analysis incorporates a run of the Bellevue-Kirkland-Redmond (BKR) travel demand model which includes an evaluation of all major roadways in and around Redmond. Using output from the BKR model, we are able to assess how growth within Redmond and other communities in the Puget Sound Region affects traffic in the surrounding jurisdictions. The results in this memorandum include the following:

- Existing Conditions – the modeled traffic volumes from the base year 2019 BKR model.
- No Action – the 2050 forecast of traffic volumes assuming no change to Redmond's Comprehensive Plan and background growth in the surrounding communities.
- Preferred Alternative – the 2050 forecast of traffic volumes assuming the Redmond 2050 Comprehensive Plan Preferred Alternative and background growth in the surrounding communities.

These three BKR model run results were selected to show the degree of change that will happen regardless of any change on Redmond's part (the difference between 2050 No Action and Existing Conditions) and the specific effects of the Preferred Alternative (the difference between the Preferred Alternative and the No Action).

RESULTS TABLE

Table 1 presents the results of the BKR model runs for Existing Conditions, No Action, and the Preferred Alternative.

FEHR PEERS

TABLE 1 | PM PEAK HOUR BKR MODEL VOLUMES FOR ROADWAYS BETWEEN REDMOND AND NEIGHBORING JURISDICTIONS

Roadway	Location	Existing (2019) Conditions	2050 No Action	2050 No Action – Existing*	2050 Preferred Alternative	Pref Alt – No Action
East Lake Sammamish Parkway	South of SR 202	1,990	2,690	700 (1.0%)	2,150	-540
SR 202	East of 188th Ave NE	3,320	3,430	110 (<0.5%)	3,480	50
Union Hill Road	West of 196th Ave NE	2,080	2,430	350 (0.5%)	2,460	30
Novelty Hill Road	West of 196th Ave NE	1,260	1,360	100 (<0.5%)	1,380	20
Avondale Road	North of NE 116th St	2,000	2,670	670 (1.0%)	2,630	-40
Red-Wood Road (SR 202)	North of NE 124th St	2,450	3,040	590 (0.7%)	3,050	10
NE 124th St	West of Willows Rd	3,890	5,210	1,320 (1.0%)	5,290	80
Redmond Way	West of 132nd Ave NE	2,650	3,640	990 (1.1%)	3,590	-50
SR 520	West of 148th Ave NE	7,920	10,980	3,060 (1.1%)	11,210	230
NE 24th St	West of 148th Ave NE	1,170	1,920	750 (1.7%)	2,060	140
Bel-Red Road	South of NE 20th St	2,030	2,680	650 (0.9%)	2,750	70
148th Ave NE	South of NE 20th St	2,750	3,600	850 (0.9%)	3,670	70
156th Ave NE	South of NE 24th St	2,150	2,960	810 (1.1%)	3,080	120
West Lake Sammamish Parkway	South of NE 24th St	330	760	430 (2.8%)	760	0

Note:
* This column shows the absolute difference and annual growth rate between 2050 No Action and Existing Conditions.

CONCLUSIONS

Table 1 indicates that traffic volumes are expected to grow between the 2050 No Action and Existing Conditions. This growth is typical for Western Washington, which continues to see robust job growth and migration from many parts of the United States as well as other countries. For the most part the annual growth rate is about 1.0% (with a few locations higher or lower). This growth rate lower than the regional growth rate of 1.6% per year observed between 2010 and 2020, a period of rapid growth, and more in line with long-term average growth for the Puget Sound Region.

Some of the notable changes in traffic volumes shown in Table 1 include strong growth NE 24th Street (1.7%) which is reflection of long-planned growth in Redmond's Overlake regional growth center and Bellevue's Bel-Red neighborhood. However, growth on other Overlake-area roadways is more moderate, showing the benefit of light rail to provide mobility in one of the fastest-growing areas of King County. West Lake Sammamish Parkway also shows strong growth (2.8%) which is driven by a relatively low initial volume of traffic under existing conditions and busier traffic on parallel roads between SR 520 and I-90 like 156th Ave NE and 148th Ave NE. There may be opportunities to work with the City of Bellevue to manage demand on West Lake Sammamish Parkway, which otherwise is not expected to see substantial changes in land uses.

When comparing the growth between No Action and the Preferred Alternative, most roadways see a modest change in PM peak hour traffic of less than 100 vehicles per hour. At this level, most drivers would not be able to notice a change in traffic congestion levels. However, under the Preferred Alternative there are larger increases in traffic (greater than 100 vehicles per hour) on SR 520, NE 24th Street, and 156th Ave NE near the Overlake regional growth center. This change in traffic is caused by the greater land use intensities planned in Overlake under the Preferred Alternative compared to No Action. Adding more growth to Overlake allows Redmond to meet the regional growth targets in the most employment and transit-rich part of the city. The only other notable change in traffic between the Preferred Alternative and No Action condition is on East Lake Sammamish Parkway, which is expected to see a decrease of 540 PM peak hour vehicles. In reviewing the model files, this change in volume is a combination of traffic redistributing to other routes and some traffic diverting through the Marymoor neighborhood to reach new destinations in this redevelopment area as well as light rail. However, the model may be overstating the degree to which people would shift away from this major arterial.

Overall, Redmond can meet its commitment to accommodate a reasonable share of regional growth with relatively modest changes to traffic in surrounding jurisdictions. This result reflects a future condition where people have more options to travel than driving a vehicle because of transit oriented development and a strong investment in expanding multimodal travel options in Redmond.

APPENDIX F

DESIGN GUIDANCE

Design guidance is an implementation tool for the street, transit, pedestrian, bicycle, and freight plans in the Transportation Master Plan. Together with these modal 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.

As a member of the National Association of City Transportation Officials (NACTO), the City of Redmond fully endorses design guidance issued by that organization, including, but not limited to, the Urban Bikeway Design Guide, Urban Street Design Guide, Transit Street Design Guide, Urban Street Stormwater Guide, Designing Streets for Kids, and Global Street Design Guide. Together, these guides will inform updates to City of Redmond design standards and regulations and provide direction for any design questions not adequately addressed by existing City of Redmond's standards and guidance.

TRANSIT DESIGN SPEED AND RELIABILITY

The City of Redmond can improve the speed and reliability of bus transit through a combination of operations and street and stop design strategies. The level of speed and reliability investment made should correlate with the service types discussed in the Transit Plan. Frequent transit and RapidRide which have service frequencies of less than 15 minutes and less than 10 minutes during peak periods, respectively, should see a higher level of speed and reliability investment. Table 1 summarizes a variety operational and design treatments that enhance speed and reliability.

TABLE 1 | TRANSIT SPEED AND RELIABILITY TREATMENTS

Treatment	Treatment Description	Treatment Purpose
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. Between 5-25 percent reduction in travel times at a signal.
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.
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.
Transit-only lanes	A through lane exclusively for use by buses typically where no business access exists.	Improve speed and reliability. Emphasis on reliability in highly congested corridors. 5-25 percent reduction in corridor travel times.
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.
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.
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.
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.

SIDEWALK ALTERNATIVES

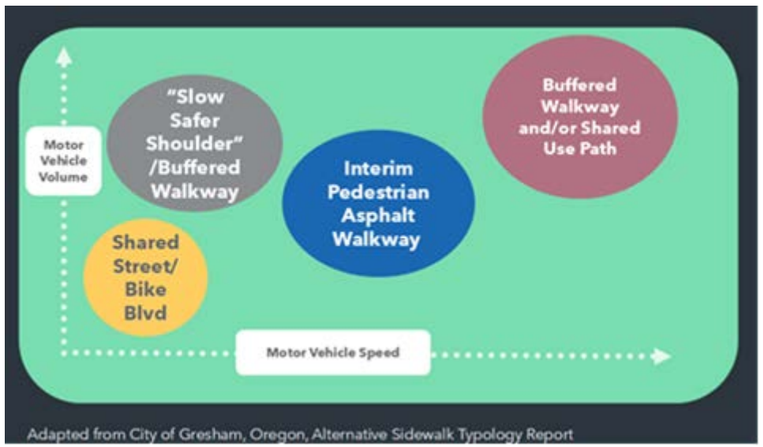
As of 2025, less than 10 percent of arterials have no sidewalks and 24 percent have sidewalk on only one side of the street. Similarly, the vast majority of local neighborhood streets have sidewalks on one (10 percent) or both sides (75 percent) of the street. Nonetheless, these gaps in the sidewalk network present access barriers and detract from a comfortable and connected pedestrian network. Sidewalks may be missing due to constraints such as topography, critical areas (steep slopes, wetlands, shoreline areas, stream buffers, poor soil conditions), utility location, limited right-of-way or because it is not physically feasible to install the standard sidewalk cross-section. It is estimated that filling all sidewalk gaps within the city would cost more than $63 million. When factoring in environmental and other constraints that may need to be mitigated or involve higher levels of engineering, the cost could be much greater. Lower-cost sidewalk alternatives to conventional curb and gutter sidewalks can help fill existing sidewalk gaps and improve network connectivity. Sidewalk alternatives may include asphalt pathways, buffered walkways, and shared streets. Table 2 shows appropriate sidewalk alternatives based on general existing conditions.

TABLE 2 | APPROPRIATE SIDEWALK ALTERNATIVE BASED ON EXISTING CONDITIONS

Existing Conditions	Shared Street/Bike Boulevard	"Slow Safer Shoulder"/ Buffered Walkway	Interim Pedestrian Asphalt Walkway	Buffered Walkway and /or Shared Use Path	Shared Use Path
Local, narrow, curbed	X	X	X		
Local, narrow, curbless with ditch or swale	X		X		
Local Street, wide curbed or curbless	X	X	X		
Arterial, curbless				X	X
Arterial with curbs					X

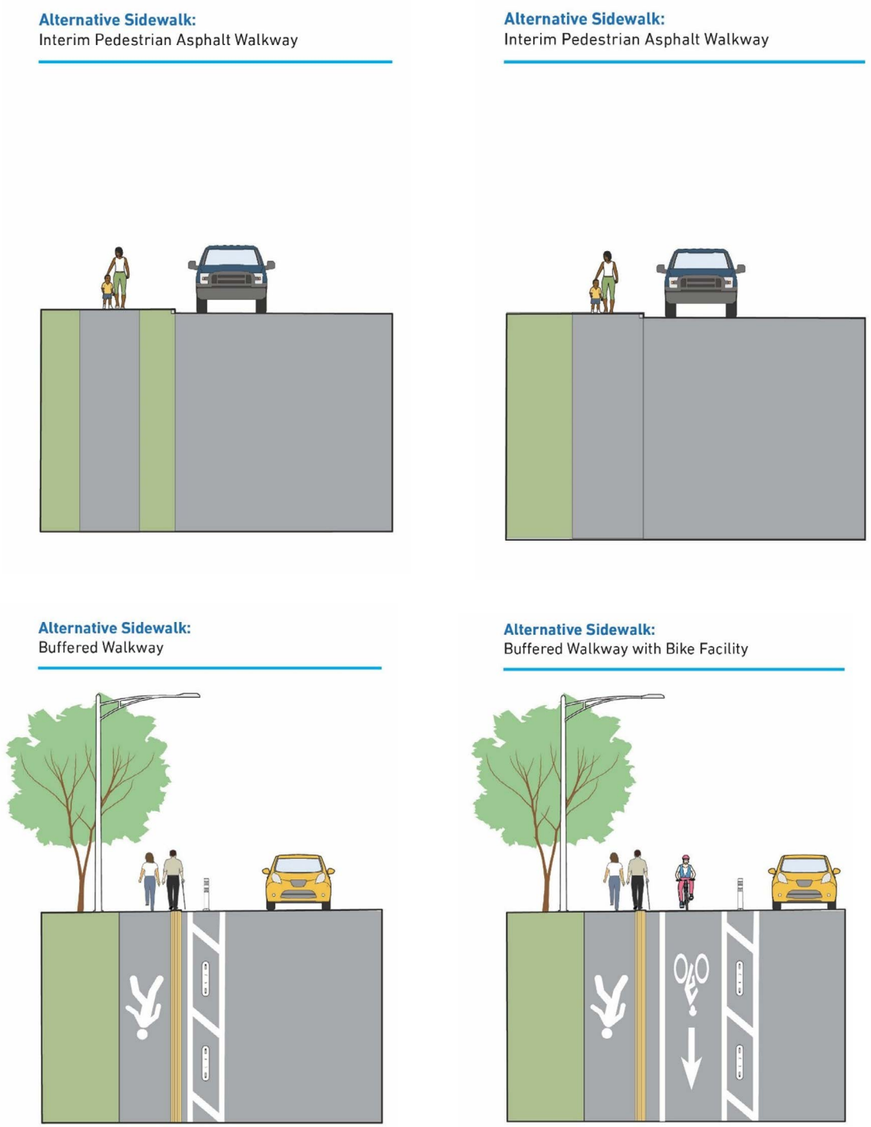
Figure 1 further indicates the selection of an alternative sidewalk in relationship to motor vehicle speed and traffic volumes along the roadway.

FIGURE 1 | APPROPRIATE SIDEWALK ALTERNATIVE IN RELATION TO MOTOR VEHICLE VOLUMES AND SPEED



The following cross sections in Figure 2 further illustrate what sidewalk alternative facilities could look like:

FIGURE 2 | SIDEWALK ALTERNATIVE FACILITIES



SHARED STREETS

Shared streets are slow-speed streets shared by pedestrians, cyclists, and vehicles. 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. Washington Senate Bill 5595 gives local agencies legal authority to create shared streets that feature speed limits as low as 10 mph and allows pedestrians to walk in the middle of the street. Vehicles would be allowed on these streets, but they must yield the right-of-way to pedestrians.

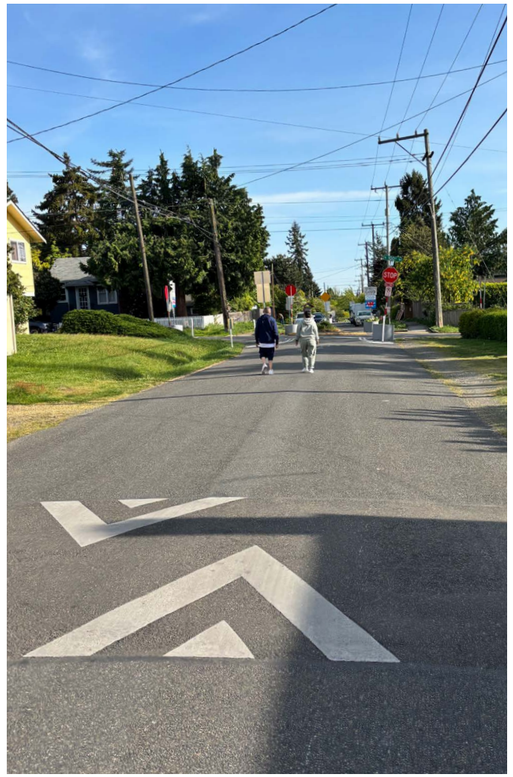
Shared Streets components that help create a people-oriented space can include:

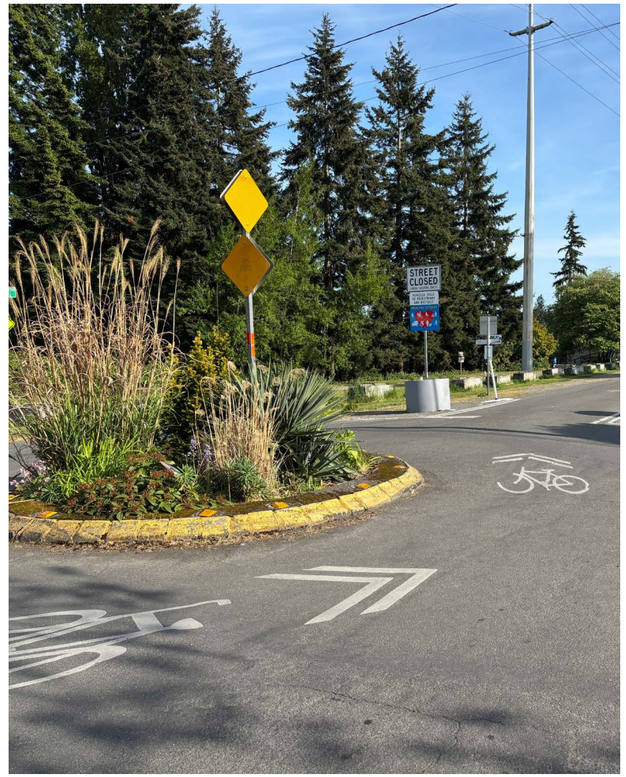
- Special paving and surface treatment to identify these streets as unique people places.
- Flush or reduced curb height and nonexistent curb sidewalk to encourage pedestrians to use the entire street rather than street edges.
- Narrow vehicular lanes to create a safe and comfortable environment for 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 with attention paid to pedestrians who are deaf-blind.
- Pedestrian-scale lighting.

Figure 3 and Figure 4 include examples of shared streets.

FIGURE 3 | 162ND AVENUE NE IN REDMOND, WA

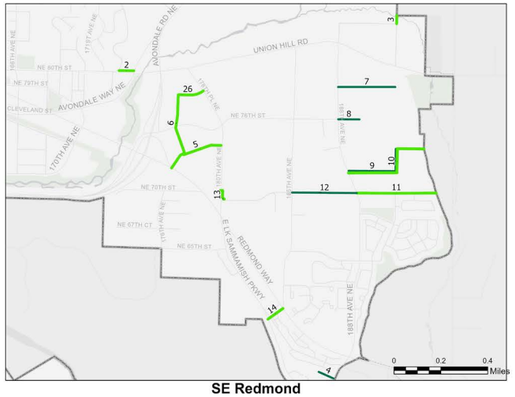
FIGURE 4 | EXAMPLES OF "HEALTHY STREETS" IN SEATTLE, WA



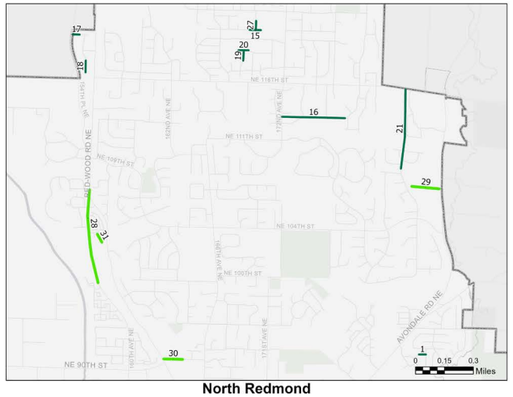


APPENDIX G

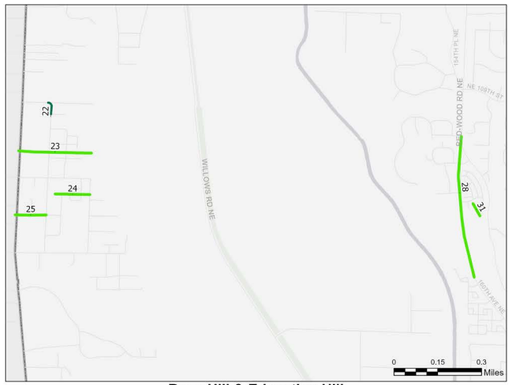
FIGURE 1 | PLANNED NEIGHBORHOOD CONNECTIONS



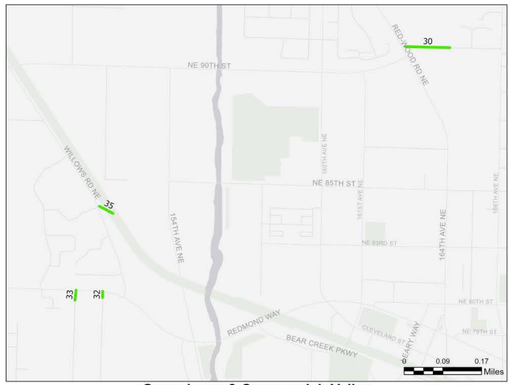
SE Redmond



North Redmond



Rose Hill & Education Hill



Grass Lawn & Sammamish Valley

Planned Neighborhood Connection by Neighborhood
City of Redmond, Washington

Planned Neighborhood Connection

Planned Street

Disclaimer: This map is created and maintained by GIS Services Group,Technology and Information Services, City of Redmond, Washington, for reference purposes only.

The City makes no guarantee as to the accuracy of the features shown on this map.

TABLE 1 | PLANNED NEIGHBORHOOD CONNECTIONS

ID	Neighborhood	Connection Type	Street	From	To	Description
1	Bear Creek	Planned Street		NE 92nd Ct	Nisqually Trail	92nd extension; New street connecting east end of NE 92nd Ct in Avondale Green to Nisqually Trail in Friendly Village
2	Bear Creek	Planned Neighborhood Connection		172nd AVE NE	Avondale Way NE	80th St staircase connecting 172nd to Avondale Way
3	SE Redmond	Planned Neighborhood Connection		192nd Ave NE	Bear & Evans Creek Trail	Non-motorized connection from north end of 192nd Ave NE to Bear and Evans Creek Greenway
4	SE Redmond	Planned Street		187th Ave NE		Extension of NE 54th Pl from 187th Ave NE west for about one block
5	SE Redmond	Planned Neighborhood Connection		180th Ave NE	Trail	Non-motorized connection
6	SE Redmond	Planned Neighborhood Connection		202	178th Pl NE	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
7	SE Redmond	Planned Street		188th Ave NE	192nd Ave NE	Street
8	SE Redmond	Planned Street	NE 76th St	188th Ave NE	192nd Ave NE	Construct new NE 76th St from 188th Ave NE to 192nd 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
9	SE Redmond	Planned Street		188th Ave NE	192nd Ave NE	New street connection in approximately 7100 block from 188th Ave NE to 192nd Ave NE.
10	SE Redmond	Planned Neighborhood Connection		192nd Ave NE	City Limit	Non-motorized connection from 192nd Ave NE east to city limit and north-south trail at 7100 block

ID	Neighborhood	Connection Type	Street	From	To	Description
11	SE Redmond	Planned Neighborhood Connection	NE 68th St	185th Ave NE	City Limit	Extension of NE 68th St from 185th Ave NE to east city limit
12	SE Redmond	Planned Street	NE 68th St	185th Ave NE	188th Ave NE	
13	SE Redmond	Planned Neighborhood Connection	180th Ave NE	68th Street	70th Street	Shared Path on the east side of 180th Avenue linking cycle tracks on 68th Street and 70th Street together. Part of comfortable bike system connecting Marymoor Station to SE Redmond
14	SE Redmond	Planned Neighborhood Connection		ELSP	202	Non-motor connection
15	North Redmond	Planned Street	169th Pl NE			Street
16	North Redmond	Planned Street		172nd Ave NE	177th Ave NE	New street connection at approximatley the 11300 block from 172nd Ave NE connecting to 177th Ave NE
17	North Redmond	Planned Street		154th Pl NE	NE 119th Way	New street connection
18	North Redmond	Planned Street		155th AVE NE	trail	New street connection; staircase between 116th and 155th Ave
19	North Redmond	Planned Street	168th Pl NE			Extend 168th Pl NE
20	North Redmond	Planned Street	NE 118th Way			Extend NE 118th Way
21	North Redmond	Planned Street		NE 111th St	NE 116th St	Full street + Non-motorized connection between NE 111 St and NE 112th Way at approximately the 18200 block, and then extending north to NE 116th St
22	NE Rose Hill Subarea	Planned Street			NE 108th St	Extend 134th Ave NE between north edge and NE 108th St
23	NE Rose Hill Subarea	Planned Neighborhood Connection		132nd Ave NE	136th Ave NE	Non-motorized connectilon in 10500 block between 132nd Ave NE and 136th Ave NE

ID	Neighborhood	Connection Type	Street	From	To	Description
24	NE Rose Hill Subarea	Planned Neighborhood Connection		134th Pl NE	136th Ave NE	Non-motorized connection west from 136th Ave NE to just beyond 134th Pl NE
25	NE Rose Hill Subarea	Planned Neighborhood Connection		132nd Ave NE	134th Pl NE	Non-motorized connection in 10200 block from 132nd Ave NE to 134th Ave NE
26	SE Redmond	Planned Neighborhood Connection				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
27	North Redmond	Planned Street				New street connection at approximately the 16900 block connecting NE 122nd St and NE 121st St, with stubs to the east and west
28	Education Hill	Planned Neighborhood Connection		End of 160th Ave NE		Construct multi-use path from 160th current terminus to 156th Ave NE
29	Education Hill	Planned Neighborhood Connection		West Valley Trail	Avondale Rd	Provide west/east 8 foot wide paved trail access from Valley View Trail to Avondale Road NE (approximately NE 108th Street)
30	Education Hill	Planned Neighborhood Connection				Trail
31	Education Hill	Planned Neighborhood Connection		NE 102nd Way	Powerline Trail	Trail
32	Grass Lawn	Planned Neighborhood Connection		Redmond Way	152nd Ave NE N. Terminus	Connecting 152nd to Redmond Way
33	Grass Lawn	Planned Neighborhood Connection		Redmond Way	151st Ave NE N. Terminus	Connecting 151st to Redmond Way
34	Idylwood	Planned Neighborhood Connection	NE 27th Place	175th Ave NE	176th Pl NE	Neighborhood sidewalk connection; the NE 27th Place trail connection
35	Grass Lawn	Planned Neighborhood Connection		8400 block	Redmond Central Connector	Purchase ROW and construct ped and bike trail connecting local streets to future RCC; connection to RCC at 8400 block