

**Q: Are golf cart type vehicles street legal in Georgia?**

I'm trying to find a 1-person vehicle, either electric or gasoline-powered, that I can drive 6.5 miles to work. The highest speed limit is 45 mph, so if this golf-cart, Club Cart, or ATV thing could keep up with the flow of traffic,..... (1 answer - asked 13 months ago)

*A: Yes, but only on roads up to 35mph*

*Status of State Licensing / Registration of LSV's*

## **GEORGIA**

Governor Roy Barnes (D) signed HB1389 into law on April 25, 2002. The measure allows LSVs to be operated on roadways with posted speed limits of 35 mph or less and requires the operator of LSVs on highways to display an amber strobe light so as to warn approaching travelers to decrease their speed because of the danger of colliding with such vehicle. Such amber strobe light shall be mounted in a manner so as to be visible under normal atmospheric conditions from a distance of 500 feet from the front and rear of such vehicle.

<http://www.quovis.com/regulations.htm>

### **Low Speed Vehicle (LSV)**

The National Highway Traffic Safety Administration (NHTSA) under rule 571.500 Standard No. 500 defines a Low-speed vehicle: "Low-speed vehicle means a 4-wheeled motor vehicle, other than a truck, whose speed attainable in 1.6 km (1 mile) is more than 32 kilometers per hour (20 miles per hour) and not more than 40 kilometers per hour (25 miles per hour) on a paved level surface." The NHTSA has ruled that LSV'S can operate on certain roadways, if they meet the 571.500 safety standards and:

A low-speed vehicle may be operated only on streets where the posted speed limit is 35 miles per hour or less. This does not prohibit a low-speed vehicle from crossing a road or street at an intersection where the road or street has a posted speed limit of more than 35 miles per hour.

A low-speed vehicle must be registered and insured and must display a license plate.

Any person operating a low-speed vehicle must have in his or her possession a valid driver's license.

<http://www.quovis.com/aboutlsv.htm>

some links for more information...

The federal government offers a 10 percent tax credit on the purchase price of electric vehicles. Some states, though not Florida, offer additional rebates. In Georgia, buyers get a \$5,000 tax credit when they buy or lease electric vehicles.

[http://www.sptimes.com/2003/08/15/Brandontimes/Batteries\\_included.shtml](http://www.sptimes.com/2003/08/15/Brandontimes/Batteries_included.shtml)

What's the Difference Between a Golf Cart and a NEV?

[http://golfcarportal.com/education/defference\\_between.php](http://golfcarportal.com/education/defference_between.php)

<http://gostreetlegal.com/> A NEV dealer in Georgia

[http://en.wikipedia.org/wiki/Neighborhood\\_electric\\_vehicle](http://en.wikipedia.org/wiki/Neighborhood_electric_vehicle)

[http://en.wikipedia.org/wiki/Low-speed\\_vehicle](http://en.wikipedia.org/wiki/Low-speed_vehicle)

<http://askville.amazon.com/SimilarQuestions.do?req=golf+carts+legal+Georgia+State+Parks>

# Golf carts en route to an OK

All

By MARY MacDONALD  
mmacdonald@ajc.com

Roswell is gaining a little Peachtree City cache.

City leaders today are expected to approve an ordinance making golf carts street-legal for residential areas where roads have speed limits of 25 mph.

The push came from a band of golfers who live around the Country Club of Roswell, have been using their carts on the roads for years and have unwittingly broken the law.

After city police warned a few about riding their carts in the street, golfers reached out to City Hall.

They found a friend in Becky Wynn, a city councilwoman and golfer, who said her own cart is "candy apple red" and resembles a tiny

Mercedes.

Wynn, who lives in the area, said the golf cart is the neighborhood's travel mode of choice.

At Christmas, residents go "cart-o-ling" door-to-door. They hop into them for progressive dinner parties and try to outdo each other decorating them for an annual Fourth of July parade.

Many golfers say they use them daily. Most are customized. Some are winterized with space heaters and plastic window covers.

Once the golfers understood they were banned from city roads, Wynn said, the next question became: "What can we do to do this?"

As it turns out, a simple one-page ordinance. City attorneys looked into it

and found two other cities allow golf carts on roads: Peachtree City and Hahira, in South Georgia.

Although sought by just one Roswell neighborhood, the new law will impact all who live in the city's four golf course communities.

There are some limitations. If the golf cart has no headlights, it can't be driven after dark. And they may only be used on residential streets within subdivisions. No tooling around on Holcomb Bridge Road.

Torey Callicutt bought her husband a cherry red-colored cart as a Father's Day gift but regularly gets behind the wheel herself. She takes it out every day to ferry their kids to various places around the neighborhood.

"It's actually quicker than being in a car," she said.



Gaines  
13th ann  
The Lan  
course. T  
dors offe

9.27.09

# Invasion of the Golf Carts

## As Electric Vehicles Migrate Onto Public Streets, Should We Be Worried?

By JONATHAN WELSH

In a trend that has the car-safety establishment worried, golf-cart-like vehicles are leaving the confines of gated communities and invading public streets.

And most of the time, it's perfectly legal.

Dan Karleskint, a retired software developer in Lincoln, Calif., near Sacramento, bought one of these battery-powered vehicles—which are also known as “neighborhood electric vehicle,” or NEVs—to cut his fuel costs and become a greener driver. His model, a Chrysler GEM, has a top speed of 25 miles an hour, the federal limit for NEVs. Typically, state and local laws allow them on public roads with speed limits of 35 mph or lower.

“I put about 4,000 miles a year on my NEV, and my BMW never leaves the garage unless we go out of town,” says the 67-year-old Mr. Karleskint.

### Shuttling Children

Drivers are increasingly buying electric vehicles, typically as second or third cars, and using them for grocery shopping, short commutes and shuttling children to and from school. A growing number of municipalities in states such as Arizona, Florida and Colorado have embraced the vehicles. Some towns have built separate NEV lanes and parking spaces. Texas recently started allowing NEVs on roads with speed limits up to 45 mpg.

Most NEVs cost between \$8,000 and \$20,000 and can travel 30 to 40 miles on a charge. Their performance varies depending on terrain, temperature, payload and other factors. They typically use lead-acid batteries that take about six to 10 hours to charge when plugged into a wall outlet. Special fast-charge systems allow charging in an hour or so. Some vehicles use other types of batteries, including lithium ion models, that offer longer ranges and charge faster.

The vehicles have been common for many years in gated communities and resorts, but more recently have begun appearing on public roads, where they have to share the pavement



A Think electric car cruises the streets of Lincoln, Calif.

with faster-moving gasoline-powered cars and trucks—raising numerous concerns. The Insurance Institute for Highway Safety calls NEVs “souped-up golf carts” and says allowing them on higher-speed roads amid heavier, faster traffic represents a safety nightmare waiting to happen. The research group, which is funded by the insurance industry, says it may start running crash tests on NEVs to show how they fare in collisions with passenger cars.

Firm figures for the number of NEVs on the road and the rate of sales growth are difficult to pin down. Some people close to the industry say roughly 100,000 such vehicles are in use, while other estimates are higher. Global Electric Motorcars, the Chrysler LLC unit that builds GEM electric vehicles and is the leading manufacturer, says it has sold about 38,000 vehicles in the U.S. GEM says it has recorded double-digit percentage growth in sales for the past five years. Sales grew at an especially high rate last summer as fuel prices reached \$4 per gallon. Other popular models include the Think City and Think Neighbor, built by a former unit of Ford Motor Co., and such small manufacturers as Zenn Motor Co. and Wheego Electric Cars Inc.

The National Highway Traffic Safety Administration says it is monitoring the growth of NEV sales and is looking into ways to more tightly regulate the vehicles. Joe Nolan, an IIHS spokes-

man, says the growing consumer interest in NEVs doesn't yet represent a safety crisis, but that could change as more start to appear on public roads. The fact that the vehicles can drive no faster than 25 mph doesn't make them safe, says Mr. Nolan, as serious injuries and fatalities occur at low speeds in conventional cars that are far more crashworthy than NEVs, which, unlike larger cars, don't have to meet stringent crash-test standards.

### High-Speed Roads

Tom Beaulieu, who drives a GEM on the streets of Santa Monica, Calif., in Los Angeles County, dismisses the safety concerns. People who drive NEVs know they have to avoid fast-moving traffic and typically choose their routes based on light traffic and low speed limits, says Mr. Beaulieu, a 56-year-old advertising agency owner. He says only “idiots” would drive NEVs on high-speed roads.

A Chrysler spokesman says its GEM vehicles meet all federal safety regulations for low-speed vehicles. Wheego spokesman Les Seagraves says buyers have to use common sense in deciding “where it is appropriate and safe” to drive the cars and which roads they should avoid. “This is your errand car or your city car. This is not a car that is going to replace your number-one vehicle,” he says.

NEV users are quick to point out the overall cost of owning an electric car can be one-third the

cost of operating gasoline cars. Based on the fossil-fuel energy used to charge their batteries, makers say, the typical NEV logs an equivalent fuel economy of 150 miles per gallon.

People have been using golf carts on low-speed roads within communities built around golf courses for decades. Sometimes golf-cart drivers would venture outside their enclosed neighborhoods to run short errands, though the practice was sometimes illegal. As gated communities proliferated, manufacturers began selling golf carts with creature comforts like doors to ward off the chill, and safety features like taillights and seatbelts.

Under federal safety rules, NEVs are classified as “low-speed vehicles.” Such vehicles are exempt from almost all of the safety standards that apply to passenger cars. LSVs don't need to have bumpers or doors and don't have to pass tests of crashworthiness. Because they usually weigh about 1,200 pounds—roughly a third as much as many cars—safety experts say there is almost no way for vehicles to stand up to a collision with a 4,000-pound sedan or sport-utility vehicle.

The National Highway Traffic Safety Administration says it is concerned about the practicality of NEVs sharing roads with larger, faster traffic. There have also been cases where vehicles were sold without the required equipment that limits them to 25 mph, or in which owners have removed it.

Some NEV owners say such stories are overblown, and point to a less obvious feature of the vehicles: how enjoyable they are to drive. Mr. Beaulieu, of Santa Monica, says his 2002 GEM is “the most fun vehicle” he has driven, and that he rarely takes out his Range Rover SUV.

Mr. Karleskint, of Lincoln, says driving his NEV has made him more aware of his surroundings. “There's a place in our town you come around a curve and dip down into a low-lying area where you can feel the difference in temperature,” he says. “It's a little thing you would never notice in a car.”

...from losses on mortgage c...  
 ...faults, Fannie said payments  
 ...with incre...  
 ...and Freddie Mac's cap...

...provisions added  
 ...several weeks  
 ...are supposed to quell fears  
 ...out the firms' ability to  
 ...weather the housing turmoil.  
 ...The law allows the Treasury De-

# You Know Gas Prices Are High When Texans Start Driving Golf Ca

*Continued from the front page*  
 cars, have exploded to about 50 a day from just five six months ago. Shipments at Chrysler LLC's Global Electric Motors, or GEM, which made the Peterses' cars, have jumped 30% from last year's second quarter, with some of its 150 dealerships around the country tripling their sales.

Switching to tiny electric cars requires some big adjustments. With three children, the Peterses must use both their little cars when they take family outings. Every trip is an adventure into the land of the giants where they're dwarfed in traffic by SUVs and trucks. They've had to learn how far—about 30 miles—they can go on a single charge. The night they got their first car, they roused a friend dressed in his pajamas for a test drive and he wound up having to help them push the car home.

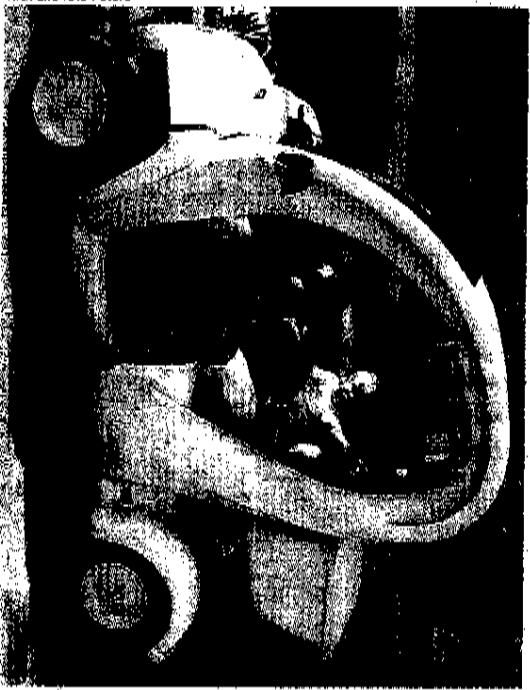
The cars aren't for long-distance travel. On average, Andrew Kuney, also of Houston, can go about 25 miles on one charge in his The Tac-shaped, three-wheeled electric car, which is technically a motorcycle and goes up to 40 mph. He sometimes plugs in his car at friends' homes for a fresher charge while he visits.

To fit his 6-foot-2 frame into the tiny driver's compartment so that he can see properly out the windshield, Mr. Kuney has to recline in his seat.  
 It's a price he doesn't mind paying considering the gas savings—more than \$100 a month—and the unexpected bonuses. "You wouldn't think it, but it's a chick-magnet," says the unmarried, 40-year-old chemical engineer, adding that women—and pretty much everybody else, too—approach him to talk about his unusual car.

## Local Sensation

Owners now for two years, Elaine Triplett and her husband are pioneers in their small East Texas hometown of Palestine, where their tiny electric pickup is a local sensation and has inspired two other people they know to buy electric cars. At the request of her supermarket, she drove the gasoline-free vehicle into the store and parked it next to the produce section for Earth Day.

The Triplets decided it made financial sense to buy the electric truck even when gasoline was costing them less than \$2 a gallon. Their 9-foot-long truck is big enough for all their needs, including hauling lumber for a ren-



Rick and Kris Peters  
 Kris Peters says her electric car is very convenient for driving around with her children, including 2-year-old Sam, who rides in a baby car seat.

ovation project, and bringing home a 9-foot Christmas tree.

The Peterses have experienced their own neighborhood celebrity in the two months they've owned their GEM electric cars. On a recent trip to the doughnut shop, they met up with people snapping pictures at cellphones. "Everybody looks at you and waves," marveled 8-year-old Alex Peters. The fam-

ily has been followed home by curious strangers. Other drivers have jumped out of their big cars at stoplights to run over and ask them about their vehicles.  
 Laws governing the roadworthiness of the little autos vary by state. In Texas, they're legal to drive only on streets with speed limits no higher than 35.

But some owners modify engines so the cars can travel much faster, and a few audacious drivers take them out on the highway. The Texas Department of Transportation recently got a call from a flabbergasted policeman who had stopped a "golf cart" on the freeway, says Kim Sue La Perles, a spokeswoman for the agency. Starting Sept. 1, the department will no longer issue license plates for the tiny vehicles to dissuade drivers from using them like regular cars.

The Peterses' cars get about 30 miles from a full charge, which at about 15 cents per kilowatt hour, amounts to a 60-cent fill-up, or two cents a mile. Compare that with 20 cents a mile for a car that goes 20 miles on one \$4 gallon of gasoline. Dr. Peters's chiropractic practice is just a few miles from his home, so he has no problem taking neighborhood streets to get there.

## Enjoying the Breeze

powered brethren, blinkers and windshield wipers are decidedly optional. The Peterses' cars do something that at first Peters particularly enjoyed: transporting the children safely belted in the extra breeze. The cars make for a along rough streets, whirring noise that's tract barking dogs.  
 Sharing the road cars requires extra alertness, say owners of normal-size times get impatient slower, their vehicle recalls one driver with an experiential-laced "get that thing off the erally, though, faster pass him by. Then, says, he usually cat them at the next light

## Continued from 1A

Long Drive, which is seeking to raise up to \$10 million, is riding the "green initiative wave," CEO Michael Wallace said. "Solar-powered LSVs could be the first major step to solar-powered transportation."

Long Drive isn't the only metro Atlanta green auto-related company in fundraising mode. Atlanta-based **Wheego Electric Cars Inc.**, which makes street-legal electric cars, has raised about \$1.2 million. (See related stories, Page 29A.)

Atlantic Station has the potential to be more pedestrian-friendly, said Derek Jacoby, vice president of Jacoby Group. Long term, the developer envisions potentially closing off some interior streets to conventional gasoline-fueled vehicles.

Long Drive is also in discussions to provide its green vehicles to Jacoby's Aerotropolis Atlanta — a proposed 130-acre mixed-use redevelopment near Hartsfield-Jackson Atlanta International Airport on the site of the former Hapeville Ford plant. The 6.5 million-square-foot aviation-intensive business district is expected to include office, retail, restaurant, hotel and airport parking.

The two developments could use the slow-moving vehicles for security and mass transit, Jacoby said. They could also be used to help market condominiums to intown yuppies.

"Everybody that buys a condo," Jacoby said, "[could get] an electric vehicle."

The potential Long Drive alliance fits with Jacoby Group's eco-conscious philosophy of "creating local green-collar jobs."

In April, Jacoby signed a deal with Norcross-based **Suniva Inc.** to initially install up to 10 megawatts of solar power in the main parking structure of the Aerotropolis redevelopment. That deal could be worth "tens of millions of dollars."

Jacoby also recently began converting garbage into gas at one of the state's largest landfills, producing enough natural gas to fuel 22,000 Georgia homes and also creating a new renewable energy option. The technology converts methane gas at DeKalb County's shuttered Live Oak Landfill into clean-burning natural gas. Jacoby began working on the process three years ago at the site, which closed in 2004. Live Oak could produce natural gas for at least 20 years.

### Growing demand

Long Drive, which sells solar LSVs made by Sarasota, Fla.-based **Cruise Cars Inc.**, markets to schools systems, municipi-

communities and exclusive resorts. Long Drive, for instance, is in negotiations to supply about 3,000 solar LSVs to a nonprofit in Oklahoma.

More than 60,000 neighborhood electric vehicles are on streets across the country, a Long Drive spokesman said, citing the Electric Drive Transportation Association.

To improve air quality and limit vehicle emissions, many cities are warming up to the idea of allowing electric and solar-powered slow-moving vehicles on their streets. Nine states are considering increasing the maximum speed of LSVs to 35 mph, Wallace noted.

Peachtree City is famous for its more than 90 miles of golf cart trails. And, the city of Roswell recently passed an ordinance allowing golf carts in certain neighborhoods. Roswell passed the ordinance at the request of some residents who wanted to limit the use of their cars.

The auto industry is becoming a three-faceted niche for the solar business, said Mark Burger, principal at **Kestrel Development Co.**, an Oak Park, Ill.-based renewable energy consulting firm. Solar power is being used to drive entire vehicles, power peripherals such as air conditioning systems, and deliver electricity to charge electric vehicles.

Solar is ideally suited for short-distance vehicles because they don't require the power and acceleration that the traditional internal combustion engine provides, Burger said.

"If you want to keep your speed limit at 25 miles [per hour] or less," he said, "why have cars that zoom around at 70 or 80 miles an hour?"

Electric motors are more efficient — and cost-effective — to operate and maintain than gasoline powered engines, Burger said. The latter, however, deliver greater acceleration and operate better in cold weather.

### Cost comparison

The market for solar-powered LSVs is being driven not just by conscience, but by cost-savings.

The annual cost of ownership for a solar-powered LSV is about \$2,000, including electricity and maintenance costs, Wallace said. Long Drive also claims its batteries last 30 percent to 50 percent longer than the traditional electric vehicle battery, because of the charging technology.

In addition to federal tax incentives, several states offer tax breaks for the purchase of solar and electric vehicles.

Oklahoma is the most generous state, offering a 50 percent tax break, Wallace said.



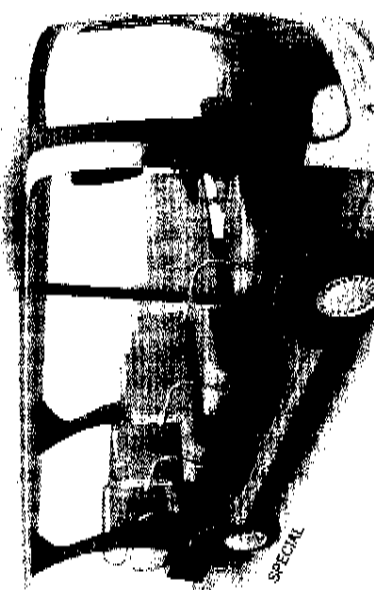
**Wallace**  
Long Drive Solar LLC

www.atlantabus

8-11-20 2007

ATLANTA BUSINESS CHRONICLE

**Pedestrian-friendly:**  
Atlantic Station could close off some interior streets to conventional gasoline-fueled vehicles.



6mA

Construction is scheduled to start in September and last for 12 months.

8-5-07

### **Golf Carts Legal in Tifton**

Tifton recently amended its code of ordinances to allow golf carts on the city's streets, reports the *Tifton Gazette*.

*Tifton Police Chief Jim Smith said Friday that Tifton Mayor Jamie Cater and members of the city council became interested in the subject of golf carts on public streets in the city when people approached them asking if they could use the motorized carts to make runs to the grocery store and other places.*

*"After checking it was discovered that quite a few cities in Georgia do allow golf carts in certain areas," Smith said.*

*The amended ordinance states that any "motorized cart" can be operated over any public roadway - road, alley, avenue, highway, route, boulevard - that has a posted speed limit of 35 mph or less, has no more than one lane of vehicular traffic per direction or is not designated as part of either the state or federal highway system. All of the motorized carts must also first be registered with the Tifton Police Department and have a decal from that department affixed to it.*

2.  
3.  
6  
6

Other vehicles, such as four-wheelers, ATVs, mules and gators, remain illegal to drive on a public road.

People wishing to register their golf cart must fill out a form with the Tifton Police Department.

*The registration fee for each cart is \$10 and people who apply for the registrations must also furnish evidence of personal liability insurance coverage consistent with the minimum requirement of Georgia law for operation of motor vehicles. The registration is effective until revoked or until the motorized cart is transferred to a new owner.*

Unless the golf cart has headlights and taillights, they can only be operated during daylight hours.