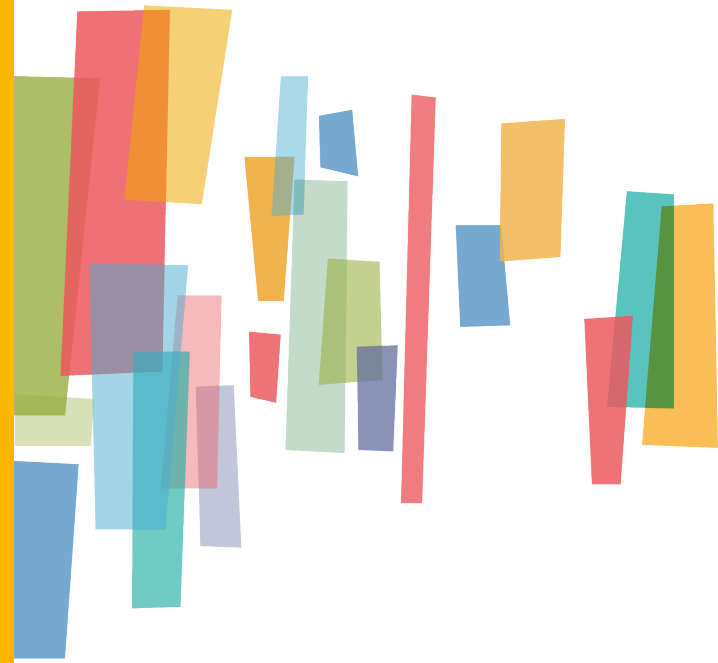


Regional Transportation Electrification Plan

Stakeholder Advisory Committee
Meeting

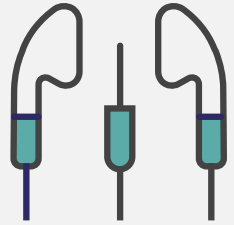
October 4, 2023



ONE
great
REGION

Technical Overview

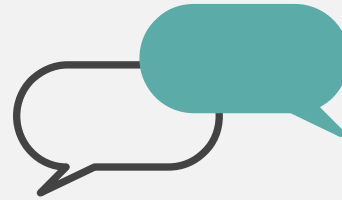
To help this meeting run as smoothly as possible, please consider the following tips:



Use headphones with a microphone



Make sure you are muted when not speaking



Send all questions & comments through the Q&A feature.



You may choose to disconnect from any VPN or third-party connection sources during the meeting to maintain connectivity and bandwidth.



Today's Agenda

- 📌 **Welcome & Introductions**
- 📌 **Project Overview**
- 📌 **Electrification Fundamentals**
- 📌 **Draft Vision, Mission, & Goals**
- 📌 **Key Concerns & Stakeholders Identification**
- 📌 **Next Steps**

Meeting Objectives

- Present overview of the Atlanta Regional Commission's Regional Electrification Transportation Plan
- Clarify the Roles and Expectations of SAC Members
- Gather Input and Feedback on the Vision for RTEP from Committee Members



Committee Introductions

Please share your...

- Name
- Title
- Organization
- Does your organization have any initiatives underway that could complement this effort?



Join at [menti.com](https://www.menti.com) use code 1751 0978

Instructions

Go to

www.menti.com

Enter the code

1751 0978



Or use QR code


Background

Purpose Statement:


The Regional Transportation Electrification Plan will provide a clear and concise strategy to equitably accelerate the adoption of EVs, reduce transportation-related greenhouse gas emissions, and position the region's workforce to support resulting investments




Project Overview



Recently there has been substantial advancements in federal transportation electrification policy and funding



ARC is leading by creating a Regional Transportation Electrification Plan (RTEP) to inform ARC's planning, policies, and practices related to supporting more electric vehicles (EVs) in the region



The project study area is comprised of the MPO area, consisting of all of parts of twenty counties



The RTEP will identify the vision and goals, and create an implementation strategy and policies to meet the vision

Historic Federal Policy Investments

█ The Inflation Reduction Act (IRA) and the Infrastructure Investments and Jobs Act (IIJA) are aimed at eliminating the two key barriers to EV adoption: the high price of EVs and lack of charging infrastructure.



Cost-Competitive EVs

IRA tax credits will help make new EVs cost competitive with internal combustion engine cars



Expansion of Charging Infrastructure

\$7.5 billion in IIJA funding to build out a national network of charging infrastructure



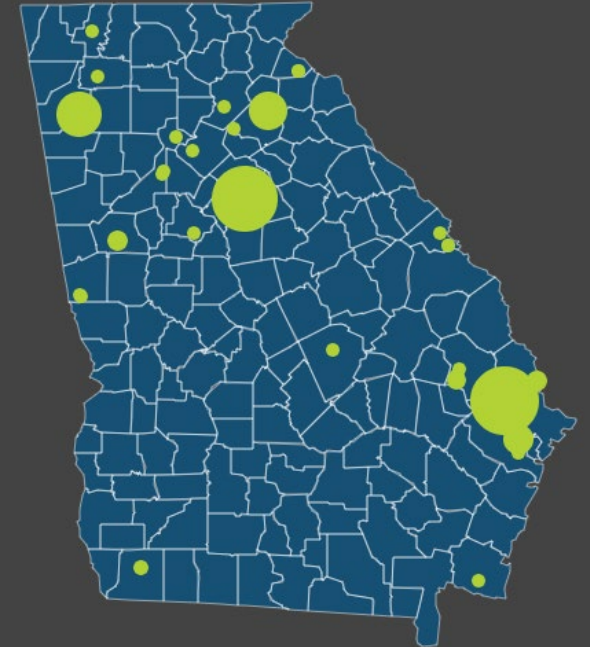
Private Industry is Transitioning its Business Model

- Industry advancements are developing at a fast pace and producing beneficial economic impacts.
 - General Motors aims to only sell electric vehicles by 2035
 - Seven major automakers announced a joint venture to invest at least \$1 billion to build 30,000 DC fast charging ports throughout the country



Georgia is positioning itself as a hub for EV and battery manufacturing

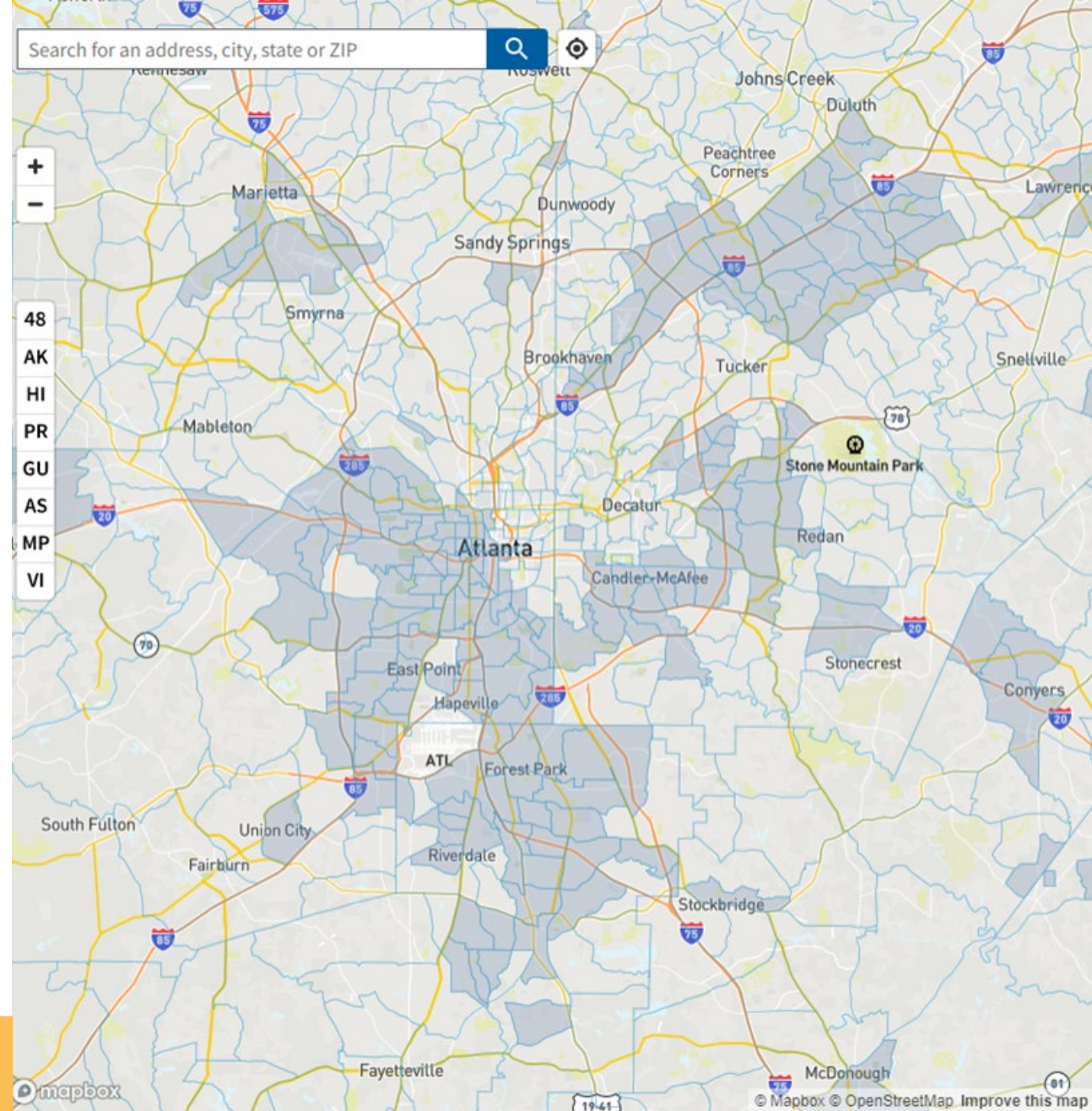
- Hyundai, Kia, and Rivian are all investing in Georgia EV manufacturing plants



2018-2023 Electric Transportation
Job Announcements.
Source: Georgia Power

Equitably Accelerate the Adoption of EVs

- The Justice 40 Initiative aims to have 40 percent of the overall benefits of certain federal investments flow to disadvantaged communities that are marginalized, underserved, and overburdened by pollution.
- Justice40 will help leverage significant federal funding to deploy EVs and EV infrastructure equitably.
- Census tracts that are overburdened and underserved are highlighted as being disadvantaged on the map.
- Layered upon regional priorities, the RTEP represents an opportunity to align the region with these policies.



Complementary Efforts

- The RTEP will complement overlapping efforts already in motion.
- ARC is requesting \$14,793,845 of federal funding under the Charging and Fueling Infrastructure (CFI) Discretionary Grant Program to expand the region's network of DC fast chargers along or near designated Alternative Fuels Corridors (AFCs), as well as provide Level 2 stations that will be free-of-charge to the vehicle operator, with an emphasis given to locations within or near disadvantaged communities.
- The award could be scalable; If awarded in full:

57.8 %

DCFC fast charging stations, publicly accessible: \$8.55 M

38.8 %

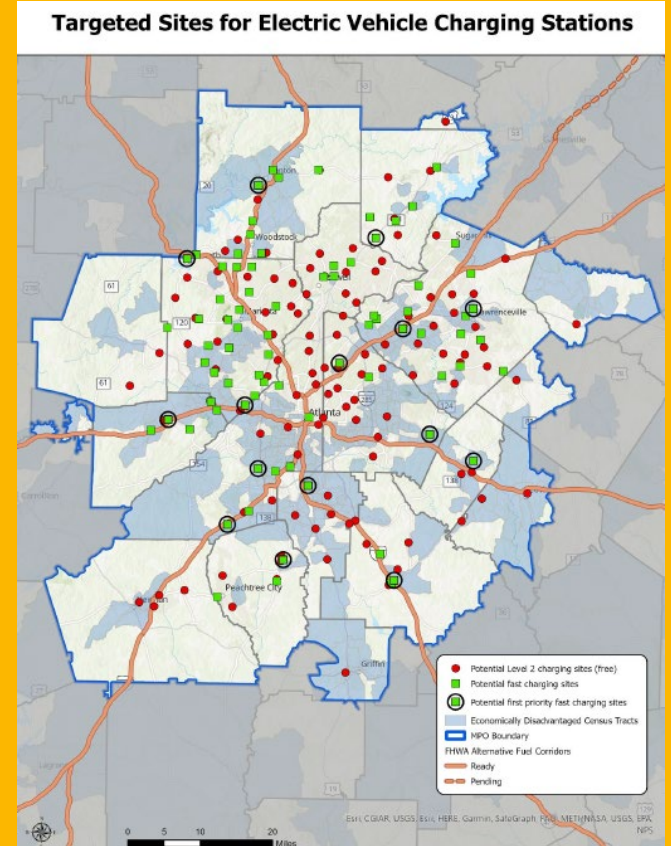
Level 2 charging stations, free to use: \$5.74 M

2.5 %

Oversight and reporting: \$375 k

2.1 %

Engagement and outreach: \$310 k



Complementary Efforts

This plan will complement and build upon overlapping efforts already in motion – not duplicate or complicate partner efforts.

- Georgia Department of Transportation (GDOT) NEVI Plan
- Atlanta-Region Transit Link Authority (ATL) Transition Plan
- Town Center Community Improvement District (CID) Electrification Study
- Peachtree Corners EV Charging Program
- And more..



Project Timeline



**Summer
2023**

Project Initiation &
Existing Conditions
Analysis



**Fall 2023/
Winter 2024**

Defining the
Plan's Vision &
Goals



**Winter/
Spring 2024**

Developing the
Plan's
Implementation
Strategies

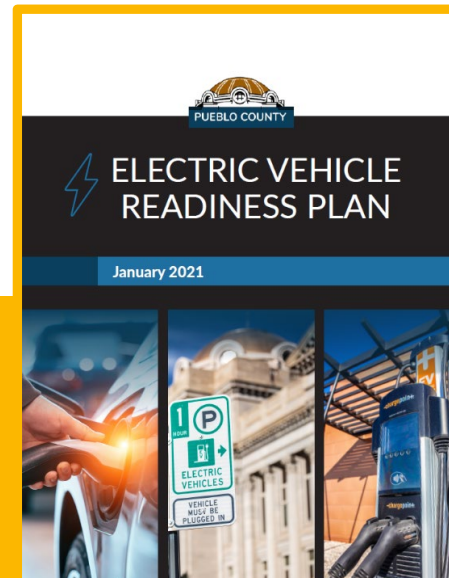
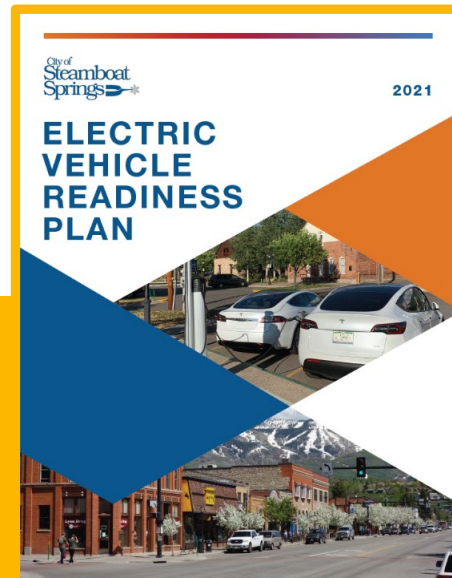
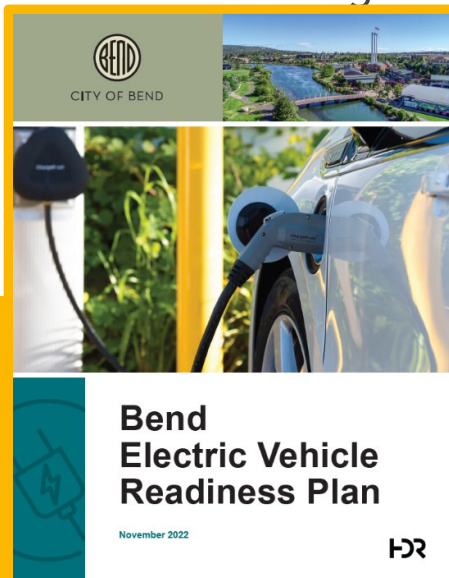


**Spring/
Summer 2024**

Prioritizing the
Action-Oriented
Implementation
Strategies

Leverage Best Practices

- Communities, regions, and states across the country are planning now for EV readiness.
- Regional coordination is key, and ARC is in the position to lead stakeholders.
- The time is now to think critically about leveraging this energy to help achieve the region's goals.
- Built from a base of invaluable stakeholder engagement, regional assessments, and visioning, together we will leverage the latest best practices to create a specific and action-oriented plan for the Atlanta region.





Stakeholder Advisory Committee

Stakeholder Outreach and Engagement



Entity	ARC Committees	Stakeholder Advisory Committee	Listening Session Groups
Membership	Comprises members from existing ARC Committees.	Composed of key stakeholders who are not currently represented on existing ARC Stakeholder Committees.	Consists of stakeholders with potential interests or impacts related to electrification infrastructure.
Role	Provide guidance and strategic direction to inform decision-making and planning processes within the ARC framework.	Assist in prioritizing technical work related to the RTEP process.	Contribute valuable insights that inform decision-making processes.
IAP2 Engagement Goal	Engage in consultation with community members and stakeholders to gather their input and perspectives, enhancing the inclusivity of decision-making.	Collaborate with stakeholders to incorporate a diverse range of perspectives, fostering a cooperative approach to transportation and electrification planning.	Involve stakeholders in meaningful discussions and dialogues to ensure that their perspectives are considered during planning and decision-making related to electrification infrastructure.

Stakeholder Advisory Committee Members



Atlanta Region Transit Link Authority
Abby Marinelli, Transit Funding Manager

Dekalb County
Robert Gordon, Fleet Manager

Metro Atlanta Chamber
Cynthia Curry, Senior Director of Clean Tech and Smart Cities

Southern Environmental Law Center
Brian Gist, Senior Attorney

City of Atlanta
John Seydel, Deputy Chief Sustainability Officer

Fulton County Government
Jessica Lavender, Energy & Sustainability Manager

Natural Resources Defense Council
Patrick King, Transportation Advocate

Town Center Community Improvement District
Alisha Smith, Director, Projects & Planning

Clean Cities Georgia
Frank Morris, Executive Director

Gateway85 Community Improvement District
Carolyn Bourdeaux, Special Projects

Partnership for Southern Equity
Lavonya Jones, Just Energy Director

Uber
Michele Blackwell, Senior Public Policy Manager

Cox Automotive
Stephanie Valdez-Streaty, Director of Mobility Research and Development

Georgia Department of Transportation
Beatrice Shakal, Policy Planning Coordinator

Peachtree Corners
James Nguyen, Transportation Engineer

UGA-Carl Vinson Institute of Government
Shana Jones, Public Service Faculty

Meeting Schedule



Meeting #1

Setting The Vision

October 4, 2023

- Committee education
- Receive consensus on draft vision, mission, and goals
- Identify key areas of concern



Meeting #2

Charting the Path Forward

November 29, 2023

- Comprehensive review of technical work and findings
- Consensus on the plan's development direction



Meeting #3

Reviewing Draft Recommendations

January/February 2024

- Project update
- Consensus on draft recommendations



Meeting #4

Final Plan

March/April 2024

- Presentation of the finalized plan
- Acknowledgment and appreciation of committee members' contributions

Stakeholder Listening Sessions

- City & County Agencies
- Power Utilities
- Private Sector Organizations
- Regional Employers
- Large Fleet Owners
- School Districts
- Local Business Leaders
- Community Advocacy Organizations
- EVSE Suppliers
- Colleges & Universities
- Electric Vehicle Users
- Economic Development Organizations
- Tourism Bureaus
- Etc.

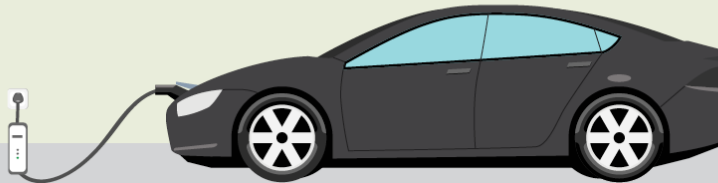


Electrification Fundamentals

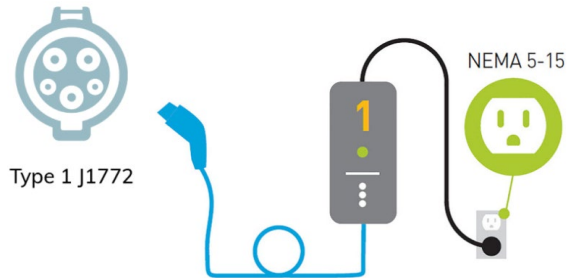
EV Charging Stations

Image Source: www.carolinacountry.com

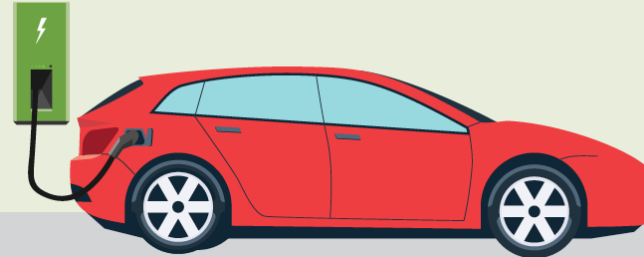
AC Level One



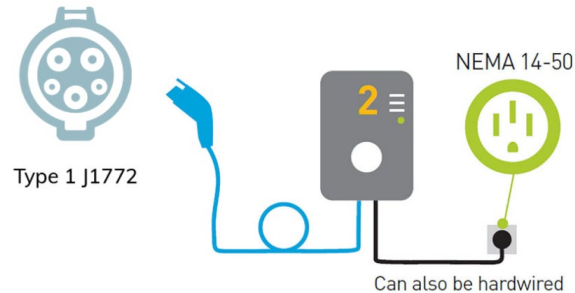
- **1.9kW Maximum**
- **Standard Outlet**
- **Slowest Charging**
- **250 miles in 48-72 hrs**



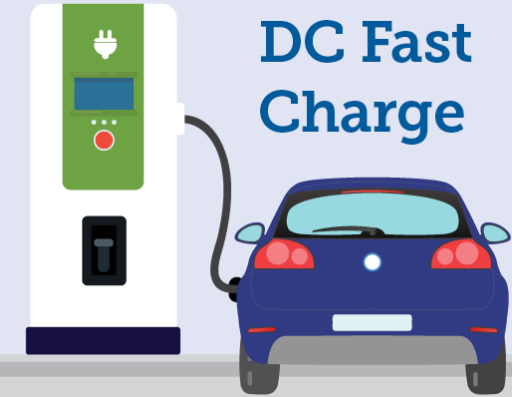
AC Level Two



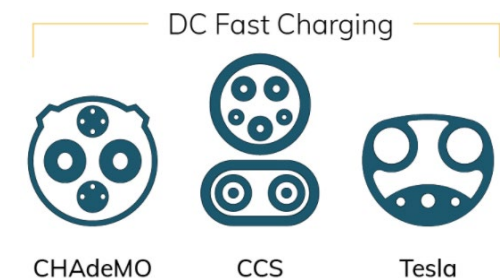
- **19kW Maximum**
- **“Dryer Outlet”**
- **Slow Charging**
- **250 miles in 10 hours**



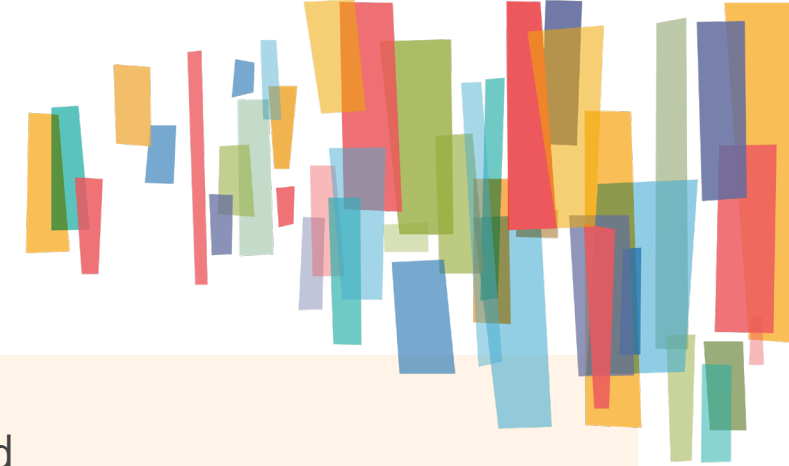
DC Fast Charge



- **50-350kW**
- **Direct Current Fast Charging**
- **Fastest Charging**
- **250 miles in +/- 20 minutes**



Common Terms



Energy vs. Power

- Energy – the ability to cause change
- Power – The rate that energy is moved

Kilowatt Hour (kWh)

The measure of electrical energy (analogous to gallons)

Kilowatt (kW)

The measure of power (analogous to gallons per minute)

Charger

The equipment that is installed to charge vehicles

Port

The ability for a charger to charge a vehicle (many chargers have two ports)

Connector

Basically what plugs into the car

Alternating Current (AC)

Power that rapidly changes polarity

Direct Current (DC)

Power that keeps consistent polarity

EV Charging Stations

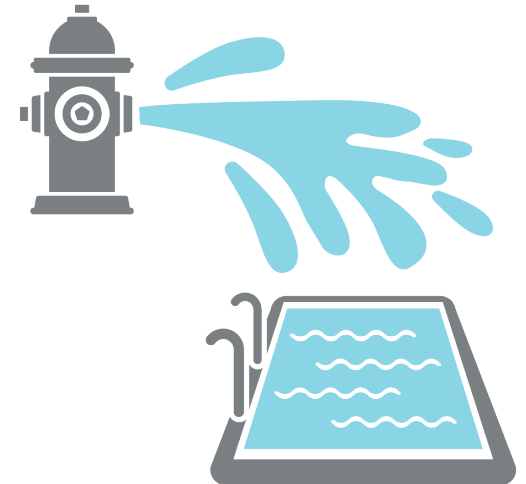
Level 1



Level 2



Level 3



Level 2 Chargers



DCFC (Level 3) Chargers

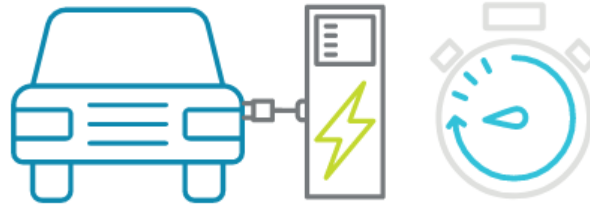


Barriers

EV Adoption Barriers



Range Anxiety for Long Trips



Long Recharging Times



Lack of Charging Infrastructure

EVSE Implementation Barriers



Low Customer Base



Infrastructure Gaps in Rural and Under-Represented Communities



Weather and Temperature Extremes

BIL EV Funding \$7.5B



\$2.5B

Discretionary Funding

This funding will be open to a variety of organizations to support a variety of projects. Guidance on this program has not been issued but is expected later this year.



\$5.0B

NEVI Formula Funding

This funding goes to state DOTs to build a network of Level 3 DC Fast chargers. States must submit plans that respond to federal guidance. This funding is to support long distance and interstate travel for EVs.

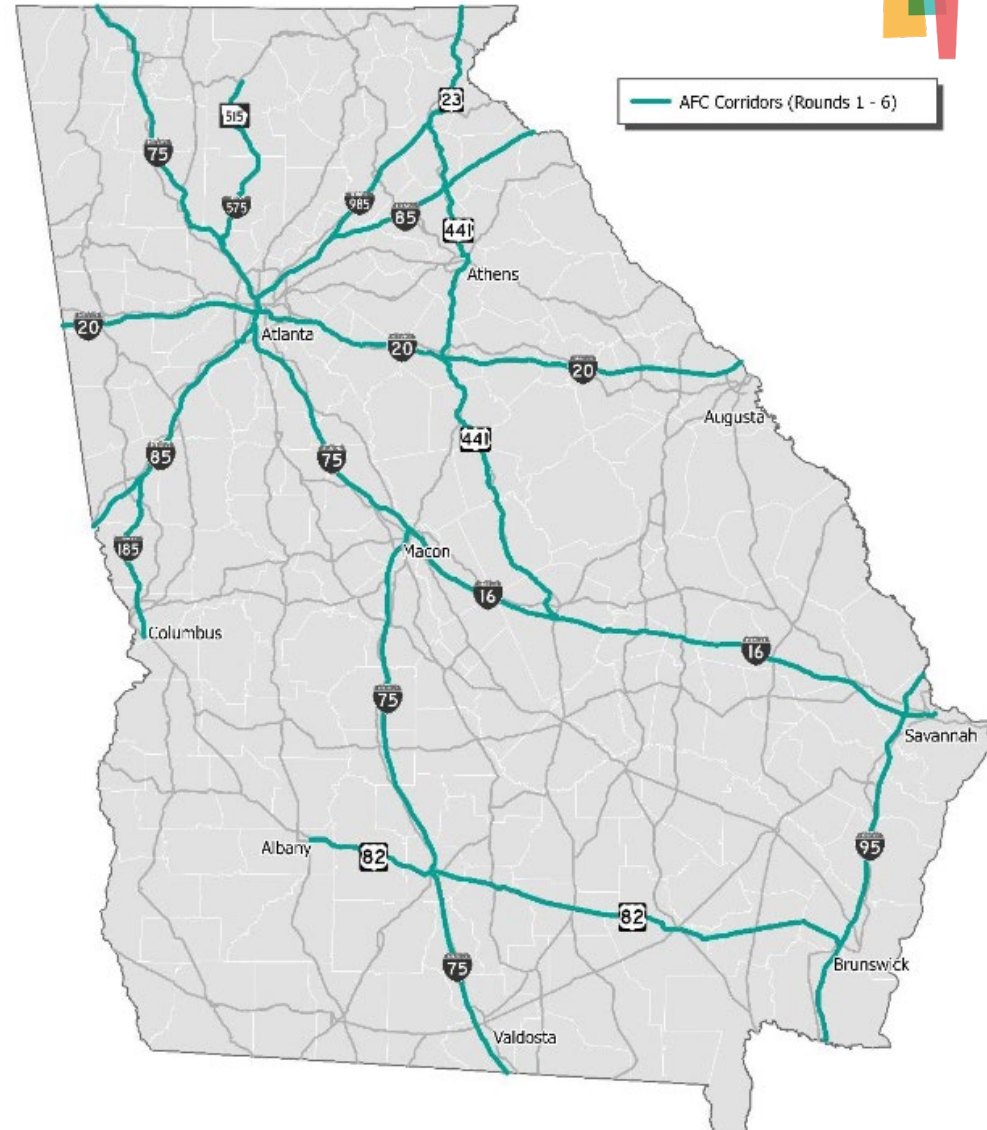
AFC Focus

- Creation of a national network of AFCs
- Focus paid to Interstates and the National Highway System
- This map will expand with the Round 6/NEVI nominations



AFC Focus

- Creation of a national network of AFCs
- Focus paid to Interstates and the National Highway System
- This map will expand with the Round 6/NEVI nominations

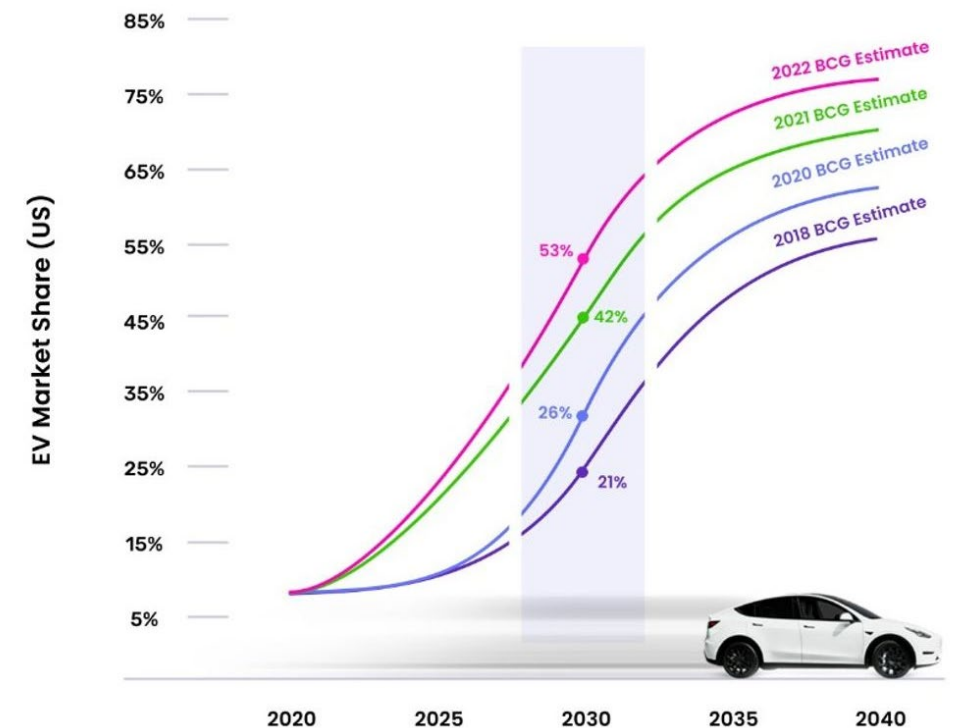


Private Adoption of EV's are Forecasted to Grow Exponentially

- EV adoption tends to accelerate when EVs represent 5% of new vehicle sales in a given market.
- Georgia has recently hit this tipping point.
 - Nationally: 8.6% of new vehicles sales were EVs in Q1, 2023.
 - Georgia: 6.8% of new vehicle sales were EVs in Q1, 2023



Projected EV Adoption Is Accelerating









Setting the Vision

Vision

ONE **great** REGION

Mission

Foster thriving communities for all within the Atlanta region through collaborative, data-informed planning and investments.

Values

Excellence | **Integrity** | **Equity**

Goals



Healthy, safe, livable communities in the Atlanta Metro area.



Strategic investments in people, infrastructure, mobility, and preserving natural resources.



Regional services delivered with **operational excellence** and **efficiency**.



Diverse stakeholders engage and take a regional approach to solve local issues.



A competitive economy that is inclusive, innovative, and resilient.

VISION #1

Establish a Regional EV Ecosystem

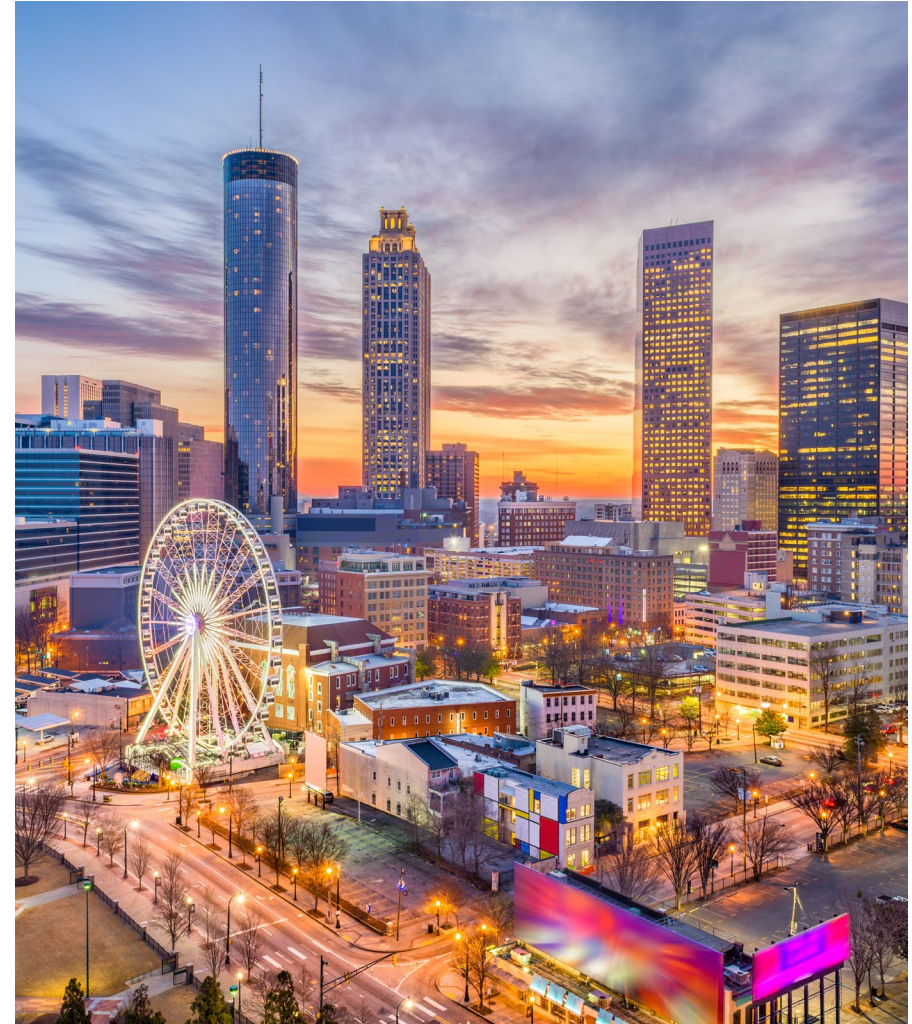
Create a robust and ubiquitous regional EV infrastructure ecosystem that supports electric mobility needs regardless of transportation mode. Coordinate such infrastructure investments to advance, accelerate, and maximize the growth of the EV ecosystem and EV adoption.



VISION #2

Economic Growth and Utilization

Concentrate targeted investments in manufacturing to benefit the region's workforce, incentivize job growth resulting in economic gains, and focus investments on EV infrastructure where utilization would be highest.



VISION #3

Advance Equitable Adoption

Become a national leader in regional transportation electrification by equitably accelerating the adoption of EVs, reducing transportation-related greenhouse gas emissions, and positioning the region's workforce to support EV investments and deployments to maximize community benefits in historically underserved communities.



VISION #4

Expand Access and Incentives

Expand public access to E-mobility options and EV charging by removing barriers to infrastructure access, providing incentives that accelerate EV adoption and support, and prioritizing policy actions that share the benefits of electrification with those who need the most assistance.



DRAFT Vision Statements and Themes



#1: Establish a Regional EV Ecosystem

Create a robust and ubiquitous regional EV infrastructure ecosystem that supports electric mobility needs regardless of transportation mode. Coordinate such infrastructure investments to advance, accelerate, and maximize the growth of the EV ecosystem and EV adoption.



#3: Advance Equitable Adoption

Become a national leader in regional transportation electrification by equitably accelerating the adoption of EVs, reducing transportation-related greenhouse gas emissions, and positioning the region's workforce to support EV investments and deployments to maximize community benefits in historically underserved communities.



#2: Economic Growth and Utilization

Concentrate targeted investments in manufacturing to benefit the region's workforce, incentivize job growth resulting in economic gains, and focus investments on EV infrastructure where utilization would be highest.



#4: Expand Access and Incentives

Expand public access to E-mobility options and EV charging by removing barriers to infrastructure access, providing incentives that accelerate EV adoption and support, and prioritizing policy actions that share the benefits of electrification with those who need the most assistance.

Join at [menti.com](https://www.menti.com) use code 1751 0978

Instructions

Go to

www.menti.com

Enter the code

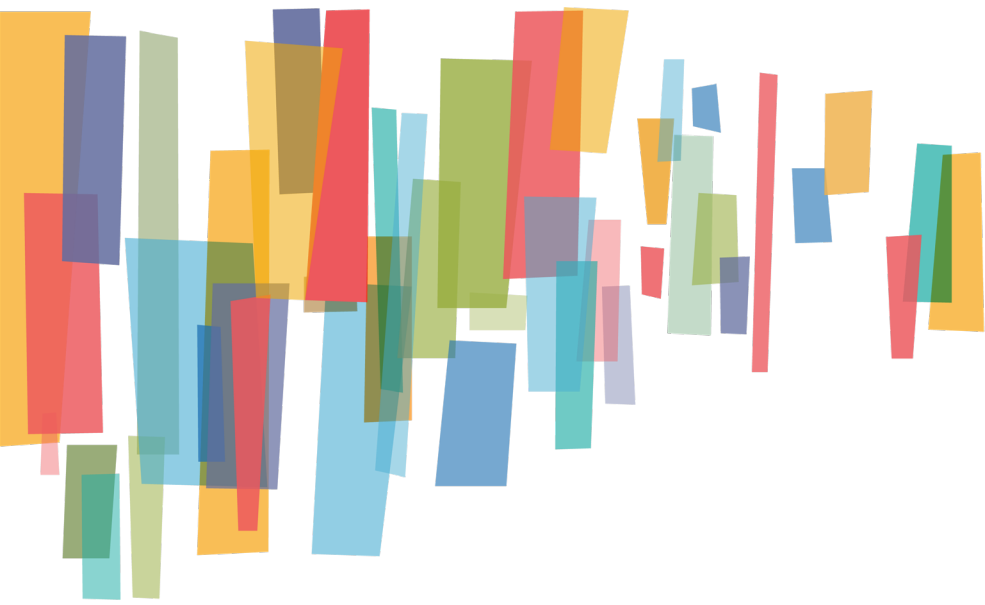
1751 0978



Or use QR code

Group Discussion

- What barriers could keep us from achieving our vision?
- What voices generally go unheard in this discussion that need to be brought to the forefront?



Next Steps

Next Steps

Near-Term Priority Actions:

- Hold Listening Sessions
- Continue through the Needs Assessment
- Continue to receive feedback from the Technical Coordinating Committee (TCC), Transportation and Air Quality Committee (TAQC), and Land Use Coordinating Committee (LUCC)



Meeting Schedule



Meeting #1

The Guiding Principles

October 4, 2023

- Committee education
- Receive consensus on draft vision, mission, and goals
- Identify key areas of concern



Meeting #3

Reviewing Draft Recommendations

January/February 2024

- Project update
- Consensus on draft recommendations



Meeting #2

Charting the Path Forward

November 29, 2023

- Comprehensive review of technical work and findings
- Consensus on the plan's development direction



Meeting #4

Final Plan

March/April 2024

- Presentation of the finalized plan
- Acknowledgment and appreciation of committee members' contributions



Thank You