My name is Randal O'Toole, and I am the Cato Institute's "rail nut." Among other things, I helped restore this steam locomotive to operation and I've ridden passenger trains hundreds of thousands of miles.

I am also a cycling nut. I've never commuted to work by car and this past summer I rode six "centuries" (100 miles in one day) with an average of 6,000 feet of hill climbing on each century.

But I don’t believe in imposing my personal preferences on others. The same does not appear to be true for the Obama administration, whose “livability” program is all about forcing changes on American lifestyles.

For example, Secretary of Transportation Ray LaHood says his goal is to “coerce people out of their automobiles.”

Department of Transportation

STRATEGIC PLAN

"New Ideas for a Nation on the Move"

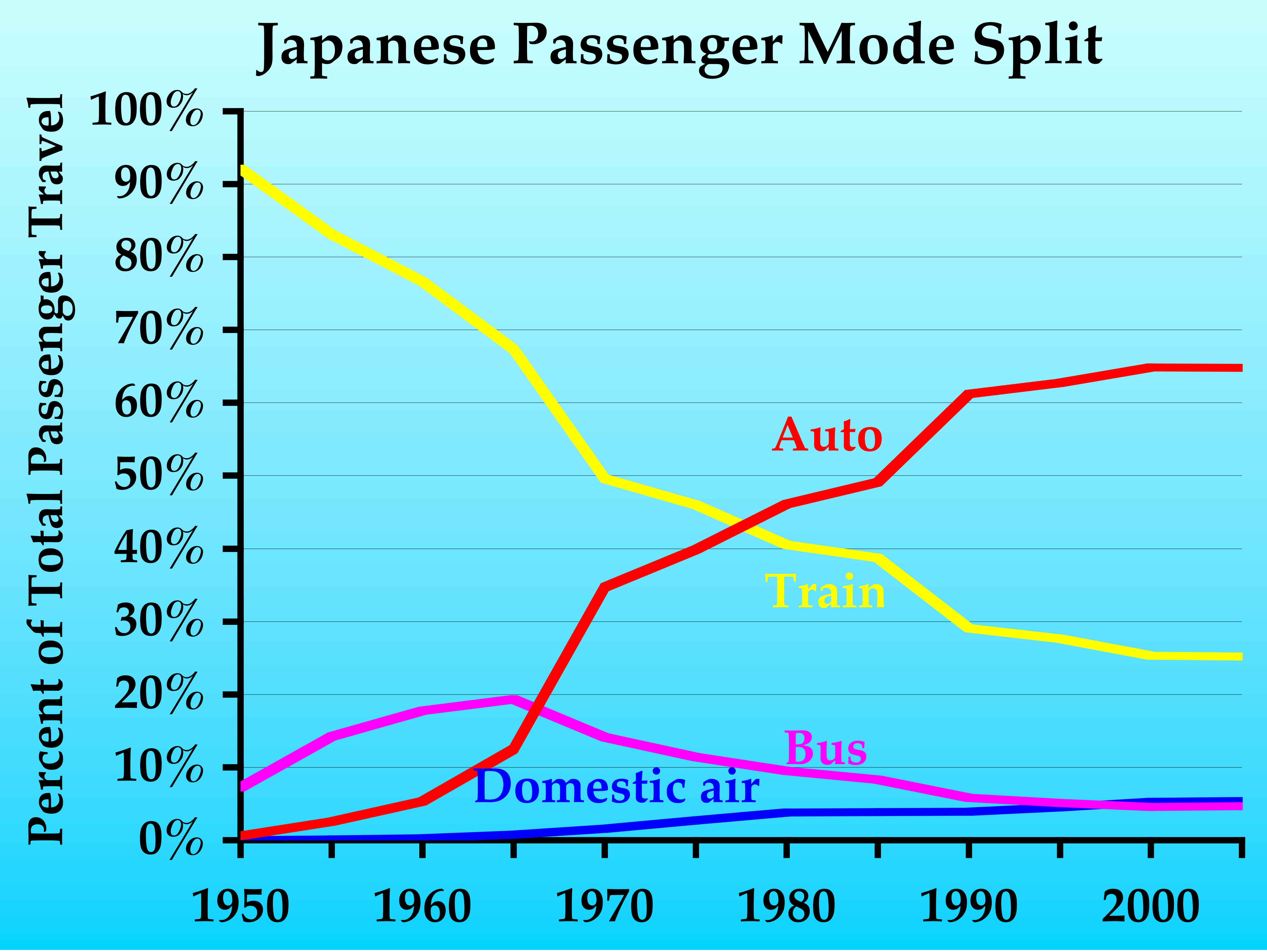
The Department of Transportation's strategic plan calls for "transformational changes" in our transportation system.

The Obama administration wants to build a high-speed rail network connecting major cities

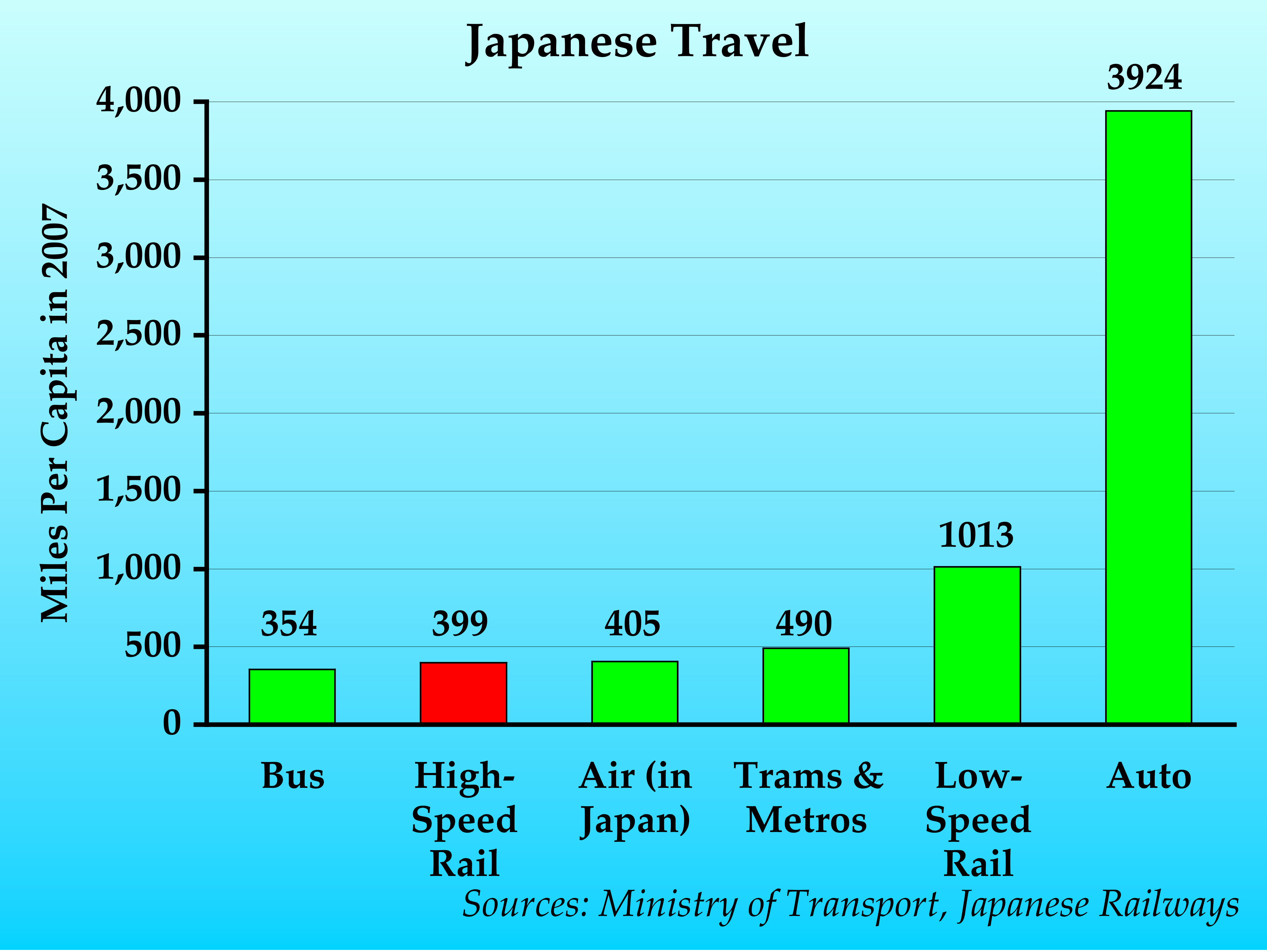
and build light rail, streetcars, or other rail transit in each of those cities.

Plus, as a way of encouraging transit ridership, it proposes to require cities to plan high-density, mixed-use developments along those rail lines and near rail stations.

These policies are not only expensive, they will fail to transform our economy in any way other than to drag it down. Contrary to popular belief, high-speed rail has not proven to be transformational in Japan, France, or any other country that has built it.

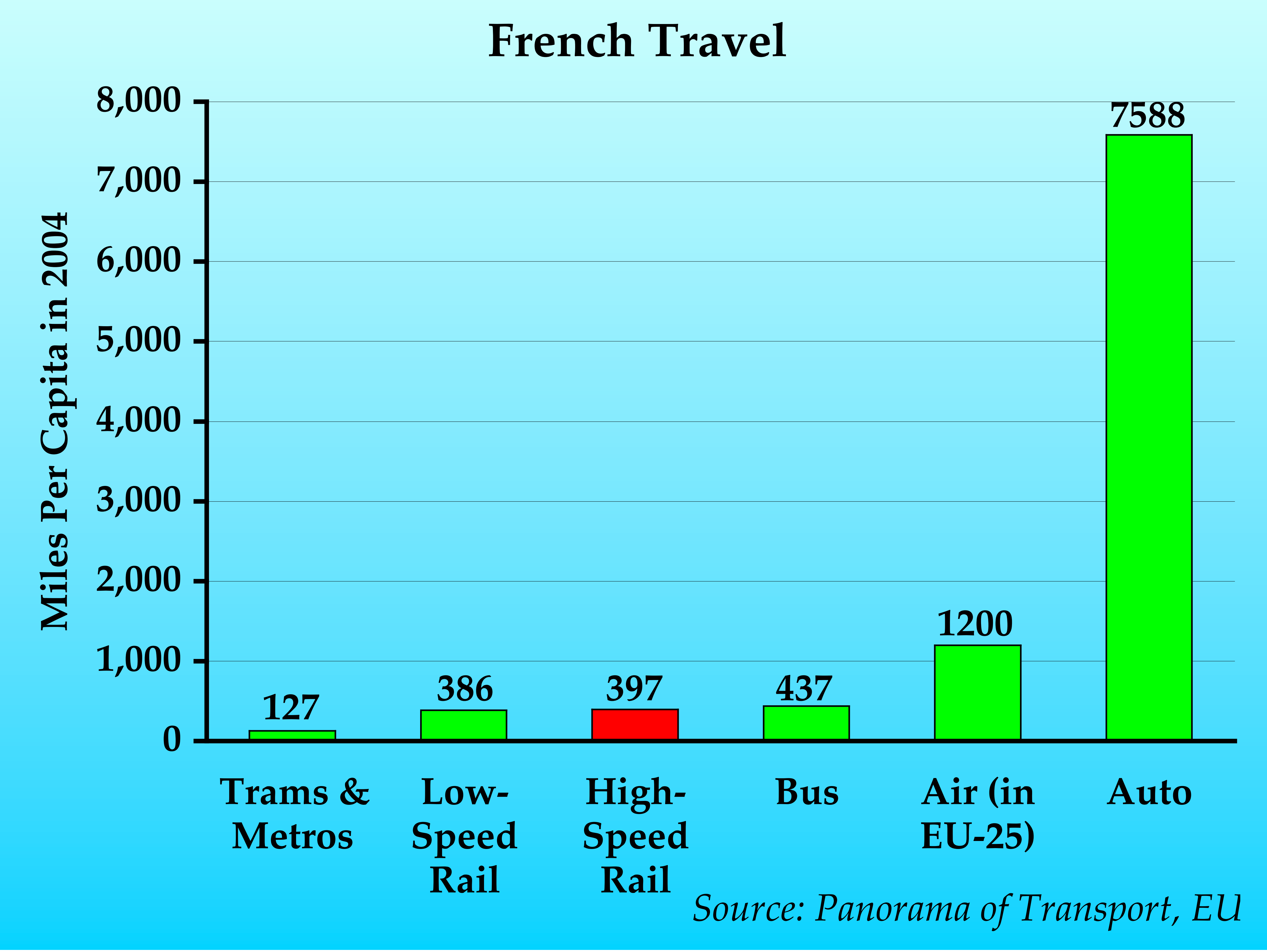


When Japan opened its first high-speed rail line in 1964, only about 12 percent of passenger travel was by car while 70 percent was by train. Today, 65 percent is by car and only 25 percent is by train. If anything, high-speed rail accelerated this transition by imposing huge cost burdens on Japan railways.

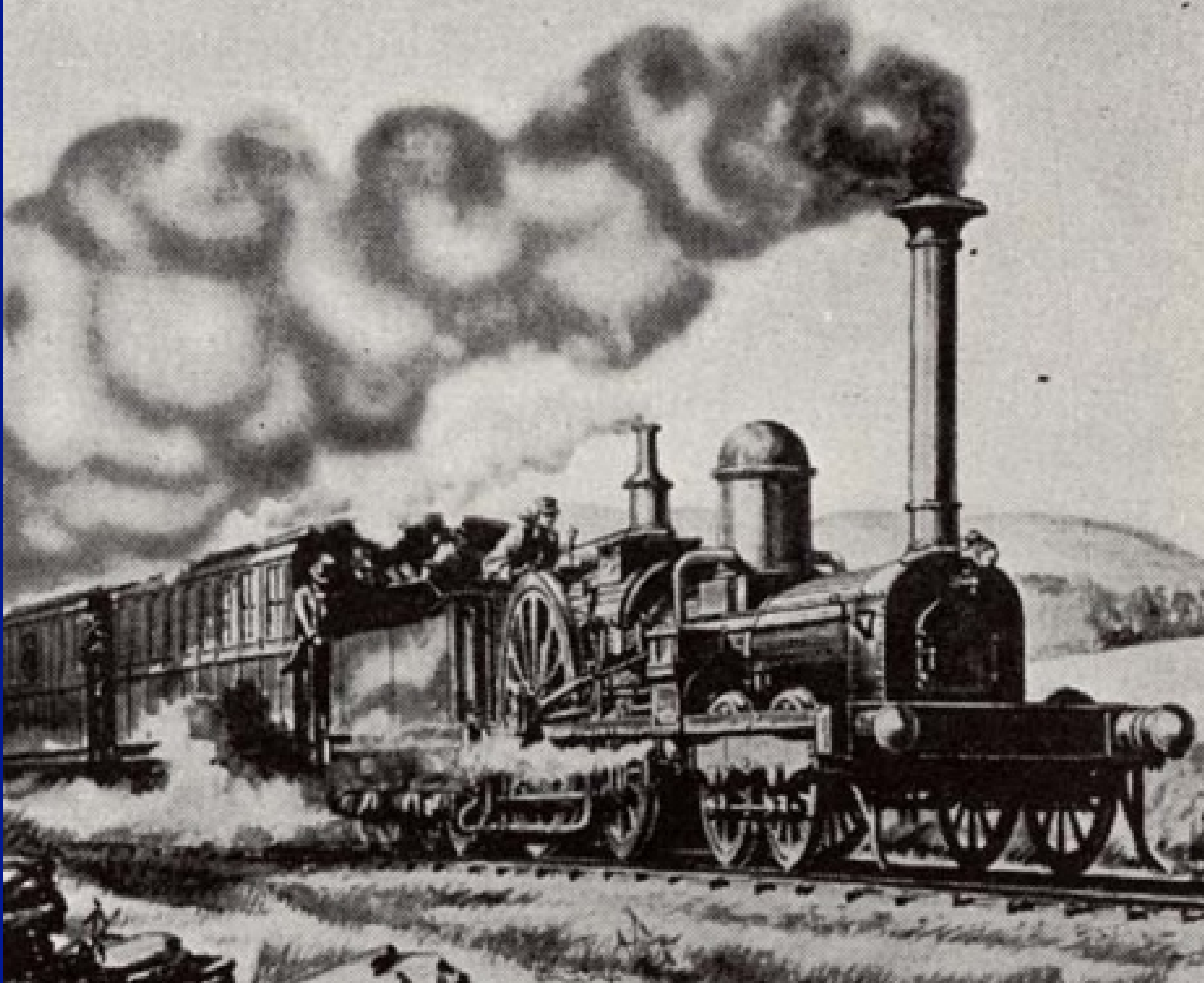


Today, the average resident of Japan rides high-speed trains only about 400 miles a year. They fly domestically more than they ride high-speed trains and they ride conventional trains 2-1/2 times as much as they ride high-speed trains.

The same story can be told in France, which has spent as much per capita subsidizing high-speed trains as we spent out of user fees building interstate highways.



Yet the average resident of France travels by car nearly 20 times as much as they ride high-speed trains, and they fly (within Europe) three times as much. They actually ride buses more than they ride high-speed trains.

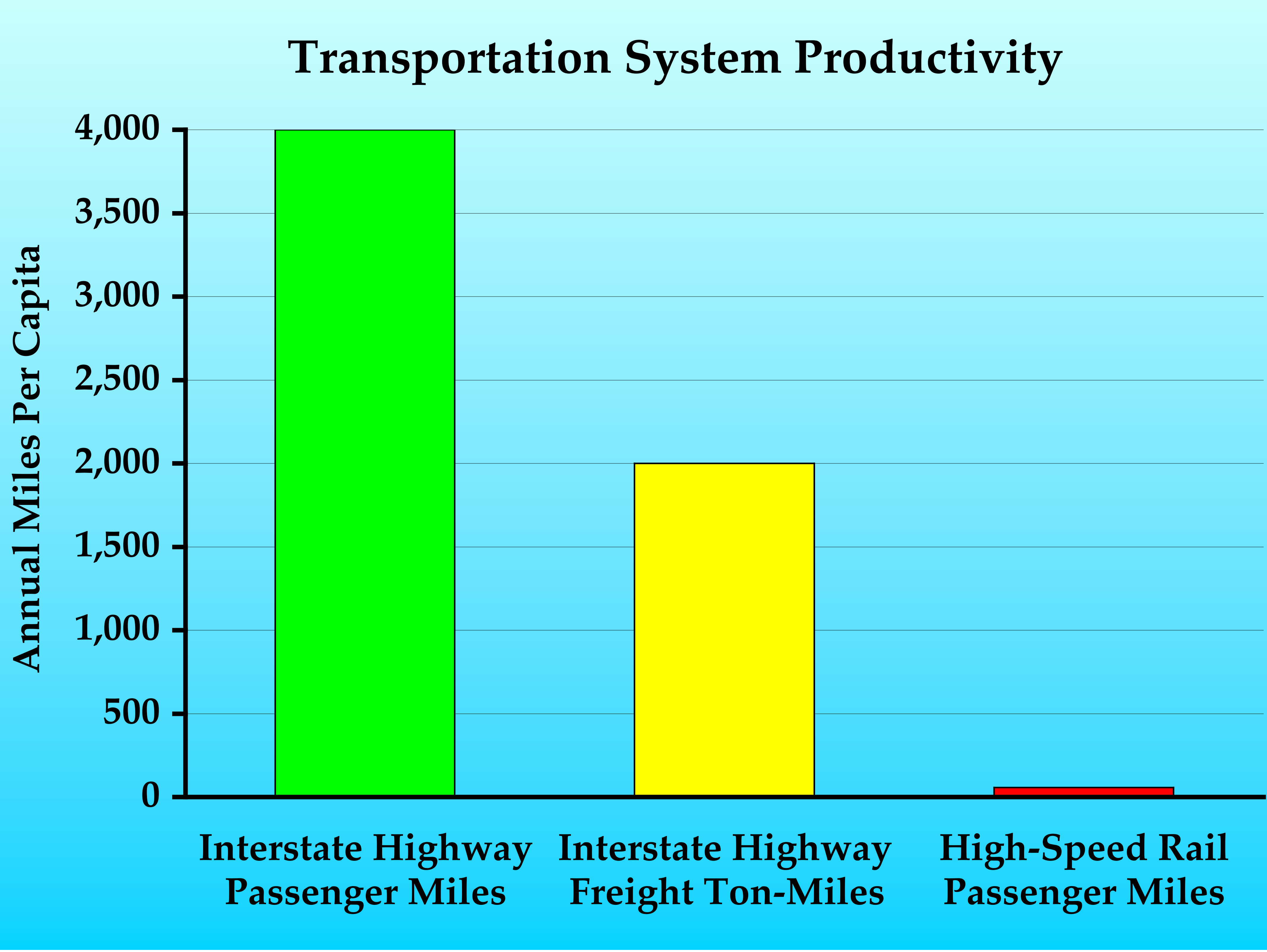


The history of transportation shows that new technologies are successful when they are faster, more convenient, and less expensive than older technologies.

Technologies like intercity trains and streetcars not only replaced previous technologies (like steam boats and horsecars) but significantly increased total mobility.

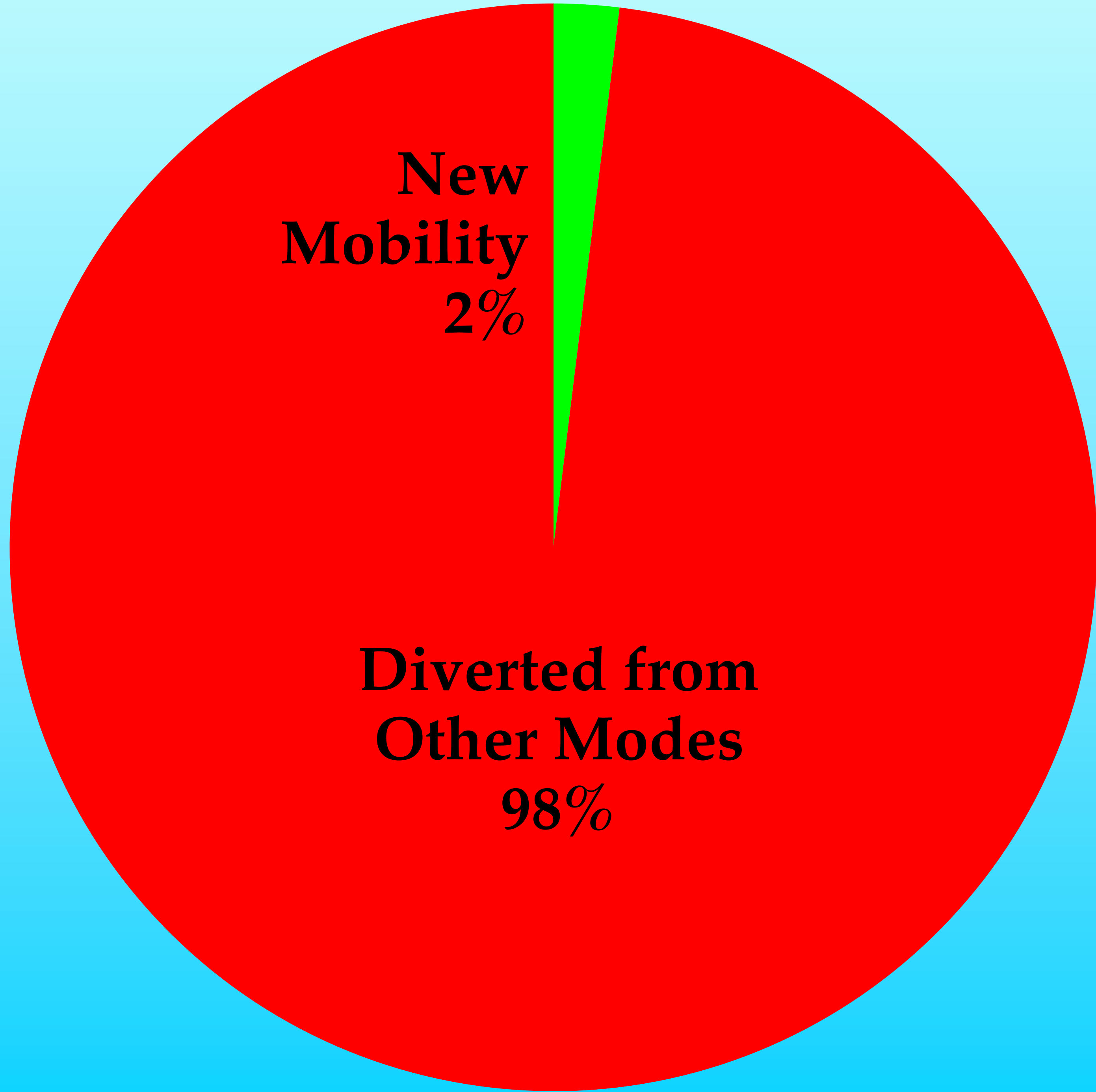
The increase in personal mobility provided by affordable, mass-produced automobiles had a huge transformational effect on America.

The same is true for interstate highways. The average American travels 4,000 miles a year and ships 2,000 ton miles a year on interstates, and that is all new travel that did not exist before the interstates were built.



High-speed rail will not have such an effect. The best estimates of rail advocates are that, if the Obama rail network is built, the average American will ride high-speed trains just 70 miles a year.

California High-Speed Rail

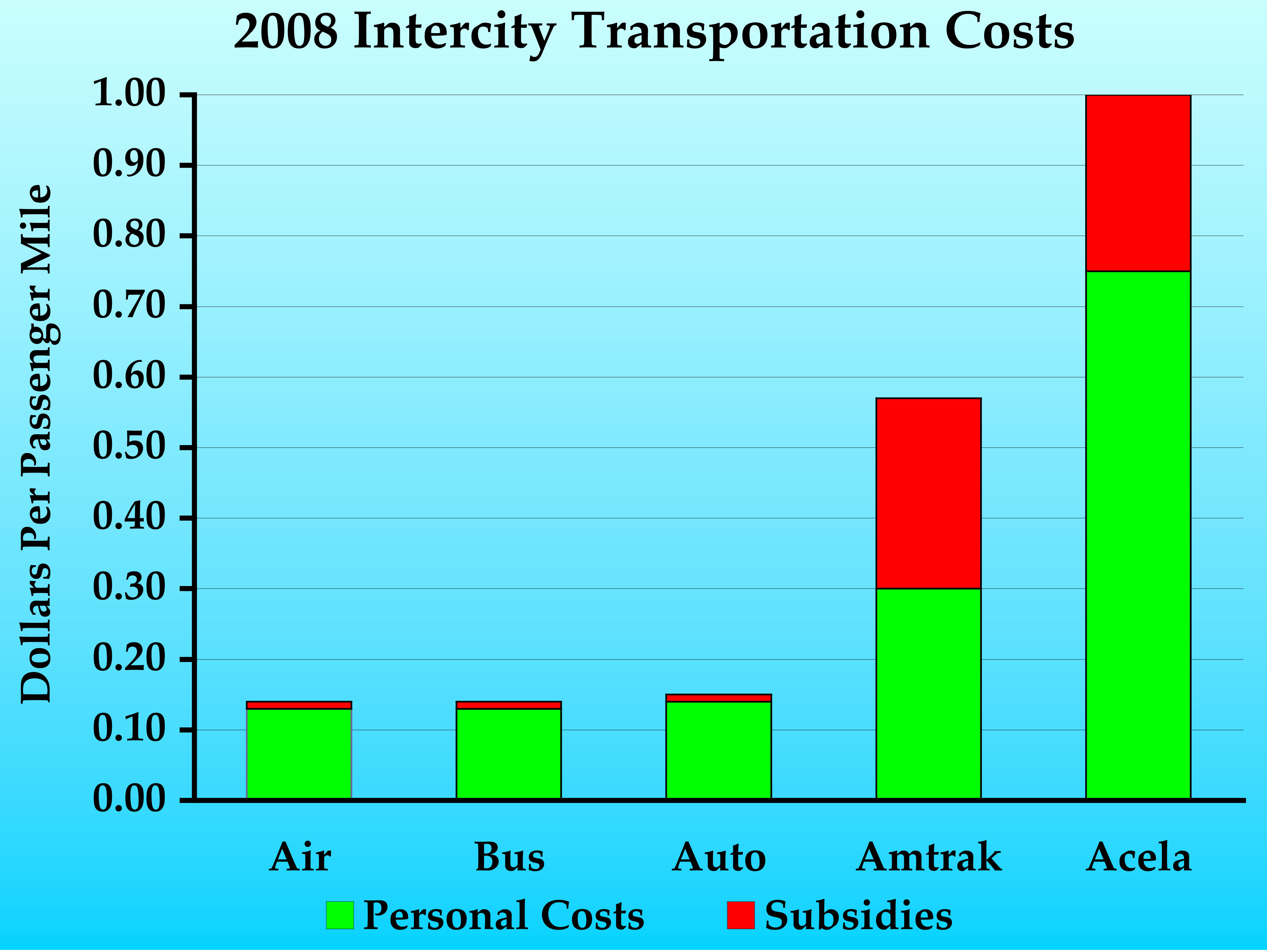


Moreover, almost none of that travel will be new mobility. The California High-Speed Rail Authority, for example, estimates that 98 percent of the people riding its proposed 220-mph trains will be diverted from cars or airplanes. Only 2 percent will be new mobility.

Fewer than 8% of Americans work in downtowns

Fewer than 1% of Americans live in downtowns

This is partly because high-speed rail really is convenient only for downtown-to-downtown trips, and less than 8 percent of Americans work downtown.



Nor will high-speed rail save money. Average fares paid for airline and bus travel are about 13 cents a passenger mile. Amtrak charges nearly 75 cents a passenger mile to ride its Boston-to-Washington Acela trains, and that fails to cover the capital cost of those trains.

For example, Amtrak charges about $150 to take the Acela from New York to Washington, but Megabus and other bus companies charge only about $15. These bus companies carry more riders in the Northeast Corridor than Amtrak.

One of the problems with high-speed rail is that it will be completely politicized.

For example, Obama's February, 2009 rail plan called for about 8,500 miles of routes.

By February 2010, another 4,000 route miles had been added due to furious lobbying from various political groups. These include a route from Cheyenne WY to El Paso TX and a route from Minneapolis to Duluth--which just happens to be in the district of the chair of the House Transportation Committee.

ENVIRONMENTAL IMPACT STATEMENT

FLORIDA HIGH SPEED RAIL
TAMPA TO ORLANDO

Federal Railroad Administration
United States Department of Transportation

Florida High Speed Rail Authority

In Cooperation with:

Federal Highway Administration
United States Army Corps of Engineers

Hillsborough, Orange, Osceola, Polk Counties, Florida

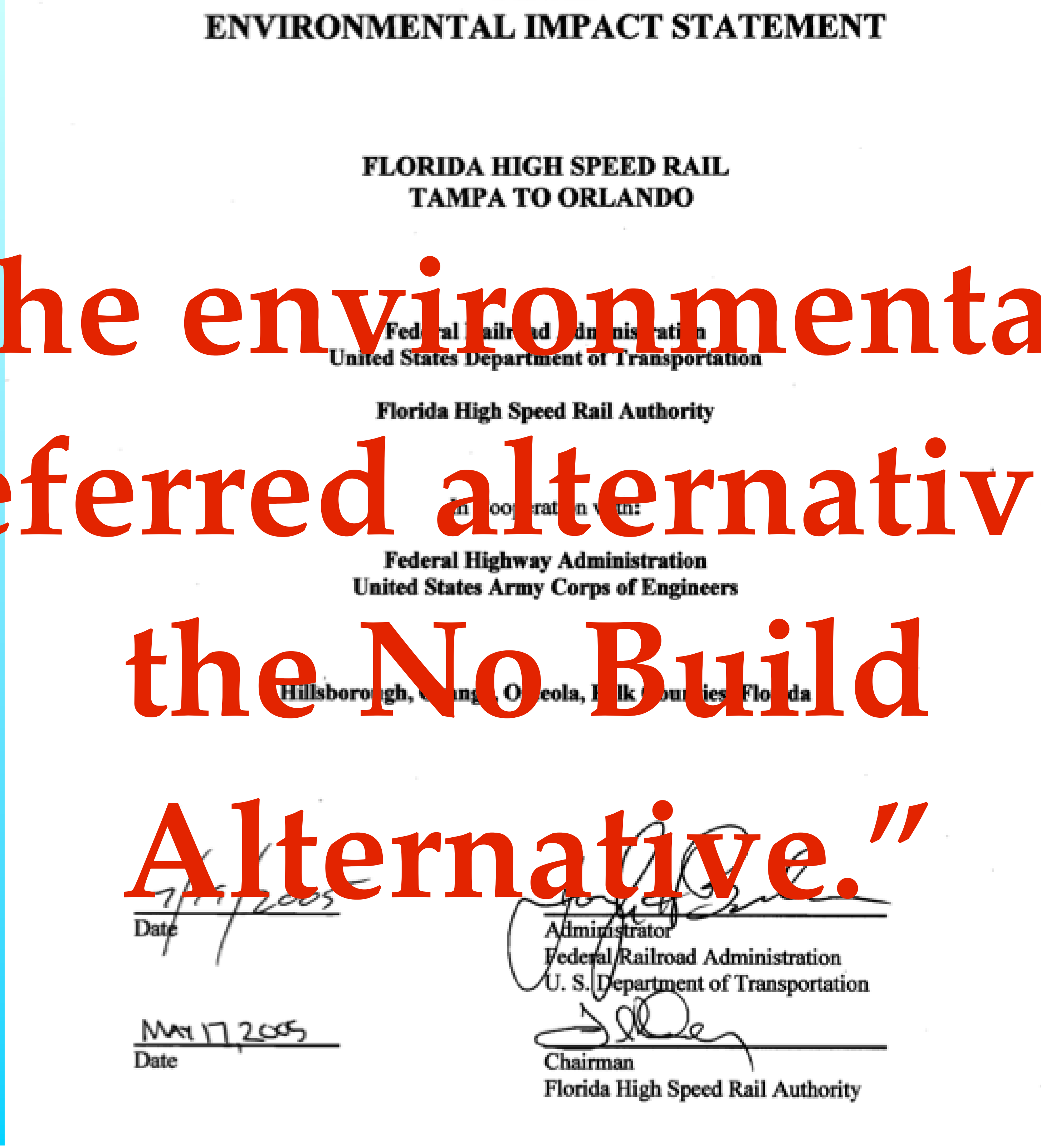
7/19/2005
Date

Administrator
Federal Railroad Administration
U. S. Department of Transportation

May 17, 2005
Date

Chairman
Florida High Speed Rail Authority

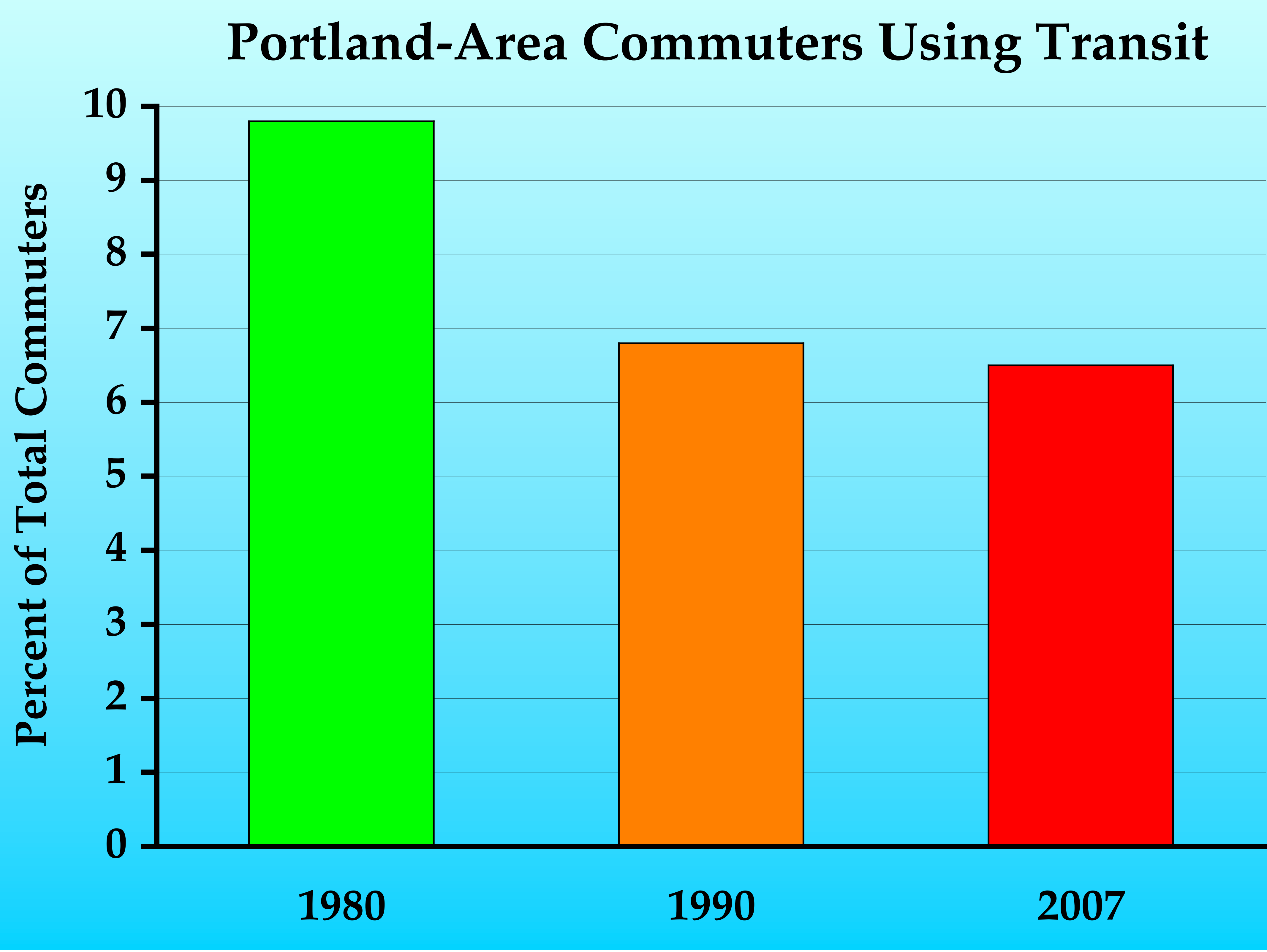
Nor is high-speed rail environmentally better than the alternatives. The environmental impact statement for the Florida high-speed rail project found that



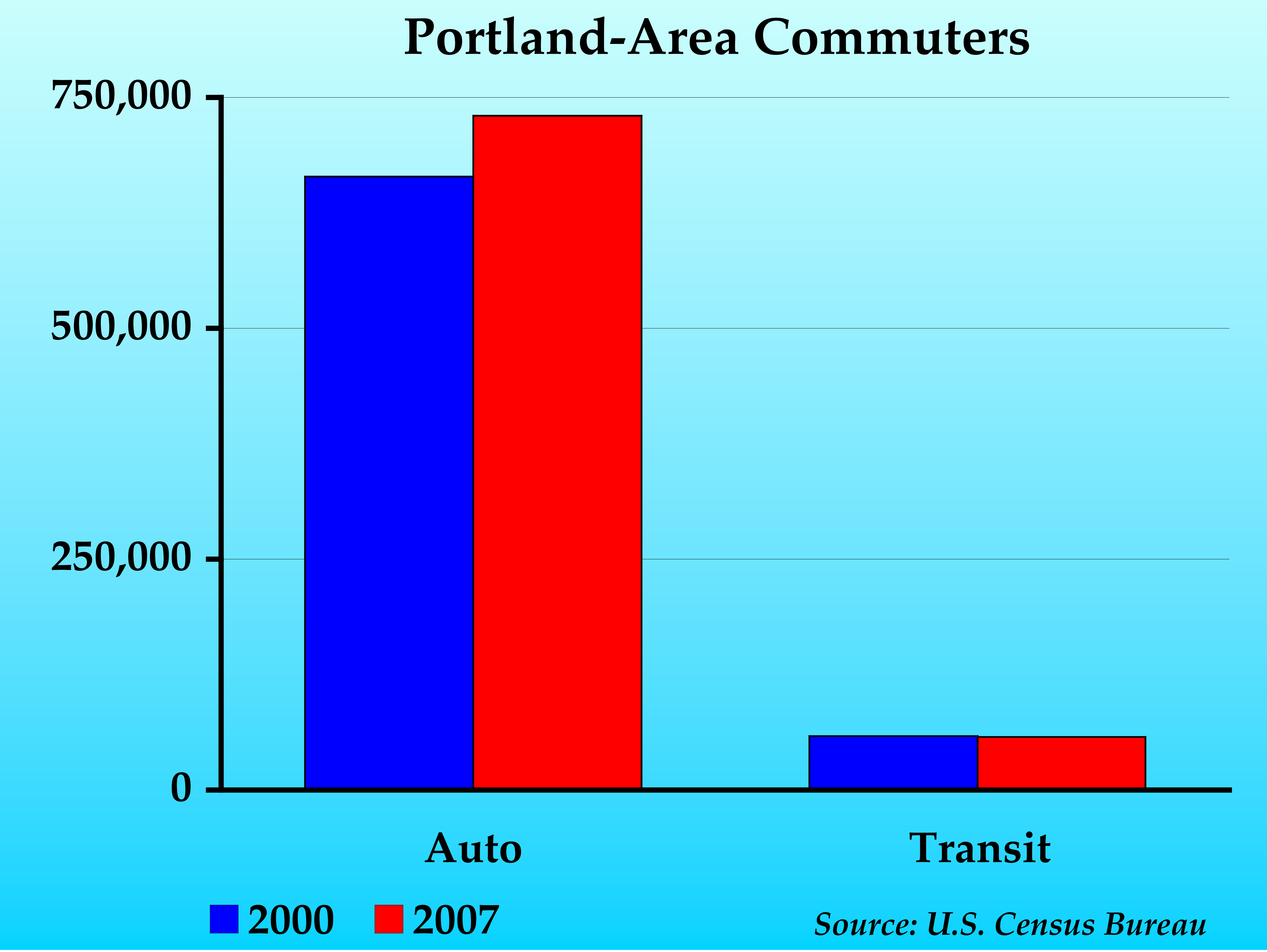
the environmental costs of building it were greater than the negligible environmental benefits of running it.

Light rail and other forms of rail transit are no better than high-speed rail. I don't want to say that no one rides the light rail in my former hometown of Portland, Oregon, but one day a train arrived downtown from the airport with only one passenger on board.

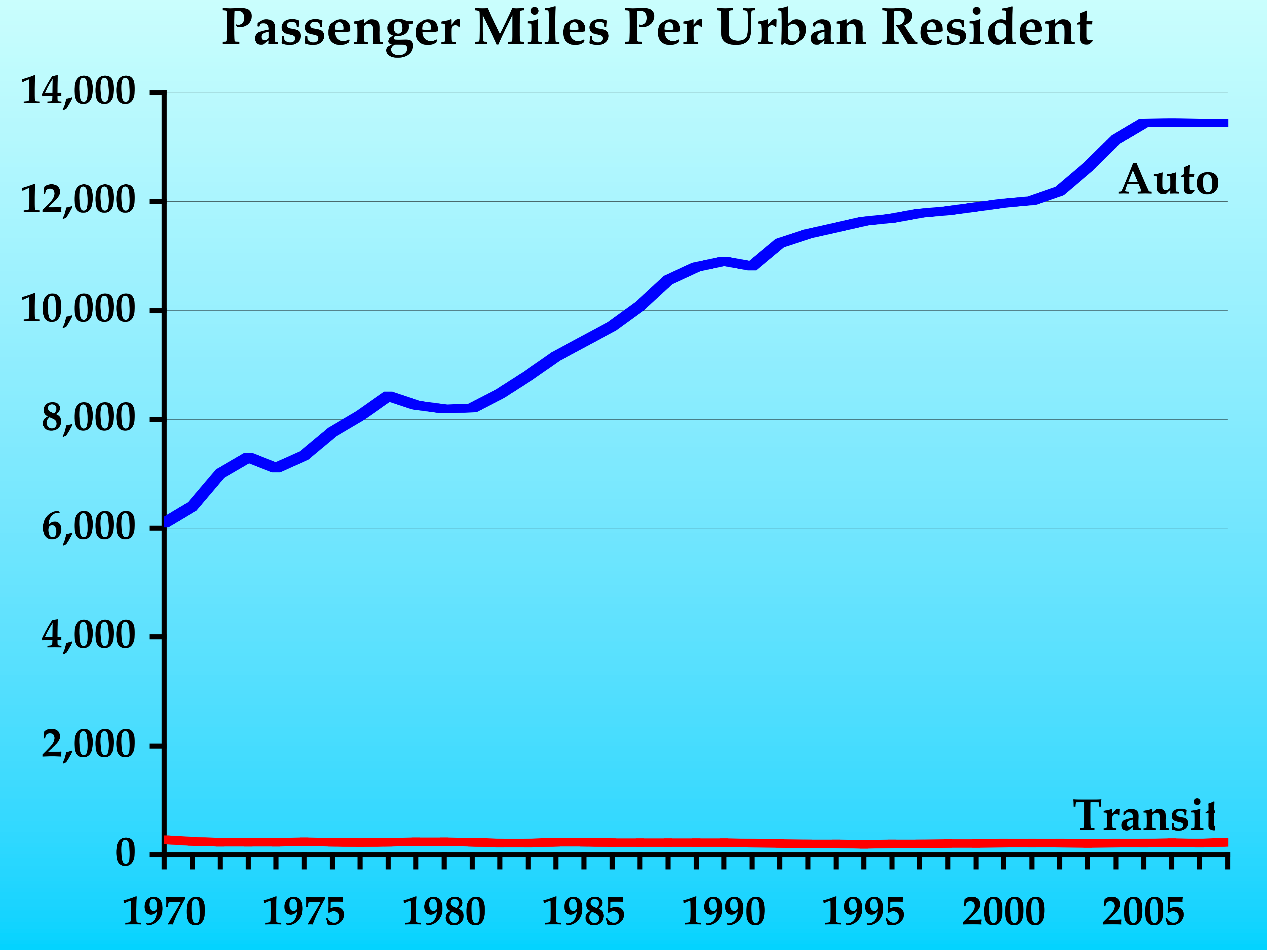
Coyotes like to go where they know they can find solitude from people, so this coyote felt perfectly comfortable climbing aboard the light-rail train.



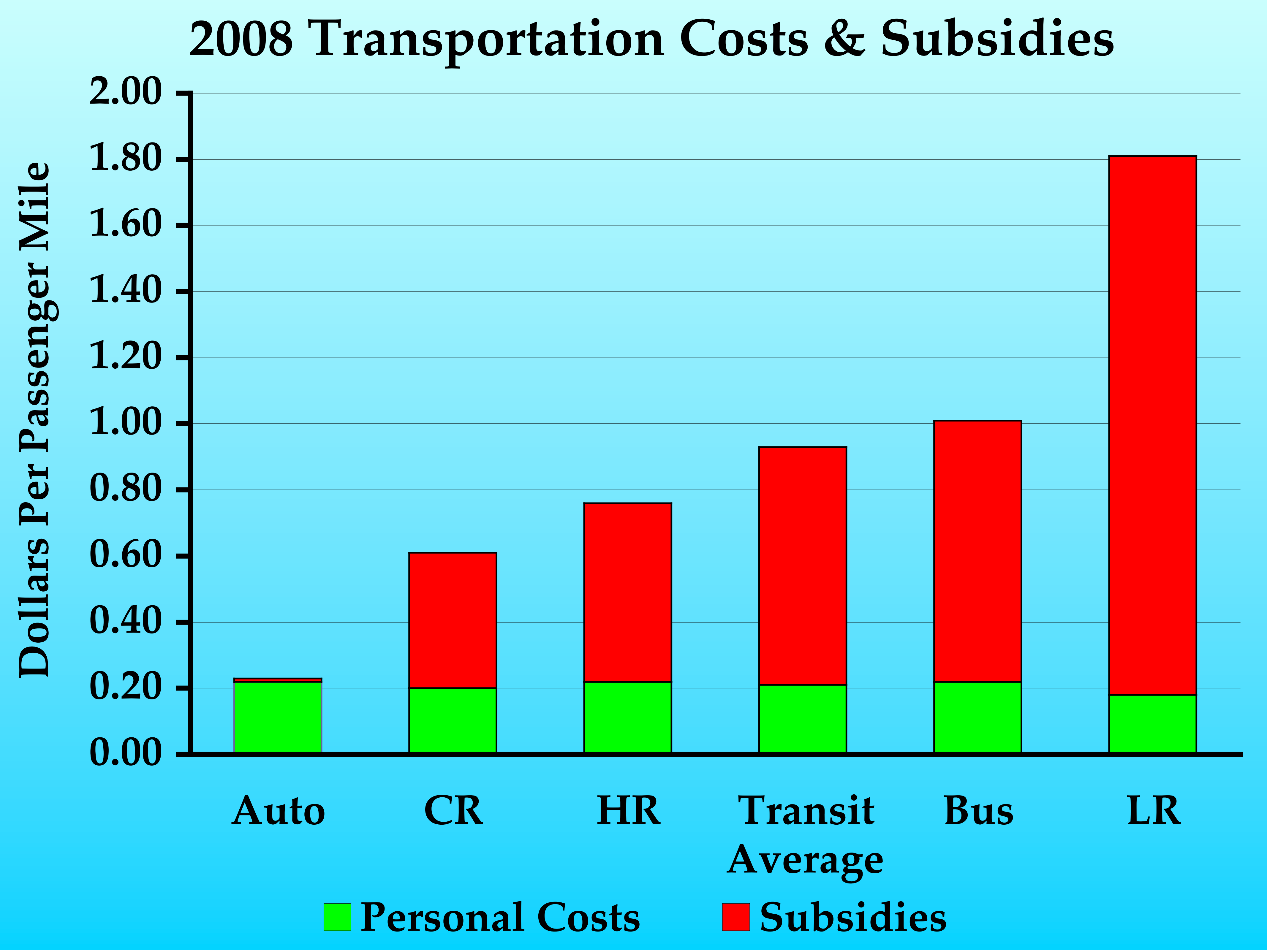
Actually, lots of people do ride Portland's light rail, but the percentage of people taking transit to work has significantly declined. In 1980, before light rail was built, 9.8% of Portland-area commuters used transit. By 1990, 4 years after the first light-rail line opened, this dropped to 6.8%. By 2007, with 4 light-rail lines, it was down to 6.5%.



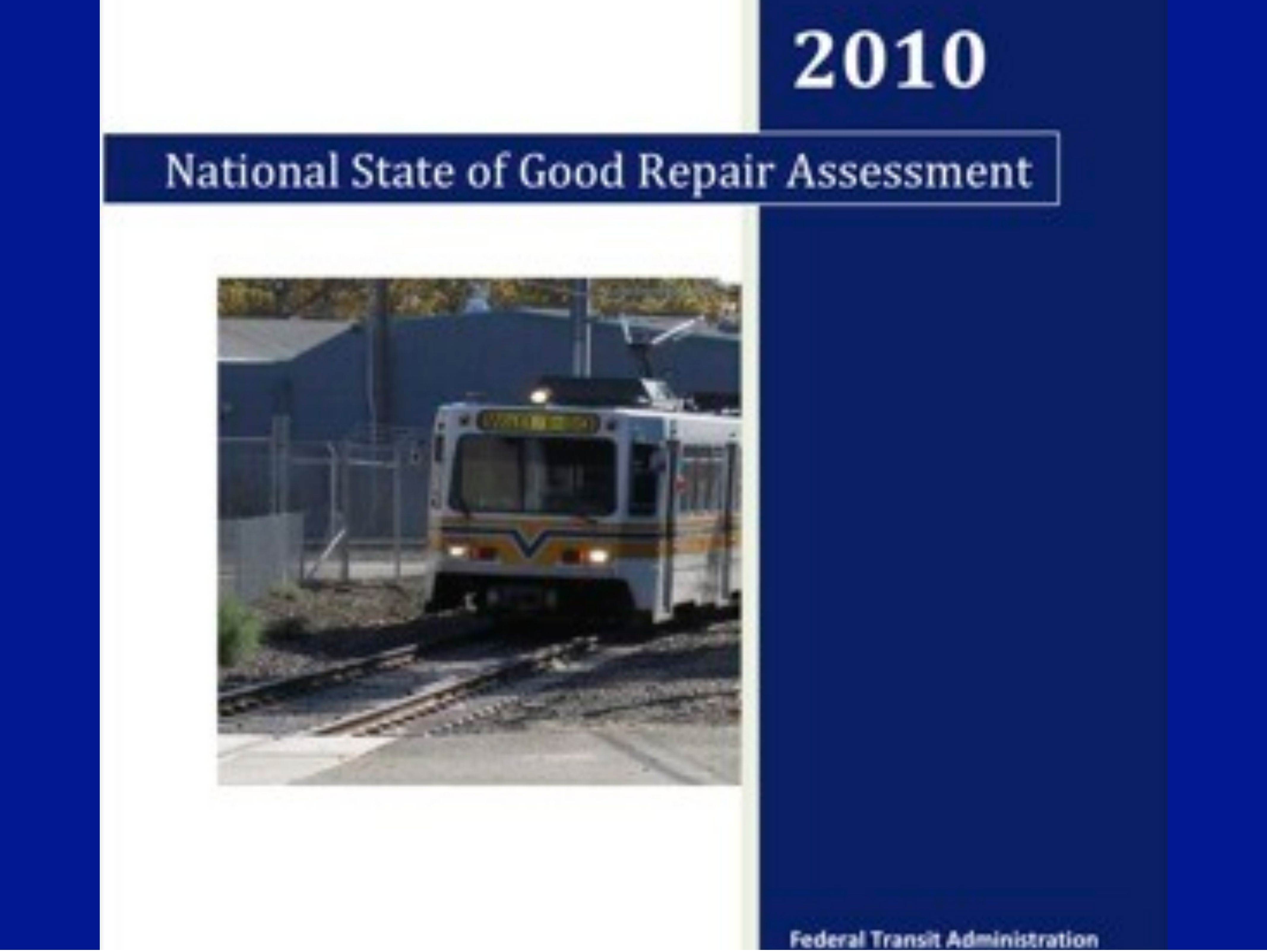
Between 2000 and 2007, Portland opened two new light-rail lines and a streetcar line, yet the number of transit commuters declined and the number of commuters using automobiles grew by more than the total number of transit commuters.



Nationally, we have spent about $500 billion subsidizing transit in the last four decades, yet transit ridership has been stagnant while per-capita urban driving has grown by 120 percent.



Like high-speed rail, transit and especially rail transit is a high-cost substitute for driving. Commuter- and heavy-rail here appear more efficient than buses, but that is because most riders of these modes are in New York. Outside of New York, new subway and commuter-rail lines have mostly been expensive failures.

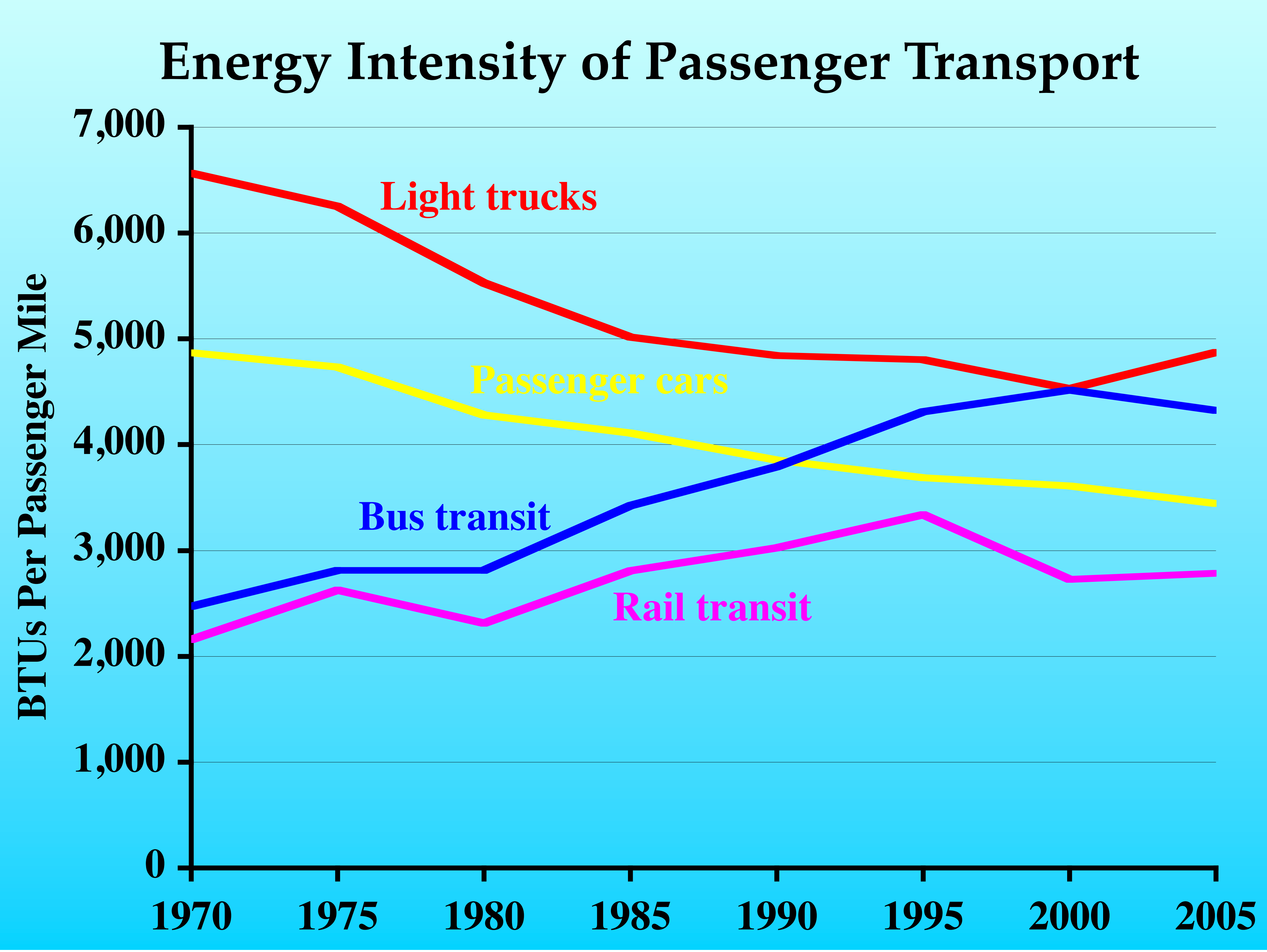


On top of that, rail transit has also led to a huge infrastructure crisis. The FTA estimates that transit agencies face a $78 billion maintenance backlog, mostly due to rail transit, and that the amount spent on maintenance is not enough to even keep rail systems from declining even further.

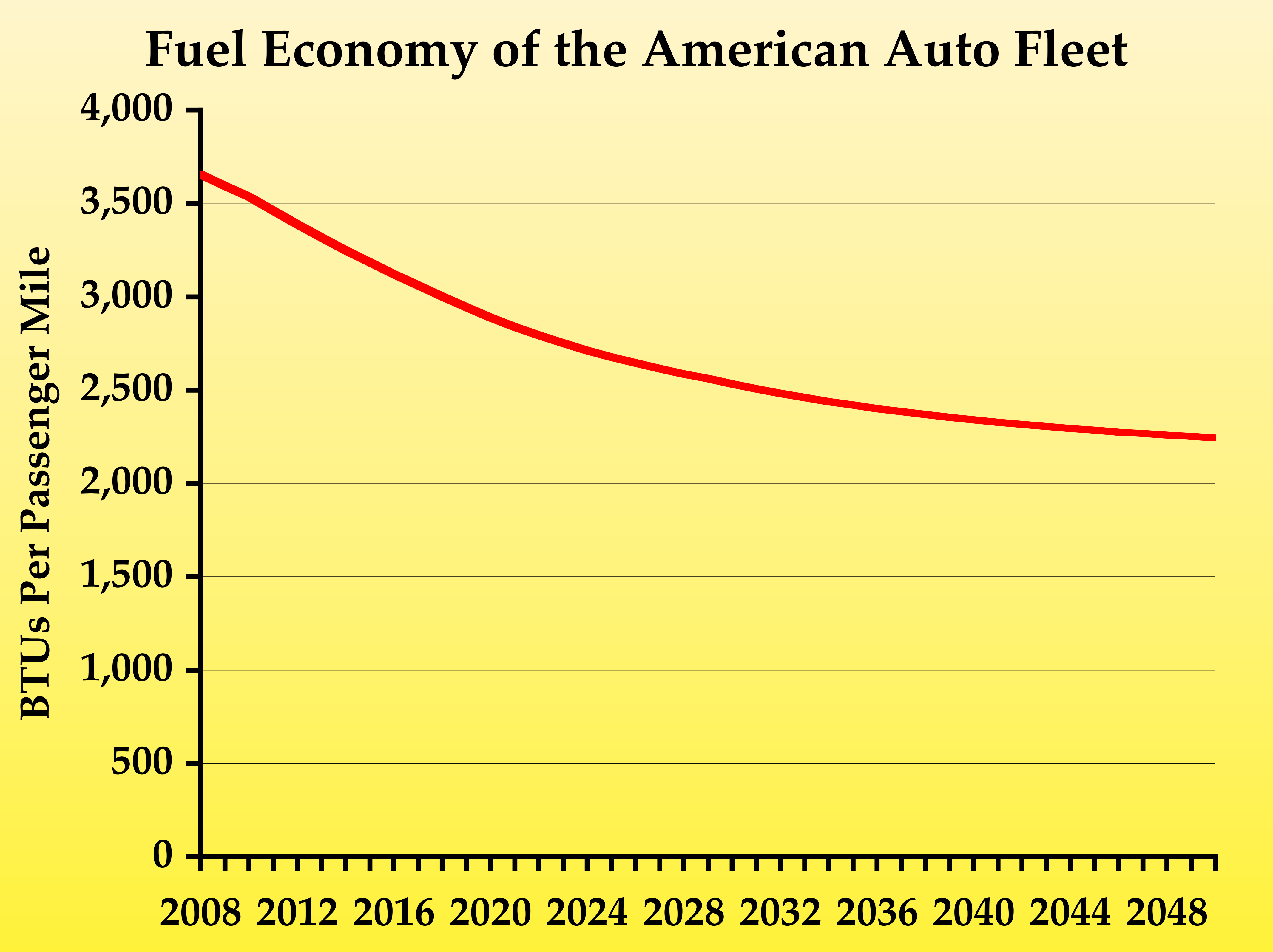
Peter Rogoff, the administrator of the FTA, recently gave a speech in Boston questioning the sanity of transit agencies that can't afford to maintain what they have, yet apply to his agency for grants to build more rail lines. "Paint is cheaper than trains," he says, meaning transit agencies would do better to paint buses in special colors to attract new riders than to build rail lines.

The EmX Franklin Corridor BRT Project Evaluation

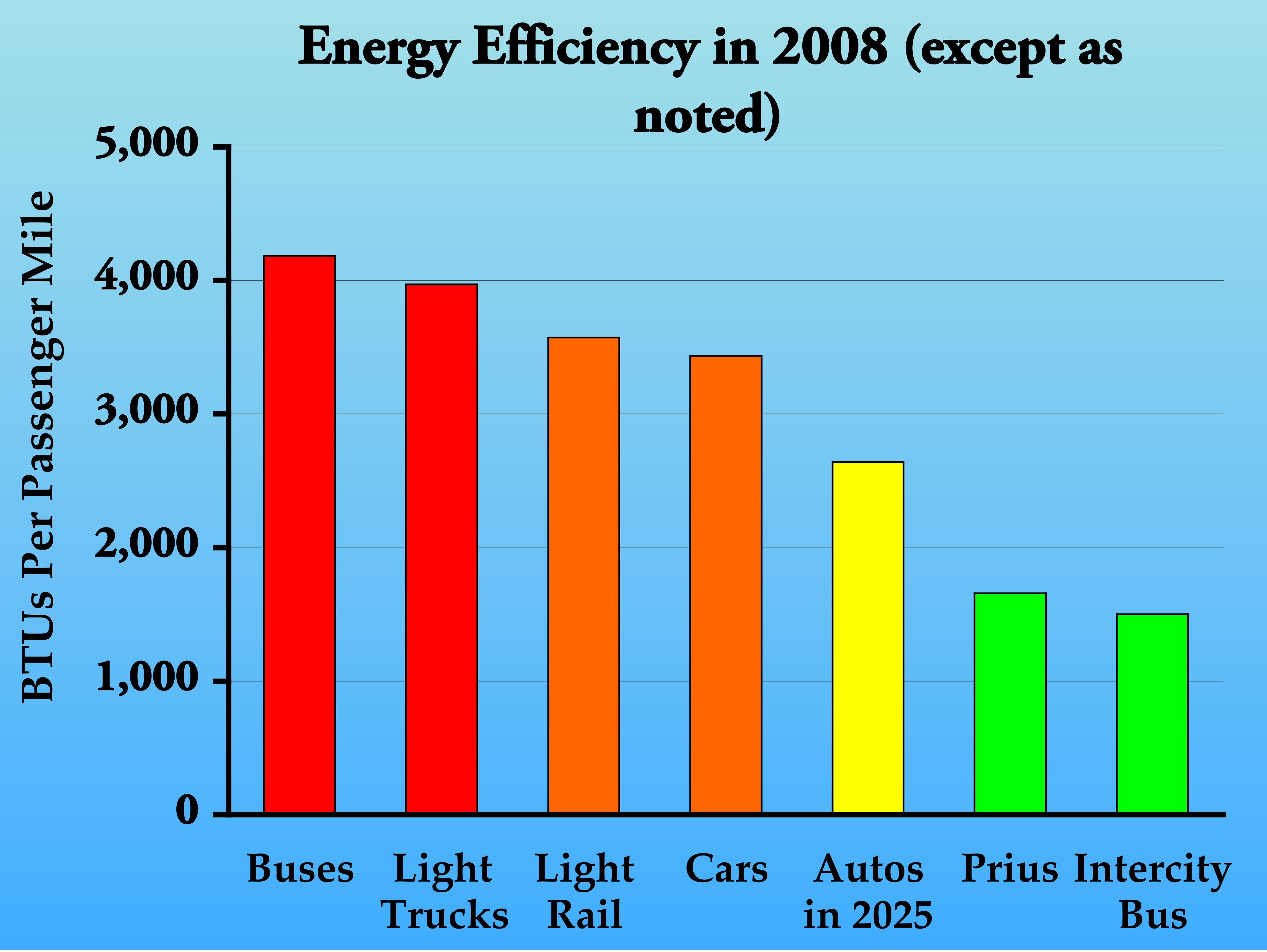
If this sounds far fetched, consider Eugene, OR, which built a bus-rapid transit line that is, in fact, no more rapid than the on-street buses that preceded it. Yet surveys show the riders think it is fast and the modernistic-looking buses have attracted a 120-percent increase in ridership. (The fact that the buses are free helped, but offering free bus service is still far less expensive than building a rail line.)



Forty years ago, transit was environmentally superior to driving. But since then cars have become more energy efficient while transit has become less so. Today, buses are less energy efficient than SUVs while rail transit is about the same as cars and far less energy efficient than, say, a Toyota Prius.



These trends are expected to continue so that, by 2025, cars will be more energy efficient than the most energy efficient transit systems in America. Transit will be the brown form of travel, cars will be the green form.



When looking at energy efficiencies, it is striking that urban transit buses are the most energy wasteful land-based vehicles in the nation, while intercity buses are the most efficient motorized vehicles.

The difference is that intercity buses are private, and they go where people want to go. As a result, they operate an average of about two-thirds full, while urban buses operate an average of about one-sixth full.

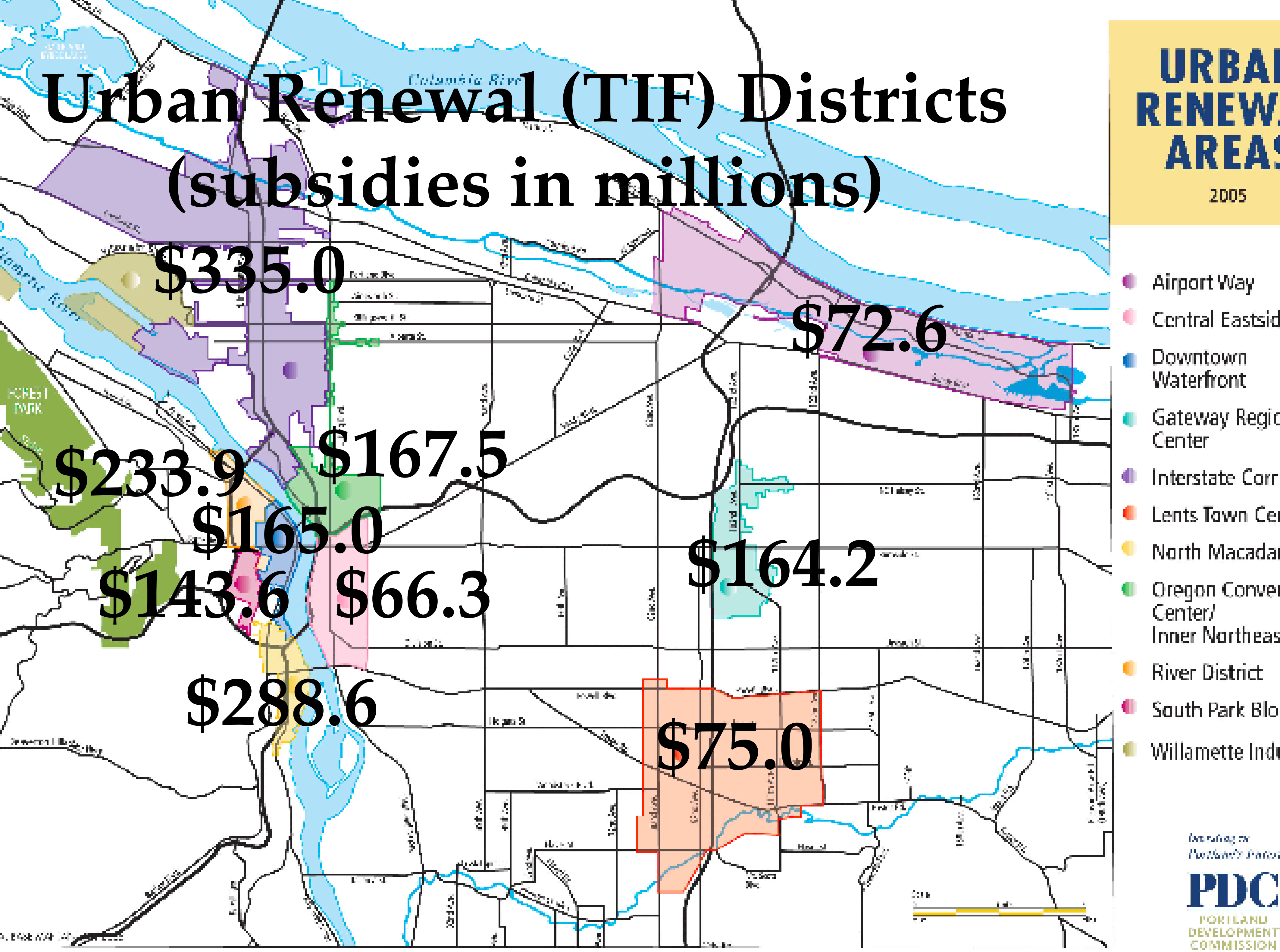
The third part of Obama’s livability program is denser, so-called transit-oriented development such as this one in Portland, Oregon. Excuse me, this is actually in Moscow, Russia.

Here is the one in Portland. The difference is that

in Moscow it is sunny, while

in Portland it is raining. Seriously, when Portland opened its first light-rail line in 1986, it zoned all the land along the line for high-density, mixed-use developments.

10 years later, this is what it got: not a single new transit-oriented development.



Second, they used tax-increment financing--in which the taxes on new development are dedicated to subsidizing that development--along all of the region's light-rail and streetcar routes.

Here is a typical transit-oriented development in Portland. Excuse me, this one is in the former East Germany.

Here is the one in Portland.

The difference is that the one in Germany is scheduled for demolition because as soon as the East Germans got their freedom

they moved into single-family homes like this one.

While Portland's urban-growth boundary has made single-family housing unaffordable to many, forcing them to live in apartments such as this one. This $35 million development received $13 million in subsidies and was built with less than 2/3 of a parking space per dwelling unit. But notice those cars parked in the photo.

They are illegally parked in a fire lane.

These cars are parked on the sidewalk (denoted by the red stripe). Though a light-rail station is right behind this building, this is really just another auto-oriented development.

Here is a mixed-use development with apartments on the top three stories and space for shops on the ground floor. But every single shop you see in this photo

has a for-lease sign in the window. Why? Because they didn't provide parking for the retailers, and there aren't enough people in the apartments to support retail. This doesn't mean that light rail is bad for all business.

MONDAY
February 10, 2003

The Oregonian

SUNRISE EDITION

PORTLAND, OREGON 2001 PULITZER PRIZE WINNER FOR PUBLIC SERVICE 35¢

Drugs are on the move on MAX

Police note that dealers have latched onto Fareless Square stops and the rides between them as fruitful places for sales

By JOSEPH ROSE
THE OREGONIAN

The dealer lingered in the shadows of a MAX platform under the Burnside Bridge. In one of his jeans pockets, $7 packets of heroin rubbed against a trading card-size picture of the Virgin Mary.

Finding a buyer for the drugs was as easy as waiting for trains to stop and unload riders every few minutes.

Busting the seller was just as easy for an undercover cop posing as a street kid on a recent night. Step off the MAX. Make eye contact. Within two minutes, the dealer was in handcuffs.

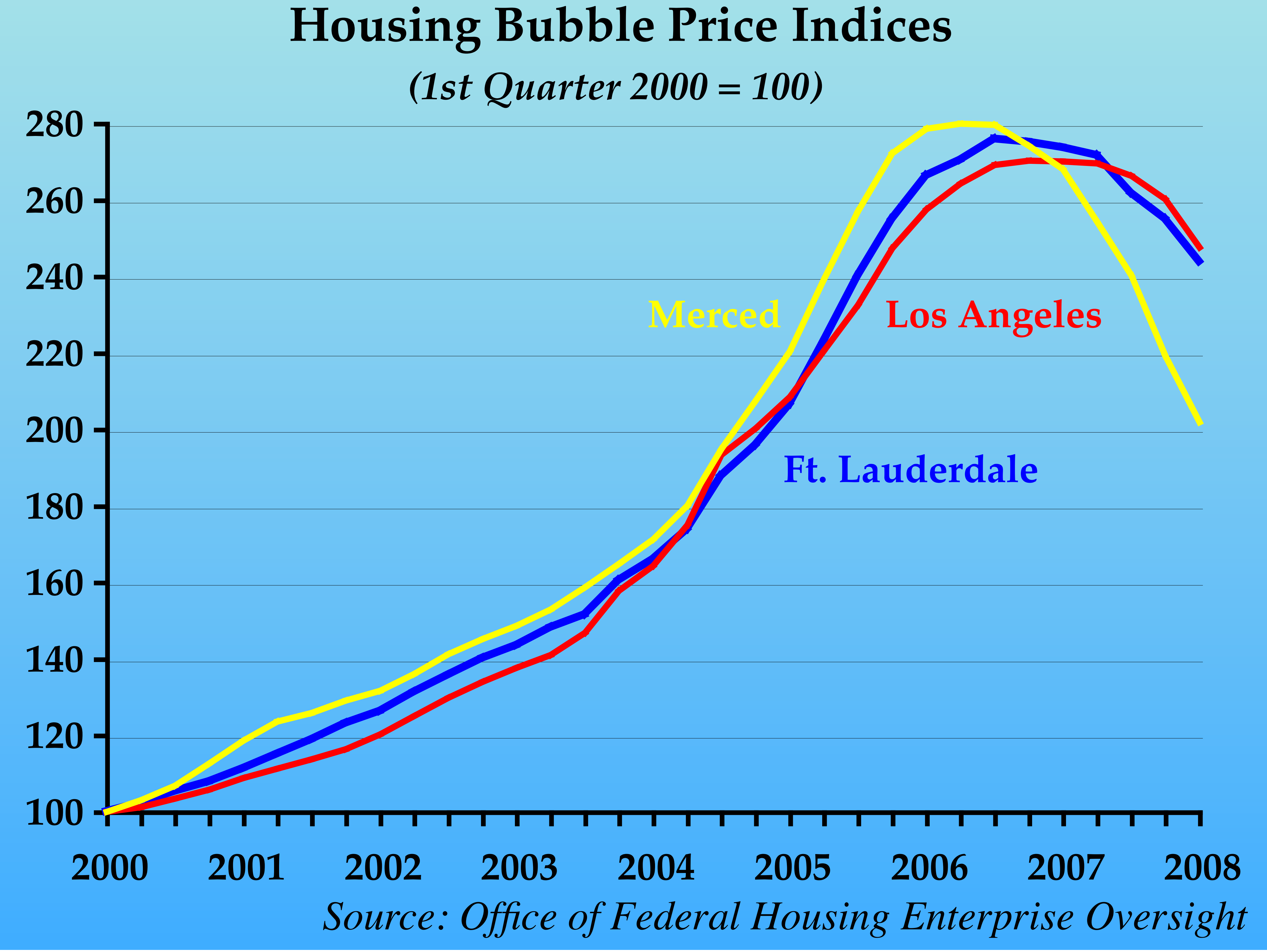
"The frustrating thing is there are three more guys in the wings, ready to take his place," said transit police Sgt. John Harrison as he watched a patrol car take the dealer away.

Every day, from just before sunrise to several hours after dark, the same frustration waits at MAX stops along Fareless Square, say officers who patrol the free-

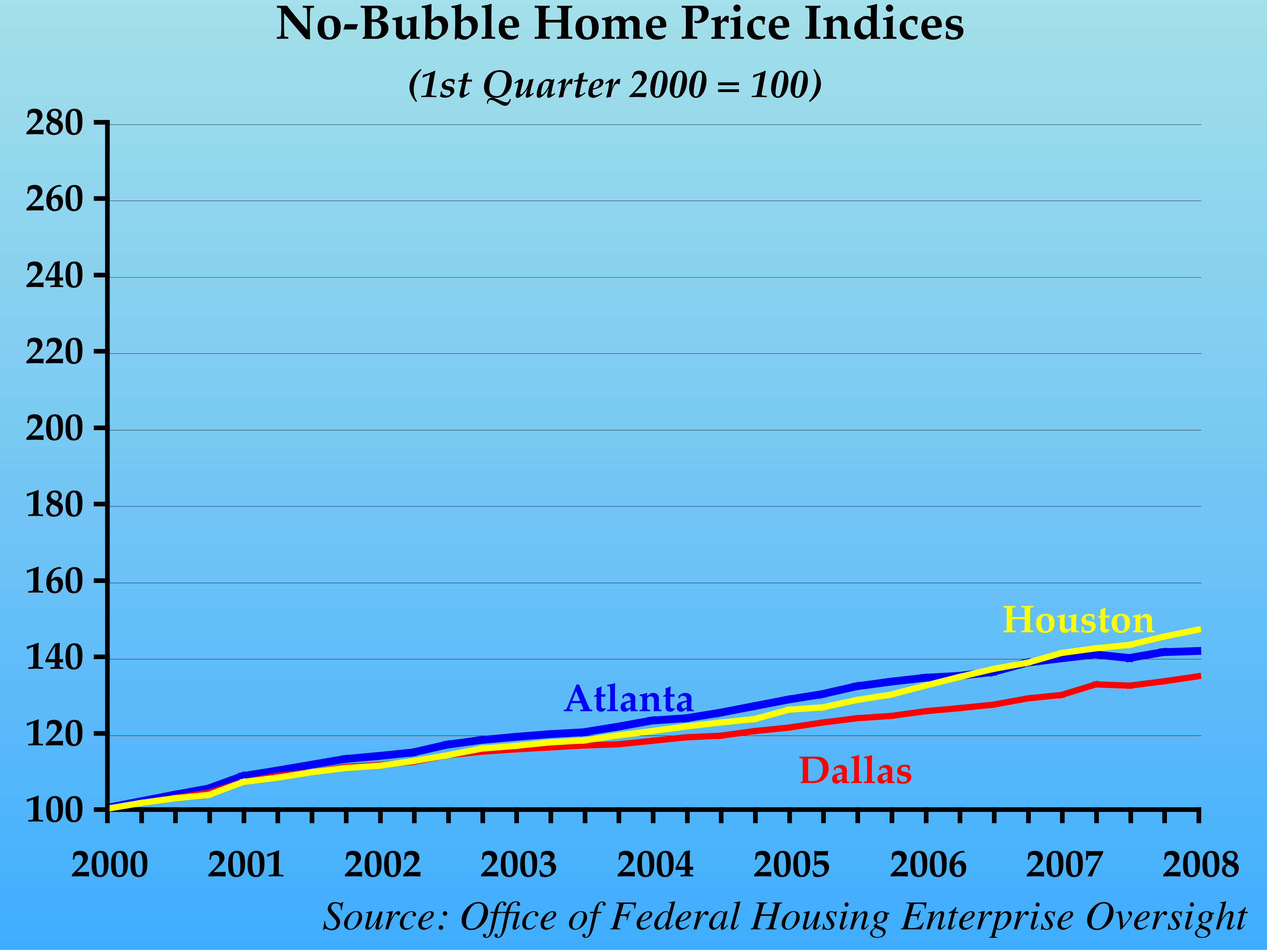
Some businesses thrive on Portland's "MAX" light-rail line, they just aren't businesses that most people want in their neighborhoods.

Urban-growth boundaries and other policies aimed at getting more people to live in dense developments necessarily make housing unaffordable.

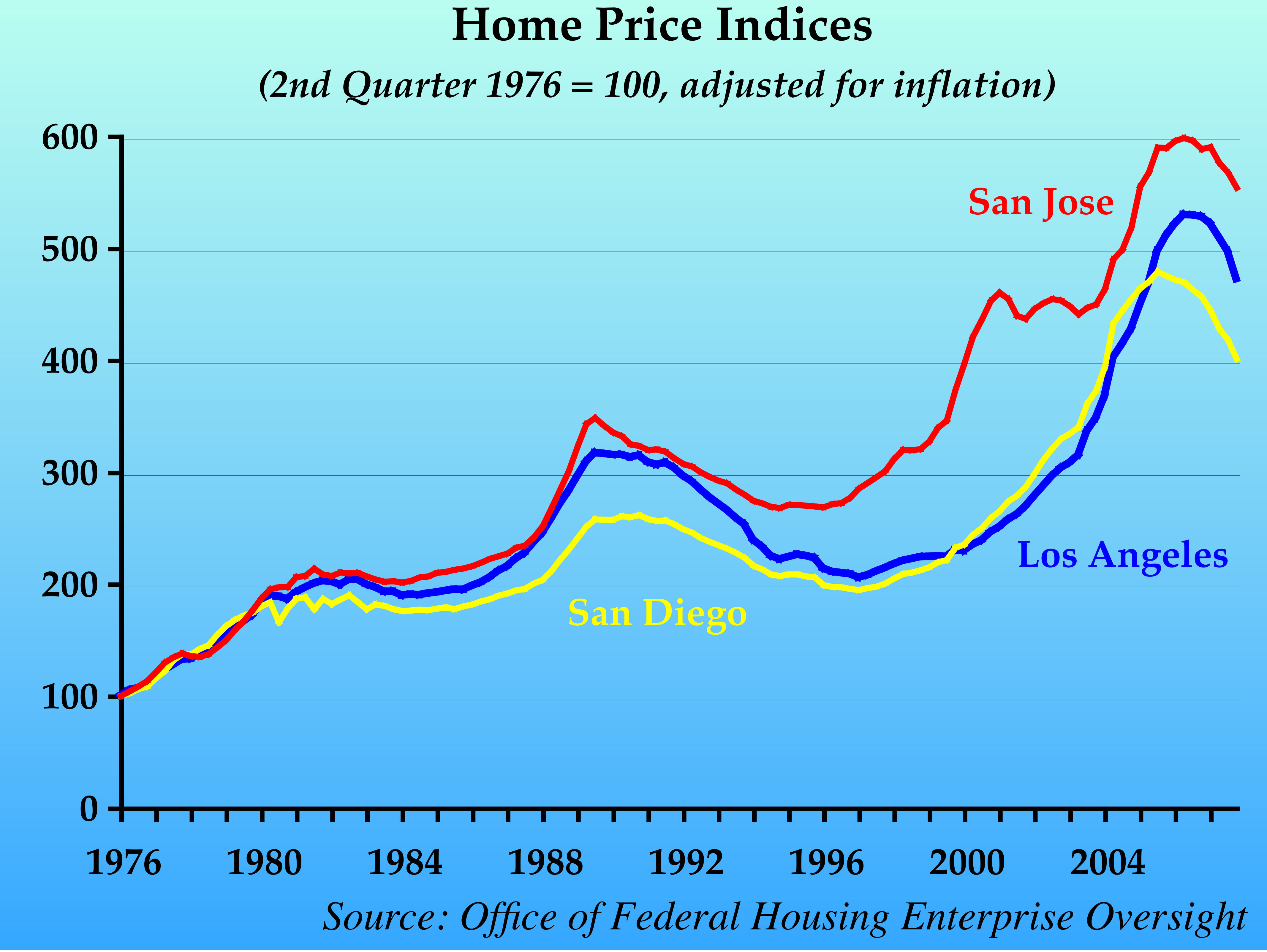
This home, for example, recently sold for $155,000 in Houston, but would easily cost twice that in Portland and four to eight times that in other cities that have adopted smart growth policies.



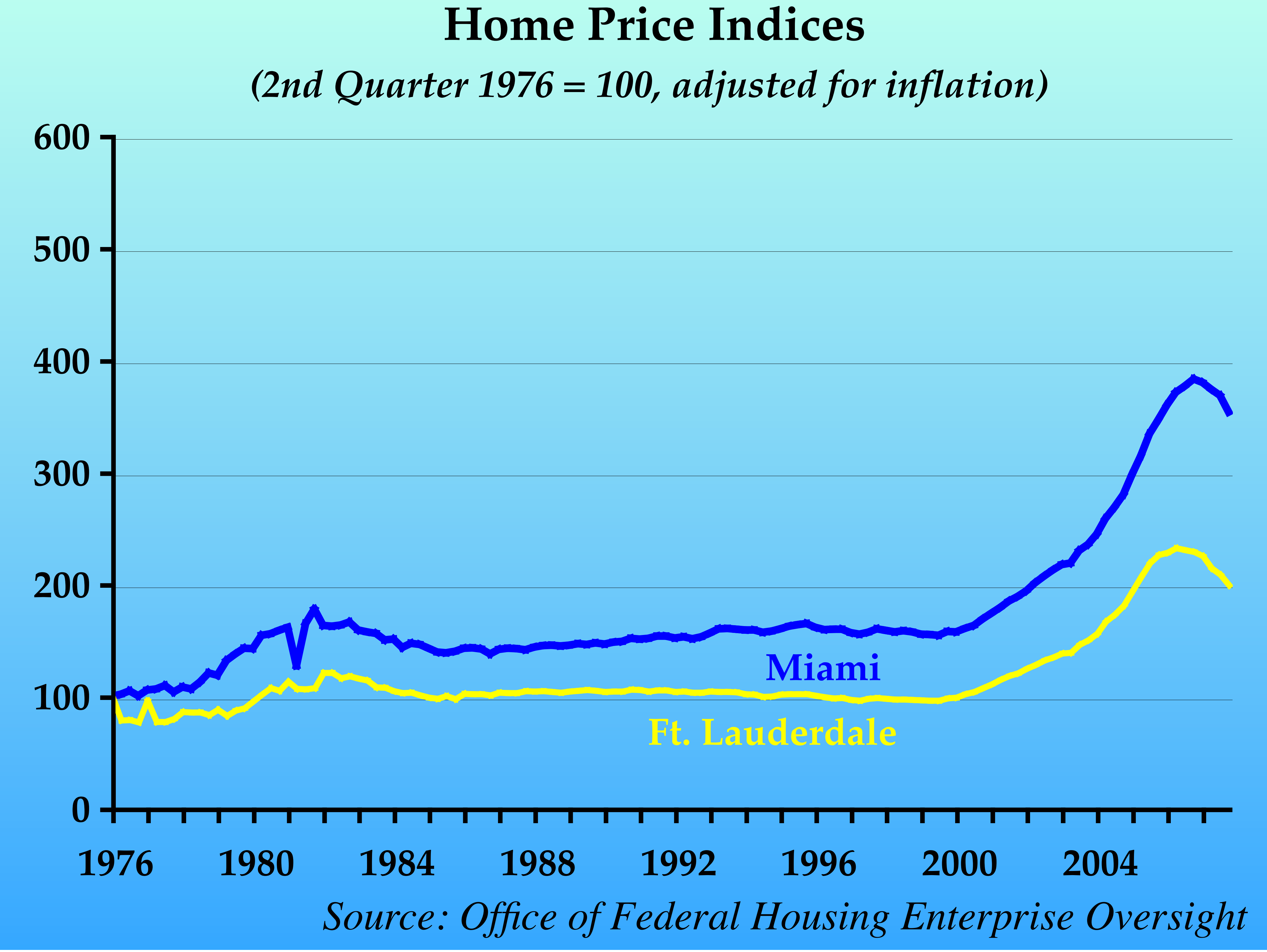
Growth-management planning is responsible for the housing bubble that led to the recent financial crisis. States such as California and Florida which have growth management planning suffered housing bubbles



While there were no bubbles at all in states such as Georgia and Texas that had no growth-management planning.



California, for example, began growth-management planning in the early 1970s and has had three housing bubbles and crashes since then.



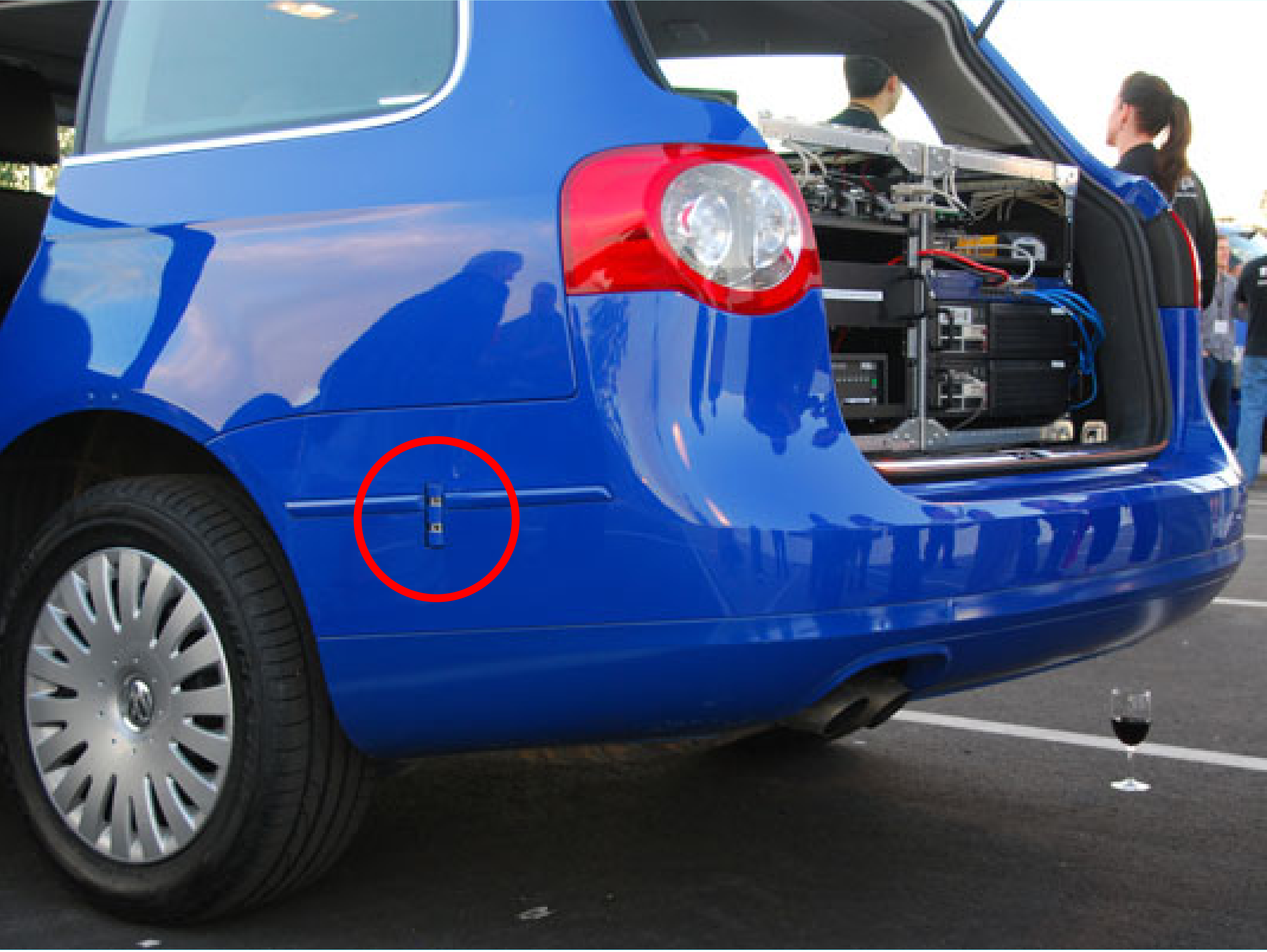
Florida began growth-management planning only in the 1990s, so it has had only one housing bubble.

What should be done instead of Obama's livability program? Rather than invest huge amounts of money in ineffective programs such as light rail and high-speed rail, we should focus on cost-effective ways of reducing congestion and energy consumption such as traffic signal coordination.

The best way to efficiently improve transit is to privatize it and promote competition among transit providers. This will result in service that is better customized to individual needs.

California had a successful experiment with driverless cars in 1997 in which 8 driverless cars operated at 65 mph just one car-length apart. Cars could change lanes and pass slower vehicles. Unfortunately, the US DOT cancelled the program after this demonstration.

Since then, most driverless car research has been done by auto manufacturers and universities. The Defense Advance Research Projects Agency gave two $2 million prizes to the teams whose driverless cars could follow selected courses. The Stanford-Volkswagen team one first prize in the first challenge and second prize in the second.



Although the car in the previous photo is festooned with all sorts of sensors, Volkswagen has miniaturized these sensors to small laser beams in the front, back, and sides of vehicles.

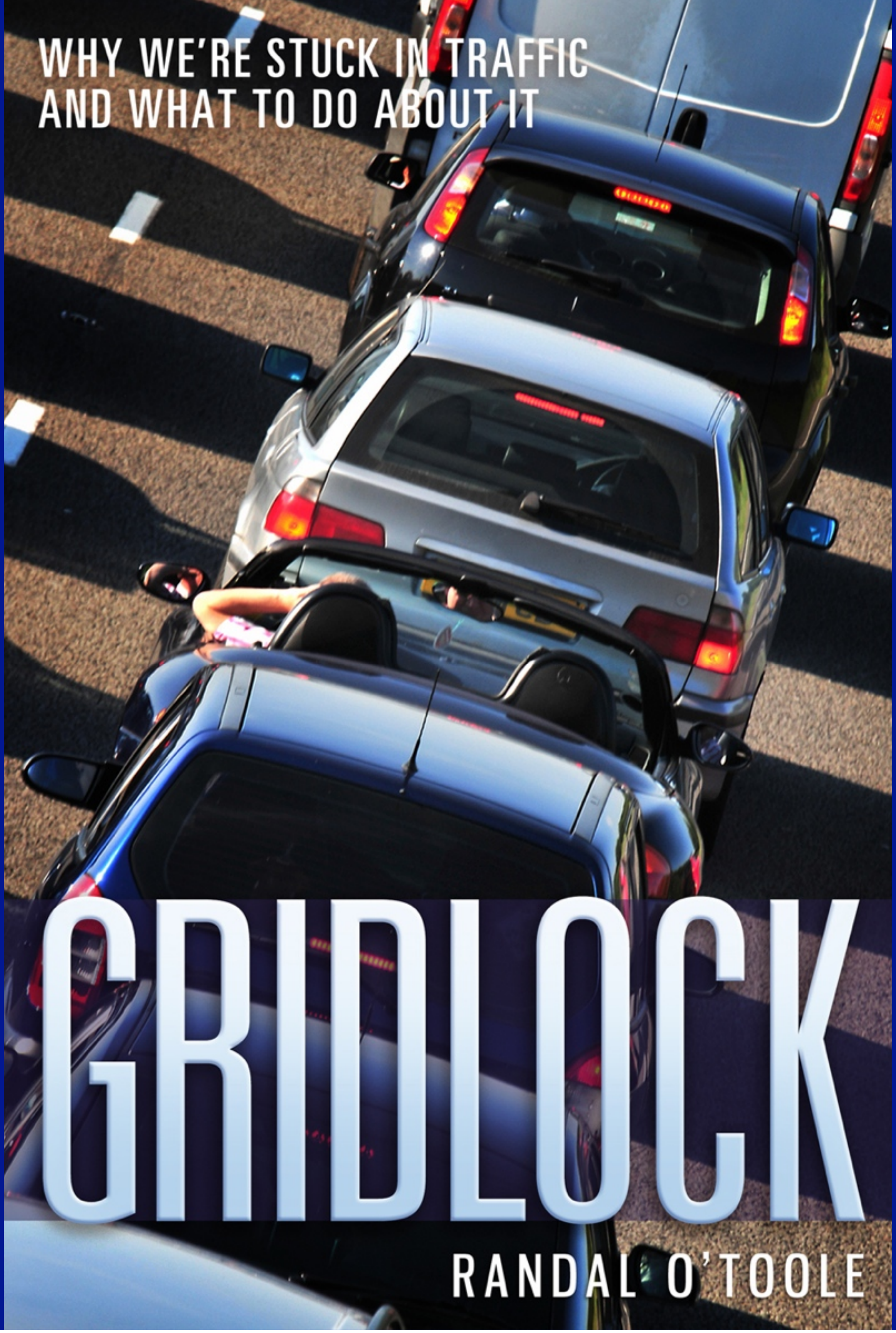
Using these sensors and GPS technology, Volkswagen has a “valet parking car” that will seek an available parking space and park until it is called back into service. To watch this video, go to http://www.youtube.com/watch?v=YVuG7HAt-r4

Driverless cars will make far more effective use of existing highway capacity and provide mobility for everyone, even people who are too young, too old, or otherwise unable to drive.

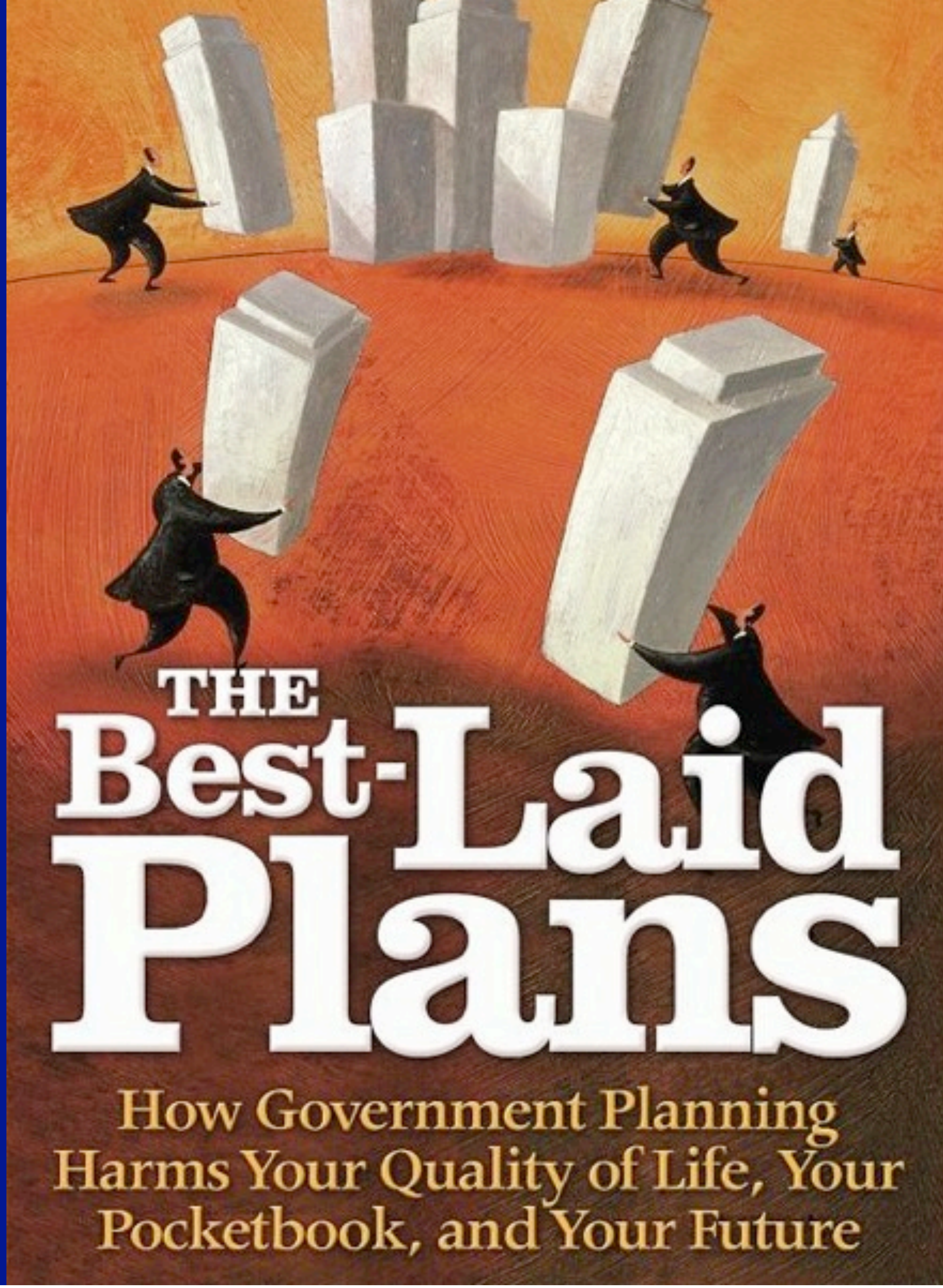
You can already buy cars that are 90 percent driverless. This is a Honda, but other manufacturers offer the same features: first, adaptive cruise control, which maintains a fixed distance behind the car in front of you, and second, lane keep, which detects the stripes on the road and steers within those stripes. For a video describing these technologies, see http://www.youtube.com/watch?v=Mde5U2RqfD8

Obama’s livability program promises to build the world’s finest 1930s-era transportation system ever seen, complete with 110-mph trains, light rail, and high-density tenements, all of which were common in the 1930s.

Instead, we should rely on a user-fee-driven transportation program in which public agencies or private providers offer only those forms of transportation that people are willing to pay for out of tolls, fares, or other user fees.



You can read more about all of these issues in my book, Gridlock, available from cato.org.


THE
Best-Laid
Plans
How Government Planning
Harms Your Quality of Life, Your
Pocketbook, and Your Future

Policy Analysis

No. 663 March 24, 2010

Defining Success
The Case against Rail Transit

by Randal O'Toole

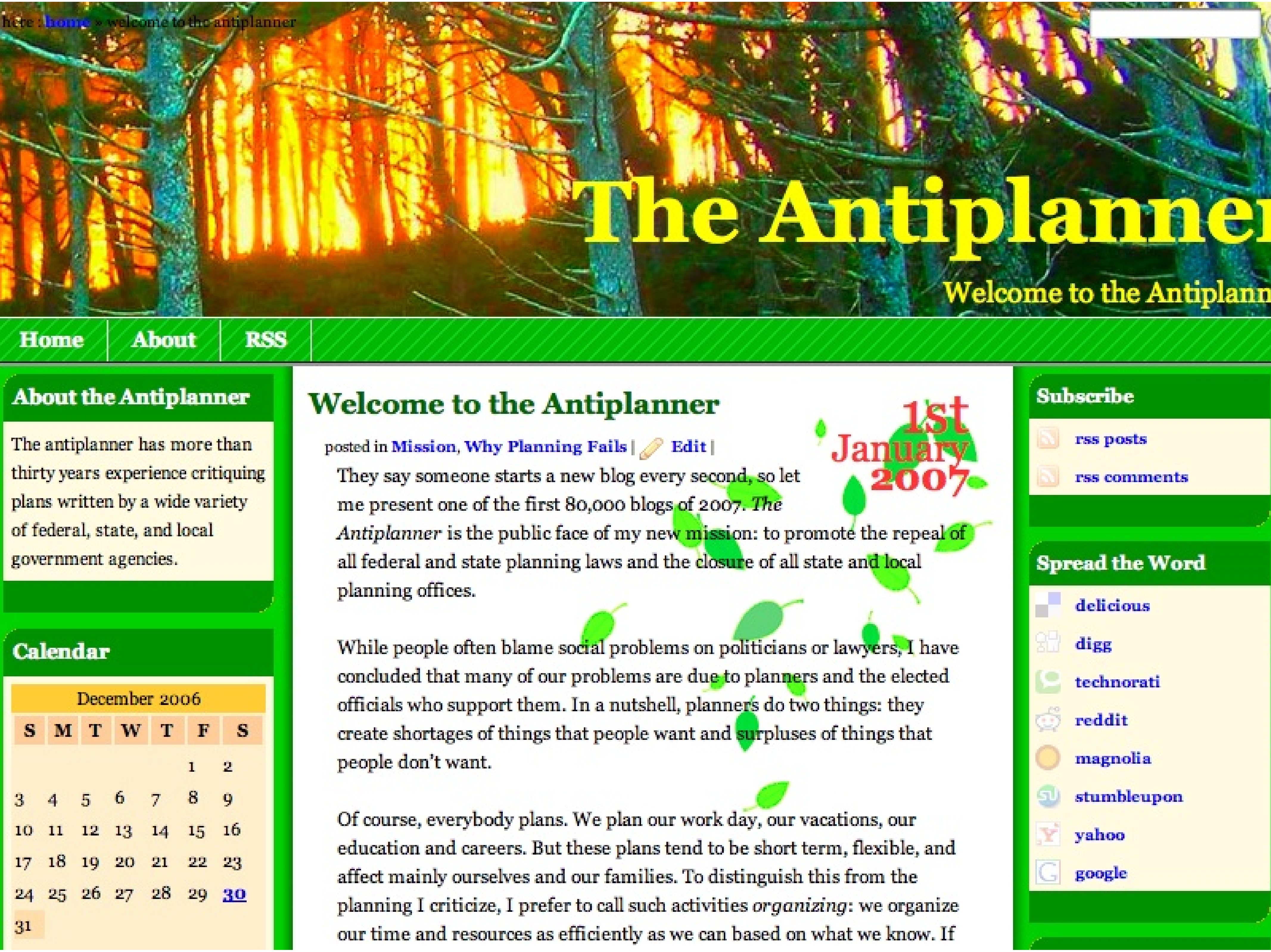
Executive Summary

Over the past four decades, American cities have spent close to $100 billion constructing rail transit systems, and many billions more operating those systems. The agencies that spend taxpayer dollars building these lines almost invariably call them successful even when they go an average of 40 percent over budget and, in many cases, carry an insignificant number of riders. The people who rarely or never ride these lines but still have to pay for them should ask, "How do you define success?"

This Policy Analysis uses the latest govern-

- Ridership: Do new rail lines significantly increase transit ridership?
- Cost-Effectiveness: Are new rail lines less expensive to operate than buses providing service at similar frequencies and speeds?
- The "Cable Car" Test: Do rail lines perform as well as or better than cable cars, the oldest and most expensive form of mechanized land-based transportation?
- The Economic Development Test: Do new rail lines truly stimulate economic development?

You can also download more than a dozen papers I've written about these issues from cato.org.



I also have a blog called the Antiplanner at ti.org/antiplanner.

For more information:

Web sites:

ti.org **cato.org**

americandreamcoalition.org

e-mail: rot@cato.org

For e-mail updates, give me your e-mail address

Here are some web sites and my email address for more information.

Many people think that Europe has so much rail transit that Europeans hardly drive at all.

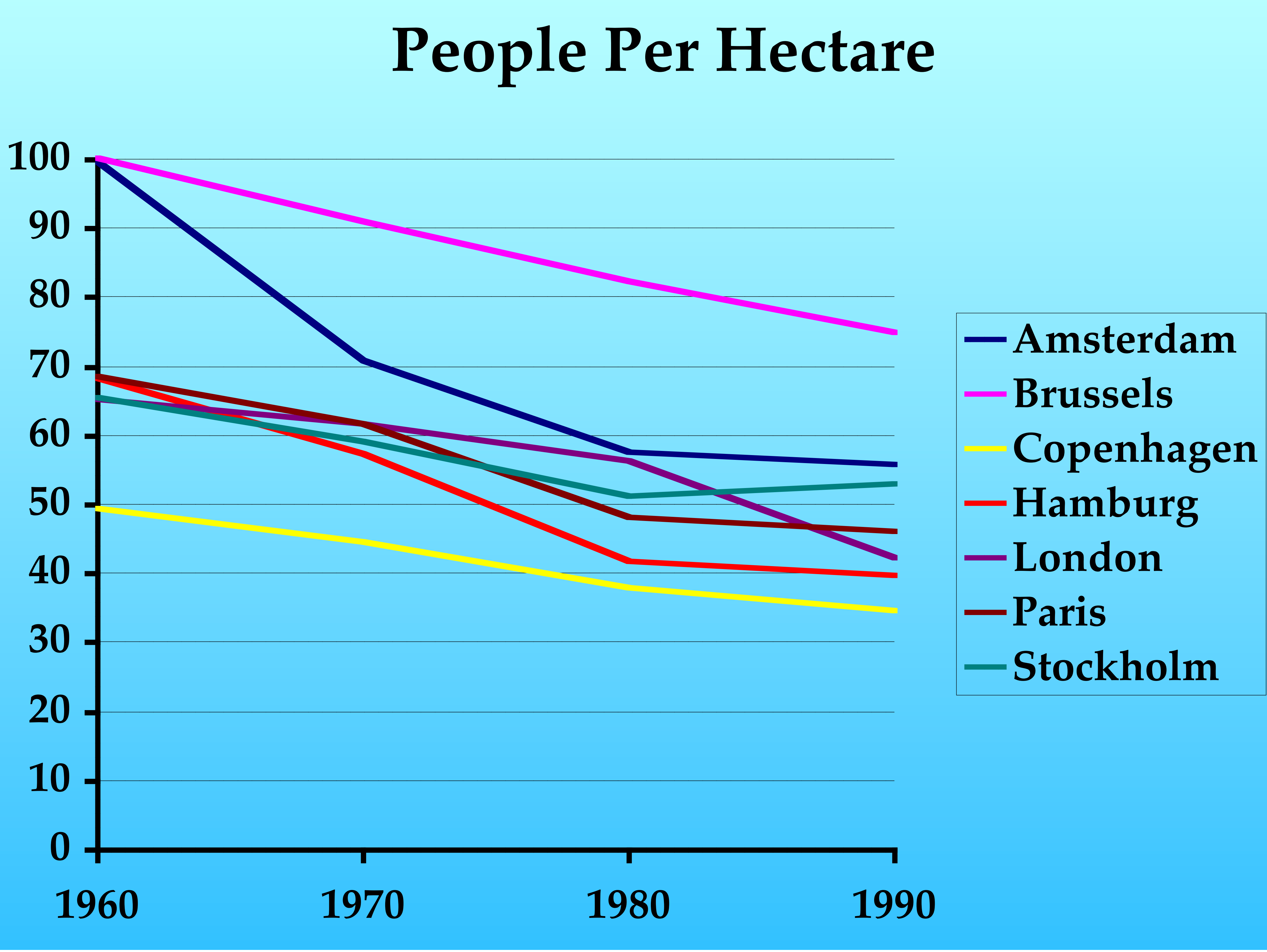
In fact, many European cities are choked with cars.

Inner Paris has lost two thirds of its population in the last few decades. Where did the people go?

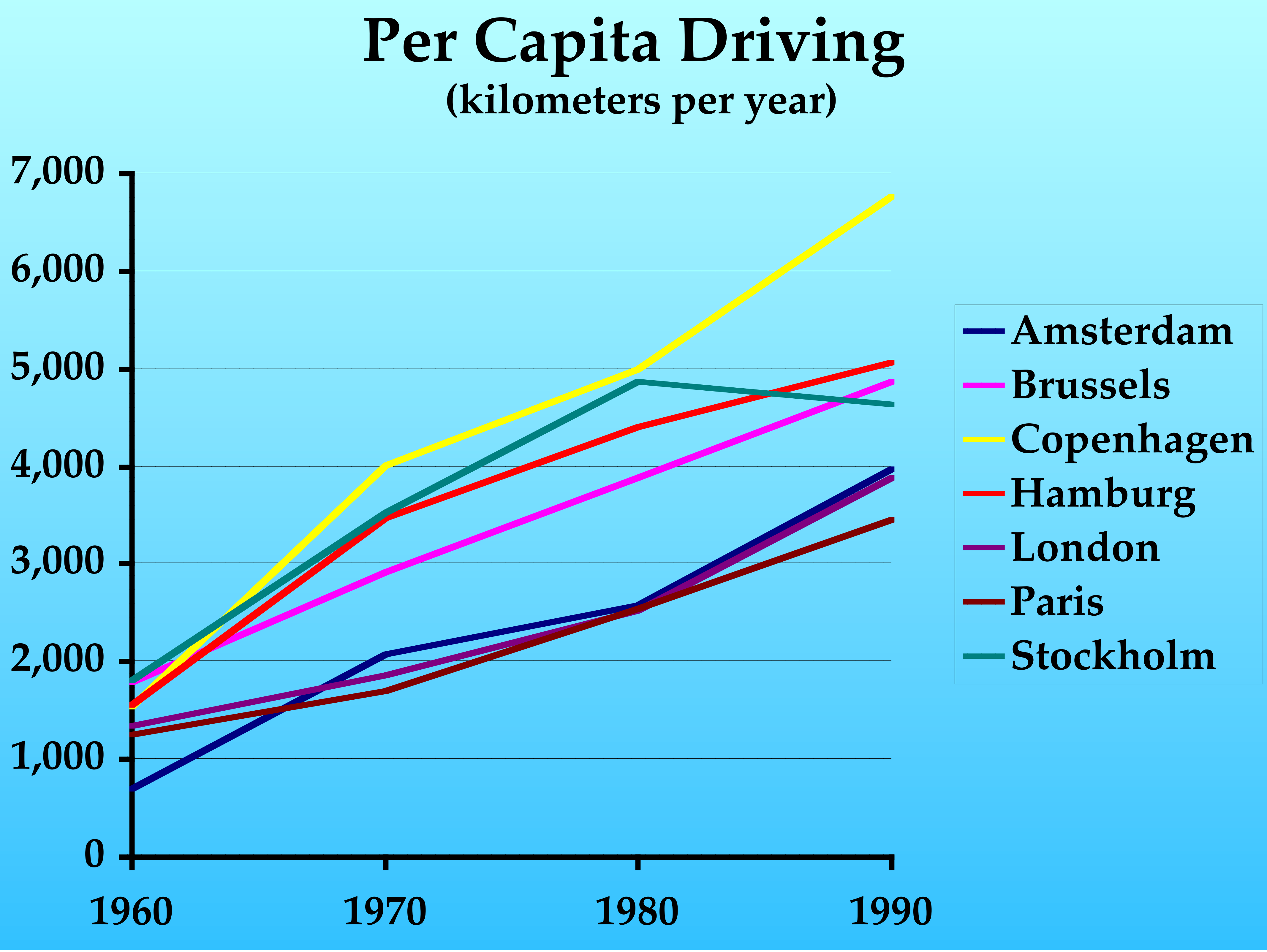
They bought cars

got on the freeways

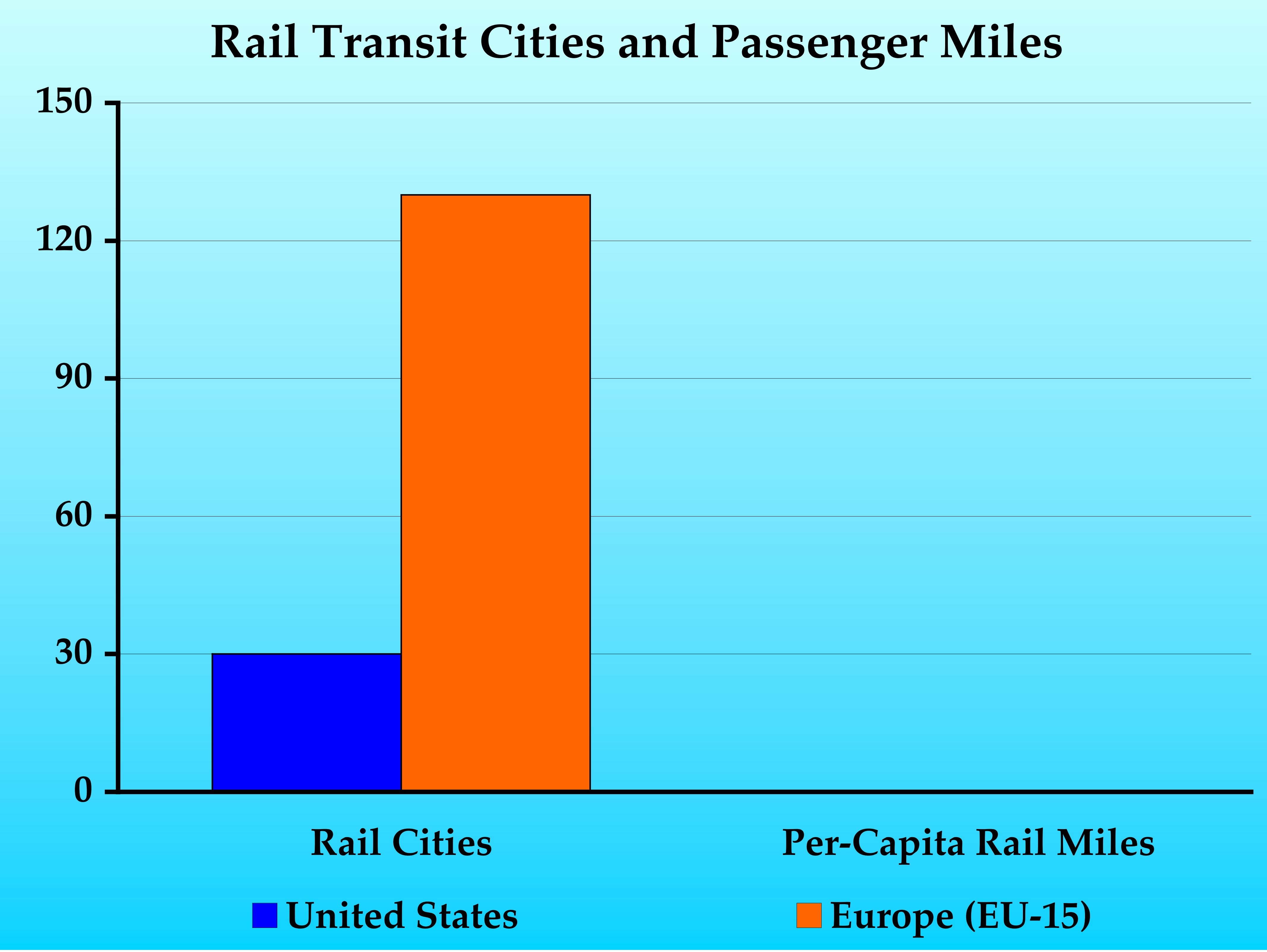
and moved to suburbs that are functionally equivalent to those in the U.S.



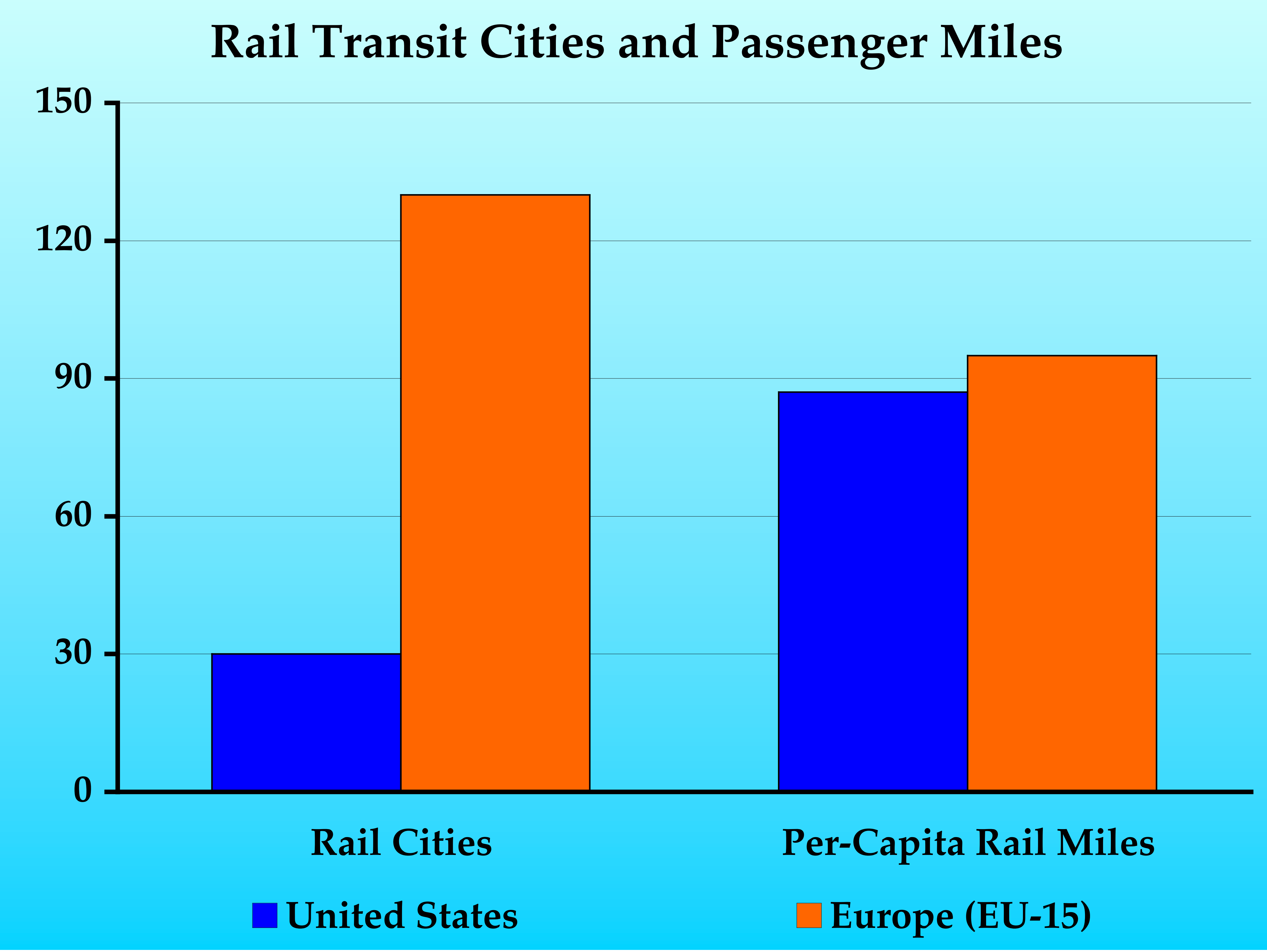
Even as LaHood wants to rebuild American cities in Europe’s image, European cities are becoming more America. Their population densities are rapidly falling



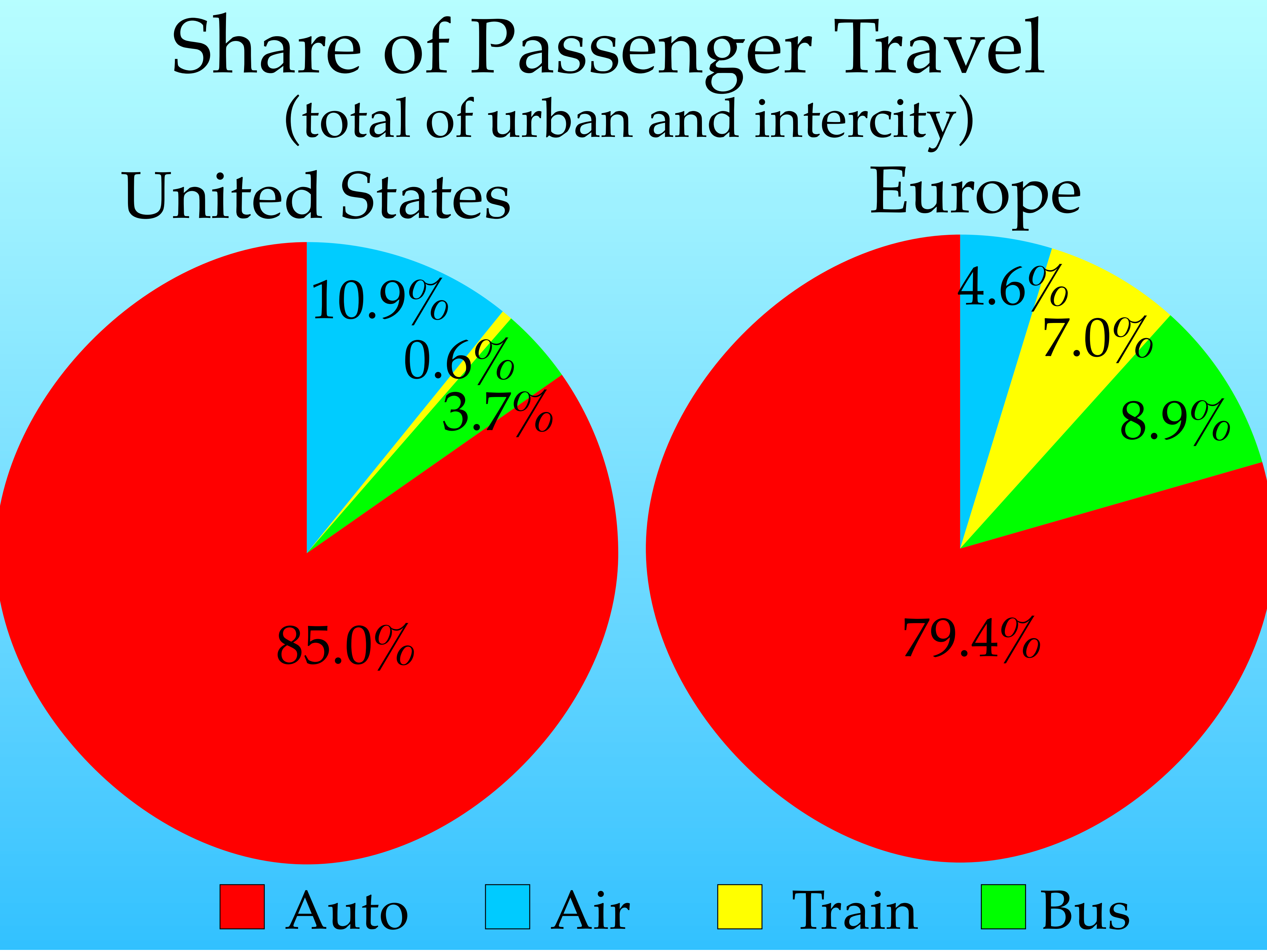
Per capita driving has rapidly increased, and transit ridership is mostly stagnant.



For example, Europe has four times as many urban areas with rail transit as the U.S.



But the average European rides rail transit only about 96 miles a year, just a little more than the 88 miles a year usage by Americans.



While “auto-addicted” Americans drive for 85 percent of our travel, supposedly “green” Europeans drive for 79 percent of their travel, which is not a huge difference.