

COLLISION COURSE: INFRASTRUCTURE AND U.S. POPULATION GROWTH

An NPG Forum Paper
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American infrastructure faces two enormous challenges. Much of it was built shortly after World War II, so it is outdated and has been allowed to deteriorate. Equally important: the U.S. population continues to grow, requiring additional capacity and wearing out existing infrastructure at higher rates.

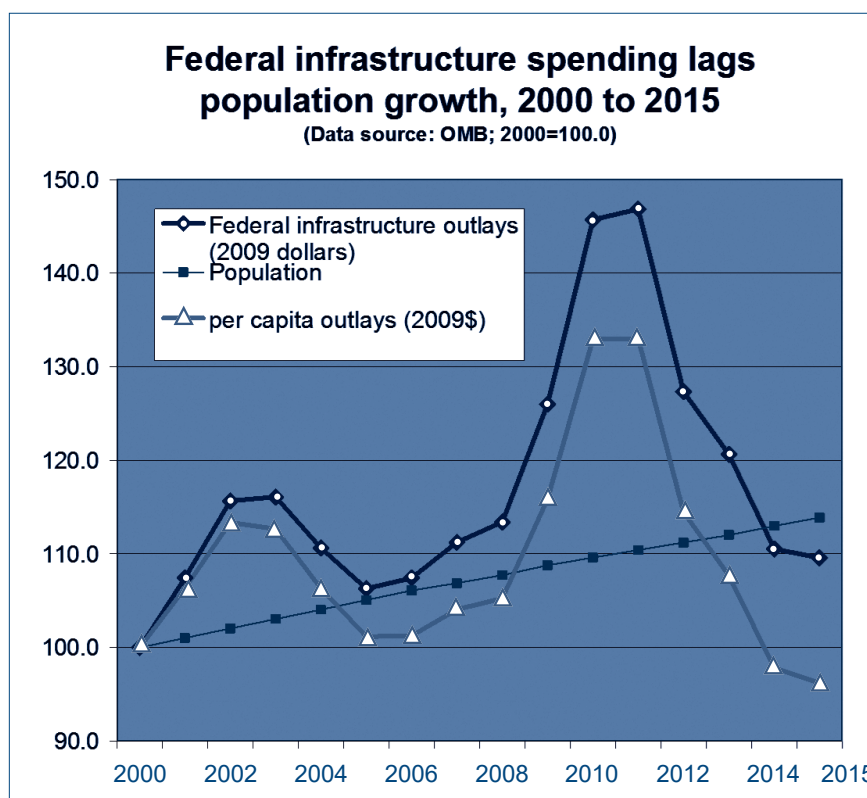
If current trends continue, our population will rise from 319 million in 2014 to 417 million in 2060. Nearly two-thirds (65%) of this increase will be due to new immigrants. This does not include the U.S.-born children of immigrant mothers, which are projected to total 40 million over the next 45 years.¹ Owing to their above average fertility rates, immigrant mothers will account for 20.3% of all births over this period, higher than their share of the women in childbearing ages. Meanwhile, fertility rates of native-born mothers are falling.

Infrastructure and population growth? That's an odd couple. Immigration policy has been debated for

years, but the debate usually focuses on border security, criminal deportations, and whether illegal alien workers are really needed to do the jobs that Americans "won't do." Immigration's impact on public infrastructure is rarely discussed.

Until the past few months infrastructure policy was on the back burner, surfacing when a bridge or levee collapsed, but generally of interest only to civil engineers and policy wonks. That changed briefly during the Great Recession, when Barack Obama's stimulus bill boosted federal infrastructure outlays by \$55 billion, in nominal terms, over the 2009-2014 period. About half of that amount was spent in 2009 and 2010.

Since then the economy has recovered, but infrastructure spending has collapsed. The one constant over this period has been U.S. population growth:



Comparing 2015 with the year 2000 we find:

- Infrastructure spending, adjusted for inflation, is 9.6% higher.
- U.S. population is 13.9% higher.
- Per capita infrastructure spending is 3.8% lower.

Had population remained at its 2000 level – 282 million – per capita infrastructure spending in 2015 would have been 14% above the level actually reached that year. That translates to an additional \$51.20 (2015 dollars) spent on infrastructure for every man, woman, and child in the country.

U.S. infrastructure received an overall grade of D+ from American Society of Civil Engineers (ASCE) in 2017 largely unchanged from the previous report in 2013.² The D grade is considered “poor” and “at risk,” just one step above “failing” and “unfit for purpose.”

Among ASCE’s findings:

- One out of every five miles of highway pavement is in poor condition. More than two out of every five miles of urban interstates are congested. Of the country’s 100 largest metro areas, all but five saw increased traffic congestion from 2013 to 2014.
- 35,092 people were killed in motor vehicle crashes in 2015. Traffic fatalities decreased significantly over the last decade, but abruptly increased by 7% from 2014 to 2015. Preliminary data shows an 8% rise in 2016.
- The average age of the country’s 90,580 dams is 56 years. About 17% of them are rated as “high hazard potential,” meaning that their failure would result in a loss of life. More than 2,000 of high hazard dams are “deficient,” requiring \$45 billion in new investment to eradicate the threat to life.
- Most electric transmission and distribution lines were constructed in the 1950s and 1960s with a 50-year life expectancy; more than 640,000 miles of high-voltage transmission lines in the lower 48 states’ power grids are at full capacity.
- Every day, nearly six billion gallons of treated drinking water are lost due to leaking pipes. It is estimated that leaky, aging pipes are wasting 14 to 18% of each day’s treated water; the amount of clean drinking water lost every day could support 15 million households.
- Almost a quarter (24%) of all public schools were rated as being in “fair” or “poor” condition. Among schools with temporary buildings, the share in “fair” or “poor” condition rises to 45%.

Although Donald Trump has proposed \$1 trillion in infrastructure investment over 10 years, the ASCE estimates that \$4.59 trillion is needed by 2025 to bring infrastructure into a state of good repair. If current spending levels continue, the country will fall short of that figure by about \$2 trillion. This implies that even if Trump’s proposal is fully funded, it will fall about 50% short of what is needed.

The traditional response to these problems is to throw more federal, state, and local tax money into infrastructure. When public support falters, infrastructure users are usually hit with higher tolls, higher transit fares, higher water bills, and other usage related fees. As a last resort many

governments sell or lease entire highways, water systems, parks, and other infrastructure systems to private companies

Yes, our infrastructure is in trouble. But if money was the problem, there would be no problem. Federal non-defense spending, the spending category that includes infrastructure, came to a whopping \$3.1 trillion in 2015. Since 1960 non-defense spending has risen faster than the rate of inflation, faster than GDP, and faster than population growth. After adjusting for inflation, the government spends 87% more per person on non-defense now than in 1960.

Social Security and Medicare account for nearly half of non-defense spending. As entitlements, these benefits must be paid no matter what the fiscal state of the country. They are the proverbial “third rail” of American politics, politically - if not legally - immune to congressional meddling.

The rest of non-defense spending consists mainly of “discretionary” spending programs, a group that includes federal aid to education, health programs, means-tested social programs, and infrastructure. Congress can change eligibility rules and spending levels for these programs in response to changing economic, social, and political conditions.

Since 1960 discretionary spending priorities have shifted dramatically. Infrastructure has lost ground relative to health, social programs, and education. The numbers tell the story:

Federal Spending on Infrastructure and Social Programs, 1960-2014 (as percent of non-defense spending)		
Fiscal year	Education and Social Programs	Infrastructure
1960	20.7%	11.2%
1970	26.5%	7.1%
1980	31.0%	6.4%
1990	25.6%	3.6%
2000	30.9%	3.7%
2010	40.5%	3.3%
2014	34.9%	3.3%

Note: Social programs include Medicaid, the Child Health Insurance Program (CHIP), Federal Employee Retirement, and means-tested social programs. (Social Security and Medicare are not included.)
Data sources: OMB, FY 2017 Budget, *Historical Tables*, Table 3.1. (Education and social programs); CBO, *Public Spending on Transportation and Water Infrastructure, 1956 to 2014*, March 2016; *Trends in Public Infrastructure Spending*, Table A-2, August 2007. (non-defense infrastructure).

In 1960, at the height of President Eisenhower’s commitment to the interstate system, federal infrastructure spending accounted for more than 11% of all non-defense expenditures. By 1980 infrastructure’s share was nearly halved, to 6.4%; and by 2014 halved again, to 3.3%. Meanwhile, education and social programs usurped 35% of non-defense spending in 2014, up from 21% 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 2014 it spent less than one-tenth as much on infrastructure as on those programs.

The 1960-70 decade is pivotal for two reasons. Lyndon Johnson's Great Society unleashed a torrent of new social programs that to this day take ever larger shares of federal discretionary spending. The Immigration Act of 1965 marked the beginning of mass immigration to the U.S. and, even more important, transformed what had been largely a European influx to an influx mainly from Mexico and Latin America.

Population growth, increasingly driven by immigration, played a major role in this fall of infrastructure – both in physical and fiscal terms. Immigrants are poorer and are more likely to receive means tested public benefits than natives. It follows that government's ability to finance spending on highways, schools, water treatment plants, hospitals, and other types of infrastructure are adversely impacted by immigration – and this negative will increase as the share of immigrants (and their children) in the population increases.

Legal immigrants pay taxes, of course, but they receive far more in benefits. A comprehensive analysis by the National Academies of Sciences, Engineering, and Medicine found that first generation immigrants and their minor dependents received an average of \$9,767 in federal outlays in 2013 while paying \$7,117 in taxes.³ In the aggregate, this translates to a deficit of \$147.1 billion attributable to legal immigrants and their native-born children.

All types of infrastructure are negatively impacted by population growth. As we detail below, immigration appears to exert a disproportionate share of the wear and tear for several types of infrastructure.

ROADS AND HIGHWAYS

Lower gas prices and a stronger economy have accelerated a long-standing trend in American life: roads are more crowded than ever, and we spend record amounts of time stuck in traffic. The cause is supply and demand. Demand, as measured by vehicle travel on all public roads in the United States, increased from approximately 600 billion vehicle miles in the mid-1950s to about 3 trillion vehicle miles today, according to a June 2016 report by the Transportation Research Group.⁴ But the supply of road infrastructure hasn't kept pace: after expanding rapidly in the 1950s and 1960s, highway construction hit a wall in the mid-1970s. Few new roads are being built today.

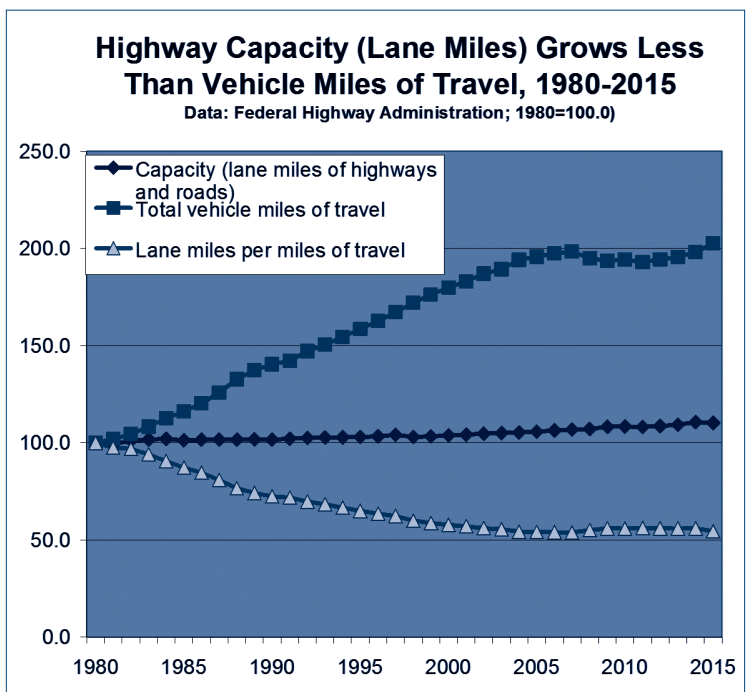
More importantly, the nation is having trouble maintaining existing road and bridge infrastructure. The interstate highway network was designed with passenger cars in mind. The tsunami of trucks that are responsible for a disproportionate share of roadway wear and tear, and now outnumber cars over many parts of the system, was never planned for.

Nor did highway planners anticipate the rapid – and, in many cases, immigration-driven – population growth of what

were much smaller cities in the 1950s. Thus, there were no plans to build an interstate directly between Las Vegas to Phoenix. Today these cities are among the largest and fastest growing of all U.S. metro areas – yet still without an interstate link. There are about 70 urbanized areas with populations of 50,000 or more that are still not connected to the interstate system. Which of these will be the next Phoenix or Las Vegas?

The average urban commuter was delayed 42 hours by congestion in 2014 versus 18 hours in 1982. The congestion “invoice” for the cost of the time and fuel wasted while delayed in rush hour traffic was \$960 per auto commuter in 2014. That is more than twice the congestion cost (\$400 in constant 2014 dollars) of 1982.⁵

At its most basic level, congestion is the result of population growth outpacing road capacity. Since 1980 U.S. population has increased by about 94 million, or 41%, but highway capacity (measured in lane miles) increased a mere 10.3%, and vehicle miles of travel more than doubled (+102.3%).



The ratio of highway supply (lane miles) to highway demand (vehicle travel miles) fell by 45% over the past 35 years – as seen in the bottom line of the graphic. The gap will likely get worse: DOT estimates that the demand for ground transportation – either by road or rail – will be 2 ½ times as great by 2050, while highway capacity is projected to rise by only 10% during that time.⁶

Recent immigrants are less likely to own automobiles and more likely to commute to work via mass transit. Carpooling, like transit, is also much more common among immigrants, nearly 22% for those here less than 5 years versus less than 11% of U.S.-born. Over time, however, the travel patterns of immigrants resemble those of the U.S.-born. For those here over twenty-years there is practically no difference.⁷

Immigration is the most important driver of population growth – and commuter traffic – in urban areas. Immigrants are more likely than natives to live in metropolitan areas (90% do), and within metropolitan areas, in central cities over suburbs (55% versus 45%).⁸

Cities with large immigrant populations experience larger increases in suburb-to-core commuter traffic – with many of the new suburban commuters having lived in urban cores until displaced by immigrants. The correlation between a metropolitan area’s commute delay (hours delayed in rush hour traffic per year) and its foreign-born population share is clear:

Metro Regions by Yearly Delay per Auto Commuter		
Metro Region	Yearly Delay per Auto Commuter (Hours)	% Foreign-born
Washington, DC-VA-MD	67	24.8%
Los Angeles-Long Beach	61	34.1%
San Francisco-Oakland	61	24.9%
New York, NY-NJ-CT	59	28.5%
Boston, MA	53	18.1%
Houston, TX	52	22.6%
Atlanta, GA	51	13.3%
Chicago, IL	51	17.8%
Philadelphia, PA-NJ-DE-MD	48	10.0%
Seattle, WA	48	14.6

Data: Texas A&M Transportation Institute 2012 Mobility Report; US Census, ACS data.

In large metropolitan areas with the longest annual commuter delays (Washington, DC, Los Angeles, and San Francisco), immigrants accounted for 27.9% of the population. By contrast, those with the shortest delays (Seattle, Philadelphia, and Chicago) had foreign-born population shares that averaged only 14.1%.

Equally important is the impact of immigration on population density within city limits:

“...For economic reasons, immigrants often live with more people per dwelling unit than do native-born residents; when Fulton et al. (2001) conducted a study on sprawl for the Brookings Institution, they found that the single most important variable in explaining changes of density between 1982 and 1997 was the share of 1990 residents who were foreign born. Los Angeles, as a major immigrant port of entry, ranks near the top of their list of the United States’ densest urban areas, and the top 20 are dominated by western urban areas like Phoenix, Modesto, Calif., and Fresno, Calif. Fulton et al. (2001) identify a counterexample in low-density Atlanta, where only 4.1 percent of the residents were foreign born in 1990.”

As density increases so too does congestion, in part because it is hard to add more street space in areas that are already heavily developed. Most new lane mileage is built on the urban fringe. Finding a parking space is also more time consuming - not to mention expensive - in dense urban cores.

At one time, mass transit was seen as the answer to metro area traffic congestion. Today experts are increasingly skeptical. As of 2013 only 5% of people said they used public transit to get to work, while 75% say they drive to work alone.¹⁰ Transit represents only 2 percent of daily trips in Southern California. For most cities, even if the percentage of trips using transit tripled, which is not likely, the resulting drop in congestion would be overwhelmed by projected population growth.

The bottom line: Enforcing U.S. immigration laws may be the most cost effective way of controlling traffic congestion in urban areas.

WATER INFRASTRUCTURE

From a distance, our water problems seem manageable. The demand for drinking water has remained relatively flat since 1985 even though U.S. population increased by about 70 million since then.¹¹ Water conservation efforts, including more efficient kitchen and bathroom fixtures, have significantly reduced per capita water consumption.

In some areas, however, population growth has canceled out household conservation efficiencies. Places that once seemed to have limitless supplies of fresh water are facing shortages:

Florida: A hundred years ago Florida had too much water, but population growth and the resulting urban sprawl has paved over many of its large swamps. Today, in many urban areas, rainwater can no longer seep underground to replenish underground aquifers. The state has turned to desalinization of sea water, an expensive process that drives up the cost of drinking water and puts marine life at risk due to excessive salt. “The chief water sources are basically gone,” says John Mulliken, former director of water supply for the South Florida Water Management District.¹²

Kansas: Parts of the High Plains aquifer will be used up within the next 25 years, and vast areas of land will have no usable groundwater in the next 50 years, according to the Kansas Geological Survey.

Idaho: Population projections suggest that the region’s water demand will grow 350% by mid-century. The major water supplier to the Boise area is considering recycling wastewater to meet future drinking water shortages. According to a 2010 U.S. Geological Survey study, there are only two states that use more water than Idaho – California and Texas.¹³

Nowhere are water shortages more serious – and preventable - than in the West and Southwest. For more than a century the Federal government has been subsidizing massive water projects in the West, with the express purpose of increasing population – agricultural population at first, and later, urban populations. Eventually, population growth outstrips water supply, but by then the place has enough political and economic clout to secure federal funds for another massive water project. Over the decades this cycle has repeated itself several times. Many western politicians have built their entire careers around water.

The Colorado River, the source of most drinking and irrigation water in Arizona, California, Colorado, Nevada, Utah, and Wyoming, is strained beyond capacity, but demand is increasing. Lake Mead and Lake Powell, the region’s two main reservoirs, regularly stand at 50% capacity or less. One study predicts that both lakes will begin drying up completely in some years after 2021; a more conservative estimate predicts that by 2057 each lake will be dry about every other year.¹⁴

California is exhibit No. 1 in how *not* to deal with this crisis. The state’s agricultural sector, notoriously dependent on illegal alien labor, accounts for 80% of all groundwater usage, but only 2% of its economy.¹⁵ A prudent water policy would insist that Washington enforce the immigration laws, thereby removing the de facto farm subsidy that comes from cheap illegal alien labor.

Prudence also dictates that water used by the 3 million illegals estimated to live in the state be taken into account. The average Californian uses about 100 gallons of water per day. About half of that is for landscaping, so we can conservatively assume that the average illegal consumes 50 gallons per day. Multiplying that figure by 3 million indicates that 150 million gallons of water per day - about 55 billion gallons per year – is consumed by the state’s illegal alien population.¹⁶ In a state of 39 million people that is equal to about 4% percent of total drinking water usage.

But in California’s water world, politics trumps prudence. Many elected officials, including Governor Jerry Brown, encourage localities to resist to President Trump’s immigration policies.

With river flows diminishing, groundwater now supplies about two-thirds of California’s water. Amazingly, the state made no attempt to regulate groundwater usage until the recent drought. The Sustainable Groundwater Management Act of 2014 was a case of too little too late, according to a Stanford University policy paper:

“...Unconstrained use of this resource has led to widespread lowering of water tables, land subsidence, and impacts to surface waters...The persistent declines in groundwater levels have led to many serious economic, social, and environmental impacts, and inevitably, disputes over how to allocate the increasingly limited resource.”¹⁷

Record rains during the winter of 2016 to 2017 have replenished many reservoirs, giving Californians the impression that the drought is over. That illusion may let policymakers temporarily off the hook for their failed water and population policies. But the same people who created the water crisis in California’s agricultural heartland have their eye on an even more egregious misuse of power.

They want to divert groundwater from the water-rich northern part of the state to agricultural use in the south. This “solution” is nothing less than the theft of privately owned water in northern California to sustain the livelihoods of illegal alien farm workers and their complicit employers in the south. Good politics, perhaps, but disastrous water policy for sure.

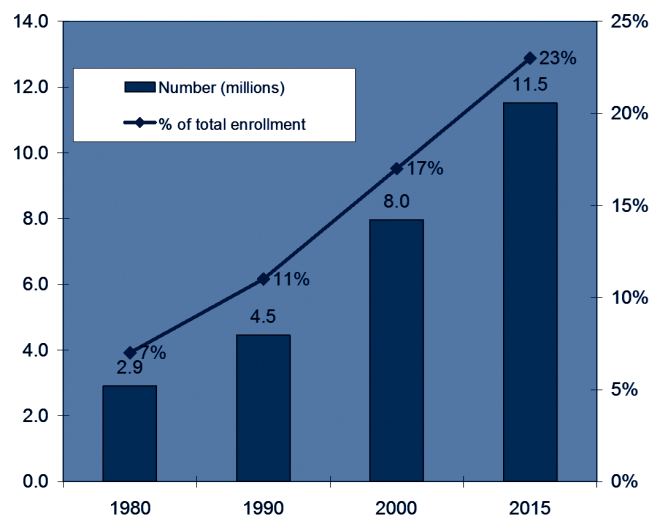
PUBLIC SCHOOLS

Fifty million students were enrolled in U.S. public schools in 2015. About one in 25 was an immigrant. U.S. born children of immigrants represented a far larger portion – 19% of total enrollment that year. This means that nearly one of four (23%) of public school students came from an immigrant household in 2015. As recently as 1990 it was 11%, and in 1980 it was just 7%.

The number of public school students from immigrant households rose from 2.9 million in 1980 to 11.5 million in 2015, about a 4-fold increase:

Public school enrollment due to immigration, 1980-2015

(Data sources: NCES (number); CIS (% of total enrollment); Calculations by author.)



Immigrant households are younger and have more school age children than the average native household. They are also poorer, and far less likely to send their children to private school. As a result, in 2015 there were an average of 63 public school students per 100 immigrant households compared to 37 students per 100 households headed by natives.¹⁸

Fertility and poverty are not the only factors behind immigration’s role in public education. In *Plyler v. Doe* (1982)

the Supreme Court of the United States struck down a Texas statute denying funding for education to children who were illegal immigrants. By a 5-to-4 majority the Court ruled that the law violated the Equal Protection Clause of the 14th Amendment, which reads: **“No State shall...deny to any person within its jurisdiction the equal protection of the laws.”**

Most legal scholars see *Pyle v. Doe* as a usurpation of Congressional powers, an attempt to make up for the legislative branch’s inability or unwillingness to deal with the illegal alien problem. Yet it stands as a monument to judicial activism.

A very expensive monument: students from illegal alien households make up about one-third of public school students from immigrant households.¹⁹ Public education is by far the largest expense state and local governments incur on behalf of illegal aliens.

Even more relevant to school infrastructure is the tendency of new immigrants – legal and illegal alike - to settle in school districts where immigrants of similar origins already live. In these areas the immigration-related share of public school enrollment is far above the national average, and the quality of school infrastructure is far worse.

Dade County, Florida, for example, had four areas in 2015 where at least 80 percent of students were from immigrant-led homes. In one of those, a part of Hialeah City, a staggering 93 percent of students belong to immigrant households.²⁰ A judicial inquiry found that custodial closets, computer labs, teacher’s lounges, book storage rooms, alcoves, and even locker rooms had been converted into classrooms.²¹

The **Los Angeles metro area** has 13 regions where students from immigrant homes make up at least 75% of school enrollment – three times the national average. Schools are so crowded that some have lengthened the time between classes to give students time to make their way through packed halls. Some Los Angeles schools will have to hold double sessions (one in the morning and one in the afternoon) and Saturday classes.

More than one-third (35%) of **Nevada’s** public school enrollment is from immigrant households, second only to California’s 48% among states. To avoid the cost of constructing needed facilities scores of Las Vegas schools are on year-round, staggered schedules. More than 21,000 students take some online classes, and nearly 700 kids take *all* their classes online.²²

Forty-four percent of public school students in the **New York City metro area** were from immigrant households in 2015. (In one NYC district the share is 91%.) One-third of all New York City public schools are overcrowded – defined as having an enrollment at 138% of school capacity.²³ A statistical analysis uncovered a strong link between overcrowding and immigrants in New York City schools: “The results reveal a

direct relationship between the immigrant density of school districts and the scale of the overcrowding problem. As the results in Table 2 demonstrate, when controlling for median income, there is a positive, statistically significant relationship between the immigrant density of school districts and the scale of the overcrowding problem...The magnitude of the effect is substantial...**for every one percent increase in the immigrant population in a district, the overcrowding problem is 100 seats greater.**”²⁴

A litany of health problems has been linked to school overcrowding. Teacher retention rates are lower in crowded schools. Standardized test scores suffer, student attendance rates fall, dropout rates are higher, and disruptive behaviors are more commonly encountered for all students, immigrant and native alike.²⁵

But on one crucial metric students from immigrant households are at a greater disadvantage. They are more likely to speak a foreign-language at home, and therefore less likely to speak English well outside the household. American schools do not do a good job at weaning non-English speakers off their home tongues – especially in districts where a large share of students is enrolled in English Language Learning programs.²⁶

A well-spoken immigrant student can assimilate easily into American culture. In schools struggling to deal with a multiplicity of foreign languages, the quality of spoken and written English among students from immigrant households suffers. For many of them, the American Dream will remain a dream.

HOSPITALS

The country is aging, new medical technology is introduced daily, and a record number of hospital expansion and renovation projects are under way. No surprise there. But a vital component of hospital infrastructure is languishing: the ER.

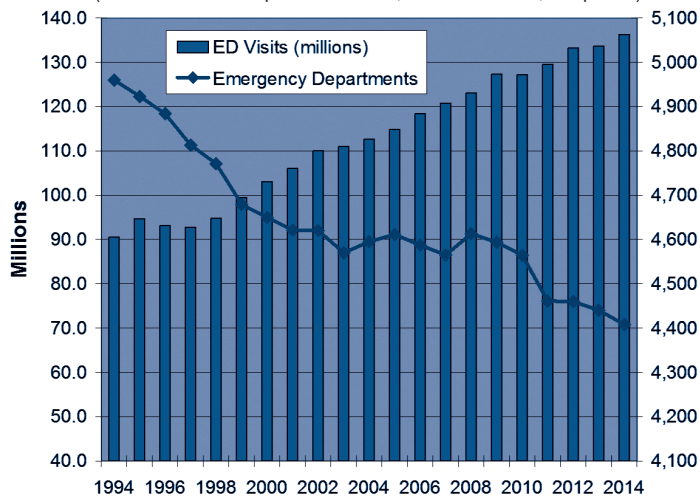
Emergency Rooms are the most common item found on the infrastructure “wish lists” of U.S. hospitals. Architect and engineering expert Joseph Sprague, director of health facilities for the Dallas-based architectural firm HKS Inc. says that almost every project his firm does has some sort of emergency department (ED) component: **“The ED has become the front door of the hospital...People go to use the emergency room and they end up using the hospital.”**²⁷

But ERs are an endangered species.

Between 1994 and 2014, the number of hospital Emergency Departments fell by 11% (from 4,960 to 4,408). Over that same time frame the number of ED visits increased 51% (from 90.5 million to 136 million visits). This increase is not merely due to population growth: the per capita utilization rate increased 23%, from 348 visits/1000 population in 1994 to 428 visits/1000 population in 2014.

Emergency department visits v. number of emergency departments, 1994-2014

(Data: American Hospital Association, Chartbook 2016, Chapter 3.)



The average wait time to see an ED physician rose from 45 minutes in 1998-2000 to 55 minutes in 2008-2010; in large urban hospitals, the average wait time rose from 56 minutes to 67 minutes.²⁸

People die from these delays. Autopsies of accident victims who died after reaching EDs in San Diego hospitals suggested that 22 percent of the deaths were preventable.²⁹

Illegal immigration is a major factor behind the ER emergency. While federal law generally bars illegal immigrants from being covered by Medicaid, a little-known part of the health insurance program - the Emergency Medical Treatment and Labor Act (EMTALA) - requires hospital ERs to admit patients regardless of nativity or citizenship status. Most EMTALA patients, according to hospitals, are illegal immigrants. A 2007 article in the *Journal of the American Medical Association* reported that 99% of EMTALA patients during a four-year period in North Carolina were thought to be illegals.³⁰

EMTALA reimburses hospitals for delivering babies for women who show up in their emergency rooms. These so-called “anchor babies” are recognized as U.S. citizens, a fact that their mothers hope will help them attain legal status themselves. For non-pregnancy related ER admissions, there is no reimbursement under the EMTALA program. This puts an enormous financial burden on hospitals - and is a major reason why so many ERs have closed.

“Not only did this unfunded mandate contribute to the closure of numerous emergency departments and trauma centers, it also created a perverse incentive for hospitals to tolerate emergency department crowding and divert ambulances while continuing to accept elective admissions. Rather than improving access to emergency care, EMTALA diminished it.”³¹

MEDICAL DEPORTATIONS

In an emergency, hospitals must treat new patients regardless of immigration status or ability to pay. When it's time to discharge those patients, different rules apply. Although hospitals are legally obligated to find suitable places to discharge patients, their insurance status make a world of difference.

This doctor's experience is typical:

“Several years ago I began caring for a man who'd been in our hospital for more than three months. He was in his 50s and had suffered a stroke. Half his body was paralyzed and he couldn't swallow food. After weeks of intensive physical, occupational and speech therapy, he regained his abilities to eat, drink and walk with only minimal help. But he still wasn't well enough to live on his own, prepare food or even get to the toilet by himself.”³²

Ideally, the patient would be discharged to a rehabilitation facility. But he was an immigrant who had entered the country illegally. **“His immigration status meant that we couldn't find an outside charity that would cover the costs of his care or pay for insurance.”**

A modest, albeit unprecedented, proposal from the doctor's case manager: **“Could he go back to Mexico?”**

The patient's family in Mexico was reached, the Mexican consulate was consulted, travel arrangements to a rehabilitation hospital were made. Medical air transport is not cheap: roughly \$50,000, depending on distance and equipment needed. From the hospital's point of view, the large one time outlay was less risky than the alternative: indefinite costs of uncompensated hospitalization.

One group that has studied the phenomenon estimates there have been 800 similar cases over the past 6 years. At \$50,000 each, that translates to \$40 million - money that could have provided care for native-born patients had U.S. immigration laws been enforced.

CONCLUSION

Too many people; not enough roads, classrooms, emergency rooms, and drinking water. This, in a nutshell, is the problem facing public infrastructure in many U.S. communities. Federal policy exacerbates both sides of this equation: U.S. population growth is increasingly driven by immigration, while the share of the federal budget devoted to infrastructure has declined in favor of means tested health and social programs.

A two-part solution, involving immigration reform and a shift in spending priorities, is essential. Failure to act and today's infrastructure problem will inevitably become tomorrow's infrastructure crisis.

SOURCES

1. Edwin S. Rubenstein, *Immigration Drives U.S. Population Growth*, NPG Forum Paper, January 2016, pages 4-5.
2. ASCE, *2017 Infrastructure Report Card*, p.5.
3. NAS, *The Economic and Fiscal Consequences of Immigration*, September 22, 2016, Table 8-1. <https://www.nap.edu/download/23550#>
4. TRIP, *The Interstate Highway System Turns 60: Challenges to Its Ability to Continue to Save Lives, Time and Money*. June 27, 2016. http://www.tripnet.org/docs/Interstate_Highway_System_TRIP_Report_June_2016.pdf
5. Texas Transportation Institute. 2015 Urban Mobility Scorecard. August 2015. <https://d2dtl5nmlpfr0r.cloudfront.net/tti.tamu.edu/documents/mobility-scorecard-2015.pdf>
6. <http://www.usnews.com/usnews/news/articles/070429/7gridlock.htm>
7. Chuck Purvis, "Commuting Patterns of Immigrants," Metropolitan Transportation Commission, Oakland. August 2003. <http://www.fhwa.dot.gov/ctpp/sr0803.htm>
8. <http://gop.science.house.gov/hearings/ets03/apr10/meyer.htm>
9. Michael Manville and Donald Shoup, *Parking, People, and Cities*," Journal of Urban Planning and Development, December 2005. <http://shoup.bol.ucla.edu/People,Parking,CitiesJUPD.pdf>
10. <http://fusion.net/just-5-of-americans-are-using-public-transportation-to-1793847949>
11. ASCE, 2017.
12. FAIR, *Immigration and U.S. Water Supply*,
13. Brian Holmes, *Seeking Solutions to Idaho's Water Supply*, March 29, 2016. <http://www.ktvb.com/news/local/idaho/seeking-solutions-for-idahos-water-supply/109062646>
14. FAIR, *Running Dry: Looming Water Shortages in the United States*, September 2012.
15. *The Drying of the West*, The Economist, February 22, 2014.
16. Tyler Durden, *Water Wars Coming to California? Is The Drought Really Over?*, Zero Hedge, March 13, 2017.
17. Stanford Law School, *California's Sustainable Management Act of 2014: Recommendations For Preventing and Resolving Groundwater Conflicts*, April 2015.
18. Steven Camarota, Bryan Griffith, and Karen Zeigler, *Mapping Immigration's Impact on Public Schools*, Center for Immigration Studies, March 2017.
19. *ibid.*
20. Stephen Dinan, *Assimilation under threat as children of immigrants flood U.S. public schools* Washington Times, March 15, 2017.
21. Florida Fails Children of Miami-Dade County, http://www.educationworld.com/a_issues/issues107.shtml
22. <http://www.npr.org/sections/ed/2015/05/06/402886741/what-happens-in-vegas-includes-crowded-struggling-schools>
23. <http://www.nydailynews.com/new-york/education/1-3-city-schools-overcrowded-audit-article-1.1859717>
24. Make the Road New York, *Where's My Seat? High School Overcrowding Disproportionately Impacts Immigrant Communities in New York City*, November 2015.
25. 21st Century School Fund, *Research on the Impact of School Facilities on Students and Teachers, a Summary of Studies Published Since 2000*.
26. Edwin S. Rubenstein, *Invasion of the Non-English Speakers*, The Social Contract, Fall 2014.
27. Edwin S. Rubenstein, *The Twin Crises: Immigration and Infrastructure*, The Social Contract Press, 2009, page 34. Pdf
28. Centers For Disease Control, *Health, United States, 2012*, Special Feature on Emergency Care, p.37.
29. David Brown, *Crisis Seen in Nation's ER Care*, Washington Post, June 15, 2006
30. Phil Galewitz, *How Undocumented Immigrants Sometimes Receive Medicaid Treatment*, February 12, 2013. <http://www.pbs.org/news-hour/run-down/how-undocumented-immigrants-sometimes-receive-medicaid-treatment/>
31. Arthur L. Kellermann, *Crisis in the Emergency Department*, *New England Journal of Medicine*, September 28, 2006 <http://content.nejm.org/cgi/content/full/355/13/1300>
32. John Henning Schumann, *When the Cost of Care Triggers a Medical Deportation*, April 9, 2016. <http://www.npr.org/sections/health-shots/2016/04/09/473358504/when-the-cost-of-care-triggers-a-medical-deportation>



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NOTE: The views expressed in this article are those of the author and do not necessarily represent the views of NPG, Inc.



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