

Why Americans Don't Ride Transit

Reason #1 – Transit Is Slow

Most transit is much slower than driving, and a lot of transit is slower than cycling.

There's a myth that Americans have some kind of irrational love affair with their cars, and they don't ride transit because of that irrationality. In fact, there are very good reasons why autos provide well over 95 percent of mechanized travel in urban areas while transit provides less than two percent.

One of the most important reasons is that transit is slow. According to the American Public Transportation Association's [*Public Transportation Fact Book*](#), the average speed of rail transit is 21.5 miles per hour, while the average speed of bus transit is 14.1 mph (see page 7). So-called rapid transit, known to the Federal Transit Administration as heavy rail, averages just 21.1 mph, while light rail is 15.6 mph and streetcars are a pathetic 7.7 mph (see page 40).

Among forms of rail transit, commuter rail is fastest at 32.5 mph, while hybrid rail (a form of commuter rail) is 28.0 mph. But commuter rail typically operates only during rush hours, while hybrid rail exists only in special limited circumstances. Monorails and other automated guideways average 8.8 mph, which helps explain why [monorails never became popular](#).

Commuter buses, averaging 26.0 mph, are the fastest form of bus transit, while ordinary

buses are just 12.5 mph and trolley buses (which, like streetcars, tend to be limited to urban centers) are just 7.1 mph. So-called bus-rapid transit lines in this country average 10.5 mph, 2 mph less than ordinary buses, which suggests that most cities' implementation of bus-rapid transit leaves a lot to be desired. The only really rapid transit is the form of

transit that's closest to cars: vanpools, which average more than 40 mph (see page 35 for bus and highway transit modes).

By comparison, the [average speed of auto travel](#) in most American cities is more than 30 mph. The slowest city is New York, at 17.6 mph, which helps explain why New York also has the highest rate of transit usage. The only others under 20 mph are San Francisco and Washington. At the other extreme, average speeds in Kansas City and Tulsa are more than 40 mph, probably because those cities, unlike so many others, haven't actively tried to discourage driving in a doomed effort to get people to ride transit.

Taken as a whole, urban transit averages 14.1 mph, less than half the speed of driving in most cities (and slower than many cyclists). This doesn't count the time spent getting to and from transit stops, waiting for transit vehicles, or transferring from one to another, all of which make transit even slower. But slow speed is only the first reason why Americans don't ride transit. The Antiplan-

ner will be reviewing more reasons in the next several days.

From: <http://ti.org/antiplanner/?p=12694>

Reason #2 – It Doesn't Go Where You Want to Go

Most transit is oriented to downtown, a destination few people go to anymore. If you don't want to go downtown, transit is practically useless.

This week, the Antiplanner is exploring the myth that Americans don't ride transit because they have some kind of irrational love affair with their cars. In fact, there are very good reasons why autos provide well over 95 percent of mechanized travel in urban areas, and transit's limited destinations is one of them.

The Portland urban area, for example, has around 15,000 miles of roads and streets. The region's 80 miles of rail transit don't begin to reach the number of destinations that can be reached by car. Adding the roughly 1,000 miles of bus routes helps, but still requires many people to walk long distances to and from transit stops.

Worse, almost all of the transit in the region, along with every other major urban area, is oriented to downtown. For example, the Sylvania campus of Portland Community College is about seven miles from Beaverton. But taking transit from one to the other requires a trip downtown and back, nearly tripling the number of miles of travel.

Transit systems started their downtown orientations in the late nineteenth century when almost all urban jobs were downtown. Today, however, only about 7.5 percent of urban jobs are still located in

downtown areas. In the New York urban area, 22 percent of jobs are located in downtown Manhattan, another reason why transit ridership is high in that region. But elsewhere, the percentage is [much smaller](#).

Transit planners try to compensate for this by designing transit systems that connect regional and town centers with the downtown areas. Such a policy might have made sense sixty years ago when most jobs that weren't downtown were located in such centers. Today, however, less than 30 percent of urban jobs are located in either downtowns or regional and town centers.

For example, Denver is spending billions of dollars building a rail transit system that aims to connect all of the regional and town centers in the area. Yet, when it is done, planners predict that only 26 percent of the region's jobs will be within one-half mile of a rail transit stop. (Of course, most of the people working those jobs won't live within a half mile of a rail stop.)

The reason for the decline of regional and town centers is the growth of service jobs. In 1920, nearly 40 percent of all American jobs were in manufacturing, which tends to be concentrated, and there was just one-and-a-third service job for every manufacturing job. By 2010, there were ten service jobs for every manufacturing job, and those service jobs tend to be finely spread across the landscape.

As a result, transit just doesn't work for most people. Making transit systems work for more people would require using more small-box transit: small buses, vans, and so forth. Instead, many transit agencies want to emphasize big-box transit: huge buses, railcars, and trains. This just shows how out

of touch transit agency leaders are with the people they are supposed to serve.

From: <http://ti.org/antiplanner/?p=12709>

Reason #3 – It's Expensive

The transit industry claims that transit saves people money. But the truth is that, for most people, it costs a lot less to drive than to ride transit.

Public transit is the most heavily subsidized form of transportation in the United States, with subsidies per passenger mile that are 50 to 100 times greater than subsidies to driving. But people who use transit are only dimly aware of the subsidies. Even without counting the subsidies, most people don't ride transit partly because the alternatives, including driving, cost so much less.

The [2015 National Transit Database](#) shows that people pay an average of 28 cents per passenger mile to ride transit. To compare this cost with driving, the [American Public Transportation Association](#) uses [American Automobile Association calculations](#) of the cost of driving, which show an average cost of about 57 cents a mile for medium-sized cars. So it seems like a no-brainer to conclude that transit saves money.

AAA, however, assumes that everyone buys cars when they are brand new, pays full financing charges, and then replaces their cars every five years. That may be the way some people buy cars, but most cars last far longer than five years. According to the [latest data](#), the average age of cars on the road is 11.6 years, which means cars last an average of 23 years. The AAA numbers fail to account for 78 percent of a car's lifespan, during which time monthly payments and finance charges may be irrelevant.

If you have a car, no matter how old it is, you only pay the variable cost whenever you drive it on any particular trip. According to the AAA data, that variable cost—fuel, maintenance, and tires—averages less than 15 cents

a mile, and would be even lower if you had a more fuel-efficient car. So right there you are saving at least 13 cents a mile over transit.

If you don't live alone, you probably often drive with a passenger. That cuts your cost per passenger mile in half. Transit makes no sense if you and one or more other people in your household regularly travel together.

If you don't have a car and live alone, transit might cost less than buying a brand-new car. But what about buying a used car? If you spend, say, \$5,000 on a used car instead of \$25,000 on a new one, then your depreciation is less than \$1,000 a year instead of the \$3,759 calculated by AAA. Insurance on a used car costs a lot less than a new one. If you pay cash for it, you save the \$683 in annual finance charges calculated by AAA. AAA also estimates taxes, license, and registration fees of \$687 a year; in Oregon, which has no sales tax, it's only about \$40. But not everyone lives in Oregon.

Counting the higher number for taxes and fees, but lower numbers for insurance and depreciation, annual fixed costs might be around \$2,500 a year. If you drive 15,000 miles a year, that's less than 17 cents a mile. Add the fixed costs of 15 cents a mile and the cost of driving your car each mile is slightly more than the cost of riding transit. But you could have saved money by buying a more fuel-efficient car, an older model that costs less than \$5,000, getting basic insurance instead of full comprehensive coverage, or any of a number of other ways. Most

importantly, if you have a passenger in your car at least some of the time, the cost per passenger mile quickly drops below the cost of riding transit.

Bottom line: If you already have a car, the variable cost of taking your car on any particular trip will be far less than the cost of riding transit. If you don't already have a car, it is easy to find ways to buy a car so that, even including the fixed costs, driving costs less than transit—which explains why 92 percent of American households have cars.

Many people buy their first car because they need it to do something that transit can't do. But, once they own it, the variable cost of driving is so low that they use it on trips that could have been taken by transit. That's the basic story of transit decline in the 20th century.

This doesn't even consider the alternative of cycling, which costs less than either driving or transit, but in many cases is faster than taking transit (and sometimes faster than driving). Driving is still the mode of choice for the vast majority of Americans, but the low cost of cycling helps explain why the American Community Survey found that the number of people cycling to work grew by more than 21 percent between 2010 and 2015, but the number of people taking transit grew by less than 15 percent. Cycling and walking, not transit, are fast becoming the modes of choice for people without cars.

From: <http://ti.org/antiplanner/?p=12714>

Reason #4 – Lack of Privacy and Security

Compared with the aura of security offered by riding inside of an automobile,

many people avoid transit because they feel vulnerable and threatened by other riders.

Crime, sexual harassment, and other invasions of privacy are common on metro systems throughout the world. Sexual harassment is especially bad on [Tokyo subways](#), and a survey of 600 women transit riders in Paris found that [100 percent of them](#) reported having been sexually harassed.

Such harassment often depends on the anonymity that comes with extreme crowding, but most American transit systems don't get that crowded precisely because Americans won't accept the invasions of personal space required for such crush conditions. Still, there are [numerous complaints](#) of sexual harassment on the New York City subway. Crime is [rapidly rising](#) on the DC Metro as well.

[Crime](#), including [thefts of smart phones](#), as well as [violent crime](#), can be a big problem on light rail, partly because there is rarely anyone aboard to keep vehicles secure. Bus drivers presumably provide a modest deterrent to crime, but still there is the problem of [bus-stop crime](#).

Some researchers argue that transit [doesn't really increase crime](#) near transit stations. But for potential transit riders, perception trumps reality. A woman may only have to suffer one or two experiences with groping or other forms of sexual harassment before she decides to never ride transit again. A man who is [beaten and robbed of his coat](#) because the coat happened to match a particular gang's colors is also going to avoid transit.

Some transit systems have designated [women-only cars](#) to protect women from

harassment, but results have been mixed. Short of putting a guard on every bus and railcar, the issue of transit security cannot be easily solved.

From: <http://ti.org/antiplanner/?p=12720>

Reason #5 – Our Cities Aren't Built for It

Housing, jobs, and other destinations are so diffused throughout American urban areas that they don't generate the large numbers of people moving from one point to another that mass transit systems need to work.

“Transit worked when American cities were denser,” is the mantra of today's urban planners. “If we can increase their densities, transit will work again.” Reality is a lot more complicated, and that reality explains why transit can't work in American urban areas even if their densities increase.

From about 1880 to 1913, transit and cities co-evolved thanks to new technologies that benefited both. The same steam engines that powered commuter and early rapid transit trains also powered downtown factories. The same Bessemer steel that made the rails that streetcars and urban trains rolled upon also provided the structural beams that allowed construction of skyscrapers. The same electric motors that moved electric streetcars also powered electric elevators that gave people quick access to the upper floors of those skyscrapers.

These technologies created monocentric cities by concentrating jobs in urban centers surrounded by residential areas that fed into the centers on transit. Never before in history had cities been like this, yet people today still imagine that cities ought to be mono-

centric, a myth that drives too much bad policy.

This was transit's Golden Age, but it was far from perfect. Transit was too expensive for unskilled workers, so they had to live in high-density tenements located within walking distance of downtown factories. To make a profit, rapid transit and streetcar operators used just enough vehicles to carry people but not enough to give them breathing room, at least at rush hour. Many transit lines had been built from the profits of the real estate developments they accessed, and while fares covered operating costs they were insufficient to rehabilitate these lines as they wore out.

Urban and transit evolution parted ways in 1913, when Henry Ford built the first moving assembly line to make his Model Ts. Cheap cars were an obvious threat to transit, but a bigger threat was less visible: unlike steam-powered, belt-driven factories, moving assembly lines required lots of land, so factories moved to the suburbs. When the suburbs refused to be annexed to the cities, monocentric cities became polycentric urban areas.

At least through the 1970s, urban planners and central city officials pretended their cities were still monocentric, and they wrote numerous downtown plans, urban renewal plans, transit plans, commuter-tax plans, and other plans designed to maintain the preeminence of downtown. The construction of the San Francisco BART and Washington Metro systems were among these plans, but were as doomed to fail as all the others.

As both jobs and people left city centers after World War II, most major central cities began to lose population even as their suburbs grew. Since 1950, Buffalo, Cleve-

land, Detroit, Pittsburgh, and St. Louis have all lost more than half their populations. Cincinnati lost 41 percent; Baltimore 35 percent; Boston and Minneapolis 30 percent; Washington 29 percent; Chicago 25 percent; St. Paul 13 percent; San Francisco and Oakland, 12 percent. Except in New York, one of the few major central cities that had more people in 2000 than 1950, this decentralization greatly reduced transit's effectiveness.

By the 1980s, planners began to realize that urban areas had become polycentric, and today polycentricity is a fundamental part of the New Urbanism. Too late: cities had changed again with the decline of manufacturing jobs and the growth of service jobs. In 1920, nearly 40 percent of all American jobs were manufacturing, and there was one-and-a-third service jobs per manufacturing job. Today, less than 10 percent of jobs are manufacturing, and there are ten service jobs for every manufacturing job.

Even if they weren't in city centers, manufacturing jobs were at least concentrated. But service jobs in such fields as health care, education, wholesale and retail trade, and utilities, were diffused throughout urban areas. As noted in Reason #2, less than 30 percent of urban jobs today are located in downtowns or regional or town centers. Other things once concentrated in downtowns, such as shopping, churches, and theaters, also became diffused.

These trends had the least impact on New York, but even in the New York urban area (which includes suburbs in northern New Jersey, southwest Connecticut, and New York state), as opposed to the city itself, transit is pretty marginal. While transit carries 57 percent of New York City commuters to work, it carries just 14 percent of suburban New York commuters.

The diffusion of jobs and other destinations throughout an urban area returned cities to be more what they were like for thousands of years before the late nineteenth century. Simply increasing population densities, as regional governments in California, Oregon, and Washington have done, doesn't help because those jobs and other destinations remain too diffuse for transit to work for any but a small minority of the population. These changes are not only irreversible, there is no reason why we should want to reverse them.

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Reason #6 – Infrastructure Is Crumbling

Rather than maintain transit systems in a state of good repair, the transit industry has chosen to build more transit lines that it can't afford to maintain. Transit riders respond to delays and dilapidated transit by finding other methods of travel.

The Department of Transportation's [latest assessment](#) of the nation's transit systems found an \$89.8 billion maintenance backlog. Moreover, the backlog is growing by \$1.6 billion a year, because rather than fix transit systems, transit agencies are building more.

To eliminate the backlog in 20 years, the report calculated, *every single dollar* now being spent on transit improvements must be transferred to maintenance and preservation. Alternatively, the industry must find at least \$5.8 billion in new subsidies each year (see page Roman numeral L).

This backlog is definitely hurting transit ridership. American Public Transportation

Association [ridership reports](#) reveal that 8 percent fewer people rode the Washington Metro rail system in the first half of 2016 than in the same period in 2015. This decline was largely due to people finding other alternatives because the subways have become so unreliable, not to mention unsafe. Although the agency began slowing trains to do trackwork late in the second quarter, the ridership decline began before that time.

Yet, aside from a few conferences during which mid-level agency officials pay lip service to achieving a state of good repair, the transit industry is ignoring this problem. Boston's MBTA, for example, says that it has a [\\$3 billion maintenance backlog](#) and needs to spend \$470 million a year just to keep it from growing, yet it is spending just [\\$100 million a year](#) on maintenance. Instead of restoring the system, it is spending well over [\\$2 billion](#) on a 4.3-mile extension of its light-rail line to Medford, Massachusetts.

Similarly, rather than contribute its fair share towards restoring the Washington Metro system, Maryland wants to spend more than \$2 billion building the [Purple Line light rail](#). Across the state line, Virginia is doing the same thing: building the [Silver Line](#) rather than assist in maintaining the existing system.

Similar problems can be found in Atlanta, Portland, San Francisco, and many other urban areas: rail transit systems declining, yet agencies are putting their resources into building new lines rather than repairing existing ones. Over the past decade, overall transit ridership has fallen in Atlanta, Cleveland, Pittsburgh, Sacramento, and other cities, and deteriorating infrastructure is one of the reasons.

Groups opposed to new highway construction used to have a mantra: "Fix it first."

Groups today that sincerely support public transit should apply that mantra to the transit industry if they want to avoid further ridership declines.

From: <http://ti.org/antiplanner/?p=12742>

Reason #7 —It Doesn't Carry Freight

Carrying large packages, suitcases, or shopping bags on transit is awkward at best and impossible at worst. Anyone who expects to travel with such cargo, even if only some of the time, will do best with a car.

In 2007, Ikea opened its first store in Portland. It is 280,000 square feet, has around a thousand parking spaces, and is near a light-rail station. How many people who plan to do more than just window shop do you imagine carry their purchases home on the light rail?

[See: <http://ti.org/antiplanner/?p=12750> for graphic]

Drag right to see the Cascades light-rail station, which is much further from Ikea than any of the parking spaces.

The land was available for Ikea because the city of Portland had given it to Bechtel in 2001 as partial payment for its [no-bid contract](#) for constructing the airport light-rail line. The city zoned the land for small-box retail, because who would want to take a light rail to a big-box store like Wal-Mart? It turned out the real question was: who would build small-box stores in a shopping area with no big-box anchor stores? The answer was no one, so Portland reluctantly rezoned the land to allow for two big-box stores so long as neither of them were Wal-Mart. Apparently, Portlanders were okay with a store selling cheap furniture made in

Asia if the store is from Sweden, but not from Arkansas.

[Fifteen American airports](#) are served by rail transit lines. Yet few if any of these lines have baggage racks or any other convenient place to put luggage. Just [15 percent of air travelers](#) take the train to Washington DC's Reagan National Airport, and just 12 percent take the train to Boston's Logan Airport. As near as I can determine, it is less than 10 percent for every other airport. Most of the riders on airport trains are airport or airline employees.

Unless you go grocery shopping every day, it simply isn't feasible to carry your purchases on transit. A bicycle with large panniers can carry more groceries than can easily be carried on a bus or train.

Moving to a new home? Buying gardening supplies? Taking a load to the dump recycling station? Transit's no help. Most people don't even trust transit to bring their dry cleaning home (at least, I've never seen anyone carrying dry-cleaned clothes on the transit lines I've been on).

People don't carry Ikea furniture or ten bags of groceries on every trip they take. But those who sometimes do will probably have a car to do it in. As [previously pointed out](#) here, once most people have a car, it becomes their mode of choice for nearly all travel that is beyond walking distances.

From: <http://ti.org/antiplanner/?p=12750>

Reason #8 – Life Is Complicated

Transit works best going from point A to point B if you happen to be near point A and want to get to point B. Transit doesn't work well for *trip chaining*, going from point A to point B via points C, D, and E. Because life is complicated and

people don't want to spend all their time traveling, trip chaining works best in an independent vehicle such as a car.

On your way to work, you might want to drop off your kids at school or daycare, drop off your suit at the laundry, and get a cup of coffee. On your way home, in addition to picking up the kids and laundry, you may want to go grocery shopping. This is called [trip chaining](#), and it is a lot easier to do in a car than by transit. (Yes, there's probably a Starbucks next to your transit stop, but your transit agency probably doesn't allow you take beverages on board.)

[Some analysts wonder](#) whether people choose to drive because they want to trip chain or if they trip chain because they have cars. But this is the wrong question. The reality is, [life is complicated](#), and cars do a better job of helping people deal with that complexity.

[Other studies find](#) that people who live in walkable, mixed-use neighborhoods can accomplish more of their tasks on foot and don't need to drive as much. But this ignores the self-selection issue: people are more likely to live in a walkable-mixed-use neighborhood if their lives aren't as complicated—for example, if they don't have kids—but even then, a bicycle can handle trip chaining better than transit. That doesn't mean such neighborhoods can significantly simplify other people's lives. For most Americans, transit doesn't serve the complexity of most of their adult lives.

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