

POLICY PLANNING FOR ELECTRIC VEHICLES IN WASHINGTON COUNTY

RESILIENT COMMUNITIES PROJECT

About the Partner

Washington County is on the eastern edge of the Twin Cities Metropolitan area, composed of 423 square miles of land, and possessing a distinct set of landscapes and resources. The County is a nexus point for interstate commerce—it is the location of the I494, I694, I94 Interchange, and the major interstate crossing into Wisconsin. The county seat is Stillwater, along the scenic St. Croix River. While much of Washington County has retained its rural atmosphere, it includes urban, suburban, and rural communities.



Project Description

The need for electric vehicle policy planning has emerged from the Washington County 2040 Comprehensive Plan and the Washington County Energy Plan, which both call for a more sustainable and resilient Washington County.

The electric vehicle (EV) landscape has changed significantly in the last several years with more automakers making large commitments to eliminate gasoline vehicles in the future, more EVs on the market, and a new federal administration with large EV goals. However, the infrastructure to support large scale EV adoption does not exist. Few public EV chargers exist in Washington County today. As EVs become more affordable and prevalent it is critical that the charging infrastructure be planned and implemented to meet local, regional, and global emission goals.

This goal of this project is to research best practices, case studies, and peer-reviewed research to create policy recommendations for county-owned publicly available EV charging stations to ensure Washington County is EV-ready and able to meet demand as the EV landscape continues to grow.

Key Issues, Questions, and Ideas to Explore

- Partnerships:** What are some examples of successful charging rollouts that are under public ownership, public/private ownership, or private-owned with public use permissions or arrangements? Are there opportunities with the private sector to offset county costs? Are there opportunities with larger agencies or cities within Washington County to offset county costs or create economies of scale? Are there funding opportunities through grants or pilot projects that would off-set county costs?
- Charger Type:** What type of chargers are best suited for the County to invest in as a suite of publicly available chargers? What types of vehicles are served by these chargers? How long does a full charge take? What are some costs and benefits associated with these types of chargers?
- Implementation:** How should the County incorporate equity into its charging implementation? Where should EV chargers be installed? Should EV chargers be installed at every county-owned facility? How should the number of chargers per facility be determined? If implementation of EV chargers is to be phased, what county facilities should be prioritized? What does full implementation look like?
- Best practices and policy recommendations:** What are best practices for equitable access, fees, operations and maintenance (including winter maintenance), partnerships, and County-employees using publicly available chargers while at work?

How Student Work Will Be Used to Build Community Resilience

- To guide equitable planning for EV charging implementation in the County

Potential Community Partners or Stakeholders

Existing Plans & Reports

- Washington County Community Development Agency (CDA)
 - Cities and townships within Washington County
 - Xcel Energy
 - Private Businesses within the County
 - Minnesota Department of Transportation
 - Metropolitan Council
 - Center for Transportation Studies (CTS) and Transitway Impacts Research Program (TIRP)
- Washington County Energy Plan (2018)
 - Washington County 2040 Comprehensive Plan: Chapter 9: Resilience & Sustainability
 - Accelerating Electric Vehicle Adoption: A Vision for MN (MnDOT 2019)
 - Great Plains Institute & Metropolitan Council EV reports

UofM RCP Contact

Sarah Tschida, Coordinator
University of Minnesota
tschi066@umn.edu, 612.625.6550

Project Lead

Sara Allen, Planner
Washington County
Sara.Allen@co.washington.mn.us, 651-430-4363



Resilient Communities Project

UNIVERSITY OF MINNESOTA