



# 2011 ACPM NATIONAL CONFERENCE

IT BEGINS HERE—FROM REFORM TO ACTION

## Infrastructure Investing

*An opportunity for plans of all sizes*



ACPM/ACARR

KINDLE

Capital  
Management Inc.





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# What is Infrastructure?

- Assets characterized by:
  - Relatively stable rates of return
  - Potential for long hold periods
  - Physical “brick and mortar” features
  - High and sustainable barriers to entry (monopolistic assets)
  - Inelastic demand attributes
  - Correlation with economic drivers (GDP, population, employment)
  - Annuity-like with real return characteristics
  - Returns driven primarily by the asset

# Infrastructure Asset Classes

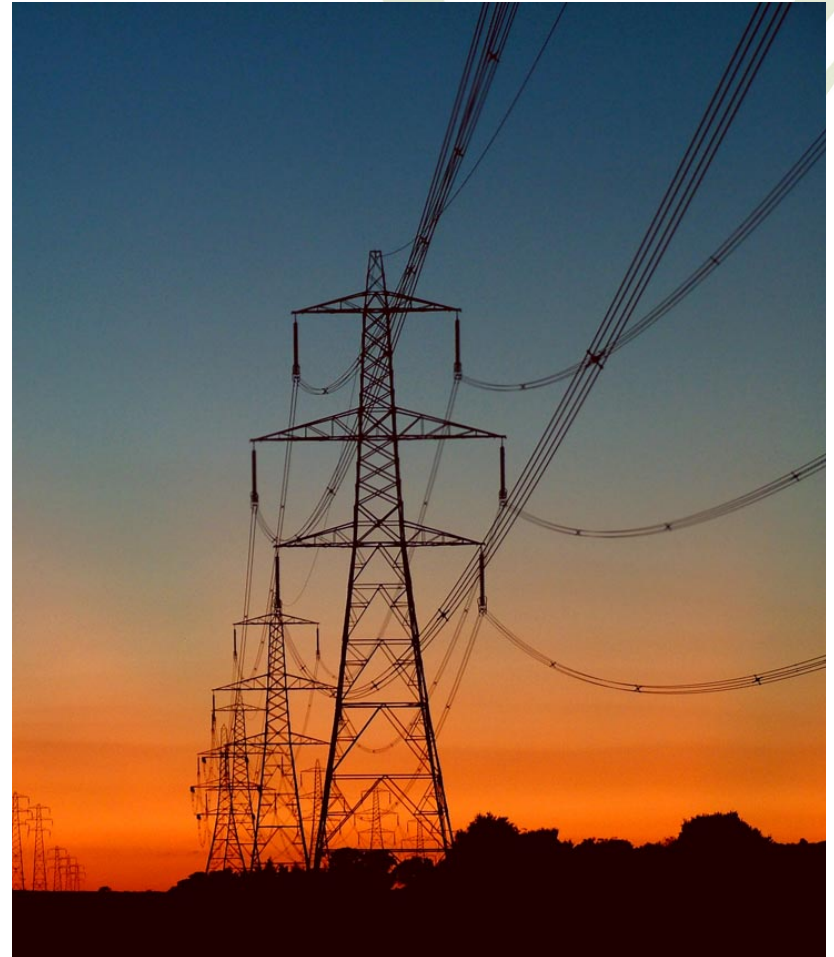


1. Regulated Assets
2. Transportation Assets
3. Contracted Competitive Assets
4. Social Infrastructure Assets

# Infrastructure Asset Classes

## 1. Regulated Assets

- Natural monopolies with high barriers to entry
- Stable demand
- Revenues based on rate of return
- *Examples: Electricity Transmission & Distribution (“T&D”), Gas T&D, Water Distribution, Collection and Treatment*



# Infrastructure Asset Classes

## 2. Transportation Assets

- Revenues based on use or availability
- Risks include regulatory pricing, demand, maintenance capital expenditures
- Revenues originate from users or government
- *Examples: Toll Roads, Bridges and Tunnels, Airports, Ports*



# Infrastructure Asset Classes

## 3. Contracted Competitive Assets

- Underlying assets may be competitive and subject to fluctuating market prices
- Returns stabilized through long-term contracted rates and volumes
- Counterparty and performance risk
- *Examples: Electricity Generation, Midstream Gas*



# Infrastructure Asset Classes

## 4. Social Infrastructure Assets

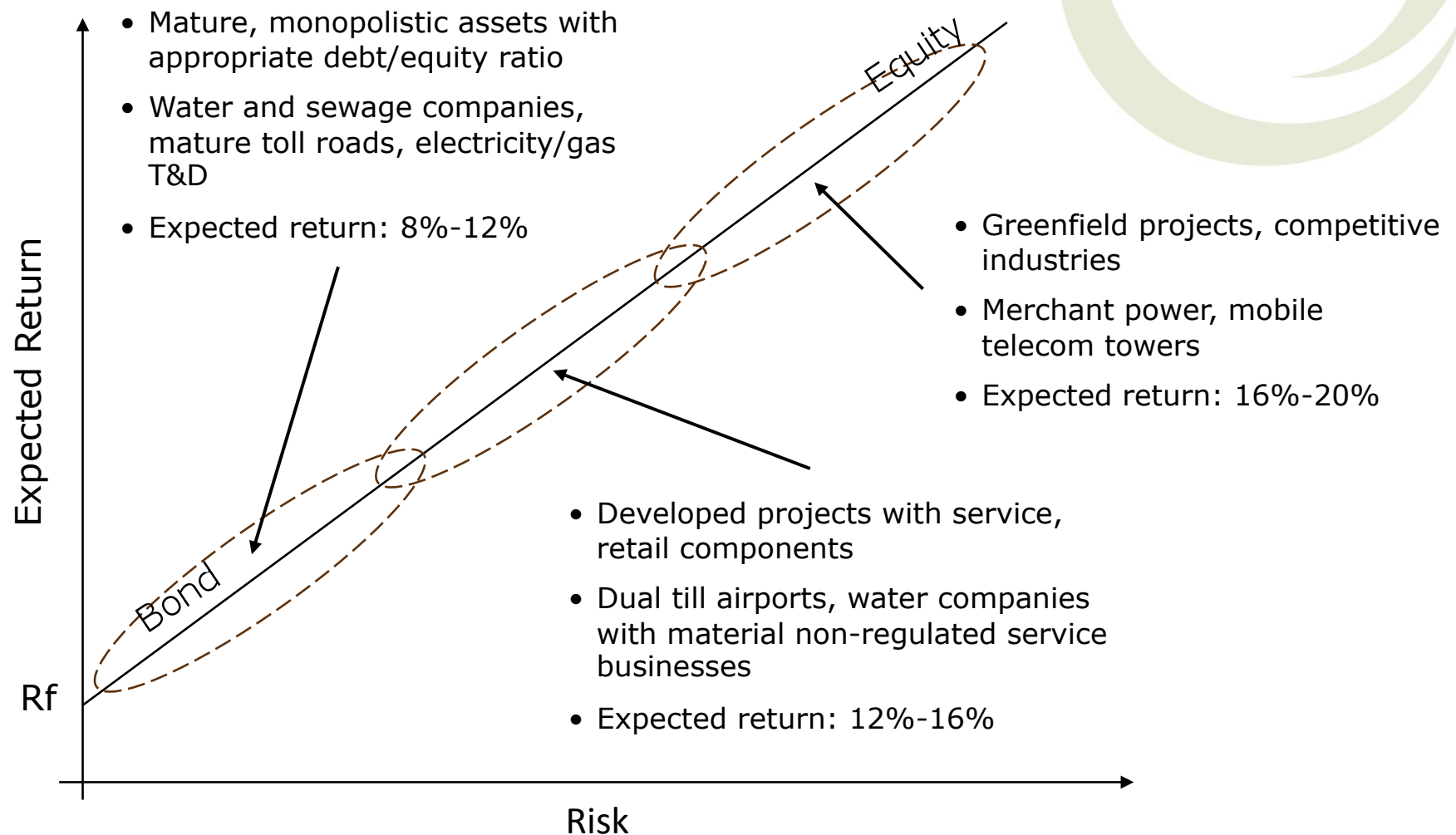
- Physical assets associated with provision of social good
- Stable cash flows contracted through government
- Revenues based on availability or performance standards
- *Examples: Schools, Hospitals, Prisons, Courts, Nursing Homes, Waste Disposal*



# Infrastructure Revenue Models

| Revenue Model                   | Description                                                                                                                                                                                                                             | Examples                                                                                                                                                              |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Regulated Rate of Return</b> | <ul style="list-style-type: none"> <li>• Pricing set by regulator</li> <li>• Pre-determined rate of return for assumed risk</li> </ul>                                                                                                  | <ul style="list-style-type: none"> <li>• Gas, water and electricity distribution</li> <li>• Electricity and most gas transmission</li> <li>• Some airports</li> </ul> |
| <b>Availability Based</b>       | <ul style="list-style-type: none"> <li>• Operator enters concession agreement (lease)</li> <li>• Term of 25-75+ years</li> <li>• Revenues are NOT subject to volume risk (use)</li> <li>• Pre-agreed pricing</li> </ul>                 | <ul style="list-style-type: none"> <li>• Toll roads, bridges and tunnels</li> <li>• Social infrastructure</li> </ul>                                                  |
| <b>Patronage Based</b>          | <ul style="list-style-type: none"> <li>• Operator enters concession agreement (lease)</li> <li>• Term of 25-75+ years</li> <li>• Revenues are subject to volume risk (use)</li> <li>• Pricing capped but linked to inflation</li> </ul> | <ul style="list-style-type: none"> <li>• Toll roads, bridges and tunnels</li> <li>• Some airports</li> <li>• Seaports</li> </ul>                                      |
| <b>Competitive</b>              | <ul style="list-style-type: none"> <li>• Revenues subject to open market forces</li> <li>• Subject to volume risk</li> <li>• May sign bi-lateral agreements to reduce risk</li> </ul>                                                   | <ul style="list-style-type: none"> <li>• Merchant power generation</li> <li>• Midstream and natural gas storage</li> <li>• Seaports</li> </ul>                        |

# Risk Return Profile



# Infrastructure Returns

| Infrastructure Asset                    | Risk     | Expected Return | Expected Cash Yield Component |
|-----------------------------------------|----------|-----------------|-------------------------------|
| <u>Utilities</u>                        |          |                 |                               |
| Water / Waste Water                     | Low      | 10-12%          | 8-10%                         |
| Gas Distribution                        | Low      | 11-13%          | 10-11%                        |
| <u>Transportation and Logistics</u>     |          |                 |                               |
| Toll Roads/Bridges/Tunnels - Brownfield | Low-Med  | 8-12%           | 4-8%                          |
| Airports                                | Medium   | 15-18%          | 5-10%                         |
| Seaports                                | Medium   | 15-18%          | 5-10%                         |
| Rail                                    | Med-High | 14-18%          | 8-12%                         |
| Toll Roads/Bridges/Tunnels - Greenfield | High     | 12-20%          | 3-5%                          |
| <u>Power and Energy</u>                 |          |                 |                               |
| Electricity Transmission & Distribution | Low      | 11-13%          | 10-11%                        |
| Pipelines Oil & Gas                     | Medium   | 12-18%          | 7-10%                         |
| Oil & Gas Storage                       | Med-High | 12-18%          | 7-10%                         |
| Power Generation                        | High     | 12-20%          | 4-12%                         |
| <u>Telecommunications</u>               |          |                 |                               |
| TV Towers                               | Med-High | 14-18%          | 7-8%                          |
| Cell Phone Towers                       | High     | 14-20%          | 8-10%                         |

Source: Kindle Capital

# The Infrastructure Market

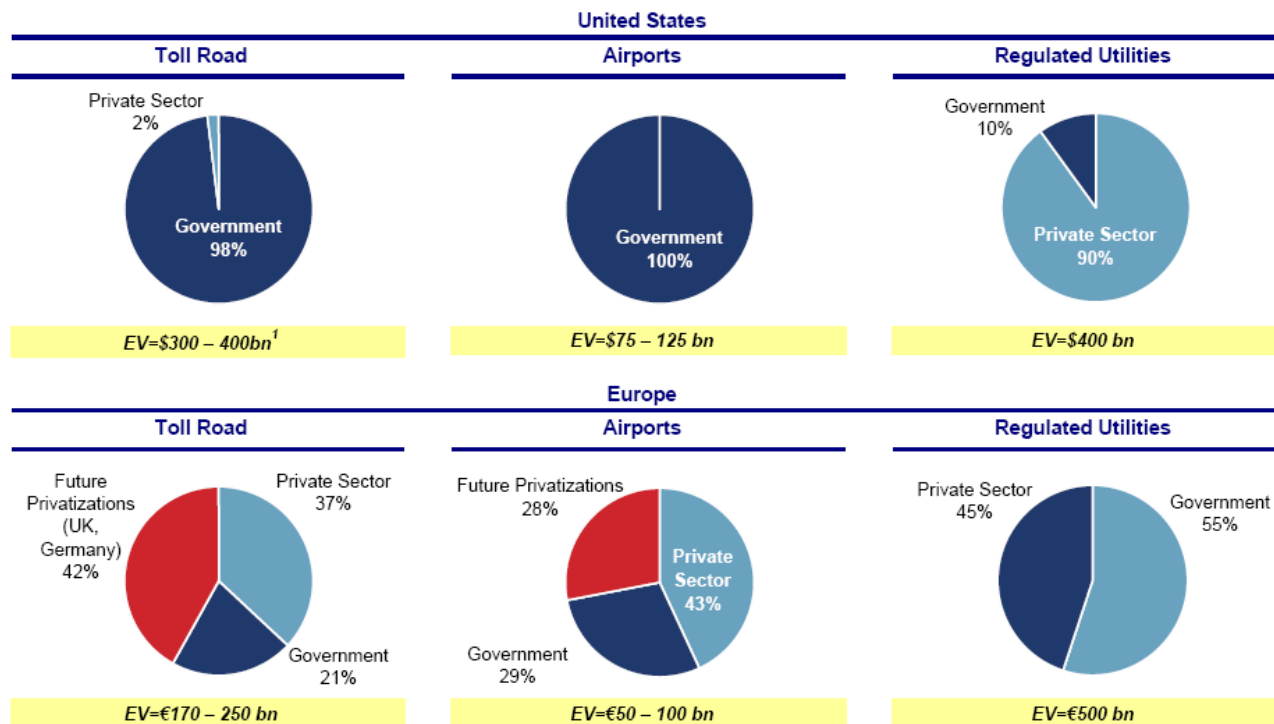
- Market for infrastructure investments is facing two forces:
  - Increasing demand for infrastructure projects from investors
  - Increasing supply of infrastructure projects by governments and private sellers.
- Consequently, the quantity and price of infrastructure deals has increased (decrease in historical returns)
- Increased opportunities in the infrastructure space have been driven by:
  - Pressure on governments to trim debts and budget deficits,
  - Governments attempts to create jobs in the recent recession,
  - Existing infrastructure reaching the end of their useful lives
  - Desire of governments to transfer risks (e.g., design, construction, operations) to investors in the private sector

# The Canadian Infrastructure Market

- The majority of Canadian infrastructure is nearing the end of its useful life and has suffered from massive underinvestment over the past 30 years
- Governments at all levels lack the financial resources to finance the required spending
- Current estimates of the infrastructure deficit across Canada range from \$50 billion to \$125 billion, which **greatly** exceeds Canada's new long term \$33 billion infrastructure plan
- This presents a tremendous opportunity for private sector investment

# The Infrastructure Market

- Overall, the size of the potential private infrastructure market is enormous



Source: Goldman Sachs

# Why Invest in Infrastructure?

## Cash Flow Stability

- Reliable and predictable cash flow streams due to regulated and contracted revenues

## Monopolistic Characteristics

- Captive market and high barriers to entry produce more predictable future cash flows

## Attractive Risk-Return Profile

- Lower volatility of returns and market risk compared to other asset classes

## Duration Match

- Long-term investments are a good fit for institutions with long-term liabilities and limited liquidity requirements

## Portfolio Construction

- Low correlation to other asset classes, including global equities and government bonds

## Inflation Hedge

- Real return nature of infrastructure investments may provide a hedge against long-term inflation

# The Risks of Infrastructure Investing

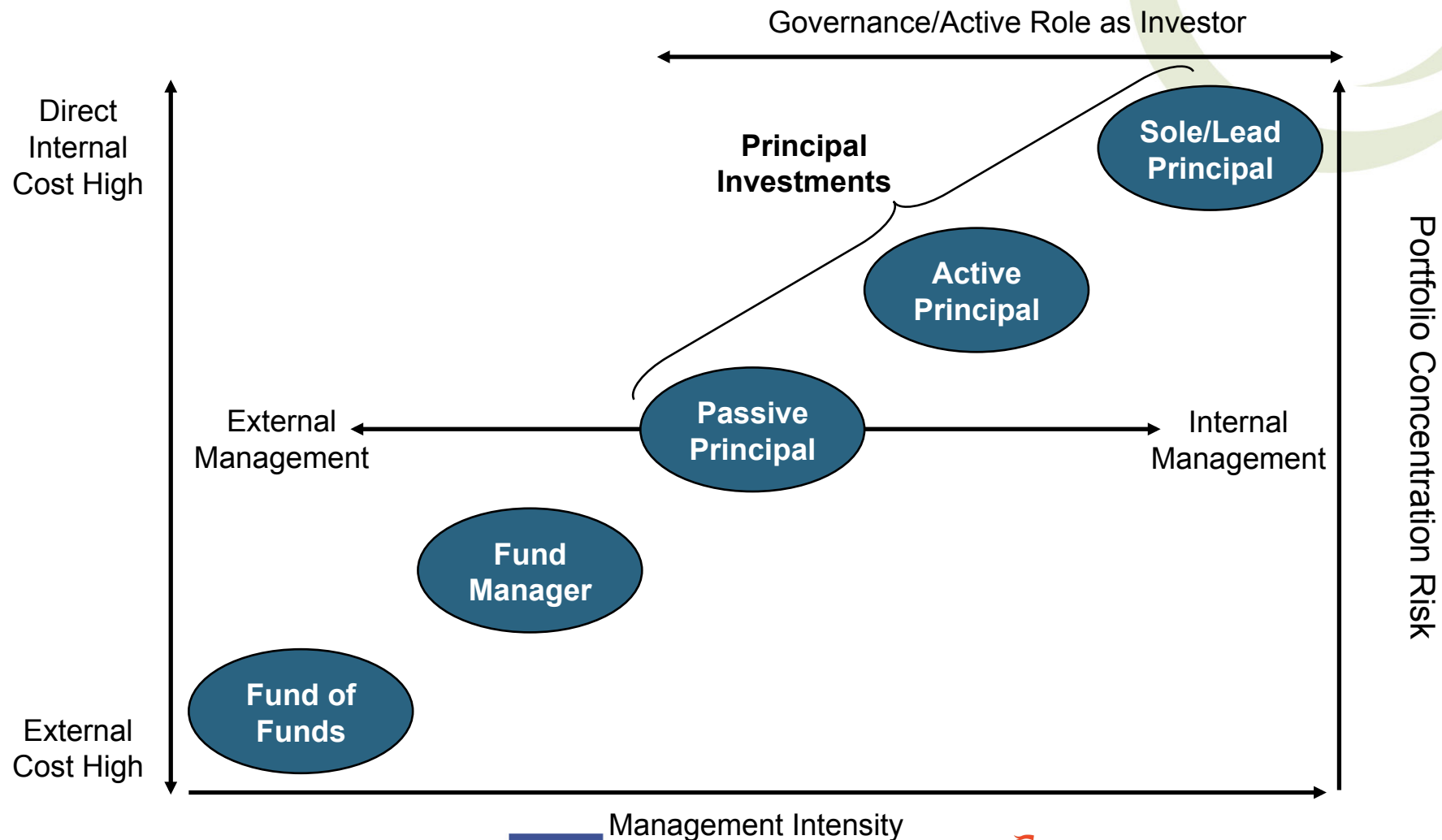
- Certain assets often described as infrastructure have volatile return characteristics and operate in competitive environments
  - Fibre optic cable, satellites
- Every infrastructure investment has unique risks that may adversely impact returns
  - Commodity price risk: uncertainty of future commodity prices due to fluctuations in market prices (natural gas)
  - Pricing risk: uncertainty in future electricity prices due to market fluctuations (electricity generation)
  - Early-stage development/demand risk: uncertainty with timing of operational launch and future use (toll roads under construction)
  - Technology risk: uncertainty of future technological developments (communications infrastructure)
  - Financing risk: risk of not being able to refinance debt at attractive rates; risk of default

# How to Access Infrastructure Investing

| Strategy                            | Description                                                                                                                                                                                                                               | Fees                                                                                                                                                                                          |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Fund of Funds</b>                | <ul style="list-style-type: none"> <li>• Commit capital to an organization that selects, invests in and monitors the performance of externally managed funds</li> </ul>                                                                   | <ul style="list-style-type: none"> <li>• Management Fee (0.5% to 1.0%)</li> <li>• Carried Interest (5% to 10%)</li> <li>• Underlying Fund Fees (1-2% management fee, 10-20% carry)</li> </ul> |
| <b>Infrastructure Fund Manager</b>  | <ul style="list-style-type: none"> <li>• Commit capital to external funds that are managed by a third party (General Partner) that sources, assesses, structures and actively manages investments in portfolio companies</li> </ul>       | <ul style="list-style-type: none"> <li>• Management Fees (1.0%-2.0%)</li> <li>• Carried Interest (10%-20%)</li> </ul>                                                                         |
| <b>Passive Principal</b>            | <ul style="list-style-type: none"> <li>• Direct investments made on a passive/ syndicated basis</li> <li>• Due diligence conducted by lead investor</li> </ul>                                                                            | <ul style="list-style-type: none"> <li>• Case-by-case basis</li> <li>• Closing fee and/or annual management fee to lead investor</li> </ul>                                                   |
| <b>Active Principal</b>             | <ul style="list-style-type: none"> <li>• Sponsoring the investment, conducting due diligence, governance rights (board seats)</li> <li>• Investment is made at closing, shared among equal size partners</li> </ul>                       | <ul style="list-style-type: none"> <li>• Direct/internal costs</li> </ul>                                                                                                                     |
| <b>Sole/Lead Principal Investor</b> | <ul style="list-style-type: none"> <li>• Sponsoring the investment, conducting due diligence, governance rights (board seats)</li> <li>• Large institution takes the lead role and may/ may not syndicate to passive investors</li> </ul> | <ul style="list-style-type: none"> <li>• Direct/internal costs</li> </ul>                                                                                                                     |



# Exposure Options



# Publicly Traded Infrastructure

| Strategy                                                                       | Description                                                                                                                                                                                                                                                                                                | Fees                                                                                                                                                     |
|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Publicly Traded Infrastructure Funds investing in <u>private</u> assets</b> | <ul style="list-style-type: none"> <li>• Commit capital to externally listed funds that are managed by a third party (General Partner) that sources, assesses, structures and actively manages investments in portfolio companies</li> <li>• Assess to liquidity through public market listings</li> </ul> | <ul style="list-style-type: none"> <li>• Similar to private fund model</li> </ul>                                                                        |
| <b>Publicly Traded Infrastructure Funds investing in <u>listed</u> assets</b>  | <ul style="list-style-type: none"> <li>• Identifies publicly listed infrastructure related companies and creates a diversified portfolio</li> <li>• Similar to a mutual fund structure</li> </ul>                                                                                                          | <ul style="list-style-type: none"> <li>• 1% to 3% based on the daily closing NAV of the portfolio</li> <li>• Potential up-front and exit fees</li> </ul> |
| <b>Publicly Traded Infrastructure Companies</b>                                | <ul style="list-style-type: none"> <li>• Direct, minority investments made in publicly traded infrastructure assets</li> <li>• Due diligence conducted internally</li> </ul>                                                                                                                               | <ul style="list-style-type: none"> <li>• Direct Internal Expenses</li> </ul>                                                                             |

# Syndication Market



## Defined

- Co-investment direct access to global transactions
- Reliance on lead investor(s) for deal execution resources
- Passive investment with limited liquidity

## Benefits to Minority Investors

- Strong alignment of interest amongst shareholders
- Opportunity to invest alongside leading infrastructure investors
- Sharing of resources (intellectual and capital)

# CPPIB/OTPP Syndication Protocol

| Term                         | Details                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Obligations</b>           | <ul style="list-style-type: none"> <li>• Commit Discretionary program: no obligation for lead investor (E.g., CPPIB) to offer syndication.</li> <li>• No fiduciary obligation among members of the investor group</li> <li>• Each investor shall form his own view as to the merits and size of commitment (subject to the minimum size and availability)</li> </ul> |
| <b>Minimum commitment</b>    | <ul style="list-style-type: none"> <li>• Minimum commitment of \$100 million per investor</li> </ul>                                                                                                                                                                                                                                                                 |
| <b>Investment objectives</b> | <ul style="list-style-type: none"> <li>• Aligned in terms of investment horizon, philosophy, cost of capital and views on governance</li> <li>• Common view on infrastructure investments: focus on physical assets with long-term cash flows, a low risk profile, and inflation protection</li> </ul>                                                               |
| <b>Closing period</b>        | <ul style="list-style-type: none"> <li>• Up to three months post-close</li> </ul>                                                                                                                                                                                                                                                                                    |
| <b>Pricing</b>               | <ul style="list-style-type: none"> <li>• At lead investor's cost, plus (1) a roll-forward at the expected IRR and (2) share of acquisition costs</li> <li>• No ongoing management costs, no performance fee ("carry")</li> </ul>                                                                                                                                     |
| <b>Governance</b>            | <ul style="list-style-type: none"> <li>• Majority of directors nominated by investors; target 15% interest per board seat</li> <li>• Structure for both simple majority and super majority decision thresholds</li> </ul>                                                                                                                                            |
| <b>Information rights</b>    | <ul style="list-style-type: none"> <li>• Quarterly and annual accounts from management</li> <li>• Annual valuation performed by an independent firm</li> </ul>                                                                                                                                                                                                       |



# Case Study – 407ETR Syndication

- In late 2010, CPPIB completed two transactions resulting in the purchase of a 40% interest in 407 International Inc. (“407ETR”), a 108 km highway in Toronto, for ~\$3.8 billion
- By March 2011, CPPIB successfully syndicated ~\$1 billion of equity to a small group of institutional investors
- Kindle Capital arranged a consortium of like-minded Canadian institutional investors to purchase more than \$100 million equity interest in the 407ETR Syndication
  - Consortium consisted of 8 Canadian pension plans and endowment funds ranging from \$1 billion to \$15 billion, including HRM Pension Plan



# Case Study – 407ETR Syndication

- 407ETR was an attractive investment opportunity for Canadian institutional investors
  - High quality asset with strong operational track record
  - Favourable concession agreement (length, price-setting mechanism)
  - Attractive risk-adjusted returns
  - Strong management team
  - Experienced investor group (lead investor and shareholder group)
  - Growth opportunities
- Shareholder governance rights in the syndication vehicle
  - Information rights
  - Board representation
  - Customary drag/tag provisions
  - Supermajority voting thresholds