# **Clean Cities Georgia**



Project Manager







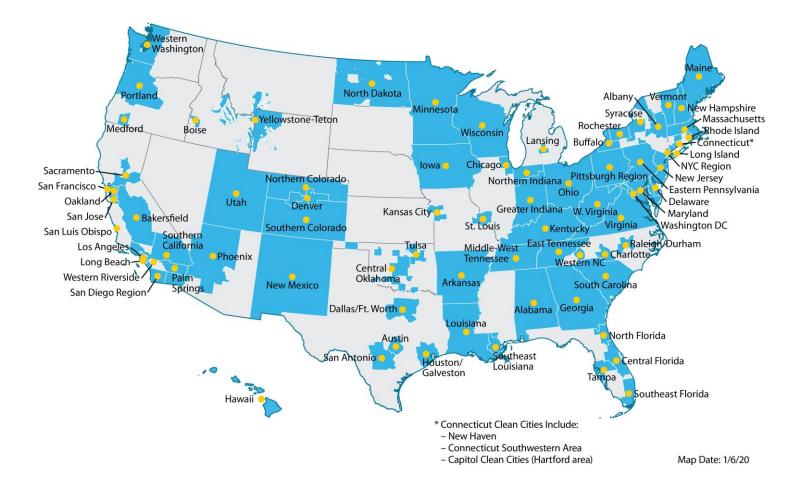
WHO WE ARE

- Part of the national Clean Cities Coalition funded by the Department of Energy's (DOE) Vehicle Technologies Office (VTO) since 1993
- Serve as a central coordinator for clean transportation activities in Georgia related to clean fuels, vehicles, and infrastructure
- Focused on reducing petroleum usage for individuals and fleets with domestic fuel sources



#### **National Network of Clean Cities Coalitions**

Nearly 100 Clean Cities coalitions with thousands of stakeholders, representing more than 80% of the U.S. population.



### **Clean Cities Georgia Team**







Sumner Pomeroy Project Manager









#### **Chairman: Ian Skelton, Atlanta Gas Light**

Al Curtis, Cobb County Arnie Braun, Cox Bill Moore, Conger LP Gas David Jaskolski, Peach State Trucks Graham Foster, MHC Kenworth-Atlanta John R. Seydel, City of Atlanta Lincoln Wood, Georgia Power, Southern Company Maria Geonczy, Georgia EPD Robert Gordon, Dekalb County Rodney Dill, Municipal Gas Authority of Georgia Ryan Bankerd, UPS WHAT WE DO



- Collaborative partner for Georgia stakeholders interested in:
  - alternative & renewable fuels
  - better air quality
  - emerging transportation technologies
- Grant managers helping fleets and community members win federal and state funding
- Education and outreach for AFVs and infrastructure

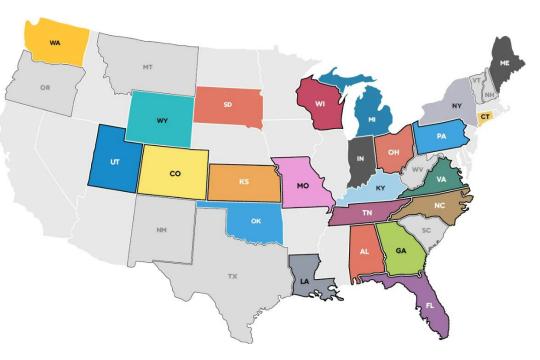




### **Drive Electric Georgia**



- Part of multi-state initiative called DRIVE EVs USA with 14 original states and growing
- Increase EV adoption and infrastructure through education and stakeholder engagement through six priority areas:
  - Consumer education
  - Utility engagement
  - State & local infrastructure planning
  - State and local government officials' education
  - Dealer engagement
  - Fleet engagement



## **EMPOWER Workplace Charging**

- DOE funded workplace charging grant focused on equity with over 30 states involved
- Funded to increase education and outreach to local businesses to install charging stations
- Not funded for the installations but will be working to connect businesses with resources to help pay for install costs
- Justice 40 Initiative 40% of all benefits must go to federally designated underserved communities





# First Responders EV Training



DRIVE

November 29, 2022

Presentation by: Chris Womock

10AM-11:30AM EST

Virtual



https://www.cleancitiesgeorgia.org/events/

## **Electrify Your Community**

Assess what EV Infrastructure exists and where there are gaps

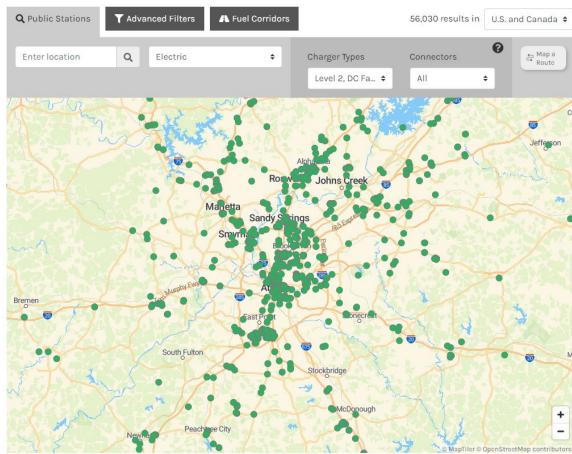
 Alternative Fuel Data Center: Station Locator Tool <u>https://afdc.energy.gov/tools</u> or App

Conduct Community Outreach and Engagement

- Work with local community-based organizations
- EV Clubs
- Host an EV Car Show

#### **Alternative Fueling Station Locator**

Find alternative fueling stations in the United States and Canada. For U.S. stations, see data by state. For Canadian stations in French, see Natural Resources Canada



### **Electrify Your Community...**

Consider electrifying your fleet

- Local municipalities already using Nissan Leaf, Chevy Bolt, Ford Lightning, Mustang Mach-E
- EPA's Clean School Bus Program
- Check with CC-GA for connections to dealers and EVSE companies

Check out other resources and tools

- Alternative Fuel Data Center (afdc.energy.gov/tools)
  - EV Pro-Lite Tool estimate a city's needs for EV charging and the effect on the electric load
  - JOBS Model estimate economic impacts of deploying charting infrastructure
- SACE's Electric Transportation Toolkit electrifythesouth.org/toolkit

## **Electrify Your Community...**

#### **Consider Funding Sources**

 Community Charging Grant Program: \$1.25B to strategically deploy publicly accessible EV charging infrastructure and hydrogen, propane, and natural gas fueling infrastructure in communities – guidance by Nov 15<sup>th</sup>

#### Georgia Power Programs

- <u>Community Charging</u>: 2 parking spaces designed for EV charging for a 10-year license term, in areas with shopping and dining that is safe and accessible 24/7
- <u>Make Ready</u>: Provides all infrastructure leading up to, but not including the charger, for areas needing 6-10 stations
- Diesel Emission Reduction (DERA) Grants with EPA application opening soon!

## **Electrify Your Community...**

#### **Inflation Reduction Act**

- <u>Clean Vehicle Tax Credit</u>
  - New Cars: up to \$7,500
    - \$3,750 if battery components manufactured/ assembled in North America
    - \$3,750 if minerals extracted/ processed in U.S. or countries with trade agreements
    - Final assembly done in North America
  - Used cars: up to \$4,000 for vehicles under \$25k and 2+ years old
- <u>Commercial EV and Fuel Cell Tax Credit</u>: up to \$7.5k for vehicles under 14k lbs and \$40k credit for vehicles above 14k lbs (can't be combined with Clean Vehicle Tax Credit)
- <u>Heavy Duty ZEV and Infrastructure Grants</u> offered by February through the EPA for cost of a Class 6 or 7 EV, installation, and maintenance costs

#### Federal and State Laws and Incentives

Find federal and state laws and incentives for alternative fuels and vehicles, air quality, fuel efficiency, and other transportation-related topics.



Clean Vehicle Credit: Learn about the electric vehicle tax credit and find EVs assembled in North America.

Search by Techn	ology				
<b>Biodiesel</b>	Electric	<u>Ethanol</u>	<u>Hydrogen</u>	Natural Gas	Propane
	<b>H</b>	-	H <sub>2</sub>	$\mathbf{b}$	LPG

- IRA Summary: <u>Afdc.energy.gov/laws</u>
- Clean Vehicle Rebate by car: <u>www.electrifyatlanta.com</u>

Make & Model	Electric Range	0-60 MPH time	DCFC power	MSRP (w/o dest.)	after Federal tax credit			
Nissan Leaf	149-226 mi	6.5-8.0 sec	50-100 kW	\$27.4k-\$37.4k	\$19.9k-\$29.9k			
Affordable EV w/ cheap battery tech. Base "S" model is stripped; at least get DCFC option. Old Chademo plug complicates roadtrips.								
Chevy Bolt EV / EUV	~250 miles	6.3-7.0 sec	55 kW	\$25.6k-\$31.7k	\$25.6k-\$31.7k *			
First affordable long-range EV on market in 2016, updated in 2021. Advanced "SuperCruise" driver assistance feature. Slower DCFC.								
Mini Electric	114 miles	6.9 sec	50 kW	\$29.9k-\$36.9k	\$29.9k-\$36.9k *			
Iconic design. Drivetrain based on BMW i3 but front wheel drive. Low range and low DCFC power makes roadtrips difficult. No leasing.								
Ford Mustang Mach-E	224-303 mi	3.5-4.8 sec	150 kW	\$43.9k-\$62.0k	\$36.4k-\$54.5k			
RWD, AWD and GT variants. New "Plug and Charge" tech for seamless DCFC session start. Advanced "Blue Cruise" driver assistance.								
Kia Niro EV	239 miles	~7.8 sec	77 kW	\$40.0k-\$44.7k	\$40.0k-\$44.7k *			
Features incl. heated & cooled seats. To be overhauled in 2023 but no drivetrain changes (so still slow DCFC). See also PHEV model.								
Volkswagen ID.4	260 miles	5.4-7.4 sec	125 kW	\$41.2k-\$50.0k	\$41.2k-\$50.0k *			
VW's first serious EV. Available in slower RWD model and quicker AWD model.								
Hyundai Ioniq 5	220-303 mi	4.4-7.4 sec	240+ kW	\$41.2k-\$56.2k	\$41.2k-\$56.2k *			
Kia EV6	232-310 mi	4.5-8.0 sec	240+ kW	\$42.1k-\$57.1k	\$42.1k-\$57.1k *			
Both built on Korea's e-GMP platform with 800V drivetrain, enabling faster charging on roadtrips. Optional "power export" capability.								
Polestar 2	249-270 mi	4.5-7.0 sec	150 kW	\$45.9k-\$54.9k	\$45.9k-\$54.9k *			
Volvo's sister brand for EVs brings their first pure electric to market, in RWD vs AWD and two battery (range) options. Google SW inside.								
Tesla Model 3	263-353 mi	3.1-5.8 sec	250 kW	\$47.0k-\$63.0k	\$47.0k-\$63.0k *			
Tesla's 3rd gen car launched in 2018, now dominates EV market along w/ Model Y. Available in RWD, AWD and "Performance" variants. All Teslas: long range, incredible power; proprietary "supercharging" DCFC peaks at 250 kW but ramps down quickly to slower speeds;								
Volvo C40 / XC40 Recharge	~225 miles	4.7 sec	150 kW	\$54.6k-\$61.2k	\$54.6k-\$61.2k *			
Medium-sized SUV in two variants; AWD; range a bit low and 150 kW DCFC is not sustained for long; See also Volvo's PHEV models.								
Ford F-150 Lightning	230-320 mi	3.8-5.0 sec	150 kW	\$59.5k-\$96.9k	\$52.0k-\$89.4k			
Ford's EV pickup finally arrives. Huge frunk with power outlets. Note \$47k "Pro" trim level is not available to retail customers.								
Tesla Model Y	303-318 mi	3.5-4.8 sec	250 kW	\$66.0k-\$70.0k	\$65.0k-\$70.0k *			
Taller CUV based on Model 3 with similar specs, dominates EV market. Available in "Long Range" and "Performance" models. All Teslas: unique, spartan interior w/ big touchscreen, few physical buttons; groundbreaking "FSD" (*not really); options add \$\$\$								
Jaguar i-Pace	246 miles	4.5 sec	100 kW	\$71.3k	\$71.3k *			
Luxurious crossover SUV. Std feat. include HUD, 360 deg view, WiFi hotspot. Only top HSE trim is currently offered. Slow-ish DCFC.								
Audi e-tron	~220 miles	5.5 sec	150 kW	\$70.8k-\$89.3k	\$70.8k-\$89.3k *			
SUV in full size and "Sportback" variants. DCFC power 150 kW is sustained over session. Low-ish range. See also Q4 and GT variants.								
Rivian R1T	314-400 mi	3.0-3.5 sec	220 kW	\$73.0k-\$97.0k	\$73.0k-\$97.0k *			
First electric pickup truck to market, extremely powerful, lots of "adventure" features. Weird tax credit situation. R1S SUV version soon. <b>Not shown here but also available in Georgia:</b> multiple luxury models including <b>Tesla</b> Model S and X, <b>Mercedes</b> EQS sedan and SUV,								

Not shown here but also available in Georgia: multiple luxury models including Tesla Model S and X, Mercedes EQS sedan and SUV, Porsche Taycan, Lucid Air, GMC Hummer; all have high performance numbers and \$100k+ price tags (and thus get no tax credit)





#### **Questions?**

#### For more info...

cleancities.energy.gov

cleancitiesgeorgia.org

driveelectricgeorgia.org

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