CenterSquare
INVESTMENT MANAGEMENT

White Paper

Executive Summary

Investment in infrastructure is critical for the United States to maintain its competitive position in the global economy. With infrastructure in the legislative spotlight, there is an opportunity to unlock a much needed wave of new investment by tapping into private capital via a listed infrastructure investment vehicle.

Structuring a listed infrastructure investment vehicle could follow two paths: either through a purpose built Infrastructure Investment Trust or through the expansion of existing REIT/MLP structures. Either of these options has the potential to be included in upcoming infrastructure-related legislation at no cost to the tax payer.

In this paper, we examine the advantages to investors, consumers and the government of the democratization of infrastructure, and discuss the implications of each of these approaches for the industry.

The Case for an Infrastructure Investment Trust

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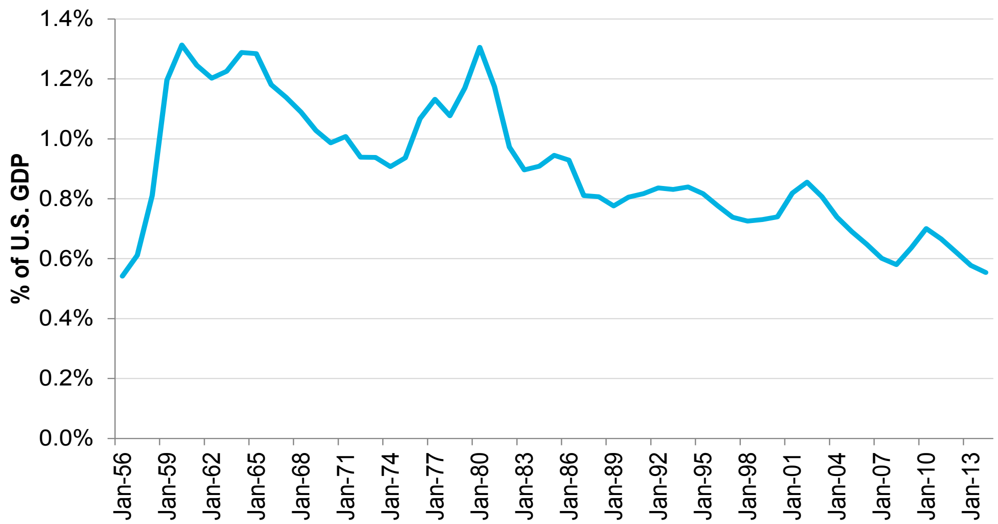
While there is broad agreement on the need for significant investment in U.S. infrastructure, the question of how to pay for it is more contentious, with different views of how to privately finance public assets. The United States in fact has a long history of successful private market solutions to infrastructure needs, dating back to the creation of our railway system over 150 years ago. More recently, listed structures such as REITs and MLPs, targeting telecommunications and energy pipelines, have proven successful in answering the challenge of stimulating private investment to address infrastructure needs by offering access to the widest possible pool of capital.

We believe that tapping into private capital to fund broader public infrastructure investment presents a mutually beneficial opportunity to meet a public need and generate compelling returns for investors. In addition, by making the investment opportunity available broadly via a listed structure, it would democratize participation in the ownership of our nation's infrastructure. We believe that a listed structure, either through a purpose built Infrastructure Investment Trust or by expanding the scope of REITs or MLPs to more efficiently allow infrastructure investment, would act as a magnet for capital to fund new infrastructure development, reduce pressure on government balance sheets, and allow the broadest possible infrastructure ownership. What is needed to unlock this potential wave of new investment, and the associated increase in jobs and economic activity that would follow, is a 21st century re-imagining of some of the 20th century's most successful corporate structures and concepts.

Decades of Infrastructure Underinvestment

The United States ranks 25th in the world for the overall quality of infrastructure[1]. The last time the U.S. had a comprehensive infrastructure investment plan was two generations ago[2], and many of the assets built then were only intended to last 50 years. Since that time, our infrastructure needs have also evolved. Today, the definition of infrastructure has broadened to include information technology, renewable energy and improved urban transportation. Further, modernizing our infrastructure requires a significant investment in technology - such as variable lane highway pricing models and GPS-based air traffic control systems – an area where the private sector has traditionally been more adept than the public sector.

Figure 1 - Federal Spending on Transportation and Water Infrastructure as a % of GDP



Source: Data underlying the exhibits in CBO's (Congressional Budget Office) March 2015 report Public Spending on Transportation and Water Infrastructure, 1956 to 2014.

Using Private Capital To Meet the Challenge

Private capital brings a number of advantages to meet the challenge for new infrastructure investment. When private capital acquires the right to build and operate infrastructure through a government-granted concession, the initial investment is subject to an economic viability test through the underwriting and bidding process, helping ensure that infrastructure spending is focused on economically necessary projects. Further, a profit motive encourages operational efficiency and the conditions of the government-granted concession make the private owner/operator accountable to the public for high quality outcomes. Such "Public Private Partnership" models have historically been used successfully to meet many of the infrastructure challenges that have faced our nation – including the construction of much of our national railway.

A common argument against private investment in infrastructure – that it will increase costs – misses the fact that our infrastructure is already not free. We currently pay for public infrastructure through our taxes. However, because the performance of publicly-built and operated infrastructure assets is not subject to market forces, these operations have the tendency to suffer from wasteful spending and inefficiency.

As an alternative to private construction of new infrastructure, allowing broader private ownership of infrastructure assets should create a deep pool of competitively priced private capital to purchase existing assets, freeing up capital to be redeployed by the government into new projects. Capital from infrastructure asset sales could be ring fenced for new infrastructure investment, which in turn could be sold into the private sector once stabilized. Such an asset recycling model could create a self-regenerating source of capital for infrastructure development.

Democratizing Infrastructure Investment

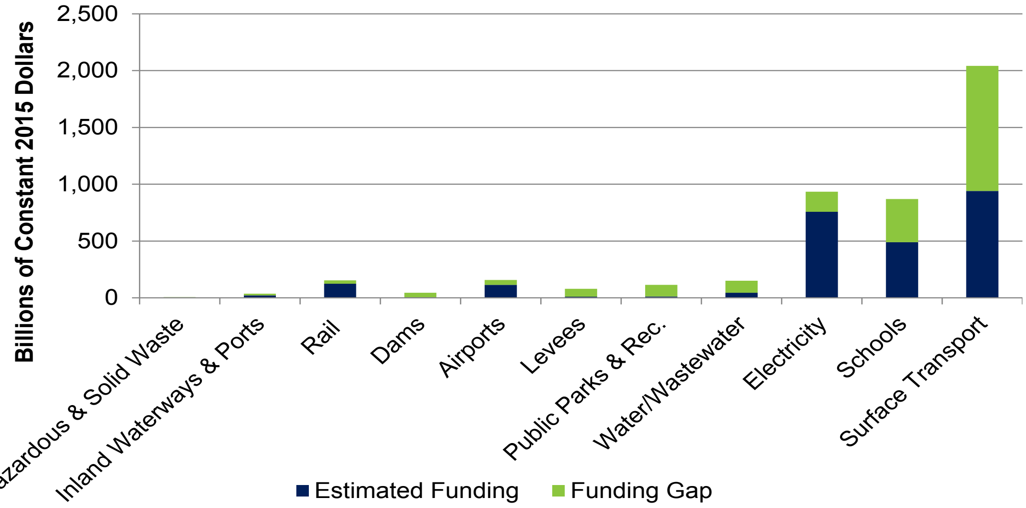
Another common objection to private involvement in infrastructure investment is a

[1] *Source: McKinsey Global Institute, "Infrastructure productivity: How to save $1 trillion a year", 2013*
[2] *Federal Aid Highways Act of 1956 (under President Eisenhower)*

The statements made and the conclusions drawn in this article are not guarantees and are merely the opinion of CenterSquare and its employees. Please refer to footnotes and disclosures at the end of this document.

political concern that "Wall Street" and large private equity firms would unfairly benefit from owning assets that we all need to use. But there is a way to both protect against this and broaden the opportunity for ownership of our nation's infrastructure. Access to infrastructure investments for every investor can be achieved by creating a vehicle that democratizes ownership via the equity market. This idea has already been tried and tested – the Real Estate Investment Trust (REIT) model in the U.S. has allowed tens of millions of individual investors either directly or through their retirement savings to enjoy the benefit of investment in commercial real estate. Today, about 25% of all U.S. commercial real estate is in the hands of such investors through the REIT market[3]. Another example is the Master Limited Partnership (MLP) model, which has proven to be successful in stimulating broad ownership of our energy pipeline infrastructure. A listed structure able to effectively invest in infrastructure assets would maximise the available pool of capital for infrastructure investment and the price the public can achieve for the value of these assets.

Figure 2 - U.S. Infrastructure Needs by System Based on Current Trends, (2016-2025); Total Funding Gap = $2.1 Trillion

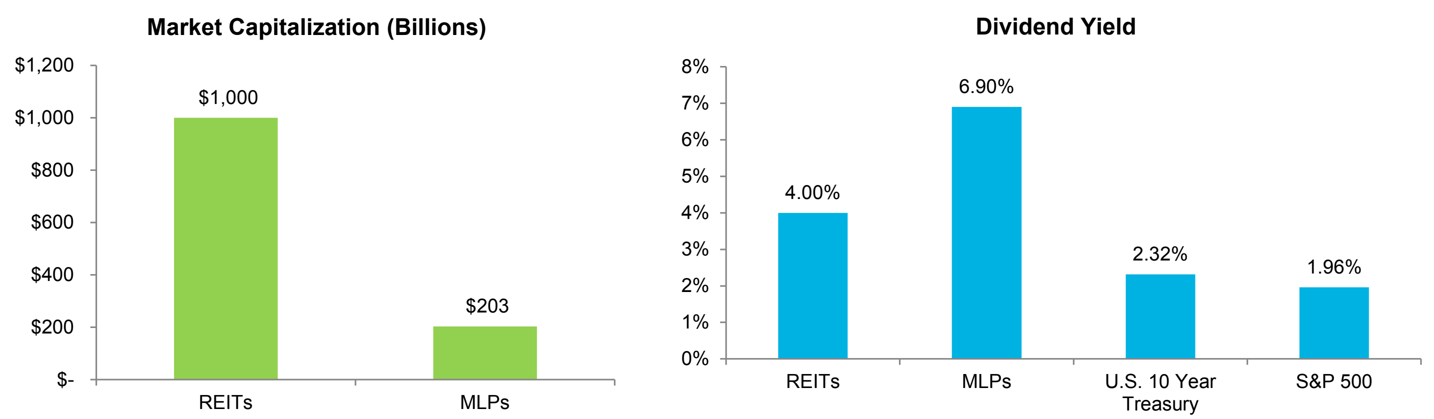


Source: 2017 Infrastructure Report Card, American Society of Civil Engineers.

One available option to create a listed entry into the infrastructure investment opportunity would be to expand the scope of the existing REIT or MLP structures to efficiently allow investment in infrastructure assets. An alternative option is to create a purpose built vehicle – an Infrastructure Investment Trust – building on successful aspects of the REIT and MLP models, but specifically focused on infrastructure investment.

Creating an appropriate listed structure to allow infrastructure investment could open the flood gates of private capital into our underinvested roads, rails, airports, power grids and energy infrastructure, and also democratize infrastructure ownership. The steady cash flow characteristics of infrastructure projects would also mean

Figure 3 - Vehicles for Private Capital to fund Public Assets



Source: Bloomberg, NAREIT. In the charts above, REITs are represented by the FTSE NAREIT All REITs Index and MLPs by the Alerian MLP Index. Market capitalization and dividend yield figures are as of May 5, 2017. Please see definition of indices at the end of this document.

[3] *Source: UBS Global Real Estate Analyzer, 2017*

that such a vehicle could be used as part of a stable, lower-volatility, yield-oriented investment allocation, which we believe will be in increasingly high demand by investors in an ageing population.

Increasing the Tax Base

If enacted, the introduction of an Infrastructure Investment Trust either through a de novo structure or the expansion of current REIT/MLP structures should act to increase the tax base. Currently, publicly owned infrastructure competes with private business (i.e. private airlines vs. government-owned rail) but is not part of the tax pool. If owned privately, these assets would then contribute to the tax base – for example in the case of an airport, states and municipalities would benefit from an increase in property taxes, and dividend payments and capital gains would also be taxable.

For those infrastructure assets that are already privately owned, there would be very little change in the effective rate paid by most corporate structures and any dividends paid would remain part of the income tax base. For instance, the midstream energy space already avoids double taxation through the MLP structure; the utility industry in the U.S. – through a combination of accelerated/bonus depreciation, renewable tax credits, and NOLs from existing business lines, is already a negligible cash taxpayer relative to statutory rates; cell towers are largely concentrated in the hands of businesses already structured as REITS; and airports, seaports, bridges, and toll roads are almost entirely held by state and municipal entities, placing them outside of tax base for most calculations. As a result, we believe the creation of an infrastructure investment vehicle would lead to a net add to the existing tax base.

Structuring an Infrastructure Investment Vehicle

Structuring a listed infrastructure investment vehicle could follow two paths, which have the potential to be included in upcoming infrastructure-related legislation at no cost to the tax payer, as we outline below.

Expand the Scope of the REIT or MLP Structures:

The success of REITs and MLPs, which have led to over $1T of new investment including infrastructure, could be leveraged by expanding the scope of these vehicles to encompass infrastructure. There are primarily two issues to address to implement this approach – the current definition of REIT and MLP "qualifying assets" (the type of assets that can be owned) and "qualifying income" (the need to structure income streams as rent payments).

Solving the criteria for qualifying assets may be reasonably straight forward. The REIT and MLP models already allow for the ownership of "real property" which includes land and structure, and hence allows infrastructure ownership. However, the definition of qualifying income is a more complex issue. The REIT structure requires qualifying income to be in the form of a rent payment, and MLPs require either a rent payment or commodity-related income. This challenges the efficiency of owning infrastructure assets through REITs or MLPs, given the broad scope of infrastructure, the conventional pricing models for infrastructure assets, and the current interpretation of "rent" by regulators. Infrastructure involves more than simply commodity infrastructure and pricing for the use of these assets is often articulated as a toll or a fee, which traditionally has not been viewed as a rent payment.

However, it is arguable that payments made to use infrastructure represent a rent payment for use of the assets, irrespective of the exact pricing model and nomenclature used to describe it. For instance, in the case of an airport approximately 50% of revenue comes from gate charges and passenger ticketing fees (the remaining 50% is traditional rents from retail and parking). Few would argue that an airport is not "real property" – it derives its value from the land underneath the airport, the runway and the terminal. So it logically follows that all fees and other charges paid by airlines and passengers are in fact to rent the use of this real property for a designated purpose and period of time. In the case of a gate charge, this is paid to give the airline the right to land its plane on the airport's runway and rent the gate to disembark passengers. In the case of passengers fees these payments are made to afford the passenger the right to use the terminal from the gate to the taxi line or parking garage. Similarly in the case of a road, this is also "real property" for which a tenant (driver) pays a rent payment (toll) to lease the property (the road) from the time it takes to move from point A to B.

Create an Infrastructure Investment Trust:

Another approach to create a listed infrastructure investment vehicle could be to leverage the success of REITs and MLPs as a blue print for a purpose built Infrastructure Investment Trust. Such a structure could be designed to be specifically tailored to the characteristics of infrastructure assets, including the nature of qualifying assets and qualifying income.

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Figure 4 - Existing and Proposed Listed Infrastructure Investment Structures

	REIT	MLP	Infrastructure Investment Trust (Proposed)
Purpose	Allow broad access to income producing real estate	Allow broad access to income producing energy infrastructure	Allow broad access to income producing infrastructure and infrastructure development
Legislative formation	REIT Act contained in the Cigar Excise Tax Extension of 1960, REIT Modernization Act of 1999	Tax Reform Act of 1986 (Section 7704 of the Internal Revenue Code of 1986); QI restrictions amended in 1988, 2008, and 2017	De novo structure per an infrastructure bill, or an evolution of the REIT or MLP structure
Distribution requirements	Distribute at least 90% of taxable net income as distributions to shareholders	No distribution requirement, but nearly all entities distribute the majority of cash flow	No distribution requirement; allow flexibility to incentivize investment
Qualifying assets	Have at least 75% of assets in real estate (real property or loans secured by property)	Minerals or natural resource-related assets, including those dedicated to storage, transportation, production, processing, and refining	Transportation/distribution of energy, power, data, vehicles (air, sea, road) including the ownership of 1) electric, gas, and water utilities, 2) telecommunication/data architecture, and 3) freight and passenger railways, airports, seaports, bridges, and toll roads
Qualifying income (existing)	Derive at least 75% of gross income from real estate income (rents or interest from mortgages), have no more than 25% of assets invested in stocks of taxable REIT	90% of gross income must be considered qualifying income, deriving from the assets described above	N/A
Qualifying income (proposed)	Broaden the accepted definition of rent to include any payment for use of real property including fees and tolls	Broaden the accepted definition of rent to include any payment for use of real property including fees and tolls	90% of gross income must be considered qualifying income from revenues associated with transmission, transportation and/or distribution of assets described above
Ownership	Minimum of 100 shareholders; no more than 50% of shares held by five or fewer individuals	Two tier structure with a GP and LP. Typically, half of the MLP is held by the sponsor/GP.	Widely held
Taxation	Dividend paid deduction means up to 100% of earnings not taxed at the corporate level; distributions include pass through of depreciation	Pass-through entity with zero federal income taxes; distributions to unitholders are a return of capital and tax-deferred	Dividend paid deduction means up to 100% of earnings not taxed at the corporate level; distributions include pass through of depreciation; any losses from infrastructure development can be offset against ordinary income

Specifically, an Infrastructure Investment Trust would define qualifying income to include revenues derived from the transmission, transportation, and/or distribution of:

1) energy,
2) power,
3) data, and
4) vehicles (air, sea, road, rail)

This definition would cover the ownership of electric, gas, and water utilities, telecommunication/data physical architecture, and both freight and passenger railways, airports, seaports, bridges, and toll roads.

In addition, because much of our infrastructure investment requires new construction projects that may involve a period of no income and, in fact, losses from upfront investment, an Infrastructure Investment Trust could feature the tax loss pass-through benefits of a private partnership structure, which cannot be captured in a REIT or MLP. An Infrastructure Investment Trust that includes the ability to pass through tax losses to offset an investor's ordinary income would create a powerful investment incentive from a broad base of investors. The effect of such a measure on stimulating new construction has precedent in the 1980s construction boom in commercial real estate[4].

Conclusion

New and better infrastructure is critical for the United States to maintain its competitive position in the global economy. Better infrastructure not only has the means to directly increase short run GDP growth and provide employment for workers left behind in this cycle, but also improves the economy's long run potential growth rate. The challenges of funding and operating infrastructure in today's economy require an enlightened approach to attracting private capital through the broadest base possible. A listed infrastructure investment vehicle, either through a de novo Infratructure Investment Trust structure or the expansion of current REIT/MLP structures, can draw on the precedent of successful existing listed structures that have opened opportunities in commercial real estate and energy investment to all investors. This would not only lead to the most competitive cost of capital available to fund U.S. infrastructure investment, but also allow the democratization of the ownership of our infrastructure.

[4] The 1981 Economic Recovery Tax Act, which dispensed additional incentives. Individuals who invested in real estate could quickly write off expenses and losses against income earned from other sources, while a lower capital gains tax rate meant that subsequent profits would be taxed at a lower rate, helping fuel the creation of much of today's real estate infrastructure.

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Definition of Indices

FTSE NAREIT All REITs Index

The FTSE NAREIT U.S. Real Estate Index includes all tax-qualified real estate investment trusts ("REITs") that are listed on the New York Stock Exchange, the American Stock Exchange and the NASDAQ National Market List. The index constituents span the commercial real estate space across the US economy and provides investors with exposure to all investment and property sectors. The performance presented is based on total return calculations which adds the income a stock's dividend provides to the performance of the index, and is gross of investment management fees. Effective December 20, 2010 the ticker for the FTSE NAREIT U.S. Real Estate Index changed from FNERTR (total return) to FNRETR (total return). The old ticker (FNERTR) has been reassigned to newly established FTSE NAREIT All Equity REIT Index which is similar to the existing benchmark in all regards except that timber REITS will comprise approximately 7% of the new index and 0% in the FTSE NAREIT Equity Real Estate Index.

Alerian MLP Infrastructure Index

The index is designed to give investors exposure to the infrastructure component of the Master Limited Partnership asset class. Constituents each earn at least 50% of EBITDA from assets that are not directly exposed to changes in commodity prices. The index is disseminated by the New York Stock Exchange and is a composite of 25 energy infrastructure MLPs

These benchmarks are broad-based indices which are used for illustrative purposes only and have been selected as they are well known and are easily recognizable by investors. However, the investment activities and performance of an actual portfolio may be considerably more volatile than and have material differences from the performance of any of the referenced indices. Unlike these benchmarks, the portfolios portrayed herein are actively managed. Furthermore, the portfolios invest in substantially fewer securities than the number of securities comprising each of these benchmarks. There is no guarantee that any of the securities invested in by the portfolios comprise these benchmarks. Also, performance results for benchmarks may not reflect payment of investment management/incentive fees and other expenses. Because of these differences, benchmarks should not be relied upon as an accurate measure of comparison.

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Mr. Scott Crowe is the Chief Investment Strategist at CenterSquare Investment Management and joined the firm in 2015. Scott is a member of CenterSquare's listed real estate, listed infrastructure and private real estate investment committees. In his capacity as Chief Investment Strategist, Scott works with each team's portfolio managers and investment professionals in the leadership of the investment process, with a particular focus on thought leadership by synthesizing our real asset views across the business. Scott is the portfolio manager of the Global Concentrated real estate securities strategy. Scott also works directly with CenterSquare's clients, providing education and guidance on the market and helping them execute their investment goals. Prior to joining CenterSquare, Scott was CIO of Liquid Alternatives at Resource Real Estate where he built and led a global investment and distribution platform. Prior thereto, Scott was the lead Global Portfolio Manager for Cohen & Steers, where he was responsible for $10B in assets under management and led the investment and research team of over 20 portfolio managers and analysts. Prior to this, Mr. Crowe held the position of Head of Global Real Estate for UBS Equities Research, where he built and managed the U.S. REIT division while leading a global team of more than 40 analysts. Scott began his career at Paladin Property Securities and holds an Honors Finance Degree from the University of Technology Sydney and a Bachelor of Commerce from the University of NSW / National University of Singapore.

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Firm

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