

**How Transit Benefits People Who Do Not Ride It:  
A Conservative Inquiry**

By Paul M. Weyrich and William S. Lind

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## FOREWORD

by The Honorable Robert F. Bennett  
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Do you use public transportation? Of course you do. Even if you live out in the country, you use public transportation when you drive to the city.

“No, I don’t,” you reply. “I drive all the way into the city. I don’t change from my car to a train or bus.”

That may be true, but you still use transit to help you get around. How? If it weren’t for public transportation, there would be thousands more cars on the road. You would spend hours more driving in or out of the city, because congestion would be far worse than it already is. So even if you don’t ride public transit, you still use it, and it is still working for you.

I was pleased and honored to be asked to write the foreword to this interesting and innovative study by Paul Weyrich and Bill Lind. Like them, I am a pro-transit conservative. I see public transportation as part of the infrastructure, no different from water lines and highways and services such as the police and the fire department. If infrastructure is inadequate, everybody suffers.

Here, Paul and Bill explain exactly how transit benefits people who do not ride it. Reducing traffic congestion for people who drive is just one way. As you will read here, there are many more.

Why is it important that people who do not ride transit understand that it benefits them? Because too often, when a transit measure is on the ballot, they vote against it. They think, “Why should I vote for this? It won’t do me any good.”

They are wrong. When they vote no, they are hurting themselves. That transit issue on the ballot will often benefit them, in the ways this study describes.

Democracy depends on informed voters, and this study will help voters understand public transportation in a new way. I hope it is widely read and discussed. I certainly intend to help distribute it in my state, and I will urge my colleagues in the Senate to do the same. I congratulate the Free Congress Foundation on once again producing the kind of cutting-edge work for which it is so well known.



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## Introduction

In November of the year 2000, the people of Salt Lake County, Utah faced a referendum on whether or not to build a new Light Rail line. The referendum was expected to go against Light Rail.

Instead, the transit project won. Why? Because the people who handled the campaign for the new rail line successfully appealed to a voting bloc most transit authorities ignore: people who do not ride transit. Brian Rasmussen of R&R Partners, Utah Transit Authority's communications agency, said:

Just to step back a bit, in 1992, we knew we lost because we did not have the support of the white collar male, age 35 to 54. So we knew that's who we had to target this time. Knowing that many of them probably have never ridden a bus or a train, or may never, what message would motivate them? So we came up with the simple message, "Even if you don't ride it, you use it." That really became kind of the center of the focus of our message . . .<sup>1</sup>

The pro-transit campaign ran television commercials designed to appeal specifically to people who were saying to themselves, "Why should I vote for this thing? I'm never going to ride it." Realizing that most non-riders drive to work, the ads stressed congestion relief. One just focused on an automobile wheel, inching ahead bit by bit in what was obviously stop-and-go traffic. Another showed a happy-go-lucky fellow enjoying the joys of the open road. In each, the message was the same: your drive to work will be easier because other people will be riding the new Light Rail line.

The purpose of this study, the fifth in our series on conservatives and mass transit, is to explore more fully the question of how local authorities and transit advocates can explain the importance of public transportation to people who don't ride it. Relief from traffic congestion is by no means the only argument.

It is important to note that the benefits to non-riders are real. We are not talking merely about how to present a case, as if we were pimps or, worse, lawyers. As conservatives, our first principle is the reality principle. Public policy must be based on reality, not on the fairy-tale wishes so beloved by liberals. If public transportation did not serve people who don't ride it, we would be the first to say so.

As with our previous studies, our focus is mostly on the benefits of rail transit. The reason is, again, the reality principle: rail transit benefits non-riders far more than does bus transit. Here, we see again the vast differences between rail and bus. With a few exceptions, such as some express services, buses serve the transit dependent, people who have no other way to get around. Rail, in contrast, serves the whole community, including the large majority of people who have a car and can drive but may choose instead to take transit (they will often choose rail but seldom a bus) and, as this study will show, people who do not ride transit at all. Real

conservatives are always happier with government activities that serve everyone than with those directed toward some special interest group.

Why, you may ask, should we as conservatives care how transit benefits non-riders? Because, for the most part, we are talking about our own. Most conservatives do not ride transit. Why? Because in most of America, the high quality transit conservatives demand is not available. Most of us have cars and can drive, and if the alternative is a bus, we do drive. As our previous studies have shown, when high quality rail transit is available, conservatives will be happy to use it. But in most places, it's just not there.

The answer, obviously, is to build more rail transit. Conservatives, and others who can drive, benefit more from Light Rail and commuter rail than anyone else. They benefit because it is transit they may want to ride and, as we will demonstrate here, they benefit from it even if they don't ride it. Sometimes we are tempted, at referendum time, to grab our unseeing fellow conservatives by the lapels of their Brooks Brothers suits and shout, "Come on, wake up! This is transit for us!"

Our hope is that this study will serve as an alarm clock, for conservatives and all others who say, "I'm never going to ride that thing." Non-riders, too, benefit from rail transit. To the degree they realize that fact and vote for more rail transit, everyone wins. As will transit itself, in referenda throughout the country.

### **How Transit Benefits People Who Do Not Ride It: A Conservative Inquiry**

Transit consultant Alan Wulkan, who is a Senior Vice President with consultant Parsons Brinckerhoff, played a key role in the referendum in Phoenix, Arizona, where Light Rail won with an astonishing sixty-five percent of the vote. Discussing that campaign at a conference, Mr. Wulkan said,

The vast majority of the people that are going to vote on your future will never use what you are asking them to vote on. I don't care if you've got the greatest transit system in the world. The best split you're going to get is going to be 15 to 20 percent of the people in your community. So, again, why would the other 80 percent that are never going to step on your transit system vote for you? You've got to answer that question when you put together your initiative.<sup>2</sup>

The answers are, in essence, three. First, transit can reduce traffic congestion, or at least the rate of increase in traffic congestion. Second, everyone may need transit occasionally, to get to the big football game or when the car is in the shop or when the snow is three feet deep. Third, transit can bring large increases in residential property values, which is to say it can put money in homeowners' pockets. Reducing traffic congestion and increasing property values almost always requires rail transit, though buses can serve people who ride on an occasional basis.

To see how transit benefits non-riders in each of these three ways (and a few others), we will look at each in turn in some detail.

### **Transit Benefits Non-riders by Reducing Traffic Congestion**

Gary Richards, who writes a column called “Mr. Roadshow” for the San Jose Mercury News in California, told of an incident that is all too typical of what is happening around the country.

They built Highway 85, a six-lane, 18.5 mile freeway. Everyone said, “This will solve our traffic problems.” Within two years, Interstate 280, which is basically a parallel freeway, was more congested than it was before 85 opened up. At one of these conferences . . . a lady stood up and she said she didn’t know if she was going to vote for any new sales taxes because she said, “You know, . . . I voted for the 84 Measure that built Highway 85 and now my options are – I can get stuck in traffic on Highway 85 or I can get stuck in traffic on the 280. So why should I vote for any more of these measures?” . . . Those are the questions I began to hear. I don’t want to say it was a flood, but it was a consistent theme – “I want out of my car, how do I get it?”<sup>3</sup>

You do not need studies to determine whether or not your city is afflicted with growing traffic congestion. You know that from your own experience. Some “rust belt” cities, where population is declining, don’t have a congestion problem. But more and more American urban areas do have the problem, some of them to a nightmarish degree. It is not only that the daily commute is taking more and more time. The time it takes is also becoming increasingly unpredictable. On a seemingly random basis, the driver faces more and more days where his trip to or from work takes far more time than it usually does. He misses appointments, she gets to day care late, and everybody’s stress level goes through the sun roof. One can almost hear the simultaneous cry come from a thousand stuck cars: “I don’t need this!”

In fact, the origin of the traffic congestion problem does not lie in the transportation field at all – though transportation systems are stuck dealing with it. Its origin lies in building codes, largely developed after World War II, that mandate the wide separation of where people live, where they work, and where they shop. For the first time in history, anywhere, those three central human activities were separated, by law, beyond the distance people could walk. The result? An endless increase in “total trips,” more and more of which have had to be made by automobile as new suburbs were built in accordance with the post-war codes.

Just as transportation did not create the problem, so transportation alone cannot solve it. The solution, not surprisingly, is less government interference in the marketplace. Every urban and suburban area should offer two alternate building codes, one the current “sprawl” code and the other a code that allows traditional neighborhood design, where living, working, and shopping are all close by each other. Which code will prevail? Let the free market decide! In the few instances where traditional neighborhood design has been allowed and has been done well, such as architect Andres Duany’s Kentlands development near Washington, D.C., the market has been willing to pay a significant premium for an old-style neighborhood. If, as we suspect, the market for traditional neighborhoods proves strong, we may finally begin to get a handle on the “total trips” problem.

But in the meantime, we have to face the fact of traffic congestion. In the portions of the United States where the population is growing, it is a problem local residents clearly recognize. A recent national survey undertaken for the United States Conference of Mayors found that:

Traffic has become a serious concern to inhabitants of metro areas in the West and South. When asked if traffic had gotten better, worse, or stayed the same in their areas over the past five years, 79% said conditions have gotten worse, while only 6% think things have improved. One out of two respondents not only believe that traffic has worsened, but believe that it is currently “much worse” than it was five years ago.

The vast majority of people also believe that traffic congestion has worsened nationwide, with 58% of people “strongly agreeing” with this statement, and 89% in agreement overall. . . .

Commuting has become a problem for many Americans. Only 14% think their commute has improved while 41% say that it has gotten worse.<sup>4</sup>

Not only do people recognize the problem, they also understand that building more highways is not a solution. The same survey found that, “If new roads are built, 66% of Americans do not think that congestion on the roads will be eased.”<sup>5</sup> That 66% of Americans are correct.

It is useful to understand why they are correct. The main reason is what is known as “induced demand” or “generated traffic.” Simply put, what these terms mean is that if you build it, they will come. Each new highway or highway lane draws more cars until it, too, is congested. Some of these cars are drawn from other roads, but many represent trips that otherwise would not be made.

Most of us can understand this from personal experience. Perhaps we forgot one thing we meant to buy at the grocery store. If it’s eleven o’clock in the morning and we know traffic will be light, we get in the car and make the trip. But if it’s six in the evening and we know we will face rush hour traffic, we say the hell with it. In the first instance, the lack of congestion has induced us to make the trip. That is “induced demand,” and it keeps generating more automobile trips until a new road is congested. Therefore, building more roads only provides temporary congestion relief.

Study after study has confirmed the induced demand problem.<sup>6</sup> Just how strong can induced demand be? Some studies find an almost one-to-one relationship.

Our study . . . found that adding lane-miles does induce substantial new traffic. . . . A 1.0 percent increase in lane miles induces a 0.9 percent increase in VMT [Vehicle Miles Traveled] within five years. With so much induced traffic, adding new road capacity does little to reduce congestion.<sup>7</sup>

Another study notes that “Transportation economist Kenneth Small provides a good review of previous studies and concludes that 50-80% of increased highway capacity is soon filled with generated traffic.”<sup>8</sup> A different review offers this summary:

Among other recent studies, many addressed elasticity of travel demand [induced demand] with respect to lane-miles of roadway (usually limited to just freeways and arterials). Hansen and Huang (1997) found elasticities of 0.9 in California metropolitan areas for a 4 to 5 year time period. Similarly, Johnston and Ceerla (1996) found elasticities of 0.6 to 0.9 over a three-year period in the same state. Noland (forthcoming) found short-term elasticities of 0.2 to 0.5 using data from 50 states, with corresponding long-term elasticities of 0.7 to 1.0.<sup>9</sup>

Finally, a study based on data from the Texas Transportation Institute found that:

Some of the more controversial recent publications have found very high (approaching 1) elasticities for roadway demand relative to roadway supply. Analysis of the Texas Transportation Institute’s Urban Congestion Study Data Set for 70 U.S. urban areas corroborates these studies. Calculated elasticities are 0.85 for highways and 0.76 for principal arterials.<sup>10</sup>

Attempting to solve the problem of traffic congestion by building more roads or adding lanes to existing freeways not only doesn’t work, it also costs a fortune. An article titled, “Sticker shock: Cost estimates for highway projects skyrocket” described the “eye popping” numbers for highway projects in the Seattle area:

The state Department of Transportation yesterday unveiled its first semisolid cost estimate for replacing Seattle’s aging Alaskan Way Viaduct.

It’s a whopper.

Depending on the option chosen and an assortment of other variables, the price tag could be anywhere from \$3.2 billion to \$11.6 billion, the agency said.

The department also released updated cost estimates for three other high-profile “mega-projects” in King County . . .

The Transportation Department estimated that:

- Proposed improvements to the Interstate 405 corridor, including two new freeway lanes in each direction from Tukwila to Lynnwood, could cost between \$9.1 billion and \$10.9 billion.
- Replacing Highway 520 across Lake Washington could cost from \$1.8 billion to \$7.4 billion, depending largely on whether the new bridge is four, six or eight lanes.

- Extending the Highway 509 freeway to Interstate 5 at South 188 Street in SeaTac, and adding lanes on I-5 from there to Federal Way, could cost between \$920 million and \$1.02 billion.<sup>11</sup>

To put these numbers in some perspective, a billion dollars will buy fifty miles of new Light Rail line, at the “should cost” figure of \$20 million per mile. Cost per mile of commuter rail is often less.

And where are new urban highways to be built? The land simply is not there, unless homes and businesses are to be demolished to create new rights-of-way. Highways take up a great deal of land. In fact, a rail transit line can carry more people in a 100-foot right-of-way than can a six-lane freeway, which requires a 300-foot right-of-way.<sup>12</sup>

Again, the public understands that building more highways is not the answer to the congestion problem. A survey undertaken for the Federal Highway Administration found that when people were asked what transportation improvements they would like to see in their own community, the winner, with about 70% agreeing or strongly agreeing, was “Expanding existing public transportation.” The least popular approach, with less than 40% support, was “Building more highways.”<sup>13</sup>

Does rail transit actually relieve traffic congestion? Yes, it does. In some cities, it actually reduces congestion; in others, it reduces the rate at which traffic congestion grows. In both cases, people who drive rather than riding transit benefit.

Of course, the usual clique of transit critics denies these facts – facts we will demonstrate are indeed facts. The inimitable Wendell Cox, the anti-transit crowd's Don Quixote, said:

But more important than the source of light rail ridership is that it carries such modest volumes in relation to traffic on adjacent roadways. In no case has light rail attracted enough drivers out of their cars to materially reduce traffic congestion . . .<sup>14</sup>

Two of his many Sancho Panzas, libertarian transit critics Thomas A. Rubin and James E. Moore, say, “Rail is not a decongestant. New facilities cannot decongest existing facilities.”<sup>15</sup> If it were true that new facilities cannot decongest existing facilities, there would be no point in building anything, and we could all just stay home. As conservatives, we rather like that idea – we’ve always had a sneaking sympathy for the Spanish Carlists’ prescription: rip up the railways and bring back the Inquisition – but we somehow doubt it would sell.

The facts show that, as usual, the anti-transit myth-makers are wrong. A good place to start finding the facts is in an interesting study by the Texas Transportation Institute (TTI) at Texas A&M University. The TTI looked at the increase in traffic congestion in large urban areas between 1992 and 1997. It found a substantial difference between cities that had rail transit and those that did not.

For the 1992-97 period examined, traffic congestion . . . increased 55.9% in urban areas without rail transit, but only 32.4% in urban areas with rail transit in major travel corridors. In other words, traffic congestion grew at a rate 73% higher in non-rail cities, than in cities with rail in one or more major travel corridors.<sup>16</sup>

A detailed study of a light rail line planned for Austin, Texas, undertaken by Lyndon Henry of Mobility Planning Associates and Samuel J. Archer of Austin's Capital Metropolitan Transportation Authority,<sup>17</sup> revealed one of the games played by the anti-transit crowd:

another criticism widely deployed by rail transit opponents from city to city is that light rail's ridership impact on traffic congestion would in any case be inconsequential—a claim based on a comparison of projected LRT ridership to total traffic in a vast area . . . The use of areawide data is virtually meaningless, since a single LRT line (or even a system with several branches) could not plausibly be expected to have an impact on all traffic in a metropolitan region. . . Like any major transportation facility, LRT and its impact should be evaluated on the basis of the corridor served, not a vast region.<sup>18</sup>

The study looks at the corridor served by Austin's planned Light Rail line, and notes that:

evidence exists that LRT does and will have a very significant impact on traffic flow in the specific corridors it serves, especially during peak periods of travel . . . another analysis indicated that the LRT service proposed for Austin would produce very tangible reductions of traffic on at least two of the major arterial roadways on which it would run. According to this analysis, an Austin LRT service would significantly alleviate future traffic flows on North Lamar and South Congress – diverting up to 30% of automobile trips in the corridor to transit. In terms of person-trips, the initial LRT service was projected to carry nearly half of the total traffic flow on North Lamar Blvd., a major arterial, thus providing substantial relief for growing congestion.<sup>19</sup>

Someone (we won't say who, though the initials W.C. come to mind) might argue, "Those are projections. Show me some data where it has actually happened." With the authors of the Austin study, we are happy to oblige. They write:

In regard to new LRT service, an Oregon Department of Transportation study suggested an apparent impact of Portland's Westside MAX LRT line on traffic. The study concluded that increased transit trips in the Westside corridor, stimulated by the MAX extension, tended to keep pace with auto trip growth, with the result that traffic would be significantly heavier without those [transit] improvements. Looking at the data collected in the periods May 1993, October 1997, and May 1999, researchers found that "transit's share of westbound trips leaving downtown during evening rush hour increased 5 percent, while the share of drive alone auto trips declined 3 percent."<sup>20</sup>

Nor is this study the only one to find that in Portland, rail transit has reduced traffic congestion. Another paper notes:

Metro, the Portland regional government, annually tracks vehicle miles driven for the region from roadway vehicle counts. From 1990 to 1999 the region's actual VMT [Vehicle Miles Traveled] rose 33%. During the same time period the region saw a 21% increase in population.

However, the miles per person per day have stabilized since 1996 at about 21 miles/person/day. This is in part due to the fact that the Portland region has stayed approximately the same size and its transit usage has increased by 42% over the same time period. As of mid-2000, transit usage had increased in 103 out of the previous 104 months.

Today, 75% of Portland's public transportation users are car owners that have chosen transit over auto use, at least for some trips.<sup>21</sup>

As we have noted in our other studies, people who can drive but choose to take transit instead, so-called "riders from choice," are the key to reducing traffic congestion. Every trip a rider from choice takes on transit equals a car removed from traffic, assuming that for most trips, most people drive alone. Since most of these people are using transit to get to or from work in rush hour, transit is subtracting their trips not just from traffic, but from rush hour traffic, which brings the greatest benefit to those who still drive. Because most riders from choice will take a train but not a bus, it is rail transit, not buses, that bring the greatest benefits to people who do not use transit. That is why people who say, "I'm never going to ride that thing" but do drive to and from work should be leading the charge for more rail transit.

Is it only in Portland, Oregon, that we can see the effects of rail transit on traffic congestion? Of course not. Everywhere that rail transit is drawing riders from choice, congestion is reduced and people who still drive benefit. Another example is Denver. A study of Denver's Southwest Light Rail line corridor, where transit ridership rose from 2,000 passengers per day when it was served by buses to 13,000 per day with Light Rail, found that:

data from Denver suggest that LRT at peak hour in the peak direction in the target corridor is carrying between 28% and 33% of the total passenger traffic flow. In other words, without the LRT line in service, approximately 30% of corridor passenger traffic would be added to roadway congestion.<sup>22</sup>

St. Louis's MetroLink Light Rail system provides a third example. As we stated in an earlier study:

MetroLink's single 18-mile line carried 14.2 million passengers in 1999. According to a 1997 rider's survey, 69% were commuting to work. Most were doing so in rush hours, when highway congestion is at its worst. And only 27% of MetroLink's riders either did not drive or had no car available. Allowing a few percentage points for people commuting to work but not in

rush hours, we can say that about 60% of MetroLink's customers were taken off the highways, minus about 25% who had no car available or did not drive. Since most Americans drive to work alone, MetroLink is removing about 12,500 cars from St. Louis's rush hour traffic every day.<sup>23</sup>

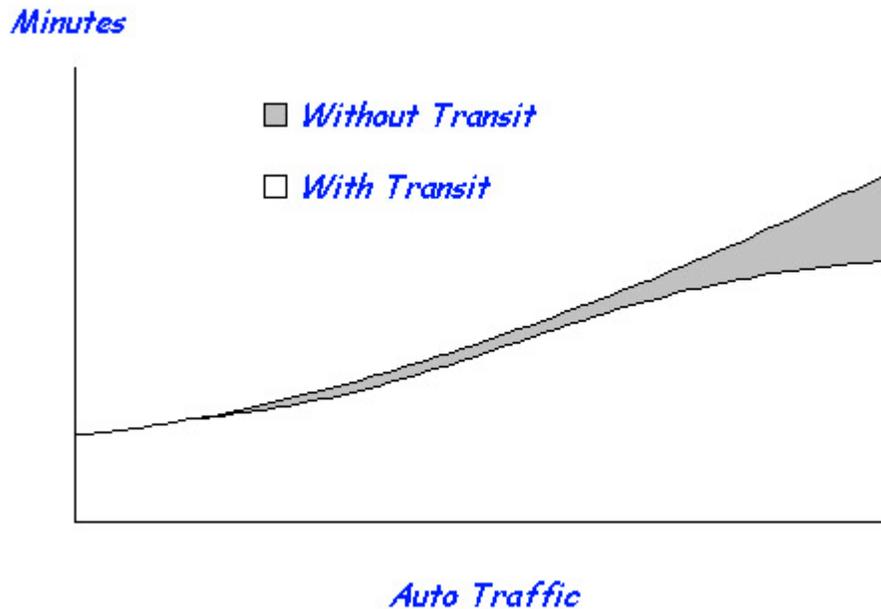
Is it only Light Rail that reduces traffic congestion? No. Commuter Rail and Heavy Rail (systems such as Washington, D.C.'s Metro) do also. Of Los Angeles's MetroLink commuter rail system, State Assemblyman John Longville says, "Both the California Highway Patrol and Caltrans have said that along I-10, for example, Metrolink trains transport what amounts to a complete lane of traffic."<sup>24</sup> Statistics suggest that a high percentage of MetroLink's riders represent cars removed from rush hour traffic, since 95% of them are commuting to work and almost 40% have a household income greater than \$75,000 per year, which means they could drive if they wanted to.

Is there generalized evidence of rail transit reducing traffic congestion, as opposed to single examples? Yes. An FTA Policy Paper, "Transit Benefits 2000 Working Papers: A Public Choice Policy Analysis," looked in great detail at how rail transit reduces hours of delay in the corridors it serves in six different cities. It looked at three kinds of commuters who benefit from rail transit: those who ride it, people who drive to the same destinations served by the rail transit line, and drivers who are driving parallel to the transit line but not necessarily to same destinations. The study found that:

In these six corridors, transit passengers saved 17,443 hours daily. By removing these would-be motorists from highway segments with the same destinations as transit, transit saved motorists an additional 21,981 daily hours. Other highways on the local network received spillover savings of 20,691 daily hours.<sup>25</sup>

In other words, not only does rail transit benefit people who do not ride it, non-riders benefit more than twice as much, in terms of time saved from traffic congestion, as do the people who are riding the trains! The study went on to convert the time savings into dollar savings, at a rate of \$15 per hour (somewhat less than the hourly rate of all those lawyers, doctors and accountants caught in traffic, we would guess). It found annual savings of more than \$225 million provided by rail transit, with transit riders getting \$65 million, people driving to the same destinations \$82 million, and drivers in parallel corridors \$78 million.<sup>26</sup> In dollar terms, people who still drive benefited almost twice as much as the transit riders. If that isn't an argument why people who don't ride rail transit should support it anyway, we don't know what one would be.<sup>27</sup>

## TIME SAVED BY DRIVERS



Source: Federal Transit Administration

How does that quote from Wendell Cox we started with sound now? Let's hear it again:

But more important than the source of light rail ridership is that it carries such modest volumes in relation to traffic on adjacent roadways. In no case has light rail attracted enough drivers out of their cars to materially reduce traffic congestion . . .

We will let you decide for yourself. But let us match it up with two other quotations, if we may. The first is from Colonel Ronald Henderson, a former Chief of Police in St. Louis:

The MetroLink light rail system has proven its extreme importance to us not only during rush hour traffic, but it has significantly helped us during special events such as Rams' football, Cardinals' baseball, and Blues' hockey games. The number of riders on the system positively impacts our traffic patterns on a daily basis.<sup>28</sup>

The second quotation is a headline to a story by Alisa Tang in the Belleville, Illinois News-Democrat shortly after MetroLink began service to that town: "Number of light-rail riders runs well ahead of forecasts: Cardinals fans squeezed into trains at the Stadium Station after a game Thursday. Ridership is high on game days."<sup>29</sup>

Belleville, Illinois just happens to be Wendell Cox's home town.

### **Transit Aids Conservation**

Rail transit's ability to reduce traffic congestion is probably its main benefit to people who do not ride it. But it is by no means the only benefit. Another is transit's positive effects on the environment.

Let us hasten to say that, as conservatives, we are by no means environmentalists. The only time you would find us sitting in a tree is if we were attempting to shoot a deer. We are, however, conservationists. We believe that the duty of stewardship requires us to pass on to future generations breathable air, swimmable and drinkable water, adequate reserves of coal and oil, and green countryside to walk in. From Edmund Burke to Russell Kirk and from the dark Satanic mills to the dark Satanic malls, true conservatives have disliked the modern practice of sending our patrimony up in smoke.

There is no question that public transit reduces energy consumption (and the flow of petrodollars to people who like to crash airplanes into our skyscrapers) and helps conservation, and that both of these benefit the people who do not ride transit as well as those who do. After all, we all drink the same water and breathe the same air. Here, we will take a brief look at just one of many studies, one undertaken for the American Public Transportation Association, Conserving Energy and Preserving the Environment: The Role of Public Transportation.<sup>30</sup>

Right at the outset, this study makes a point that is of interest to conservatives:

With its fuel and pollution advantages, increased use of transit offers the most effective strategy available for reducing energy consumption and improving the environment without imposing new taxes, government mandates, or regulations on the economy or consumers.<sup>31</sup>

Even that pink paradise, Portland, Oregon, appreciates the way transit can help keep the Feds at bay. A recent study there found that:

Tri-Met transit service significantly reduces emissions of air pollutants in the Portland-Vancouver airshed, thereby helping to attain and maintain compliance with federal ambient-air quality standards. These emissions reductions also indirectly help avoid additional costly federal emission control requirements on existing and expanding industries and help keep the Portland area from being at a competitive disadvantage in attracting new industries."<sup>32</sup>

The study done for APTA offers these supporting facts:

- Public transportation saves more than 855 million gallons of gasoline a year, or 45 million barrels of oil. These savings equal about one month's oil imports from Saudi Arabia . . .

- For every passenger mile traveled, public transportation uses about one-half the fuel of private automobiles, sports utility vehicles (SUVs) and light trucks.
- The reduced VOC (volatile organic compounds) and NOx (nitrogen oxides) emissions that result from public transportation use save between \$130 million and \$200 million a year in regulatory costs.
- If Americans used public transportation at the same rate as Europeans – for roughly ten percent of their daily travel needs – the United States would... Reduce its dependence on imported oil by more than 40 percent or nearly the amount of oil we import from Saudi Arabia each year . . .<sup>33</sup>

A major reason why Americans do not use public transportation at the same rate as Europeans is that good public transportation is not available. As we noted in an earlier study, only about one-half of all Americans have any public transit service, and only about one-quarter have service they call “satisfactory.”<sup>34</sup> In most cases, high quality transit – transit good enough to draw riders from choice – means rail transit. That, in turn, usually means electrified railways, if the rail transit system is carrying lots of passengers.

How do electric railways – Light Rail and Heavy Rail – stack up in terms of energy efficiency and reduced pollution? The answer is, “very well.” Automobiles use about 6,350 BTUs of energy per passenger mile. Public transit as a whole uses about 2,740 BTUs per passenger mile. Light Rail uses less than half of that – about 1,150 BTUs per passenger mile – and Heavy Rail only about 900. In other words, electric railways are about six times as energy efficient as automobiles.<sup>35</sup>

The pollution story is similar. Electric railways have the further advantage that the electricity that runs them can be generated by non-polluting sources, such as hydropower, wind power (the Light Rail system in Calgary, Canada, now gets all the electricity used to power its trains from wind mills), or nuclear power. And even if coal is used to generate the electricity, the power plant can be located well away from the metropolitan center where air pollution (mostly from cars) is already bad.

In sum, if your city is considering building a new electric railway, probably Light Rail, or adding to its existing system, you will benefit in terms of cleaner air, whether you ride the system or not. Your benefit from reduced energy consumption may seem less direct, at least until the next blow-up in the Middle East gives us another gas shortage. But the benefit is there, nonetheless.

### **Transit Can Save Non-riders Money**

Fine, you say. I guess I do breathe the local air. But gas is cheap, I've got a good car and can drive wherever I want, and I don't have to commute in rush hour. So I still don't know why I should support public transit.

What if it could save you money? Yes, public transportation may be able to save you money, even if you never ride it. If you have a family, your wife or husband and your children also need to get around town. If they can use public transit rather than having to have their own car, you can save a great deal of money.

As an APTA study notes, automobiles can be very expensive:

For every dollar earned, the average household spends 18 cents on transportation, 98% of which is for buying, maintaining and operating cars, the largest source of household debt after mortgages. . . .

Savings with public transportation are substantial. Americans living in transit-intensive metropolitan areas save \$22 billion annually in transportation costs... transit availability can reduce the need for additional cars, a yearly expense of between \$4,800 and \$9,700.

Silicon Valley commuters are excellent examples. Riding the Santa Clara Valley Transit Authority's Altamont Commuter Express, the daily 80-mile commute by train saves each commuter over \$2,500 annually --\$2,688 by train compared to \$5,282 by car.<sup>36</sup>

If that commuter happens to be your husband or wife, the train is saving you \$2,500 each year even though you never ride it.

More likely, the way public transit can save you money is by reducing the number of cars you have to buy, maintain, and insure for your kids to drive. Let's face it, getting a car for each teenager is a very expensive business. The car itself may be a junker, but the insurance cost for teenage drivers can be staggering. Studies done for Fannie Mae, which now has a pilot program offering larger loans to people willing to limit the number of cars they own to one per adult driver, found that using public transit instead of owning an extra car can save \$200 to \$250 per month.<sup>37</sup> In our neighborhood, that's not chicken feed. And, given the accident rate of teenage drivers, your kid is a lot safer on the bus or the streetcar than behind the wheel of a rodde '49 Ford (we know we're showing our age with that one, but those flathead V-8s made for great hot rods).

So for your son or daughter's 16<sup>th</sup> birthday, may we suggest a monthly transit pass would make a good present? You could even offer to increase their allowance from the money you save by not getting them a car.

### **Occasional Transit Use**

OK, you say, but I don't happen to have any kids. And I'm still sure I'm never going to ride transit.

Never? What about when your car is in the shop? Or bad weather makes driving hazardous? Or you are under the weather yourself with some bug or a few too many drinks and would be a hazard if you drove? And what about going to the baseball or football or hockey game? Driving and parking in all that traffic won't make the game much fun.

Many people who say they "never ride transit" do in fact ride transit. What they mean is that they do not ride it on a regular basis, for commuting to work. They are "occasional users." But on those occasions when they do ride transit, they want and expect it to be there.

One of the most authoritative studies of urban travel, Commuting in America II by Alan Pisarski, notes that occasional use of transit is much more common than some people seem to think:

The incidental and occasional use of transit by auto users, such as when vehicles are in repair, will have a much greater effect on transit share than will the incidental use of autos by transit users. In some areas, this can add 15% to transit and carpool use.<sup>38</sup>

One of the most common occasional uses of transit is for special events such as baseball or football games. Bill Grogan, managing director of the St. Clair County, Illinois, Transit District, said, "People who would never think of using public transit would easily hop on the train to go to the airport, to games." Counts of cars in the parking lots of the new Light Rail line that serves St. Clair County (an extension of St. Louis's MetroLink) bore him out. On an average weekday, the ten lots held about 3,000 cars. On April 1, 2002, the St. Louis Cardinals' opening day, the lots held 5,671 cars.<sup>39</sup>

In fact, MetroLink offers an even more dramatic example of how special events can draw occasional users to Light Rail. On Saturday, July 1, 2000, during Fair St. Louis, MetroLink carried 160,721 riders – about four times its usual workday ridership! One article notes:

Since approximately 70% of MetroLink riders have been attracted from automobiles, and assuming typical average occupancy of 1.2 persons per car, that's about 93,000 automobile trips "diverted" from the city's crowded freeways and streets. Assuming round trips, that's more than 46,000 parking spaces that were not needed that day.<sup>40</sup>

And that is a whole lot of headaches from driving and parking that people who rode Light Rail, many of whom "never use transit," did not have.

San Diego's Light Rail system offers another example:

Typically, for Padres baseball games the Trolley carries 9 to 10 percent of the gate. For sell-out baseball and almost all football games, ridership climbs to 20 percent or more of the gate. Teams recognize that the Trolley service brings them bottom line benefits such as: attracting fans back to games who stopped attending due to traffic and parking concerns . . .<sup>41</sup>

People using transit to get to the game are one type of occasional user. Another, less happy type is people using transit to escape disaster. An APTA study notes that:

By midday, September 11, 2001, New York's MTA subway and commuter trains and buses were evacuating millions of commuters from Manhattan. Following the attack on the Pentagon, Washington, DC's WMATA moved hundreds of thousands of commuters safely and provided buses to deploy police and to serve as shelters for rescue workers.<sup>42</sup>

It is easy to imagine what would happen in any major urban area if, in response to a terrorist attack or other sudden disaster, everyone got in their car and tried to drive out of the city. The result would be instant gridlock and no escape for anyone. Only public transit has the capacity to move lots of people quickly in a major evacuation. In time of emergency, people who "never use transit" find that adequate public transportation can be literally a matter of life or death.

Nor is it simply on the day of disaster that transit is important to people who usually do not ride it. After the Loma Prieta earthquake in 1989, San Francisco's Bay Bridge was closed for a month. How did people get to work? On the BART Heavy Rail system. During the critical month, BART carried 75% of transbay commuters, up from 35% before the earthquake.<sup>43</sup>

And it isn't just major catastrophes that bring occasional users to transit. An example of a frequent catastrophe (it's catastrophic in Washington, anyway) where occasional users flock to transit is that nasty four-letter word, snow. A February 20, 2002 story in the Washington Times reported that:

The region's biggest snowfall since 1996 has transformed . . . [parking] garages into virtual ghost towns. Since the storm, many commuters have left their cars at home and used public buses and trains.<sup>44</sup>

In most places, when snow or other bad weather shuts down everything else, the one thing that keeps running is the trains.

A final category of occasional users we would note – with some reluctance, since it includes us—is those who find Father Time beginning to nip at their heels. (Actually, Mr. Lind is a regular rider, since he commutes on Washington's Metro). Most of us baby boomers drive and have cars available when we want to go somewhere. But our night vision is not quite what it used to be, neither are our reflexes, and cutting in and out of fast-moving traffic is not

nearly as much fun as it was when we were sixteen. As AARP has the bad taste to remind us, we are on our way to becoming “seniors.” An APTA study notes:

By 2020, 40% of the U.S. population will be older adults; many will be unable to drive. In fact, one-fourth of today’s 75+ age group does not drive . . . Public transportation and related travel options represent a lifeline for older adults, linking them with family, friends and a changing society.<sup>45</sup>

Changing mostly for the worse, we would add, but we still want to be able to get around in it, if only to sneer. Many boomers who “never use transit” will find themselves riding transit in years to come, and when they need it they will want it to be there.

### **Rail Transit Raises Property Values**

But you are still not convinced. Yes, you admit you do ride transit occasionally, or would find it convenient to do so if you had transit service. But you'd still get around somehow without it. And when you are old, your children will drive you, no doubt thanking you for the opportunity to play chauffeur in their ample leisure time.

Do you own a house? If you do, do you find it nice when the value of your property increases? Is the value of your home something you are counting on to provide for your old age? (Sorry to keep harping on that, but it does happen, you know.)

In city after city, rail transit has been shown to add substantially to residential property values.

- A study of “gentrification” in Chicago, which looked at the value of residential property served by either CTA (Heavy Rail) or Metra (commuter rail), states that “evidence is found that properties closest to transit stations increased in value much more than those farther away, especially in the period 1985-1991. Properties adjacent to transit stations had a 20% higher increase in value compared to those located a half-mile away . . .”<sup>46</sup>
- A look at the impact of San Francisco’s BART Heavy Rail system on residential property values found that “the average Alameda County home is worth about \$3,700 less for each mile distant from a BART station. The average Contra Coast County home is worth about \$3,200 less for each mile distant from a BART station.”<sup>47</sup>
- “A 1993 study of the Eastside Metropolitan Area Express (MAX) light rail transit line reviewed the impacts of rail transit to property values in suburban Portland . . . Portland’s experience is generally consistent with the results of the studies in other areas. Within the 2 years after the 1986 beginning of the operation of the rail line, residential properties in the East Burnside area within 500 meters of the transit were, on average, 10.6% greater in value than homes outside 500 meters.”<sup>48</sup>
- A study of properties served by Dallas’s new DART Light Rail system found that “The largest increase in residential property values was seen at the VA Hospital station, where values rose 65 percent.”<sup>49</sup>
- In Massachusetts, “An analysis of the data shows that the median price of single-family homes nearly doubled in 19 communities after they gained MBTA [commuter rail] service. Brockton, for example, which got three commuter rail stops, had one of the biggest increases in median family-home price: from \$71,503 in 1995 to \$194,000 in 2002 – up 171 percent.”<sup>50</sup>
- According to the Los Angeles Times, “In less than a decade, ‘you could see 5% to 10% premiums,’ said Larry Kosmont, a Los Angeles-based real estate consultant. ‘If you have access to transportation, it is considered a benefit.’”<sup>51</sup>

Of course, transit, even rail transit, is not a magic wand. If a neighborhood is overrun with crime, split in half by a roaring freeway or downwind from the sewage plant, adding rail transit service is not likely to do much for residential property values. But if a nice neighborhood is given commuter rail or Light Rail, local homeowners will probably benefit, in some cases substantially so. And they never have to ride the train to pocket the money.

### **Conclusion**

How does transit serve thee? Let us count the ways. Even if you never ride it, public transit, especially rail transit, offers many benefits. As the Salt Lake City ad said, “Even if you don’t ride it, you use it.”

Rail transit takes other drivers off the road, so you are less likely to get stuck in traffic. It helps clean the air everyone breathes, riders and non-riders alike, and makes sure there is enough gasoline for all those SUVs. Transit can serve as the wife’s or teenager’s car, so you don’t have to buy (and insure) another one. It can take you to work—yes, you who “never ride transit” – when your car is helping pay for your mechanic’s boat or your driveway is buried under two feet of snow. It can take you to the big game without all the hassles of driving and parking (and let you drink as many beers as you want without meeting your friendly local motorcycle cop). It can get you out of town, fast, if something blows up. It can carry you to visit your children when you are old, blind and palsied, whether they want you to come or not. Finally, if rail transit arrives near where you live, it can bring you a substantial pot of money by raising the value of your home.

It’s really quite a list, don’t you think? You can have it all, or most of it anyway, without ever boarding a train. You can have it all, every last bit, without riding transit regularly.

The key word here is “think.” That is what we hope you will do the next time someone proposes a new rail transit line for your city. Even if you don’t ride, you will use it.

## Appendix

Over the past several years, Paul M. Weyrich and William S. Lind of the Free Congress Foundation have written four studies of public transportation, each of which looks at an aspect of the subject from a conservative point of view. All four earlier studies are still available from the Free Congress Foundation or from the American Public Transportation Association. In order of publication, they are:

- Conservatives and Mass Transit: Is It Time for a New Look? This study looks at three common conservative perceptions about mass transit – that the current dominance of the automobile is a free market outcome, that no conservatives actually use mass transit, and that transit does not serve any important conservative goals – and finds that each is open to question. It also offers a number of conservative suggestions for improving the efficiency and quality of public transportation.
- Does Transit Work? A Conservative Reappraisal In this paper, the authors address the “one percent argument:” the argument that transit is not important because it only carries about one percent of total trips. They find not only that the number is wrong, but that the yardstick itself, total trips, is inappropriate and misleading. They propose a new measure, “transit competitive trips,” which is defined as the trips for which transit can compete. By this measure, the importance of transit to virtually every American city becomes clear.
- Twelve Anti-Transit Myths: A Conservative Critique Here, conservatives Weyrich and Lind take on the libertarian transit critics and their usual arguments, such as “Light Rail has been a failure everywhere,” “Transit does not relieve congestion,” “Most Light Rail riders are former bus riders,” and the greatest chestnut of all, “It would be cheaper to lease or buy a new car for every rider than to build a new Light Rail system.” The study refutes them all, giving transit proponents useful arguments when the critics’ flying circus hits town just at referendum time.
- Bring Back the Streetcars! A Conservative Vision of Tomorrow's Urban Transportation Rail transit’s greatest challenge may well be explaining what it is and what it can do to people who have never ridden a train of any sort in their lives. When those people are asked in a referendum to vote money for “Light Rail,” they often have no idea what Light Rail is. The solution? According to Weyrich and Lind, start with what people do know: streetcars. Building a new streetcar line, with Vintage, Heritage or modern equipment, is far cheaper than Light Rail and provides a way to introduce rail transit that most people welcome. Three case studies illustrate alternate approaches that fit almost any city's needs and resources.

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