

ISSUE BRIEF

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America Needs a Rational Transit Policy

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More than three decades ago, federal legislation was enacted to transfer money from highway user fees to mass transit, such as subways and buses. The diversion is so substantial that each passenger mile of transit is supported by highway user fees (such as gasoline taxes) at a rate 15 times that of each roadway passenger mile.¹

The rationale for federal transit funding includes assumptions that transit is better for the environment, is crucial to the mobility of low-income citizens, and reduces traffic congestion. This article examines these rationales.

The rationale for public subsidies to transit was to keep fares affordable for low-income citizens who did not have cars, as well as to reduce traffic congestion and, finally, to improve the environment. In the late 1970s, there were expectations among some in transit that reducing air pollution (smog) would require large numbers of drivers switching to transit. In fact, car travel continued to increase, while smog was reduced significantly anyway.²

Driving More

Transit's share of urban travel has declined in the three decades since drivers started paying a tax on gasoline to support transit. From 1980 to 2012,

transit's share of work trips dropped by nearly 20 percent, while driving alone has *increased* by nearly 20 percent.

Work trips are particularly important, because their concentration during morning and evening peak periods are the proximate cause of most traffic congestion.

Transit's all-day share of urban travel has fallen by 30 percent since 1982, despite the many new federally funded urban rail systems.³ While higher gasoline prices have been associated with a modest increase in transit ridership, nine times as many people have started driving alone as taking transit to work since 2000.⁴ Pure and simple, drivers have not abandoned their cars for transit. Moreover, the number of people working at home is on track to equal that of people taking transit by 2020—and without subsidies.

Even so, transit performs admirably in some markets. Between 40 percent and 80 percent of commuters use transit to the central business districts (downtowns) of New York, Chicago, Philadelphia, San Francisco, Boston, and Washington.⁵ Moreover, these six municipalities (*not* the corresponding metropolitan areas) account for 55 percent of all transit commuting destinations, nearly 10 times their 6 percent share of national jobs.⁶

Outside these municipalities, where 94 percent of the jobs are located, only 2.4 percent of commuters use transit. This is because U.S. metropolitan areas are functionally 86 percent auto-oriented suburban.⁷ These areas do not have a sufficient geographical concentration of employment to make high levels of transit service practical.

This paper, in its entirety, can be found at <http://report.heritage.org/ib4368>

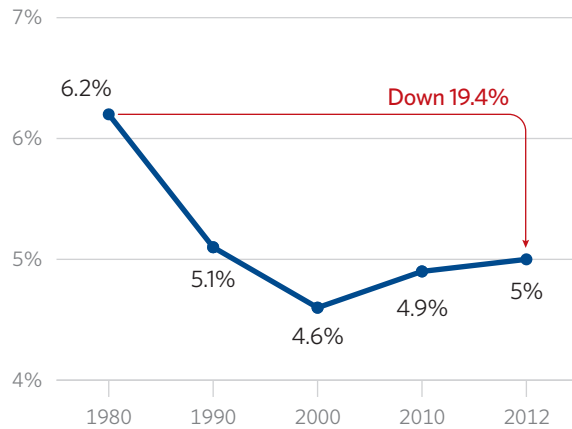
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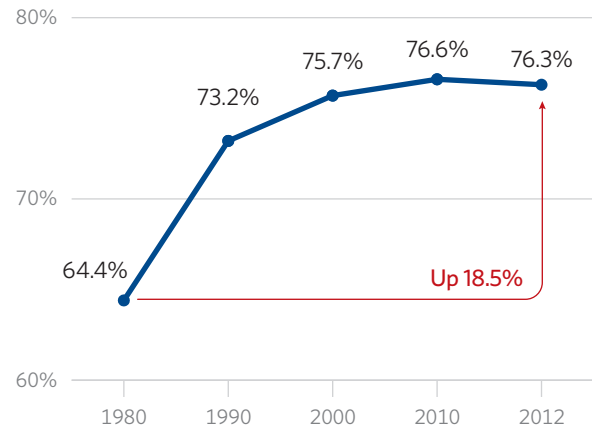
CHART 1

Long-Term Trends Show Less Use of Transit, More Driving Alone

TRANSIT MARKET SHARE OF WORK TRIPS



DRIVING ALONE SHARE OF WORK TRIPS



Source: Author's calculations based on data from the U.S. Census Bureau, 1980 to 2000, and the American Community Survey, 2010–2013, <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml> (accessed March 18, 2015).

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Rising Costs

Even as transit's market share has been falling, overall ridership has risen due to a large increase in overall urban travel. But higher ridership has come at a substantial cost. Transit's 1982 ridership base required total public expenditures of approximately \$0.70 per passenger mile⁸ (2011 dollars). The expenditure per additional rider has

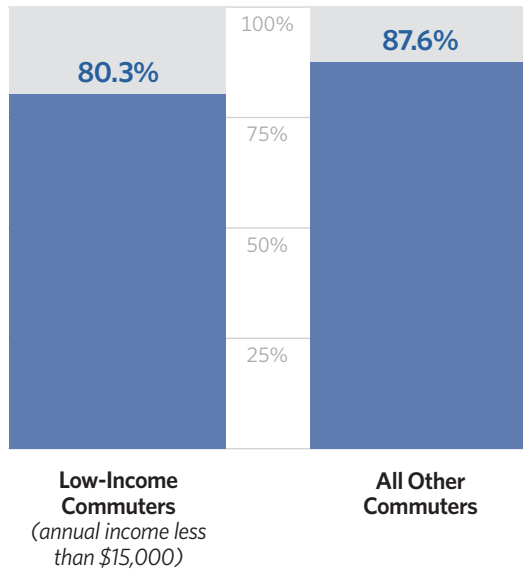
been much higher, at approximately \$2.05 per passenger mile (2011 dollars). That is because transit service is provided to the markets with the highest concentration of destinations (work and otherwise), and as it is expanded to markets with less demand, higher expenditures are necessary. Any additional gains in transit ridership are likely to be at least as costly.

1. Calculated from data in FHWA *Highway Statistics*.
2. The author was a member of the Los Angeles County Transportation Commission at the time, which oversaw transit and highway policy in the nation's largest county.
3. Wendell Cox, "US Urban Personal Vehicle & Public Transport Market Share from 1900," in Demographia, *Urban Transport Fact Book*, 2014, <http://www.demographia.com/db-tr1900.pdf> (accessed March 12, 2015).
4. Wendell Cox, "US Work Access by Mode: 1960–2012," <http://www.demographia.com/db-jtw1960-2010.pdf> (accessed March 12, 2015).
5. Wendell Cox, "United States Central Business Districts," Demographia, 3rd. ed., March 2014, <http://www.demographia.com/db-cbd2000.pdf> (accessed March 20, 2015).
6. Wendell Cox, "Transit Policy in an Era of the Shrinking Federal Dollar," Heritage Foundation *Backgrounder* No. 2763, January 31, 2013, http://thf_media.s3.amazonaws.com/2013/pdf/bg2763.pdf.
7. Wendell Cox, "From Jurisdictional to Functional Analysis of Urban Cores & Suburbs," *NewGeography*, June 4, 2014, <http://www.newgeography.com/content/004349-from-jurisdictional-functional-analysis-urban-cores-suburbs> (accessed March 12, 2015). Canadian metropolitan areas are often touted as having much better transit systems than the U.S. Yet, even in Canada, the automobile dominates urban travel, and metropolitan areas are three-quarters functionally automobile-oriented suburban and exurban. See Wendell Cox, "Canada: Suburban, Automobile Oriented Nation," *NewGeography*, October 1, 2013, <http://www.newgeography.com/content/003962-canada-suburban-automobile-oriented-nation> (accessed March 12, 2015).
8. A passenger mile is one mile of travel by a person. For example, a car with two occupants on a five-mile trip equals 10 passenger miles (two occupants times 5 miles). Calculated from data in the U.S. Census Bureau's database and the Federal Transit Administration's National Transit Database.

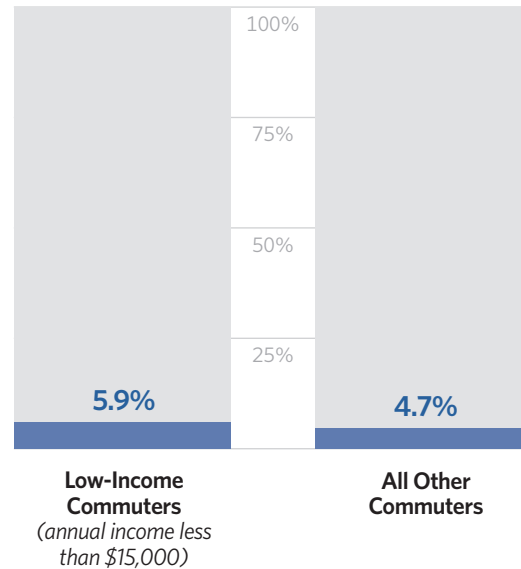
CHART 2

Commuters' Use of Cars and Transit Similar Across Income Levels

SHARE OF COMMUTING BY CAR IN MAJOR METROPOLITAN AREAS



PERCENTAGE OF COMMUTERS USING TRANSIT



Source: Author's calculations based on data from the U.S. Census Bureau, American Community Survey 2012, <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml> (accessed March 18, 2015).

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Moreover, transit expenditures are far higher per passenger mile than those of cars (including SUVs). Consumer expenditures for purchasing and leasing cars, operating costs, and highway user fees, as well as an adjustment to include government road expenditures in excess of highway user fees were approximately \$0.26 per passenger mile in 2011.⁹ By contrast, overall transit expenditures per passenger mile were more than four times as high, at \$1.10.

Traffic Congestion

Meanwhile, transit has not reduced traffic congestion. Urban traffic congestion in the 52 metropolitan areas with populations of over 1 million people has increased by 150 percent since 1982, according to Texas Transportation Institute data. This is to be expected, because road capacity has not kept up

with the increase in driving. However, metropolitan areas that have added more highway capacity have been rewarded. An example is fast-growing Houston, which had the nation's worst traffic congestion in the mid-1980s, and has improved its position to eighth-most-congested city in the U.S. Phoenix has had similar success.

Low-Income Commuting

Given that a principal purpose of subsidizing transit has been to provide mobility to low-income commuters, it may be surprising that those with lower incomes rely on cars almost to the same extent as everyone else. The 2012 American Community Survey indicates that 80.3 percent of low-income commuters (below \$15,000 annual income) drove cars. This is nearly as high as the 87.6 percent among commuters with incomes of \$15,000 and above.

9. Calculated from data in U.S. Department of Labor *Consumer Expenditures*, National Household Travel Survey, and *Highway Statistics*. Higher cost figures are often cited, such as from the Internal Revenue Service and the American Automobile Association. These figures are for vehicle miles, not passenger miles, and assume considerably shorter periods of ownership per vehicle than average. The figure cited here represents the actual expenditures per passenger mile on automobiles and the roadway system by households.

Only 5.9 percent of low-income commuters take transit, not much more than the 4.7 percent of those with higher incomes. The reality is that, without a car, the overwhelming majority of commuters, low-income and higher-income alike, are stranded with inferior employment opportunities, since they can access so few of the jobs in the metropolitan area by transit, walking, or cycling. Recent Urban Institute research suggested that “enhancing car access will notably improve the likelihood of employment among very low income adults, but investments in transit in areas with concentrated poverty will only have, at best, marginal effects.”¹⁰

Transportation and the Economy

Economic research shows that metropolitan areas perform better in economic growth and job creation if they have better mobility—measured in the percentage of jobs that can be reached in a certain amount of time (such as the national average of 25 minutes, one-way).¹¹ Today’s large metropolitan areas were made possible, at least in part, by the far greater access to jobs that only cars can provide. Brookings Institution research¹² indicates that the average commuter can reach only 6 percent of jobs in 45 minutes by transit in the larger metropolitan areas.¹³ By comparison, car commuters can reach more than 10 times as many jobs in less time. David Levinson at the University of Minnesota has shown that the average employee can reach more than 80 percent of major-metropolitan-area (over 1 million population) jobs in 30 minutes or fewer traveling by car.¹⁴ In short, auto-access jobs are more than

10 times as great, in two-thirds the time. It would be virtually impossible for transit to be expanded enough to equal this access.¹⁵

The average commute by car is approximately twice as fast as by transit. Indeed, the higher U.S. reliance on cars results in generally shorter work-trip travel times than is the case for international competitors and contributes to its domination of international gross domestic product per capita rankings.¹⁶ Nine of the 10 richest metropolitan areas in the world are in the United States.¹⁷

Refocusing Federal Policy

Drivers have not shifted to transit, despite billions in federal transit funding and the many new rail lines. With transit commuting concentrated in just six municipalities, transit is not a genuinely federal issue. Public funding for transit would be more appropriately provided by the states and localities, where it is most important.

People need to be quickly connected with the larger metropolitan-wide job markets, a task that is beyond that of transit. Washington should limit its role to oversight and allow states and localities to invest in the roadway infrastructure that carries almost 99 percent of personal travel and 100 percent of highway freight volume.

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10. Rolf Pendall et al., “Driving to Opportunity,” The Urban Institute, March 2014, <http://www.urban.org/UploadedPDF/413078-Driving-to-Opportunity.pdf> (accessed March 12, 2015).
11. Wendell Cox, “Traffic Congestion, Time, Money & Productivity,” NewGeography, September 18, 2009, <http://www.newgeography.com/content/001044-traffic-congestion-time-money-productivity> (accessed March 12, 2015).
12. Adie Tomer et al., “Missed Opportunity: Transit and Jobs in Metropolitan America,” Brookings Metropolitan Policy Program, May 2011, http://www.brookings.edu/-/media/research/files/reports/2011/5/12%20jobs%20and%20transit/0512_jobs_transit.pdf (accessed March 12, 2015).
13. Wendell Cox, “Transit: The 4 Percent Solution,” NewGeography, May 26, 2011, <http://www.newgeography.com/content/002251-transit-the-4-percent-solution> (accessed March 17, 2015).
14. Average of major-metropolitan-area 30-minute job access. University of Minnesota Center for Transportation Studies, “Access Across America,” January 29, 2015, <http://www.cts.umn.edu/Research/featured/access/> (accessed March 12, 2015).
15. Jean-Claude Ziv and Wendell Cox, “Megacities and Affluence: Transport & Land Use Considerations,” 11th World Conference on Transport Research, 2007, <http://trid.trb.org/view.aspx?id=890075> (accessed March 20, 2015).
16. Wendell Cox, “Improving the Competitiveness of Metropolitan Areas,” Frontier Centre for Public Policy, *Policy Series* No. 135, May 2012, http://www.fcpp.org/files/1/PS135_Transit_MY15F3.pdf (accessed March 12, 2015).
17. Wendell Cox, “World’s Most Affluent Metropolitan Areas: 2012,” NewGeography, January 25, 2013, <http://www.newgeography.com/content/003420-worlds-most-affluent-metropolitan-areas-2012> (accessed March 12, 2015).