

The world economy is moving.

Can America keep up?



Efficient transportation creates the competitive edge.

The growth in the world economy promises to be astounding like nothing you've ever seen before. . . . A key to keeping competitive will be to rethink our transportation systems so they fit the movements and demands of a global economy; currently, they are configured to meet the demands the U.S. faced in the last century.

—Michael Gallis, Futurist, 2006



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Keep America Moving

State-of-the-art transportation drives economic growth.

America's transportation infrastructure historically gave our nation a global competitive advantage that paved the way to prosperity. Interconnected systems of transit, airports, highways, railroads, and ports ensure the rapid movement of goods and people. As other nations step up their transportation investments and our economy increasingly depends on "just-in-time" delivery, the U.S. transportation infrastructure needs to keep pace.

Studies show that each additional 1 percent in transportation infrastructure investment increases overall economic productivity by 0.05 percent to 0.21 percent—a small percentage that represents a huge gain in absolute terms.¹ Public transit is an increasingly critical part of that investment, creating economic opportunity while saving Americans time, money, and fuel.

Strategically connected bus, rapid transit, and commuter rail systems reduce hours wasted in traffic congestion; curb road and parking facility costs; lower levels of costly pollution; and boost America's energy independence. By creating access to

education and jobs, interconnected systems also relieve unemployment. And they spur economic and cultural revitalization in neglected metropolitan communities.

As energy costs and traffic congestion increase, the demand for high quality transportation infrastructure will deepen and grow.² Government investment that meets—and drives—this demand can free our passengers and freight from the traffic congestion that saps our time and resources.

Just as metropolitan regions grew from cities to become the geographical units of the 20th century global economy, megaregions—agglomerations of metropolitan regions with integrated labor markets, infrastructure, and land use systems—are rapidly taking their place. . . . If we are to take advantage of these dynamics of change, our nation must make the critical investments necessary to provide capacity for growth and quality of life for the next half century. Increasingly, these investments and interventions must occur at the megaregional scale, which provides the necessary breadth of resources to grow and compete globally.³

—*America 2050: A Prospectus*

Transportation investments will restore America's competitive edge.



Transportation keeps the economy moving.

Economic vitality is rooted in a transportation infrastructure that efficiently moves people and goods—at the lowest cost. That’s why public transportation investments pay enormous dividends. They can:

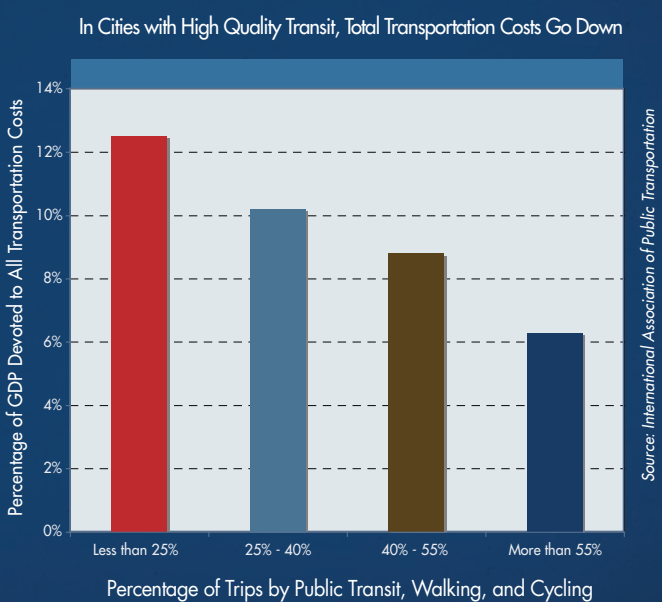
- **Shift consumer expenditures from foreign fuels to U.S. goods:** In 2004 public transportation saved an estimated 1.4 billion gallons of gasoline—equivalent to 33.5 million barrels of crude oil. Households with two adults who use public transportation save an average of \$6,251 a year compared to an equivalent household with two cars and no access to public transportation service.⁴
- **Generate economic activity:** Every tax dollar invested in public transportation generates an average of \$6 in economic returns.⁵ And transit provides fast and easy access to our economic engines—central business districts, revitalized urban areas, and major convention centers and sports stadiums.
- **Strengthen supply chains:** Over the past 25 years, America’s capital-intensive economy has shifted emphasis from warehousing goods to keeping them in motion for just-in-time delivery—creating longer and more complex supply chains to move goods as quickly as possible. Increased rail capacity to support intermodal supply chains will reduce costly transport delays.
- **Reduce infrastructure costs:** Transit-oriented, compact development minimizes the need for costly infrastructure, roads, and stormwater management systems.
- **Create jobs:** The U.S. Department of Transportation estimates that every \$1 billion of federal funding invested in transportation infrastructure creates 47,500 jobs.⁶

Transportation investment will prime the pumps of U.S. economic engines.

Urban mobility has never been more important. Our large metropolitan areas—where public transportation is most prevalent and accessible—generate more than 86 percent of the nation’s gross domestic product (GDP).⁷ By 2050, more than 70 percent of the nation’s population and economic growth will occur in metropolitan “megaregions,” with ever-increasing demand for efficient movement of goods, people, and capital between them.⁸ Public transportation plays a vital role in keeping the pumps of these economic engines primed.

Around the world, cities that invest in high quality, multimodal public transportation reap lasting economic benefits. Ultimately, their interconnected systems enable them to devote a smaller portion of their wealth to total transportation costs—for vehicles, fuel, fares, roads, parking, and transit—with annual average per capita savings of more than \$2,500. In cities

where travelers can ride transit, walk, and bicycle, the percentage of GDP spent on transportation is just half of what residents of other cities spend.⁹



The United States is at risk of falling behind . . .

Other nations—especially in the developing world—are creating transportation networks that integrate urban transit with high-speed rail systems and intercontinental airports. China is aggressively launching a plan to connect every province and its 30 largest cities in a national grid system for both freight operations and high-speed rail—with new signaling technology and centralized traffic control to improve rail capacity.

As U.S. transportation investments lag behind, our businesses suffer too. Non-U.S. firms are seizing opportunities to supply the equipment and signaling technology for dozens of new rail systems in countries throughout Europe and Asia.

Here in the United States, public transportation investments can produce the greatest economic benefit in metropolitan areas—where traffic congestion is growing and roadway expansion is increasingly costly. In 2003, traffic congestion in the 85 largest U.S. urban areas caused 3.7 billion hours of travel delay. Travelers driving during peak hours averaged 47 hours stuck in traffic that year, up from just 16 hours in 1982.¹⁰

And Americans lose more than time. In 2003, congestion wasted an estimated 2.3 billion gallons of fuel in the top 85 urban areas, at a cost of more than \$63.1 billion—or \$794 per traveler—for both time and fuel.¹¹

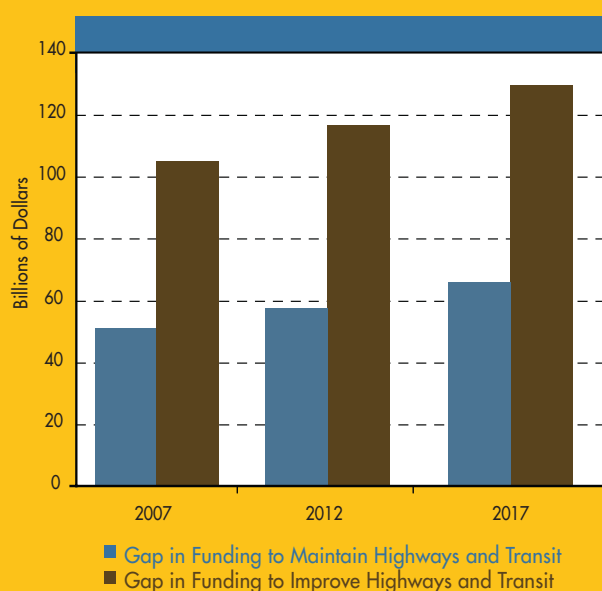
The United States cannot compete if transportation investments remain static. The National Cooperative Highway Research Program estimates that in 2007, \$238.3 billion is needed to maintain America's surface transportation systems—and it would take \$293.0 billion to improve them to fully meet the needs of our growing economy.¹² Considering all funding sources, those estimates leave a funding gap of \$50.7 billion to maintain the systems and \$105.3 billion to improve them. By 2017, those gaps will widen to \$66.0 billion and \$133.9 billion, respectively.



The brand-new Beijing-to-Lhasa railway is an engineering marvel . . . and it illustrates the divide between a nation that invests (China) and one that consumes (the United States).

—American, American Enterprise Institute, Jan/Feb 2007

U.S. Funding Gap for Transportation Needs is Widening



Source: National Cooperative Highway Research Program

China's New Urban Rapid Transit Systems

For the past six years—and for years to come—China is opening at least one new subway system every year.

- Chengdu: 15-station metro under construction
- Chongqing: 18-station monorail completed in 2005
- Guangzhou: Four-line metro completed in 1999; three lines under construction; three lines planned to open by 2010
- Hangzhou: Two lines to open in 2010
- Nanjing: 13-station metro opened in 2005; 20-station route to be completed in 2009
- Shenzhen: 10-station metro completed in 2004
- Tianjin: 21-station metro rebuilt in 2006; two more 42-station routes planned
- Wuhan: 10-station metro completed in 2004; two more lines to open in 2010

—Source: UrbanRail.Net

Transportation keeps Americans moving.

In 2003, public transportation in the most congested U.S. cities saved travelers 1.1 billion hours in added travel time and a total of \$18.2 billion in congestion costs. Without public transportation, congestion in these cities would have increased by an estimated 27 percent.¹³ Commuters who use public transportation spend just 40 percent of what it costs to drive a car to work.¹⁴ Transit riders save an average of \$1,400 a year in gasoline alone.¹⁵

The impact is even greater for low-income, disabled, and elderly Americans who can't afford or operate a car. Public transportation gives them access to jobs, educational and training opportunities, healthcare facilities, and commercial and cultural destinations.

Although other transportation improvements reduce traffic congestion and conserve energy, the wide range of additional long-term benefits of public transit investments make them exceptionally cost effective.

The more U.S. cities invest in interconnected, easily accessible transit, the greater their returns. In cities with high quality transit systems, each resident pays about \$100 per year in taxes to finance the system but saves \$500 per year in transportation costs. And because these cities enjoy five times the transit ridership of other cities, their operating costs per passenger mile are 33 percent lower and their rates of service cost recovery are almost 60 percent higher.¹⁶

The challenge: Making transportation investments to drive economic momentum.

At a time of growing concern about America's energy dependence and our nation's position in the global economy, we can't afford to shortchange transportation investment. SAFETEA-LU (the Safe, Accountable, Flexible, Efficient Transportation Equity Act – A Legacy for Users) provides an excellent start. Public transportation is a key part of the package, including funding for the new rail and fixed guideway transit projects that are crucial to increasing access and attracting new riders. **But Congress can do more.**

To compete in the global marketplace, strategic federal transportation investments will enhance multimodal integration and mobility, enabling more efficient movement of both passengers and freight. In addition to fully funding transportation at the levels guaranteed by SAFETEA-LU, we need to explore additional investments to make sure our entire national transportation system—including transit, airports, highways, railroads, and ports—functions as an integrated, interconnected whole.

States and municipalities have done their part, assuming a growing share of U.S.

transportation investments. But a piecemeal approach is no substitute for a national vision for seamless transportation—from urban centers, to air and shipping hubs, and on to the economic centers around the globe.

As the National Surface Transportation Policy and Revenue Study Commission reviews the condition, future needs, and revenue requirements of the U.S. surface transportation system over the next 30 years, the time is right for Congress to embrace a bold vision for American transportation in the 21st century.





Keep America Moving

Endnotes

¹ Bhatta, S., and M. Drennan. "The Economic Benefits of Public Investment in Transportation: A Review of Recent Literature." *Journal of Planning Education and Research*, Vol. 22, 288-296.

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³ *America 2050: A Prospectus* at www.america2050.org/pdf/America2050prospectus.pdf.

⁴ Bailey, Linda. *Public Transportation and Petroleum Savings in the U.S.: Reducing Dependence on Oil*. Fairfax, VA: ICF International, 2007.

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⁶ *Introduction to JOBMOD*. Washington: Federal Highway Administration, 2002.

⁷ U.S. Conference of Mayors, January 2006.

⁸ *America 2050: A Prospectus*.

⁹ *Mobility in Cities Database*. Brussels, Belgium: International Association of Public Transport, 2005 at www.uitp.com/rome2005/RMR/en/pics/MCD-en.pdf.

¹⁰ *2005 Urban Mobility Report*. College Station: Texas Transportation Institute, Texas A&M University, 2005.

¹¹ *Ibid.*

¹² *Future Financing Options to Meet Highway and Transit Needs*. Web-Only Document 102. Washington: National Cooperative Highway Research Program, December 2005 at http://onlinepubs.trb.org/onlinepubs/nchrp/nchrp_w102.pdf.

¹³ *2005 Urban Mobility Report*.

¹⁴ *Commuting Expenses: Disparity for the Working Poor*. BTS Issue Brief 1. Washington: Bureau of Transportation Statistics, 2003.

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¹⁶ Litman, Todd. *Rail Transit In America: Comprehensive Evaluation of Benefits*. Victoria, B.C.: Victoria Transport Policy Institute, 2004.

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*This report was underwritten by the private-sector business
members of the American Public Transportation Association.*
Published March 2007

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