Infrastructure 2014

Shaping the Competitive City

Meeting of the Minds Webinar
June 18, 2014

Welcome!

Urban Land Institute
Infrastructure Initiative

#ULI_infra

EY
Building a better working world

#EY_Cleantech

Speakers

- **John de Yonge,** Director, Account Enablement, Global Cleantech Center, EY
- **Rachel MacCleery,** Senior Vice President, Content, Urban Land Institute
- **Jay Gillespie,** Vice President, Infrastructure Advisory, EY

John de Yonge

Director, Account Enablement

Global Cleantech Center

EY

Urban Land Institute
Infrastructure Initiative

#ULI_infra

EY
Building a better working world

#EY_Cleantech

Introduction

- Beginning of a conversation on infrastructure that will be continued at **Meeting of the Minds 2014** (Detroit, September 30 – October 1)
  - *Workshop Tour 2: Retrofitting Legacy Infrastructure with Smart City Solutions*
- Growing competition among cities—investment, talent and trade
- Infrastructure is a key axis of competition that underlies many others
- *Infrastructure 2014: Shaping the Competitive City* provides an important baseline for discussion

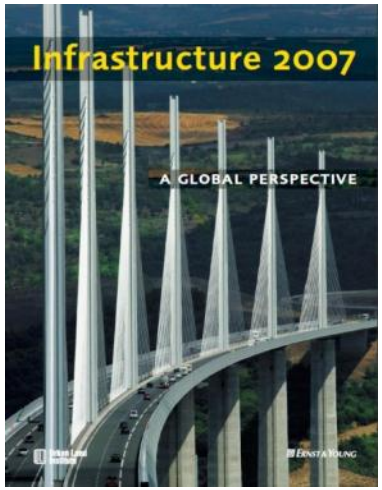
Visit:

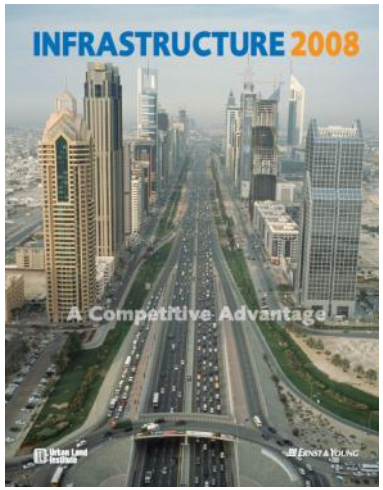
- **www.ey.com/GL/en/Industries/Real-Estate/EY-infrastructure-2014-shaping-the-competitive-city**
- **www.ey.com/cleantech**

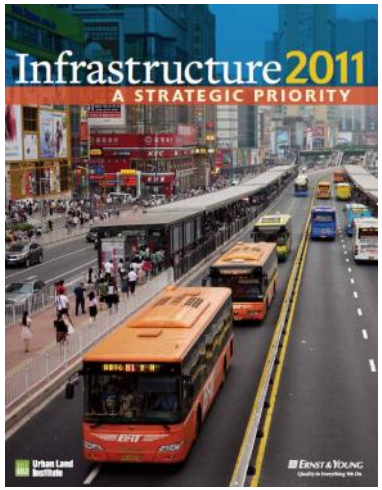
Rachel MacCleery

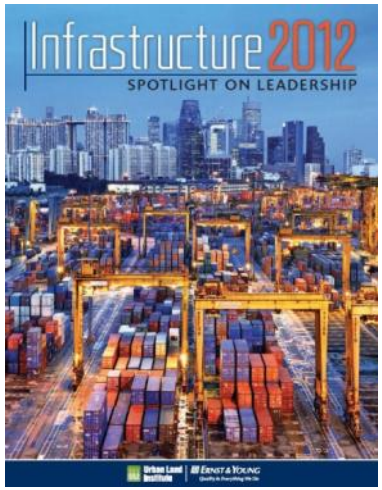
Senior Vice President, Content

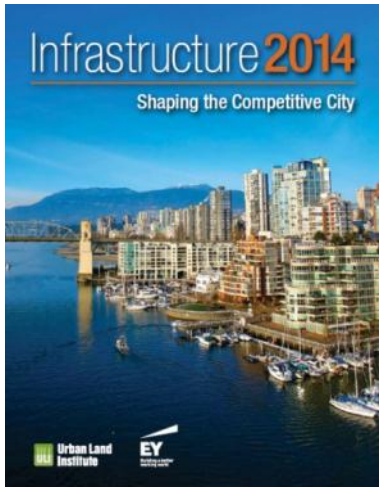
Urban Land Institute











Urban Land Institute
Infrastructure Initiative

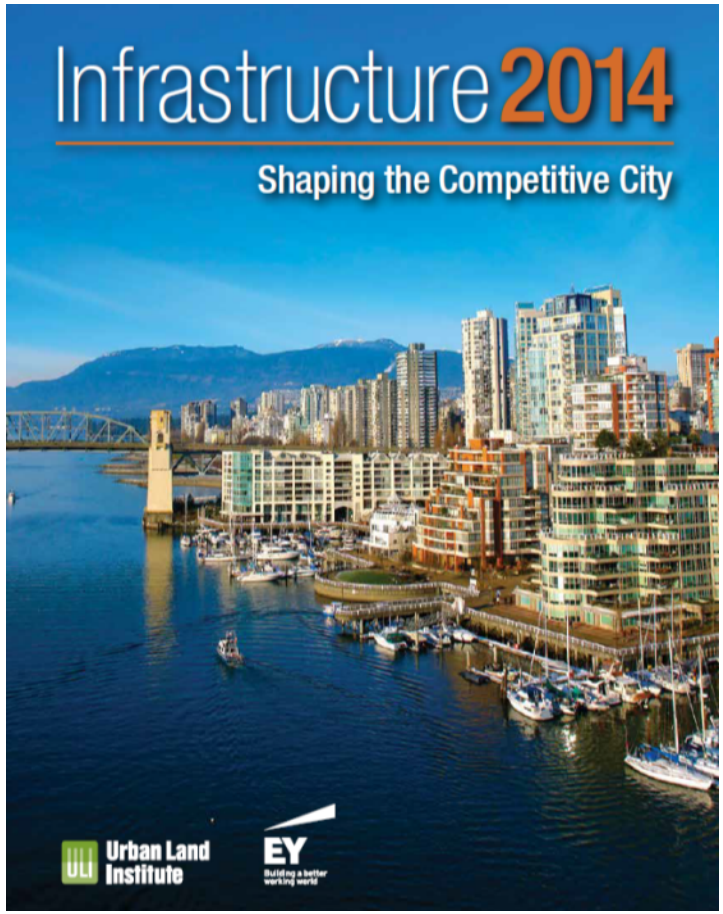
EY
Building a better working world

www.uli.org/infrastructurereport

Infrastructure 2014

Shaping the Competitive City

- How do real estate developers and investors think about infrastructure?
- How do city leaders use infrastructure to position their cities for growth and economic development?
- What role does infrastructure play relative to other development strategies?
- Are public and private priorities aligned, or do they diverge?



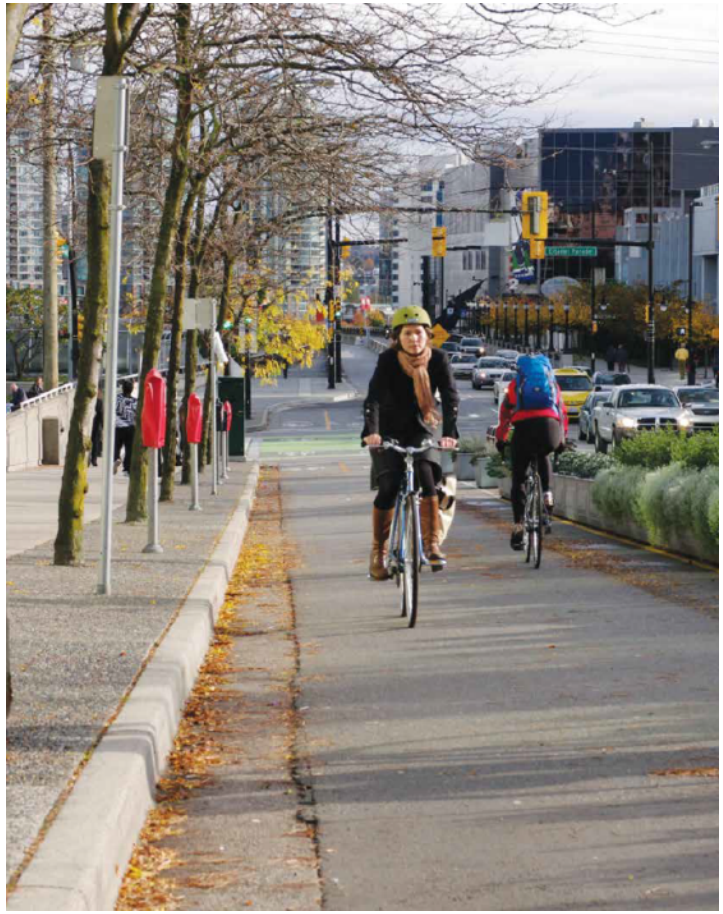
Urban Land Institute
Infrastructure Initiative

EY
Building a better working world

www.uli.org/infrastructurereport

Methodology

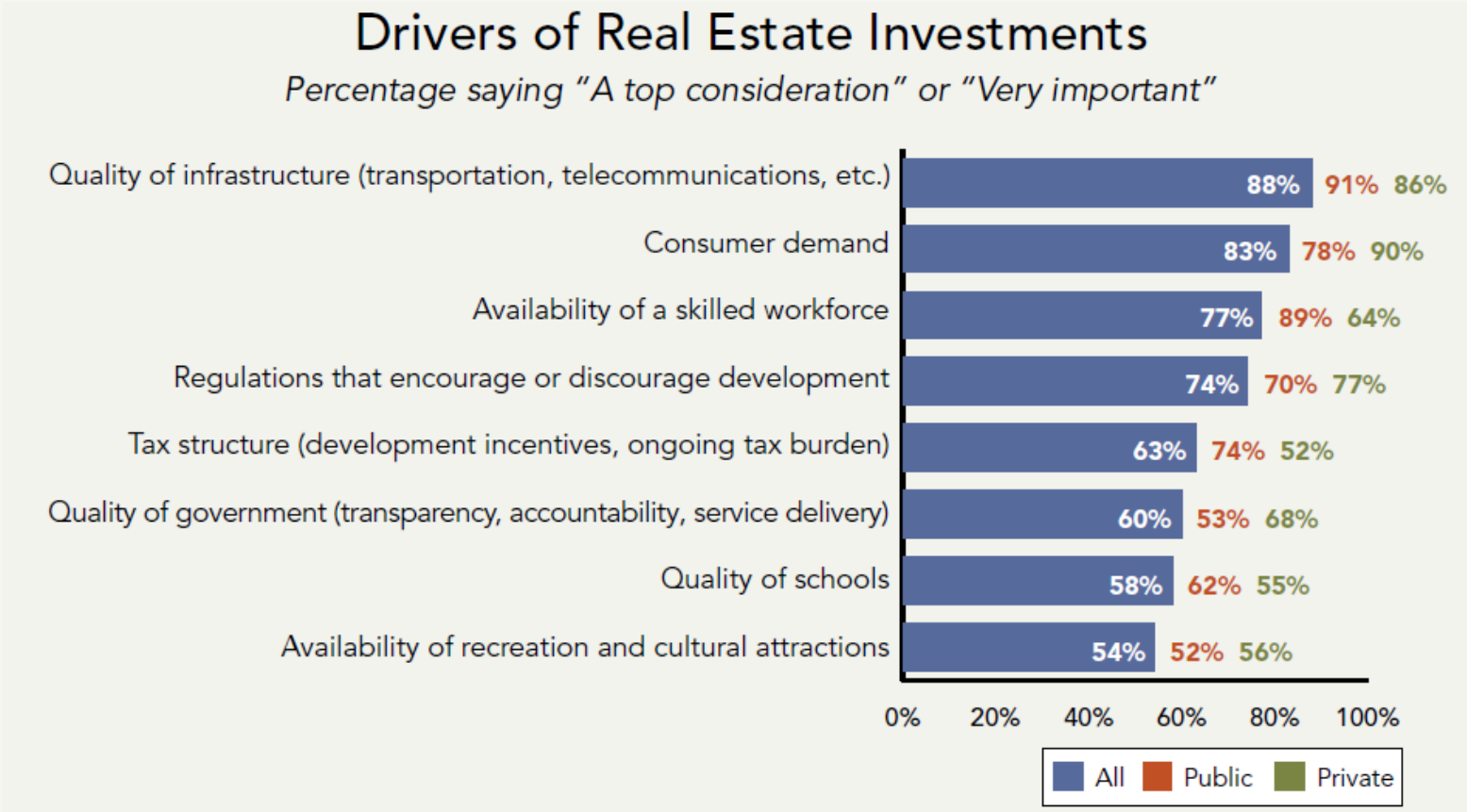
- Survey sent to global real estate and civic leaders in January 2014
- 241 public sector respondents
- 202 private real estate developers and leaders
- 84% of respondents were based in the U.S.; remainder were global
- 35 interviews with survey respondents



Key findings

- Good infrastructure is a key driver of where real estate investment dollars go
- Improving the quality of public transit, roads and bridges, and pedestrian infrastructure are highest priorities
- Public willingness to pay for infrastructure is a top factor that will shape cities
- Funding and financing is seen as resting on cooperation between developers and government
- Long term maintenance and operations are big concerns

Finding 1 | Top Drivers of Real Estate Investments: Infrastructure, Consumer Demand

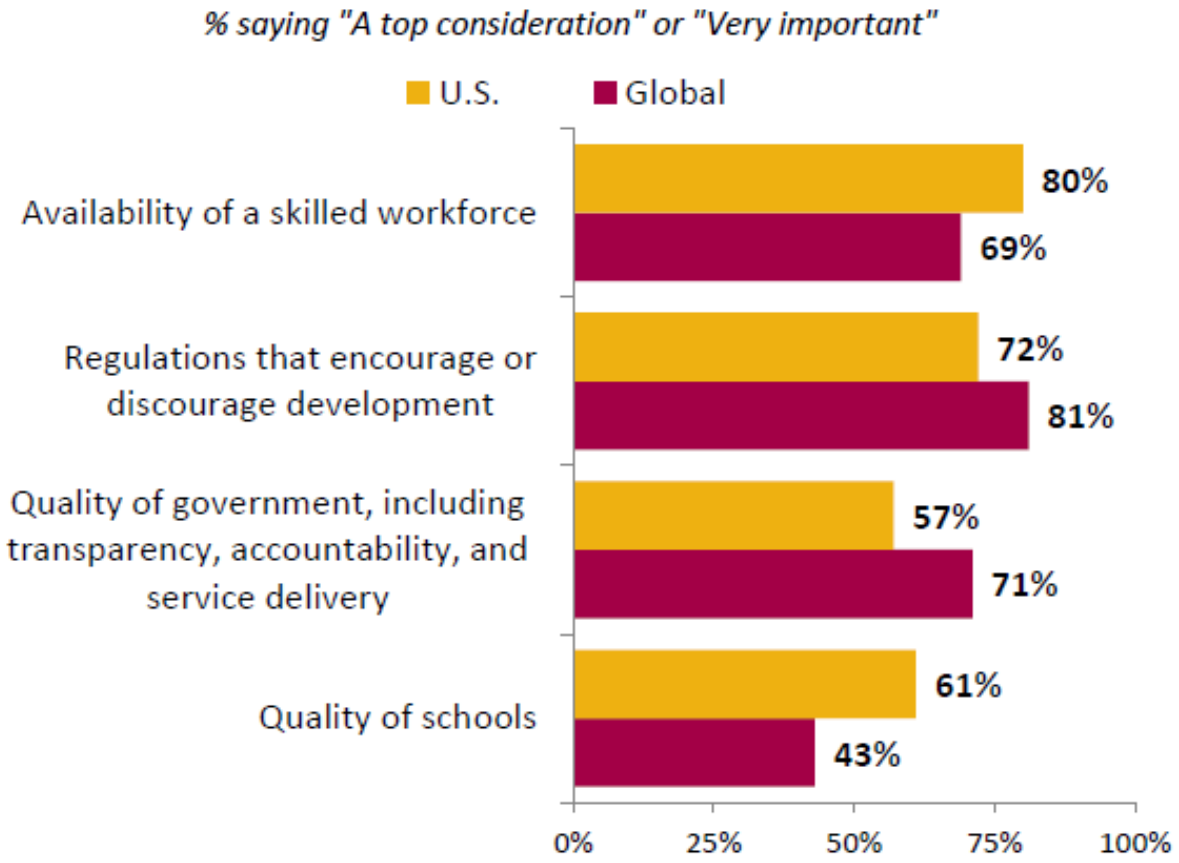


Urban Land Institute
Infrastructure Initiative

EY
Building a better working world

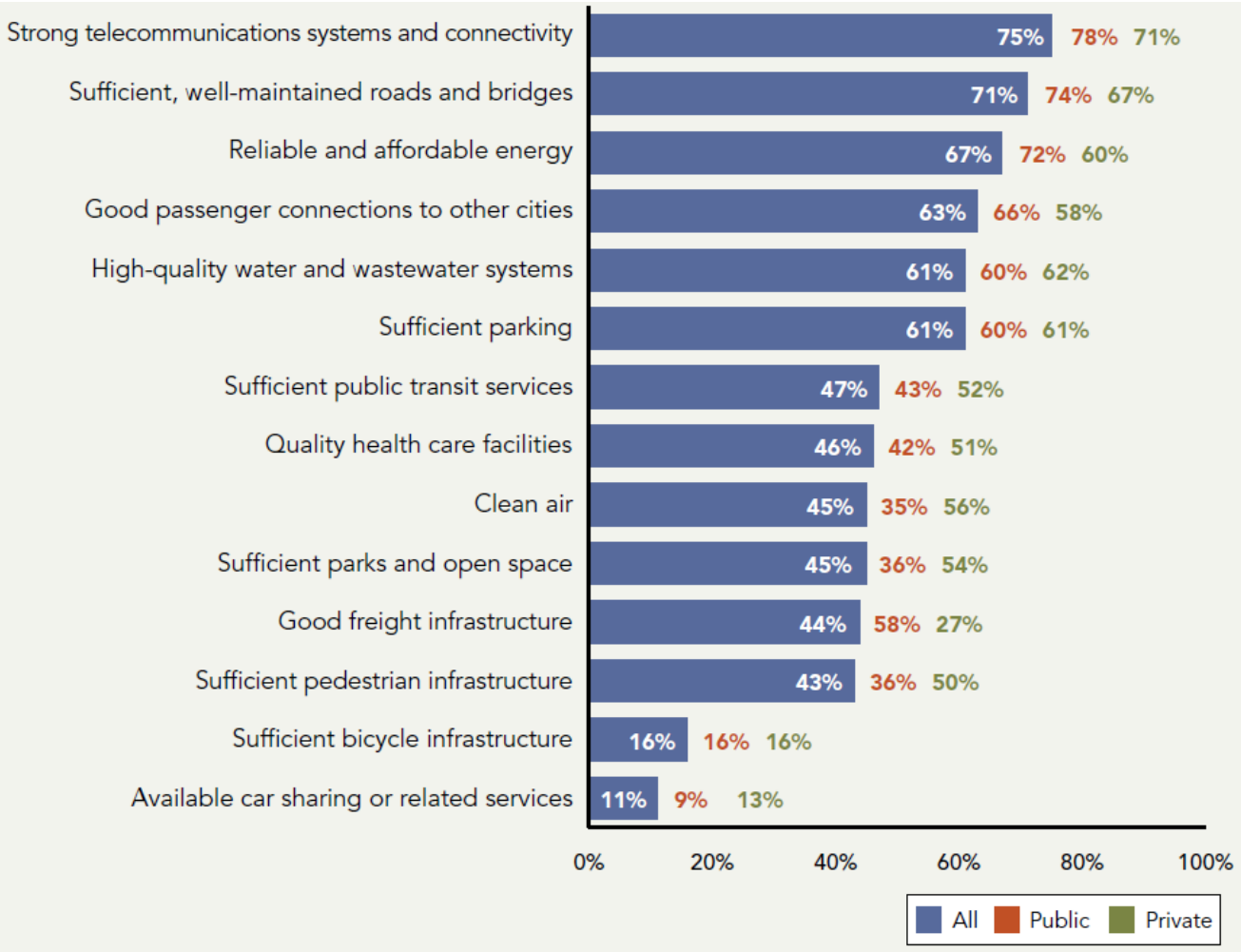
Drivers of Real Estate Investment Decisions

U.S. vs. Global Presence



Infrastructure Drivers of Real Estate Investment

Percentage saying "A top consideration" or "Very Important"

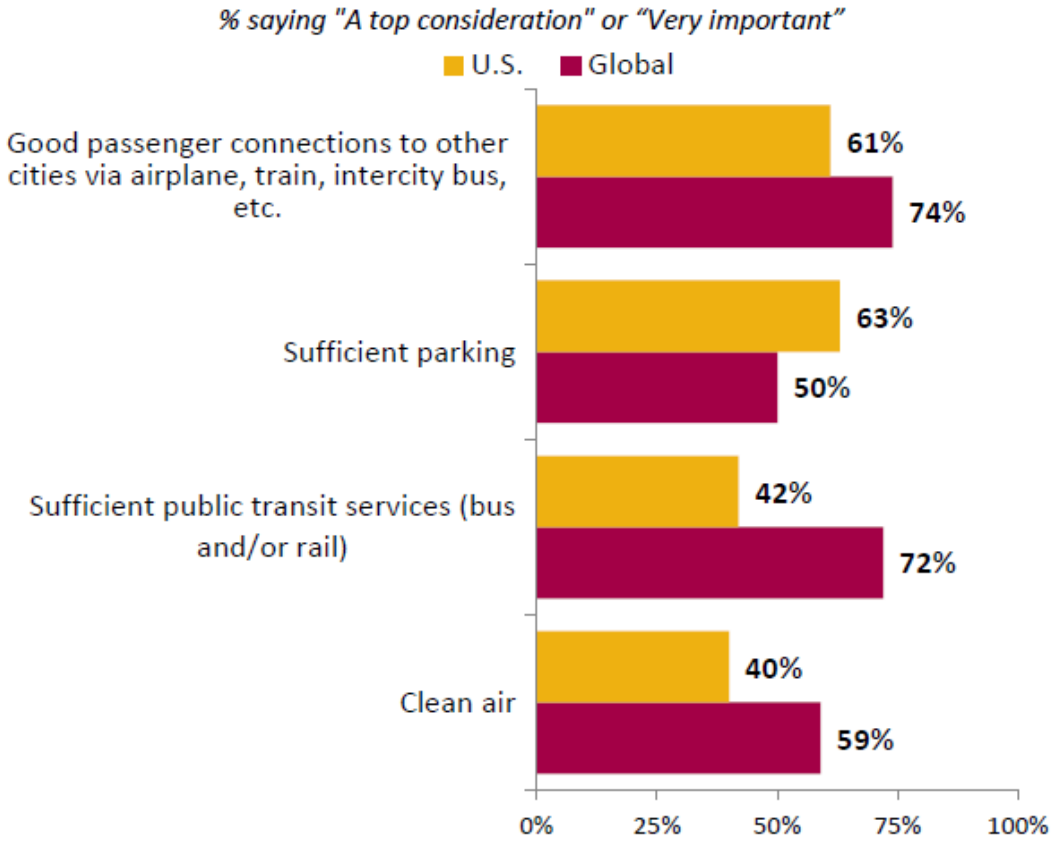


Urban Land Institute
Infrastructure Initiative

EY
Building a better working world

Infrastructure Drivers of Real Estate

U.S. vs. Global Presence

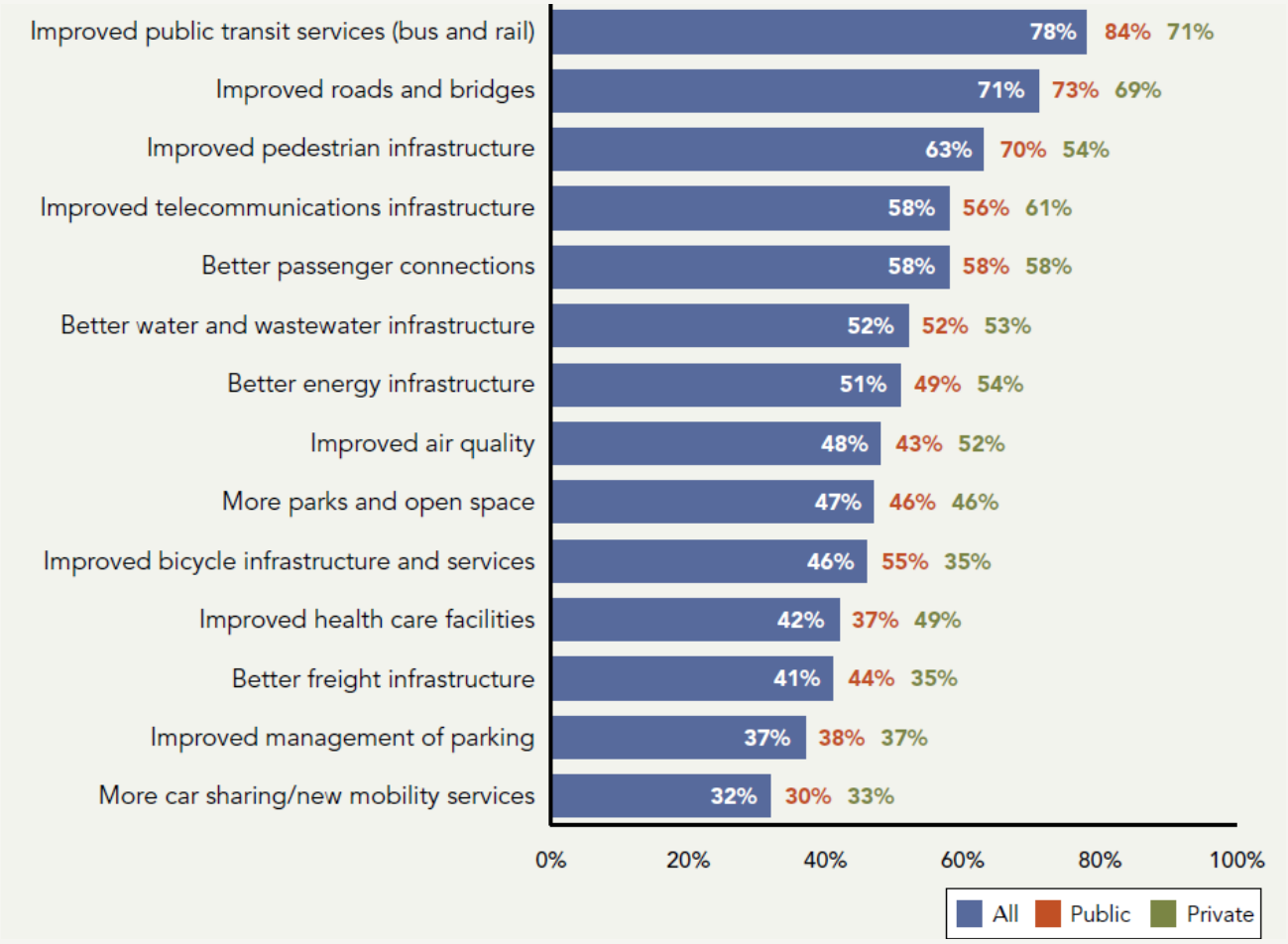


Urban Land Institute
Infrastructure Initiative

EY
Building a better working world

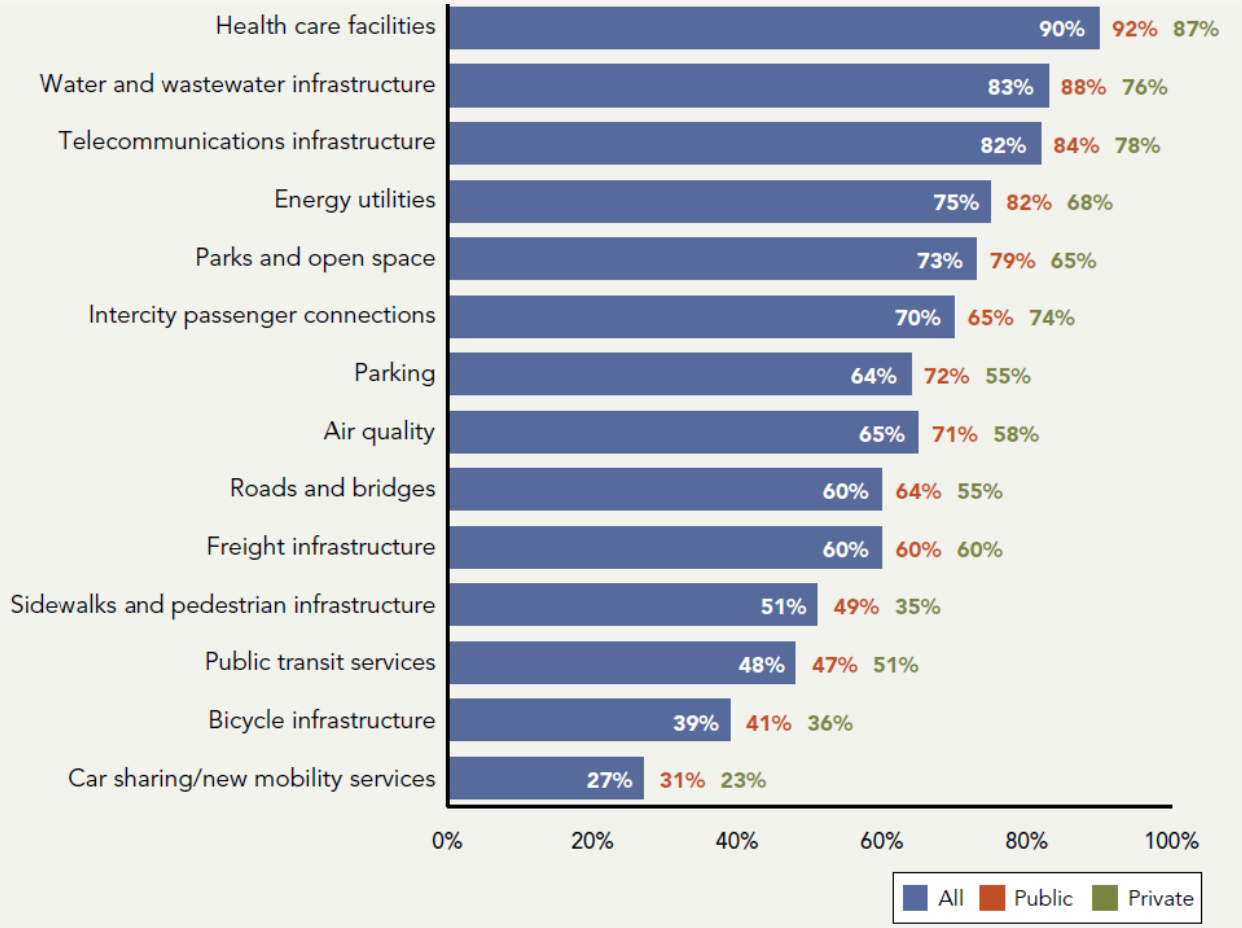
Finding 2 | Highest Investment Priority: Public Transit

Percentage saying "One of the very top priorities" or "High priority"



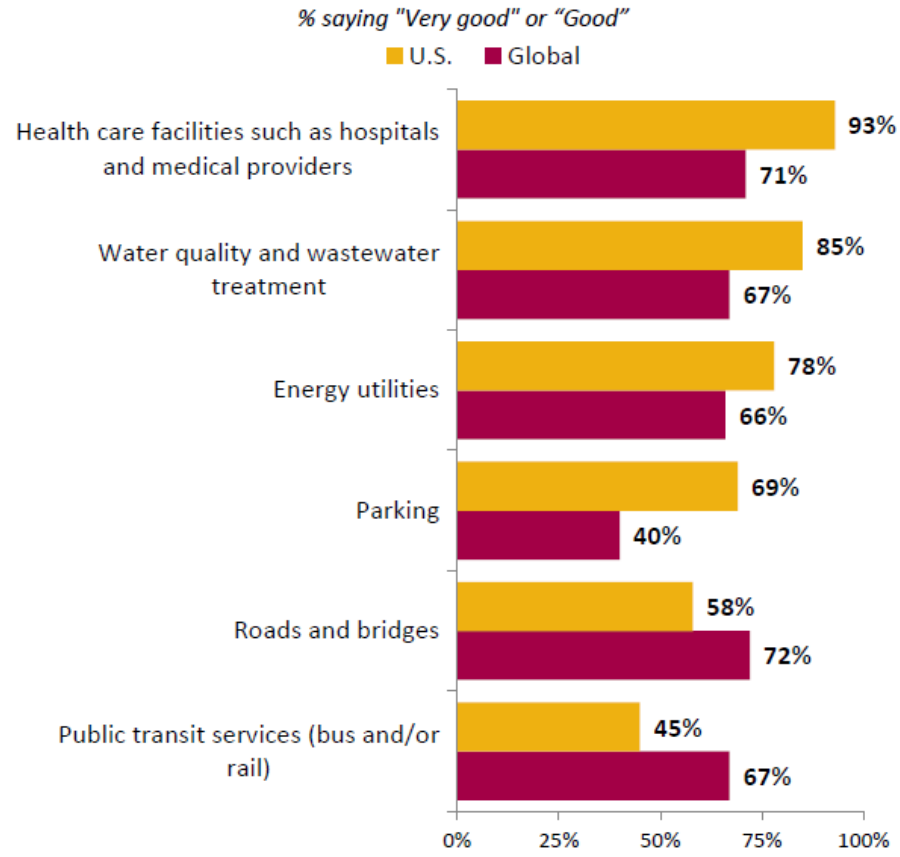
Perceptions of Infrastructure Quality

Percentage saying "Very good" or "Good"



Perceptions of Infrastructure Quality

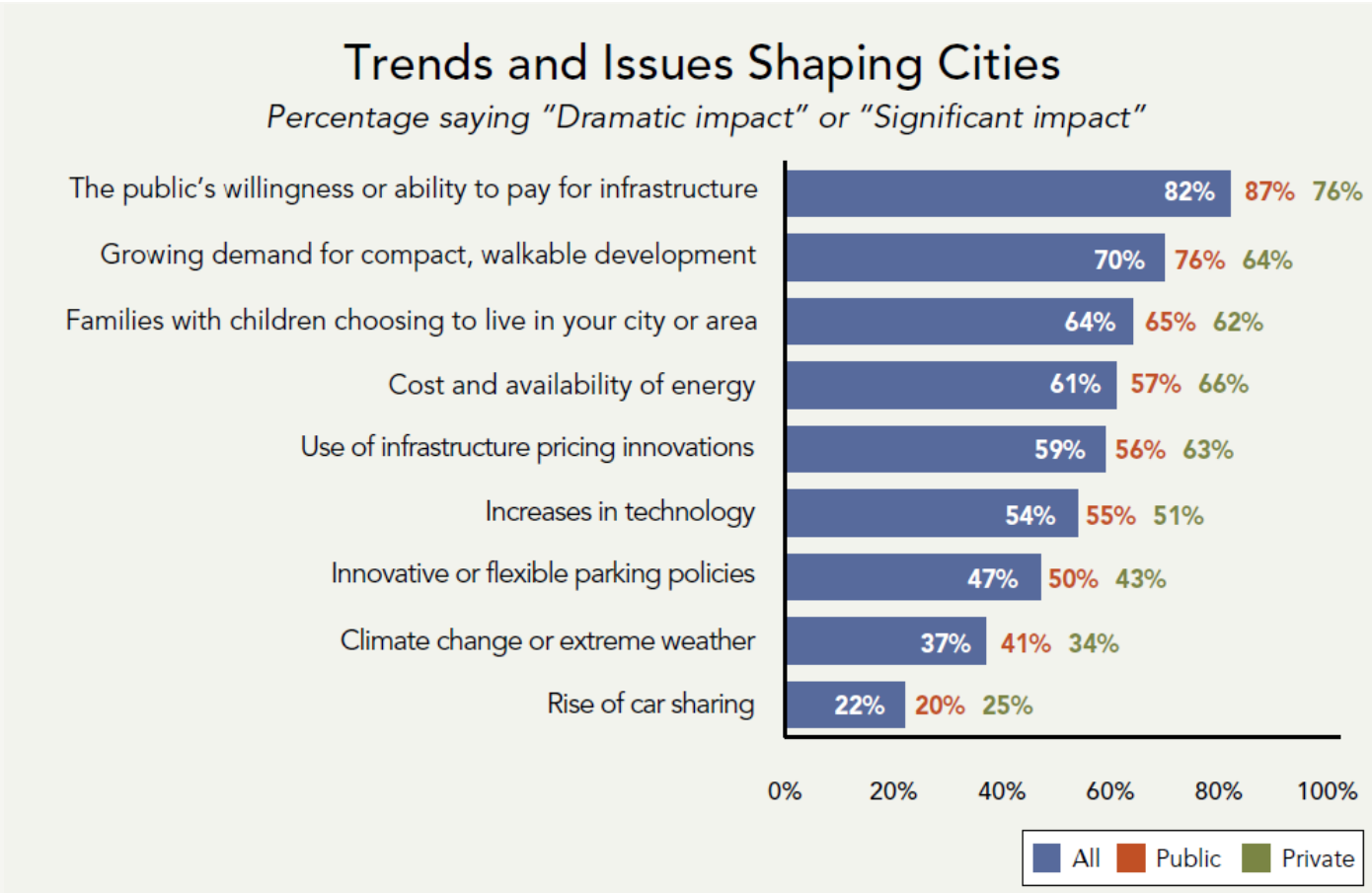
U.S. vs. Global Presence



Urban Land Institute
Infrastructure Initiative

EY
Building a better working world

Finding 3 | Top Trend Shaping Cities: Public Willingness to Pay for Infrastructure



Urban Land Institute Infrastructure Initiative

EY Building a better working world

Unpacking Willingness to Pay

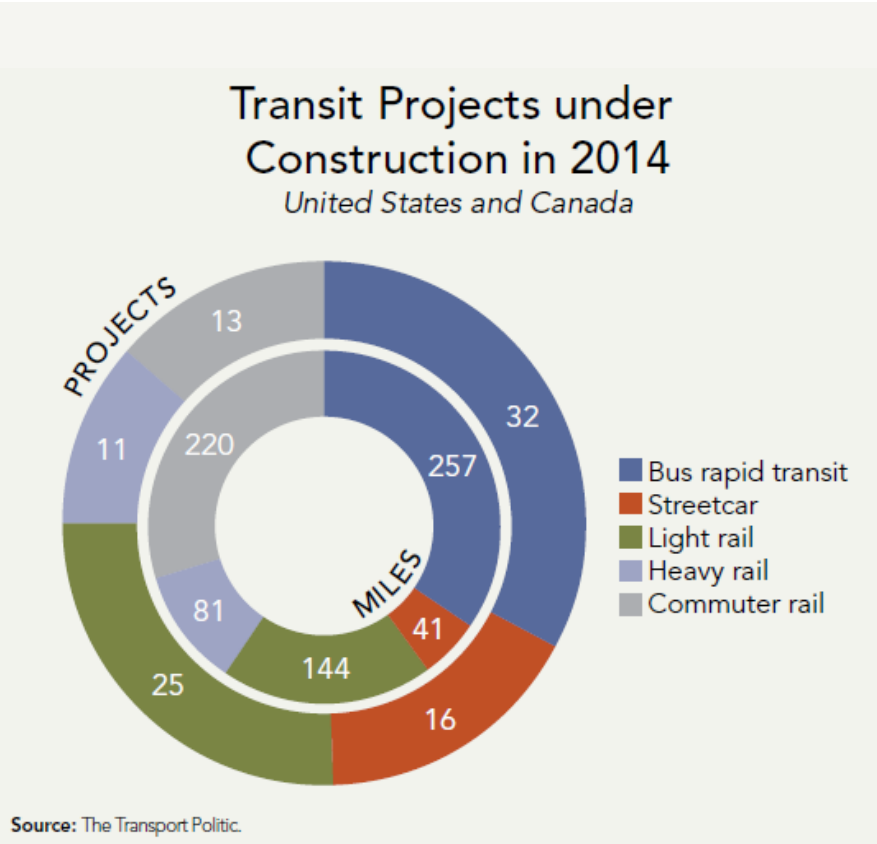
Need:

- Stronger, forward-looking investment case for investment
- Messages that resonate with the public
- Cost-effective investment strategies
- Careful stewardship of resources

U.S. Transportation Ballot Measures

2013 results	2012 results
8 states	17 states
15 measures	62 measures
Approved: 11	Approved: 49
Rejected: 4	Rejected: 13
Success rate: 73%	Success rate: 79%

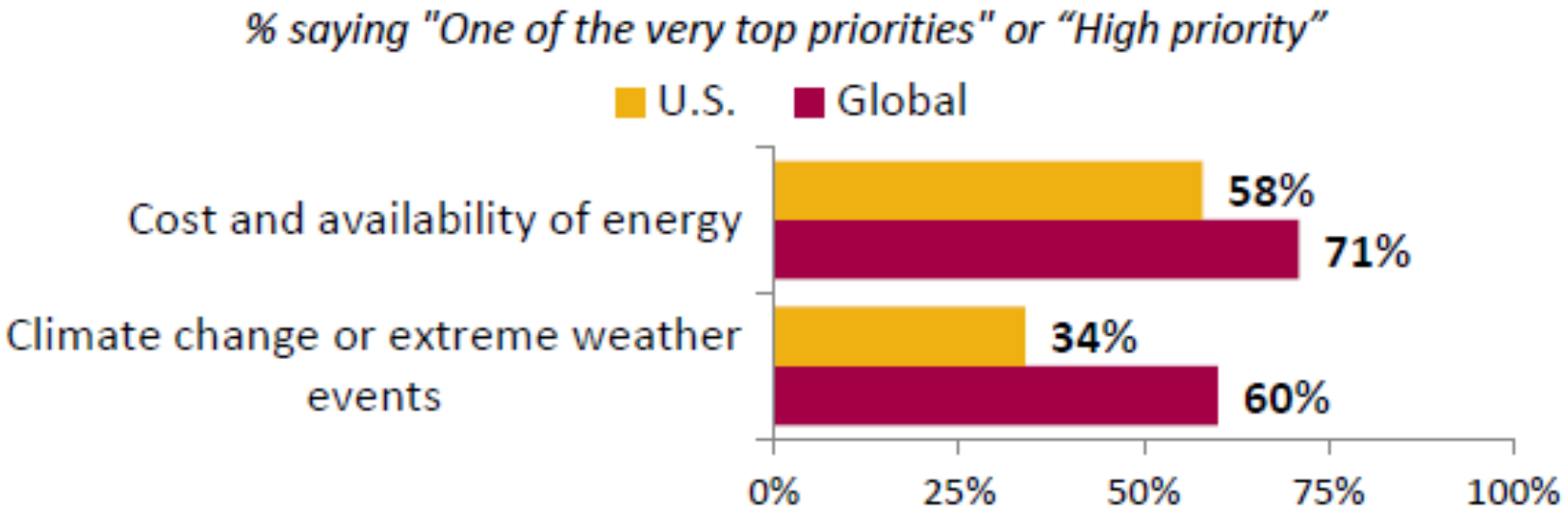
Source: Center for Transportation Excellence.



Source: The Transport Politic.

Factors Shaping Investments in the Next Ten Years

U.S. vs. Global Presence



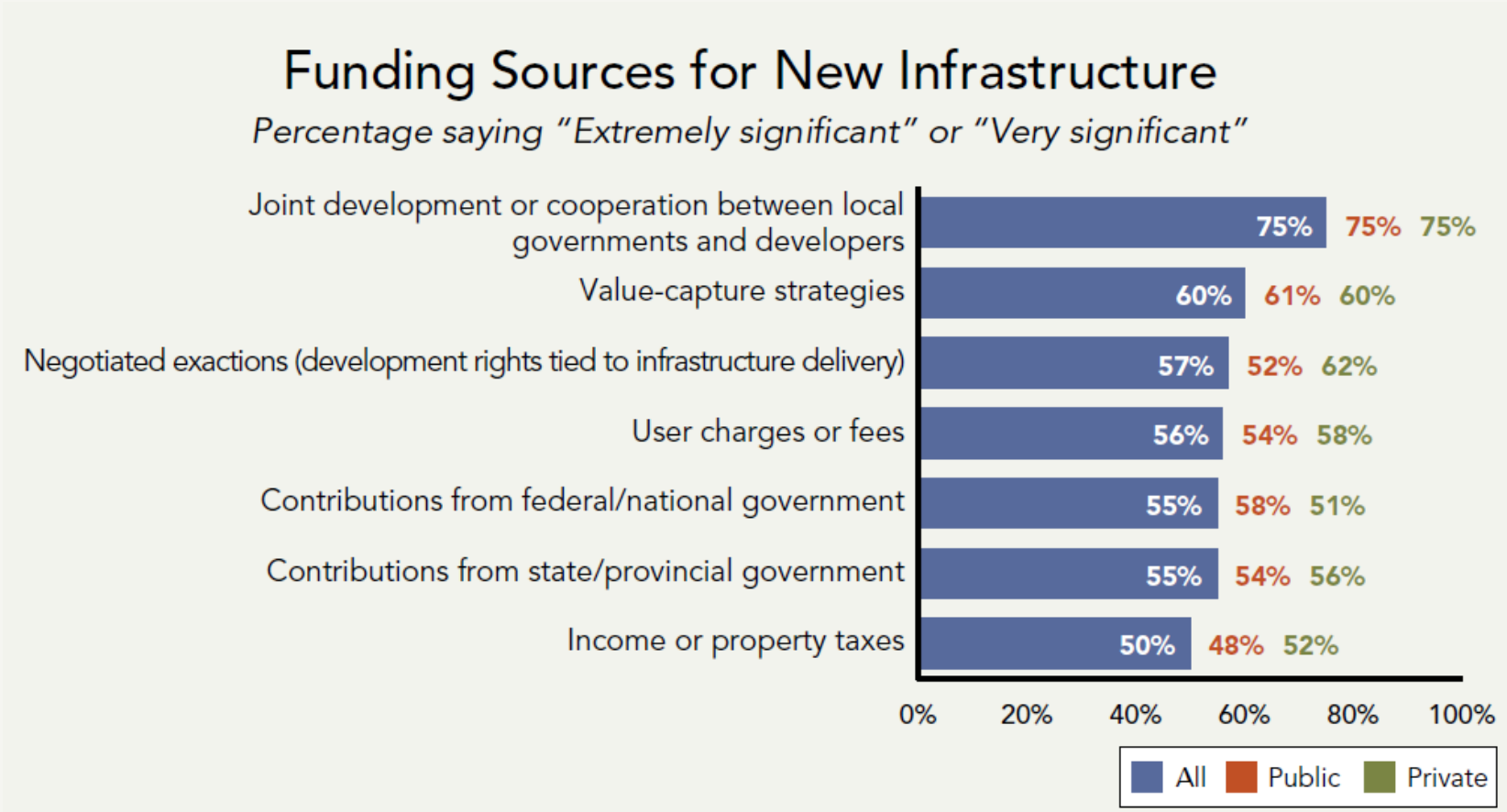
Jay Gillespie

Vice President

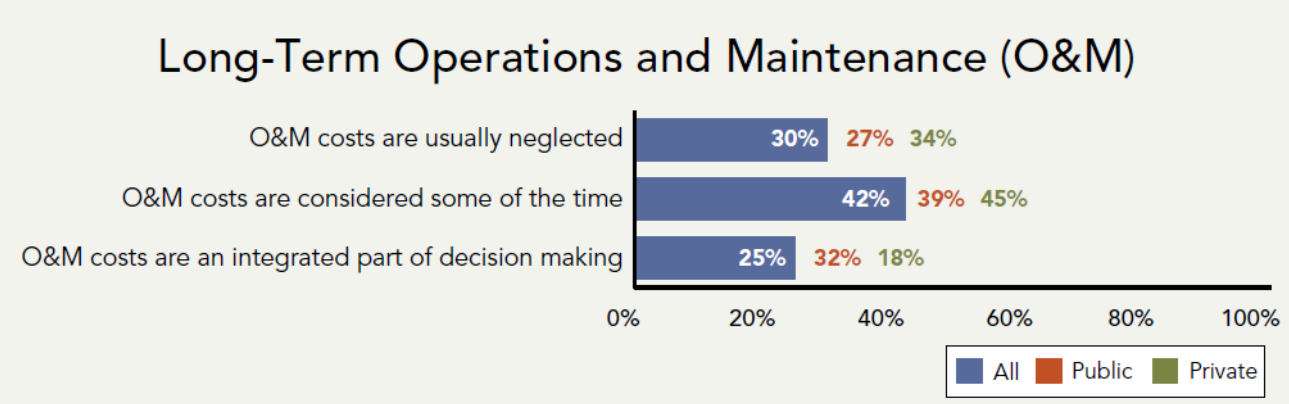
Infrastructure Advisory

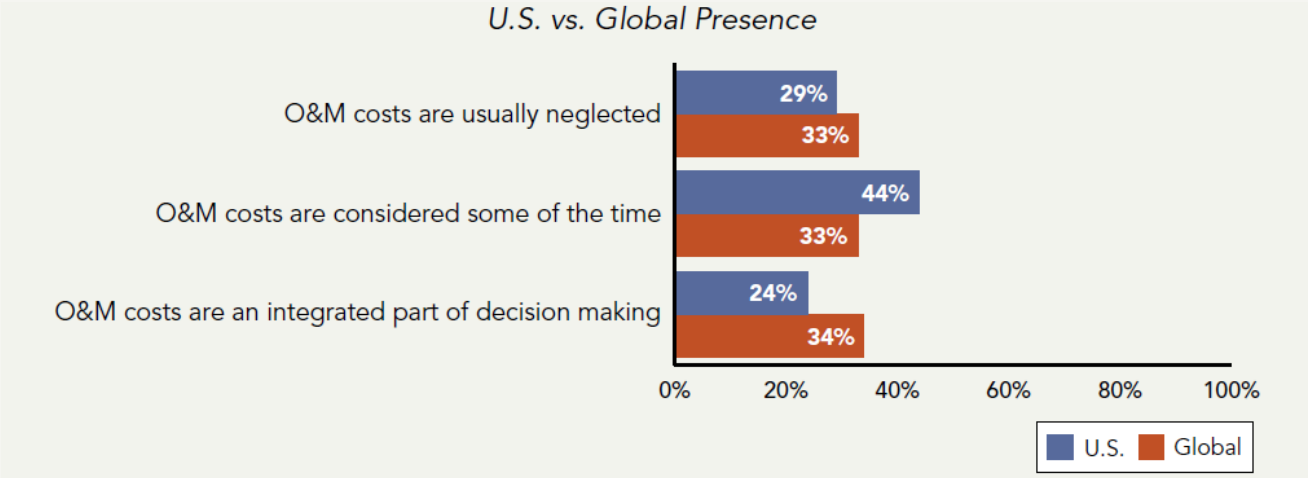
EY

Finding 4 | Top Infrastructure Funding Source: Cooperation between Developers and Governments



Finding 5 | Key Concern: Long-Term Operations and Maintenance





Case Study 1 of 8: Port of Miami Tunnel

- PPP to construct tunnel providing direct access from port to I-395
- Trucks (4,400/day) will now bypass congested downtown streets
- DBFOM helped foster innovation by bidders and deliver project under budget
- Long term O&M responsibility meant bidder incentivized to introduce innovation and efficiency
- With less truck traffic, downtown streets and real estate benefit
- Port is major economic driver
- Project helps the port prepare for Panama Canal expansion
- Project Facts:
  - $1 billion project cost
  - 35 year concession agreement
  - No tolls

Case Study 2 of 8: 2012 London Olympics

- Goal to provide long term sustainability; legacy redevelopment rather than white elephant
- Located on brownfield site
- Olympic planners used games to:
  - Revitalize East London neighborhood
  - Build and rebuild needed infrastructure
- Thought through pre- and post-games infrastructure needs and downscaled components according to need
- Related infrastructure:
  - £6.5 billion in ten railway lines and 30 bridges
  - £10 million investment in pedestrian, cycling infrastructure upgrades
  - Queen Elizabeth Park built from Olympic park site

Case Study 3 of 8: The Hong Kong Model

- By linking real estate and transit, Hong Kong has achieved exceptional transit service, compact land use, and profitability
- HK Transit stats:
  - 99.9% on time
  - Farebox recovery: 185%
  - 5.1 million daily passengers
- Mass Transit Railway (MTR) Corporation is developer which directs property revenues back into transit service
- Rail + Property Model: MTR buys land at “before rail” prices
  - Leases or sells land at premium
  - Transit system as land use structure

Case Study 4 of 8: Silver Line/Dulles Corridor Metro

- Located in Northern VA, west of Washington, DC
- 23 mile, $5.6B Metrorail extension to Dulles airport being built in two phases
- Partial funding for Phase I will come from property owners in the Tysons Corner area that have agreed to a special assessment district with a $400M cap
- Phase 2 funding will come partially from property owners adjacent to the Phase 2 alignment
- Toll road revenues from the Dulles Toll Road are funding just over half of the rail extension project cost

Case Study 5 of 8: Denver Union Station

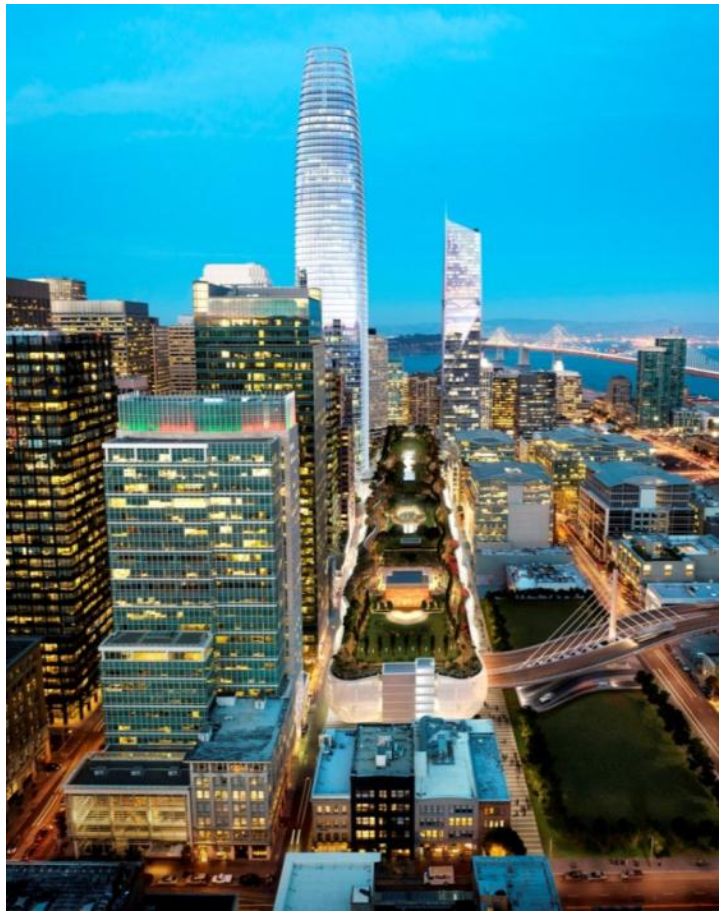
- Located on western edge of downtown, station is hub for sales tax supported FasTracks transit program
- Total project cost for station is approximately $500M
- Regional Transportation District (RTD) purchased site in 2001 and designated a master developer in 2006 to purchase/develop properties
- Also, a 20 acre TIF district created in 2008 surrounding the site
- Increase in tax revenues in the district will go to pay debt service for the project

Case Study 6 of 8: Atlanta BeltLine

- 22 mile rail corridor encircling center of city to be used for parks, trails, and transit
- In 2005, a 6,500 acre TIF district (8% of City) created to fund implementation for 25 years
- Majority of TIF funds will be used for land acquisition, trail construction, parks, transportation improvements, and affordable housing
- Some funds used for developer infrastructure, primarily for environmental brownfield cleanup or to spur development in underused areas

Case Study 7 of 8: Transbay Transit Center

- Located in downtown San Francisco, first phase of $4.5B project will create a five story bus facility that will connect multiple transit systems
- Retail space located within station with future rail located in two below-grade levels
- Sale of state-owned land surrounding transit center has generated over $400M in funding for Phase 1
- TIF district funding from state-owned parcels will also provide a revenue stream for debt repayment



Case Study 8 of 8: Georgia MMPT

- Located in downtown Atlanta at convergence of major freight rail lines
- Proposed transit project that will connect existing MARTA rail and bus systems, regional express buses, intercity buses and new passenger rail investments
- Project located within a 120 acre study area
- Revenue generated from future retail, commercial, and residential projects to help defray capital and operating costs of the MMPT
- Private real estate space located within, above, and surrounding transit center
- Proposed use of special assessment, TIF funding, and joint development

John de Yonge

Director, Account Enablement

Global Cleantech Center

EY

Urban Land Institute
Infrastructure Initiative

#ULI_infra

EY
Building a better working world

#EY_Cleantech

Recap and look ahead

Infrastructure 2014 findings

Good infrastructure is a key driver of where real estate investment dollars go

City infrastructure priorities: public transit, roads and bridges, pedestrian infrastructure

Public's willingness to pay is a top factor that will shape cities; long term operations and maintenance are big concerns

Funding and financing is seen as resting on cooperation between developers and government

Smart infrastructure opportunity

- Opportunity to redefine infrastructure "quality"
- Opening for new business models and innovation
- Transform infrastructure into mobility
- Enhance value of existing assets by connecting them to each other and the broader ecosystem
- Realize avoided costs/avoid infrastructure investments through efficiency and leveraging private sector assets
- Enhance value proposition: direct benefit, cost, functionality; meet the expectations of the connected consumer/citizen
- P3 opportunity – monetize efficiencies, introduce innovations, new business practices
- Cities can take a stake in smart infrastructure development

What is smart infrastructure?

- Energy and resource efficient
- Sensor enabled – connected, optimizing, predictive
- Resilient
- Future proofed

Meeting of the Minds 2014

Workshop Tour: Retrofitting Legacy Infrastructure with Smart City Solutions

- Sensors embedded in buildings and infrastructure are enabling the building (and critical building functions) to connect to broadband networks.
- Internet of Everything: empowering large and small companies to innovate. “Dumb” assets are being rapidly retrofitted and readied for another century of service.
- Tour of Detroit smart infrastructure deployments—lighting, parking, building retrofits.
- In-depth group discussion led by EY on the transition from legacy infrastructures to smart city systems.
- Please join us!

Infrastructure 2014

Shaping the Competitive City

Q & A

www.ey.com/GL/en/Industries/Real-Estate/EY-infrastructure-2014-shaping-the-competitive-city

www.uli.org/infrastructurereport

Infrastructure 2014

Shaping the Competitive City

Thank you!

Urban Land Institute
Infrastructure Initiative

#ULI_infra

EY
Building a better working world

#EY_Cleantech