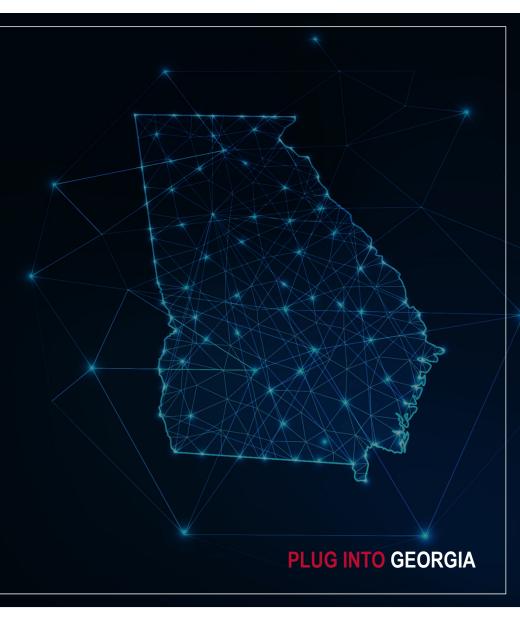


## Welcome!

We will begin shortly.







## Welcome: Why & What Next

**Shana Jones & Natalie Bock** 

Carl Vinson Institute of Government

## Why Electric Mobility?



Georgia and the southeastern US are rapidly becoming the hub of the growing electric vehicle industry.

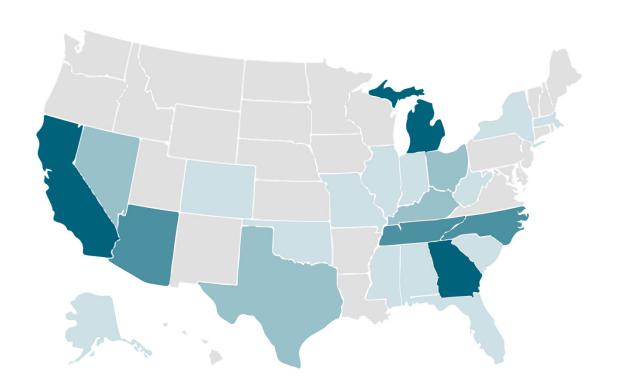


- The Southeast will house 34% of all EV manufacturing jobs
- 32 OEMs within 500 miles of Atlanta
- Since 2018, 35 EV-related projects have contributed \$23 billion in investments in Georgia

#### **EV-ONLY EMPLOYEES**



Source: AtlasEV Hub



## rgia's EV Charging Infrastructure

1,869
Station locations

4,936
EVSE ports



Source: Data as of Nov. 27, 2023, U.S. Dept. of Energy, Alternative Fuels Data Center

## **Big Picture: Local Government EV Lanes**

#### **Internal Fleets**

**Goal:** EVs in your government fleets.

#### Considerations:

- Routes
- Fueling
- Number of chargers
- Policy
- Savings
- Maintenance
- Sustainability goals

#### **Charging Availability & Safety**

**Goal:** Enable residents and visitors to charge their EVs safely.

#### **Considerations:**

<u>Public Assets</u>: Are there gov't properties that that could have charging?

<u>GDOT</u>: What is the state doing to promote charging? And how do you avoid duplicating effort or over-building infrastructure?

<u>Private Sector</u>: Do your ordinances and policies further the charging you want to see in your community? <u>Safety:</u> What public safety issues arise? What training may be needed for responders?

#### **Economic Development**

**Goal:** EVs provide economic benefits to the local economy.

#### **Considerations:**

<u>Production</u>: Can your community become part of the EV production ecosystem?

<u>Boost local business</u>: How can EVs encourage people to shop and stay locally?

<u>Generate revenue</u>: How can EV charging stations generate additional revenue?

Who is your **point of contact** for managing EVs and promoting charging in your community?

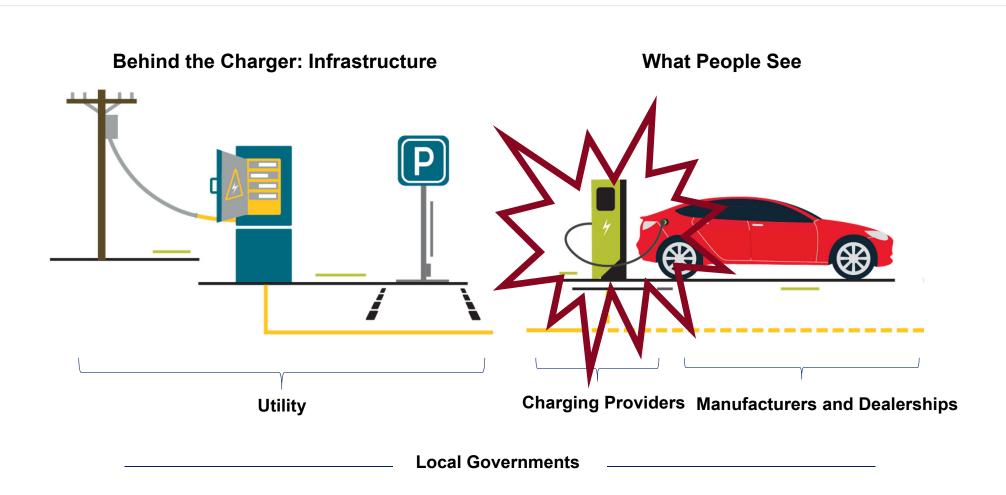


## **Charging Availability: Important Point**



The Department of Energy estimates as much as 90% of car charging is done overnight, at home.







## **Charger Types**

#### Level 2

1 hour of charging = 24 mi of range Less demand on electric grid

## **Direct-Current Fast Charging** (DCFC)

20 min of charging = 60-80 mi of range More demand on electric grid



## **Threshold Questions**

- What are your needs? Fleet charging? Community charging? Both?
- Have you engaged your utility? Start with your utility!
- What is GDOT supporting in your community for "fast" charging?
- Are private businesses providing charging?
- What are you doing to coordinate and communicate? With private businesses, internal government, external government?
- What are you doing to promote charging in your community, both publicly available charging and at-home charging?

Why are we asking these questions?
To determine what level of charging and where.
This really matters!



<b>The E-Mobility Transition: GDOT's Role and Plan</b> 9:45-10:15	<b>Matthew Fowler</b> , Program Manager, Georgia Department of Transportation, P3 Division			
10:15-10:20 Break				
Providing the Power: The Utility & Charging Provider Perspective 10:20-10:45	<b>Glenn Halliday</b> , Electric Transportation Program Manager, Georgia Power Company <b>Todd Allums</b> , Director, Utility Programs EnviroSpark Energy Solutions			
10.20	Toda / manie, Birostor, Camby i regrame Envirospant Energy Coladone			
10:45 – 10:50 Brief Panelist Transition				
The Auto Dealership Perspective: Market Projections and Local Role	Ben Jordan, Georgia Automobile Dealers Association  Dale Critz, Jr., Critz Auto Group			
10:50-11:15	Walter Lewis, J.C. Lewis Motor Company			
11:15-11:20 Break				
The Regional and Local Government  Perspective: Preparing for the E-Mobility Future  11:20-12:00	Kofi Wakhisi, Planning Administrator, Atlanta Regional Commission Alicia Brown, Sustainability Director, City of Savannah Tom Couch, Bulloch County Manager			





## Georgia's National Electric Vehicle Infrastructure (NEVI) Deployment Plan

#### Matthew Fowler, PTP

Georgia DOT Program Manager

Plug In to Georgia: E-Mobility Success for Local Governments

November 29, 2023







## **NEVI Program**



#### **Purpose**



Create a convenient and reliable nationwide network of 500,000 EV chargers by 2030, installed every 50 miles and within 1 mile of Alternative Fuel Corridors

#### Goals



Accelerate equitable adoption of EVs, reduce greenhouse gas emissions, and encourage U.S. industries to lead global electrification

#### **Funding**



\$5B in funding programmed over the 2022-2026 federal fiscal years, with \$135M apportioned to Georgia



NEVI requires all states to prepare a plan compliant with federal requirements from Federal Highway Administration and the Joint Office of Energy and Transportation



## Federal Standards and Requirements

The NEVI Program rules will apply and serve as the foundation for implementation, including the following three key components for charging stations along Alternative Fuel Corridors (AFCs):



#### **Fast**

Minimum of four DCFCs high-powered (150 kW) chargers at each NEVI site



#### Reliable

97% charger uptime 24/7 availability



#### **Accessible**

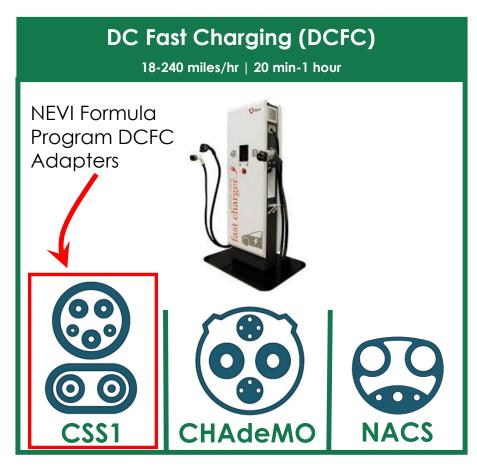
Every 50 miles along AFCs ≤ 1 mile from corridor



## **EV Charging Types**









## **Example DCFC Stations**









## **Progress Towards Implementation**

- NEVI Plan Approved by FHWA September 2022
- Federal Final Rule Published February 28, 2023
  - EVITP Certification
  - Cybersecurity requirements
- Federal Buy America Waiver Published February 21, 2023
- Ongoing stakeholder and industry meetings



Post: March 15, 2023

#### **Georgia Department of Transportation**

Request for Information RFI-484-03152023NEVI

for

**Electric Vehicle Charging Infrastructure Deployment** 

Dated Issued: March 15, 2023

Responses Due: April 17, 2023 by 4:00pm EDT

Georgia Department of Transportation One Georgia Center 600 West Peachtree, N.W. Atlanta, Georgia 30308



## Georgia NEVI Plan Development Process

Late 2021 Feb-Apr 2022 May-July 2022 June-Aug 2022 Aug-Present



- Internal GDOT
  Planning
- Need Analysis
- Team engagement
- Outreach planning
- Bordering states review
- Funding opportunity review

- Stakeholder outreach
- Location and corridor analysis
- Market assessment
- Best practices review
- Alternative Fuel Corridors (AFCs) nominated

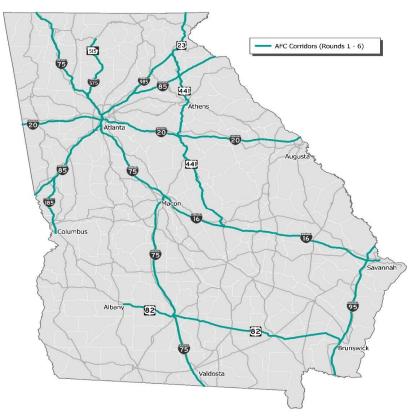
- Stakeholder outreach (cont'd)
- Draft and submit compliant GEVI Plan to Joint Program Office
- Implementation
  Planning
- Public engagement and Stakeholder outreach (cont'd)

	FY2022	FY2023	FY2024	FY2025	FY2026	Total
GDOT's GEVI funding (80% maximum)	\$19.9M	\$28.8M	\$28.8M	\$28.8M	\$28.8M	\$135.1M
Private match (20% minimum)	\$5M	\$7.2M	\$7.2M	\$7.2M	\$7.2M	\$33.8M



## **Alternative Fuel Corridors and Existing Infrastructure**

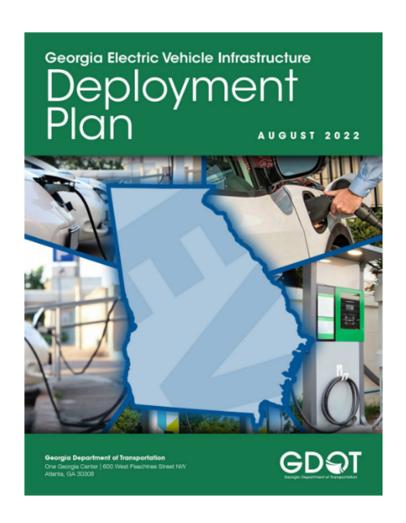
1,534 total miles of Alternative Fuel Corridors



162	93*	14
Publicly available DCFC stations  NEVI-Comp  • Minimum of Current (DC) Charging Sy	DCFC stations within 1 mile of an AFC exit or intersection  liant Chargin four 150kW (total s) fast chargers westem (CCS) ports miles apart and	al 600kW) Direct vith Combined s at each station
*42.Ta.		

\*42 Tesla-only supercharger sites





#### **Plan Sections**

State Agency Coordination





Implementation

Stakeholder Outreach





Civil Rights

Vision and Goals





Equity Considerations

Contracting





Cybersecurity

Existing and Future Conditions





Program Evaluation

EV Charging Infrastructure Deployment





Labor and Workforce Considerations



### Vision and Goals in Georgia



#### Compliance with federal requirements:

Sites will be developed in accordance with federal rules and requirements and result in 100% of Georgia's Interstates and AFCs being fully built out to NEVI Program standards.



#### **Customer-driven deployment:**

Convenient and sufficient charging investment where EV drivers prefer to charge, regardless of whether private sector investment can fully fund.



#### **Economic development:**

Sites should be placed so that they optimize the economic development opportunity from electric vehicles.



Private sector ownership and operation (including non-profits): Sites will be delivered and operated by non-state entities.



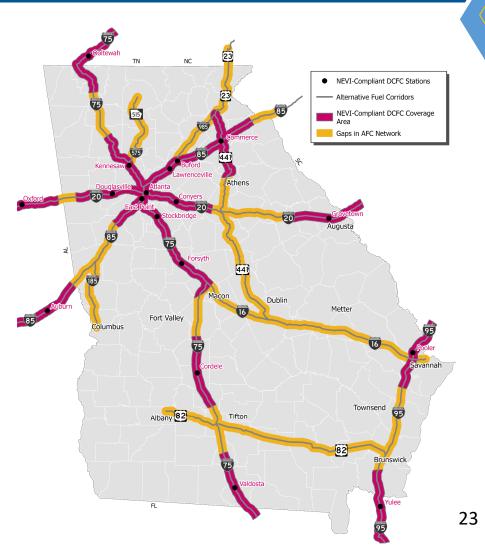
Sustainability and reliability of operations:
Sites will be developed to ensure that charging achieves high operational performance.



## **Plan Implementation**

## **AFC Gaps**

- Deployment plan identified Gaps in AFC Network that are required to be addressed (noted in yellow on the map)
- A Gap is a 50-mile stretch in an AFC where a charging station is required to be constructed to make that stretch NEVI compliant.
- Georgia DOT plans to build out the state's AFC network through multiple rounds of solicitations.

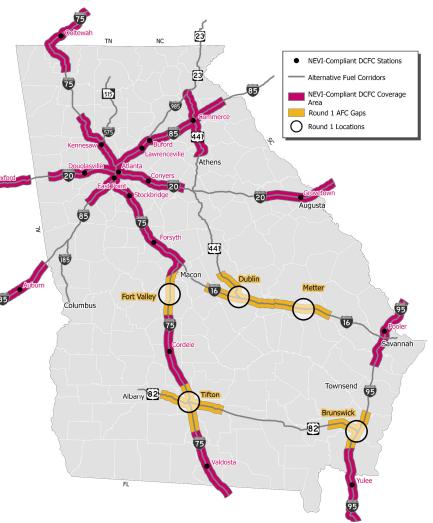




### **Plan Implementation**

### **Round 1 Locations**

- Round 1 Locations represent a radius around the exit/interchange where a charging station could be located to build out the Gap.
- Charging stations will be installed within 1mile travel distance of the exit/interchange
- Locations across the AFCs are influenced by:
  - Traffic as a proxy for potential charger utilization
  - Connections to major cross highways
  - Tourist destinations along the route
  - Existing real estate around the interchanges
  - Amenities, including existing/planned additions





## **Procurement Schedule**

Activity	Date			
Issue Request for Proposal (RFP)	July 25, 2023			
Deadline to Submit Questions	August 23, 2023			
Deadline for One-on-One Meeting Agenda Submissions	September 27, 2023			
One-on-One Meetings with Proposers	October 2-6, 2023			
Deadline for Proposers to Submit PDMS Access Request	November 3, 2023			
Proposal Due Date	November 17, 2023			
Anticipated public comment period under Rule 672-1704(3)(g)	November 27-December 27, 2023			
Anticipated selection of apparent Best Value Proposer for each Georgia NEVI Location	February 15, 2024			
Anticipated deadline for execution of each Project Agreement and related documents by each Developer and GDOT (Effective Date)	April 24, 2024			

All dates set forth above and in the RFP are subject to change at GDOT's sole discretion. All times indicated are prevailing times in Atlanta, Georgia.



## **Procurement Approach**





Multiple procurement opportunities/awards to fill the gaps



Multiyear procurement roll out through FY 26



Furnish, install, operate, and maintain for 5 years



## **Additional Requirements**

As set forth more specifically in the RFP, additional requirements that will apply:



Environmental Compliance



Power and Data Communication Utility Connection



Property Interest



Operations and Maintenance



Min 20% Financial Commitment (fund/finance)



No Right-of-Way Acquisition



Non-compliance regime



Payment and Performance Security



**Contract Expiration** 



## **Stay Connected**

- @GeorgiaDOT
- @GADeptofTrans
- @gadeptoftrans
- www.dot.ga.gov



# Thank You

For Viewing

## Break

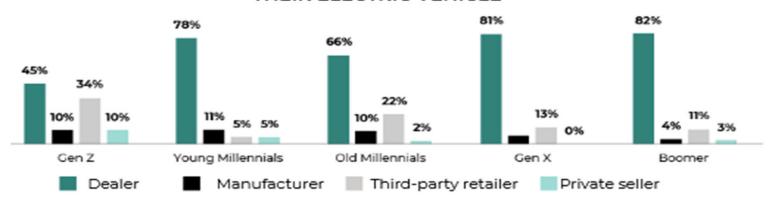




### **Role of the Local Dealership**

"Consumers Favor Traditional Car Dealer Shopping Experience to Direct Retail by Nearly Threefold, Expect Dealers to Play Pivotal Role in EV Education"

## WHERE SHOPPERS PLAN TO PURCHASE THEIR ELECTRIC VEHICLE





## Break





	Customer Own/Operate			Spark Iperate	Charging As A Service	
	Property	EnviroSpark	Property	EnviroSpark	Property	EnviroSpark
Infrastructure	1			<b>✓</b> *		<b>✓</b> *
Equipment Cost	1			1		1
Charger Installation	1			1		1
Electricity	1		1		1	
MaintenancePlan	5 year Maintenance Plan		Included		Included	
Network Connectivity Fee	\$25 /month		Included		Included	
Subscription Fee					\$100-200 /month	
Charging Revenue	90%	10%***		100%	100%	
Contract Length	1 Year Software Term** 1 Year Warranty		10 Year Term		5 Year Term	

<sup>\*</sup>May require cost participation, site inspection pending \*\*Renewable on a yearly basis, no applied for non-networked options \*\*\*Covers Transaction Fees

## Break









# The Auto Dealership Perspective: Market Projections & Local Role

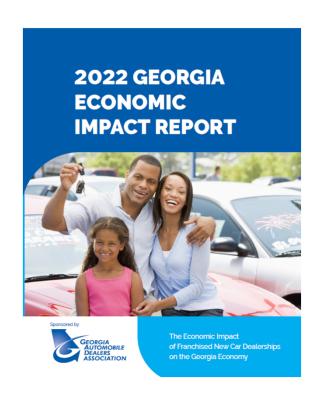
Wednesday, November 29, 2023

Walter N. Lewis, J.C. Lewis Motor Company Dale Critz, Jr., Critz Automotive

### **Economic Impact**

- 491 dealerships
- Number of jobs per dealership 71
- Total employment of 72,700\* jobs
  - o **34,600** direct & **38,100** indirect
- Average salary of \$95,200\*\*
- \$5.9 billion in total earnings for dealership employees in Georgia
- \$1.8 billion in state/local taxes collected or paid
- \$914.1 million in federal payroll taxes collected or paid
- Over \$24.3 million in charitable contributions in 2022

Source: 2022 Economic Impact Report- The Economic Impact of Franchised New Car Dealerships on the Georgia Economy



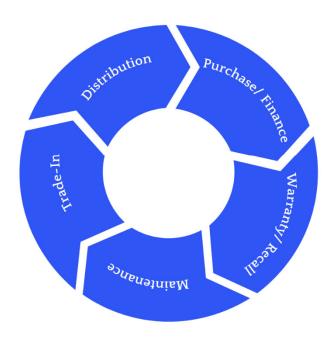


<sup>\*</sup>Includes direct and indirect employment

<sup>\*\*</sup>Includes commission employees

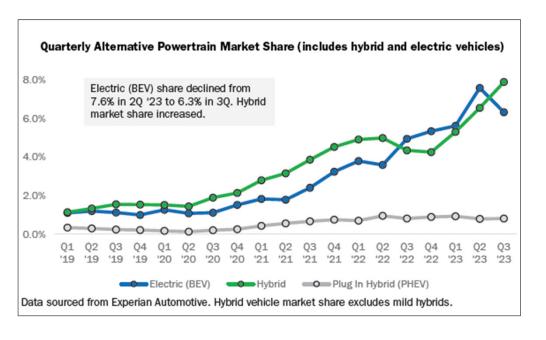
### What Do Local Dealerships Do?

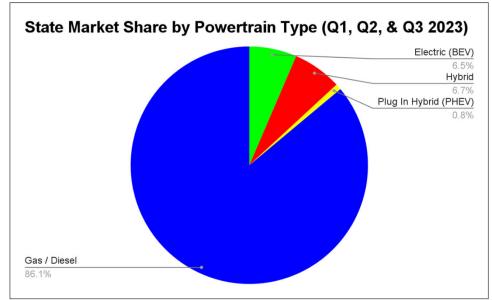
- Sell both used and new vehicles
- Independently owned
- Perform safety-critical repair and maintenance: warranty, recall
- Operate body shops
- Arrange financing for customers
- Trade-ins
- Title and registration
- Support Customer Through Entire Life Cycle of Vehicle





# **Market Analysis: Electric Vehicles (GA)**







### **Electric Vehicle Market: Challenges**

#### **Supply & Demand**

Electric vehicles are now some of the slowest sellers on dealership lots. In September, it took retailers over two months to sell an EV, compared with around a month for gaspowered vehicles and only three weeks for a gas-electric hybrid, according to data from Edmunds.

Carmakers are reacting to the slackening demand by cutting prices and offering discounts on EVs.

BUSINESS | AUTOS

### Automakers Have Big Hopes for EVs; **Buyers Aren't Cooperating**

Sales growth has slowed in the U.S. as car companies are finding a limited pool of consumers willing to pay more for these models

By Sean McLain Follow Oct. 15, 2023 5:30 am ET

## EV stockpile suggests growing pains

Even when sales outpace inventory, some dealers still struggle to seal deal

Hannah Lutz Musi-Scotts.com

What looks like an electric which inventory ghai nignálicu gcowing paine, moi a cooling murket,

The current ITV namative but nearly \$1,000 cars olling up at dealerships as consumer enflusions for the new includeby dwindler. At some dealer-

 EVs' share has gone flat in a busiling market, registration data above 1796E 41

ships, that's true. Cox Automotive data shows XV supply of more than 100 days on dealership lob, more than double the number of gusoline vehicles.

Sell, that data is complicated by the nature of It's sales. INs are an expanding size of the overall market but until recently were hindered by stort - represents EVs at dealerships, excluding Testa au-inventory altano, said Tyson Joentry, vice ponddent of data and analytics at J.D. Power.

"The story that domaind for LVs tradewing it po-

Helped by robust sales related to changing fedand zero-emission vehicle rate incentives this year, INs made up 8.6 percent of setall sales and 6.7 percent of available inventory in June, according to LD. Power.

Now, Cox Automotive inventory data shows 103 days' napply of EVs on average in June. The figure and donor't have dealerships. Days' supply - or

see SUPPLY, Page 34

Sources: Automotive News, Automotive News, Automotive News, Wall Street Journal



### **Electric Vehicle Market: Challenges**

#### **Price**

"According to an Edmunds survey this summer, the high cost of EVs is still the biggest deterrent for potential buyers... so there is a serious need for product expansion at the lower end of the price spectrum."

## Average Transaction Price in September 2023

\$50,683 for EV's

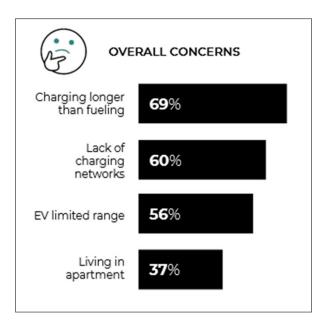
VS.

\$48,000 for all light vehicles

#### Range



#### **Charging Infrastructure**



Source: <u>Automotive News</u>, <u>Wall Street Journal</u>, CDK "Charged Truth About EVs," 2022.



#### **Electric Vehicle Market: External Factors**

**Gasoline Prices** 



**Interest Rates** 



**Government Policy** 



**Takeaway**: The popularity of EVs has increased in recent years, but challenges remain and external factors are contributing to market volatility.



### **Role of the Local Dealership**



Dealerships are making large scale investments to prepare for the sale and service of electric vehicles.

**3.9** ← Average number of electric vehicle chargers installed at new vehicle dealerships by the end of 2023.

\$99,835, 000 ← Total estimated dealership expenses during 2023 to prepare for the sale and service of electric vehicles.

# Franchised Dealerships Sell Over 1 Million EVs

Published August 3, 2023

Dealerships On Track to Invest \$5.5 Billion in EV Infrastructure







# **Georgia's Local Franchise Dealers**



**Walter Lewis** 



**Dale Critz** 



Savannah Savannah



# **Break**





# Climate Pollution Reduction Grants (CPRG) Program



- 2022 Inflation Reduction Act authorized the creation of new, two-phase \$5 billion program:
  - 1) CPRG Noncompetitive Planning Grants to develop strong climate pollution reduction strategies (\$250 M)
    - Program guidance issued March 2023
  - 2) CPRG Competitive Implementation Grants to help put plans into action (\$4.6 B)
    - Notice of Funding Opportunity issued late September 2023
    - www.epa.gov/inflation-reduction-act/about-cprg-implementation-



**CPRG Planning for the Atlanta MSA** 

- ARC is lead agency for Atlanta MSA CPRG
  - 29 counties
  - 150 cities
  - 57-percent of the state's population







# One Planning Grant – 3 Deliverables over 4 Years



# Priority Climate Action Plan (PCAP)

- States/MSAs: due March 1, 2024
- Tribe/territory: due April 1, 2024
- Near-term, implementation-ready, priority greenhouse gas (GHG) reduction measures
- Prerequisite for eligible entities in the area covered by the plan to apply for implementation grants



#### Comprehensive Climate Action Plan (CCAP)

- Due in 2025, 2 years after award (later for tribes and territories)
- Address all sectors and significant GHG sources/sinks
- Near- and long-term GHG emission reduction goals and strategies



#### Status Report

- Due in 2027 (N/A for tribes or territories)
- Updated analyses and plans
- Progress and next steps for key metrics

U.S. Environmental Protection Agency



# **CPRG Implementation Grants**

- CPRG Priority Climate Action Plan makes ARC communities eligible for funding
- Applications are due to EPA April 1, 2024
- Important to be involved in the PCAP process if your local government plans to apply for implementation funds
- Examples of implementation actions/projects that may be captured under the CPRG plans' strategies & funded via implementation grants:
  - Solar panel installations/programs
  - Electric bike programs
  - Home weatherization/energy efficiency
- Tree canopy restoration
- Electric vehicle fleet transitions

Etc... must reduce/absorb



GHGs

DI LIC INTO GEORGIA

# **CPRG Implementation Grants – Applying?**

- Submit information via Emission Reduction Measure ID survey to by December 31:
  - Reduction measure(s) that include one or more CPRG key sectors
  - Amount of CO2 reduction (carbon sink, if applicable) for each measure
  - Government as a lead or partner
- Additional nice to have info:
  - Low Income Disadvantaged Community (LIDAC) analysis
  - Workforce development analysis
  - Criteria air pollutant analysis



# Stay connected & engaged with Atlanta MSA CPRG

- SHARE Your community's climate action, clean energy, or sustainability plans
- SIGN UP For notification of upcoming stakeholder opportunities
- SPREAD THE WORD Share the stakeholder sign up survey with colleagues, friends, other organizations



atlantaregional.org/climatechange



# Thank you!

Shana Jones
<a href="mailto:shanaj@uga.edu">shanaj@uga.edu</a>
706.542.3641

**Natalie Bock** 

nbock@uga.edu

706.542.9048





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