

Research Summary Personal Mobility, Economic Growth & Poverty Reduction

Democratizing Prosperity in the United States

The United States and the developed world have experienced unprecedented economic growth since before World War II. US income per household has increased approximately 2.5 times.¹

In the United States, the increased incomes and the development of low-cost suburban areas has facilitated home ownership rates to increase from 40 percent before World War II to nearly 70 percent. Increased incomes have permitted car ownership per household to increase substantially. Similar trends have occurred throughout the developed world.

It might be argued that there has been a democratization of prosperity.

The economic growth that has occurred since World War II has been associated with the higher level of mobility provided by the automobile, higher levels of home ownership (especially in the suburbs) and the more competitive retail market that has developed as roadway systems have expanded.

Economic Productivity is Associated with Car Travel

The strong connection between personal mobility and economic growth (and the reduction of poverty) is demonstrated by various research:

Mobility is an important component of economic growth.

Urban areas in which people can reach a larger share of employment in a certain amount of time (such as 30 minutes) tend to be more productive, as research by Remy Prud'homme and Chang-Woon Lee of the University of Paris has shown.²

Research by Robert Cervero of the University of California found a strong relationship between higher work trip travel speeds and worker productivity.

... average commute speed—reflecting the provision of transportation infrastructure—most strongly influenced labor productivity in the San Francisco Bay Area, with an elasticity of around 0.10—every 10 percent increase in

¹ Calculated from US Department of Commerce data. <http://www.demographia.com/db-pc1929.pdf>.

² Remy Prud'homme and Chang-Woon Lee (1998), "Size, Sprawl, Speed, and the Efficiency of Cities," Paris, France: Observatoire de l'Économie et des Institutions Locales.

*commuting speed was associated with a one percent increase in worker output, all else being equal.*³

Our own research, covering urban areas from the high-, middle-, and low-income worlds, found an association between greater urban travel is strongly and higher urban income levels. This research suggests that mobility is more important than other factors, such as transit market share, transit service intensity, or population.⁴

In reviewing this research, it is important to understand that car travel is considerably faster than travel by transit and provide far greater access to a larger part of the urban area than transit, walking or biking (below).

Moreover, it is a generally accepted view that traffic congestion (slower travel speeds) imposes economic costs.

Hartgen and Fields have shown that traffic congestion imposes substantial costs on urban areas and that those costs are more acute in the downtown areas (central business districts).⁵

The Texas Transportation Institute produces estimates of economic losses due to congestion costs in urban areas each year.⁶

Lower Poverty Levels are Associated with Car Travel

Quicker automobile based mobility and access assists low income citizens in escaping poverty:

A Brookings Institution report concluded: “Given the strong connection between cars and employment outcomes, auto ownership programs may be one of the more promising options and one worthy of expansion.”⁷

A study by the Progressive Policy Institute, a research organization affiliated with the Democratic Leadership Council (of the Democratic Party), noted:

In most cases, the shortest distance between a poor person and a job is along a line driven in a car. Prosperity in America has always been strongly related to mobility and poor people work hard for access to opportunities. For both the rural and inner-city poor, access means being able to reach the prosperous suburbs of our booming metropolitan economies, and mobility means having the private automobile necessary for the trip. The most important response to the

³ http://www.lincolnst.edu/pubs/dl/88_CERVEWEB.pdf.

⁴ Wendell Cox, “Public Transport Performance Indicators: Implications for Emerging Urban Areas”, presentation to the CODATU X Congress, Bucharest, Romania, May 2004, <http://www.publicpurpose.com/c11-icators.pdf>.

⁵ David T. Hartgen and Gregory Fields, “Accessibility, Traffic Congestion and Regional Economic Performance,” Reason Foundation (in publication), 2009.

⁶ <http://mobility.tamu.edu/ums/>

⁷ Evelyn Blumenberg and Margy Waller, "The Long Journey to Work: A Federal Transportation Policy for Working Families," Center for Urban and Metropolitan Policy, Brookings Institution, July 2003, p. 2.

*policy challenge of job access for those leaving welfare is the continued and expanded use of cars by low-income workers.*⁸

Raphael and Stoll, at the University of California, estimate that if automobiles were available to all African American households, the gap between non-Hispanic-white and African-American unemployment would be reduced by nearly one-half.⁹

A U.S. Federal Transit Administration study found that only 14 percent of jobs in the high-growth suburbs of Boston were within one hour's transit ride of inner-city low-income areas.¹⁰

As the above research indicates, economic growth and poverty reduction are associated with superior mobility --- with reducing travel times.

Cars Provide Unparalleled Mobility and Access

Among the nation's 51 metropolitan areas with more than 1,000,000 population, the average journey to work speed on transit is 88 percent longer than by single-occupant automobile (one way: 48.9 minutes versus 26.0 minutes). Transit takes 65 percent longer than car pools (26.9 minutes).¹¹

The average transit commuter spends approximately 170 hours per year longer traveling to and from work as the average commuter who drives alone.

Even in the New York metropolitan area, with by far the best transit system in the nation, the average work trip on transit takes 82% longer than driving alone (51.8 minutes versus 27.8).

It is not possible to improve transit service enough to compete with the automobile for most trips at an affordable cost. It is not possible to substitute automobile-competitive transit service for automobile use at a cost that can be afforded. It has been estimated that the transit improvements that would be necessary to equal the overall speed of cars could cost an amount similar to the annual personal income of any US urban area.¹²

US urban areas generally rely on automobile transportation more than other developed nation urban areas and, as a result, they have lower population densities.

⁸ Margy Waller and Mark Alan Hughes, "Working Far from Home: Transportation and Welfare Reform in the Ten Big States," Progressive Policy Institute, August 1, 1999. See also Anne Kim, "Why People Need Affordable Cars," Blueprint: Ideas for a New Century, February 11, 2003, at www.ndol.org/ndol_ci.cfm?contentid=251220&kaid=114&subid=143.

⁹ Steven Raphael and Michael Stoll, *Can Boosting Minority Car-Ownership Rates Narrow Inter-Racial Employment Gaps?* (National Science Foundation, June 2000).

¹⁰ Annealing Lacombe, *Welfare Reform and Access to Jobs in Boston* (Washington, D.C.: U.S. Department of Transportation, Bureau of Transportation Statistics, 1998).

¹¹ Data for 2007 from the American Community Survey of the United States Bureau of the Census. See: <http://www.publicpurpose.com/ut-commute2007.pdf>.

¹² <http://www.publicpurpose.com/illusion.pdf>.

Nonetheless, the higher speed of automobile commuting permits US commuters to reach their jobs more quickly than in comparably sized urban areas of similar size in other developed nations.

This is most vividly illustrated by comparing Hong Kong with Los Angeles. The Hong Kong urban area is approximately 10 times as dense as the Los Angeles urban area. Approximately 80 percent of travel in Hong Kong is by transit, which compares to approximately 2 percent in Los Angeles. Yet, with its lower densities, the average work trip in Hong Kong is 46 minutes in one direction. Moreover, even with its high-quality transit system, the average car trip takes little more than one-half the time of the average transit trip.¹³ In Los Angeles, the average work trip is 28 minutes in one direction. Over a period of a year, a Los Angeles commuter spends 135 hours less commuting than in Hong Kong (the equivalent of 17 8-hour work days).

Another example compares Sydney, Australia with Houston. The two urban areas have similar populations, though Houston has an urban density¹⁴ approximately 85 percent greater than that of Houston. Moreover, transit represents 22 percent of work trips in Sydney,¹⁵ more than 8 times the Houston figure of 2.6 percent. Sydney commuters spend an average of 34 minutes each way traveling to work. Houston workers spend only 28 minutes.

Urban Highways Reduce Freight Costs

A large share of the nation's intercity freight and virtually all freight within urban areas travels by road. Lower road speeds and greater congestion increase freight costs, which is reflected in higher product costs. Keeping traffic moving reduces freight costs, product costs and makes it possible for people to have higher standards of living (because they can purchase more with their income).

The Economic and Social Importance of Travel Time

It is imperative that urban travel times be minimized, because of the close connection between mobility, economic growth and poverty alleviation. Because the car provides the quickest access for nearly all trips, *the policy goal of reducing travel by car could lead to less economic growth and greater poverty.*

The connection between mobility, economic growth and poverty reduction is not understood by proponents of strategies that would restrict mobility.

¹³http://www.td.gov.hk/FileManager/EN/Content_523/section_3_eng.pdf.

¹⁴ Urbanized area, see: <http://www.demographia.com/db-worldua.pdf>,

¹⁵ <http://www.transport.nsw.gov.au/tdc/documents/hts-report-2006.pdf>