



Fort Collins Electric Vehicle (EV) Readiness Roadmap
EV Readiness Steering Committee Kickoff Meeting

- Welcome & Introductions
- Project Overview
- Findings from Discovery Phase
- Discussion of Key Challenges, Barriers & Strategies
- Discussion of Roadmap Vision & Goals
- Next Steps & Action Items





Background & History

- **Partnership with Loveland, CSU, and Electrification Coalition** in 2013 to raise awareness of EVs
- **Utility Services Public EV Charging Station Pilot:** installed 13 City owned and operated charging stations beginning in 2013
- **2015 Workplace Charging Challenge** in partnership with DENC and DOE
- **2015 Climate Action Plan Framework** includes accelerating the adoption of electric and fuel efficient vehicles
- **EV Technical Team assembled in August 2017** to inform EV Readiness Roadmap RFP scope

Overall Purpose

- **Develop an EV Readiness Roadmap** to support current and future EV adoption in Fort Collins
- **Establish a vision, goals, and clearly defined roles** for City of Fort Collins Departments, the private sector, and the Fort Collins community
- **Identify:**
 - **Action items for City** efforts to inform policies and programs
 - **Strategies for increasing and leveraging investment** in EVs and charging infrastructure
 - **Approach to address infrastructure needs** and promote equitable placement
 - **Best practices for education, outreach,** and addressing barriers to EV adoption
 - **Regional coordination** strategies

Objectives

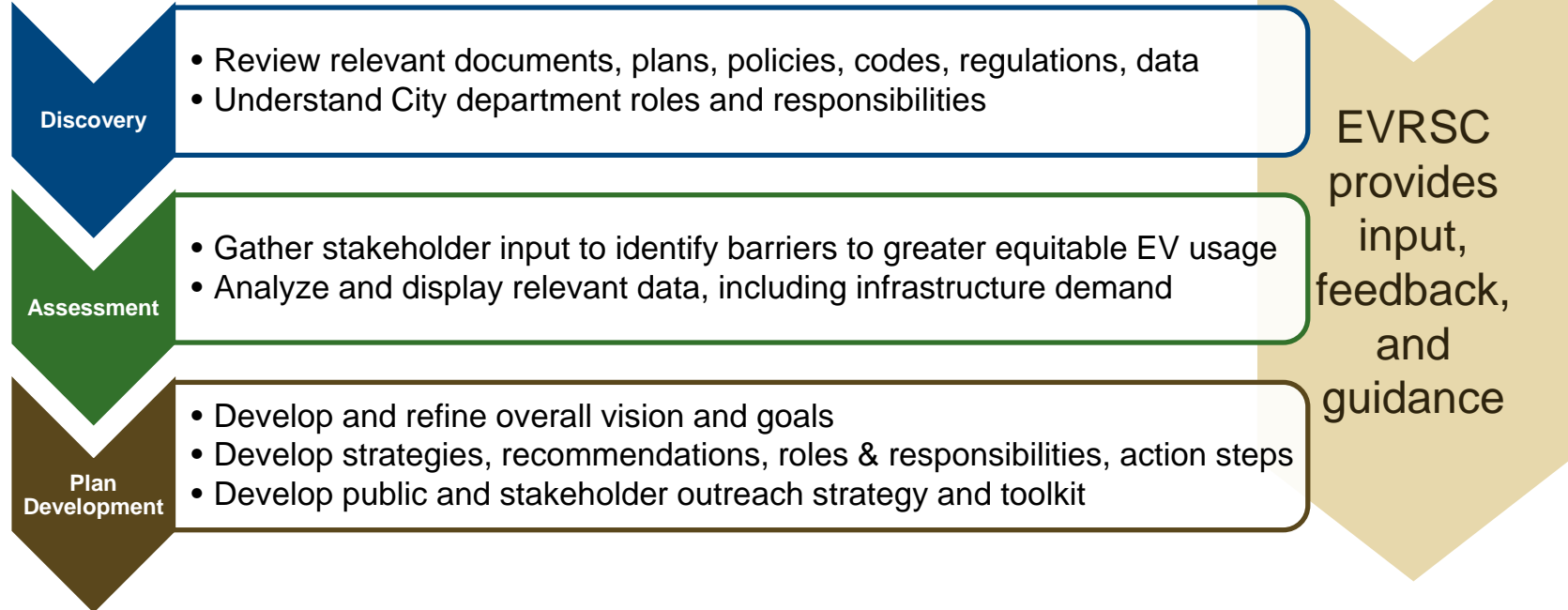
- **Increase EV use in Fort Collins** by providing the clarity and direction needed to advance Fort Collins to the next level of EV adoption
- **Help Fort Collins achieve their 2015 Climate Action Plan goals** by reducing the carbon emissions and local air quality impacts of vehicles used within the city
- **Inform and align with ongoing planning efforts**, including the ongoing City Plan and Transportation Master Plan update, and the upcoming analyses of the electric grid distribution system planned by Fort Collins Utilities

Purpose of EVRSC

Provide **guidance and oversight** for a strategic plan (the *EV Readiness Roadmap*) to support current and future EV adoption in the City of Fort Collins, including:

- **Review and guide development of the plan**
- **Inform an overall vision and goals** for the City and community aimed at transitioning to EVs
- **Inform development of strategies, recommendations, clear roles and responsibilities, and action steps** for the public and private sector to enhance EV readiness within Fort Collins

Approach



Schedule



EV & EV Charging 101

Vehicles

| | Fuel | Electric Range | Example |
|-------------------------|--------------------------|----------------------|-------------------------------------------------|
| Plug-in Hybrid Electric | Electricity and Gasoline | 9 miles (mi) - 53 mi | Chevrolet Volt (53 mi) Prius Prime (25 mi) |
| Battery Electric | Electricity | 57 mi – 335 mi | Nissan Leaf (151 mi) Chevrolet Bolt (238 mi) |

Charging Stations

| | Current Type | Voltage (V) | Range & Charging Time | Connector | Primary Use |
|---------|--------------|-------------|----------------------------------------------------|---------------------------------|----------------------------------------|
| Level 1 | AC | 120V | 2 to 5 miles of range per hour of charging | SAE J1772 | Residential Workplace |
| Level 2 | AC | 240V | 10 to 20 miles of range per hour of charging | SAE J1772 | Residential Commercial Workplace |
| DC Fast | DC | 480V | 60 to 80 miles of range per 20 minutes of charging | CHAdeMO, SAE Combo, Tesla | Commercial Workplace |

Documents Reviewed

- 2011 Vehicle Capacity Study
- Workplace Charging Challenge Program Report
- DENC Case Study
- Environmental Services Strategic Plan
- Social Sustainability Strategic Plan
- Climate Action Plan
- 2016 Community GHG Report
- 2016 Municipal Carbon Inventory Report
- Carbon Sequestration Report

- Transportation Master Plan
- 2011 Plan Fort Collins
- 2017 Air Quality, Climate, and Recycling Survey
- 2016 Energy Policy Update
- Downtown Parking Plan
- Downtown Plan

State Resources Reviewed

- Colorado EV Plan
- State Incentives

Ordinance & Codes Reviewed

- Traffic Code
- Public EVSE Fees
- Building Code
- Residential Code
- Energy Code
- Permits
- Residential Code Green Building Amendments
- Electrical Code
- Land Use Code

Websites Reviewed

- ClimateWise
- Innovate Fort Collins
- City Calendar
- Utilities EV Website
- Utilities Smart Meters Website
- Environmental Services Department Air Quality Website
- Enviro Portal
- Transportation Website

Interviews Underway

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What resources did we miss?

High Level Findings

- Great work has been done to support EVs and infrastructure!
- A number of documents/plans already include EV-related language and/or actions.
- Some key items lack EV-related language (e.g., no parking enforcement for EV spots, no permits specific to EV charging).
- Some key information sources are out-of-date and/or difficult to find.

Discussion Points

- Factors Driving EV Demand
- Challenges/Barriers to Increased EV Adoption (*Real or Perceived*)
- Opportunities
- Potential Strategies & Approaches
- Key Stakeholders & Engagement Strategies
- Key Resources

Guiding Principles

- Identify actionable, measurable, and achievable goals
- Aim for three to five goals
- Consider that the roadmap will include short-term, medium-term, and long-term recommendations
- Incorporate local plans and priorities
- Align with and reference relevant regional- and state-level goals

Starting Point

Draft Electric Vehicle Vision:

The City of Fort Collins, to achieve our Climate Action Plan goals and improve air quality, will support the adoption of electric vehicles in our community. The City will provide this support through education and outreach, developing public charging infrastructure, facilitating private charger installation, efficient grid integration, and ongoing conversion to renewable energy resources.

Goal 1: Support electric vehicle adoption with both an equity and triple bottom line lens.

Goal 2: Consider electric vehicles as an integrated solution for alternative transportation as part of our community's transportation hierarchy.

Goal 3: Establish clear roles and responsibilities in relation to electric vehicles for both the public and private sector.

- Next EVRSC Meeting
 - April 17, 18, or 19
- Action items from this meeting

Thank you!

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