Milken Institute Financial Innovations Lab

Investing in Los Angeles' Urban Resiliency

Project Background

As cities across the globe continue to grow at unprecedented rates, the effects of globalization, urbanization, and climate change are having dramatic physical, financial, and social impacts. Today, urban areas house more than half of the world's population and contribute 80 percent of global GDP. As more people and assets become rapidly concentrated in cities, infrastructure will struggle to keep up and the necessity for cities to be better prepared for environmental shocks and population stresses will intensify. Cities across the globe have begun to focus on the importance of funding and financing urban resilience strategies.

To support expected population increases and climate stresses, average annual global infrastructure spending of US\$4T is needed through 2030.² Most countries are underinvesting, producing an annual global shortfall of US\$350B.³ With limited budgets, cities will need to ensure that their development strategies and investment decisions enhance both economic and social resilience. In many global cities, priority projects and programs have already been identified; yet, these plans have not attracted the capital required to meet funding needs.

Given the funding gap, the Milken Institute, in collaboration with AECOM, is examining opportunities to make more effective use of public and private capital for the financing of resiliency projects. The collaboration kicked off with the Institute convening a Financial Innovations Lab on July 31, 2018 to examine the remodel of Los Angeles Union Station (LAUS). Today, the region's transportation system is highly oriented toward personal automobiles, and the City of Los Angeles ranks worst among major global cities for peak hours spent in congestion.

An updated Union Station will play a major role in improving transportation options. The project, Link US, will include the reconfiguration of railroad track alignments and the revitalization of the passenger concourse at LAUS, transforming it from a stub-ended track terminal to a world-class multimodal station.

The Lab used Link US as a case study to brainstorm innovative ways to make more effective use of public capital and attract increased private financing to transformational infrastructure projects across the city and state. The workshop brought together policymakers, technical experts, and finance professionals to generate market-based solutions and public policy recommendations in support of accelerating this transformational project.

Resilience & Infrastructure Investment in Los Angeles

Los Angeles faces a variety of resiliency challenges including unpredictable environmental shocks such as earthquakes and wildfires, and stresses that weaken the city, including its overtaxed and congested transportation networks.

On a state level, California has distinguished itself as a policy leader in addressing the climate effects of urbanization, with laws requiring greenhouse gases (GHG) to be at 1990 levels by 2020, and 80 percent below 1990 levels by 2050.⁴ At the same time, California's population is expected to reach almost 50 million by 2050, from just under 40 million today.⁵ Interregional travel is forecasted to grow to 545 million trips annually⁶ and with only 5 percent of commuters using public transit,⁷ vehicular transportation represents the largest contributor to the state's GHG emissions at 37 percent.⁸ This traffic also takes a significant economic toll, estimated to exceed \$19B annually.⁹

Los Angeles County is of particular importance in the state's challenge to become more resilient, as it is both the largest county by population (10.4 million in 2017) and by area (4,084 sq. miles). With California's combined challenge of reducing GHGs and accommodating a growing population, state and local policymakers have an incentive to make expanding public transit, including the state's rail and bus networks, a top priority.

Improving transit capacity in the region is no small feat and financing this infrastructure undertaking will require creativity, innovation, and political will. Traditionally, the public sector has supported infrastructure at the federal, state, and local levels. However, federal financing for infrastructure has declined in recent years, creating a need to consider alternative sources, including private capital.

Our research shows a well-established need to fundamentally i) reform public infrastructure procurement, ii) accelerate project delivery, and iii) drive more widespread adoption of lifecycle management approaches—all of which stand to benefit greatly from the involvement of

private partners in what is commonly referred to as a Public-Private Partnership (P3). P3s are long-term contracts between private partners and a government entity where the private party provides a service and assumes certain operational and managerial risks in exchange for payment tied to performance. California is increasingly relying on P3s to deliver quality projects.

Residents in Los Angeles have historically been in support of increased funding for new and improved infrastructure. In 2016 Los Angeles County voted to approve Measure M, a half cent county sales tax increase to create a sustained funding stream for regional mobility, including 40 transit and road projects planned by Los Angeles County Metropolitan Transportation Authority (Metro) over the initial 40 years of the program. 12 However, the improvements at LAUS will require financing beyond that allocated through Measure M. The Link US remodel will catalyze transit-oriented development (TOD) by creating a destination location with a new passenger concourse and other amenities. The focus of the Lab was the gap in financing to cover the project's \$2-2.5B price tag. 13

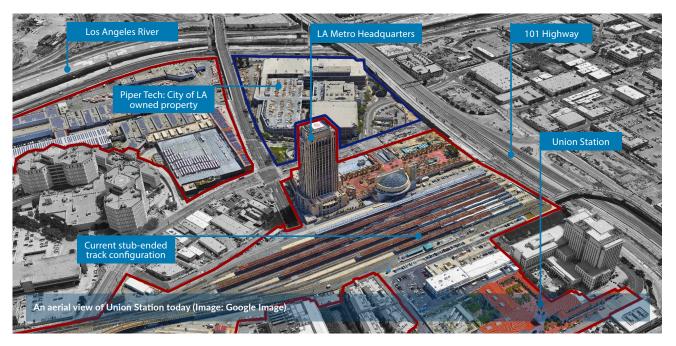
Union Station: Past, Present, & Future

Built in 1939, Union Station is a historic monument in downtown Los Angeles, known both for its architectural prominence and its importance to the region. Union Station is the largest multi-modal terminal in Southern California, with approximately 541 Metro light rail and subway, Metrolink, Amtrak and future High Speed Rail trains, 1,800 buses, and 100,000 people daily—connecting 7 counties. Metro acquired the property in 2011 and has already invested \$46M in tenant improvements to reestablish the iconic nature of the property.

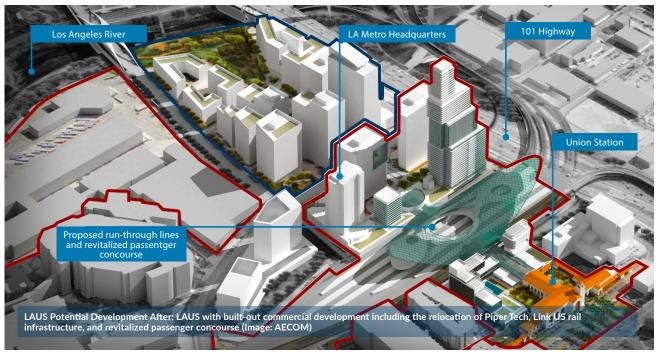


(Image: Metro)

The Link US project will transform how the regional rail system operates in Los Angeles by converting the stubended station into a run-through station with up to 10 new run-through tracks and a loop track, with up to two platforms and four run-through tracks for future High Speed Rail.



The project will be constructed in phases. Project Phase A includes early track, rail signal, and rail communication work in the throat area, construction of the full viaduct structure over the US-101 freeway, property acquisition on Commercial Street and street improvements, and the initial two run-through tracks and a loop track. Project Phase A is funded with \$950 million. Project Phase B includes raising the rail yard up to 15 feet, construction of the new expanded passenger concourse, new platforms, escalators and elevators, and completion of the remaining run-through tracks over the US-101. Project Phase B is currently unfunded and Metro is actively seeking funding.



Key: LA Metro owned land

City of LA owned land

In the future, Union Station will be a transit hub that will allow the city to compete on a global scale by keeping up with population growth, economic development, and the associated mobility demands. The Link US project will increase station capacity up to 63 percent, from 172 trains to 280 trains daily. In addition to the transportation improvements, the remodel is expected to generate an additional \$1.5 billion in economic activity for the region. The impact of the project is expected to reach beyond just the infrastructure component through the revitalization of the surrounding neighborhood.

Highlights

Participants at the Lab were in consensus that the remodel and increased capacity of Union Station could be beneficial to the region. However, there was also consensus that the case for developing surrounding TOD, such as possible commercial, office, and residential opportunities, had not been fully formulated. Headwinds to the project were generally agreed upon and included:

- challenges with the station's location
- an unconvincing short-term economic proposition
- the need for greater project support to enable the project to achieve its potential goals

Throughout the day, the group discussed how to de-risk this type of investment and maximize the ability to attract both public and private funding sources. Participants discussed:

- the potential for commercial development
- the feasibility of a P3 that bundles such commercial development
- tax increment financing (TIF) options
- federal funding, such as the newly introduced opportunity zone legislation

Main Challenges

1.

Location

The station's location poses both an opportunity and a challenge. Metro owns 47 acres of the LAUS campus, which includes an additional 6M sq. feet of developable entitlement.¹⁴ The area surrounding the station needs investment to create healthier, more connected neighborhoods and attract commercial development. Situated just northeast of Downtown LA, Union Station touches a variety of neighborhoods that are currently experiencing a wave of redevelopment—the Arts District, South Park, the Historic Core, among others, Additionally, restoration efforts of the nearby LA River and Civic Center are bringing energy to the broader area. However, LAUS faces many location constraints as it is bound by a county jail, the Piper Tech industrial facility, the US-101 highway, and a bus terminal. To create a destination in and around Union Station, the land will likely need to be rezoned to make the neighborhood more attractive for residential and commercial development.

The transit elements of the Link US project are expected to be complete in 2028. Very little commercial development can occur on Metro land before this delivery date as many of the available development sites are needed for staging the infrastructure construction. In addition, the attractiveness of those surrounding development sites will strongly depend on enhancements to nearby land use designations and density requirements. Commercial developers who participated in the lab questioned the benefits of bundling the commercial development opportunities into a P3 today to help finance the infrastructure project if no value can be captured for at least a decade.

2.

Capturing Value

Link US has a funding gap, which can be filled through public sources, private investment, or a combination thereof. Depending on the type of financing or funding utilized and the final capital structure, it will be necessary to identify revenues to service any debt and/or provide a return to investors. Such revenues can be in the form of availability or performance-based payments (e.g., from Metro and other transit operators), from retail activity at the station, or from value captured from real estate development around the station. One common way to capture value from infrastructure development is tax increment financing (TIF), which funds projects through an increase in property value (and thus tax revenue).

California was one of the first states to enact TIF legislation, including the creation of Redevelopment Agencies (RDAs). However, in 2015, Governor Jerry Brown signed into law new Enhanced Infrastructure Financing District (EIFD) legislation, which replaced RDAs that had been eliminated in 2011. The EIFD structure is a type of TIF district that is expected to allow many new projects in California to be financed by capturing the future value of the infrastructure project benefit in the surrounding community.

Municipalities can issue bonds secured by the resultant tax and fee increases to repay the developers for their initial investment at the conclusion of the project or utilize a "pay-as-you-go" method to make annual payments once the new value has been captured.

Metro has conducted EIFD feasibility research for the Link US project to gauge the value capture opportunity. The initial results of the study are not overwhelmingly convincing that creating an EIFD comprised of the immediately adjacent lots alone will yield enough revenue to finance Link US. Similar to the timing concern around bundling real estate development into a P3 deal, there is a significant gap before the revenue from the increased property taxes will be captured. Given the recent resurgence of other downtown areas. Lab participants were also concerned that an EIFD around the station would not necessarily pass the "but for" test, which articulated whether or not the added value from development would have occurred naturally or as a result of the new station.

3.

Need for Additional Project Champions

Large-scale infrastructure projects are highly complex and involve the collaboration of a variety of parties, including local and regional governments, investors, community leaders, and more. While there is consensus that interregional transit capacity must be improved, Metro has had to champion the project alone to push Link US forward as a 2028 priority. Identifying more broad-based championship will help to reduce the uncertainty in the investment community, galvanize needed agency resources, as well as rally local residents and businesses in the area.

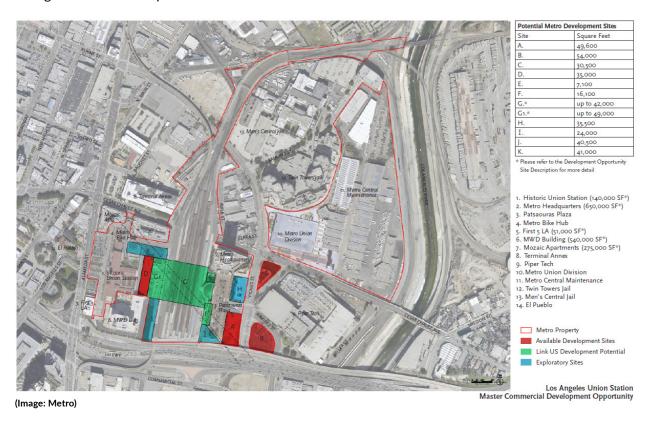
Key Recommendations

1.

Amplify the Project Vision and Benefits to Communities and Users

Plans for a project the scale of Union Station should serve as a visionary roadmap to guide all aspects of surrounding development. Given the location and timing challenges of Link US, Lab participants recommended Metro reexamine the existing project plan to enhance the case for the infrastructure improvements, including a strong narrative that qualitatively tells the story of regional impacts, all supported by quantitative data. The group discussed the City's Transit Oriented Communities (TOC) zoning density provisions to explore opportunities to magnify incentives, as well as better coordinating synergies with the various revitalization projects currently underway in the general vicinity of Link US, such as the LA River and Civic Center.

The Link US project needs to identify ways to collaborate with and leverage the work being done on these other neighboring projects to amplify a cohesive, visionary plan for the region that demonstrates the triple bottom line (economic, social, and environmental) impacts. Participants agreed that Metro should continue to develop Link US to look beyond the core infrastructure components and propose a strategy that will revitalize the entire area and proactively coordinate intergovernmental cooperation to benefit the broader communities.



The project should incorporate meaningful community engagement as highlighted in many other best practice TOD case studies, as well as effectively demonstrate to businesses and residents in the community how Link US will benefit their neighborhood.

Hesitation and pushback to major neighborhood change are not uncommon. During the Lab, participants referenced the initial planning of Denver Union Station and the bold proposal to move the recently constructed light rail station approximately 500 feet away from the station headhouse. By demonstrating that he newly created corridor connecting the headhouse and light rail station would bring large amounts of foot traffic, the infrastructure redesign helped to attract broad public support and private sector development to the infrastructure project.

Next Steps

- Conduct an assessment of the triple bottom line impacts to validate why a proposed plan is the best option for Metro, the city, and the community as a whole.
- Demonstrate to local partners, such as the City of Los Angeles' Piper Tech and the County of Los Angeles' correctional facilities, why their involvement and flexibility in Link US will prove beneficial, both socially and economically.
- Explore upzoning options to make the area around LAUS a more attractive destination for commercial and residential development.
- Enhance the existing project with a broader transformational narrative to engage new political champions to help counter political, financial, and technical headwinds.
- Leverage the ongoing resurgence in neighborhoods surrounding LA Union Station including the Arts District, Chinatown, and Little Tokyo—in conjuction with the Connect US Action Plan, the LA River revitalization and the Link US project to catalyze greater development opportunities.
- Explore additional location challenges and opportunities, including the closure of the Vignes entrance to the 101 freeway to create stronger access for the local community.

2. Determine Viable Strategy for Core Infrastructure

The workshop participants tackled different structures for delivering financing components, with mechanisms that included public and private investment. Referencing examples of existing P3 projects, such as the Long Beach Courthouse, participants fleshed out the potential benefits to using a P3 model as one option. Outside of the financing component, benefits of a P3 could include reducing the overall construction timeline and associated

project costs, optimizing design outcomes, and improving lifecycle performance of the asset. Participants suggested that Metro reexamine components of Link US to make the investment offering more opportunistic and less prescriptive. A more flexible procurement process was suggested to enable Link US to attract a larger audience to a more meaningful project. The group discussed various mixes of repayment sources, what the incentives are for a developer to invest in Union Station, and ways to streamline the procurement process.

Any partnership should be mutually beneficial, and any private investor will need to see a clear path to earning a return. Link US in its current form does not adequately demonstrate a financial opportunity due to the aforementioned challenges. While there are a handful of commercial development opportunities in and around the station, such as the potential commercial opportunities at Piper Tech, Lab participants generally agreed that Link US should delay bundling the commercial development with the infrastructure component in a P3 contract. The group concluded that the best value proposition is to let the real estate market around Union Station mature, and allow the destination to be created around the infrastructure.

Next Steps

- Quantify the pros and cons of engaging a private partner and determine the appropriate timing of such engagement. As an outcome from the Lab, Metro is exploring the options for engaging a program coordinator to augment their in-house expertise. This may help in attracting financial resources and act as a catalyst for intergovernmental coordination, among other benefits.
- Develop stronger data on the overall lifecycle costs of the Link US project.
- Review feedback from Lab participants and examine broader market precedents to compare infrastructure RFQs that bundle commercial development vs. those that do not, and to assess how to most effectively attract private investment in the absence of nearterm commercial development incentives.
- Conduct a value-for-money analysis for any portions of the project that may be financed as a P3 and ensure the criteria to select design elements for the project, including the design of the passenger concourse, are compatible with the highest and best use for the long-term redevelopment opportunity.

3.

Develop an Inclusive Governance Structure

Link US is a large project for the City of Los Angeles and will involve a variety of stakeholders at various stages and throughout the process. Lab participants discussed recent case studies and highlighted the correlation between successful project outcomes and strong and inclusive governance structures.

Participants identified a strong need to improve coordination among the various stakeholders of Link US including Metro, the City of LA, LA County, and the private sector, starting in the planning stage and enduring through completion. One way of improving communication, as well as aligning incentives, is to create a joint governance structure, where all parties contribute to the development, understand their role and conceptualize their benefit from the project's completion. In the case of Hudson Yards in New York City, the Hudson Yards Development Corporation (HYDC) was set up as an arm of the city government to oversee all construction related to the redevelopment. HYDC coordinated the efforts between NY Metropolitan Transportation Authority, the NY Department of City Planning, NYC Council, NY Law Department, and the NYC Industrial Development Agency, to name a few, in order to efficiently execute the development project. 16 Participants referenced past projects that utilized a Joint Powers Authority. However recent legislation has added a level of complexity to that structure of governance, which was met with pushback from Lab participants.

The underlying mandate of any governance structure is the project charter, a living and breathing document that binds all parties together for the mutual benefit of the community. The Link US project will deliver benefits to the community, environment, and regional economies, which, if effectively portrayed, will attract a wide range of champions. Given the complex and phased nature of the Link US project, the charter should have two layers of participation: an executive steering committee comprised of the key entities that would survive the entirety of the project and sub-working groups specific to different phases of construction.

Next Steps

- Explore the advantages of various governance structures, such as a 501(c)3 or Limited Liability Partnership, to see what will be most effective to drive the coordination of the necessary resources. Lab participants suggested that the initial governance structure, or executive committee, be limited to include members of Metro and the City of Los Angeles. Once the initial details of the strategy are ironed out, the governance structure can be expanded to include other key stakeholders through sub-working groups.
- Develop a project charter to lay out the participation of each relevant entity, including but not limited, to the contribution of people, resources, physical assets, financing, duration, and level of responsibility. The project charter should be a binding agreement between all parties that effectively demonstrates the additive role and beneficial outcomes for each entity involved.
- Engage stakeholders across the project to understand where Metro can encourage greater ownership from external participants.

4.

Explore Alternative Development Opportunities

Given the limited commercial development opportunities today in and around Union Station, the project should incorporate a more flexible approach to engage private developers, which could include entering into a pre-development contract or exploring how to create a timed release of additional funds for the project once the commercial development proceeds could be realized. Union Station is within LA Council District 14, which has some of the highest multifamily and mixed-use permit activity in the city.¹⁷ Identifying ways to improve the location around Union Station will have community impacts beyond just commuters passing through.

A transit or regional EIFD was proposed as potentially appropriate for value capture. EIFDs do not require the revenue capture locations to be contiguous. Lab participants proposed expanding the EIFD footprint to leverage the investments being made by Metro throughout its regional network of stations, which stand to benefit from the increased throughput enabled

by Link US. Remodeling the station to function as a regional transit hub will connect economies across Los Angeles County. The density improvements around those stations and the subsequent development represents value that could be captured, although participants recognized that this could become controversial as local areas fight for their share of that value.

Outside of the typical private investors in TOD and infrastructure, high-net-worth investors and foundations may also be interested in playing a role in this iconic redevelopment. Impact-oriented philanthropists might have a particular interest given transportation investments like Link US have significant economic multiplier effects. 18 Metro can present the Union Station project as a highprofile civic space with an opportunity to make a meaningful impact on the community. As many cities struggle to fund basic public needs, there is an increasing role for philanthropic participation. The City of Tulsa benefited from a \$465 million donation from George B. Kaiser to transform a city park into an urban destination.¹⁹ Metro has already begun exploring ways to provide opportunities for this type of investment, including pocket park sponsorship or naming rights, among others.

Next Steps

- Continue research around a transit or regional EIFD.
- Evaluate EIFD funding scenarios and define the roadmap/timelines to establish an EIFD prior to engaging in the next step of the commercial development procurement.
- Explore hiring a consultant or entering a predevelopment agreement where the value of the agreement devalues over time as capital is put to work and the region evolves.
- Develop properties gradually as the neighborhood matures due to the infrastructure development, so Metro can sell or ground-lease the land at a higher value over time.
- Develop a proposal that demonstrates a wide range of philanthropic opportunities at Union Station as the centerpiece of LA's re-unification with the river.

Conclusion

This Financial Innovations Lab initiated an impactful dialogue between government agencies, private investors, and commercial real estate developers that will continue to be critical for the success of Link US. Outlined in this executive summary are the key recommendations discussed throughout the Lab. Follow-up items include additional working groups and research to further develop the suggestions proposed. Advancing the suggestions and recommendations in this summary will require continued partnerships by those already involved and others. The steep challenges of this project are only overshadowed by the significant societal, economic and environmental rewards associated with a modern and flourishing LA Union Station.

Acknowledgments

In collaboration with

AECOM

This executive summary was prepared by Maressa Brennan.

We are grateful to those who participated in the Financial Innovations Lab for the contributions to the recommendations summarized in this report.

Lab participants

Darren Artura, Managing Director, Real Estate & Insurance Operations, California Institute of Technology

Angela Barranco, Chief Operating Officer, River LA

Sabrina Bornstein, Deputy Chief Resilience Officer, Office of Mayor Eric Garcetti

Maressa Brennan, Senior Associate, Innovative Finance, Milken Institute

Vincent Chio, Director, Regional Rail, Link US Deputy Project Manager, LA Metro

Adam Christian, Senior Vice President, Ernst & Young Infrastructure Advisors LLC

Rick Clarke, Chief Program Management Officer, LA Metro

Jon Dearing, Director, Strategy, AECOM

Yvette Edidin, Advisor, Innovative Finance, Milken Institute

Stephen Engblom, Senior Vice President/ Global Director, Cities, AECOM

Théo Feldman, Advisor, Milken Institute

Aidan Flaherty, Director, Strategic Communications, AECOM

Carolyn Flowers, Senior Vice President, AECOM

Steve Getzug, Corporate Vice President, Communications, AECOM

Shmel Graham, Director, Office of Mayor Eric Garcetti

Jenna Hornstock, Executive Officer, Transit Oriented Communities, LA Metro

Matt Horton, Associate Director, Center for Regional Economics, Milken Institute

Craig Hoshijima, Deputy Executive Officer, LA Metro

Malcolm Johnson, Executive Director, JPMorgan

Omar Karar, Executive Director, Moelis & Company

Larry Kosmont, President & CEO, Kosmont Companies

Borja Leon, Director of Transportation, Office of Mayor Eric Garcetti

Chris Leslie, CEO, Macquarie Infrastructure Partners Inc.

Chun Leung, Transportation Analyst, Office of Mayor Eric Garcetti

Clive Lipshitz, Managing Member, Interstate Tradewind Advisors

Caitlin MacLean, Senior Director, Innovative Finance, Milken Institute

Brandon McCall, Senior Loan Officer, Enterprise Community Investment

Jeanet Owens, Senior Executive Officer, Regional Rail Link US Project Manager, LA Metro **Jonathan Parfrey**, Executive Director, Climate Resolve

Jan Perry, General Manager, City of Los Angeles

Bob Peskin, Senior Consulting Manager, AECOM

Mark Pisano, President, Infrastructure Funding Alliance

Stephen Polechronis, Senior Vice President, AECOM

Ken Pratt, Deputy Executive Officer, LA Metro

Freddy Rayes, Investment Director, Meridiam/Long Beach Judicial Partners LLC

Heather Rim, Senior Vice President & Chief Communications Officer, AECOM

John Ritter, Managing Director, Real Assets, University of California

Paul Rosenstiel, Board Member, CalSTRS

Tom Rousakis, Senior Managing Director, Ernst & Young Infrastructure Advisors LLC

Yousef Salama, Manager, LA Metro

Ann Sewill, Vice President, Health & Housing, California Community Foundation

Hina Sheikh, Economic & Workforce Development Deputy, Los Angeles County— Office of Hilda L. Solis

Tyson Skillings, Managing Partner, Rockwood Capital

Ray Sosa, Vice President, AECOM

Jeff Statton, Business Development Manager, Bechtel Infrastructure

Peter Stone, Senior Vice President, Brookfield Asset Management

Qinan Tang, Portfolio Oversight (Infrastructure Strategy), CIM Group

George Tapas, Vice President & Managing Director, AECOM

Daniel Tellalian, Managing Partner, Avivar Capital

Phil Washington, CEO, LA Metro

Felicia Williams, Senior Vice President, Kosmont Companies

Joy Woo, Associate Vice President, Cities, AECOM

Geoffrey Yarema, Attorney, Nossaman

Alex Zaman, Director, Citigroup

Endnotes

- 1. "Sustainable Cities: Beacons of Light Against the Shadows of Unplanned Urbanization," Citi.
- 2. Ibid.
- 3. "Bridging Global Infrastructure Gaps," Jonathan Woetzel, Nicklas Garemo, Jan Mischke, Martin Hjerpe and Robert Palter, McKinsey Global Institute, June 2016.
- 4. "California's 2017 Climate Change Scoping Plan," California Air Resources Board.
- 5. "Projections," State of California Department of Finance.
- 6. "2018 Business Plan: Transforming Travel, Expanding Economy, Connecting California," California High-Speed Rail Authority.
- 7. "INRIX Global Traffic Scorecard," INRIX.
- 8. "California's 2017 Climate Change Scoping Plan," California Air Resources Board.
- 9. "INRIX Global Traffic Scorecard," INRIX.
- 10. "Statistics," County of Los Angeles.
- 11. "What are Public Private Partnerships?" World Bank Group.
- 12. "Measure M: Program Management Plan," LA Metro.
- 13. Ibid.
- 14. Ibid.
- 15. "Resource Guide to EIFDs," California Community Economic Development Corporation.
- 16. "The HYDC," Hudson Yards Development Corporation.
- 17. "Los Angeles City Council Districts 2017 Economic Report," Los Angeles Area Chamber of Commerce.
- 18. "Economic Impact of Public Transportation Investment," American Public Transportation Association, 2014.
- 19. "Transforming Tulsa, Starting with a Park," Patricia Leigh Brown, NY Times, August 10, 2018.