

Presentation to:

TEXPERS

The Texas Association of Public Employee Retirement Systems

"To protect and strengthen the public employee retirement system of Texas"

EnnisKnupp Global Infrastructure

March 31, 2009

ENNISKNUPP

Global Infrastructure Overview

Section One

Infrastructure Defined

- Infrastructure is broadly defined as the essential assets a society requires to facilitate the orderly operation of its economy
- Greenfield versus Rehabilitated Brownfield versus Brownfield
- Investable infrastructure can be broken into three categories:

Transportation	Toll roads, bridges, tunnels, parking facilities, railroads, rapid transit links, airports, refueling facilities, seaports
Utility	Electricity transmission, electricity generation, gas, water distribution, sewage treatment, broadcast and wireless towers, telecommunications, cable networks, satellite networks
Social	Courthouses, hospitals, schools, correctional facilities, stadiums, subsidized housing

Infrastructure Market

- Though infrastructure is 'relatively' new to the U.S. institutional marketplace, it's an asset class that has been included in allocations in Australia, the United Kingdom and Canada for the last 15 to 20 years
- Supply/demand imbalance for public infrastructure
 - Capital works spending deficit growing
 - Governments face pressure to increase spending on social welfare, education, and defense
- State or local government vote to engage in a Public-Private-Partnership (PPP)
 - Potential win/win for governments and infrastructure fund managers
 - Governments have need for cash in hand
 - Fund managers are able to take a longer-term approach
- Infrastructure investment opportunities are not limited to PPPs
 - Privately owned infrastructure assets
 - Public-to-private transactions

Infrastructure Market (cont'd)

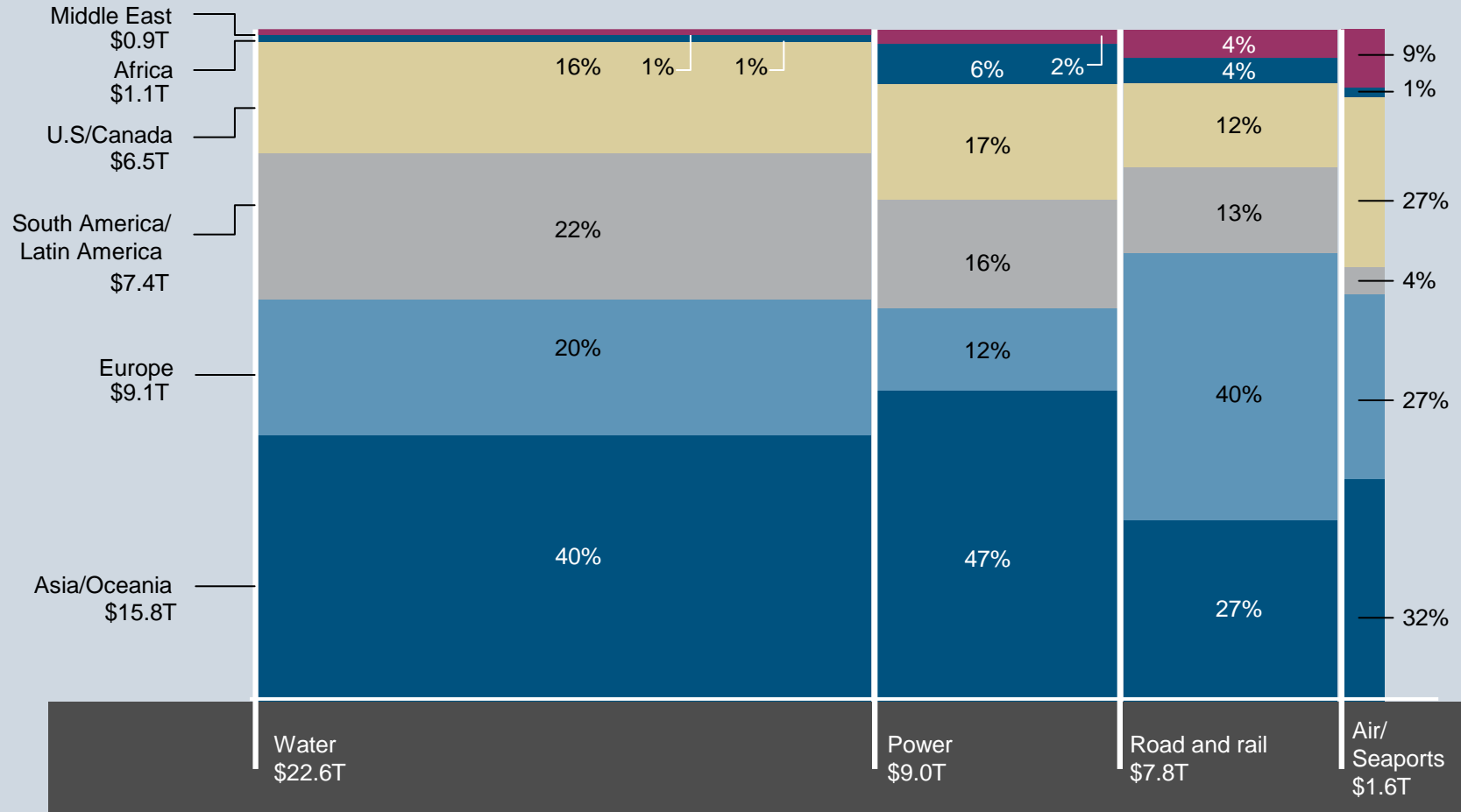
- The infrastructure gap in North America is staggering
 - Booz Allen projected the need for spending \$41.0 trillion globally and \$6.5 trillion in the U.S. and Canada over the next 25 years to maintain, modernize and expand basic utilities and transportation
 - In early 2009, the American Society of Civil Engineers urged the government and the private sector to invest \$2.2 trillion over the following five years in the United States
 - A 2007 report to the Federation of Canadian Municipalities estimates that deferred spending on infrastructure has increased five-fold from \$12 billion in 1985 to \$60 billion in 2003. The municipal infrastructure deficit is estimated to be \$123 billion today
 - Mexican officials have budgeted a record \$2.7 billion for highways in 2008. Experts say that is about half of what the nation should be spending annually to upgrade and expand its 213,000-mile (342,790-kilometer) system

America's Infrastructure Report Card	
Sector	Grade
Aviation	D
Bridges	C
Dams	D
Drinking Water	D-
Energy (National Power Grid)	D+
Hazardous Waste	D
Inland Waterways	D-
Levees	D-
Public Parks and Recreation	C-
Rail	C-
Roads	D-
Schools	D
Solid Waste	C+
Transit	D
Wastewater	D-
Infrastructure GPA	D

Source: American Society of Civil Engineers, 2009

Infrastructure Market (cont'd)

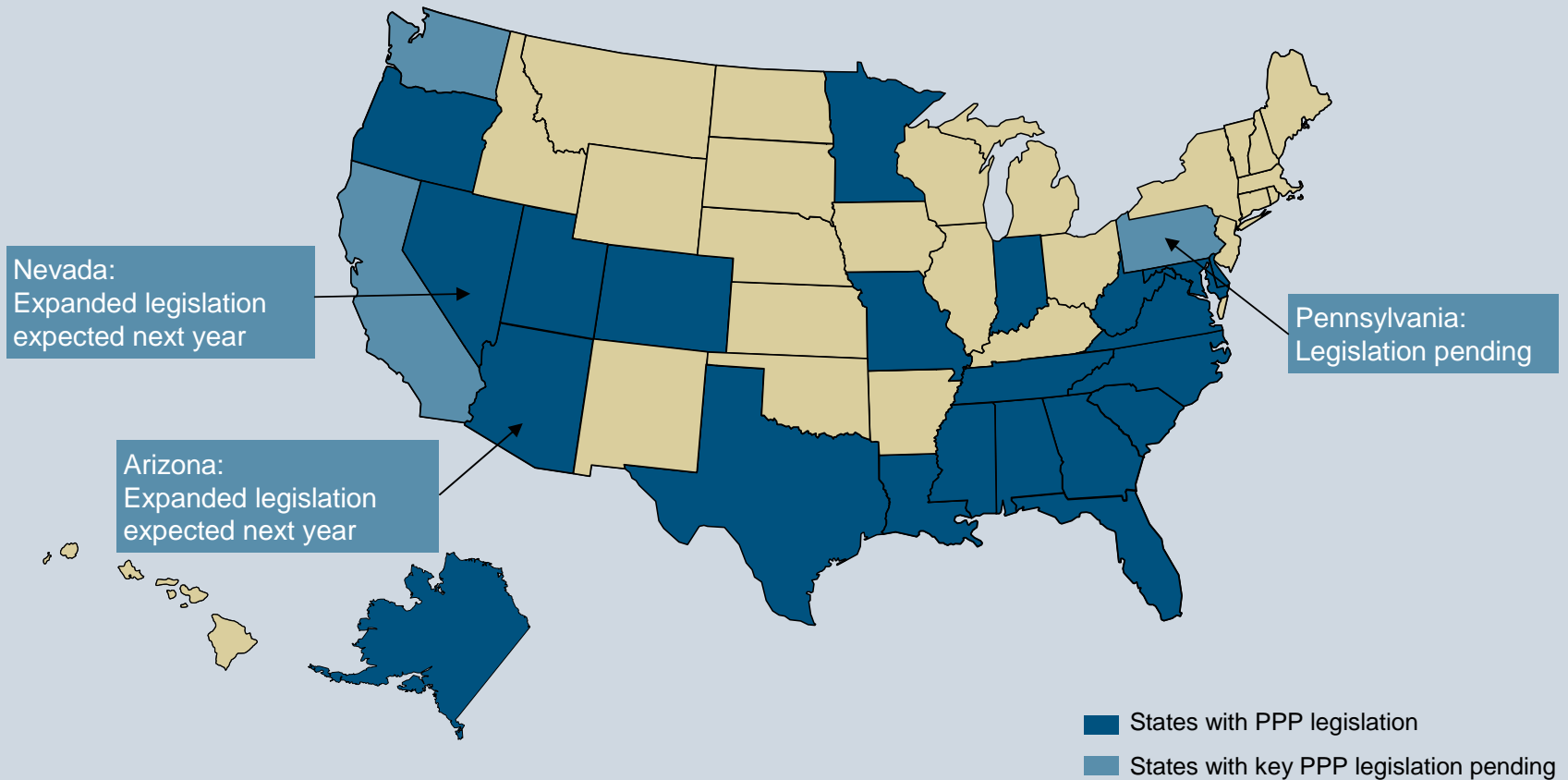
TOTAL PROJECTED CUMULATIVE INFRASTRUCTURE SPENDING 2005 – 2030 IS APPROXIMATELY \$41 TRILLION



Source: Booz Allen Hamilton, Global Infrastructure Partners, World Energy Outlook, Organisation for Economic Co-Operation and Development (OECD), Boeing, Drewry Shipping Consultants, U.S Department of Transportation

Current Infrastructure Market Overview – OECD

States with Public-Private Partnership Legislation



Sources: Nossaman Guthner Knox Elliott, Macquarie. As of May 31, 2008

Infrastructure Opportunities / Concerns

Opportunities	Concerns
Mature assets	Lack of historical investment theme within the U.S.
Monopoly characteristics	Political/regulatory risk
Predictable positive cash flows and earnings via regulation and/or long-term contracts	Interest rate risk
Inelasticity of demand for services provided	Event risk
Low volatility of cash-flows	Lack of liquidity
Low return volatility	Leverage
Downside protection	Business/operational risk
Annual yield generation via high probability of distributions	Management fees
Long asset life	
Low correlation of returns versus other asset classes	

Investment Vehicles

- **As the infrastructure landscape in the U.S. continues to evolve, managers are offering numerous investment vehicles**
 - Primary Partnerships
 - Traditional – 10 year to 15 year closed-end funds
 - Traditional with income fund option – LPs would have option to convert from a traditional to an income fund at some predetermined point during the life of the fund
 - Open-ended – a perpetual fund with greater liquidity than traditional closed-end funds
 - Publicly listed
 - Fund of funds
 - Co-investments
 - Direct investments
- **Structure for closed-end, open-end and fund of funds**
 - Limited Partnership Interests
 - Subject to 10-15 year term (except open-end fund)
 - Management fee/preferred return/carry
 - Annual/quarterly yield payable

Concluding Thoughts

- **Infrastructure may provide:**
 - Portfolio diversification (depending on current portfolio exposure) with a relative lower risk profile than other private equity asset classes
 - Annual yield component to assist in funding liabilities, if applicable
 - An expected return that has a low correlation (0.4 – 0.6) to U.S. equities and non-U.S. equities and little or no correlation with bond markets
- **Infrastructure assets may be able to provide some downside protection due to their mature, cash flow positive characteristics coupled with long term contracts/leases**

Biography

Appendix A

Biography



Dan Kim
Senior Investment Analyst

- Member of the firm's global private equity research group and heads infrastructure fund research
- Manages global private equity consulting assignments for several retainer and project clients
- Assisted a Taft-Hartley and three public pension plans (\$33 billion in total assets, 4-5% allocations to infrastructure) with strategy, policy, pacing, sourcing, due diligence, legal review, and reporting and monitoring for their infrastructure programs
- Presented infrastructure recommendations to clients which have resulted in commitments of over \$450 million
- Identified and determined viability of investment opportunities for management buyouts and private company financings for a private equity firm
- Developed financial models for buyouts, mergers and acquisitions, and private equity transactions
- Previously, Dan was a manager of research and analysis for A Street Capital, vice president of research and analysis for Circle Group Internet and research analyst for Coe Capital Management
- B.A. degree in economics from the University of Illinois

Terms and Glossary

Appendix B

Terms and Glossary

■ Infrastructure

- A fund investment strategy involving investment in equity and debt securities in transportation, communication, sewage, water and electric systems. These systems tend to be high-cost investments; however, they are needed for a country to be efficient and productive
 - 1. Brownfield Investments
 - » Investments in generally well established cash-flowing projects with developed assets and structures. Brownfield assets are perceived to be the lowest return and lowest risk sector of infrastructure investing. Profit margins of Brownfield projects tend to be low as the cost of purchasing and operating the asset are higher than Greenfield investments with less room for capital appreciation
 - 2. Rehabilitated Brownfield Investments
 - » Rehabilitated Brownfield is a segment of the infrastructure industry which focuses on investing in assets that are currently constructed but may require immediate capital improvements or expansion. This structure is effectively a blend of Brownfield and Greenfield risks and returns
 - 3. Greenfield Investments
 - » Investments in projects that do not currently exist and need to be constructed. These assets typically involve more risk than pure Brownfield investments as they include design and construction risk, as well as operating risk. These types of investments are often sold to other investors once the project is completed and generating cash flow

Terms and Glossary (cont'd)

- **Fund-of-Funds**

- A fund set up to distribute investments among a selection of private equity fund managers, who in turn invest the capital directly. Fund-of-funds are specialist private equity investors and have existing relationships with firms. They may be able to provide investors with a route to investing in particular funds that would otherwise be closed to them.

- **Co/Direct Investments**

- The syndication of a private equity financing round or an investment by a general partner alongside a private equity fund, in a financing round.

- **Definitions**

- Capital contribution: The amount of capital drawn down by the general partner. Also known as the paid-in capital or capital drawn down.
- Commitment: A limited partner's obligation to provide a certain amount of capital to a fund.
- Distribution: Cash or the value of stock disbursed to the limited partners of a fund.
- Internal rate of return (IRR): The discount rate that equates the net present value (NPV) of an investment's cash inflows with its cash outflows.
- J-curve: The curve realized by plotting the returns generated by a private equity fund against time (from inception to termination).
- Market value/Net Asset Value (NAV): The carrying value of the remaining investments.
- Pooled IRR: A method of calculating an aggregate IRR by summing cash flows together to create a portfolio cash flow and calculate IRR on portfolio cash flow. IRR is used in calculating returns of private equity funds because cash flows are determined by the manager as opposed to investors. The magnitude of the cash flow is significant.
- Vintage year: The year of fund formation and first drawdown of capital.