

# 2015 GII Agenda

# Ritz-Carlton, Half Moon Bay, California November 18–20, 2015

# Wednesday, November 18

#### 07:00 REGISTRATION OPENS

#### **12:00–16:00 INFRASTRUCTURE TOURS** (various off-site locations)

As an integral part of the Global Infrastructure Initiative (GII) program, we will be hosting a number of infrastructure and technology tours to learn how some of Silicon Valley's leading companies are applying innovation and technology to deliver infrastructure solutions. A preliminary sample of the target tours include the following:

- Tesla Motors and the future of urban mobility
- Google and the essence of innovation
- SolarCity and distributed generation
- San Francisco infrastructure tour

## 16:00-18:00 INFRASTRUCTURE MARKETPLACE

An unstructured opportunity for infrastructure leaders from across the value chain to connect and set the course for the coming years of delivery. A collection of GII tools, knowledge, and partners will be on display to facilitate market making.

17:00-18:00 MODERATOR'S MEETING

18:00-19:00 WELCOME RECEPTION

19:00–21:30 DINNER AND KEYNOTE DISCUSSION

Welcome: Robert Palter, Director, McKinsey & Company; Co-chair, Global Infrastructure

Initiative

Speaker: Anthony Foxx, Secretary of Transportation, US Department of Transportation Moderator: Rik Kirkland, Principal and Director of Publishing, McKinsey & Company

21:30 NIGHTCAP

# Thursday, November 19

#### 06:30-07:30 SUNRISE COASTAL RUN

All participants are invited to join running legend, Dean Karnanzes, for a gentle coastal run and discussion on how to maintain your performance. All ages and abilities are welcome. *Special guest:* **Dean Karnanzes**, Athlete, author, and entrepreneur

#### 07:30-08:30 NETWORKING BREAKFAST

#### 08:30-09:00 DRIVING INNOVATION IN INFRASTRUCTURE

Of the 25 actions identified in Rio, three themes stood out: invest early in preparation, build skills in both industry and government, and involve the public. How are these trending? What else needs to happen to enable innovation and improve delivery? *Opening remarks:* 

**Julian Mills**, Principal, McKinsey & Company; Co-chair, Global Infrastructure Initiative *Facilitators:* 

Carol Browner, Senior Counselor, Albright Stonebridge Group Rik Kirkland, Principal and Director of Publishing, McKinsey & Company

#### 09:00-09:10 INSPIRING IDEAS: NO ORDINARY DISRUPTION

A radically different world is emerging with the collision of four global disruptive forces in play—growth and urbanization in emerging markets, rapid technological change, increasing connectivity, and aging populations. These four forces have been in play since the turn of the century but are now disrupting long-established patterns in every market and sector of the world economy. How are these dramatic world transitions reshaping infrastructure, and what does this mean for your organization?

Speaker: Jaana Remes, MGI Partner, McKinsey & Company

#### 09:10–09:45 PLAN: THE RISE OF CITIES — THE LARGEST DISRUPTION THE WORLD HAS EVER SEEN

Approximately 3.9 billion people live in cities and this is expected to increase to 6.5 billion by 2050. Coupled with accelerating technology and changing user needs, infrastructure planning has become a dynamic business. How do infrastructure planners get ahead of the curve to meet future needs while maintaining existing infrastructure services? *Panelists*:

**Trevor Fowler**, City Manager, Johannesburg **Uwe Krueger**, Chief Executive Officer, Atkins **Kasim Reed**, Mayor, Atlanta

Moderator: Jonathan Woetzel, Director, McKinsey & Company

#### 09:45-10:20 FINANCE: BUILDING A CREDIBLE PIPELINE OF BANKABLE PROJECTS

Investors express concern that there are insufficient quality infrastructure projects that offer the right risk/return ratio to attract capital. Simultaneously, governments and developers would like to see investors take on greater risk in infrastructure projects. Do governments have unrealistic expectations about risk and return, or is the private sector too reactive in helping governments understand what makes a bankable deal? How do we to create more bankable projects?

Panelists:
Thierry Déau, Chief Executive Officer, Meridiam

Liew Mun Leong, Chairman, Changi Airport

**Jordan Schwartz,** Head of the Global Infrastructure Facility, World Bank Group

Moderator: Tyler Duvall, Principal, McKinsey & Company

#### 10:20–10:55 BUILD: ENABLING INNOVATION IN THE CONSTRUCTION SECTOR

Entrepreneurs and tech companies are exceptional at creating environments that inspire innovation. The construction sector has been less successful, typically pursuing only incremental change, resulting in flat productivity gains over the past 30 years. What will it take to revolutionize construction when fragmentation, cultural resistance, and risk aversion stand in the way? Will integrated approaches, aligned incentives, or communication make a difference?

Panelists:

Michael Marks, Founding Partner, Riverwood Capital; Chairman, Katerra Jeff Morales, Chief Executive Officer, California High-Speed Rail Authority Vahid Ownjazayeri, President, Global Civil & Infrastructure, AECOM Moderator: Mike Della Rocca, Principal, McKinsey & Company

#### 10:55-11:25 NETWORKING BREAK

#### 11:25–12:00 OPERATE: NAVIGATING DIGITAL—TRANSFORMING TRANSPORT INFRASTRUCTURE

Across industries, customer experience is being redesigned to be omnichannel, personalized, and seamless. Simultaneously, we are seeing massive efficiency gains and new revenue potential in operations, driven by big data, advanced analytics, sensors, and hyperconnectivity. What will it take for leaders to successfully navigate this digital transformation in the transport and travel sectors? How do organizations capitalize on opportunities while managing the threats from new disruptive businesses? *Panelists:* 

Di-Ann Eisnor, Head of Growth, Waze

**Stefan Heck**, Co-Founder and CEO of NAUTO; Fellow at Stanford University **Ketil Solvik-Olsen**, Minister of Transport and Communications, Norway *Moderator:* **Julian Mills**, Principal, McKinsey & Company; Co-chair, Global Infrastructure Initiative

#### 12:00–12:10 INSPIRING IDEAS: INSIGHTS FROM SPACE

By 2020, constellations of hundreds of satellites will provide persistent surveillance of every meter of the Earth. Using a combination of high-resolution satellites, artificial intelligence, and advanced statistical-modeling techniques, we can already approximate this future today. Applied to the infrastructure sector, we can monitor construction progress, road conditions, traffic patterns, commodity inventories, and much more. How could this unprecedented tracking and benchmarking capability transform the sector?

Speaker: James Crawford, Chief Executive Officer, Orbital Insight

#### 12:10–12:45 DELIVERING THE NEXT TRANSBAY TUNNEL

The Bay Area is experiencing burgeoning population growth alongside aging transport infrastructure, with no alternative to the Bay Area Rapid Transit (BART) tunnel. Preliminary research indicates that a second multimodal transbay tunnel is critical to provide resilience and sustain economic growth in the Bay Area. This session sets the stage for four structured workshops where GII participants will draw from their collective experiences to determine how to PLAN, FINANCE, BUILD, and OPERATE this megaproject.

Panelists:

Claus Baunkjær, Managing Director, Femern A/S

Ed Lee, Mayor, San Francisco, California

Libby Schaaf, Mayor, Oakland, California

Moderator: Robert Palter, Director, McKinsey & Company; Co-chair, Global Infrastructure

Initiative

#### 12:45-14:15 LUNCH

## 14:15–15:15 DISCUSSION SESSIONS: DELIVERING THE NEXT TRANSBAY TUNNEL

Participants select one of four concurrent discussion sessions:

#### PLANNING THE NEXT TRANSBAY TUNNEL

Discussion leaders:

Gillian Gillett, Director of Transportation Policy, City of San Francisco

Charles Harrington, Chairman, CEO and President, Parsons

Steve Heminger, Executive Director, Metropolitan Transportation Commission

Scott Wiener, Supervisor for District 8, San Francisco Board of Supervisors

Moderator: Jonathan Woetzel, Director, McKinsey & Company

# FINANCING THE NEXT TRANSBAY TUNNEL

Discussion leaders:

Nuria Haltiwanger, Chief Executive Officer, ACS Infrastructure Development

Laurie Mahon, MD and Head Global Infrastructure Finance, CIBC

Edward Pallesen, Managing Director, Goldman Sachs

Moderator: Robert Palter, Director, McKinsey & Company; Co-chair, Global Infrastructure

Initiative

#### 14:15–15:15 DISCUSSION SESSIONS: DELIVERING THE NEXT TRANSBAY TUNNEL (continued)

Participants select one of four concurrent discussion sessions:

#### **BUILDING THE NEXT TRANSBAY TUNNEL**

Discussion leaders:

**Lee Saage**, former Director Capital Projects; San Francisco County Transportation Authority **Michael Schneider**, SVP and Managing Director, Global Infrastructure Advisory Practice, HDR Engineering

**José Valén,** International Development Director, Acciona Infrastructure *Moderator:* **John Means**, Principal, McKinsey & Company

#### **OPERATING THE NEXT TRANSBAY TUNNEL**

Discussion leaders:

**Tilly Chang**, Executive Director, San Francisco County Transportation Authority **Chantal Sorel**, Managing Director, SNC-Lavalin

**Torbjörn Suneson**, Senior Advisor, Swedish Transport Administration *Moderator:* **Julian Mills**, Principal, McKinsey & Company; Co-chair, Global Infrastructure Initiative

#### 15:25–16:25 DISCUSSION SESSIONS

Participants select one of four concurrent discussion sessions:

#### PLAN: URBAN MOBILITY — PLANNING FOR GREATER ACCESS

Rapid urbanization, technology gains, and changing user behaviors have caused the urbanplanning models and mobility strategies of the past to become redundant. Simultaneously, our cities have become the incubators of innovation and efficiency. What new models are required to better integrate urban planning and mobility? What actions can infrastructure leaders take now to set the course for success?

Discussion leaders:

Tim Kentley-Klay, Co-founder, ZOOX

Bruce McCuaig, President and CEO, Metrolinx

Jay Walder, President and CEO, Motivate

Moderator: Stefan Heck, Co-Founder and CEO of NAUTO; Fellow at Stanford University

#### FINANCE: FIXING PUBLIC-SECTOR INFRASTRUCTURE FINANCE

Pundits believe that governments can finance infrastructure better than private capital can, using infrastructure banks or bonds. The default assumption is that public money is cheaper. Yet government funds are often constrained by debt challenges, strained budgets, inflated costs, and the threat of higher taxes. How do we move beyond this debate to get critical infrastructure financed? What are the collective lessons from more than 20 years of public—private partnership financing on whom should play where?

Discussion leaders:

Marcia Hale, President, Building America's Future Robert Milliner, Director, Global Infrastructure Hub

Pär Nuder, Chairman, AP3

Werner von Guionneau, Chief Executive Officer, InfraRed Capital Partners

Moderator: Tyler Duvall, Principal, McKinsey & Company

#### 15:25–16:25 DISCUSSION SESSIONS (continued)

Participants select one of four concurrent discussion sessions:

#### **BUILD: DISRUPTIVE COST REDUCTION**

Many industries have systematically reduced manufacturing costs by optimizing their procurement and supply chains, applying lean practices, and better aligning plans with customer needs. What levers can we apply to move the needle in the global engineering and construction industry? How can we use technology to better connect design, procurement, construction, and asset operation to reduce overall cost? *Discussion leaders:* 

Anton Affentranger, Chief Executive Officer, Implenia
Steven Berglund, President and CEO, Trimble Navigation
Héctor García, Region President for Latin America, Bechtel
Sunny Wang, General Manager, Broad Group USA
Moderator: Maria João Ribeirinho, Principal, McKinsey & Company

#### **OPERATE: LEVERAGING DATA TO OPTIMIZE PERFORMANCE**

Most infrastructure owners and investors would welcome the use of data to optimize performance of their asset, both with respect to utilization and operating costs. What is possible today and what benefits can we expect? What regulatory, structural, and process preconditions are required to deliver on the promises beyond the technical concept? Can we leverage data and technology to drive revenue in assets? *Discussion leaders:* 

Lance Hockridge, Managing Director and CEO, Aurizon Holdings Leigh Jasper, Chief Executive Officer, Aconex Ashay Prabhu, Managing Director and Co-founder, Assetic Thomas Siebel, Chief Executive Officer, C3 Energy Moderator: Adrian Booth, Principal, McKinsey & Company

#### 16:25-16:40 SWITCH BREAK

#### 16:40–16:50 INSPIRING IDEAS: NEW TRENDS IN INFRASTRUCTURE FINANCING

Affordable solar and storage technologies are turning every house into a power plant and every car into a battery. These movements towards distributed infrastructure have been accompanied by new ways of financing infrastructure, where capex is paid for directly by the consumer, often financed by the infrastructure service providers via long term contracts. Who are the leading innovators, what are the business models, and how will this disrupt transport infrastructure?

Speaker: Michael Linse, Partner, Kleiner Perkins, Caufield and Byers

#### 16:50–17:25 MAINSTREAMING DISASTER RISK REDUCTION AND RESILIENCE

The global community is increasingly aware that the delivery of critical infrastructure must include robust disaster risk reduction and resilience plans to account for climate change, natural disasters, and extreme weather. Yet experience consistently highlights that we are underinvesting. What factors influence the way that mitigation, adaptation, and resilience are prioritized in infrastructure planning and delivery today? What sectors and institutions are best placed to lead and how can global leaders overcome collective inertia? How can the future costs of inaction be better reflected in our decision making today? *Panelists*:

Michael Berkowitz, President, 100 Resilient Cities, Rockefeller Foundation Ed Jackson, Major General, US Army Corps of Engineers Kit Miyamoto, President & CEO, Miyamoto International Moderator: Carol Browner, Senior Counselor, Albright Stonebridge Group

#### 17:25-17:35 INSPIRING IDEAS: MAPPING THE FUTURE

Infrastructure connects and defines us—our roads, pipelines, and Internet cables shape our opportunities, vulnerabilities, and identities. Global infrastructure connectivity is transforming the world from political to functional maps such that how we use the world matters more than how we legally subdivide it. This session explores how a Connectivity Atlas will become our greatest asset in navigating the future and rebounding from adversity.

Speaker: Parag Khanna, Managing Partner, Hybrid Reality
Introduction: Rik Kirkland, Principal and Director of Publishing, McKinsey & Company

#### 17:35-19:00 **NETWORKING BREAK**

#### 19:00–21:30 DINNER AND ENTERTAINMENT

#### 21:30 NIGHTCAP

# Friday, November 20

#### 08:00-09:00 BREAKFAST DISCUSSION SESSIONS

Participants select one of four concurrent discussion sessions:

#### PLAN: ECONOMIC MASTER PLANNING FOR MEGA-DEVELOPMENTS

McKinsey's research indicates that a significant percentage of large real-estate developments fail to create their anticipated economic value. This should be a cause for concern for both developers and government. How can we conduct economic master planning to realize the right asset mix to deliver commercially viable and socially thriving developments? What planning tools and experience do we have at our disposal to get this right?

Discussion leaders:

Mark Gregg-Macdonald, Group Executive: Planning & Sustainability, Transnet Jason Prior, Chief Executive, Cities + Places, AECOM Jorge Quijano, Chief Executive Officer, Panama Canal Authority Wong Heang Fine, Group Chief Executive Officer, Surbana Jurong Moderator: Guangyu Li, Director, McKinsey & Company

# FINANCE: BEYOND PRIVATIZATION — FINANCING INFRASTRUCTURE PORTFOLIOS THROUGH ASSET MONETIZATION

Public-infrastructure owners struggle to find the funds to rebuild and maintain infrastructure assets. Meanwhile, substantial equity is "trapped" in existing assets, without a clear path to monetize them. When full privatization is not a viable path, how do we tap government equity in existing assets to rebuild?

Discussion leaders:

Graham Bradley, Chairman, Infrastructure New South Wales
Rob Collins, Executive Director, Global Investments, Hastings Fund Management
Clemente del Valle, President, Financiera de Desarrollo Nacional
Peter Luchetti, Vice Chair, California Economic Infrastructure & Development Bank
Moderator: Aaron Bielenberg, Senior Vice President, McKinsey & Company

#### **BUILD: USING BIG DATA FOR BETTER DECISIONS**

New technology is enabling better real-time decision-making, informed by hard data across industries. Correctly applied, big data can drive productivity in the industry and on projects through increased performance transparency and by enabling simulation and prediction. How can we build infrastructure to be responsive and flexible to the real-time data of the future? What data sources are enabling project teams to gain better insight and make better decisions? What are the implementable lessons from case studies? Discussion leaders:

John Beck, Executive Chairman, Aecon Group

Peter Chamley, Director, Arup

Amar Hanspal, Senior Vice President, Autodesk

**Mike Lewis**, Corporate Manager of Construction & Chief Innovation Officer, Bechtel Group *Moderator:* **John Means**, Principal, McKinsey & Company

#### **08:00–09:00 BREAKFAST DISCUSSION SESSIONS** (continued)

#### **OPERATE: CATERING TO YOUR CUSTOMERS**

Truly understanding your customer's identity, location, and preferences can create great value—both for the customer and for infrastructure providers. While the opportunity is huge, barriers such as privacy rights, organizational change, and stakeholder alignment are significant. How can we achieve win-win outcomes and where is disruption looming? What is working across asset classes today that can be applied more broadly tomorrow? *Discussion leaders:* 

Jose Hernandez, Executive Vice President South America, Sensus David Middleton, Chief Executive Officer, Transport Scotland Stephen Shewmaker, Chairman, Cubic Transportation Systems *Moderator:* Adrian Booth, Principal, McKinsey & Company

#### 09:00-09:15 SWITCH BREAK

#### 09:15-09:25 INSPIRING IDEAS: CONNECTED INFRASTRUCTURE

Tens of billions of devices, machines, and systems are connected, bringing dramatic opportunities to transform how cities and infrastructure operate. We are already experiencing positive outcomes in managing traffic flows, building efficiency, energy, and water use. What is the full potential scenario, leveraging software and analytics, and what does this mean for infrastructure leaders as digital becomes a strategic initiative? *Speaker:* William Ruh, Chief Executive Officer, GE Digital & Chief Digital Officer, GE

#### 09:25-10:00 TACKLING THE BIGGEST INFRASTRUCTURE BOTTLENECK: HUMAN CAPITAL

Exacerbated by rapid urbanization and infrastructure demand, the lack of qualified human capital may be the biggest bottleneck to infrastructure delivery in the future. What can boards and CEOs do to accelerate the development of skilled infrastructure professionals? What are the possible talent bridges with other industries? How can infrastructure companies improve their people and make their culture more appealing? *Panelists:* 

**Kevin Connelly**, Chief Executive Officer, Spencer Stuart **Mark Elliott**, Chief Executive Officer, Northwest Rapid Transit **Kyle Mangini**, Global Head of Infrastructure, IFM Investors *Moderator:* **Mike Della Rocca**, Principal, McKinsey & Company

#### 10:00-10:10 INSPIRING IDEAS: RETHINKING THE CUSTOMER EXPERIENCE

Orlando International Airport (serving Disney, Universal Studios, and more) is one of the most significant airports in the United States because of the demanding customer profile, rapid growth, and ambitious expansion plans. To meet customer expectations and maintain competitive advantage, the Greater Orlando Aviation Authority launched an unprecedented effort with its 18,000 employees to strengthen customer experience. The results have been nothing less than transformative.

Speaker: Ron Ritter, Expert Principal, McKinsey & Company

#### 10:10–10:40 GOVERNANCE: FOCUSING ON THE LONG TERM

Developing nations present huge opportunities for megaprojects, but they face challenges with poverty and a lack of basic services, often making delivery difficult. This raises the age-old question of how to balance the demands of long-term development with short-term needs. Can infrastructure investment enable countries to address their immediate needs too? How do we build resilient infrastructure plans that can withstand the dynamic political and economic cycles? How do countries reset and rebuild confidence when they falter? *Panelists:* 

Madeleine Albright, Chair, Albright Stonebridge Group

Joaquim Levy, Minister of Finance, Brazil

Moderator: Rik Kirkland, Principal and Director of Publishing, McKinsey & Company

## 10:40-11:10 THE BEST IDEAS 360

Recap of the best ideas, insights, and actions from the Global Infrastructure Initiative. *Facilitators:* 

Carol Browner, Senior Counselor, Albright Stonebridge Group

Robert Palter, Director, McKinsey & Company; Co-chair, Global Infrastructure Initiative

#### 11:10-11:20 CLOSING REMARKS

Robert Palter, Director, McKinsey & Company; Co-chair, Global Infrastructure Initiative

#### 11:30–13:00 NETWORKING LUNCHEON