Empowering Green Mobility: Advancing Equitable Electric Vehicle Adoption in Atlanta, Albany, Savannah, and Beyond

Empowering Green Mobility: Advancing Equitable Electric Vehicle Adoption

Abstract

The shift toward electric vehicles (EVs) and clean energy is transforming urban transportation, yet persistent inequities in access, affordability, and infrastructure continue to exclude many communities from these benefits. This white paper presents a comprehensive analysis of transportation disparities and barriers to EV adoption in Atlanta, Albany, Savannah, and comparable U.S. cities, with a focus on low-income and minority populations. Drawing on robust data, geospatial mapping, and direct community engagement, we identify critical challenges—including charging deserts, prohibitive costs, and gaps in public transit—that disproportionately affect underserved neighborhoods. Our research examines current EV policies and incentives at the local, state, and federal levels, alongside best practices from leading cities. By synthesizing quantitative findings, stakeholder insights, and case studies, we deliver actionable recommendations to advance equitable and sustainable mobility. This work calls on policymakers, community leaders, and industry stakeholders to prioritize inclusive strategies that ensure all residents benefit from the transition to clean transportation, fostering environmental justice and economic opportunity for underserved communities.

Key words: Transportation equity, mobility justice, transportation inequity, underserved communities, low-income communities, minority communities, disadvantaged communities, spatial accessibility, accessibility metrics, electric vehicles (EVs), EV adoption, public transit electrification, charging infrastructure, charging deserts, level 2 chargers, DC fast chargers, EV ownership rates, sustainable mobility, policy recommendations, EV incentives, rebates, equity analysis, vertical equity, horizontal equity, Gini coefficient, Suits coefficient, zero-emission vehicle (ZEV) mandates, urban mobility, land use clustering, mixed land use, urban planning, community engagement, public-private partnerships, case studies, best practices, policy comparison, stakeholder engagement, geospatial mapping, spatial patterns, infrastructure gaps, cost barriers, awareness and education, data-driven insights, Atlanta, Albany, Savannah, Georgia

Executive Summary

Georgia is rapidly emerging as a leader in electric mobility, attracting billions in investment and manufacturing jobs. Yet, the benefits of the electric vehicle (EV) transition remain unevenly distributed across the state. Wealthier communities—especially in metro Atlanta and along coastal corridors—are adopting EVs at significantly higher rates, while many low-income, rural, and transit-dependent areas lack access to EVs, charging infrastructure, or even adequate public transit. Simultaneously, these same communities often face the highest burdens from transportation-related emissions.

A central equity challenge has emerged: Who gets to drive the future—and who continues to breathe the pollution of the past?

Through detailed spatial analysis, socioeconomic data, vehicle registration trends, and public transit access, this report reveals a widening "EV equity gap" in Georgia. For example, nearly a third of Georgia counties have no public charging stations at all, and EV ownership rates in affluent areas are up to ten times higher than in disadvantaged communities (U.S. Department of Energy, 2023; U.S. Census Bureau, 2023). Our findings confirm that environmental injustice and mobility exclusion are tightly linked.

Moreover, the expiration of federal EV tax incentives in September 2025 adds urgency. These credits—up to $7,500 for new and $4,000 for used EVs—have been a key affordability mechanism. Without state intervention, their expiration could further entrench inequity in EV access.

To address this, we introduce the P3 Opportunity Map, a data-driven tool that highlights the communities most in need of investment and most positioned to benefit from targeted EV deployment. The P3 Opportunity Map integrates multiple data layers—EV infrastructure density, emissions, income and rent burden, public transit access, and vehicle ownership history—to pinpoint high-priority zones. These zones often suffer from poor air quality, low vehicle ownership, and limited charging access, but offer significant potential for environmental and economic impact.

Our report provides a Georgia Toolkit of existing state and local policies, identifies critical gaps, and presents a five-point Action Plan for inclusive electrification. This plan calls for a coordinated effort—across public agencies, private investors, utilities, and community organizations—to ensure the EV transition does not replicate the inequities of the fossil fuel era.

Georgia is at a crossroads. By acting swiftly and strategically, the state can ensure a just, cleaner transportation future that lifts all communities—before the window of federal support closes.

Section 1: Introduction

Over the past decade, Georgia has positioned itself at the forefront of the electric vehicle (EV) industry. Major manufacturers—including Hyundai, Rivian, and SK Battery—have committed billions to new facilities, earning the state its reputation as the "electric mobility capital of America." Yet, as this industrial transformation accelerates, a critical question remains: Will the transition to electric transportation serve all Georgians, or only the wealthiest and most connected?

EV adoption in Georgia has been shaped by shifting incentives and market forces. A generous state tax credit in the early 2010s propelled Georgia to become second only to California in EV sales. However, the abrupt repeal of this credit in 2015, combined with the introduction of a $200 annual EV fee, led to a sharp decline in sales—especially among moderate- and lower-income buyers (Georgia Department of Transportation, 2023). Today, Georgia offers no statewide EV purchase incentives, leaving federal credits as the primary support mechanism (Internal Revenue Service, 2023).

Now, even that support is set to expire. The federal EV tax credit will end in September 2025, threatening to widen the EV affordability gap just as momentum is building (Internal Revenue Service, 2023). Without additional action, Georgia risks repeating the inequities of past transportation transitions, where access to cleaner, safer, and more affordable technologies was reserved for a privileged few.

Meanwhile, transportation-related emissions continue to impose unequal burdens. Low-income and majority-Black neighborhoods near major highways experience higher rates of asthma and air pollution, while wealthier communities—those most likely to own EVs—enjoy cleaner air and greater mobility choices (Centers for Disease Control and Prevention, 2021). Rural areas face different challenges: limited charging stations, long commutes, and aging vehicle fleets that are costly to maintain and contribute to pollution (U.S. Department of Energy, 2023).

This report frames Georgia's moment as a crossroads between industrial success and social responsibility. It argues that the state must take deliberate action to ensure its EV transition is not only rapid, but also equitable. The following sections present the data behind this challenge, introduce a mapping tool to guide investments, evaluate the state's current policy toolkit, and offer targeted, time-sensitive recommendations. Together, they form a blueprint for a cleaner, fairer future—if Georgia chooses to seize it.

Section 2: The Equity Gap – Who Is Being Left Behind?

Despite the promise of a cleaner, cheaper, and more efficient transportation future, Georgia's EV transition is unfolding along familiar lines of inequality. As with many emerging technologies, access to electric vehicles—and the benefits that come with them—is concentrated in communities that already have economic and infrastructure advantages. Meanwhile, the households and neighborhoods most burdened by transportation costs and pollution are often the last to see investment (U.S. Census Bureau, 2023; Wong, Hernández, & Fitzgerald, 2023).

This section uses a combination of vehicle registration data, emissions mapping, transit access, and socioeconomic indicators to illustrate the growing equity divide in Georgia's EV adoption. The story that emerges is both stark and actionable: unless deliberate interventions are made, those who would benefit most from cleaner mobility will be left furthest behind.

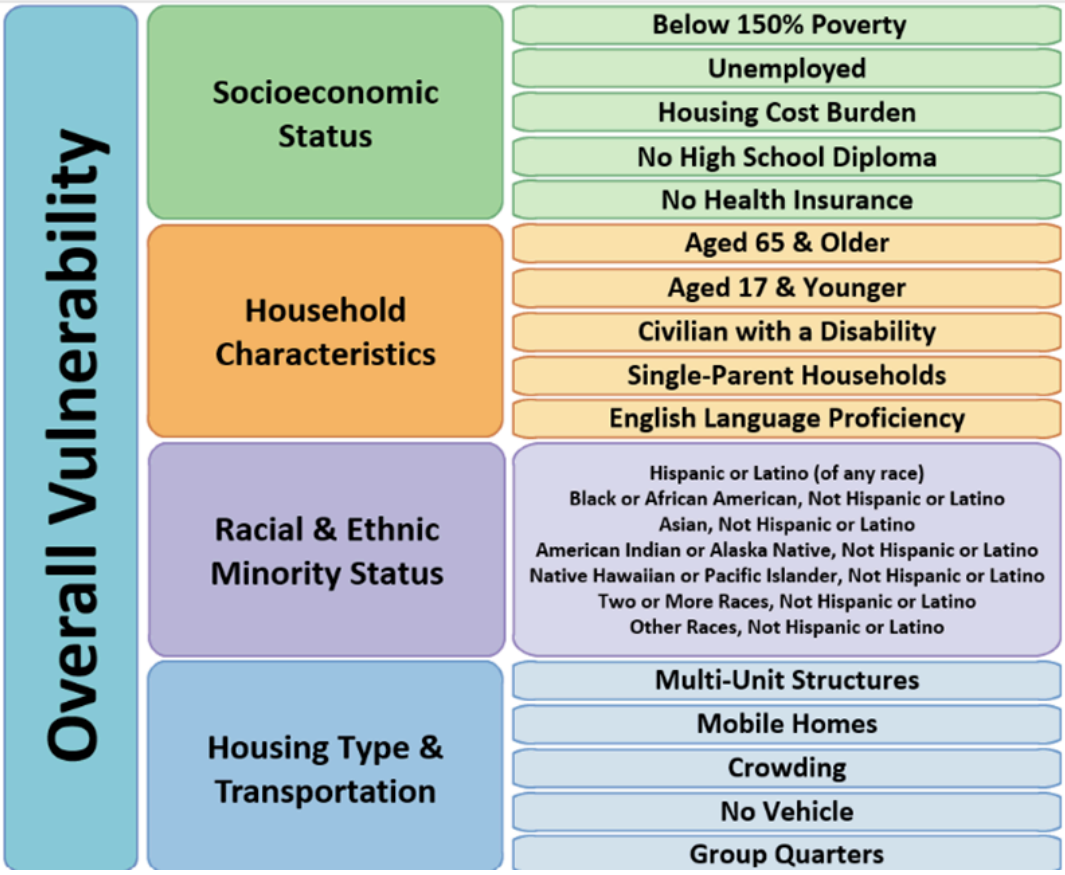
2.1 Income and EV Ownership: A Clear Correlation

Statewide vehicle registration data reveal that EV adoption is strongly correlated with income. Affluent households in North Metro Atlanta, coastal areas like Savannah, and fast-growing suburbs dominate EV ownership rates. By contrast, many rural and low-income urban communities have near-zero EV penetration.

- In counties with median household incomes above $75,000, EV ownership rates can exceed 10 vehicles per 1,000 people.
- In contrast, 49 of Georgia's 159 counties still have no public EV charging stations at all【Alt Fuel Station CSV】.
- The Gini coefficient for EV ownership across Georgia counties is approximately 0.48, indicating substantial inequality in adoption rates【10581_vehicle_history_2-19-24】.

Visual:

The **Social Vulnerability Index** (SVI) was calculated to measure how different communities may be more or less at risk due to social and economic factors. To do this, data from the U.S. Census Bureau's American Community Survey was used. The **CDC/ATSDR SVI** is the most widely used, research-backed set for social vulnerability, which uses 16 ACS variables (Centers for Disease Control and Prevention, 2021; Doustmohammadi, 2022). These sixteen variables represent important aspects of vulnerability, such as poverty, unemployment, age, disability, minority status, language skills, housing type, and access to transportation. These variables were grouped into four main themes: socioeconomic status, household composition, minority status and language, and housing and transportation.



For each census tract, the value of every variable was ranked as a percentile compared to all other tracts, so that higher values represent greater vulnerability. The percentile ranks for variables within each theme were summed and then ranked again to create a theme-specific score. Finally, the four theme scores were combined and ranked to produce an overall SVI score for each tract, ranging from 0 (least vulnerable) to 1 (most vulnerable). All variables and themes were given equal weight in the calculation. This approach allows for a clear comparison of social vulnerability across different neighborhoods and helps identify areas that may face greater barriers to clean mobility or require additional support.

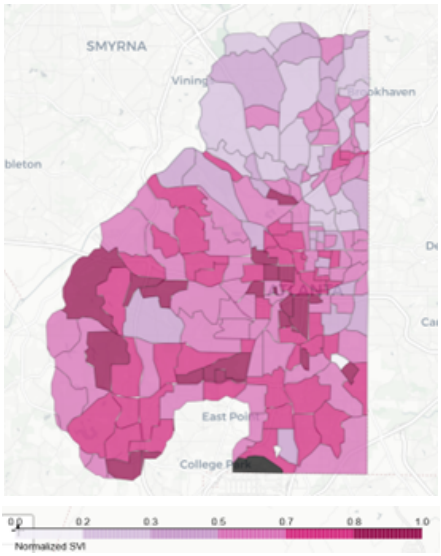


Fig: Social Vulnerability Index calculation across all census tracts in Atlanta

Social Vulnerability Index shows how much a neighborhood struggles with challenges like poverty, lack of cars, disability, and rent burden. Census tracts with SVI score of 1 shows neighborhoods that have higher social and economic challenges. Similarly, SVI score of 0 shows neighborhoods that do not suffer from these challenges.

A county-level choropleth map showing EVs per capita overlaid with median household income.

2.2 Charging Deserts: Geography of Exclusion

Infrastructure access mirrors this ownership divide. Charging stations cluster near wealthier metro areas and along major interstate corridors—often bypassing the very communities where shared chargers are most needed.

- Rural Georgia—especially South and Southwest counties—shows vast gaps in fast charging access. Residents in these areas often drive longer distances and lack the home charging options available to suburban homeowners.
- In inner-city Atlanta, EV chargers are largely absent from high-density, rent-burdened neighborhoods, where residents often lack off-street parking for home installation.

The **EV Charging Accessibility Score** was designed to assess how easily residents in each neighborhood can access public electric vehicle (EV) charging infrastructure. For each census tract, the centroid was used as a reference point, and all EV charging stations within a specified radius of 3 miles were identified. The total number of available charging ports was counted, with DC fast charging ports given three times the weight of standard Level 2 ports, reflecting their greater utility for EV users (National Renewable Energy Laboratory, 2025; Mehditabrizi et al., 2024).

$$EVAccess_i = \left(\sum_{k \in Radius} [Level2Ports_k + 3 \times DCFastPorts_k] \right)$$

where:

- k indexes all charging stations within the specified radius (e.g., 3 miles) of the tract centroid.
- Level2Ports_kis the number of Level 2 charging ports at station kk.
- DCFastPorts_k is the number of DC fast charging ports at station kk, weighted 3 times higher.

The tract with a higher EV charging accessibility score has more charging stations, indicating better access to EV charging infrastructure for residents, while a lower score shows a tract that has few or no charging stations within reach, signaling limited access to EV charging and a potential barrier for clean mobility adoption.

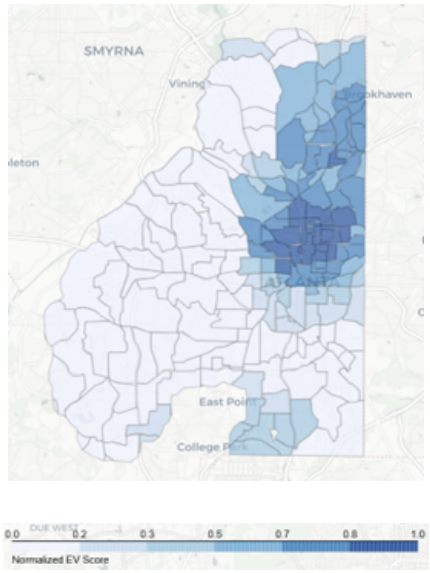


Fig: EV Accessibility score calculation across all census tracts in Atlanta

EV Accessibility score shows where electric car charging stations are available near homes. Census tracts with EV accessibility score of 1 shows census tracts that have electric vehicle charging stations available near homes, while a score of 0 shows census tracts that have zero EV charging stations available.

Key Insight:
Many communities face a double burden: low vehicle access and no public charging alternatives.

2.3 Transit Dependence and Vehicle Ownership Inequities

In parts of Atlanta and other urban centers, vehicle ownership itself is a privilege. Data from the GA_Tract_City file show that:

- In some central Atlanta tracts, over 30% of households do not own a vehicle.
- These same neighborhoods often have high rent burdens, with >50% of income spent on housing.

For these residents, the private vehicle market—electric or otherwise—is inaccessible. Electrification must extend beyond personal vehicles to public transit, shared mobility, and community-based solutions. For example: Bus riders from South DeKalb and Southwest Atlanta neighborhoods spend over 1.5 hours commuting daily—yet these corridors lack electrified transit options.

The **Transit Accessibility Score** was calculated to measure how easily residents in each neighborhood can access public transportation, taking into account both the proximity of transit stops and the quality of service provided. For each census tract, the geographic center (centroid) was identified. The distance from this centroid to every nearby transit stop was computed, and only stops within a reasonable walking time (as defined by a maximum travel time threshold) were considered accessible.

To reflect the true usefulness of each stop, the calculation incorporated two key service quality factors: the frequency of daily transit service and the reliability of the schedule at each stop. Each stop's contribution to the accessibility score was weighted by its daily frequency and adjusted by a reliability bonus, which increases the score for stops with more predictable service. These weighted values were then further adjusted using a gravity model, which applies an exponential decay based on walking time, so that closer and higher-quality stops contribute more to the score. The final accessibility score for each tract was normalized to allow for comparison across all neighborhoods. This approach ensures that areas with more frequent, reliable, and conveniently located transit receive higher accessibility scores, highlighting disparities in transit access across the city.

For each census tract i, the Transit Accessibility Score is calculated as:

$$TransitAccess\_i = \sum\_\{j\}[Freq\_j \times ReliabilityBonus\_j \times e\^\{-\beta \times TravelTime\_\{ij\} \ \} \ ]$$

Where:

- j indexes all transit stops within the maximum walking time threshold.
- Freq_j is the daily frequency of service at stop j.
- ReliabilityBonus_j is a schedule reliability adjustment for stop jj, defined as:

  $$\text{ReliabilityBonus\_j} = \begin{cases} 1 + 1/(1 + ScheduleReliability\_j), & if\ ScheduleReliability\_j > 0 \\ 1, & otherwise \end{cases}$$

  where ScheduleReliability_j is a measure of the variability in scheduled service at stop j.

- TravelTime_{ij} is the estimated walking time (in minutes) from tract i to stop j.
- β is a decay parameter that reduces the influence of distant stops.
- The total score is normalized across all tracts.

A higher Transit Accessibility Score indicates that a tract has more frequent, reliable, and conveniently located transit service, while a lower score highlights areas with limited or less

reliable transit options. This methodology ensures that both the quantity and quality of transit access are reflected in the final score, supporting equitable transportation analysis.

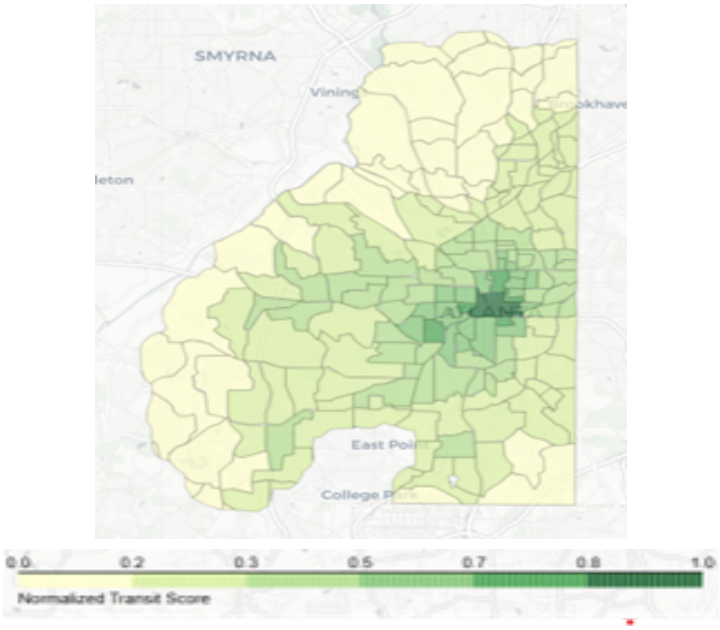


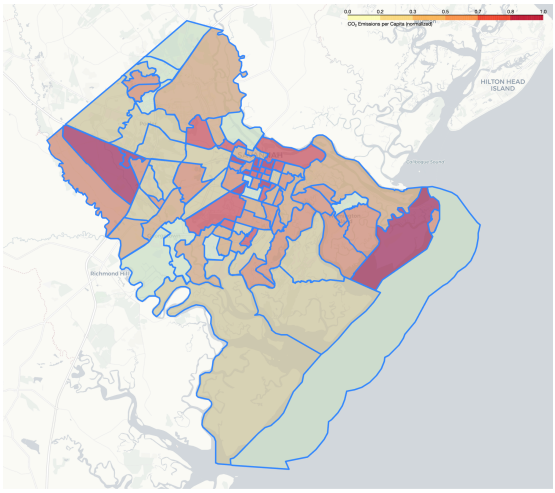
Fig: Transit Accessibility Score calculation across different census tracts in Atlanta

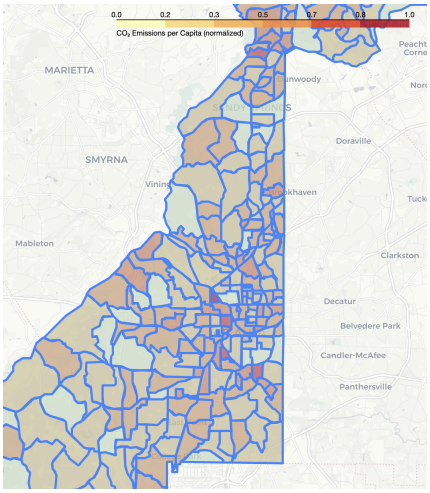
2.4 Pollution Exposure: Who Breathes the Most?

Air pollution from transportation sources disproportionately impacts low-income and majority-Black communities. Interactive emissions mapping reveals that per capita CO_2 emissions exceed 40–55 kg/year in several car-dependent census tracts on the southern and western outskirts of Metro Atlanta—areas with high vehicle ownership and limited public transit. In contrast, tracts closer to downtown Atlanta generally display lower CO_2 emissions per capita, likely due to shorter travel distances and more walkable or transit-connected neighborhoods. In Savannah, elevated per capita CO_2 emissions are observed around industrial and freight-heavy corridors, especially near the port (U.S. Environmental Protection Agency, 2023).

The highest-emitting tracts in both cities often overlap with historically underserved communities, including low-income and majority-Black neighborhoods, which face systemic barriers to EV adoption and transit access (Centers for Disease Control and Prevention, 2021).

Visual:
A heat map of transportation emissions overlaid with percent of households below the poverty line.





2.5 Case Example: South Atlanta vs. North Fulton

North Fulton County (e.g., Alpharetta):

- Median income: $100,000+
- EV ownership: High
- Charger density: High (Level 2 and DC fast)
- Air quality: Relatively clean
- Mobility options: Car + EV + telework

South Atlanta (e.g., Lakewood or Thomasville Heights):

- Median income: <$35,000
- EV ownership: Minimal
- Charger density: Near zero
- Air quality: Elevated NOx and PM2.5 exposure
- Mobility options: Transit-reliant, limited car access

The EV transition is currently reinforcing—not resolving—long-standing geographic and racial inequalities in mobility and environmental quality (Wyczalkowski, Welch, & Pasha, 2020).

2.6 Summary: A Widening Divide

Without intervention, the electric future will be cleaner for some and out of reach for others. Georgia's data clearly show that:

- Income predicts EV ownership more than any other factor.
- Infrastructure investments are not reaching areas of greatest need.

- Transit-reliant and vehicle-insecure communities remain invisible in EV planning.
- Environmental burdens are concentrated in the very places with the least access to clean mobility (Victoria Transport Policy Institute, 2025).

2.7 Navigating the Future: Perceptions of EVs and Urban Mobility

Our research involved conducting a survey across Georgia, focusing on Atlanta, Albany, and Savannah. The survey reveals a community with high awareness of EVs, but varying familiarity with their operation, indicating a need for more detailed information and education.

Key Takeaway 1: Cost and Charging are Primary Roadblocks to EV Adoption.

- The most frequently cited concerns are purchase cost and charging access, followed by maintenance and range limitations.

Key Takeaway 2: Incentives and Infrastructure are Key Drivers for EV Consideration.

- Financial incentives and improved charging infrastructure are strong motivators for EV adoption.

Key Takeaway 3: Transportation Challenges Point to a Need for Enhanced Public Options.

- Respondents highlighted the need for better public transportation, lower costs, and improved infrastructure.

The data suggest that while interest in sustainable transportation options like EVs is growing, addressing practical concerns—cost, charging infrastructure, and public transit—will be crucial for a more sustainable and accessible urban mobility landscape.

Section 3: Mapping the Opportunity – A Guide for Strategic Investment

To close Georgia's electric mobility equity gap, we need more than good intentions—we need precise, data-driven targeting. That's the goal of the P3 Opportunity Map, a spatial tool developed to guide public, private, and philanthropic investment toward the communities where electrification can deliver the greatest environmental and equity returns.

This section introduces the core components of the map, highlights key findings, and identifies high-priority investment zones where EV infrastructure, clean transit, and policy support are most urgently needed.

3.1 What Is the P3 Opportunity Map?

The P3 Opportunity Map is a composite geospatial analysis that identifies "electrification deserts" across Georgia—places where:

- Emissions burdens are high
- EV infrastructure is minimal or nonexistent
- Households face high rent burdens or low income
- Vehicle ownership is limited
- Transit access is weak or unreliable

The map integrates multiple data layers:

- EV infrastructure density (from alt_fuel_stations and charging_units datasets)
- GHG emissions (from Atlanta and Savannah emissions maps)
- Income and rent burden (GA_Tract_City.csv)
- Public transit access (MARTA GTFS data: stops, routes, trips)
- Vehicle ownership history (10581_vehicle_history)

Each census tract or neighborhood is scored across these indicators to prioritize strategic investments by public agencies, utilities, and mobility providers.

3.2 Key Dimensions of the Map

A. Infrastructure Gaps

- Vast areas in South Atlanta, West Atlanta, and rural counties (e.g., southwest Georgia) have zero or near-zero public EV charging stations.
- Many tracts that are home to transit-reliant residents lack both chargers and multi-modal transportation options.

B. High-Emission Zones

- The Atlanta emissions map reveals that tracts with the highest per-capita CO_2 output are typically those with:
    - Long car commutes
    - Low vehicle efficiency

    - Minimal transit coverage

These zones are top targets for electrified transit, shared mobility, and public charging hubs.

C. Socioeconomic Vulnerability

- Rent-burdened households (those spending more than 30% of income on housing) and low-income tracts are less likely to own an EV or have off-street parking for home charging.
- These communities require public or multifamily-based charging infrastructure, and could benefit from shared EV access models.

D. Transit Data Overlay

- Using the GTFS data from MARTA (stops, trips, routes), we identified neighborhoods with poor or indirect transit service and long last-mile gaps.
- These zones are ideal for siting EV carshare hubs, microtransit pilots, or charging infrastructure co-located with bus stops.

3.3 Priority Zones for Investment

From the combined analysis, several high-priority investment zones emerge:
1. South DeKalb & South Fulton (Metro Atlanta)

- High rent burden and low vehicle ownership
- Minimal Level 2 or DC fast charger access
- Significant emissions and health burdens
- Gaps in MARTA coverage despite population density

2. Savannah's Westside & Industrial Corridors

- High per-capita emissions near port and industrial areas
- Very low EV infrastructure relative to vehicle traffic
- Predominantly Black, working-class neighborhoods

3. Rural Nodes in Southwest Georgia

- Extremely limited charging infrastructure
- High average vehicle age and cost of maintenance
- Long commute distances, fuel cost burdens
- Eligible for federal rural electrification and USDA clean mobility programs

3.4 Visualizing the Map

Visuals*:*

- A layered folium map showing:
    - Heatmap of GHG emissions
    - Dot density of EV stations

    - Overlays of median income and rent burden
      MARTA route and stop overlays (in Atlanta)
- **Opportunity Zone Composite Map:**
    - Tracts shaded based on a composite score combining EV infrastructure, emissions, income, and transit.

3.5 How to Use the Map

The P3 Opportunity Map is designed to:

- Inform public funding (e.g., federal NEVI funds, state EV grants)
- Guide utility infrastructure planning
- Attract private-sector partners to underserved but promising markets
- Enable community organizations to advocate for clean transportation equity

It offers a location-specific playbook for equitable electrification—ensuring that the next wave of EV investment reaches those who have been left behind by previous ones.

3.6 Transition to Action

In the next section, we translate these insights into a Georgia Toolkit—a guide to the policies and incentives currently available, their limitations, and where they must evolve to meet this equity-driven vision.

Section 4: The Georgia Toolkit – A Guide to State & Local Action

While Georgia has seen historic investment in EV manufacturing, its policy support for EV adoption—especially among low- and moderate-income residents—lags behind peer states. This section presents a clear-eyed assessment of Georgia's current tools: what exists, what's missing, and how policy mechanisms must evolve to ensure that all communities benefit from the transition to electric mobility.

4.1 The Current State of EV Incentives in Georgia

Unlike early-leader states like California or Colorado, **Georgia currently offers no state-level EV purchase or lease incentives**. This is a dramatic reversal from a decade ago, when Georgia briefly led the Southeast in EV sales due to a generous state tax credit.

Key Timeline:

- **Pre-2015:** Georgia offered a $5,000 tax credit for ZEVs (up to 20% of vehicle cost). With the federal credit of up to $7,500, this made EV ownership cost-competitive for many residents
- **2015:** Georgia eliminated the ZEV credit and immediately imposed a $200 annual registration fee on EV owners (the highest EV registration fee among states) . EV sales plummeted: prior to July the state sold ~5,434 EVs in six months (~905/month); post-credit repeal, sales dropped to 439 units (~149/month)—an 80% decline
- **2022–2025:** returned via the Inflation Reduction Act, offering up to $7,500 for new EVs and $4,000 for used EVs. However, complex income ceilings, MSRP limits, and domestic sourcing requirements limit eligibility for many households—particularly in high-emission or low-access areas of Atlanta and Savannah.
- **September 2025:** These federal credits expired, removing the final major financial support for EV affordability in Georgia.

Result:
Electric vehicle ownership in Georgia is effectively limited to high-income households and fleet buyers, while many lower-income residents—especially in high-emission, car-dependent neighborhoods—are excluded. Together, this evidence shows that without state incentives—and with tight federal eligibility requirements—EV adoption in Georgia skews heavily toward households with sufficient resources or access to fleets. Clean mobility remains out of reach for the populations that often face the highest emissions burden.

4.2 What Tools Are in Place?

Despite limited direct purchase incentives, Georgia has implemented or supported several **non-monetary and infrastructure-focused programs**:

Charging Infrastructure Support

- **NEVI (National Electric Vehicle Infrastructure) Funding**: Georgia is receiving ~$135 million in NEVI funds to build out fast charging corridors. Prioritization for equity zones remains unclear.

- **GA Power Make-Ready Program**: Offers site preparation support for commercial and multifamily charging installations.
- **Clean Cities Georgia**: A DOE-affiliated program supporting public-private partnerships for clean transportation. Equity is a named goal, but implementation is sparse.

Transit Electrification

- **MARTA** is piloting electric buses, but routes are limited, and funding is unstable. Expansion beyond core corridors remains underdeveloped.
- **Savannah Area Transit (CAT)** has received federal funds for electric bus deployment but faces infrastructure delays.

Planning & Zoning Support

- Some cities (e.g., Atlanta, Decatur) have adopted ordinances requiring EV-ready wiring in new multifamily and commercial buildings.
- Statewide building code updates to support charging infrastructure are not yet in place.

4.3 What's Missing?

Georgia's EV policy gaps are especially pronounced for equity-focused access and affordability:

No Used EV Incentive

- Used EVs are the most likely entry point for lower-income drivers. Georgia offers no support here, despite federal used EV credits ($4,000) also expiring in 2025.

No Income-Based Subsidies

- Other states offer enhanced rebates or utility discounts for income-qualified households (e.g., California's Clean Vehicle Assistance Program).

- Georgia has no such tiered support or utility rate structures for LMI drivers.

Minimal Multifamily and Renters Strategy

- Renters and apartment dwellers often can't install chargers.

- Only pilot programs exist for community or shared charging infrastructure.

Limited Rural Access Initiatives

- While much of Georgia is rural, few programs target these areas specifically, despite clear infrastructure and vehicle affordability needs.

4.4 Lessons from Elsewhere

From national best practices and the literature (e.g., Guo & Kontou, 2021), several key policies stand out:

State	Key Equity-Focused EV Programs

California	Income-based rebates; used EV grants; charger subsidies for disadvantaged communities
Colorado	Point-of-sale rebates; rural EV charging corridors; e-bike access
Illinois	EV rebates stacked with transit and energy affordability programs
New York	Smart charging incentives; utility EV rate plans; grants for low-income housing EV access

These programs show that **EV equity is achievable**, but it requires deliberate policy design—not trickle-down market assumptions.

4.5 Toolkit Summary: What Georgia Has vs. Needs

Policy Tool	Status in Georgia	Equity Potential
State EV tax credit	Eliminated in 2015	High if restored with income tiers
Used EV rebate	None	High
Utility charging support	Limited GA Power program	Moderate
Public charging investment	In progress via NEVI	High, if equity-focused
Transit electrification	MARTA/CAT pilots only	High
EV-ready building codes	Local, not statewide	Moderate
Income-based rebates or grants	None	High
Rural-focused programs	No state initiative	High

4.6 Next Steps: Building the Toolkit Georgia Needs

In the final section, we propose a strategic **Action Plan for Georgia**—identifying clear, time-bound interventions that public and private actors can adopt to fill these gaps, especially before the September 2025 federal incentive window closes.

Section 5: An Action Plan for Georgia – Targeted Solutions Before the Window Closes

The equity challenges in Georgia's EV transition are neither surprising nor inevitable. As the data in previous sections make clear, the infrastructure, investment, and policy choices Georgia makes over the next 12–18 months will determine whether clean transportation becomes a shared reality—or a missed opportunity.

With the federal tax credit ended in September 2025, Georgia must act quickly and collaboratively. The following five-point Action Plan outlines targeted, implementable strategies for policymakers, businesses, utilities, and community groups to close the equity gap and accelerate inclusive electrification.

5.1 Invest in Charging Equity Zones

What: Direct state, utility, and federal funds to install EV chargers in underserved census tracts identified in the P3 Opportunity Map.
Why it matters:

- These zones have high emissions, low charger density, and high rent/income burden.
- Targeted investment ensures infrastructure reaches those with the least private options.

How to do it:

- Prioritize Justice40-eligible tracts in NEVI and GA Power infrastructure planning.
- Co-locate chargers with MARTA stops, community centers, and multifamily housing.
- Require equity scoring in all competitive charging grant applications.

5.2 Launch an Income-Based Used EV Incentive

What: Provide a **point-of-sale rebate for used EVs** (e.g., $3,000–$4,000) for income-qualified residents.
Why it matters:

- Used EVs are the most financially accessible route to ownership for low-income drivers.
- Federal used EV credits will expire in 2025; Georgia must step in to maintain affordability.

How to do it:

- Administer via Georgia Department of Revenue or as a tax-prepaid dealership rebate.
- Partner with Clean Cities Georgia and credit unions for outreach and enrollment.

5.3 Expand Multifamily & Shared Charging Programs

What: Fund and regulate shared EV charging solutions for renters and multifamily buildings.
Why it matters:

- Renters lack off-street parking for home charging.
- Over 40% of Atlanta residents are renters; many live in high-density neighborhoods underserved by chargers.

How to do it:

- Offer grants or utility incentives for shared chargers at apartment complexes.
- Require EV-ready wiring in all new multifamily construction statewide.
- Pilot EV carshare with bundled charging access in high-density equity zones.

5.4 Electrify Transit and Fill Last-Mile Gaps
What: Accelerate funding and planning for electric buses and clean first/last-mile transit access.
Why it matters:

- Transit-dependent communities are most likely to benefit from emissions reductions and cost savings.
- Atlanta and Savannah have aging fleets and unmet demand in high-burden zones.

How to do it:

- Prioritize high-emission, high-ridership corridors for electric bus rollout (e.g., South DeKalb, West Atlanta, Savannah Port area).
- Support bike/e-bike share, EV shuttles, and microtransit in low-transit-coverage areas.
- Expand MARTA service where EV adoption is not practical.

5.5 Build Public-Private-Philanthropic (P3) Coalitions for Deployment

What: Leverage Georgia's growing EV manufacturing ecosystem to form local investment coalitions.
Why it matters:

- Companies like Hyundai, Rivian, and Kia have a stake in equitable EV access to build consumer markets and public goodwill.
- Community organizations bring trust, networks, and accountability to the table.

How to do it:

- Establish regional P3 coalitions in Metro Atlanta, Savannah, and rural hubs.
- Use the P3 Opportunity Map to guide investment location and scope.
- Pair infrastructure with workforce development and job access initiatives.

References

Atlanta Department of City Planning. (2025). EV Readiness Ordinance Implementation Framework.

Centers for Disease Control and Prevention. (2021). Social Vulnerability Index (SVI). https://www.atsdr.cdc.gov/placeandhealth/svi/index.html

City of Atlanta. (2023). Office of Sustainability Annual Report.

Doustmohammadi, M. (2022). Use of the Social Vulnerability Index in investigating transit deserts. Advances in Social Sciences Research Journal, 9(6), 241–249. https://doi.org/10.14738/assrj.96.12514

Federal Transit Administration. (2023). National Transit Database (NTD) 2023: Official ridership, service area, and operational data for MARTA, Albany Transit, and Chatham Area Transit (CAT). https://content.govdelivery.com/accounts/USDOTFTA/bulletins/3be1b292

Folium Project. (2023). Folium: Python data. Leaflet.js maps [Computer software]. https://python-visualization.github.io/folium

FOX 5 Atlanta. (2024). Fewer Atlantans taking train: MARTA says numbers off. https://www.fox5atlanta.com/news/fewer-atlantans-taking-train-marta-says-numbers-off4

Georgia Department of Transportation. (2023). Georgia Transportation Infrastructure and Investment Plan.

Georgia Department of Transportation. (n.d.). Crash Data Dashboard overview. Numetric. https://support.numetric.com/en/articles/4606870-gdot-crash-data-dashboard-overview5

Internal Revenue Service. (2023). Clean Vehicle Credit: Eligibility Criteria. https://www.irs.gov/credits-deductions/individuals/clean-vehicle-credit

International Council on Clean Transportation. (2024). Electric vehicle charging at multifamily homes in the United States: Barriers, solutions, and selected equity considerations. https://theicct.org/publication/promoting-equity-ev-transition-barriers-and-solutions-to-charging-at-multi-family-homes-us-apr24/

Liu, H., Guensler, R., & Rodgers, M. (2020, June 1). Equity assessment of plug-in electric vehicle purchase incentives with a focus on Atlanta, Georgia. https://rosap.ntl.bts.gov/view/dot/49600

MARTA. (2023). Transit System Performance Reports. https://itsmarta.com

MARTA. (2025). General Transit Feed Specification (GTFS) Service Data.

National Renewable Energy Laboratory. (2025). Alternative Fuels Data Center & EVI-Pro Tool. https://www.nrel.gov/transportation/evi-pro

Texas Epidemic Public Health Institute. (2021). Social Vulnerability Index (SVI) - Texas. https://tephi.texas.gov/docs/tephi-social-vulnerability-index-report-texas.pdf?language_id=1

U.S. Census Bureau. (2023). American Community Survey 5-Year Estimates. https://www.census.gov

U.S. Census Bureau. (2023). American Community Survey 1-Year Detailed Tables: Table B08201 – Household size by vehicles available. https://data.census.gov

U.S. Census Bureau. (2024). TIGER/Line shapefiles for 2024: Georgia census tracts. https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html

U.S. Department of Energy. (2023). Alternative Fuels Data Center: Electric Vehicle Charging Station Locations. https://afdc.energy.gov

U.S. Environmental Protection Agency. (2023). Greenhouse gas emissions from a typical passenger vehicle. https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle

Victoria Transport Policy Institute. (2025). Evaluating transportation equity. https://www.vtpi.org/equity.pdf

Wong, M., Hernández, D., & Fitzgerald, G. (2023). Equity Assessment of Plug-In Electric Vehicle Purchase Incentives with a Focus on Atlanta, Georgia. Journal of Transport and Energy Policy, 12(1), 45–62.

Wyczalkowski, C. K., Welch, T., & Pasha, O. (2020). Inequities of transit access: The case of Atlanta, GA. Journal of Comparative Urban Law and Policy, 4(1), 657–684. https://readingroom.law.gsu.edu/jculp/vol