

Investing in America's Future Infrastructure

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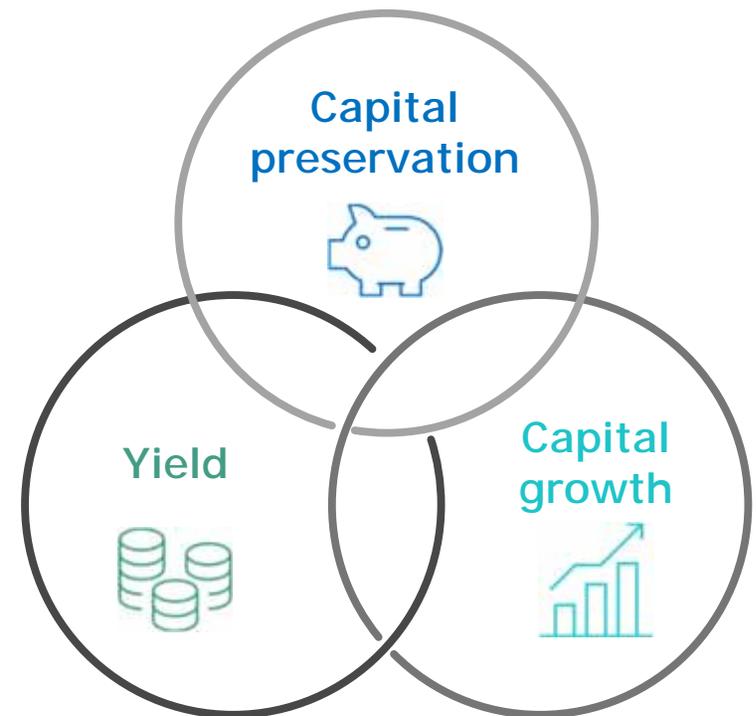
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What Is Infrastructure?

Infrastructure Can Meet Different Investor Needs

- Infrastructure can solve for different investors' needs of capital preservation, yield and capital growth



Please refer to important notice and disclaimer regarding forward looking statements

Defining Infrastructure

Key characteristics of infrastructure assets

Essential services

Capital intensive/
high barriers to entry

Long operational life

Low demand
elasticity

Inflation linked cash
flows

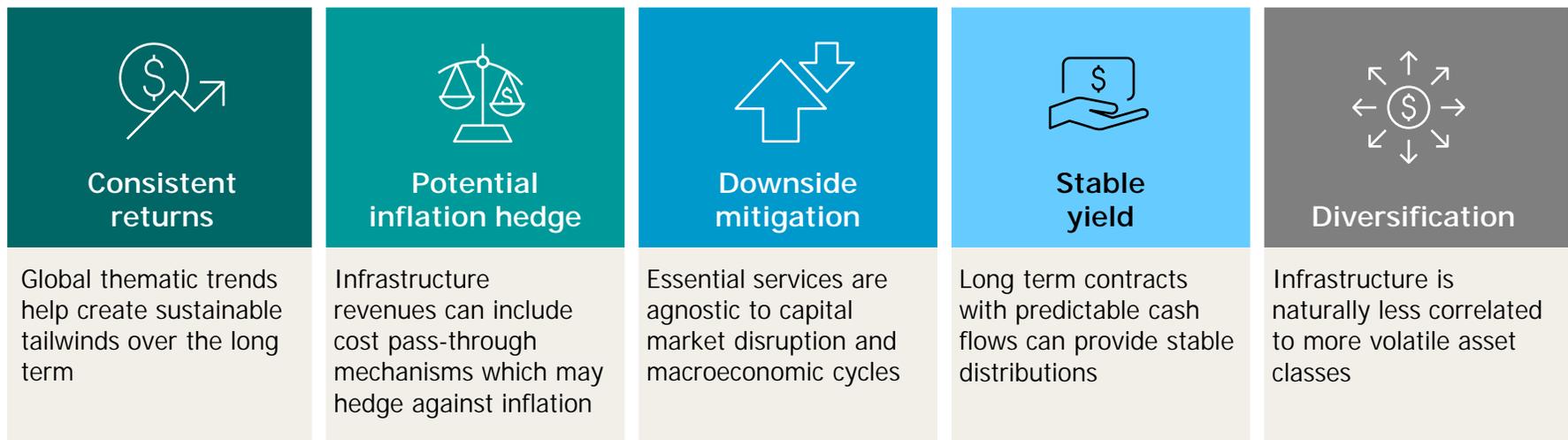
Stable, predictable
cash flows



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Investment Attributes of Infrastructure

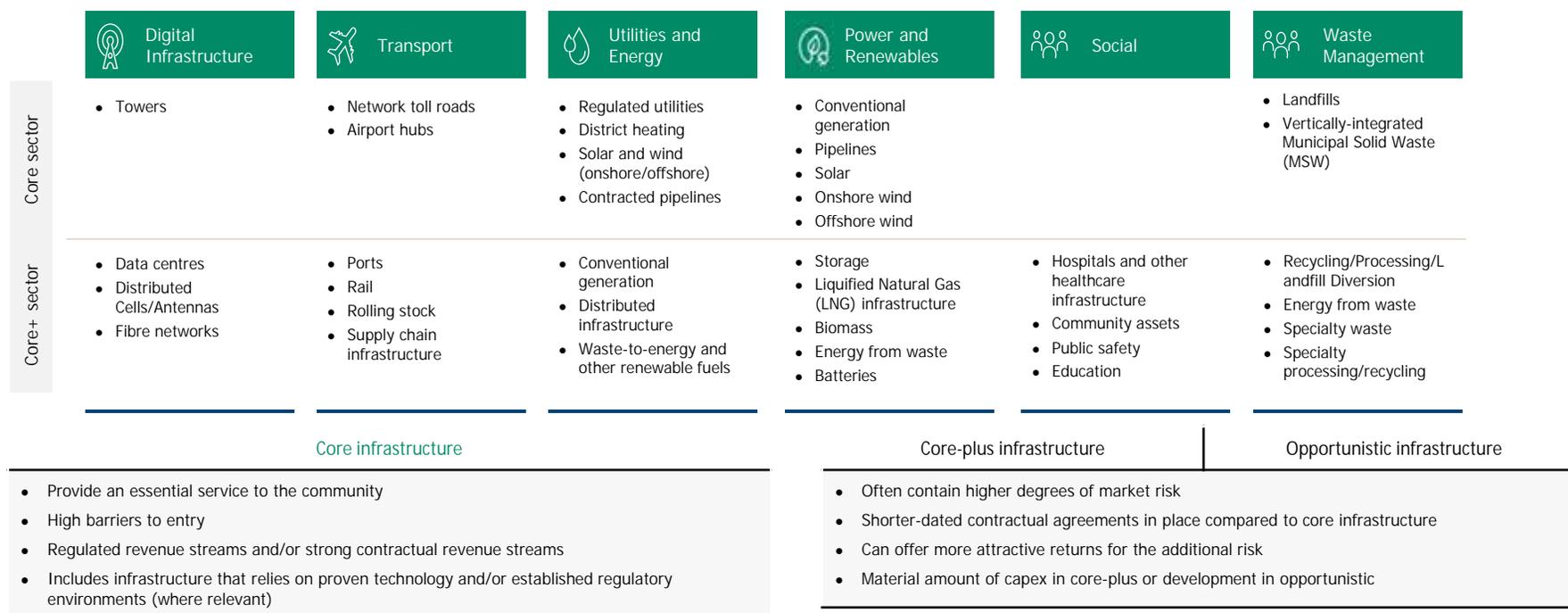
How infrastructure's attributes have the ability to translate into essential portfolio benefits¹



1. Capital is still at risk—the value of investments may fall as well as rise and you may not get back the amount originally invested.

Infrastructure Subsectors

Infrastructure encompasses a diverse range of subsectors



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Infrastructure Risk Profiles

Leverage
Stage of development
Geography



Regulated

- Cost of capital
- Inflation
- Incentives
- Operating efficiency
- Capex efficiency
- Independence of regulator
- Consumer cost
- System stability



Contracted

- Counterparty strength
- Customer integration
- Licensing/concession changes
- Contract renewals
- Inflation pass through

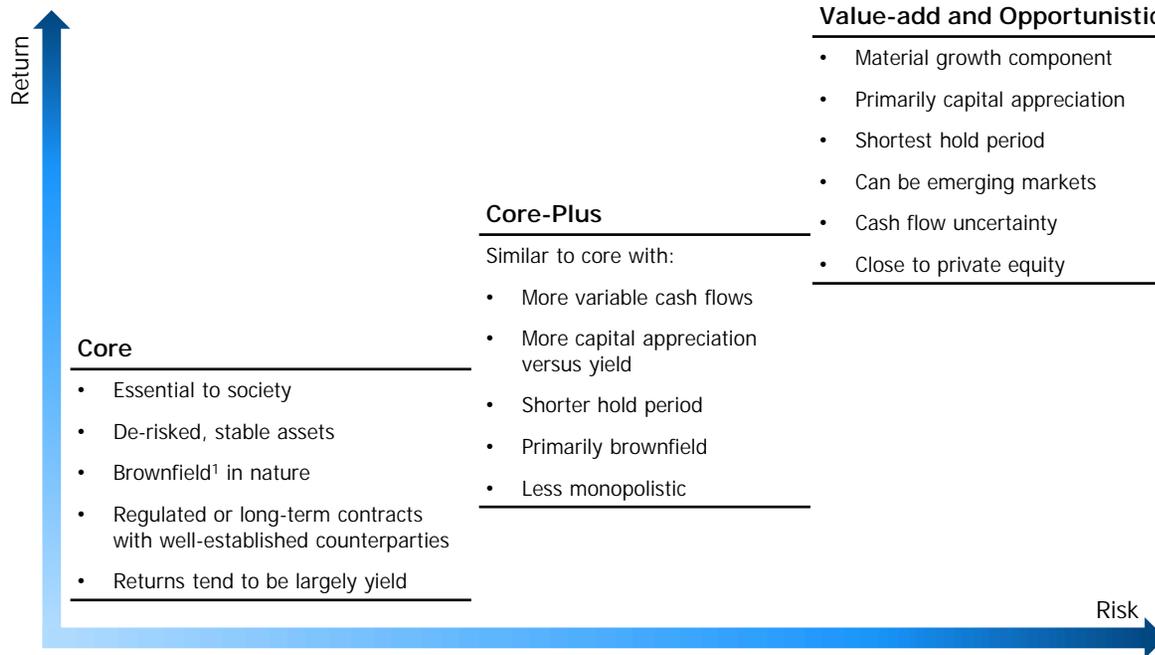


Volume

- User levels
- Price controls
- Elasticity of price increases
- Competitive landscape
- Correlation with macro economics

Risk-Return Characteristics

Infrastructure can be accessed across the risk-return spectrum



Risk and returns based on a range of factors including:



Geography



Leverage



Technology

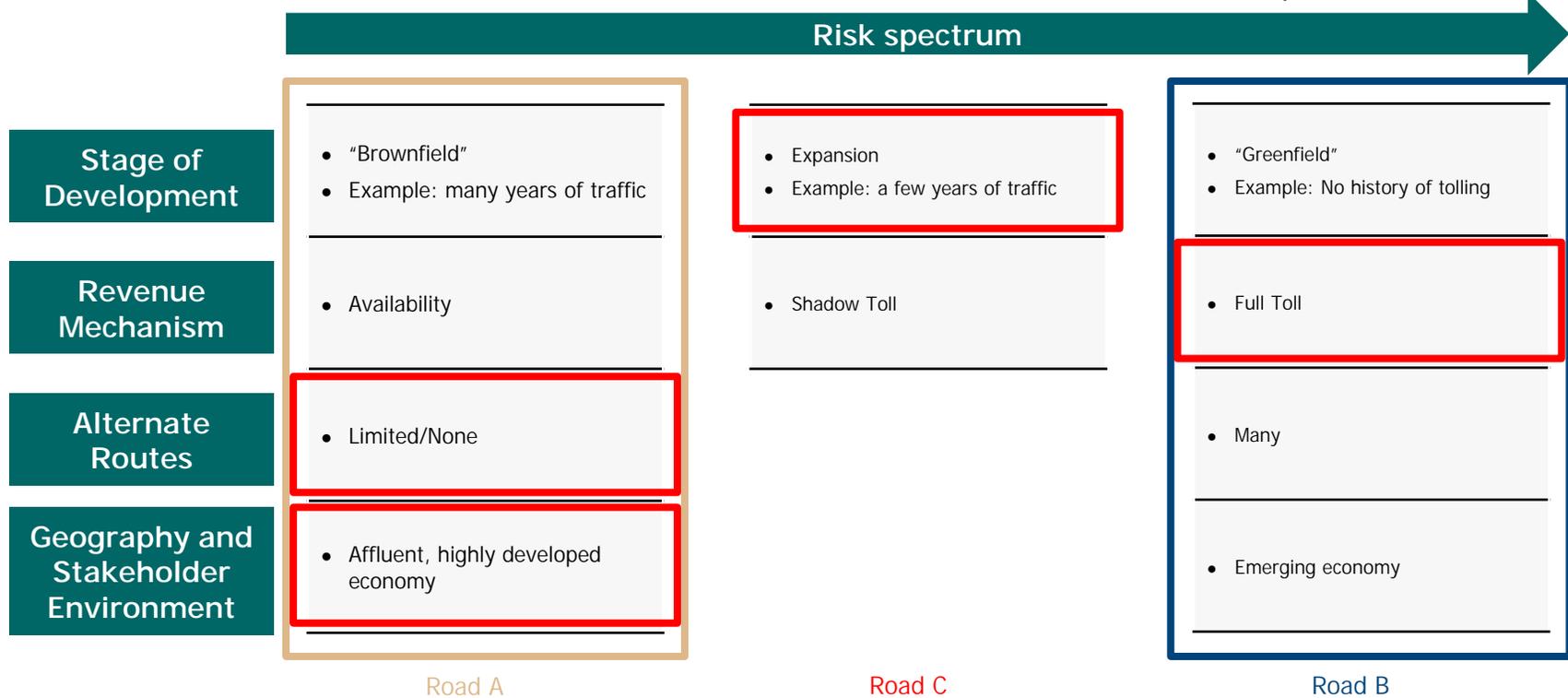


Market risk

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 1. Brownfield means the asset is built and investments are substantially capex focused. Chart is for illustrative purposes only. Source: Mercer, Infrastructure Investing—A Primer, 2021

Diversification Within Subsectors

There is no "one size fits all" in each infrastructure subsector as well as risk-return profile



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In the Current Market

Why Is Infrastructure a Highly Relevant Asset Class Today?



- **Defensive** asset class with the potential for **attractive absolute and risk-adjusted returns**
-



- Potential for stronger returns when **inflation** is above average
 - Potential for stronger returns when **interest rates** are high
-



- **Secular** and **political** tailwinds
-



- US investors are **under-allocated** to this **large asset class**¹
-

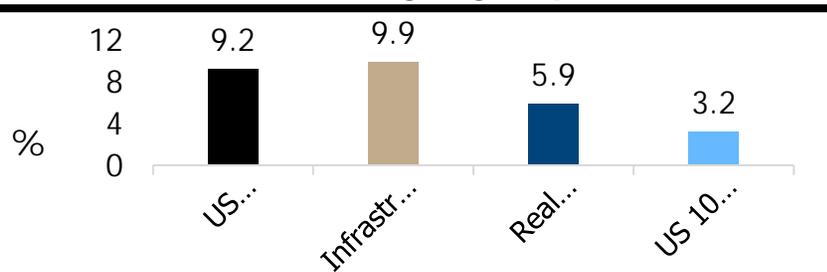
Past performance does not predict future returns—this has been prepared for educational purposes only.

1. Shown by Preqin institutional market data retrieved in December 2023 compared to other developed markets

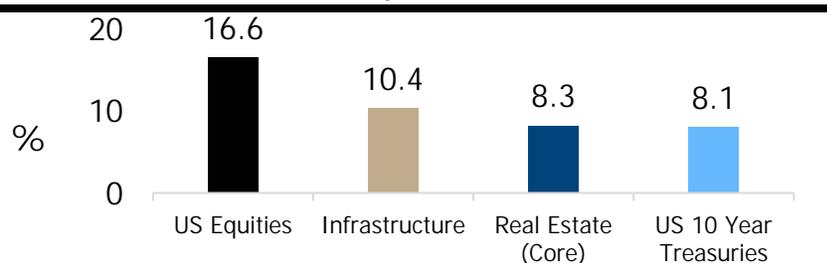
Infrastructure Has Delivered Strong Risk-Adjusted Returns

Higher returns offered while experiencing lower volatility

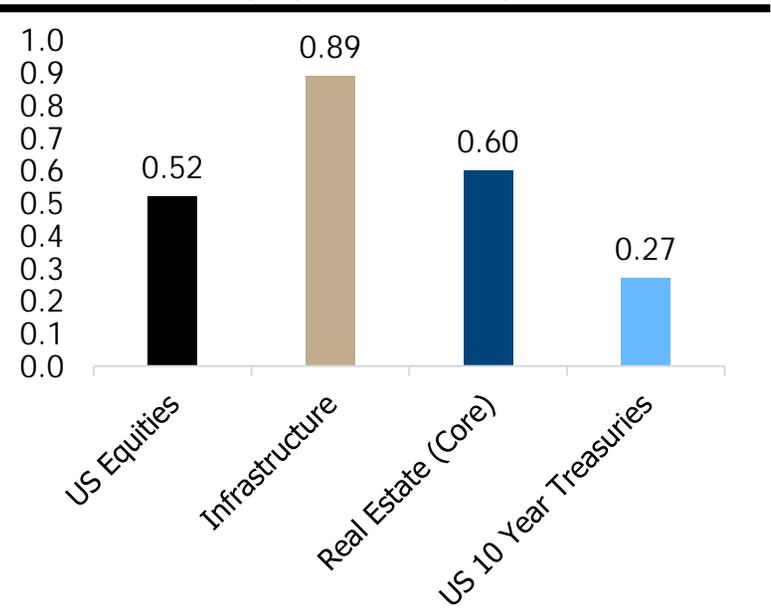
Infrastructure's strong long-run performance



Greater volatility than real estate and bonds, less than equities¹



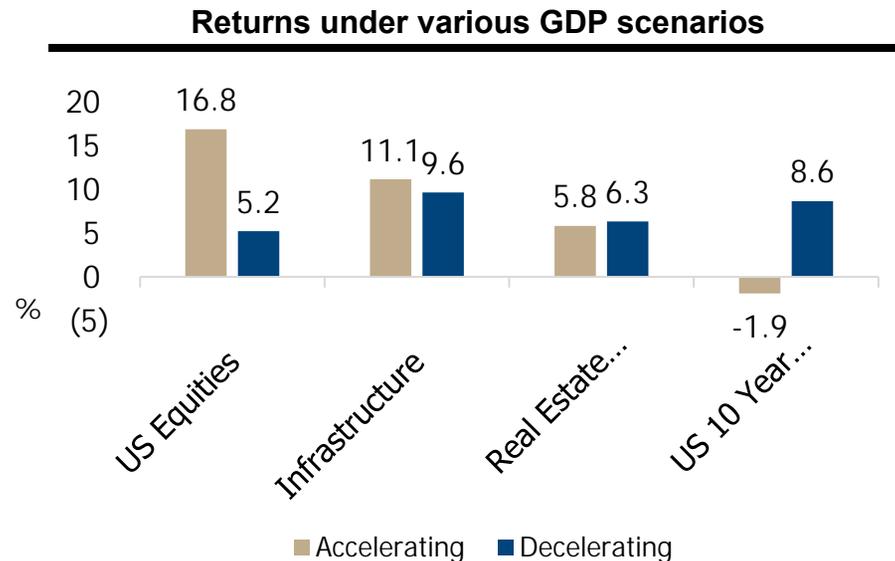
Risk-reward proposition—Sharpe Ratio²



This has been prepared for educational purposes only. Analysis period is quarterly, using data from 4Q 2003 to 1Q 2023 except the real estate index which starts from 4Q 2004. Sources: Bloomberg Finance LP, Cambridge Associates Infrastructure Index (CAII). For equities we use S&P 500® Total Return Index as a proxy. For infrastructure we use the CAII and calculate the returns net of fees and expenses. For real estate we use INREV Global Real Estate Fund Index (GREFI) which refers to core property performance gained via fund structure with low levels of leverage, and excludes land, developments, and alternative property sectors. We use Macrobond for real estate and gross domestic product (GDP) growth and inflation for individual countries. We use the International Monetary Fund for the country weights that go into the calculations for GDP growth and inflation. Note that any published rankings or similar groupings have inherent limitations and qualifications, such as limited sample size, imperfect access to information and other considerations. Past performance is not an indication of future results. 1. Measured in annualized standard deviation 2. Risk-free rate of 1-year US government bond yield used. Sharpe ratio measures the relationship between reward and risk in an investment strategy. The higher the ratio, the greater the investment return relative to the amount of risk taken. (August 2023)

Infrastructure Has Delivered a Smoothed Return Profile When Compared to Equities

Creating alpha through consistency



Similar downside to real estate but more upside participation



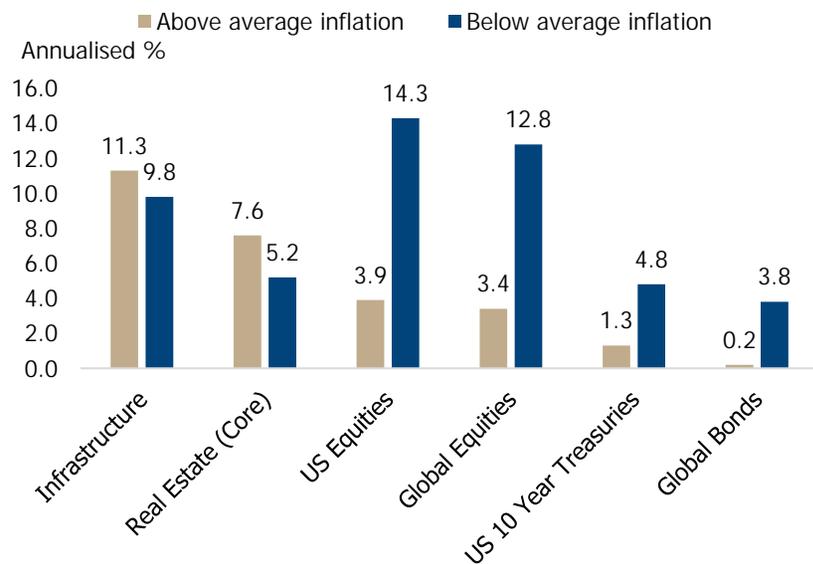
Significant outperformance compared to equities when GDP is decelerating

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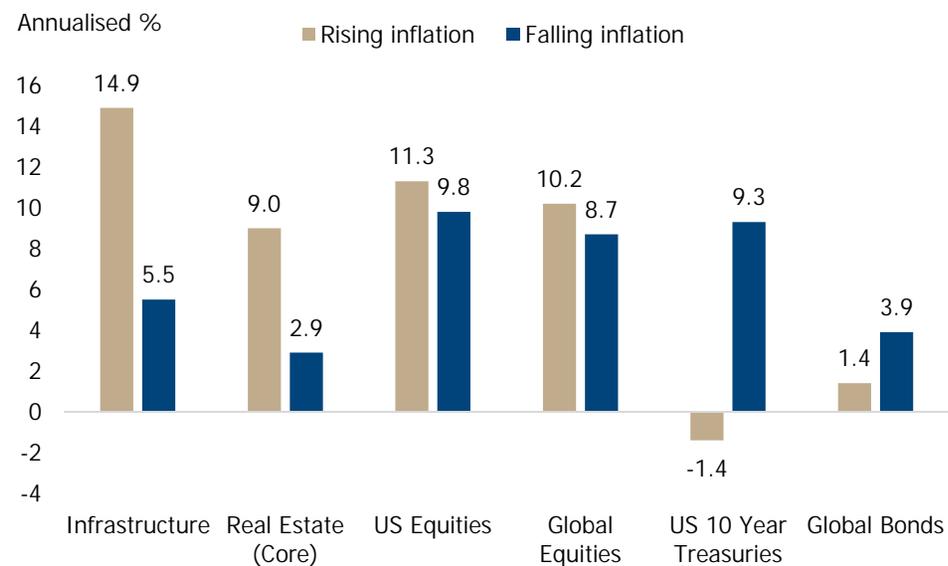
Infrastructure and Inflation

The infrastructure asset class can offer an attractive inflation hedge

Returns versus inflation—Above and below average

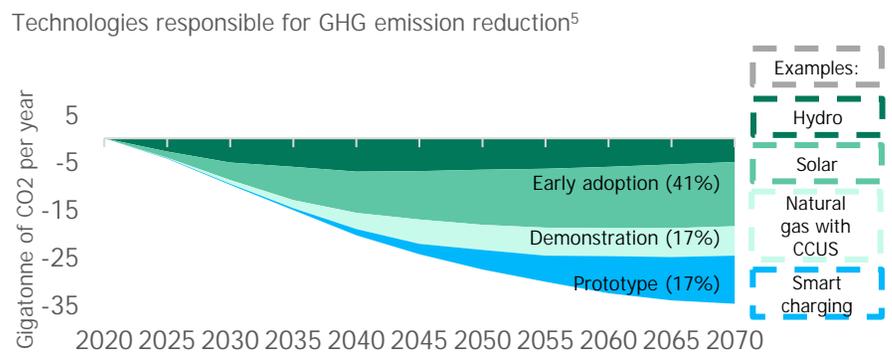
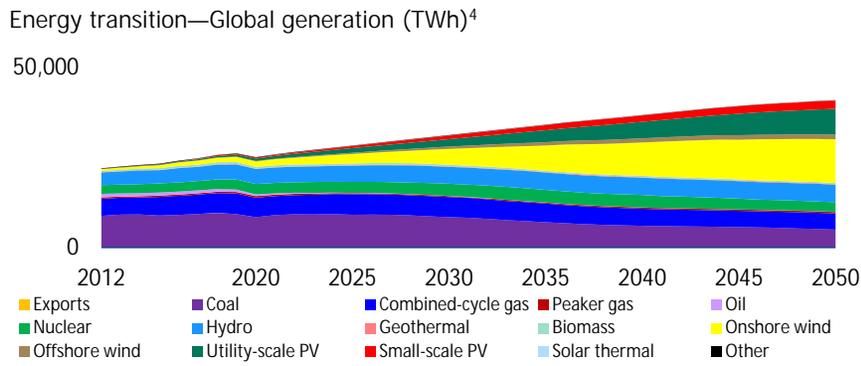
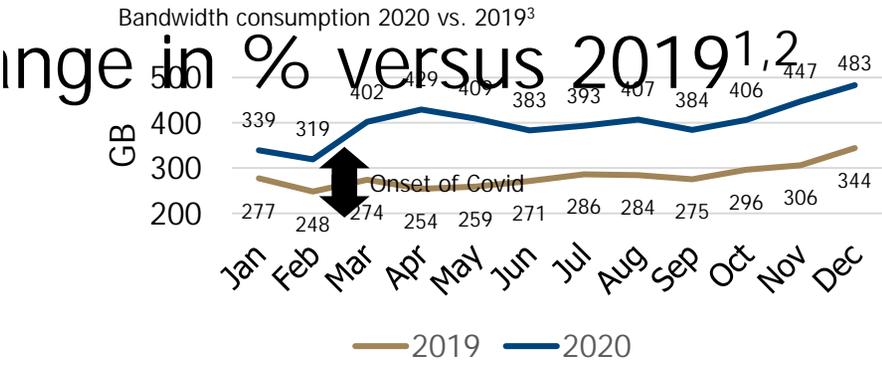
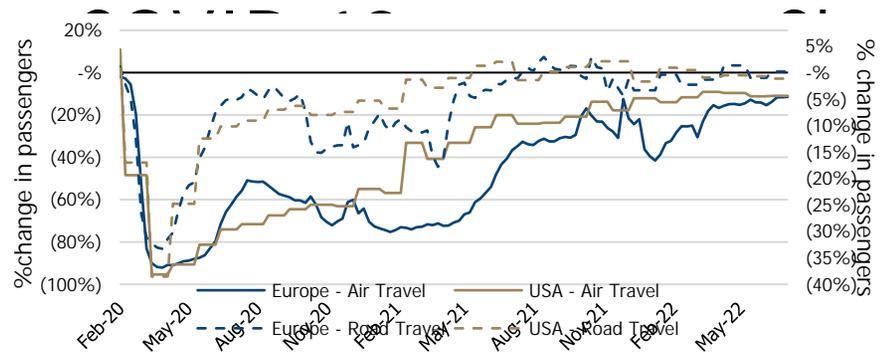


Returns versus inflation—Rising and falling



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Macro Trends Support Infrastructure Investing



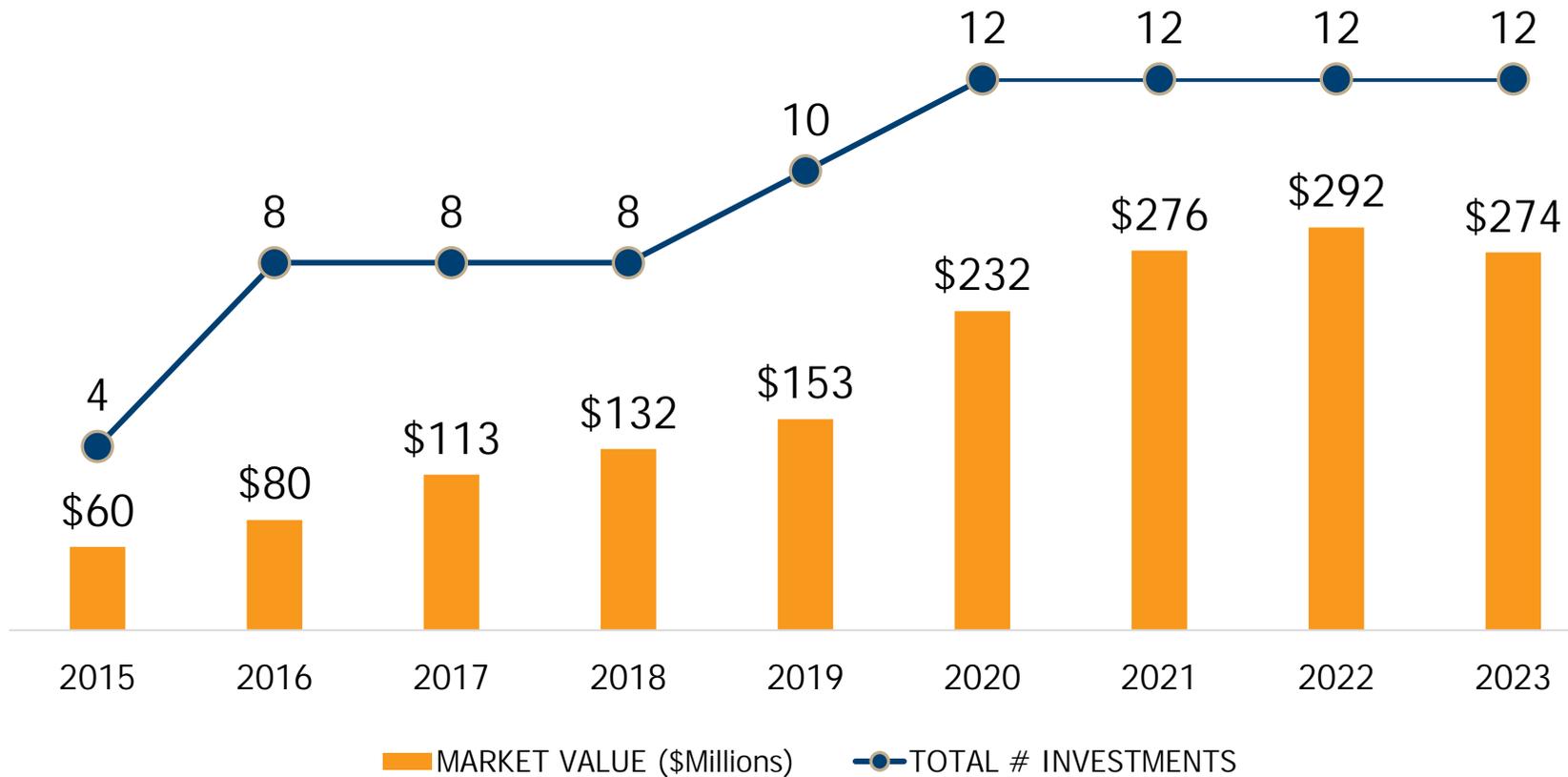
Past performance does not predict future returns—this has been prepared for educational purposes only. 1. European Organisation for the Safety of Air Navigation (EUROCONTROL), US Transportation Security Administration (TSA). 2. Atlantia (Europe is average of Italy's ASPI network, France's SANEF and Abertis' Spanish toll road portfolio), US Department of Transportation (vehicle miles travelled on all US roads). Latest data available shown for metrics (as at July 2022), European data on weekly basis and US data is monthly. 3. OBVI Broadband Insights Report. 4. Source: BNEF, November 2020. 5. IEA, Global energy sector CO2 emissions reductions by current technology, July 2020.



Who We Are—LIUNA

- Over 530,000 members in the US and Canada
- Second largest construction union in the United States
 - Over 80 pension and annuity funds
- Roughly \$65 Billion in pension assets

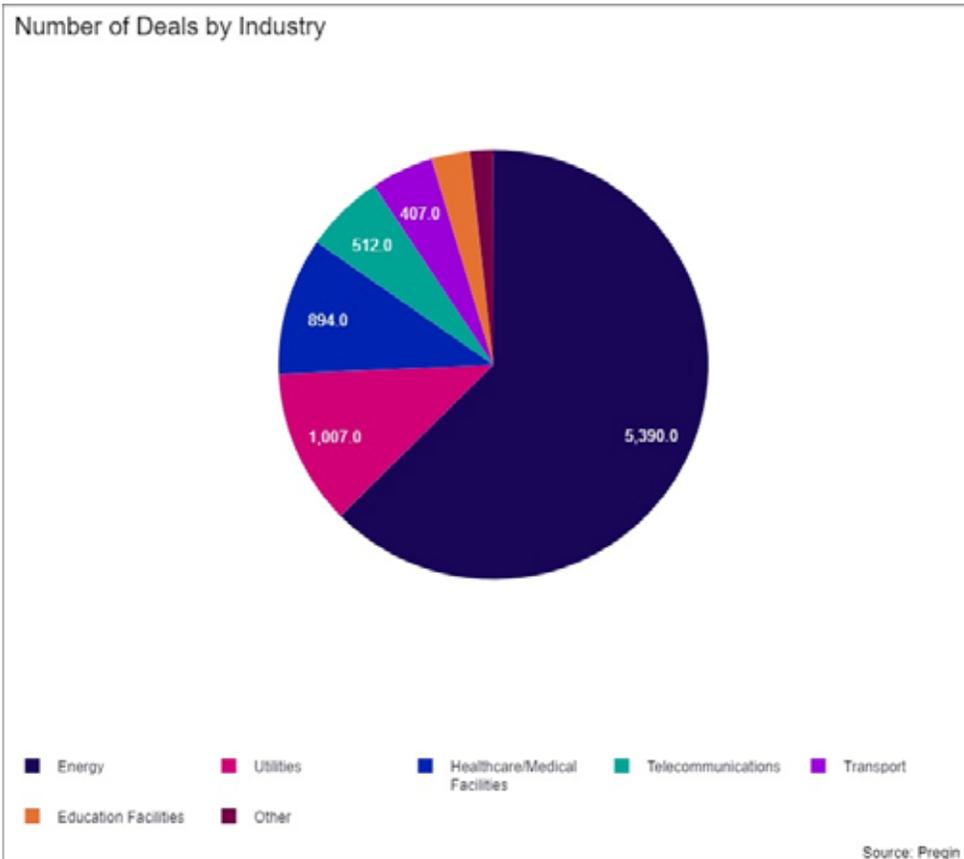
Sample Plan Shows Steady Growth in Infrastructure Investing



Thoughts From 10 Years of Infrastructure Investing

- 10-year return experience >10%
- 7-9% of total assets
- Stability of cashflows
- Diversity of investment options
 - Open vs. Closed-end vehicles
 - Greenfield vs. Brownfield
 - Large scale vs. Smaller scale
 - Geographic diversity

What Are Infrastructure Managers Investing In? 10 Years of Data



- 62% of Deals in Energy
- 11% in Utilities
- 4.7% in Transport
- 6% Telecommunications

What Is the IRA?

“Clean energy is now the safe, smart, government-backed bet for conservative investors.”



How Does the IRA, IIJA, CHIPS Impact Investing Opportunities?

- Tiger Infrastructure Fund, TPG
- Economics driven by 45Q



How Does the IRA, IIJA, CHIPS Impact Investing Opportunities?



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Deals

GIP, CPP target US utility decarbonisation with \$6.2bn deal

While CPP Investments has previous experience in the sector, the take-private of Allete marks GIP's first deal in the US utility space.

Zak Bentley - 9 May 2024



Policy Tailwinds— Real Examples

Recent Federal Legislation Has Resulted in New Opportunities and Created a Fast-Moving Federal Grants Landscape

Biden Administration Goals and Priorities¹

	Infrastructure Investment and Jobs Act (IIJA) ¹	Inflation Reduction Act (IRA) ¹	CHIPS and Science Act ¹
 Significant local or regional economic impact			
 Workforce development and training for jobs of the future			
 Climate change, clean energy, energy efficiency			
 Affordable and sustainable housing			
 Strengthen US manufacturing (“Buy America, Build America”)			
 Benefits for economically disadvantaged communities			
 Position the US as a world leader in progress to net zero			
	<p>2021</p> <p>Goals: Rebuild American infrastructure, enhance sustainability and climate resilience, and improve community connectivity.</p> <p>Total funding: \$1.2 trillion</p> <p>Focus area(s): Infrastructure (broadband, power, transportation, water), public transit and EVs, cyber and climate resiliency, environment</p> <p>(Note the IIJA is also referred to as the Bipartisan Infrastructure Law)</p>	<p>2022</p> <p>Goals: Ensure that the United States remains a global leader in clean energy technology, manufacturing and innovation.</p> <p>Total funding: \$369 billion</p> <p>Focus area(s): Clean manufacturing, energy efficiency, pollution reduction, environmental justice, transportation electrification, GHG reduction fund</p>	<p>2022</p> <p>Goals: Boost domestic research and manufacturing of semiconductors in the United States.</p> <p>Total funding: \$280 billion</p> <p>Focus area(s): Chip manufacturing, semiconductor research, workforce training, manufacturing equipment</p>

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MAM Government Grants Project

Over \$850m in federal grant dollars secured to date, with over a dozen other grants currently being considered or applied for by portfolio companies.

Opportunity

- Following signing of the IIJA (Nov 2021), and the IRA (Aug 2022), federal, state and municipal governments are committed to jump-starting private infrastructure projects in their communities.
- **\$1.5 trillion+** is currently available to fund projects in the US. MAM has the opportunity to assist portfolio companies to access these resources

Process

- MAM is working with portfolio companies to identify and pursue grants that align with their areas of focus.
- Guidehouse has been engaged to help identify specific needs and interests of each portfolio company. Through these workshops, we successfully identified **85 grants** and presented them to the portfolio companies.
- In May 2024, a two-day MAM Government Affairs and Sustainability conference was held in D.C with representatives from **28 portfolio companies**

Successes to Date

Portfolio Company	Total
Digital infrastructure	\$189.9M
Green Investments	\$239.4M
Transportation	\$371.3M
Utilities & Energy	\$79.8M
Waste Management	\$9.1M
Total	\$889.5M

Current opportunities

- MAM government affairs will continue to implement the plan of action and phase II efforts with Guidehouse for program monitoring services, screening assessment for applicability and prioritization, and grant pursuit support.

Impact Assessment of Key Inflation Reduction Act Provisions

This document seeks to provide a high-level overview of certain of the provisions in the Inflation Reduction Act and their application to certain sectors in which MAM is seeking to make investments. Given the nature of many of the programs created, extended, expanded, or augmented by the new law, provisions are presented as simplified descriptions. Ability to realize the stated incentives may require certain obligations to be met and may not be applicable to all applications of the stated technologies. None of the information contained this presentation should be relied upon for specific investments and the actual text of the law should be referred to.

Provisions	Key Elements ¹	Direct MAM Energy Transition Sector Impact ¹ ↑	Indirect MAM Energy Transition Sector Impact ¹ ↑
Extension of Legacy Wind and Solar Credits	<ul style="list-style-type: none"> Extension of Production Tax Credit ("PTC") for wind and reinstatement of PTC for solar 	 Wind and Solar	   Green H2 H2 Derivatives (Ammonia, Methanol) Battery Storage
New Technology Neutral Credits	<ul style="list-style-type: none"> Up to 30% Investment Tax Credit ("ITC") for broader array of technologies including biogas and energy storage 	   Battery Storage H2 storage Biogas	  Green H2 Blue H2
Carbon Capture Credits Increase	<ul style="list-style-type: none"> Increased tax credit for carbon capture and sequestration (\$85/t) and enhanced oil recovery (\$60/t) Increase in direct air capture and sequestration (\$180/t) 	  Point Source Carbon Capture Direct Air Capture	  Sustainable Aviation Fuel Clean Fuels
Hydrogen Tax Credits	<ul style="list-style-type: none"> 10-yr PTC for clean H2 tied to lifecycle GHG emissions Green H2: PTC and ITC of up to \$3/kg and 30%² Blue H2: PTC and ITC of up to \$1/kg and 10%² 	  Green H2 Blue H2	   Sustainable Aviation Fuel H2 Derivatives (Ammonia, Methanol) Clean Fuels
Advanced Manufacturing Tax Credits	<ul style="list-style-type: none"> New PTC for eligible components produced in the US Extension of up to 30% ITC for manufacturing of specified renewable energy equipment 	 Infrastructure-Enabling Tech	    Green H2 Blue H2 BEV and FCEV CCUS
Clean Fuels Tax Credits	<ul style="list-style-type: none"> Extension of biodiesel and renewable diesel tax credit through end of 2024 New sustainable aviation fuel credit through 2024 New clean fuel credit from 2024 through 2027 	  Sustainable Aviation Fuel Clean Fuels	  Green H2 Blue H2
Clean Vehicle Tax Credits	<ul style="list-style-type: none"> Up to \$7.5k per vehicle (battery or fuel cell) Up to \$40k per commercial vehicles (battery or fuel cell) Up to \$100k for alternative fuel recharging property 	   BEV and FCEV H2 Charging Heavy Transport	   Green H2 Blue H2 Battery Storage
Greater Monetization Flexibility/Direct Pay	<ul style="list-style-type: none"> Increased tax credit monetization flexibility through direct pay or transferability outside tax equity structure; particular benefits for H2 and carbon capture 	<u>Direct Pay Flexibility</u>    Green H2 Blue H2 CCUS	<u>Tax Credit Transfer</u> All sectors

Note: Please refer to the Important Notice and Disclaimer regarding forward looking statements. Strategies referenced and described herein refer to MGETS objectives. There can be no guarantee that such strategies, or any portion thereof, will be executed by MAM's Energy Transition funds or in any given investment, or that they will be successful if executed. There can be no assurance that MGETS will be able to implement its investment strategy or achieve its investment objectives. 1. Macquarie analysis based upon the new law text and summaries of the new law created by BNEF, Vincent & Elkins, and Latham & Watkins. 2. Assumes lifecycle emissions of 0 kg of CO2 per kg of hydrogen (green) and 0.45 kg of CO2 per kg of hydrogen (blue) multiplied by factor of 5, respectively.

Key Takeaways

Key Takeaways

- Infrastructure investing, which is focused on long-term investing in businesses and assets providing essential services to the community, can provide significant potential benefits to pension fund investors.
- The infrastructure asset class is increasingly well developed, with a number of high-quality managers in the space, plus range of different products, risk-targeted return profiles and routes to deploy capital.
- Over time infrastructure has provided strong risk-adjusted returns, and arguably should be an attractive asset class at a time of economic uncertainty, characterized by high inflation and interest rates.
- Whether in the US or globally, a number of key “mega trends” are driving significant growth in infrastructure, creating an expanded set of investment opportunities.

Key Takeaways

- IJA, CHIPS, and IRA, are primarily driving energy transition investments for pension fund infrastructure portfolios.
- Infrastructure investment opportunities in transit, airports, roads, are still relatively rare in the US even though IIA has tried to incentivize more public private partnerships.
- Concepts like prevailing wages and apprenticeship that have for decades only been used in the public construction sector have been pushed into the private sector via tax credits in the IRA. Infrastructure investment managers face real financial risks if they fail to accurately understand and implement these new labor provisions on clean energy investments.

Key Takeaways

- Concepts like prevailing wages and apprenticeship that have for decades only been used in the public construction sector have been pushed into the private sector via tax credits in the IRA.
- Infrastructure investment managers face real financial risks if they fail to accurately understand and implement these new labor provisions.

Key Takeaways

- Trustees should use this new opportunity to insist on stronger responsible contractor policies for infrastructure investments they make, and ask consultants to rank investment manager expertise on implementing these policies or use things like the NABTU scorecard.

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Session Evaluation



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