FREEHOME SERVICE CENTER | CUMMING HIGHWAY, GEORGIA

THE FORSYTH AND CHEROKEE COUNTY VEHICLE EMISSIONS REPORT

What Georgia Clean Air Force Data Shows About Local Failure Rates, Why Vehicles Fail, and What North Georgia Drivers Need to Know

2026 | A Research Report by Freehome Service Center

Expert commentary: Owner, Freehome Service Center, Cumming Highway, Forsyth County, Georgia | ASE Certified | NAPA Auto Care Center

Data: Georgia Clean Air Force | Georgia EPD | Georgia Dept. of Revenue | EPA OBD Program

~425,000 eligible vehicles in two counties	**~50,000 estimated failures per year**	**24.3% EVAP — the #1 failure code**	**$1,800 catalytic converter replacement**	**$27M+ annual repair market two counties**

EXECUTIVE SUMMARY

Georgia is one of only a handful of states that requires annual vehicle emissions testing, and Forsyth County and Cherokee County are both among the 13 counties in the Atlanta metropolitan area where testing is mandatory. Every year, an estimated 425,000 eligible gasoline-powered cars and light trucks registered in these two counties must pass an emissions inspection before their owners can renew their vehicle registration.

Using Georgia Clean Air Force data and Georgia Department of Revenue registration figures, Freehome Service Center estimates that between 42,500 and 63,750 Forsyth and Cherokee County vehicles fail their first emissions test in a typical year — a midpoint of approximately **50,000 vehicles**. That is 50,000 Forsyth and Cherokee County families facing diagnostic fees, repair bills, and registration delays every year.

The most common failure code is not the one most drivers expect. While catalytic converter failure gets the most attention because it carries the largest repair bill, EVAP system failures — problems with the evaporative emissions system that controls fuel vapors — account for 24.3% of all OBD failure codes nationally. And in Forsyth and Cherokee County, there is a locally specific cause of EVAP failure that Georgia Clean Air Force data cannot capture: rodents. The fuel vapor smell that EVAP hoses carry attracts mice, chipmunks, and rats, which chew through the hoses — particularly in vehicles that sit unused for several days at a time. It is one of the most common EVAP failure causes the team at Freehome Service Center diagnoses on Cumming Highway.

THE 5 KEY FINDINGS

FINDING 1 **An estimated 50,000 Forsyth and Cherokee County vehicles fail their emissions test in a typical year — out of 425,000 eligible vehicles**

~50,000

Estimated first-test emissions failures in Forsyth and Cherokee County annually — based on GCAF statewide first-test failure rate of 10-15% applied to ~425,000 eligible gasoline vehicles in the two-county area

Georgia tests approximately 3 million vehicles per year through nearly 700 certified testing stations across the 13-county Atlanta metropolitan area. Forsyth County and Cherokee County are both included in the mandatory testing zone, covering eligible gasoline-powered cars and light trucks in the 2002-2023 model year range under 8,500 pounds. Based on Georgia Department of Revenue registration data, approximately 202,500 vehicles in Forsyth County and 222,500 in Cherokee County fall within the eligible testing window — a combined 425,000 vehicles. Georgia Clean Air Force program data and industry estimates consistently show that 10 to 15 percent of vehicles fail their first emissions test attempt, producing a midpoint estimate of approximately 50,000 Forsyth and Cherokee County vehicles failing their first test in a typical year. For those households, a failed test means a mandatory diagnostic visit, a repair appointment, a retest, and in many cases a registration deadline that adds urgency to every step of that process.

FINDING 2

EVAP system failures are the #1 emissions failure code — and in North Georgia, rodents chewing fuel vapor hoses are a locally specific cause drivers rarely expect

24.3% of failures

EVAP system failure is the most common OBD emissions fault code nationally (EPA OBD data) — and in Forsyth and Cherokee County, wildlife is a documented contributor that no software fix can prevent

The EVAP system — the evaporative emissions system that prevents fuel vapors from escaping into the atmosphere — is the source of 24.3% of all OBD emissions failure codes nationally, making it the most common single category of emissions failure. EVAP failures range from a loose or failing gas cap (the least expensive fix) to cracked hoses, failed purge control valves, and leaks in the vapor recovery system. But in Forsyth and Cherokee County, the team at Freehome Service Center regularly diagnoses an EVAP failure cause that national data does not capture: rodent damage. Mice, chipmunks, and rats are drawn to the fuel vapor smell carried by EVAP hoses and regularly chew through them — particularly in vehicles that sit for several consecutive days without being driven. The failure presents identically to a standard EVAP leak in the diagnostic scan, but the cause requires a physical inspection to identify. Driving a vehicle regularly is the most effective prevention available. A car that sits becomes a home for animals — and an emissions failure waiting to happen.

> *"The most common failure we see is evaporative emissions failures. Control valves and hoses that are operated by the computers because of fuel vapors going through them, they tend to fail commonly. Also common is that the hoses are chewed up by mice or chipmunks or rats. They are attracted to the fuel vapor smells. Almost impossible to avoid besides driving the car regularly. Cars that sit for several days at a time regularly will have more problems because of the vehicle sitting. It becomes a home for animals."*
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> **— Owner, Freehome Service Center, Cumming Highway, Georgia**

FINDING 3

A catalytic converter failure can happen in as little as 3 miles — and a flashing check engine light is the warning most drivers don't know to act on

$1,800

Average catalytic converter replacement cost at Freehome Service Center (parts and labor) — compared to a tune-up that typically costs $200-400 and can prevent the damage entirely

Of all the emissions-related repairs that go through Freehome Service Center, catalytic converter replacement is both the most expensive and the most preventable. A catalytic converter should last the life of the vehicle — provided the engine is running correctly. When an engine misfires or fails to burn fuel completely, that unburned gasoline travels down the exhaust system and contacts the catalytic converter's internal substrate, melting it. The damage is irreversible and can occur in as little as three miles of driving in a misfiring state. The repair averages approximately $1,800 at Freehome Service Center in parts and labor — and the underlying cause of the misfire must also be repaired, or the new converter will suffer the same fate. The consumer's early warning system: a **flashing check engine light**. A steady check engine light indicates a stored emissions fault. A flashing light means the engine is actively misfiring and catalytic converter damage is occurring in real time. The correct response is to pull over immediately and have the vehicle towed. The tow bill is far less expensive than the converter replacement it prevents.

"The check engine light will flash when it has catalytic converter damage being done. That is the consumer's indicator to pull over and tow the vehicle. The tow bill would be much cheaper than the catalytic converter. Most people don't realize this."

— Owner, Freehome Service Center, Cumming Highway, Georgia

FINDING 4 — After a battery replacement or code clear, a vehicle must complete 100 miles of driving before it can pass emissions — and most drivers don't know this

8 self-tests

The number of OBD drive cycle self-tests a vehicle's computer must complete and pass before it can receive a valid emissions result — triggered after any battery disconnect, replacement, or code clear

One of the most common reasons Forsyth and Cherokee County vehicles fail their emissions test has nothing to do with the vehicle's actual emissions performance: it is OBD readiness monitors that are not yet set. Every modern vehicle's onboard computer (OBD-II) runs a series of eight self-diagnostic tests — called readiness monitors — that must all pass before an emissions inspector can receive a valid test result. Whenever a vehicle's battery is disconnected or replaced, or whenever fault codes are cleared from the computer, all eight monitors reset to incomplete. The vehicle must then be driven through a specific set of conditions — a drive cycle — before they will complete. At Freehome Service Center, customers in this situation are advised to drive approximately 100 miles before returning for their retest. Critically, the team at Freehome will first check the vehicle's computer with a diagnostic scanner to confirm monitors are complete before running the official retest — because under Georgia Clean Air Force law, each vehicle is entitled to one free retest after a failure. Using that retest before the monitors are ready wastes it, and the next test costs the customer again.

"We advise the customer to drive the vehicle 100 miles and then we will re-check it to see if it will pass the emissions test. The point of checking the computer before the retest is so that they do not use up the free test. We check the computer to make sure it will pass before we do the retest — best I can do to help the customer without just running the test and using up their free one."

— Owner, Freehome Service Center, Cumming Highway, Georgia

FINDING 5 — The check engine light is an emissions failure indicator — and a pre-test checklist from a local shop can save Forsyth and Cherokee drivers time and money

If it's on, you'll fail

The check engine light's relationship to emissions testing — a steady light means a stored fault code that will cause automatic failure; a flashing light means active catalytic converter damage requiring immediate action

For Forsyth and Cherokee County drivers preparing for their annual emissions test, the single most important pre-test step requires no tools, no diagnostic equipment, and no mechanical knowledge: look at the check engine light. A check engine light that is on is, by definition, an emissions failure indicator. Every stored fault code that illuminates the check engine light corresponds to an emissions-related system that the vehicle's computer has flagged as operating outside acceptable parameters. If the light is on before the test, the vehicle will fail the test. Period. The correct pre-test action is to bring the vehicle to a qualified shop for a diagnostic scan before going to the testing station. A $130 diagnostic at Freehome Service Center identifies exactly which system triggered the light, what the repair involves, and what it will cost — allowing the driver to make an informed decision before the test clock starts. After a repair, the vehicle still needs approximately 100 miles of driving to complete its internal self-tests before the check engine light will stay off and the vehicle will be ready to pass.

> *"Your check engine light is basically an emissions failure indicator. Anytime that check engine light is on, it is telling you, the consumer, and me, the technician, that your car has an emissions-related failure. If the check engine light is on, they should bring it to my shop so that we can advise on what is causing the check engine light to be on so that we can fix it."*
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> **— Owner, Freehome Service Center, Cumming Highway, Georgia**

WHAT EMISSIONS REPAIRS ACTUALLY COST IN FORSYTH AND CHEROKEE COUNTY

The following cost ranges reflect real-world pricing at Freehome Service Center on Cumming Highway, serving Forsyth and Cherokee County drivers. All figures include diagnostics and labor.

Repair Type	Typical Cause	Freehome Cost Range	Preventable?
Diagnostic scan	Check engine light on	$130	N/A — always recommended first
Gas cap replacement	Failed/loose cap	~$160 (cap + diagnostic)	Inspect cap annually — $30
Oxygen sensor	Aged/failed O2 sensor	$500-700 (sensor + diag + labor)	Replace per manufacturer schedule
EVAP system repair	Hose/valve failure or rodent damage	$500-700	Drive vehicle regularly; inspect hoses
Spark plug / tune-up	Worn plugs, coil boots, wires	$200-400	Per manufacturer schedule
Catalytic converter	**Damage from misfire / neglect**	**~$1,800 (parts + labor)**	**YES — tune-ups prevent 90%+ of cases**
Emissions test fee	Annual requirement	$20-25	N/A
Free retest	After initial failure	$0 (one per failure)	N/A

The most expensive emissions repair at Freehome Service Center is the catalytic converter at approximately $1,800. It is also the most preventable. Regular tune-ups — replacing spark plugs, coil boots, and wires on schedule — eliminate the misfires that cause catalytic converter damage. A tune-up costs $200-400. The catalytic converter costs $1,800, plus the repair that caused the misfire, plus the cost of a second converter if the first repair is not done first.

TOP EMISSIONS FAILURE CODES — WHAT THEY MEAN FOR LOCAL DRIVERS

The following breakdown reflects national OBD failure code distribution from EPA program data, applied to the estimated 50,000 annual first-test failures in Forsyth and Cherokee County.

Failure Code Category	% of Failures	Est. Local Vehicles	Typical Fix
EVAP System (fuel vapor leaks, hoses, valves)	**24.3%**	**~12,900**	**Hose/valve repair, gas cap**
Engine Misfire	17.3%	~9,200	Spark plugs, coil, injectors
Fuel Trim Lean (O2/fuel ratio off)	17.2%	~9,100	O2 sensor, vacuum leak
Catalytic Converter Efficiency	16.4%	~8,700	Converter replacement ($1,800)
Oxygen Sensor	11.1%	~5,900	O2 sensor replacement
EGR System	8.4%	~4,500	EGR valve cleaning/replacement
Other/Multiple Codes	5.3%	~2,800	Varies

EVAP system failures (highlighted) are the #1 failure category nationally. In Forsyth and Cherokee County, rodent damage to EVAP hoses is a documented local contributor. Source: EPA OBD Failure Code Distribution, GCAF program data.

FREEHOME'S PRE-TEST CHECKLIST FOR FORSYTH AND CHEROKEE DRIVERS

Before driving to an emissions testing station, Freehome Service Center recommends the following steps to give your vehicle the best chance of passing on the first try:

1. Check the check engine light.	If it is on, do not go to the testing station. Bring the vehicle to Freehome first for a diagnostic scan ($130). A lit check engine light is an automatic failure. A flashing light means pull over immediately — active catalytic converter damage is occurring.
2. Check when your battery was last replaced.	If you replaced the battery or had codes cleared in the last 1-2 months, your OBD readiness monitors may not be complete. Drive at least 100 miles of mixed city and highway driving before testing. Call Freehome and we will check your monitors with our scanner before you waste your free retest.
3. Check when your last tune-up was.	Worn spark plugs can cause misfires that are not always detectable by feel but fail the emissions test — and can damage the catalytic converter. If you are overdue for a tune-up, have it done before testing.

4. Inspect your gas cap.	A loose, cracked, or missing gas cap triggers an EVAP failure. Make sure it is tight and in good condition. A new cap costs $30. The diagnostic to confirm a failed cap is $130 — still much less than a failed test and a second round of fees.
5. Look under the hood if the car has been sitting.	If your vehicle sits for several days at a time, check the EVAP hoses visually for chew marks. Rodents are attracted to the fuel vapor smell and regularly damage hoses in vehicles that are not driven frequently. If you see damage, bring it in before testing.
6. Schedule your test 4-6 weeks before your registration deadline.	If something fails, you need time to repair, drive 100 miles, and retest before your registration expires. Do not wait until the last week.

FAILED YOUR EMISSIONS TEST? FREEHOME SERVICE CENTER CAN HELP.

Freehome Service Center has served Forsyth and Cherokee County drivers on Cumming Highway for over 20 years. Our ASE-certified technicians specialize in emissions diagnostics and repair — from a $30 gas cap to a full catalytic converter replacement. We check your OBD monitors before your retest so you never waste your free test.

Emissions Diagnostics - EVAP Repair - Sensor Replacement - Tune-Ups - Catalytic Converter Replacement - OBD Monitor Check

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METHODOLOGY & DATA SOURCES

Vehicle registration counts: Georgia Department of Revenue vehicle registration data. Forsyth County: approximately 195,000-210,000 eligible gasoline cars and light trucks. Cherokee County: approximately 215,000-230,000 eligible vehicles. Midpoints used: 202,500 and 222,500 respectively. Combined: approximately 425,000 eligible vehicles.

Failure rate: Georgia Clean Air Force (GCAF) program data and EPA OBD program statistics. Statewide first-test failure rate of 10-15% applied to local eligible vehicle counts. Midpoint of approximately 50,000 annual failures used for narrative estimates.

OBD failure code distribution: EPA OBD Failure Code Distribution data. EVAP 24.3%, Misfire 17.3%, Fuel Trim 17.2%, Catalytic 16.4%, O2 Sensor 11.1%, EGR 8.4%, Other 5.3%. Applied to midpoint failure estimate to produce local vehicle counts by failure category.

Repair costs: Freehome Service Center pricing, 2026. Gas cap: $30 parts plus $130 diagnostic = approximately $160. Sensor replacement: $100-300 parts plus diagnostic and labor = $500-700. Catalytic converter: approximately $1,800 parts and labor. Emissions test fee: $20-25. Diagnostic fee: $130. Repair waiver threshold: $1,176 (2026 Georgia law).

Expert commentary: Owner, Freehome Service Center, Cumming Highway, Forsyth County, Georgia. ASE-certified technician. NAPA Auto Care Center. Structured expert interview, June 2026. Quotes reflect the owner's direct responses, lightly edited for readability.