

E-Mobility Strategy

TMP Update



E-MOBILITY STRATEGY

1. 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 chapters 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.

2. Advancing Redmond 2050 Guiding Principles

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

Resilience

- **Electricification reduces greenhouse 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

Equity & Inclusion

- **Access to EVs, e-bikes, micromobility, and charging infrastructure 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

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

3. 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). The ESAP offers an initial framework for coordinated and beneficial sustainability action across the city and community. A periodic update to the ESAP is underway and anticipated to be completed in late 2025. 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. The City fleet now 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.

Current public EV infrastructure available across the city, as well as adoption trends is summarized in Table 1.

TABLE 1 REDMOND EV INFRASTRUCTURE SUMMARY

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

Notes:

¹ Data based on data.wa.gov "[Electric Vehicle Population Map](#)" and estimate of light duty vehicles based on city average.

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 Chapter 5 – Bicycle Strategy.

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 2 summarizes the outcomes of the city analysis.

TABLE 2 CITY DATA ANALYSIS

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.

4. 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.

Redmond 2050 Policies Supporting Strategy 1

- 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.

Redmond 2050 Policies Supporting Strategy 2

- 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.

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.

Redmond 2050 Policies Supporting Strategy 3

- 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 Chapter 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.

Redmond 2050 Policies Supporting Strategy 4

- 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 Chapter 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 Chapter 7 Strategy 4.3).

Strategy 5: Explore e-bike charging opportunities through micromobility partnerships.

As discussed in Chapter 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.

Redmond 2050 Policies Supporting Strategy 5

- 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 and designated shared micromobility parking zones at transit stations.
- Action 5B: Explore adding e-bike charging infrastructure to publicly managed EV charging facilities.

Strategy 6: Incorporate e-bike charging infrastructure into neighborhood and regional Mobility Hubs.

As discussed in Chapter 6 – Transit Network Strategy, Mobility Hubs are designated locations that bring together many types of transportation modes or services to promote alternative modes to driving alone. Mobility Hubs can have a regional transportation focus, or a can focus on neighborhood

connections. Charging infrastructure for both EVs and e-bikes adds an important element to Mobility Hubs and encourages sustainable travel.

Redmond 2050 Policies Supporting Strategy 6

- FW-CR-1: Develop partnerships and programs to rapidly and equitably reduce greenhouse gas emissions and create a thriving, climate resilient community.
- 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.
- 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.
- 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.
- FW-TR-4: Plan, design, build, operate, and maintain a transportation system that supports the City's sustainability principles.
- 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.

Recommended Actions

- Action 6A: Include e-mobility charging infrastructure in the development of neighborhood Mobility Hubs (see Chapter 6 Strategy 3)
- Action 6B: Explore partnerships with transit agencies to establish e-mobility charging at transit centers and light rail stations where applicable (see Chapter 6 Strategy 3).