



# FIXING AMERICA'S INFRASTRUCTURE,

The only conceivable financial solution to America's infrastructure deficits takes the form of public-private partnerships.

# ONE PUBLIC-PRIVATE PARTNERSHIP AT A TIME

ANIRBAN BASU AND JOSEPH NATARELLI

**T**here seems to be little about which Americans agree these days, whether it's healthcare, guns, free trade, or immigration. But one thing most Americans of any given political stripe agree on is that our shrinking productivity is a bad thing. During the second quarter of 2016, U.S. worker productivity declined at a 0.6 percent seasonally adjusted annual rate. On a year-over-year basis, productivity is down 0.4 percent, which means that the average American worker is less productive now than they were a year ago.<sup>1</sup>

The slowdown in U.S. productivity growth is widely considered one of the major factors behind America's shockingly modest recovery. Productivity, measured in terms of output per hours worked, has been sluggish for more than

a decade. As early as the mid-2000s, statisticians began noting productivity's flattening.<sup>2</sup> Given declining U.S. birthrates and the uncertain immigration future, productivity needs to rise. If it doesn't, wage growth will remain stagnant, America will suffer enormous difficulty paying back its debts, and Medicare and Social Security are sure to dissolve into insolvency.

Most Americans also seem to agree that the systematic lack of infrastructure investment in the United States is one of the major factors behind our declining productivity. For anyone inclined toward metaphors, it would be

---

ANIRBAN BASU is the chief construction economist at Marcum LLP and the CEO of the Sage Policy Group.

JOSEPH NATARELLI is the partner-in-charge of Marcum LLP's New Haven office as well as the National Construction Industry Leader.

easy to see the connection between the nation's infrastructure and the human body's circulatory system.

The nation's roads, highways, and bridges carry America's people and merchandise, the lifeblood of the economy. The nation's water systems provide life-sustaining fluids, while the nation's telecommunications and electricity infrastructure transmit ideas and energy, allowing the U.S. economy to continue to move forward along various dimensions.

The notion that America's infrastructure deficits are growing is nothing new. For years, engineers of various types have spotlighted America's lagging investment in broadband speeds, leak-proof water systems, roads, and bridges. As indicated by *The Huffington Post*, most analysts don't even rank America's wireline or wireless broadband speeds among the top 20 in the world.<sup>3</sup>

As the inventors of much of the world's information technology, America was predicted to enjoy a phenomenal fiber-optic future. But OpenSignal has ranked the United States 55th in the world in wireless LTE speeds (New Zealand is first, followed by Singapore, Romania, South Korea, and Denmark) and ZDNet indicates that America is 41st in average broadband speed (Lithuania is first, followed by Sweden, Portugal, Latvia, and Finland).<sup>4</sup> In terms of average broadband speed, America ranks behind nations like Moldova, Ukraine, and Greece.

Naturally, construction firm executives and the professionals who advise them are less likely to be focused on broadband speeds and more likely to be focused on water systems and other forms of large-scale infrastructure. The American Society of Civil Engineers (ASCE) frequently delivers a report card on the nation's infrastructure, the most recent version of which concludes that inadequate infrastructure costs every American nearly \$3,400 a year in disposable income. The study identifies 10-year needs across 10 infrastructure categories.<sup>5</sup>

According to a report released this year, America's infrastructure investment gap totaled \$1.44 trillion. Con-

tractors will not be surprised to learn that a significant portion of that total pertained to a lack of adequate investment in the nation's surface transportation network, which includes roads, bridges, and mass transit. The level of underinvestment in electricity infrastructure approaches \$200 billion, while the level of neglect in the water and wastewater infrastructure category exceeds \$100 billion. Airports require about \$42 billion in additional investment to meet needs while America's inland waterways and ports require an additional \$15 billion. Ongoing underinvestment has earned U.S. infrastructure a grade of D+ from the ASCE.<sup>6</sup>

### **Public-private partnerships (P3s) to the rescue**

America's lack of infrastructure investment is not simply a function of stalemated politics, a lack of will, and/or an absence of foresight. The fact of the matter is that government doesn't have much money to spend. The federal government is sitting on a \$19 trillion national debt and faces even larger future funding gaps in entitlement programs like Social Security and Medicare. Many states are wrestling with underfunded pensions and soaring Medicaid costs. A recent study indicated that pensions in states like Kentucky, Illinois, and New Jersey are severely underfunded.<sup>7</sup> There are many other priorities ranging from education and public safety to parks.

At the same time, America's private sector, including companies operating abroad, are sitting on billions of dollars of excess capital. According to Bloomberg, by early 2015, U.S. companies were sitting on more than \$2 trillion in stockpiled offshore profits.<sup>8</sup> During the current economic expansion, CEOs have often deployed surplus capital by raising dividends, purchasing company stock, or acquiring competitors and/or suppliers. But such actions do not necessarily increase productivity, although they may temporarily boost investor interest and expand earnings per share.

This capital could arguably be deployed by increasing productivity in infra-

**ACCORDING TO A REPORT RELEASED THIS YEAR, AMERICA'S INFRASTRUCTURE INVESTMENT GAP TOTALED \$1.44 TRILLION.**

structure projects through the fashioning of P3s. A recent Harvard Kennedy School of Government review helps to define P3s, in part by citing a definition that comes from PPP Canada, an independent component of the Canadian government. Under that definition, a P3 is a “long-term, performance-based approach to procuring public infrastructure where the private sector assumes a major share of the risks in terms of financing and construction and ensuring effective performance.”<sup>9</sup>

While the performance and risk-spreading functions are important, ultimately the most important element of P3s is financing. While many speak of P3s as an important aspect of our collective future, the fact is that the impact of P3s has already been felt. As indicated by Kennedy School researchers, since the catalyzing \$1.8-billion Chicago Skyway lease that was completed roughly a decade ago, the U.S. P3 market has developed rapidly.<sup>10</sup>

Between 2005 and 2014, 48 infrastructure P3 transactions with an aggregate value exceeding \$60 billion reached a formal announcement phase. Of these 48 transactions, 40 were successfully closed. According to the Harvard report, 2012 saw the largest number (nine) of P3 transactions reach a financial close.<sup>11</sup>

Financial professionals are critical about the completion of P3s. Typically, negotiations take place between businesspeople and politicians. Politicians are right to be wary given the financial sophistication sitting at the opposite side of the table and the fact that P3 agreements tend to be very long in nature, frequently involving leases that last decades.

It is therefore important for financial professionals to help both parties understand the nature of the obligations into which they will enter, including the respective levels of risk and implications for tax payments. If policymakers can

be educated and made to feel more comfortable regarding these arrangements, America will see more P3s, faster infrastructure build-out, rising productivity, and higher shared standards of living.

### Bottom line

Here's the point — the only conceivable financial solution to America's infrastructure deficits takes the form of public-private partnerships. Dozens of successful P3s have already been forged. The bulk of these agreements pertain to roads, although P3s have also been used to improve airports, seaports, water systems, and supply parking. P3s appear to be particularly popular on the East Coast, in Texas, California, Illinois, Indiana, and Colorado. More states and municipalities must participate if America is to bolster productivity and regain its competitive edge. Thankfully, there are a growing number of role-model communities that have paved the way ahead. ■

### NOTES

<sup>1</sup> "US revised Q2 productivity down 0.6% vs preliminary reading of down 0.5%," CNBC.com

(Sept 1 2016). Available at: <http://www.cnn.com/2016/09/01/us-revised-q2-productivity-down-06-vs-preliminary-reading-of-down-05.html>.

<sup>2</sup> Cardarelli, R. and Lusinyan, L., "U.S. total factor productivity slowdown: Evidence from the U.S. states," International Monetary Fund (May 2015) (working paper). Available at: <https://www.imf.org/external/pubs/ft/wp/2015/wp15116.pdf>.

<sup>3</sup> Kushnick, B., America's broadband embarrassment: We are 19th to 55th in the world in wired & wireless broadband speed rankings, *The Huffington Post* (Dec 7 2015). Available at: [http://www.huffingtonpost.com/bruce-kushnick/americas-broadband-embarr\\_b\\_8736488.html](http://www.huffingtonpost.com/bruce-kushnick/americas-broadband-embarr_b_8736488.html).

<sup>4</sup> *Ibid.*

<sup>5</sup> "Failure to act: Closing the infrastructure investment gap for America's economic future," ASCE (2016). Available at: <http://www.infrastructurereportcard.org/wp-content/uploads/2016/05/2016-FTA-Report-Close-the-Gap.pdf>.

<sup>6</sup> *Ibid.*

<sup>7</sup> Reed, C., Ready to retire? Avoid these 4 states, *Governing* (July 18, 2016). Available at: <http://www.governing.com/gov-institute/voices/col-pension-debt-4-worst-states-to-retire.html>.

<sup>8</sup> Rubin, R., U.S. companies are stashing \$2.1 trillion overseas to avoid taxes. *Bloomberg* (March 4, 2015). Available at: <https://www.bloomberg.com/news/articles/2015-03-04/u-s-companies-are-stashing-2-1-trillion-overseas-to-avoid-taxes>.

<sup>9</sup> Deye, A., US infrastructure public-private partnerships: Ready for takeoff? *Kennedy School Review* (June 16, 2015). Available at: <http://harvardkennedyschoolreview.com/us-infrastructure-public-private-partnerships-ready-for-takeoff/>.

<sup>10</sup> *Ibid.*

<sup>11</sup> *Op. cit.* note 9.