The Role of Infrastructure Investments in a Multi-Asset Class Portfolio

Infrastructure is a broad term that generally captures income-producing, tangible assets that support economic activity and provide essential services to society. These pillars of economic activity and essential services include transportation of individuals and goods, generation and transmission of energy, communications infrastructure, and data storage and transmission. Specific examples of infrastructure assets include integrated and regulated utilities, airports, toll roads, rail transportation and various communications-related assets such as data centers, cell towers, satellite technology and fiber optics networks.

Given the universal need for economic and social infrastructure, infrastructure is truly a global asset class. However, different regions and countries have taken different approaches to delivering essential infrastructure as either a public service or good, privatizing as a for-profit service or good, or establishing public private partnerships (PPP). For example, in the United States, airports are predominantly publicly operated assets, whereas many airports in Europe are privately owned and operated. Toll roads are often a form of public-private partnership. Our focus will be on privately owned and operated infrastructure assets rather than publicly owned infrastructure, given this represents the investable universe for our clients.

According to a report by McKinsey & Company, estimated global spending on infrastructure was $2.5 trillion in 2015. In the same report, it is estimated that $3.7 trillion of infrastructure investment will be needed every year through 2035 to support growth in global demand.[1] This need could increase further by up to $1 trillion annually to meet the United Nations' Sustainable Development Goals.

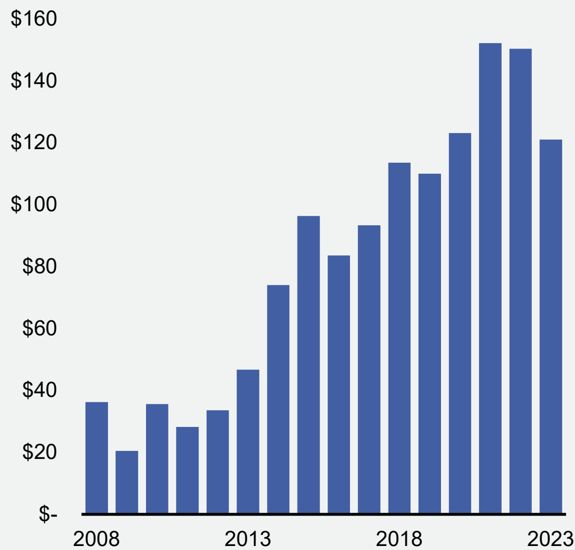
Given pervasive government budget challenges and constraints in many regions, such as the EU and the United States, and political headwinds to raising taxes, we believe much of this investment will need to be sourced in the private markets over the coming years, which should introduce significant new investment opportunities for investors.

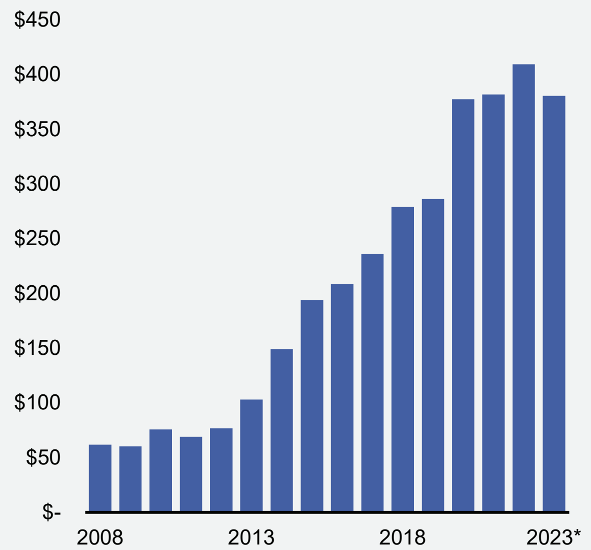
1 *McKinsey Global Institute, "Bridging Infrastructure Gaps: Has the World Made Progress?" McKinsey & Company, October 2017.*

Investable Infrastructure Universe

Transport	Utilities	Energy	Digital Infrastructure	Social Infrastructure
▶ Toll Roads ▶ Bridges & Tunnels ▶ Parking Facilities ▶ Airports, Seaports, & Ferries ▶ Freight Rails	▶ Gas Transmission & Distribution ▶ Electricity Transmission & Distribution ▶ Water & Sewage	▶ Renewable Energy ▶ Energy from Waste ▶ Natural Gas ▶ Midstream Energy ▶ Hydrocarbon Storage Facilities	▶ Communications Towers ▶ Satellites ▶ Fiber-Optic Networks ▶ Data Centers	▶ Education Facilities ▶ Healthcare Facilities ▶ Judicial Buildings ▶ Essential Housing ▶ Public Transportation

Source: CBRE Investment Management. For illustrative purposes only.





**2023 cumulative dry powder figure as of September 30, 2023.*
Source: PitchBook Q1 2024 Global Real Assets Report as of March 31, 2024. Includes closed-end private infrastructure fundraising cumulative dry powder from 2008 through 2023.

The anticipated conversion to clean energy generation over the coming decades will also spur significant demand for investor capital in new energy transition infrastructure projects. According to a recent report by Aon, energy transition investments reached a record $1.8 trillion globally in 2023, which still falls short of the estimated $3.5 trillion annual investment that will be required to achieve a net-zero global economy by 2050.[2]

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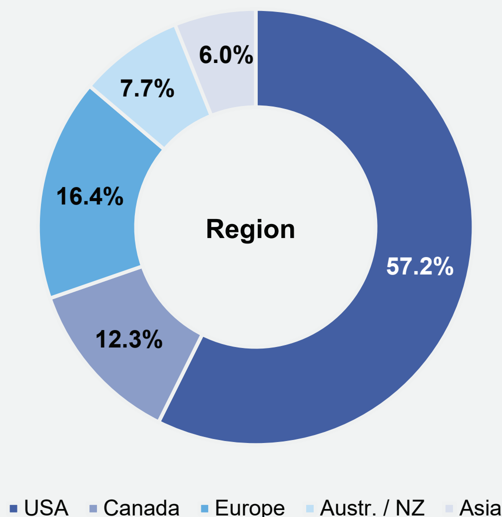
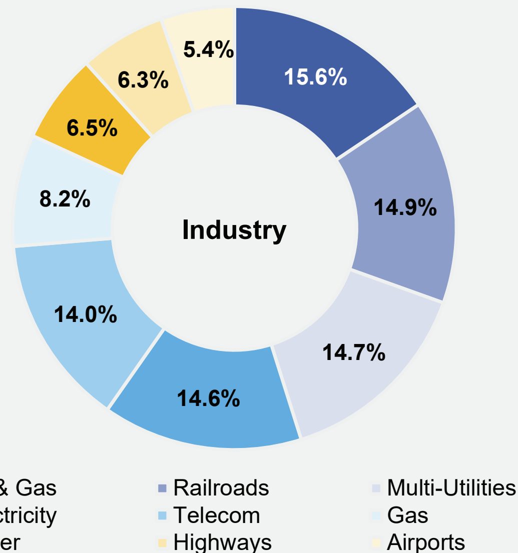
2 *"8 Focus Areas for the Renewable Energy Sector," Aon, June 2024.*

MSCI World Infrastructure Index





Source: MSCI represented by the MSCI World Core Infrastructure Index, as of June 30, 2024.

The potential benefits associated with an exposure to infrastructure

Infrastructure offers three core benefits to multi-asset class portfolios. First, as an asset class, global listed infrastructure has demonstrated historically attractive returns with lower volatility than global equities. Attractive historical risk-adjusted returns of infrastructure have been driven by the monopolistic nature of many infrastructure companies and the relatively inelastic demand of services that many infrastructure industries enjoy. These qualities result in relatively stable, predictable, and attractive cash flow-based income for investors.

Over half of the total return in listed infrastructure over time has been sourced by income return offering investors equity-like upside return potential with a more bond-like stable income return profile. Secondly, infrastructure provides attractive diversification benefits with global equities and fixed income.

Fundamental Characteristics of Infrastructure Businesses

Long-Lived Real Assets
Infrastructure businesses typically operate in regulated industries, potentially enhancing the predictability of cash flows and lowering financial risk.

High Barriers to Entry
Competition is often limited by strict zoning restrictions, large capital requirements, and exclusivity rights, which make it difficult or prohibitive for new entrants.

Stable Cash Flows
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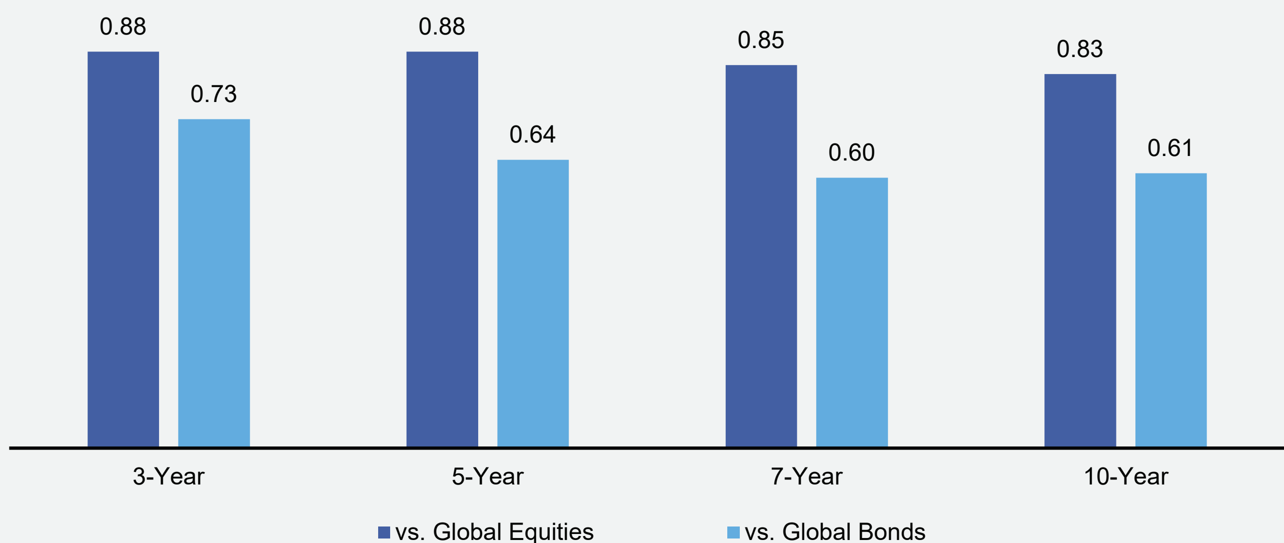
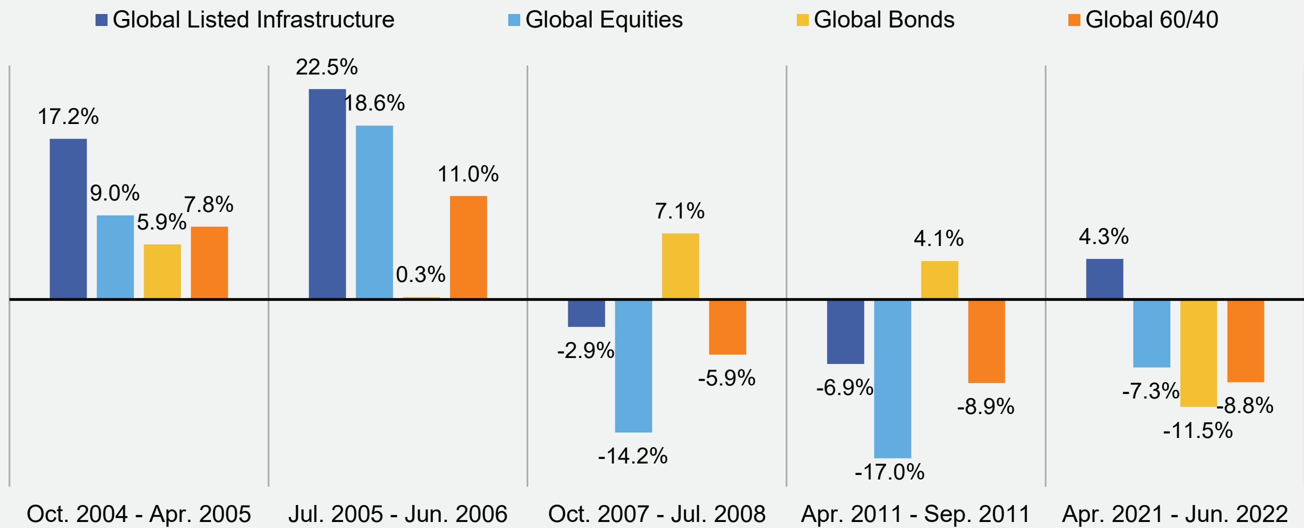
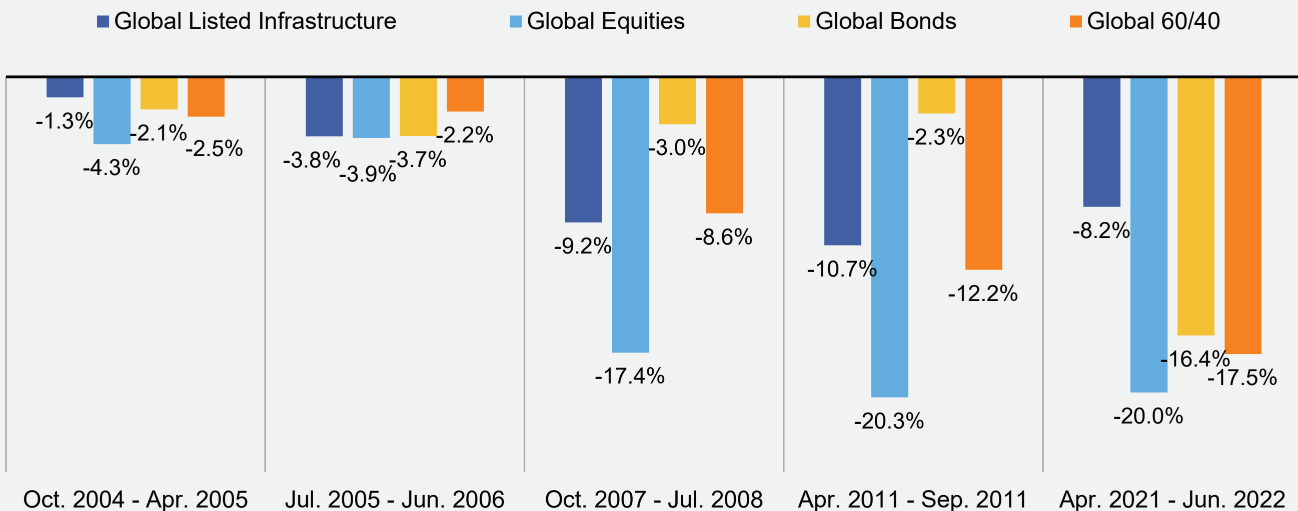
Inelastic Demand
The essential nature of infrastructure means that demand tends to be relatively resilient in economic downturns (varies by sector).



Source: Investment Metrics. Correlations based on monthly index returns as of June 30, 2024. Global Listed Infrastructure represented by the MSCI World Core Infrastructure Index. Global Equities represented by the MSCI All Country World Index. Global Bonds represented by Bloomberg Barclays Global Aggregate Index.

Third, infrastructure has historically outperformed global equities and a traditional 60/40 portfolio comprised of global equities during periods of rising inflation. Infrastructure has also exhibited lower drawdowns than global equities during periods of accelerating inflation. A 5% allocation to global listed infrastructure has historically improved absolute returns and mitigated maximum drawdowns relative to a traditional 60/40 portfolio during these rising inflation periods.





Source: Investment Metrics. Returns and maximum drawdowns based on monthly index returns as of June 30, 2024. Global Listed Infrastructure represented by the MSCI World Core Infrastructure Index. Global Equities represented by the MSCI All Country World Index. Global Bonds represented by Bloomberg Barclays Global Aggregate Index. Global 60/40 composed of 60% MSCI All Country World Index and 40% Bloomberg Barclays Global Aggregate Index and assumes continuous rebalancing. Rising inflation periods defined as time periods where inflation, as measured by the Consumer Price Index (CPI) is on a rising trajectory and is sustained above a 3% year-over-year rate for at least three months until a local maximum is reached. Five distinct time periods identified based on this definition during the total data availability period (September 2001 - June 2024): October 2004 - April 2005, July 2005 - June 2006, October 2007 - July 2008, April 2011 - September 2011, April 2021 - June 2022.

Many infrastructure assets include explicit inflation linked pricing contracts, which has made it an attractive asset class for investors looking for greater inflation protection in their portfolio without making the leap into potentially more volatile commodities. For example, a toll road operator may have a long-term concession agreement with a local government that allows for annual toll increases based on the Consumer Price Index (CPI). Similarly, a telecommunications tower operator may have a multi-year contract with a wireless carrier that incorporates annual revenue escalators to offset potential impact of inflation.

Revenue Model	Sub-Sectors	Inflation Linkage
Regulated	Electric Gas Distribution Water	• Periodic rate cases reflect inflationary cost impacts • Utilities typically have inelastic demand with low fluctuation
Concession-Based	Airports Toll Roads	• CPI+ toll or fee increases permitted via concession agreements
Contracted: GDP Sensitive	Midstream Freight Rails Ports	• Business-dependent revenue escalators • Pipelines benefit from fixed costs, insulating cash flows • Freight Rails offer stable balance sheets and high debt duration
Contracted: Other	Communications	• Typical annual revenue escalators of 3-4%

Source: Cohen & Steers, Bloomberg, as of March 31, 2024.

According to CBRE Investment Management, 87% of infrastructure companies are able to pass inflation costs on to customers. Listed infrastructure, as represented by the MSCI World Core Infrastructure Index, has outperformed a traditional 60/40 portfolio of global equities and fixed income by just under 800 basis points on average during the five rising inflation periods referenced above.

In recent years, infrastructure has garnered significant attention from investors. Several trends have emerged that are driving long-term opportunities and providing compelling reasons for investment in the asset class. A heightened need to decarbonize and reach net-zero emissions is spurring investment into renewable power generation and battery storage technologies. Growing need to process ever-increasing volumes of data is driving investment into data storage and transmission assets such as cell towers, fiber optic networks, and data centers. The prospective applications of artificial intelligence in everyday life have only enhanced the need for a more robust digital infrastructure. This broad "electrification" of society across various industries portends an exponential growth in power demand.

However, aging electricity grids are currently not suited to handle this massive increase in load, resulting in a growing need for investment into the modernization of decades-old transmission infrastructure. Lastly, recent legislation is likely to improve economic prospects of pursuing these large-scale infrastructure projects. In the U.S. alone, the Inflation Reduction Act and CHIPS and Science Act provide billions in tax credits and funding for the advancement of energy and climate security technologies, semiconductor manufacturing capabilities, as well as R&D and commercialization of artificial intelligence, quantum computing, and nanotechnology.

How investors can gain exposure to infrastructure

Investors can access infrastructure in two primary ways. Listed infrastructure companies are global publicly traded companies. Examples include large publicly regulated utilities, transportation-related companies, communications infrastructure companies and midstream energy companies. Listed infrastructure funds provide investors with an efficient and cost-effective way to introduce a diversified infrastructure strategy into their portfolio. Diversification across companies, sectors and regions can be achieved quite efficiently and cost effectively with a listed fund. The daily liquidity associated with listed funds is attractive and even a requirement of many investors. Our research has demonstrated that listed infrastructure is an asset class that is best implemented through an active strategy provided critical due diligence research is part of the selection process. In addition, passive infrastructure ETFs are also available. The second implementation approach is to invest in private, unlisted infrastructure funds that can offer more targeted infrastructure exposures.

This approach to infrastructure investing lacks the immediate diversification benefits of a mutual fund or ETF comprised of listed companies and lacks the daily liquidity associated with a registered fund. However, the return potential of private infrastructure can be higher given an illiquidity premium, access to public private partnership initiatives and large-scale projects, and opportunities to invest in specialized assets that are not available more broadly to public market investors. Investors in private infrastructure typically must be qualified purchasers to participate.[3]

We believe multi-asset class institutional investors should include a strategic allocation to infrastructure in their portfolio given the benefits of attractive risk-adjusted returns, diversification, and inflation sensitive characteristics. This can be accomplished by implementing a listed infrastructure strategy, private infrastructure, or a combination of both listed and private strategies. Our investment research team spends significant time assessing active listed infrastructure strategies as well as attractive private infrastructure investment opportunities. Given the unique and heterogenous nature of infrastructure, we believe proper research and due diligence represents an essential prerequisite to participating in this asset class.

For additional information regarding this report, please reach out to your relationship manager.

3 *Qualified purchasers, as defined by the U.S. Investment Company Act of 1940, are individuals holding at least $5 million in investments or institutions holding at least $25 million in investments.*

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