

INFRASTRUCTURE MARKET UPDATE

EMPLOYEES RETIREMENT SYSTEM OF RHODE ISLAND

Presented by:

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Infrastructure Market Highlights

- There are 221 unlisted infrastructure funds seeking a total of \$149 billion in capital as of the first quarter of 2015
 - 56% of managers raising capital have been marketing their offerings for more than a year and a half
 - \$10.7 billion in total capital was raised by unlisted infrastructure funds during the first quarter of 2015
 - Funds have decreased in size with average fund size now at \$767 million, down from \$885 million in 2014
- Global/multi-regional funds are dominating infrastructure fundraising, representing 55% of total capital raised during the first quarter of 2015
 - Asia-Pacific, North America and Western Europe continue to be the main geographic focus with Latin America gaining momentum in terms of the number of funds in market and target size
- Transportation has surpassed energy to become the most popular sector in terms of combined deal value
- There is an Increase in demand for direct exposure as investors seek new ways to access infrastructure; other ways include co-investing and separate accounts
- Improvements in the alignment of interests between limited partners and general partners
 - Investors continue to push back on 2% / 20% private equity fee structures
 - ❖ Most investors are targeting 1% - 1.25% management fees on core and value-added brownfield infrastructure funds
 - 59% of funds are now charging less than 2%
 - 42% of investors now feel that fund managers' and investors' interests are appropriately aligned

Current Market Conditions

- Institutional investors' appetite for infrastructure investing has moved beyond core brownfield infrastructure assets
 - Interests in value-added brownfield and greenfield infrastructure assets have surged
 - Investors increasingly create separate infrastructure allocations as the market develops and seek new ways to access infrastructure through direct and co-investments
- The number of infrastructure deals slightly increased in 2014 after a dip in 2013
 - The number of infrastructure deals completed in 2014 totaled 64, compared to 61 in 2013¹
- Asset values in the infrastructure space continue to trend upward
 - Competition for infrastructure deals remain intense as investors seek attractive, stable long-term returns but find limited opportunities
 - Investment managers that are able to source proprietary deals show more clear competitive edges
- Different market sectors exhibit distinct competitive landscapes
 - Middle market is becoming more crowded due to the influx of capital targeting this market
 - Smaller projects show the least level of competition, still overlooked by most infrastructure investors
 - Mega scale investments are likely to be highly competitive, due to concentration of capital in limited number of large scale investors
- Only a small number of investors focus on PPPs in North America
 - There is still great uncertainty around political risk upfront
 - Availability of tax-free municipal bonds that provide financing for public projects further limit the use of PPPs

¹: InfraDeals.com, PwC Analysis
Source: PwC U.S. Infrastructure Deals 2014 and 2015 Outlook, Hermes GPE

Current Market Conditions

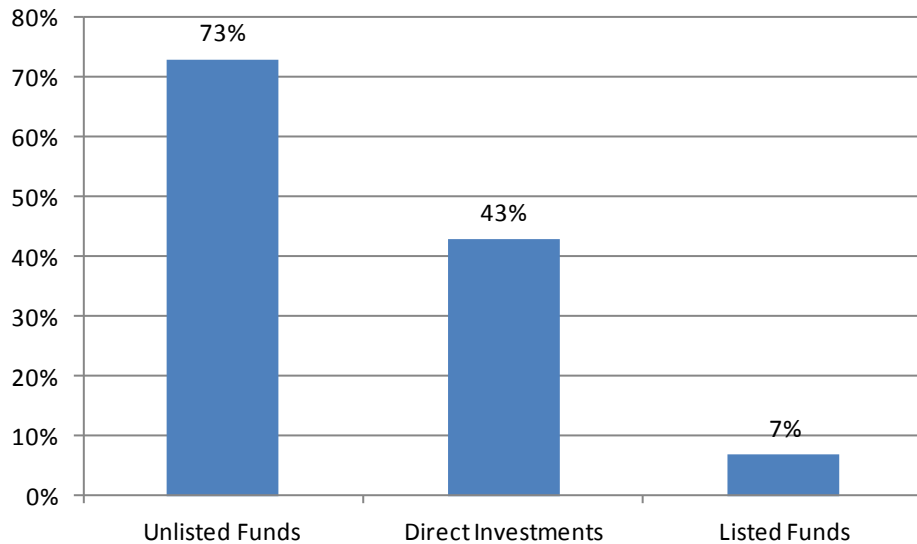
Energy Market Updates

- The plunge in world oil prices is slowing activity involving energy and power infrastructure, with many of the deals coming from distressed sellers
- Asset values in energy sectors, specifically in power generation, are under pressure as revenue forecasts are declining
 - Even for contracted assets, weaker pricing forecasts could result in lower forecasts post contract periods
 - As long term forecasts of fossil fuel prices are stabilizing at lower levels compared to last year, electricity price forecasts are also following suit
- Renewable energy projects accounted for the majority of energy and power deals in 2014
 - Number of renewable energy deals reached 43 in 2014 compared with 31 in 2013
 - Renewable assets with long-term contracts could gain relative value versus new development projects
- US natural gas prices have decoupled from oil prices over past five years, mainly due to increasing production from shale gas, prompting domestic gas-intensive industrial development and expansions
 - This has created a demand for infrastructure to access, deliver and store oil, natural gas and liquids
- Areas of interest by investors include intra/interstate pipelines, liquefied natural gas terminals, oil and gas gathering, storage and equipment and services
- The current MLP bear market that began in August 2014 represents the second largest decline in value in the history of MLPS as represented by the Alerian MLP Index, amounting to -40.1%, approaching the same levels started during the financial crisis in 2007
- MLPs are now attractively valued in comparison to many other equity securities and will likely generate double digit total returns over the next 12 to 18 months as the environment for energy companies improves
 - If commodity and MLP prices stay low, management teams may defer potential growth projects to avoid raising capital at depressed pricing

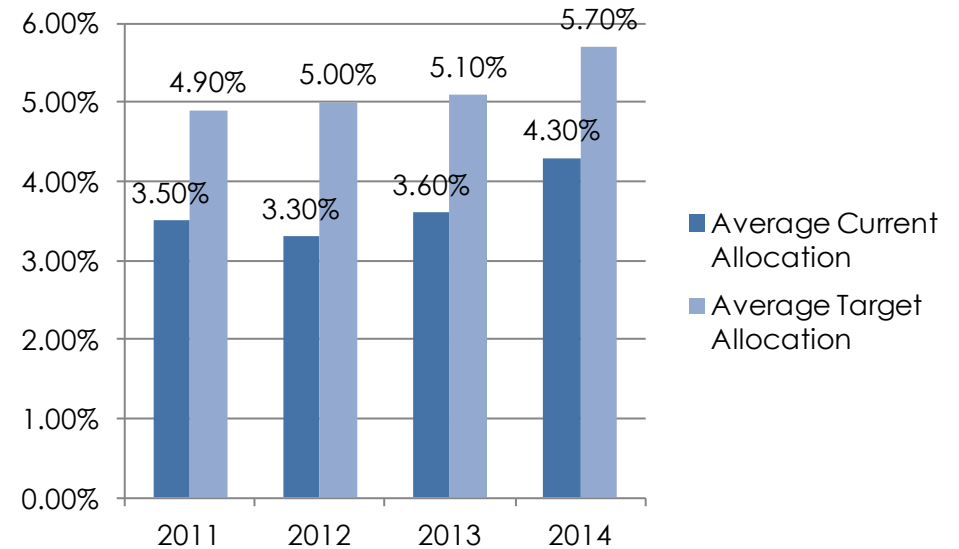
Source: Advisory Research, PwC, The Carlyle Group, JP Morgan

Infrastructure Investor Universe

Preferred Route to Market of Infrastructure Investors

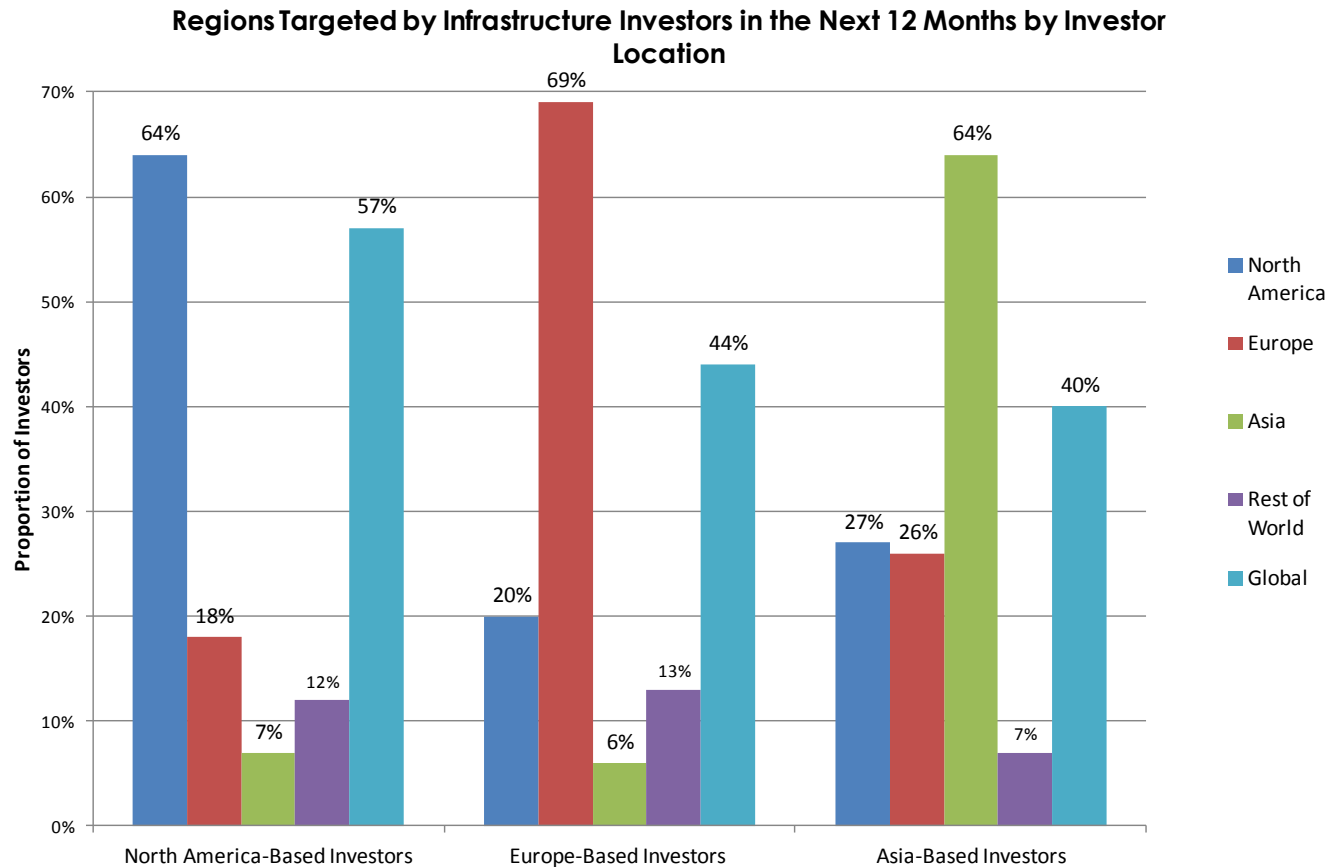


Average Current and Target Allocations to Infrastructure Over Time



- Investor interest in direct investments has grown from 33% in 2013 to 43% with both unlisted funds and listed funds decreasing slightly
- Over time, average investor current allocations to infrastructure have been steadily growing with targets at an all time high of 5.7%

Infrastructure Investor Universe



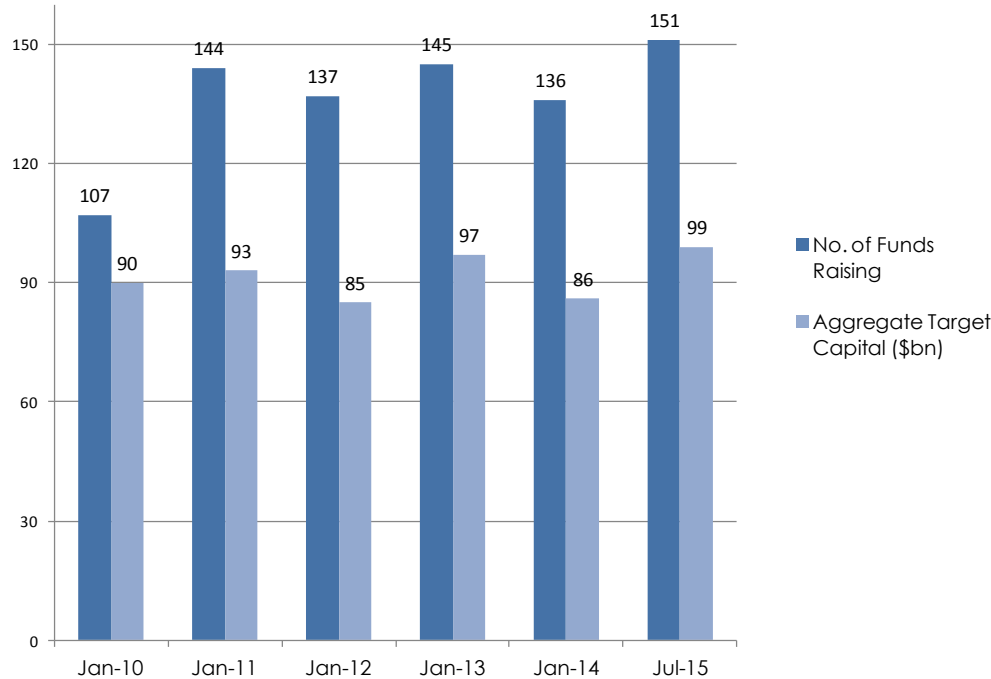
- Regions targeted by investors demonstrate a domestic bias
- All investors are increasing interest in global mandates
- Emerging market interest remains low as investors remain cautious

Challenging Landscape

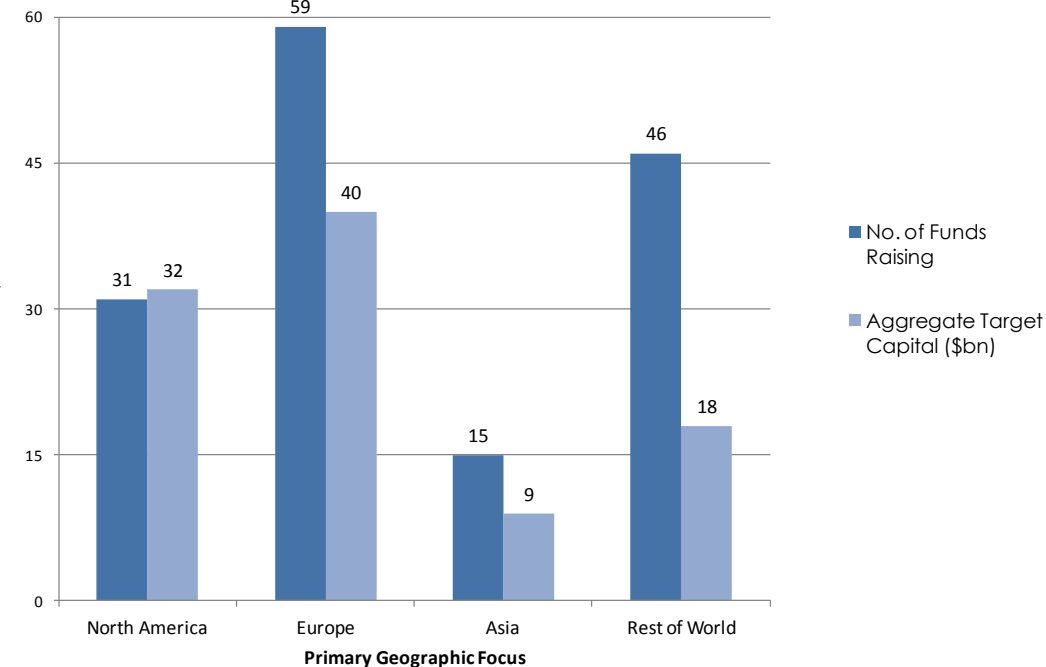
- Large funds raise a significant amount of capital
 - In 2014, 43 unlisted infrastructure funds reached a final close, with 10 funds accounting for 73% of capital raised
 - Blackstone Global Energy Fund II closed at \$4.5 billion; Legal & General UK Regeneration Fund-Co-Investment is looking to raise over \$22 billion for Western Europe projects
- With the increasing number of funds in the market, fund managers need to demonstrate a unique and compelling strategy
 - Fundraising remains a long and difficult process for many managers
- Ability to establish proprietary deal flow and deploy capital as competition for assets increases
- More emerging and spin-out infrastructure managers in the market
- Abundant dry powder can lead to higher auction activities and possible overpayment for assets
 - Asset prices continue to rise with the average transaction size reaching \$549 million in 2014, up 67% from 2013's \$329 million
- Increased competition for investor capital as investors become more diverse and complicated
- There are some concerns within the investor community over the performance of the infrastructure asset class

Infrastructure Fundraising Review

Unlisted Infrastructure Funds in Market over Time, January 2010 - July 2015



Breakdown of Unlisted Infrastructure Funds in Market by Primary Geographic Focus

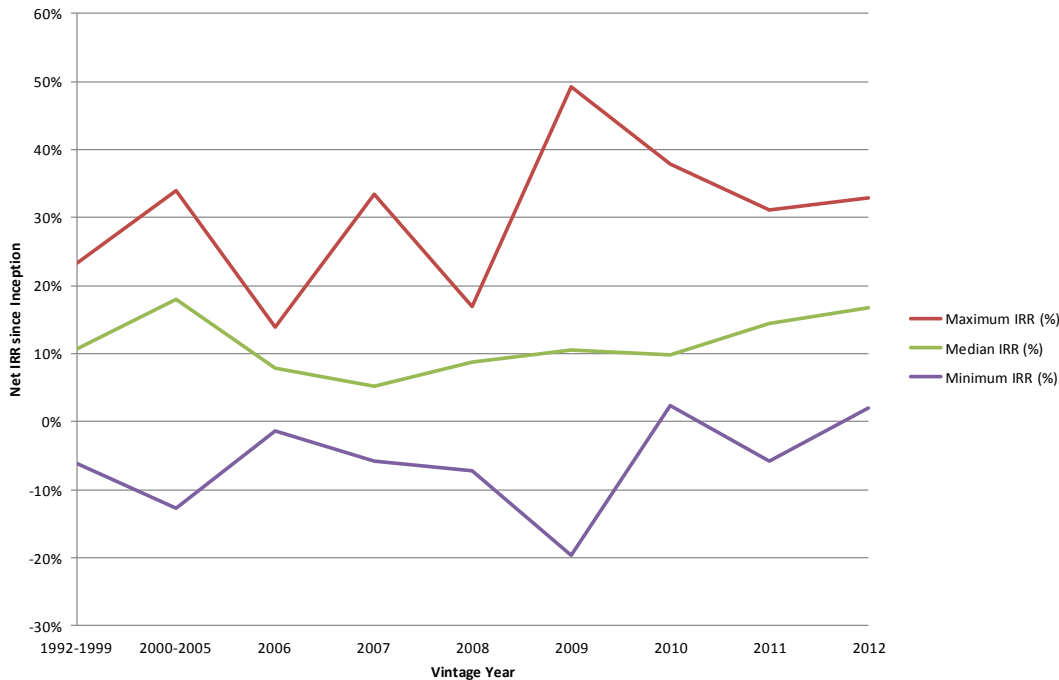


- The fundraising market remains competitive
 - 56% of funds on the market have yet to hold a first close
- Fund managers are continuing to bring new infrastructure funds to market
 - On top of the list is Alinda Infrastructure Fund III, looking to collect \$5 billion
- Average proportion of fund size achieved as of the first half of 2015 is 107%

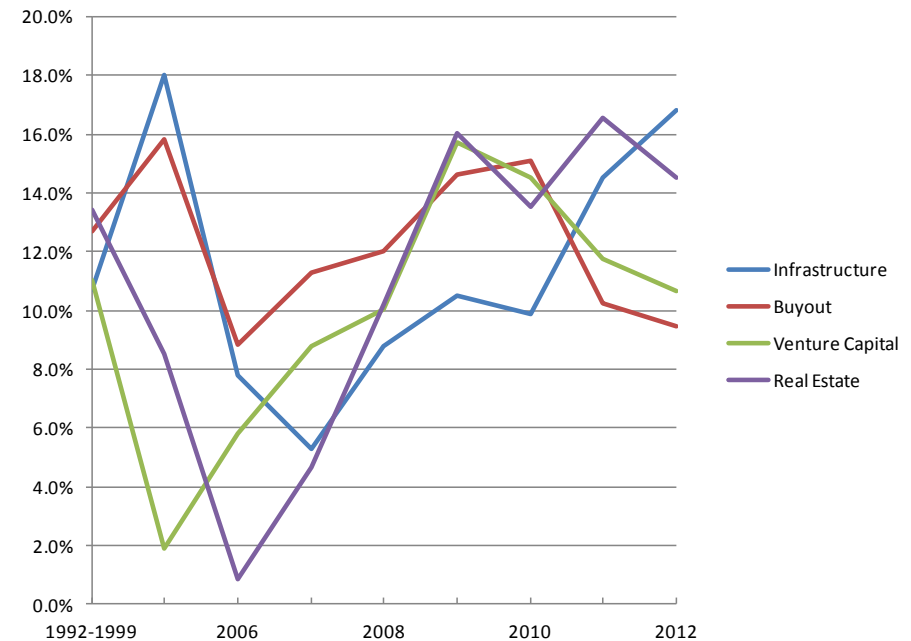
Source: Preqin Infrastructure Online September 2015

Historical Performance

Median, Maximum and Minimum Net IRRs for Unlisted Infrastructure Funds by Vintage Year



Infrastructure vs. Other Private Equity Strategies - Median Net IRR by Vintage Year



- Unlisted infrastructure funds with a vintage year of 2012 have a median net IRR of 16.8%
- Infrastructure funds of more recent vintages have multiples of closer to 1.0x.
- Infrastructure funds of older vintages have performed well.
 - Median net IRR for funds of vintages 1993-1999 is only slightly lower than private equity and real estate.

Source: Q2 2015 Preqin Infrastructure Quarterly Update

ERSRI Infrastructure Portfolio Summary

Fund (Vintage)	Commitment Amount	Geography	Asset Types	Sectors	Target Return
IFM Global Infrastructure Fund – US (2013)	\$50 million	North America and Europe	Brownfield	All Infrastructure Sectors	10% Net
iSquared Global Infrastructure Fund (2014)	\$50 million	Global	Brownfield and Greenfield	Energy, Utilities, Water, Waste Management and Transportation	15% Net
Harvest MLP Alpha Strategy (2014)	\$160 million	U.S.	Energy MLPs	Energy Infrastructure Assets	15% Net
Stonepeak Infrastructure Partners Fund II (2015)	\$50 million	North America	Brownfield and Greenfield	Power, Water, Energy, Communications, Renewables, and Transportation	12% Net

- To date, ERSRI has committed \$150 million to infrastructure and \$160 million to Master Limited Partnerships (MLP)
 - ERSRI has a 3% target allocation to infrastructure and 2% to MLPs
- Exposure is diversified geographically, across asset types, sectors and vintage years

Conclusion

- PCA believes as the infrastructure market continues to mature, investors must remain cautious and diligent
 - Important to determine how ERSRI wants to continue to invest in infrastructure to meet its specific goals
 - Manager selection remains crucial
- ERSRI should assess different investment manager approaches/styles, portfolio construction, commitment pacing and future growth

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