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## Could car ownership go the way of the landline phone?



A 1928 Republican slogan claimed presidential candidate Herbert Hoover would put a chicken in "every pot and two cars in every garage." Americans' love affair with the car was just beginning. For decades, Americans purchased more cars and moved further out to the suburbs. Yet that trend seems to be shifting.

As the cost of owning a car and environmental concerns continue to rise, and transportation options continue to grow, people are realizing we don't necessarily need to own cars, we just need to get where we want to go efficiently. As Rocky Mountain Institute has shown in its

roadmap for getting the U.S. off oil and coal by 2050, [Reinventing Fire](#), smart [IT-enabled traffic and transport systems](#), alternative commuting and smart growth development strategies can halve or further slash the [13,000 miles a typical American drives each year](#). We are moving in that direction as new business models emerge to help us with our mobility needs.

### Learning to share

In a lifetime of car ownership, an American family likely will "invest" almost \$1 million in its vehicles. Transportation now comes in a close second to rent or mortgage as the largest budget item for the average household. However, the two-car family model is slowly changing. A study by management consulting firm Oliver Wyman ([PDF](#)) showed that if fuel prices rose significantly by 2030, approximately 77 percent of people in Western Europe and Asia would change their primary mode of transport, with 30 percent willing to give up car ownership completely. With the growth of car-sharing programs around the world, that option is getting easier.

Car sharing services provide 24/7 self-serve access to a network of vehicles stationed around your city (and increasingly, cities worldwide), which can be reserved by the hour or day via smart phones, the Internet and call centers. People can save money and lose the hassles of car ownership, yet still have the benefits of access to a car when they need one. As of last year, commercial [car-sharing programs](#) had almost 1.8 million members sharing over 43,550 vehicles in 27 countries and five continents.

Car-share programs come in many varieties. Most major car rental chains now offer a version, and the informal economy offers interpersonal versions whose safety and legality are in hot debate. Sticking to just the commercial offers, the models vary. When you become a member of Zipcar, you have access to Zipcars all over the world with a wave of your Zipcard. You can find and reserve a Zipcar with your smartphone, reserve it by the hour or the day, and drive 180 miles on a reservation within 24 hours, without paying any extra per-mile costs. One of the only rules is to return the vehicle on time to the same place you picked it up. Car2go members can drive any car they find distributed throughout the handful of cities it operates in as long as the car is not reserved, or they can reserve a car online 30 minutes before it's needed. Then the car can be left in any available parking spot in the city that meets the program's guidelines.

Car sharing not only decreases car ownership, but a Federal Transit Administration study ([PDF](#)) showed it also increases more sustainable modes of transportation by changing the economics of driving. For most folks, driving has the big fixed cost of buying the car and the parking space, yet a relatively small cost for each individual trip; as long as you have gas in the tank, you don't have to feel the pain of paying anything each time you drive. Car sharing flips that equation on its head. Car-sharing membership is inexpensive, but you pay for each individual trip. Car-sharing members have to consider the cost every time they drive and therefore are more likely to forego the trip in favor of walking, biking or public transit. They generally end up way ahead economically, especially in cities, where the fixed cost of buying a car and the much more expensive cost of purchasing a parking space far outweigh the comparatively small per-trip costs of their relatively few vehicle trips.

The impact of car sharing on the environment is immense. For example, the World Resources Institute wrote that each shared vehicle in North America can replace [9 to 13 personal cars](#). City CarShare reported its program in the San Francisco Bay Area avoided [85 million pounds of CO<sub>2</sub> emissions](#) in 2012 alone. Another benefit of car sharing is because the cars drive far more miles in far less time than the individually owned vehicles they replace -- individually owned cars can sit idle up to [95 percent](#) of the time -- they will turn over more frequently. As new cars get better mileage than older cars, this will help with fleet mileage, reducing even more the impact of our driving on the environment.

### **How IT streamlines public transport**

The use of public transportation is rising around the world. In 2012, people in the U.S. took [10.5 billion trips](#) on public transportation, a billion more than they took in 2000. And the rise of handy smartphone apps is making mobility through public transport even easier. Hundreds of applications can tell you which bus or subway to take, when it comes, where to get on, where to get off, the traffic data and anything else you need to make your trip effortless. Some apps even tell you exactly where to stand on the subway platform so that you arrive directly in front of the exit, shaving minutes off your trip.

Car manufacturers are also realizing the concept of mobility based on vehicle ownership soon may be a relic of the past. BMW -- in a shift away from its identity solely as an automaker -- has launched a series of [mobility services](#) to improve personal mobility in urban areas, automotive or otherwise, including an app that has real-time information on 12 major public transit systems in the U.S. and the U.K.

Daimler has launched an app in Germany called [moovel](#), which shows the various options for bus and rail connections, ridesharing opportunities and a taxicab call function.

## Reinventing the filling station

In its report [Green Solutions to the Auto Crisis](#), the Heinrich Boll Foundation think tank showed that as important as electric and alternative fuel cars may be, “concentrating on drive technology alone will not be enough to achieve a true paradigm shift.”

We need to transform the automobile into one part of an integrated system providing a wide range of mobility options. That thinking caused one fuel company to rethink the traditional gas station approach. Propel Fuel’s [Clean Mobility Centers](#) throughout Washington and California provide a variety of renewable fuels, including ethanol and biodiesel. But they also offer rideshare and community transportation resources such as bike maps, bus and train routes and carpooling information, as well as free bicycle tuning stations.

It seems Herbert Hoover’s dream of 1928 was realized for a few years. The average number of U.S. cars per household peaked in 2006 at 2.1, but has been slowly decreasing ever since. Young Americans are [waiting longer](#) to get licensed; roughly 1 in 5 say they will never even get a license, [according to an August 2013 report from the University of Michigan’s Transportation Research Institute](#). And they are driving less, increasingly turning to alternatives such as mass transit or car-sharing programs, and choosing living locations and lifestyles to match.

As RMI has shown in *Reinventing Fire*, using autos more productively can save money, deliver the same or better access to where we want to be, and improve the quality of our lives. It does so because we get the equivalent services with less cost, risk and hassle. The switch from car ownership to mobility services, a key piece of this new mobility model, is really a game changer.

<http://www.greenbiz.com/blog/2013/08/20/could-car-ownership-go-way-landline-phone>