Bridge Infrastructure

n August 2007, a horrific incident forced the American public and the nation's leaders to take a close look at the state of the country's highway bridges. The collapse of the eight-lane bridge in Minneapolis carrying Interstate-35W over the Mississippi took the lives of 13 people and injured more than 100 others. Although the 40-year-old steel structure had been considered "structurally deficient" since 1990, engineers with the Minnesota Department of Transportation did not believe that the bridge was in danger of imminent failure.

Mary E. Peters, the U.S. Secretary of Transportation, spoke for most of us when, at a news conference after the disaster, she declared that "Bridges in America should not fall down." In fact, bridges do collapse-and at greater rates than you might think. Some 1,500 U. S. bridges collapsed between 1966 and 2005, according to



and weights.

In August 2007, the collapse of the eight-lane bridge in Minneapolis carrying Interstate-35W over the Mississippi River took the lives of 13 people and injured more than 100 others.

the American Society of Civil Engineers (ASCE).¹ More than 60 percent of these failures are traceable to soil erosion around bridges during floods. Ship collisions, overloads, design flaws, corrosion, and poor maintenance are among other causes. Unanticipated bridge traffic, which could arguably be blamed on immigration, does not seem to be a contributing factor.

More than 70,000 bridges are rated structurally deficient, like the span that collapsed in Minneapolis. They carry an average of more than 300 million vehicles per day.² While it is unclear how many of them pose actual safety risks, structurally deficient bridges are closed or restricted to light vehicles because of their deteriorated structural components. Another bridge classification—the functionally obsolete bridge—is described by ASCE as having older design features that make it unable to safely accommodate current traffic volumes, vehicle sizes,

Section 3

The news about bridges is not all bad, however. Another report—the Bureau of Transportation Statistics' (BTS) *Condition of U.S. Highway Bridg-*

> 1990-2007-ines: dicated that nearly 42 percent of all highway bridges were classified as structurally deficient 17 years ago. By mid-August 2007, however, the combined number of structurally deficient and functionally obsolete bridges had decreased to 25.6 percent of all bridges, even as the total number of bridges increased by nearly 5 percent to approxi-

mately 600,000 structures, the BTS report noted.³

As of 2003, 27.1 percent of the nation's bridges (160,570) were structurally deficient or functionally obsolete. In that year, however, one in three urban bridges—a much higher rate than the national average—was in those categories.

Do immigrants use highway bridges at greater rates than natives? Probably not. But given the role of immigration in U.S. population growth, it is not unreasonable to expect that immigrants and their U.S.-born children account for a disproportionate share of the *rise* in urban bridge traffic. It would cost \$9.4 billion a year for 20 years to repair all substandard bridges, according to the latest estimate, made in 2005, by ASCE.⁴ In a separate report, the Federal Highway Administration says meeting the backlog of needed bridge repairs would take at least \$55 billion.⁵ to Nowhere" in Alaska. That provision eventually faltered, but about \$24 billion—a little less than 8 percent of the total—in the last highway bill was still devoted to projects singled out by lawmakers for funding.

Shrinking revenues and credit market turmoil

Bridges by the Numbers	
600,000 bridges in the U.S. (2007) 12.6 percent of bridges classified as "structurally deficient" by the Federal Highway Administrati (2007) 300 million vehicles cross structurally deficient bridges daily \$223 million cost of "Bridge to Nowhere" in Alaska (not funded) 8.0 percent of the 2006 highway bill earmarked for "pork" projects.	on
Spending Required to Repair All "Structurally Deficient" Bridges 2007: \$188 billion (a) (\$636 per capita)	
2050 Projections (b): \$279 billion: at current population trends \$241 billion: at 50-percent reduction in immigration \$188 billion: at zero population growth	
Notes: a. ASCE estimate. b. Assumes per-capita spending requirements are at 2007 levels.	
Sources: American Society of Civil Engineers, Congressional Budget Office, Pew Foundation, Texas Transportation Institute, U. S. Department of Transportation.	

That was before the Minneapolis disaster.

State bridge inspections in the wake of the I-35W collapse have uncovered additional structural deficiencies, raising estimated costs of a national bridge makeover. Colorado, for example, identified 125 major bridges in need of major repair, at a cost of \$1.4 billion. New Jersey is moving funds from other road projects in order to spend \$605 on bridge repairs this year, up from \$96 million last year. Nine other states are issuing bonds—taking on debt—raising taxes, hiking fees, or shifting funds from other road projects.⁶

Meanwhile, federal funding is in decline. Federal highway trust fund disbursements fell by \$3.2 billion in FY 2008 and are expected to fall further because Americans are driving less.

The administration is also demanding that Congress show more discipline, citing thousands of special projects, or earmarks, in highway bills that do not reflect the real priorities. The best known among them was the \$223 million "Bridge will inevitably reduce the funds available for bridges and other infrastructure projects. Reducing the demand for such projects—by population and immigration controls—may be the best alternative.

Immigration's Fiscal Impact

Federal motor fuel taxes generate most of the money available for bridge construction and re-

pair. As described in the highway section, the gas tax does not yield enough revenue to fund needed infrastructure improvements. Tax rates have not changed since 1993, and with the economy in recession, a gas tax hike is even more unlikely today.

Of course, the feds could share other tax revenues with state transportation departments. The problem is that 98 percent of our bridges (and 97 percent of our roads) are owned by state and local governments, and these governments have often used past increases in federal transportation aid merely to replace their own infrastructure spending.

It is clearly a matter of priorities: Politically popular programs like Medicaid and education have crowded out infrastructure. The numbers tell the story:

In 1960, at the height of President Eisenhower's commitment to the interstate system, federal infrastructure spending accounted for nearly 12 percent of all non-defense expenditures. By 2006, infrastructure's share was just 3.5 percent. Mean-

WINTER 2009

while, education and social programs usurped more than 33 percent of non-defense spending in 2006, up from 21 percent in 1960.

Put differently, in 1960, the federal government spent about half as much on infrastructure as it spent on education and means-tested programs; by 2006, it spent only one-tenth as much on infrastructure as on those programs.

Immigration played a major role in this process. Immigrants are poorer, pay less taxes, and are more likely to receive public benefits than natives. It follows that the government's ability to finance discretionary outlays like bridge upgrades and repair is adversely impacted by immigrants—and this negative will increase as the share of immigrants in the population increases. and municipal assistance.

NRC found that immigrant households receive an average \$13,326 in federal benefits while paying \$10,664 in federal taxes, that is, they generate a fiscal deficit of \$2,682 (1996 dollars) per household. In 2007 dollars, this deficit is \$3,408 per household.

The fiscal damage is even more acute at the state and local level. Public education, at a cost of \$7,737 per immigrant household, accounts for nearly half of what immigrants currently receive from state and local governments. Means-tested welfare programs rank second, accounting for about one-fifth of all immigrant-related spending by state and local governments. States are required to contribute to as many as 60 different federal means-tested programs, including Medicaid and TANF.



The Putah Creek Road Bridge in Northern California crosses over this major stream—a 70-mile creek and tributary of Yolo Bypass.

There is surprisingly little objective research on the fiscal burden imposed by immigrants. The best study is still *The New Americans*, the National Research Council's (NRC) 1997 study of immigration's economic and demographic impact. The NRC staff analyzed federal, state, and local government expenditures on programs such as Medicaid, Aid to Families with Dependent Children (now TANF, Temporary Assistance for Needy Families), and Supplemental Security Income (SSI), as well as the cost of educating immigrants' foreign- and nativeborn children. The NRC also estimated the average immigrant household's share of police and fire protection, public works, recreation, higher education,

The NRC study found that state and local benefits received by the average immigrant household exceed the amount of state and local taxes paid by such households by \$4,398 (2007 dollars).

Thus, the average immigrant household generates a total (federal, state, and local) fiscal deficit of \$7,806 (\$3,408 + \$4,398.) This is the net subsidy immigrant households receive from households headed by U.S. natives. There are currently about 36 million immigrants living in about 9 million households, so the aggregate deficit attributable to immigrants comes to \$70.3 billion (\$7,806 x 9 million.)

Bottom line: Immigrants could deplete the

amount of public funds available for infrastructure by as much as \$70 billion per year.

California Bridges Falling Down?

California is the immigration capital of the U.S. In 2007, the state's nearly 10 million immigrants accounted for nearly 28 percent of the state's population. New York state is a distant second with 4.1 million immigrants (22 percent of the state's population).

While there is no proof, there is ample circumstantial evidence that California's immigrants are crowding out its infrastructure. In 2004, for example, the state transferred \$3.1 billion from the transportation trust fund to the general fund—which finances social programs for immigrants and other economically disadvantaged individuals. That same year, a civil engineer from Modoc, California, was quoted as follows:

> California's diversion of funds has almost halted the bridge replacement program in most jurisdictions, including our shaky wooden truss bridge with a 3-ton load limit, that provides the only access to a hundred square miles of land, people, and forests. Ever tried to take a 12ton fire engine over a 3-ton bridge?⁷

This news item is also from 2004:

A chunk of the Richmond-San Rafael Bridge fell into the bay yesterday afternoon, forcing the closure of a lane and causing major traffic tie-ups in the county that lasted for hours. The 3-foot-wide, 1-foot long hole opened along the trestle section of the bridge exposing the bay below. The span has been bedeviled by holes in recent years. Opened in 1956, the decks on the span have never been replaced and are showing signs of age.⁸

As was this:

The Victoria Avenue Bridge, which dates to 1928, will be retrofitted to withstand an earthquake of magnitude 7.4 if the City Council approves the \$9 million project. The bridge was not built to handle a major earthquake and has deteriorated over the years. 'The work must be done,' said Councilman Art Gage, who lives nearby and drives across the bridge several times a day. 'It's a little scary looking,' he said of the span. 'You see the concrete cracked everywhere.'⁹



The Golden Gate Bridge in San Francisco opened to vehicular traffic at twelve o'clock noon on May 28, 1937. The bridge opened ahead of schedule and under budget.

Perhaps we should not be surprised at the following factoid: 38 of the nation's 50 most heavily trafficked bridges and overpasses deemed structurally deficient are in Southern California. Of those, 32 are in Los Angeles County, five in Orange County, and one in Riverside County.¹⁰

Drivers in the three Southern California counties alone make more than 27 million crossings on structurally deficient bridges each day.

The Role of Illegal Aliens

Before Minneapolis, there was Katrina. The 2005 hurricane weakened bridge infrastructure

throughout the Mississippi delta. Within a year of that disaster, the Mississippi Department of Transportation (MDOT) spent more than \$1 billion on infrastructure projects in south Mississippi, including 90 bridges.

At the top of MDOT's to-do list were two spans washed away by the hurricane: the bridge over Biloxi Bay and the one at Bay of St. Louis. Those spans were in need of dire repair well before Katrina. Understandably, the locals did not care who worked on the bridges as long as the structures were completed on time and were safe to drive on. Apparently MDOT did not care, either.

Last year, the owner of Tarrasco Steel, a company that supplied workers on the Biloxi Bay Bridge, was arrested and charged with hiring immigrants on projects in three states. Federal immigration agencies found that most Tarrasco employees were using bogus Social Security numbers. Far worse: They lacked valid welding certifications attesting to their competence for the job. Seventy-seven workers were arrested.¹¹

According to an Immigration and Customs Enforcement press release, the Tarrasco probe was a Critical Infrastructure Protection investigation, which "are generally predicated on the threat to national security posed by unauthorized workers employed in critical infrastructure-related facilities."¹²

The terrorism threat is far less than the danger of a catastrophic infrastructure failure due to cheap—and incompetent—alien labor.

Endnotes

- 1. http://pubs.asce.org/magazines/CEMag/2008/ Issue_01-08/article1.htm.
- 2. http://findarticles.com/p/articles/mi_qn4176/ is_20070803/ai_n19440687.
- 3. http://pubs.asce.org/magazines/CEMag/2008/ Issue_01-08/article1.htm.
- 4. http://www.asce.org/files/pdf/reportcard/2005_ Report_Card-Full_Report.pdf.
- 5. http://findarticles.com/p/articles/mi_qn4176/ is_20070803/ai_n19440687.
- 6. http://www.usatoday.com/news/nation/2008-07-24-bridges_N.htm.
- 7. http://www.asce.org/files/pdf/reportcard/2005_ Report_Card-Full_Report.pdf.
- 8. Marin Independent Journal, April 24, 2004.
- 9. *The Press Enterprise*, [San Bernardino], December 7, 2004.
- 10. http://www.freerepublic.com/focus/fnews/1875585/posts.
- 11. http://www.accessmylibrary.com/coms2/ summary_0286-31779382_ITM.
- 12. http://www.accessmylibrary.com/coms2/ summary_0286-31779382_I.

Fire and emergency rescuers sift through the wreckage of the Minneapolis bridge shortly after it collapsed into the Mississippi River during rush hour traffic. Some 1,500 U. S. bridges collapsed between 1966 and 2005, according to the American Society of Civil Engineers.

