MARINER

A PRIMER FOR INSTITUTIONAL CLIENTS:

Introduction to Infrastructure

September 2025

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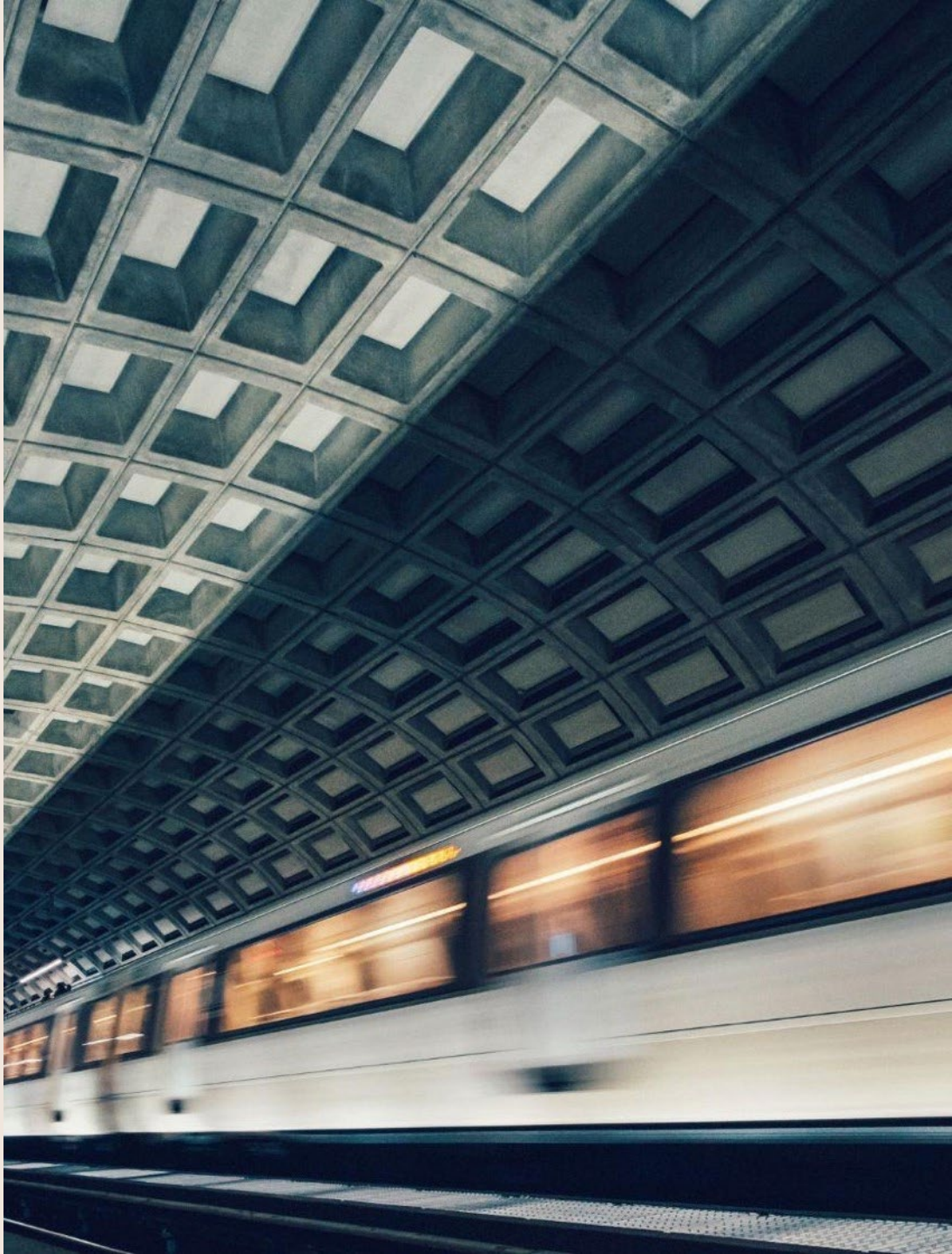


The Investment Challenge

Many institutional asset categories, such as public equities and certain alternative investments, are projected to exhibit elevated volatility. This heightened risk profile can challenge plan sponsors striving to meet actuarial return assumptions while maintaining portfolio stability.

	EXPECTATIONS		
Category	**Compound Return[1,2]**	**Arithmetic Return[1,2]**	**Expected Volatility[1,3]**
U.S. Large Cap Equity	6.7%	7.9%	16.3%
U.S. Small Cap Equity	6.9%	8.8%	20.7%
Developed International Equity	8.1%	9.5%	17.6%
Emerging Markets Equity	7.2%	9.2%	21.1%
U.S. Core Fixed Income	4.6%	4.7%	5.1%
Private Equity	9.9%	11.6%	19.6%
U.S. Core Real Estate	8.1%	8.7%	11.3%
U.S. Value-Added Real Estate	10.1%	11.7%	19.1%

[1] Expected returns and volatility are from the "2025 JPMorgan Long-Term Capital Market Assumptions" (LTCMAs). Expected returns and volatility are rounded to the nearest 0.1%. JPMorgan's expectations are for the next 10-15 years.
[2] The compound (or "geometric") return expectation is an expected multi-year growth rate. The arithmetic average return ("arithmetic return") is a single-year return expectation. The compound return is always lower than the arithmetic return due to the variation drain in returns (the impact of standard deviation) over time. Asset classes that have a higher volatility expectation will have a larger difference between the compound return and the arithmetic return.
[3] Volatility is defined as annualized standard deviation of total return. In this presentation, "high volatility" is defined as 15.0% or more.

The Investment Challenge

High expected correlations across public and private equity markets, often exceeding 0.7, indicate that these markets may rise and fall in tandem, diminishing the benefits of traditional diversification strategies.

	U.S. Large Cap	U.S. Small Cap	Dev. Intl Equities	Emerging Equities	Core FI	Private Equity	Private Real Estate
U.S. Large Cap	1.00						
U.S. Small Cap	0.90	1.00					
Dev. Intl Equity	0.88	0.80	1.00				
EM Equity	0.74	0.68	0.86	1.00			
U.S Core Fixed Income	0.26	0.18	0.30	0.29	1.00		
Private Equity	0.78	0.75	0.80	0.80	0.00	1.00	
U.S. Private Real Estate[2]	0.35	0.29	0.27	0.29	-0.13	0.34	1.00

[1] Expected correlations are from the "2025 JPMorgan Long-Term Capital Market Assumptions" (LTCMAs).
[2] The LTCMAs project that U.S. Core Real Estate and U.S. Value-Added Real Estate will be perfectly correlated (1.00). Consequently, the expected correlations of U.S. Core Real Estate and U.S. Value-Added Real Estate with the other asset categories shown are the same.

Addressing the Investment Challenge

Addressing the Investment Challenge

Infrastructure has characteristics that can help address these challenges:

- Due to low expected correlations to equities, fixed income, and real estate infrastructure can provide diversification benefits that may enhance diversified portfolios' risk/return ratios.

- Infrastructure achieves its long-term stability through predictable, often inflation-linked cash flows (e.g., from utilities or toll roads) and regulated revenue models, with historically lower volatility compared to public equities.

- Blending elements of equities, fixed income, and tangible assets, infrastructure may provide long-term stability by generating returns that fall between those of equities and fixed income.

Ultimately, these benefits could reduce a portfolio's volatility as well as improve the risk-return and drawdown characteristics of a traditional institutional portfolio, potentially resulting in a more optimal asset allocation for institutional investors.

Addressing the Investment Challenge

Infrastructure is expected to outperform fixed income over the long term and produce similar returns to public equity with reduced volatility.[1,2]

Category	Compound Return[1,2]	Arithmetic Return[1,2]	Expected Volatility[1,3]
U.S. Large Cap Equity	6.7%	7.9%	16.3%
U.S. Small Cap Equity	6.9%	8.8%	20.7%
Developed Intl. Equity	8.1%	9.5%	17.6%
EM Equity	7.2%	9.2%	21.1%
U.S. Core Fixed Income	4.6%	4.7%	5.1%
Private Equity	9.9%	11.6%	19.6%
U.S. Core Real Estate	8.1%	8.7%	11.3%
U.S. Value-Added Real Estate	10.1%	11.7%	19.1%
Global Core Infrastructure	**6.3%**	**6.9%**	**11.0%**

[1] Expected returns and volatility are from the "2025 JPMorgan Long-Term Capital Market Assumptions" (LTCMAs). Expected returns and volatility are rounded to the nearest 0.1%. JPMorgan's expectations are for the next 10-15 years.
[2] The compound (or "geometric") return expectation is an expected multi-year growth rate. The arithmetic average return ("arithmetic return") is a single-year return expectation. The compound return is always lower than the arithmetic return due to the variation drain in returns (the impact of standard deviation) over time. Asset classes that have a higher volatility expectation will have a larger difference between the compound return and the arithmetic return.
[3] Volatility is defined as annualized standard deviation of total return. In this presentation, "high volatility" is defined as 15.0% or more.

Addressing the Investment Challenge

Infrastructure is also expected to provide diversification benefits relative to public equity, private equity, and fixed income.[1]

	U.S. Large Cap	U.S. Small Cap	Dev. Intl Equities	Emerging Equities	Core FI	Private Equity	U.S. Private Real Estate	Global Core Infras.
U.S. Large Cap	1.00							
U.S. Small Cap	0.90	1.00						
Dev. Intl Equity	0.88	0.80	1.00					
EM Equity	0.74	0.68	0.86	1.00				
U.S Core Fixed Income	0.26	0.18	0.30	0.29	1.00			
Private Equity	0.78	0.75	0.80	0.80	0.00	1.00		
U.S. Private Real Estate[2]	0.35	0.29	0.27	0.29	-0.13	0.34	1.00	
Global Core Infrastructure	**0.47**	**0.41**	**0.55**	**0.58**	**0.04**	**0.62**	**0.32**	**1.00**

[1] Expected correlations are from the "2025 JPMorgan Long-Term Capital Market Assumptions" (LTCMAs).
[2] The LTCMAs project that U.S. Core Real Estate and U.S. Value-Added Real Estate will be perfectly correlated (1.00). Consequently, the expected correlations of U.S. Core Real Estate and U.S. Value-Added Real Estate with the other asset categories shown are the same.

Defining Infrastructure

Defining Infrastructure

Infrastructure is defined as essential services and facilities that support or are required for the economic activity and societal functions of a region.

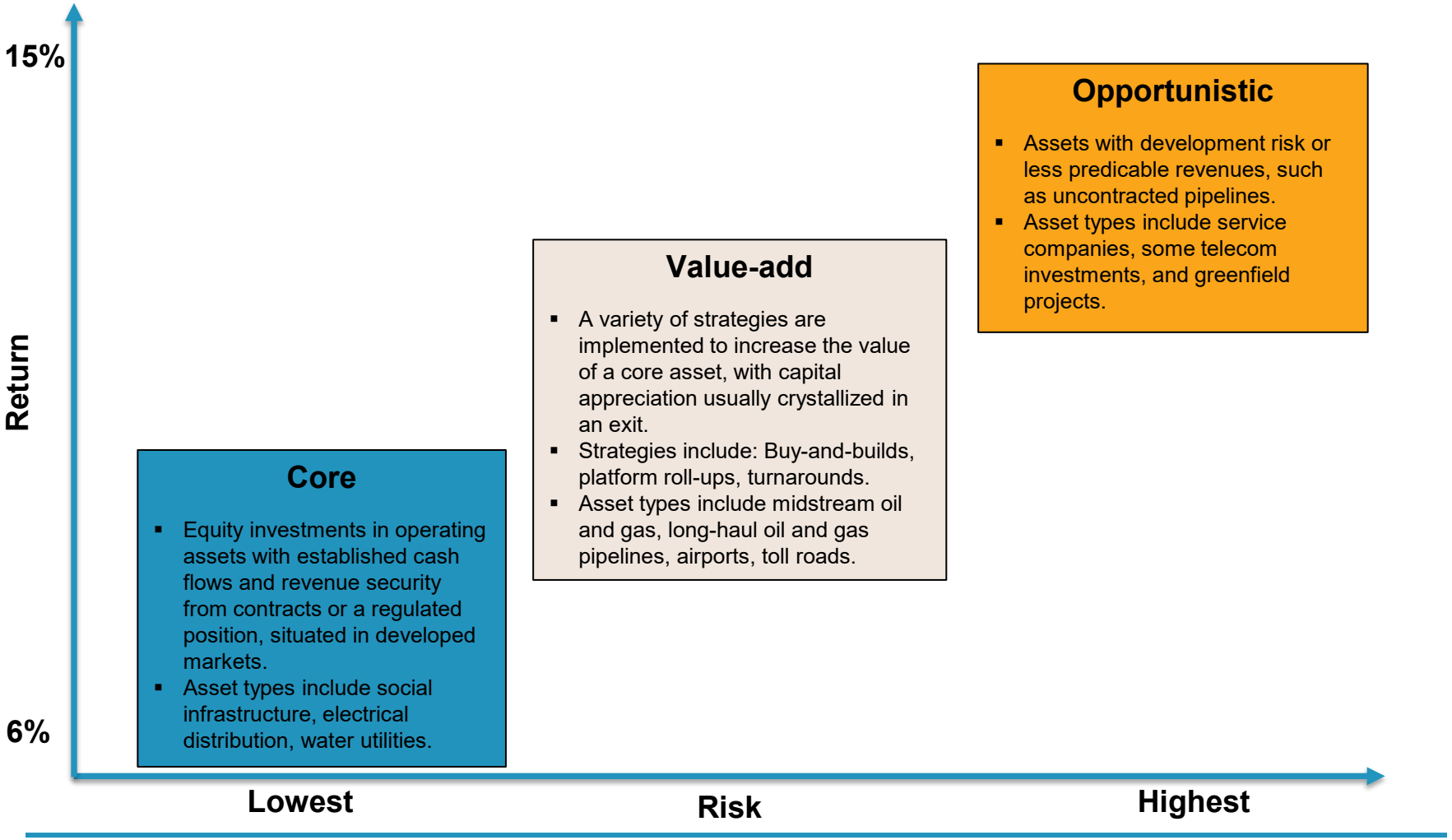
Characteristics include:

- Monopolistic or semi-monopolistic position, high barriers to entry
- Long useful life
- Generally, operate in regulated or contractually structured environments
- Stable, relatively predictable cash flows
- Lower exposure to business cyclicality

Common types of Infrastructure assets:

Sectors	Transportation	Energy/Utilities	Communications	Social
Subsectors	Toll roads/bridges/tunnels Municipal Parking Airports Rail Mass Transit Networks Port Facilities	Oil and Gas Pipelines Regulated Utilities Renewable Energy Water Treatment/ Distribution	Communication Towers Cable Networks Satellite Systems	Education Facilities Healthcare Facilities Correctional Facilities

Defining Infrastructure – Style Spectrum



Defining Infrastructure – Style Spectrum

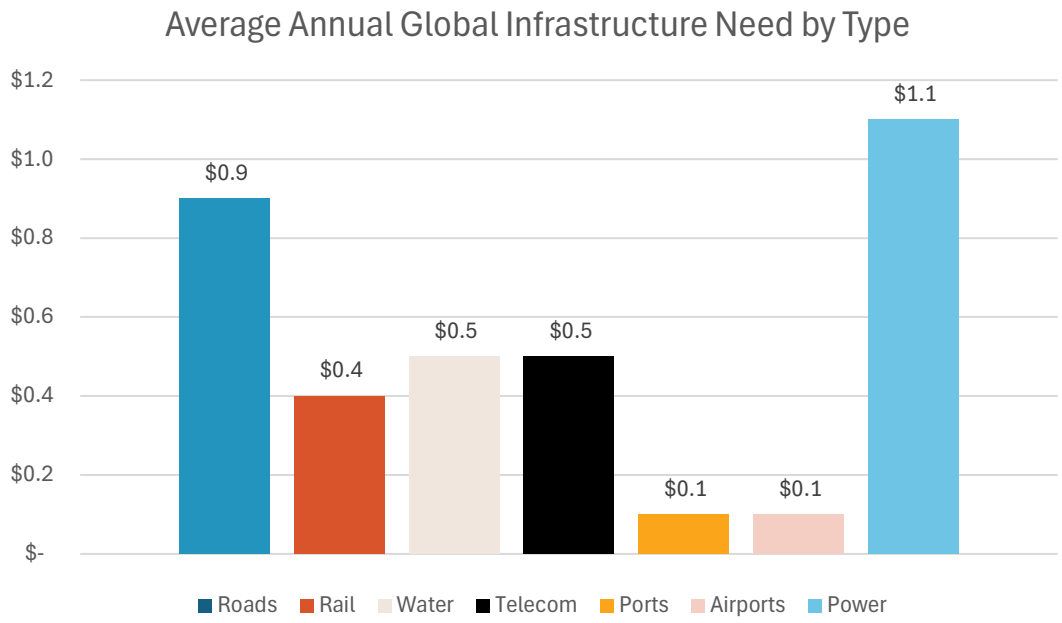
There are three primary styles of infrastructure strategies with varying risk and return profiles that an institution can utilize to construct an infrastructure portfolio.

- Core is a lower-risk strategy, driven primarily by current income.
- Value-add provides more upside potential than core with more risk. It seeks appreciation while mitigating volatility with some current income generation.
- Opportunistic offers the highest potential return and risk. It derives most of its return from appreciation.

	Core	Value-add	Opportunistic
Target Return (net)	6% to 8%	10% to 12%	15% to 17%
Key Risks	Operating	Operating Strategy Execution Construction	Construction Strategy Execution Market, Political
Primary Return Driver	Income	Appreciation	Appreciation
GDP Sensitivity	Low	High	High
Brownfield or Greenfield	Brownfield	Both	Both
Operating Complexity	Medium	High	High
Geography	OECD	OECD/Non-OECD	OECD/Non-OECD

Defining Infrastructure – Estimated Needs

It is estimated that average annual global infrastructure needs will exceed $3.5 trillion, reflecting steady demand for long-term investment across transportation, energy, water, and digital systems.[1]



[1] J.P. Morgan Asset Management. Market Insights: Guide to Alternatives (1Q 2025).

History of Institutional Investment in Infrastructure

History of Institutional Investment in Infrastructure

Private investing in infrastructure is not new as railways, bridges, and canals were not only built but owned and operated privately in the 19th century.

- The U.K. canal system (1770s to 1830s)
- The Philadelphia and Lancaster Turnpike - Philadelphia and Lancaster Turnpike Road Co. (1795)
- U.K. gas lighting utilities – Gas Light and Coke Company (1812)
- Erie Canal – Erie Canal Packet Boat Companies (1817-1825)
- U.S. telegraphs – Western Union (1850)
- The Ambassador Bridge – Manuel J. Moroun (1929)

The modern era of institutional investing in infrastructure began in the 1970s and 1980s in countries such as the United Kingdom and Australia. Infrastructure has been recognized as an investable asset class for decades, particularly following extensive privatization during the administration of United Kingdom Prime Minister Margaret Thatcher (1979–1990). However, it was not until the mid-1990s, following large-scale privatization and liberalization in the energy, telecommunications, and rail sectors in Europe, that infrastructure assets gained widespread popularity among global investors.

Infrastructure investing has been popular in Australia for many years within its superannuation funds. It has also been widely implemented as an asset class in the public retirement systems of Canada and Western Europe.

- Based on Preqin data, as of December 2024, there was approximately $1.6 trillion of private equity infrastructure assets under management compared to $190.1 billion as of December 2010.

History of Institutional Investment in Infrastructure

Infrastructure is a global asset class with a majority of the assets in North America, Western Europe, and Asia/Australia.[1]

Acceptance of the asset class among U.S. institutional investors is increasing with numerous potential opportunities. Investing in U.S. infrastructure assets allows investors exposure to the asset class without the currency risk.

- Based on Preqin data, as of December 2024 there were an estimated $1.4 trillion of infrastructure transactions completed in the U.S. during the prior decade, which compares to the estimated €1.2 trillion of transactions completed in Europe.

The World Bank Group forecasts total global infrastructure investment needs to be $125 trillion between 2016 to 2040.[1]

[1] The World Bank Group: *Infrastructure Monitor 2024*

Potential Benefits

Potential Benefits of Infrastructure – Reduced Portfolio Volatility

Infrastructure is expected to outperform fixed income over the long term and produce similar returns to public equity with reduced volatility.[1,2]

Category	Compound Return[1,2]	Arithmetic Return[1,2]	Expected Volatility[1,3]
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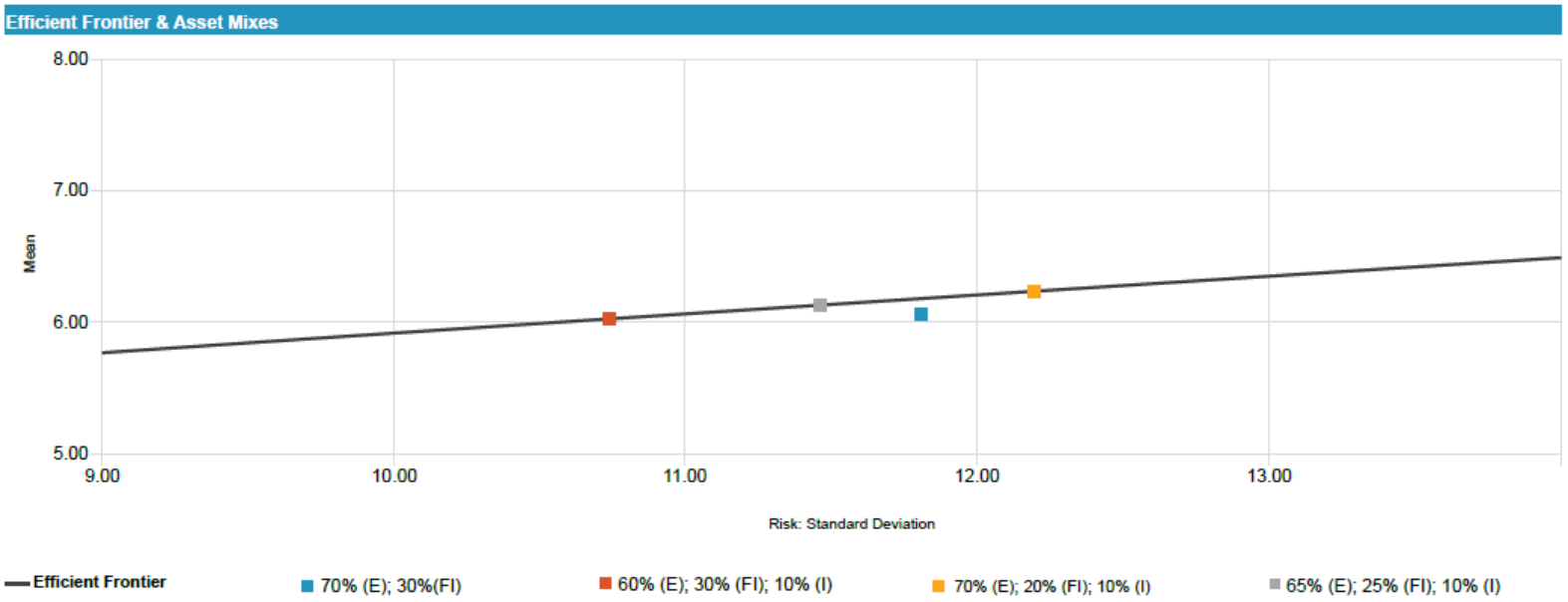
Potential Benefits of Infrastructure – Improved Sharpe Ratio

Historically speaking, allocating a portion of an equity portfolio to infrastructure has reduced overall portfolio volatility while sacrificing less in portfolio return. This has generally resulted in a more efficient portfolio with greater return per level of risk and higher historical Sharpe Ratio.



Asset Mix Statistics

	70% (E); 30%(FI)	60% (E); 30% (FI); 10% (I)	70% (E); 20% (FI); 10% (I)	65% (E); 25% (FI); 10% (I)
Arithmetic Mean	6.07	6.03	6.24	6.14
Standard Deviation	11.81	10.74	12.19	11.46
Sharpe Ratio	0.51	0.56	0.51	0.54

Source: Morningstar and Mariner. Volatility is measured by annual standard deviation of returns. Past performance does not guarantee future results.
Forecast for the next 10 -15 years based on the 2025 JPMorgan Capital Market Assumptions (CMAs).
The efficient frontier is based on the CMAs for large-cap US equities, small-cap US equities, core aggregate fixed income, US cash, and global core infrastructure.
The efficient frontier is constrained by a 10% cap on global core infrastructure. Optimization software does not consider illiquidity, and we consider it typical for investors to cap illiquid exposures to account for this.
The asset mixes shown are based on large-cap US equities, core aggregate fixed income, and global core infrastructure.

Implementation Considerations

Implementation Considerations - Vehicles

Vehicle type	Minimum Investment	Liquidity	Fund Term	Typical Strategies
Open-end Funds (private assets)	$10 million (negotiable)	Quarterly	Perpetual	Core
Closed-end Funds (private assets)	$10 million (negotiable)	Illiquid	10 to 12 years	Value-add Opportunistic

	Open-end Funds (Private Assets)	Closed-end Funds (Private Assets)
Key Advantages	• Current income generated from cash-flowing assets • Low correlation to equity markets • Direct exposure to infrastructure assets	• Broadest number of managers and strategies to select from • Low correlation to equity markets • Direct exposure to infrastructure assets
Key Disadvantages	• High fees relative to listed alternatives • Focus on cash-flow, less upside potential • Leveraged • Less liquid than listed securities	• Higher fees • Leveraged • Blind pool risk • Interim liquidity is limited to complex, costly secondary market transactions
Fit within Portfolio	• Tend to focus on investments with long-term hold periods and stable cash flows • Primary component of an institutional investor's infrastructure program	• Tend to focus on investments with a higher risk/return profile • Complementary component of an institutional investor's infrastructure program

For general illustrative purposes only.

Implementation Considerations – Risks

Primary considerations to implementing an infrastructure allocation:

Political/Regulatory

Regulated infrastructure assets are subject to changes in government regulations and guarantees. Governmental regulators typically determine rates that can be charged to customers. Energy infrastructure, including oil & gas, solar, wind, and nuclear, are particularly vulnerable to this risk.

Asset types

For some assets, rate increases are not built into contracts, which reduces the extent of inflation protection. Particularly in US, there is a high reliance on regulators for rate increases, which can be time-consuming.

Headline

There is high potential for public backlash on rate increases.

Currency

Exchange rate fluctuations on foreign investments can severely impact returns.

Benchmarking

There is no benchmarking standard for private infrastructure strategies. Alternatives include absolute return, CPI + x%, public benchmark + x%, or comparison to funds of the same vintage year.

Implementation Considerations – Risks

Primary considerations to implementing an infrastructure allocation:

Credit

Private funds typically carry 40% to 70% leverage and are sensitive to credit market conditions.

Liquidity

Open-end private funds' quarterly liquidity option can lock up depending on withdrawal queues and market conditions.

UBTI

Most funds will structure investments to minimize the impact of Unrelated Business Taxable Income (UBTI). However, certain investments may result in the generation of UBTI. To remedy this, managers may have offshore blocker vehicle options.

ERISA Fiduciary

Most infrastructure managers are not ERISA fiduciaries by accepting less than 25% of ERISA commitments or by becoming exempt by registering as a venture capital operating company (VCOC). If either of these cases, managers will not comply with ERISA standards.

Implementation Considerations – Manager Selection

What does Mariner look for when evaluating infrastructure managers?

Institutional Standards

We prefer firms that are registered with the SEC, have formal disaster recovery plans, and have audited financial statements. These standards represent industry best practices and enable investors to make more informed decisions in the investment selection process.

Team Stability

We believe that it is beneficial to partner with a team that has had minimal turnover of key professionals responsible for generating the strategy's track record.

Investment Process

We look for a disciplined approach to capital deployment, with clear criteria for asset selection, value creation, and exit strategies that align with investor objectives. Additionally, we prioritize managers with a demonstrated ability to navigate market cycles and effectively manage downside risk.

Track Record

We prefer strategies with at least a three-year institutional track record. Past success relative to strategies taking similar risks, including in adverse environments, increases our confidence that the strategy will be successful in the future.

Availability & Price

We prefer managers with both reasonable fees and adequate vehicle types, which are consistent with institutional market standards.

Glossary

Glossary

Brownfield – projects that have existing assets generating cash flow.

Capital Call – Occurs when a manager requests a transfer of the portion of the investors' committed capital. The called capital is utilized by the manager to make investments and cover expenses.

Carried Interest – performance fee collected by the manager on profits in excess of a predetermined return referred to as a preferred return.

Closed-end Fund – A fund with specified term the manager must liquidate the investments by, generally eight years or longer.

Committed Capital – The amount of capital an investor has agreed to invest in a closed-end, private infrastructure fund. The capital is called on an as needed basis by the manager.

Greenfield – projects that include the construction of new assets.

Investment Period or Commitment Period – Refers to the established length of time a manager can call capital for new investments, generally three to four years.

Monopolistic – markets in which a product is controlled by a single producer and there are few, if any, substitutes.

OECD – Organization for Economic Co-Operation and Development whose members are predominantly developed countries with high per capita income, as classified by the World Bank. They typically have advanced economies, high living standards, and well-developed infrastructure.

Open-end Fund – A perpetual fund with no set end date. New investors buy in at the current Net Asset Value and existing investors sell at the current Net Asset Value.

Preferred Return – Also referred to as a hurdle rate. The minimum level of return the investment or fund needs to earn before the manager can earn carried interest.

Vintage Year – The calendar year in which the manager begins investing capital of an infrastructure fund.

Disclosures

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