Equitable Electric Vehicle Readiness in Columbus

Sustainable Columbus Committee Meeting
November 18, 2021



Jenna Tipaldi

American Cities Climate Challenge Climate Advisor to City of Columbus Natural Resources Defense Council

Refresh of the American Cities Climate Challenge

The **Climate Challenge** is a Bloomberg Philanthropies initiative that aims to **accelerate and deepen** U.S. cities' efforts to create the **greatest climate impact** and showcase the benefits – **good jobs, cleaner air, and cost savings** – that climate solutions bring.



Reduce building energy use

Increase renewable energy

Reduce vehicle travel

Electrify vehicles

Cities Reach Paris Climate Goals

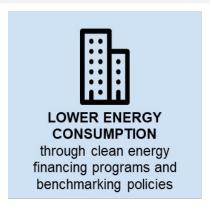
Climate Challenge supported work in Columbus

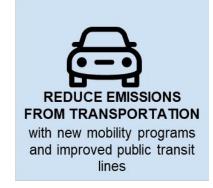
2021 - 2022 Priority Actions:

- Equitable EV Readiness
- Benchmarking Implementation and Buildings Strategy
- Residential Energy Efficiency & Workforce Development
- Equity Index Co-creation
- Mobility Hub Equitable Engagement

2019 - 2021 Priority Actions:

- Workforce development (Energy Advocates)
- PACE Financing
- Home energy audits
- New mobility options (bike/scooter expansion)
- Parking management
- Increase public transit use





What we'll cover today

- Refresher: What is Equitable EV Readiness
- Background & Benefits: Why an EV ready ordinance is the right tool and who benefits from it
- Update: What we've been up to since January
- Momentum: Where else we're seeing EV readiness
- Equitable Engagement: Our strategy and next steps

What is EV Readiness?

EV Readiness Ordinances require new buildings and major renovations to include parking spaces that can easily & affordably be converted to EV charging stations

Levels of EV readiness:

EV Capable



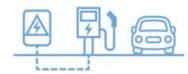
EV Capable: Conduit run from electrical panel to parking space

EV Ready



EV Ready: Wiring run through conduit ending with an outlet or terminal box

EVSE Installed



EVSE Installed: Conduit, wiring, and outlet, with a charging station installed

Our goal is to ensure **equitable**, **affordable**, **and convenient access** to EV charging infrastructure for all residents

Electric vehicle adoption is critical to achieve Columbus' climate and equity goals



Transportation, largely from single occupant internal combustion engine vehicles, accounts for **38% of our community-wide GHG emissions**

Alignment with Climate Action Plan Electric Vehicle Adoption Goals

2%	100%
2020	2050

Reliable home and workplace charging infrastructure significantly increases the likelihood of widespread EV adoption

EV Charging Infrastructure Provides Equitable Access to Charging

Standardized requirements for EV charging infrastructure will **increase access to lower cost transportation** for those with disproportionately less access: residents in multifamily housing, low-income neighborhoods, and BIPOC communities

Electric vehicle charging infrastructure provides widespread, equitable benefits

Who Benefits?

- Multifamily tenants, who gain access to convenient and affordable charging at home
- Residents, who feel reduced range anxiety by having access to charging at work and retail hubs



• **Community**, who breathe cleaner air in our neighborhoods from reduced pollution released from gas-powered vehicles



• **Developers**, who realize a 75% financial savings¹ in charging infrastructure installation during construction compared to retrofitting



Building owners, who demonstrate their commitment to more affordable and environmentally-friendly transportation for residents

^{1. &}lt;u>Plug-In Electric Vehicle Infrastructure Cost-Effectiveness Report</u>

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Retrospective: January to November 2021

Research and Analysis

- Analyzed anticipated costs to developers
- Researched current charger distribution
- Identified peer city policy thresholds

Local Ground-truthing

- Met with local developers to discuss EV charging priorities
 - Identified interest in standardized approach to charging

Partner Identification

 Secured funding for local partners for equitable engagement: CommEN Strategies and IMPACT Community Action

Equitable Engagement

Created an engagement strategy to include residents, CBOs. affordable housing, non-traditional partners, and developers

EV Readiness ordinances have gained momentum as auto companies, consumers, and workers prepare for electrification



be electric by 2030

Lyft vows '100 percent' of its vehicles will

©CNBC

Biden plans to replace government fleet with electric vehicles

FORTUNE

Ford Plans to Invest \$11 Billion to Electrify Its 'Most Iconic' Vehicles

Ford Motor (F) will significantly increase its planned investments in electric

and fully electric vehicles day at the Detroit auto

iously announced target of udes the costs of

General Motors to eliminate gasoline and diesel light-duty cars and SUVs by 2035

Big U.S. automaker says it will invest heavily in electric vehicles and be carbon neutral by 2040

research and development expenses for 2016, the last full year available, were

THE WALL STREET JOURNAL

Jaguar Land Rover Goes Electric

Jaguar Land Rover will invest \$3.5 billion a year to roll out its first fully electric model by 2024

2020 Is the Turning Point for Electric Cars

o brands, startups and opportunistic investors are all joining the electric-vehicle

REUTERS

Global carmakers to invest at least \$90 billion in electric vehicles

St.Louis Public Radio

With New Electric Vehicle Requirements Added To St. Louis Codes, Local Electricians Are Ready

While companies invest, over 10 cities in the Climate Challenge have passed or are pursuing EV-readiness



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Our commitment to equitable engagement

One-on-One Stakeholder Calls

Resident Focus Groups

Tquitable EV Roundtables January - February 2022

October 2021 onward

November - December 2021

- Traditional developers
- Affordable housing developers
- Community based organizations
- Non-traditional partners
- Under-represented organizations
- Industry stakeholders

CommEN Strategies is leading resident focus groups in low-income and BIPOC neighborhoods to understand community priorities and needs related to transportation options

Large group meeting(s) with all relevant and interested stakeholders and partners to co-create an Equitable EV Ready policy and supportive programs, centering equity and community priorities

Community and resident equitable engagement will continue

December 2021 and Onward

Community engagement continues

- In partnership with CommEN Strategies, we'll continue to meet with non-traditional and under-represented organizations to understand their needs and our shared priorities
- In partnership with IMPACT Community Action, we'll fund and hire three Community Consultants from BIPOC neighborhoods to ensure community priorities are included in policy design

• Resident engagement continues

- In partnership with CommEN Strategies, we'll continue resident focus groups in BIPOC and low-income communities
- Resident priorities will be shared and centered as we move to Roundtables

Equitable EV Ready Roundtables in the new year

Beginning January 2022

Equitable EV Roundtables

- Two to four virtual meetings that bring together all stakeholders and partners
- Facilitated meetings with topical breakout groups (ie affordable housing)
- January 2022 dates to be confirmed

Roundtable Objectives

- Review equitable engagement strategy and outputs from resident engagement
- Understand the equity and community impacts of EV charging infrastructure
- Co-create policy and supportive programs with stakeholders and partners while centering community needs and priorities

Questions?

A dedicated website with updates and additional information will be available on the Sustainable Columbus website next month.

For more information in the meantime, contact Jenna Tipaldi at IETipaldi@columbus.gov

