Findings:

• The decline of U.S. infrastructure has many economic consequences which will only become worse if deficiencies are left unaddressed.

• P3 partnerships have proven to be highly effective models for implementing infrastructure projects.

• Private equity can play an essential role in rebuilding America’s infrastructure.

Jumpstarting Infrastructure

Deferred maintenance has left U.S. infrastructure in desperate need of repair and renewal. In its 2017 report card, the American Society of Civil Engineers (ASCE) gives our infrastructure a D+ grade and estimates that it would take nearly $4.6 trillion to address issues associated with all sectors of infrastructure in the United States. According to the ASCE Report Card, one in 11 of the nation’s 614,387 bridges were considered “structurally deficient.” Approximately 20% of U.S. highways were considered to have “poor pavement conditions,” costing drivers approximately $118 billion. Aging delivery systems have led to water main breaks resulting in 2 trillion gallons of wasted water, and energy demand requires new methods of supply and storage.

Infrastructure is an issue that impacts all 50 states, and upgrades are required from major metropolises to rural areas. While most Americans agree that we must improve our infrastructure, there is still a lot of debate over how to catalyze infrastructure renewal in the most efficient and effective way possible.

Given the limitations on federal, state, and local spending, the American Investment Council (AIC) believes that incentivizing private capital is the most feasible path to achieve large-scale infrastructure upgrades. Tax policies, grant programs, and state education are key incentives to facilitate this solution.

Political Momentum

During his campaign, President Donald Trump proposed a $1 trillion infrastructure plan to improve outdated infrastructure. The details of the proposal have not been released, though recent media reports have indicated that the administration will publish a plan in May. During the presidential campaign, Trump advisors Peter Navarro and Wilbur Ross released a detailed
infrastructure plan, one that relies heavily on tax credits to encourage private investment in U.S. infrastructure. House and Senate members, from both sides of the political aisle, are also focused on this issue. In January, top Senate Democrats proposed an infrastructure plan, “A Blueprint to Rebuild America’s Infrastructure and Create 15 Million Jobs,” which includes water, roads, bridges, and other projects as key investment priorities. 

Despite this bipartisan acknowledgement, the growing debt burden and curbed government spending have reduced funds the federal government is able to commit to infrastructure projects. Locally, states and municipalities lack adequate resources to make investments to modernize and improve their infrastructure systems. By contrast, capital raised by private infrastructure funds has more than doubled since 2009.

Exhibit 1: 34 U.S. States, District of Columbia, and Territories Enabling P3 Approaches to Infrastructure

“...If the U.S. is going to succeed in fixing our crumbling roads and bridges, water and wastewater systems, and other critical assets, we have to find ways to bring more private investors to the table.” – Sarah Kline, Fellow, Bipartisan Policy Center

Traditional Forms of Infrastructure Funding Face Practical Restraints

In the past, public projects relied on federal, state, and local authorities to provide financing by administering tax revenue and user fees towards projects in combination with leverage from municipal bonds. These funding options have become increasingly difficult. Lower tax revenues to state and local governments, particularly after the Great Recession, combined with growing Medicare expenses and pension obligations have put significant budgetary pressures on these governments. Moreover, municipal bonds have

Source: Federal Highway Administration, Department of Transportation.
attracted fewer investors and their use has put additional liabilities on municipal governments. The combination of lower revenues and higher liabilities have depleted the ability of many states and municipalities to invest in infrastructure using this traditional financing model.

In contrast to public resources, private funds’ access to capital has grown, and these investors have had significant success in upgrading and expanding infrastructure assets. An infrastructure bill as conceived by Republicans and Democrats could stimulate private equity involvement in many projects and expedite public and private investment in U.S. infrastructure.

The Case for Private Capital to Finance Infrastructure

1. Public–Private Partnerships

As infrastructure investment needs outweigh available taxpayer resources, governments of all levels have sought public–private partnerships (P3s) to attract private financing for public projects. In this model, private investors partner with the public sector to provide financing, industry expertise, and in some cases, management of a resource in exchange for consistent revenue streams. Currently, 34 states and the District of Columbia have enacted statutes to benefit from P3s, while the remaining states cite political risk and taxpayer concerns for not taking advantage of the P3 financing model.

A P3 with the state of Connecticut created 23 modern highway service plazas. This infrastructure project included the total renovation of structure, interior, and exterior of all service plazas.

- Upgrades to facilities received LEED Silver certification. The project also completed extensive environmental, health, and safety improvements.
- Project created 375 jobs in Connecticut (100 construction jobs; 200 permanent jobs; 75 union custodial jobs).
- Project demonstrated a successful partnership with organized labor.
- Project will create $500 million in economic benefit over the life of the concession to the state of Connecticut.

2. Private Investment

In addition to investing private capital through the P3 model, numerous private funds improve the operations of existing and new infrastructure without forming partnerships with public entities. In the U.S., targets for these investments are typically private or publicly-traded companies that own or operate infrastructure assets.

The private investment model is one that has demonstrated much success. Private investors view their role as “custodians of infrastructure” rather than simply business owners. The benefits that private investors bring to these assets are found in...
P3 projects: industry and operational expertise, long-term capital, and financial incentives drive performance improvements.

Only a small portion of today's infrastructure assets are held by private or publicly-listed companies, but infrastructure funds with this focus deploy significant capital. ArcLight Capital, a firm specializing in energy infrastructure, has invested $17 billion in 101 transactions since its inception in 2001. In fact, the potential for private investment will likely increase due to turnover of already privately held infrastructure and the growing number of companies creating new technologies with applications to energy storage and generation, water systems, and transportation. These innovative companies will require more private capital to expand operations.

Private Equity is Poised to Invest

Unlike local governments, which have experienced a diminution of financial resources, private equity funds are flush with capital. Private equity managers form fund investment vehicles by raising capital from outside institutional investors. These organizations include pensions, university endowments, and charitable foundations. Allocating capital to infrastructure investments has increased in popularity because these investments provide a predictable revenue stream and attractive returns to investors.

Increased fundraising has positioned the private equity industry to take the lead in jumpstarting U.S. infrastructure, whether by partnering with state and municipal governments or investing independently. Exhibit 2 shows that the volume of capital raised by infrastructure funds has grown steadily over the past decade. In 2016 alone, infrastructure funds in North America raised over $30 billion. The amount of dry powder, i.e., the total amount of capital available to invest, increased 33% over 2015 levels to $67 billion in 2016 for North American-focused funds. This figure has already grown to $70 billion in April 2017 [Exhibit 3].

With more capital raised, private investment funds have begun to invest significant amounts of capital in infrastructure projects. For instance, private equity firm KKR has been investing in infrastructure since 2008 and currently has 21 investments with $8 billion of assets under management.

How Is Private Equity Positioned to Best Revitalize U.S. Infrastructure?

Just as private investment spurs business growth of companies, private capital can expedite the renewal of infrastructure. Experienced private equity investors bring the long-term capital and needed capabilities that are particularly important given infrastructure's rapidly evolving dynamics. Today's typical infrastructure projects incorporate far more development, complexity, and capital requirements than in years past. Specifically, private equity can deliver:

- Long-Term Capital Commitment: Top private equity infrastructure firms can readily access a much larger pool of long-term capital than public entities. If municipal interest

“High quality infrastructure is the backbone of our national economy, encouraging growth and driving success. Nowhere has this been more true over the last decade than in the energy industry. ArcLight is proud to have contributed to this success story, providing critical private capital and resources to help build the 21st century's energy infrastructure.”

– Dan Revers, Co-Founder and Managing Partner, ArcLight Capital
becomes taxable to the holders of municipal bonds in the future, as some in Congress have proposed, the disparity in access to capital will only increase.

- **Solutions Tailored to Market Needs and Demand**: Decision making around private capital commitments can be nimble and structured based on the underlying market conditions and demand. Private equity commitments and P3s are the best ways to incorporate government oversight while ensuring citizens have access to quality public infrastructure.

- **Project Accountability and Oversight**: Private equity adds the highest level of accountability to infrastructure projects. As owners, private equity must make sure projects are on time, on budget, and taxpayers are satisfied. Private equity firms can also depoliticize future capital investment since they are determined at the outset of the deal.

- **Critical Capabilities Required**: Private equity adds in-depth experience and knowledge of market needs, capital projects, and financing. Private equity professionals typically have a notable track record in comparable infrastructure projects. More broadly, firms have the flexibility and resources to find strong operating partners which bring the right scale and capabilities.

- **Project Performance and Speed to Market**: Private equity can streamline project management which is essential to ensure quality outcomes.
KKR worked with Suez and the City of Bayonne to improve the water and wastewater system. Using a concession model, Suez and KKR struck a 40-year agreement with the Bayonne Municipal Utilities Authority (BMUA). Under the agreement, the joint venture has made an initial payment to the BMUA of $150 million, which will be used to eliminate the BMUA’s existing debt and improve its finances. The joint venture has further committed to funding another $157 million into the system over the life of the contract.

- KKR, United Water, and the City of Bayonne worked together to achieve a number of operational goals including technical advances such as computerized mapping; capital repair and replacement projects to upgrade infrastructure like pipes, fire hydrants, and meters; and employee safety enhancements.

- The P3 was a contributing factor for the upgrade of the City’s credit rating.

- The operational and environmental stewardship of Suez and KKR, created a sustainable model that upgraded core assets and improved system reliability.

“America has been struggling to find a way to strike the balance between the politically charged question of public ownership of water and wastewater infrastructure, and the need to attract private capital and expertise to optimize existing assets. The unique structure of the Bayonne deal has combined with enthusiastic support from city leadership to bridge that divide in a brand new way.” – Global Water Intelligence

in a timely fashion and reduce project costs. By partnering with private equity funds to execute projects, municipal entities can potentially reduce their own overhead costs.

How Can Washington Advance Infrastructure?

As lawmakers debate initiatives for improving U.S. infrastructure and consider the role of P3s and private capital, they should be aware of current policies that provide strong incentives for public and private infrastructure investment. They should also consider new actions that would help to expand opportunities for infrastructure investment.

“We see compelling infrastructure opportunities in sectors including energy, power, transportation, and water. Our approach combines Carlyle’s deep industry and operating expertise with our rich 30-year history of owning and improving critical assets and businesses.” – Glenn Youngkin, The Carlyle Group

• Tax policies that encourage long-term investment, e.g., full interest deductibility and tax-free municipal bonds.

• Matching grant programs to align municipal, state, and federal level engagement.

• Continued education of states on the benefits of partnering with private capital and the strong legal framework supporting them.

The American Investment Council also believes an infrastructure bill can encourage even greater investment opportunities:

• Incentivize states that permit P3s to embark on
new projects, particularly to solve critical issue areas in regions where they have proven to be effective.

• Develop resources to match private investors to pre-identified state projects.

• Streamline infrastructure permitting processes, which currently slow decisions on executing projects.
  o Create incentives for municipalities to clarify rules around permitting and provide predictable timelines for project approvals.
  o Provide additional federal matches for states, localities, or projects that expedite the approval process.
  o Consider additional ways to accomplish the dual objectives of expediting project approvals and protecting the environment.

Conclusion
The decline of U.S. infrastructure has many economic consequences which will only become worse if deficiencies are left unaddressed. Both sides of the political aisle agree that more needs to be done to refurbish and upgrade our aging infrastructure. This bipartisanship creates a unique opportunity to develop policies that incentivize both public and private investment in infrastructure. With robust capital raises, private investors are poised to take a lead role in providing financing to these long-term projects.

Private investment can be a part of the solution on infrastructure. As exemplified by the case studies and metrics in this report, private capital is a proven contributor to successful infrastructure projects across the country and should be an essential component to a federally-backed proposal. We at the American Investment Council look forward to participating in the discussion about how private capital can help to modernize U.S. infrastructure.

ArcLight was the lead investor in Terra-Gen Power, the only U.S. company providing electricity on a utility scale from three major renewable energy sources: wind, solar, and geothermal power.

• With ArcLight’s sponsorship, Terra-Gen developed and constructed 11 interconnected wind projects totaling 1,547 Megawatts, making Terra-Gen the largest onshore wind portfolio in the U.S.

• The company sells its renewable power to utilities and power cooperatives, with the wind projects providing clean, renewable power to over 1.5 million customers in the Western U.S. Terra-Gen owns 1051 MWs (net equity).

• Terra-Gen’s development efforts continue to create jobs and local economy stimulus around each project.
Endnotes


2. Ibid.


9. “Global Infrastructure Investment: The Role Of Private Capital In The Delivery Of Essential Assets And Services,” PwC and GIIA.

10. Data on infrastructure funds and performance in Exhibits 2, 3 and 4 are from Preqin, 2017 Preqin Global Infrastructure Report.