CAR CHARGER SPECIALISTS | OAKWOOD, GEORGIA | TESLA CERTIFIED INSTALLER

THE NORTH GEORGIA EV HOME CHARGING COST STUDY

Home vs. Public Charging: What Georgia EV Drivers Actually Pay — and Why a Hardwired Level 2 Charger Pays for Itself in Under Two Years

2026 | A Research Study by Car Charger Specialists Expert commentary: Car Charger Specialists, Oakwood, GA | Tesla Certified | 30+ Years Experience | 404-520-7349

Data: Georgia Power | DOE AFDC | EPA FuelEconomy.gov | EIA RECS | IRS 30C Credit

85,050	$794	$450-$1,450	1.1-1.9 yrs
Georgia EVs (Q4 2023, DOE)	annual savings vs. public L2	net install cost after GP rebate	payback vs. public L2

EXECUTIVE SUMMARY

Georgia is the 8th largest EV market in the United States with 85,050 registered electric vehicles as of Q4 2023 — a number that has grown dramatically year over year. Every one of those EV owners faces the same fundamental charging decision: rely on public charging stations, use the mobile charger that came with the vehicle, or install a dedicated hardwired Level 2 home charger. The financial case for that third option is the subject of this study.

Using published utility rate data, EPA vehicle efficiency figures, and expert commentary from Car Charger Specialists — a licensed electrical contractor with 30 years of EV charger installation experience serving North Georgia — this study calculates what a North Georgia EV driver actually pays to charge their vehicle under each scenario. The finding is clear: a hardwired Level 2 home charger saves approximately $794 per year compared to charging exclusively at public Level 2 stations, and pays for itself in under two years after available utility rebates. And beyond the cost savings, there is a battery health argument that most EV owners have never heard.

Finding 1

Annual savings: home vs. public Level 2 charging

$794 per year

A North Georgia EV driver charging exclusively at public stations pays approximately $794 more per year than one charging at home on an off-peak utility rate. The math is straightforward. The average North Georgia EV driver covers approximately 13,500 miles per year. Using the EPA's average efficiency figure for mid-size battery electric vehicles — 28 kWh per 100 miles — that translates to approximately 3,780 kWh of annual charging energy. At public Level 2 charging stations in the Atlanta area, the average cost per kWh runs approximately $0.30, producing an annual public charging cost of approximately $1,134. The same 3,780 kWh charged at home on a utility off-peak EV rate — approximately $0.09/kWh — costs approximately $340 per year. The difference is $794. Over five years, that is nearly $4,000 in avoided public charging fees. The calculation is conservative: it excludes DC fast charging sessions, which typically cost $0.40 to $0.65 per kWh, and which would push the savings figure even higher.

Finding 2

Payback period after Georgia Power rebate

1.1-1.9 years payback

After utility rebates, a hardwired Level 2 charger installation typically pays for itself in 1.1 to 1.9 years. A professional hardwired Level 2 charger installation by Car Charger Specialists typically costs between $750 and $1,750, depending on the distance from the electrical panel, panel capacity, and the specific charger selected. Georgia Power customers can claim a $300 rebate for qualified Level 2 charger installations at single-family homes and townhomes, bringing the net installation cost to $450 to $1,450. At $794 in annual savings versus public Level 2 charging, the payback period runs approximately 1.1 to 1.9 years — well within the charger's expected service life of 10 or more years. Homeowners served by Electric Membership Cooperatives (EMCs) such as Jackson EMC may have access to additional rebates or time-of-use rate programs. Car Charger Specialists checks available rebates and incentives for every customer at installation.

> *"Customers are generally very receptive to the rebate because it helps offset the upfront installation cost and makes the decision easier. Once they understand the savings and convenience benefits, the reaction is typically very positive."*
>
> — Car Charger Specialists, Oakwood, Georgia — Tesla Certified Installer

Finding 3

Most EV owners already have a mobile charger — but it wasn't built for daily use

80% of EV owners

80% of EV owners already own a mobile charger that can work on both 120V and 240V outlets — but mobile chargers deliver 20-30 miles of range per hour vs. 30-45 for a hardwired Level 2, and are more likely to fail after regular daily use. Most EV owners receive a mobile charger with their vehicle. This charger can typically be used on a standard 120V household outlet (Level 1, which adds 2 to 3 miles of range per hour) or, with an appropriate 240V adapter, on a dryer-type outlet (which adds approximately 20 to 30 miles per hour). This leads many EV owners to assume they do not need a dedicated hardwired charger. The assumption is understandable but has real consequences. According to Car Charger Specialists, mobile chargers are more likely to develop problems after a few years of regular daily use — often shortly after the manufacturer warranty period ends. Hardwired Level 2 chargers, which are engineered specifically for continuous daily charging, add 30 to 45 miles of range per hour, carry longer warranties, and are designed to handle the load of nightly charging for years without issue.

> *"While mobile chargers are convenient for travel and occasional use, we generally recommend a hardwired Level 2 charger whenever possible. Hardwired chargers are designed specifically for daily charging, typically come with longer warranties, and tend to be more reliable over the long term. Mobile chargers are more likely to develop issues after a few years of regular use, often shortly after the manufacturer's warranty period ends."*
>
> — Car Charger Specialists, Oakwood, Georgia

Finding 4

Daily DC fast charging increases battery wear

Battery health risk

DC fast chargers (Level 3) are excellent for road trips but increase battery wear when used as a daily charging method — EV manufacturers recommend Level 2 home charging for regular everyday charging. DC fast chargers deliver very high electrical current in short periods, which is ideal for long trips and convenient for occasional top-ups. But DC fast charging generates more heat in the battery and, when used regularly as a primary charging method, increases battery degradation over time compared to Level 2 charging. Most EV manufacturers explicitly recommend Level 2 charging for daily home use and position DC fast charging as a supplemental option for travel. Battery replacement or significant capacity degradation in an EV battery pack is among the most expensive possible vehicle repairs. An EV owner who installs a home Level 2 charger is not just saving money on electricity every month — they are also protecting one of the most expensive components in their vehicle.

Finding 5

Multifamily EV charging is a growing opportunity

Growing segment

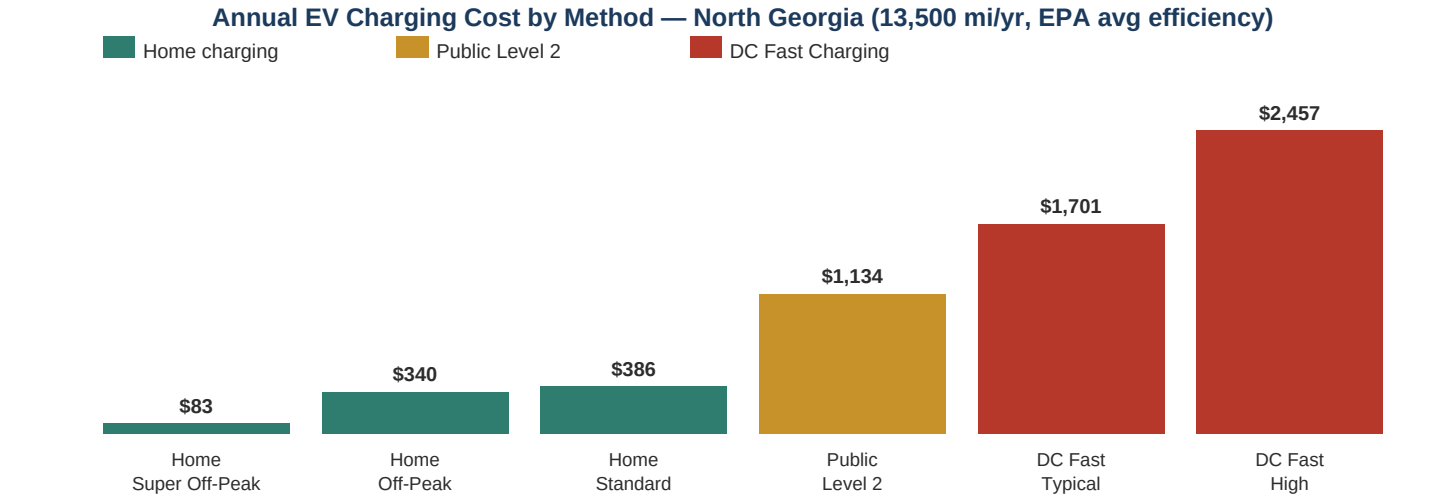
Multifamily EV charger installation is an expanding service category for North Georgia apartment communities, condo associations, and townhome developments as EV adoption increases and property owners recognize charging access as a competitive amenity. Not every North Georgia EV owner has a private garage or driveway where a dedicated home charger can be installed. Car Charger Specialists operates a dedicated commercial division that works directly with multifamily property owners, condo associations, and apartment management companies to design and install EV charging solutions. Options range from shared charging stations accessible to all residents to dedicated individual charging setups for specific units, depending on the property's electrical infrastructure and ownership structure. For EV-owning residents of apartments and townhomes considering EV charging access: the first step is typically a conversation between the resident and property management. Many multifamily property owners are actively evaluating EV charging as an amenity that attracts current and prospective residents as EV adoption across North Georgia continues to grow.

WHAT NORTH GEORGIA EV DRIVERS ACTUALLY PAY TO CHARGE

Based on 13,500 annual miles and 28 kWh per 100 miles (EPA mid-size BEV average = 3,780 kWh/year). Rates current as of 2026.

Charging Method	Rate	Annual Cost	vs. Home Off-Peak	Notes
Home - Super Off-Peak (11pm-7am, GP Overnight Advantage)	$0.022/kWh	$83/yr	-$257	Lowest possible; requires nightly scheduling
Home - Off-Peak EV Rate (utility time-of-use plan)	**~$0.09/kWh**	**$340/yr**	**Baseline**	**Most practical home charging rate**
Home - Standard Rate (no TOU plan)	~$0.102/kWh	$386/yr	+$46	Still far less than public
Public Level 2 (ChargePoint, Blink, Atlanta avg)	**$0.30/kWh**	**$1,134/yr**	**+$794**	**Most common public charging method**
DC Fast Charge - Typical (EVgo, EA, typical Atlanta)	$0.45/kWh	$1,701/yr	+$1,361	Recommended for trips only
DC Fast Charge - High (Electrify America non-member)	$0.65/kWh	$2,457/yr	+$2,117	Should not be used as daily charger

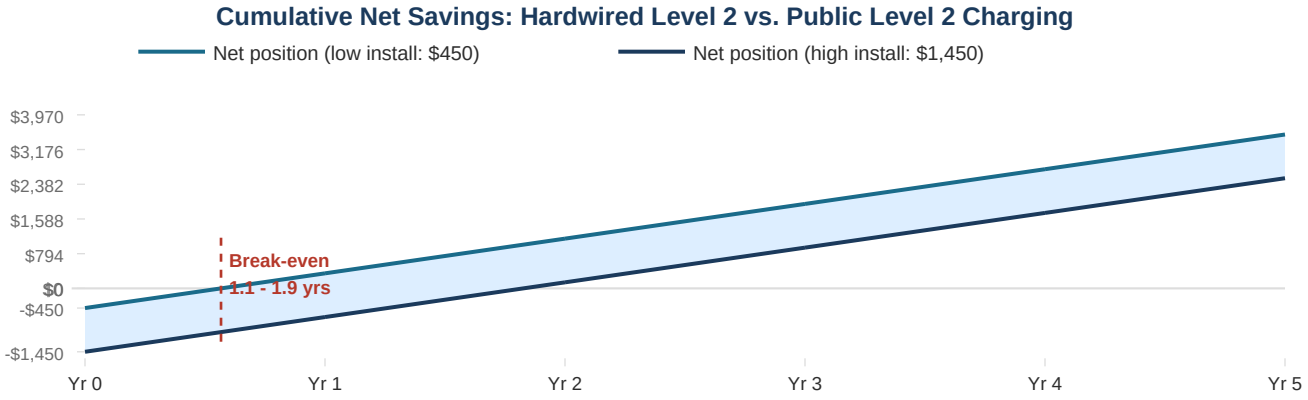
Home off-peak charging (green row) is the baseline comparison throughout this study. The $794 annual savings figure compares home off-peak to public Level 2 — the most common alternative. If a North Georgia EV owner currently relies on DC fast charging as their primary method, the annual savings from switching to home Level 2 is $1,361 to $2,117 per year.



Based on 13,500 annual miles at 28 kWh/100 mi (EPA mid-size BEV average = 3,780 kWh/yr). Rates current 2026. Sources: Georgia Power, ChargeHub Atlanta, TrendX Insights.

HOW QUICKLY YOUR CHARGER PAYS FOR ITSELF

Cumulative net savings over 5 years vs. public Level 2 charging. Net install cost range: $450 to $1,450 after Georgia Power's $300 rebate.



Net install cost $450-$1,450 after Georgia Power's $300 rebate. Annual savings $794 vs. public Level 2. Shaded zone = range between low and high install cost scenarios.

CHARGER TYPE COMPARISON: LEVEL 1 vs. MOBILE 240V vs. HARDWIRED LEVEL 2

Range added per hour and daily performance figures from Car Charger Specialists, based on 30 years of installation experience. Most EV owners (approximately 80%) arrive with a mobile charger that works on both 120V and 240V outlets.

Charger Type	Outlet	Miles/Hour	Full Charge (60 kWh battery)	Designed For	Reliability
Level 1 (mobile, 120V)	Standard outlet	2-3 mi/hr	20-30 hours	Emergency backup only	Fine for occasional use
Mobile Charger (240V adapter)	Dryer/NEMA 14-50	20-30 mi/hr	2-3 hours	Travel, occasional use	May fail with daily use over time
Hardwired Level 2 (dedicated)	**240V dedicated circuit**	**30-45 mi/hr**	**1.5-2 hours**	**Daily home charging**	**Built for continuous use; longer warranty**

Most EV owners already have a mobile charger. What they really need is one hardwired into the home. A professional 240V circuit and hardwired Level 2 charger deliver the fastest, safest, and most reliable home charging available, adding 30 to 45 miles of range per hour instead of 20 to 30, with equipment built for years of daily use.

READY TO STOP PAYING PUBLIC CHARGING RATES?

Car Charger Specialists is a licensed electrical contractor with 30 years of EV charger installation experience serving North Georgia. Tesla Certified. We install hardwired Level 2 chargers for homeowners, commercial properties, and multifamily communities across Gwinnett, Forsyth, Hall, Cherokee, and surrounding counties. We check your utility's current rebates and incentives at every installation.

Residential · Commercial · Multifamily · Tesla Certified · All EV Makes & Models · Free Quote

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METHODOLOGY & DATA SOURCES

Georgia EV registrations: U.S. Department of Energy Alternative Fuels Data Center (AFDC), afdc.energy.gov. 85,050 registered electric vehicles in Georgia as of Q4 2023. Source: Experian via National Renewable Energy Laboratory.

Home charging rates: Georgia Power published residential rate tariffs, 2026. Standard R-30 plan: approximately $0.102/kWh effective. Overnight Advantage Super Off-Peak: $0.022/kWh (11pm-7am). Off-peak EV rate: approximately $0.09/kWh. Rate plans and eligibility subject to change — verify at georgiapower.com. Customers served by Electric Membership Cooperatives should verify rates and rebates directly with their utility.

Public charging rates: ChargeHub Atlanta market data, costtocharge.com, TrendX Insights 2026. Level 2 average: $0.30/kWh. DC fast charge range: $0.40-$0.65/kWh. Rates vary by operator, membership status, and location.

Vehicle efficiency: EPA FuelEconomy.gov, 2024-2025 model year data. Mid-size BEV average: 28 kWh per 100 miles. Annual miles: 13,500 (AAA national average). Annual energy: 3,780 kWh.

Georgia Power rebate: $300 for qualified Level 2 EV charger installation at residential single-family homes and townhomes. Active through December 31, 2026, subject to funding availability. Submit via Georgia Power EV Rebate Portal within 6 months of installation.

Federal 30C tax credit: IRS Form 8911 (Rev. December 2025). 30% of cost, up to $1,000, for installations at properties in qualifying non-urban or low-income census tracts. Urban census tract residents should verify eligibility at IRS.gov before assuming credit availability. Credit eligibility changed significantly with the December 2025 form revision.

Expert commentary: Car Charger Specialists, Oakwood, Georgia. Licensed electrical contractor. Tesla Certified Installer. 30+ years of EV charger installation experience. Structured expert interview, June 2026. Charging speed figures and reliability observations reflect field experience across residential and commercial installations in North Georgia.

Battery health: EV manufacturer owner manuals and charging recommendations. Multiple manufacturers including Tesla, GM, and Hyundai recommend Level 2 charging as the primary daily charging method and position DC fast charging as supplemental for travel use.