2013 REPORT CARD FOR AMERICA'S INFRASTRUCTURE ASCE



2013 Report Card for America's Infrastructure Findings

America's public transit infrastructure plays a vital role in our economy, connecting millions of people with jobs, medical facilities, schools, shopping, and recreation, and it is critical to the one-third of Americans who do not drive cars. Unlike many U.S. infrastructure systems, the transit system is not comprehensive, as 45% of American households lack any access to transit, and millions more have inadequate service levels. Americans who do have access have increased their ridership 9.1% in the past decade, and that trend is expected to continue. Although investment in transit has also increased, deficient and deteriorating transit systems cost the U.S. economy \$90 billion in 2010, as many transit agencies are struggling to maintain aging and obsolete fleets and facilities amid an economic downturn that has reduced their funding, forcing service cuts and fare increases.

Transit: Conditions & Capacity

Connecting riders to transit is critical to the health of the nation's economy; however, access to transit options remains a significant burden for many Americans. Just over 55% of U.S. households reported that they have access to public transportation service, down slightly from almost 57% in 2001. Among urban households, 69% have access to transit, while just 14% of rural households have access to transit. Transit usage tracks fairly closely with employment, indicating that a significant portion of riders depend on transit to commute to a job. Among households in large metropolitan areas with no access to a private automobile, over 90% live in neighborhoods with access to transit service of some kind. However, they can reach only about 40% of the jobs in their area via transit within 90 minutes, potentially limiting employment opportunities.

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Access to transit varies by region, with Northeast and Western cities having the highest access rates and cities in the South having the lowest. Among metropolitan areas with the best access to jobs for zero-vehicle households, Honolulu was number one with 70%, and 13 of the top 20 cities were in the West. The South had 11 of the 20 worst access rates, including six of the eight largest metropolitan areas in Florida. As the population ages, access to transit will become increasingly important as older drivers will want and need viable alternatives to driving. As a result, communities are beginning to address the challenges of an aging population in their transportation planning. New Mexico, for example, has included access to transit in

RANK	METROPOLITAN REGION	COVERAGE RATE
E	LOS ANGELES-LONG BEACH-SANTA ANA, CA	96.5%
2	HONOLULU, HI	94.3%
L.	SEATTLE-TACOMA-BELLEVUE, WA	93.3%
l.	SAN JOSE-SUNNYVALE-SANTA CLARA, CA	92%
i	MIAMI-FORT LAUDERDALE-POMPANO BEACH, FL	91.7%
i.	EL PASO, TX	90.4%
1	LAS VEGAS-PARADISE, NV	89.9%
1	PORTLAND-VANCOUVER-BEAVERTON, OR-WA	88.7%
l.	NEW YORK-NORTHERN NEW JERSEY-LONG ISLAND, NY-NJ-PA	88.7%
0	WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV	88.5%
11	BUFFALO-NIAGARA FALLS, NY	86.9%
2	DENVER-AURORA, CO	86.6%
3	SAN DIEGO-CARLSBAD-SAN MARCOS, CA	85.9%
14	SAN FRANCISCO-OAKLAND-FREMONT, CA	85,4%
15	ALBUQUERQUE, NM	84.5%
6	MODESTO, CA	84.2%
17	CHARLESTON-NORTH CHARLESTON-SUMMERVILLE, SC	82.6%
8	CHICAGO-NAPERVILLE-JOLIET, IL-IN-WI	82.2%
9	BRIDGEPORT-STAMFORD-NORWALK, CT	82.1%
:0	TAMPA-ST. PETERSBURG-CLEARWATER, FL	81.3%
1	PHOENIX-MESA-SCOTTSDALE, AZ	80.8%
2	PHILADELPHIA-CAMDEN-WILMINGTON, PA-NJ-DE-MD	80.3%
3	SALT LAKE CITY, UT	80.2%
4	TUCSON, AZ	79.7%
!5	BRADENTON-SARASOTA-VENICE, FL	79.6%

rural areas, especially for the elderly, disabled, and low-income residents, in its key metrics being monitored for setting performance goals for their transportation programs.

Investment in major urban transit systems has led to an increased percentage of newer transit vehicles for most modes in the past three years. Overall, the percentage of vehicles older than their minimum useful life decreased to 16% in 2011 as compared with 17% in 2009. The condition of transit buses, which are responsible for carrying the majority of transit riders (53% of unlinked passenger trips in 2008), remains barely adequate, consistent with trends over the past decade. In addition, 30% of urban bus maintenance facilities are rated below a three on a five-point scale (with five being the bestrating).

Rail-based systems carry just over a third of all transit trips (35%) but have the greatest maintenance needs of all transit modes, with a backlog of \$59 billion as compared with \$18 billion for nonrail systems. In addition, these systems have larger than average annual normal replacement needs (i.e., annual costs required to maintain a state of good repair): \$8 billion as compared with the average of \$6 billion across all other transit modes. Fixed guideways, which include tracks and roadways dedicated to transit, require the largest replacement costs and have more than tripled since 1970. Fixed guideways also have widely varying conditions, with

not only the greatest share of assets in excellent condition (defined as 4.8–5.0 on a five-point scale) in terms of replacement value, but also the highest share of assets in poor condition (defined as 1.0–1.9 on a fivepoint scale). This represents a major financial challenge for transit authorities to keep these systems in good operating order and can likely be attributed to the following: Rail systems are some of the oldest assets still in use (especially heavy rail systems in cities like New York, Chicago, and Boston), as well as a major area of growth in recent years (especially light rail systems in Denver, Salt Lake City, Charlotte, etc.).

Just as troubling as the

ANK	METROPOLITAN REGION	LABOR ACCESS RATE
	SALT LAKE CITY, UT	64.1%
	SAN JOSE-SUNNYVALE-SANTA CLARA, CA	61.3%
	HONOLULU, HI	61.1%
	TUCSON, AZ	52.3%
	MADISON, WI	48.2%
	ALBUQUERQUE, NM	47.1%
	PROVO-OREM, UT	47%
	FRESNO, CA	45.8%
	DENVER-AURORA, CO	45.6%
0	MILWAUKEE-WAUKESHA-WEST ALLIS, WI	45.1%
1	OGDEN-CLEARFIELD, UT	44%
2	LAS VEGAS-PARADISE, NV	42.3%
3	GRAND RAPIDS-WYOMING, MI	39.9%
1	DES MOINES-WEST DES MOINES, IA	38.7%
5	MODESTO, CA	38.5%
6	PORTLAND-VANCOUVER-BEAVERTON, OR-WA	38.4%
7	NEW YORK-NORTHERN NEW JERSEY-LONG ISLAND, NY-NJ-PA	36.8%
3	SAN FRANCISCO-OAKLAND-FREMONT, CA	35%
3	BAKERSFIELD, CA	35%
)	SAN ANTONIO, TX	34.3%
1	DAYTON, OH	34.1%
2	NEW ORLEANS-METAIRIE-KENNER, LA	34%
3	WASHINGTON-ARLINGTON-ALEXANDRIA, DC-VA-MD-WV	33.8%
4	TOLEDO, OH	31.6%
5	WICHITA, KS	30.8%

maintenance backlog is the fact that many transit agencies do not systematically monitor the conditions of their facilities to keep their fleets in good and consistent operation. Many agencies don't conduct regular, comprehensive asset condition assessments, lagging behind other transportation sectors in this respect. For example, nearly all state Departments of

Transportation maintain some record of the condition of their pavement and bridge assets. As transit systems grow, good asset management practices will be essential to effectively manage complex systems and growing ridership.

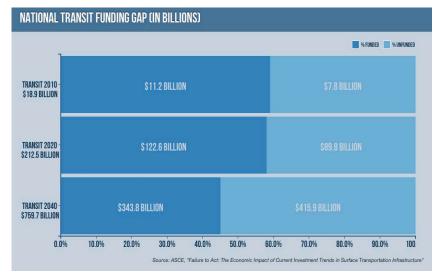
Nevertheless, many transit agencies have been leaders in using technology to make their systems more convenient and reliable even as they have had to make cuts in service, including offering real-time arrival



information and online route planning. These practices have played a role in increasing ridership.

Transit: Investment & Funding

The expansion of transit systems in recent years has been made possible through a substantial increase in overall funding for transit – more than 36% since 2000, totaling over \$52 billion from all sources in 2008. However, the recent economic downturn is reversing those gains as states and localities struggle to adjust to reduced revenues and federal funding remains constant, as it has for



the past two decades. Voters in many areas have been supportive of funding transit through ballot initiatives, supporting 47 of 59 such initiatives on state and local ballots in 2012. In fact, since 2000, 70% of public transit ballot initiatives have passed. Recent polling research further supports this trend, indicating that two out of every three Americans support increased local investment to expand and improve transit systems. In addition, a recent infusion of almost \$4 billion in federal funds from the American Recovery and Reinvestment Act (ARRA) has helped to improve some conditions, reducing the backlog of repair and rehabilitation of transit assets needed by about 5%. However, this is only temporary. The Federal Transit Administration (FTA) still estimates a maintenance backlog of nearly \$78 billion needed to bring all transit systems up to a state of good repair (generally defined as achieving a rating of 2.5 or higher on a scale of 1–5).

Despite these trends, the Federal Transit Administration estimates that a funding gap of \$25 billion per year exists, and this gap is expected to grow. If current trends continue, the 2010 investment gap of 40% is expected to grow to 55% by 2040. Without a significant increase in funding for maintenance and operations of these systems, conditions will inevitably decline as systems and assets age.



These deficiencies, which currently cost the U.S. economy about \$90 billion per year in lost time and wasted fuel, will cost us \$570 billion in 2020 and over \$1 trillion in 2040, should current funding trends continue.

The Federal Transit Administration's State of Good Repair initiative directed \$48 million in grants in 2010 and 2011 to 31 transit agencies to develop and improve asset management practices. However, with over 650 different agencies across the country, the needs in this area remain significant.

Transit: Success Stories

America Fast Forward

Los Angeles County's move from car capital of the world to transit capital of the United States is being driven by \$15 billion in transit funds approved by county voters and with the assistance of America Fast Forward, the innovative finance section of MAP-21, America's new surface transportation law. America Fast Forward offers over \$20 billion in new federal lending power over the next two years.



By helping communities leverage their transportation resources and stretch federal dollars further than they have been stretched before, America Fast Forward will reshape our nation's infrastructure while employing tens of thousands of workers to build a stronger and more mobile America. Implementing America Fast Forward in Los Angeles County alone will create over 160,000 highway and transit construction-related jobs, increase ridership by an estimated 77 million trips per year, reduce emissions from vehicles, and save an estimated 10.3 million gallons of gasoline annually.

Eagle Public-Private Partnership Project

The Eagle Public-Private Partnership (P3) is a first-of-its-kind agreement to design/build/finance/operate/maintain a \$2.1 billion expansion of Denver's transit network. This innovative program is rapidly expanding Denver's Regional Transportation District to serve a growing and changing population by spreading the cost out over many years and transferring many of the risks in



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financing and operating to its private concessionaires. In return, concessionaires are rewarded based on the performance of the operation and maintenance of the project. Denver is already being recognized as a top transit city in the United States, and the Eagle P3 project will enable the region to attract more residents and jobs.

Transit: Conclusion

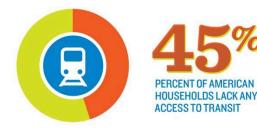
Americans continue to demonstrate their desire to have robust public transportation options, evidenced by increasing ridership and continued support of local and state-level funding issues. However, nearly half of Americans lack access to a good transit system, and transit agencies remain hard pressed to keep up with the demand of operating and maintaining the systems that exist. Continued investment in transit systems of all



kinds is needed to support people's ability to access jobs and enjoy independent mobility as they age.

Raising the Grades: Solutions that Work Now

- Increase access to transit in urban, suburban, and rural communities so that all Americans have more and better transportation choices
- Adequately fund maintenance of transit vehicles and facilities to keep systems in state of good repair and reduce life-cycle costs
- **Continue federal investment in transit** through a robust surface transportation program (authorization and appropriation) and a solvent Highway Trust Fund
- **Require transit systems to adopt comprehensive asset management systems** to maximize investments
- Include transit in state and local project development processes and metrics to track performance of transportation systems
- Local, regional, and state government entities especially in smaller urban and rural areas – should prioritize transit investments that can enhance sustainable land-use decisions



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