

CHARLES SCHILKE

## Mapping Solution for SoCal Housing Shortage

**Coordinating development with utilities accelerates occupancy**

SOUTHERN CALIFORNIA encompasses a significant portion of America's housing shortfall and faces both housing production and housing affordability crises. In response, the state has appropriated \$600 million, of which \$243 million is designated for the region's metropolitan planning organization (MPO)—the Southern California Association of Governments (SCAG)—to meet several goals, including housing production. The purpose of this grant money is to support cities and counties in meeting their housing needs, which the state quantified as 1.3 million units by the end of 2029. With less than six and a half years remaining to meet this need, that's 200,000

housing units per year—a number matching the population of Salt Lake City, and, truly, an ambitious goal.

SCAG is shaping the process to achieve the goal. Geographically, SCAG is the largest MPO in the United States. The organization encompasses six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura) and 191 cities; that area covers more than 38,000 square miles (98,000 sq km), extends to the borders of Nevada and Mexico, and has more than 19 million residents. For decades, SCAG has developed long-range regional transportation plans, but SCAG's involvement in housing historically has been

limited to assigning housing target numbers provided by the state to each jurisdiction.

To meet the housing unit goal, SCAG's approach is to develop infill areas where regional utilities are already ample, as a way to shrink the logistics timeframe involved, use less construction material overall, and thus reduce the environmental impact of the new housing units.

One significant barrier: as developers complete new housing units, often what follows is a lag of six to 12 months in hooking up utilities to those units before they may be occupied. This lag can negate as much as a year's worth of housing occupancy—200,000 units—toward

**This map illustrates two things: (1) the contours of the Southern California Association of Governments (SCAG) service area, and (2) the rent burdens of SCAG's member municipalities.**

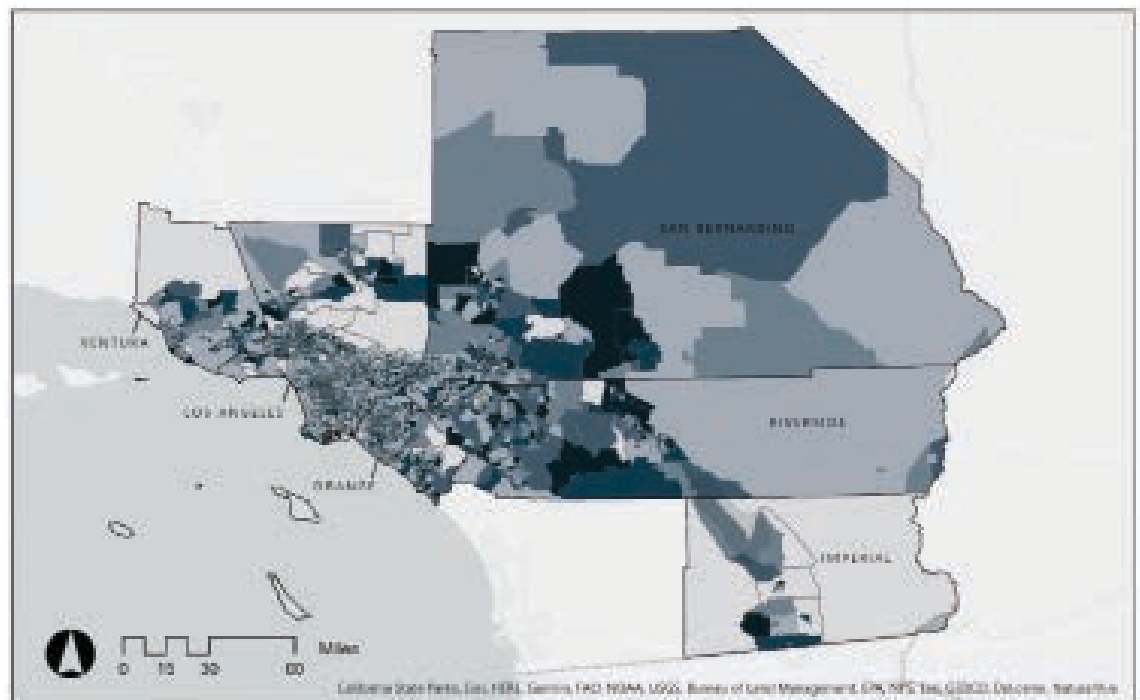
### Severe Rent Burden

The percentage of renters paying 50% or more of their income on rent

#### Severe Rent Burden

- 0 - 20% of renters
- 21 - 26%
- 27 - 31%
- 32 - 37%
- 38% or more of renters
- No data

Public Health Measures of Southern California, SCAG, 2022  
Date: 10/12/2022



STEPHEN A. SAMPSON

the 1.3 million-unit goal. The problem is most acute with the dry utility electricity hook-ups, but also exists with the water, wastewater, and storm-water wet utilities.

The state, SCAG, utilities, real estate developers, and potential and actual housing residents all have a common interest in minimizing the utilities hookup delay. For the state and SCAG, removing the delay would go far toward achieving housing supply goals. For utilities, resolving the delay would save time and money by focusing their expansion and letting them expand their lines only to the

extent needed by residents of completed housing. Real estate developers would have greater general predictability and could sell completed units more quickly, thus reducing their interest carry. Potential and actual housing residents would have more housing choice. If all stakeholders can resolve this issue, it will effectively put the occupancy of completed housing up to a year ahead of where it would otherwise have been.

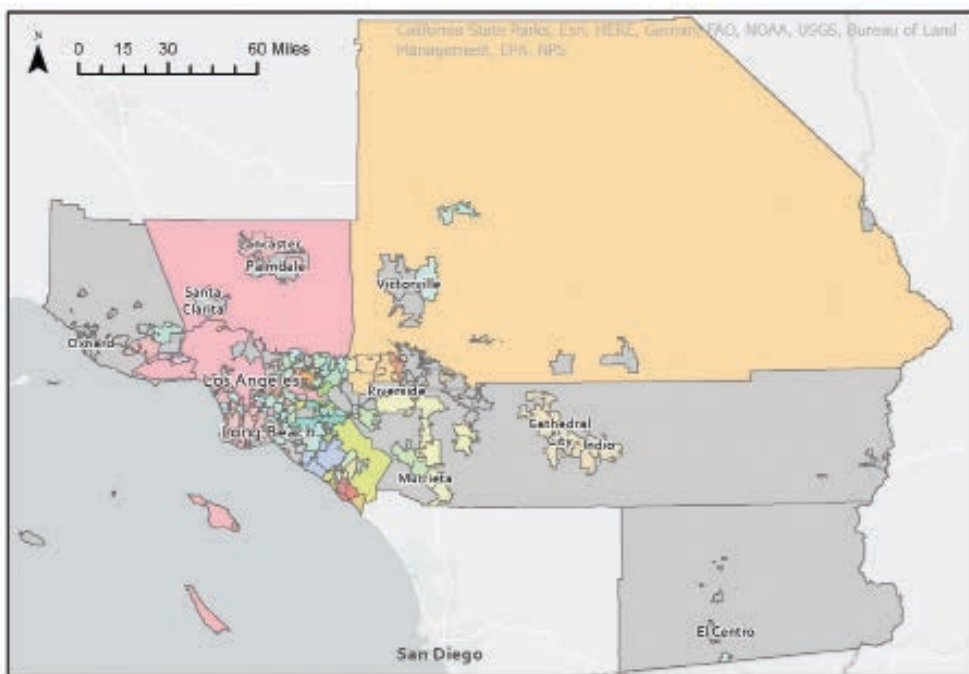
### Advisory Services Panel

In April, SCAG sponsored a special Urban Land Institute (ULI) Advisory Services Panel

(ASP) titled “Regional Utilities Supporting Housing” (RUSH). The ASP clients at SCAG included Elizabeth Carvajal, deputy director of planning, and Ma’ayn Johnson, manager of housing. ASP staff included Marty Borko, executive director, and Kelly Kao Miles, senior director, both of ULI Los Angeles; Jonathan Nettler, Los Angeles regional director and associate principal; and Karen Gulley, managing principal of PlaceWorks, a California-based land use consulting firm.

The goal of the panel was to solicit ideas from the expert panelists and conduct a gap analysis on utility access and

## Water Service Retailers in the SCAG Region



Note the large number of water service retailers in the SCAG service area. There are 19 water service retailers that service more than 5 jurisdictions alone, and dozens of small water providers in minor jurisdictions.

STEPHEN A. SAMPSON

capacity that would inform development of the RUSH Pilot Program in advance of a call for RUSH demonstration project grant applications by SCAG member municipalities.

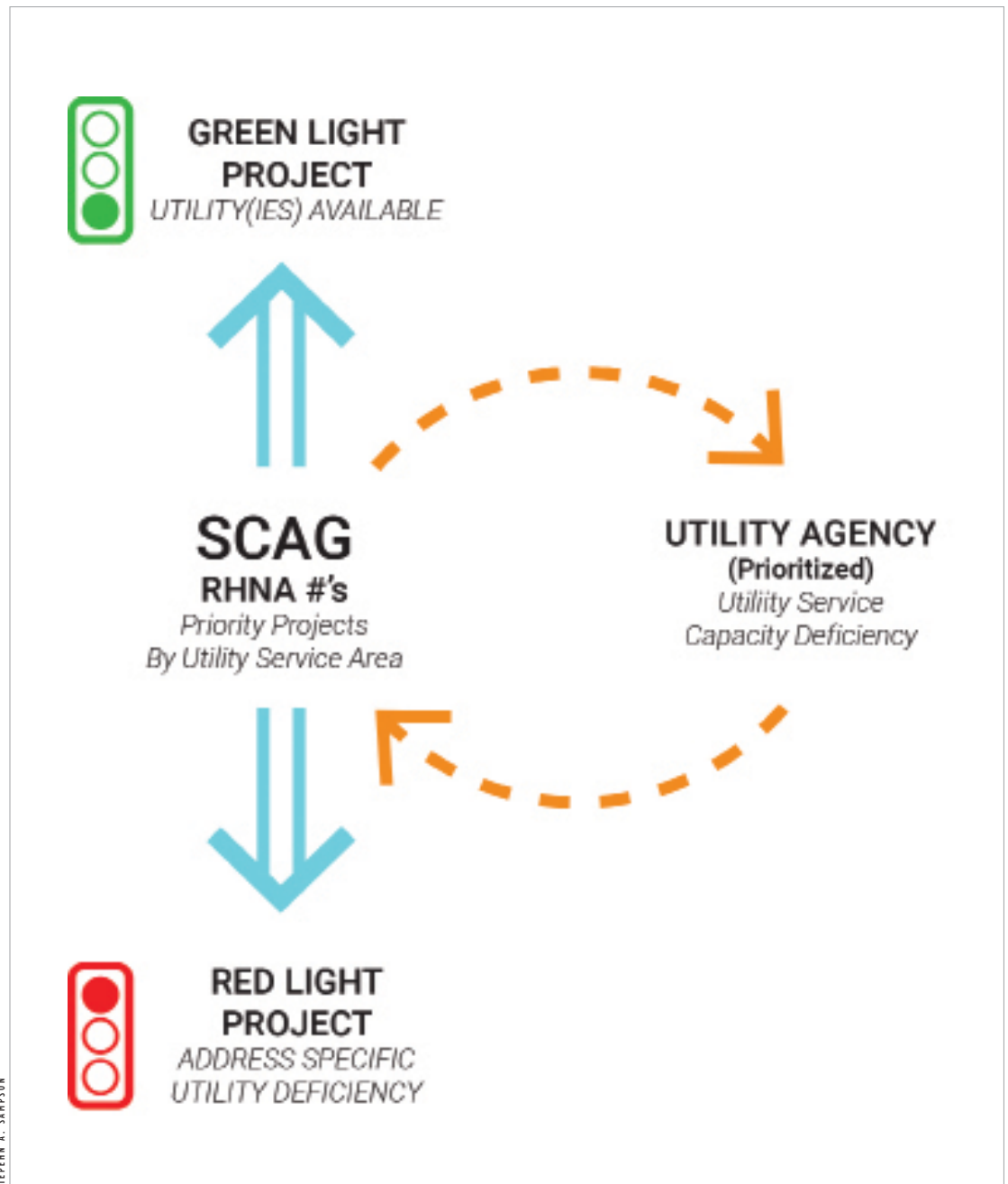
### Coordinating with utilities

To coordinate SCAG housing

targets with regional utilities expansions, we first need to understand the current decision processes of SCAG in targeting sites, and of utilities in expanding their systems. The RUSH program is a subset within a nested series of housing programs, as follows:

▷ In the general plan for each SCAG jurisdiction are housing elements that include targets for facilitating production of the new housing needed by the end of 2029. Each guide also includes maps and addresses listing an inventory of sites capable of supporting

This diagram illustrates how the utility agencies could be brought into the SCAG Regional Housing Needs Assessment (RHNA) process to facilitate housing element planning and implementation, and how a project may move from Red Light to Green Light priority status.

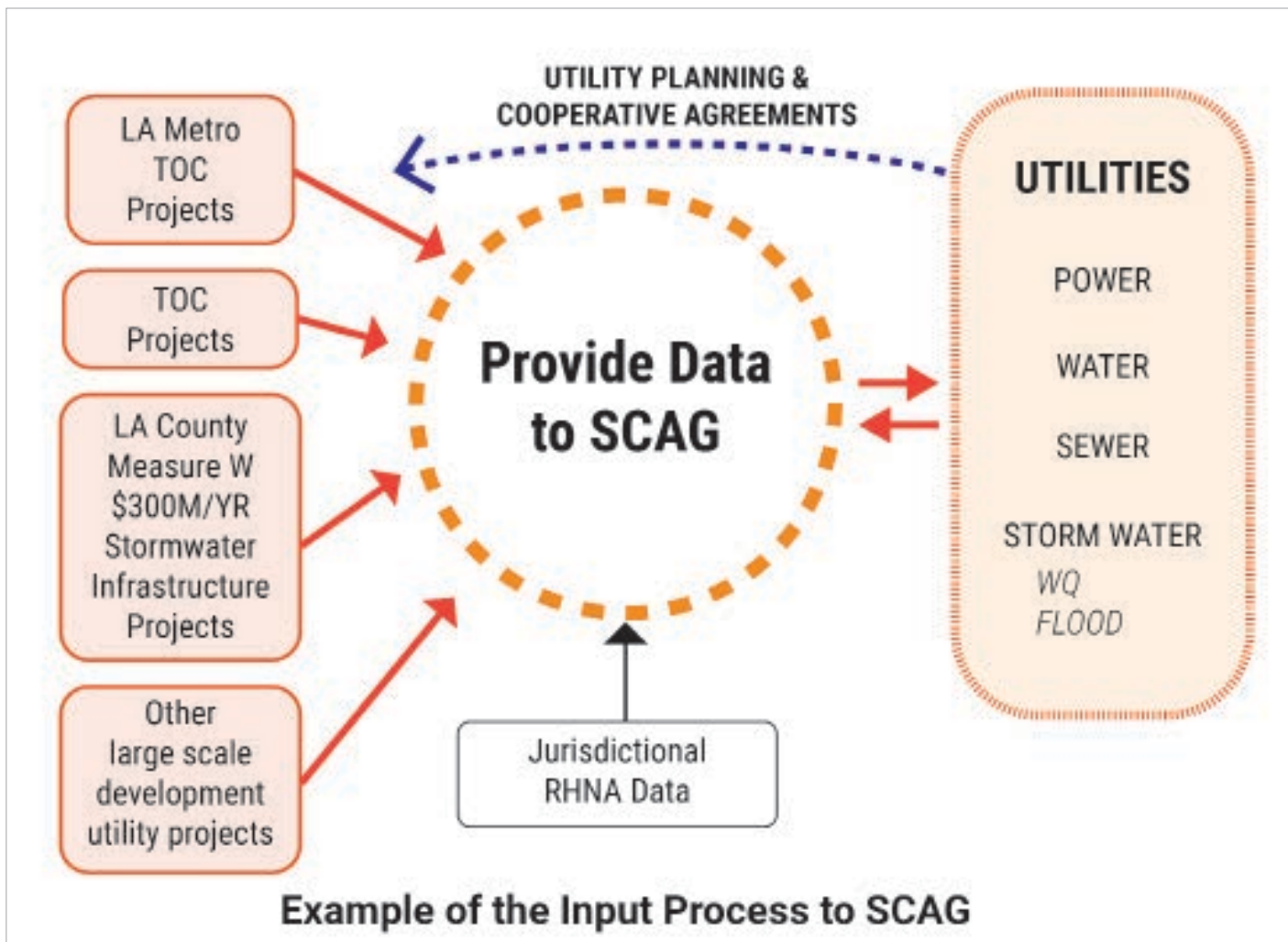


the units allocated to each jurisdiction. SCAG's traditional role in housing has been limited to preparing the Regional Housing Needs Assessment (RHNA) allocation every eight years to quantify each SCAG jurisdiction's housing allocation. In 2019, the state of California allocated \$47 million in Regional Early Action Planning (REAP) 1.0 funds and, in 2023, allocated \$246 million more in REAP 2.0 funds to SCAG. These funding infusions enabled SCAG to take the lead in the REAP program, and to dramatically expand its previ-

ously modest role in housing to provide robust support for local government and stakeholders in developing and adopting land use plans and other programs that accelerate housing production; such production, in turn, led to the SCAG RUSH ASP. One of the main areas toward which SCAG's REAP funds are directed is the Programs to Accelerate Transformative Housing (PATH), which supports strategies to accelerate infill development by increasing housing supply, choice, and affordability.

The PATH program includes the RUSH Pilot Program, which focuses on nontransportation utilities infrastructure planning and improvements essential to housing production and occupancy. Of the \$246 million in PATH funds that the state is allocating to SCAG, \$35 million is designated for the RUSH program, a competitive grant opportunity to fund initiatives and projects with innovative solutions for reducing development costs and increasing housing capacity in infill areas through utility planning and investment.

**This diagram illustrates the role SCAG plays in the gathering and synthesizing of data and helping to establish cooperative agreements where needed.**



STEPHEN A. SIMPSON

## Starting point

Both dry and wet utilities in Southern California are modestly coordinated with housing, but only in the most general sense that utilities assess the overall population growth of a given SCAG county or city, look at that municipality's required housing elements, plan enough utility growth to satisfy those housing elements, and extrapolate by customer class to support population growth. Utilities in the SCAG region currently lack the ability to readily drill down to specific housing sites.

Panelist Charley Wilson, of the Southern California Water Coalition, says that, based on anticipated population growth with a time horizon of three to five years, the board of a utility such as Southern California Edison (SCE) first makes a projection for its entire service area. SCE then budgets the allocation of capital in its Gen-

eral Rate Case (GRC), which its state regulatory agency, the California Public Utilities Commission (CPUC), reviews every four years. The GRC, as approved by the CPUC, is then baked into the rates.

SCE makes routine utility load studies, and forecasts energy consumption and growth patterns. In relatively undeveloped areas like the Inland Empire, where large areas still remain for development, the utility's planners can make these calculations relatively easily. In infill areas, however, the planners must instead make calculations on a project-by-project basis.

The CPUC requires utilities to build "just in time" extensions of utility infrastructure systems. The calculation can be difficult because not everyone follows through with building their project. Ratepayer advocates dislike having to subsidize the deadweight costs of overextended and

unused utility lines through existing rates.

California law obliges utilities to treat all applications for service equally on a first-come, first-served basis, regardless of circumstances such as availability of utility service or clustering of housing. This requirement greatly limits the options of utilities and SCAG housing site selectors. Although current law has the advantages of bright-line enforcement, it may clash with both utility and housing needs.

## Developer's perspective

Complications arise if the developer seeks to change the use and/or bulk of a project—such as converting outdated office buildings into housing or converting the site of a single-family home into a substantial apartment building. Such a change in use and bulk often requires utility infrastructure upgrades.

Even before executing a

**Front row:**  
Charley Wilson, Southern California Water Coalition (Infrastructure); Ryan Aeh, City Ventures (Developer); Craig Perkins, The Energy Coalition (Infrastructure); Walker Wells, Raimi + Associates (Sustainability); Kelli Bernard, Lighthouse Public Affairs (panel cochair)

**Back row:**  
Alex Rose, Continental Development (panel cochair); Charles Schilke, Johns Hopkins University (Implementation); Sherry Okun-Rudnak, BAE Urban Economics (Finance); KeAndra Cylear Dodds, LA Metro (Equity)



STEPHEN A. SAMPSON

purchase and sale contract, developers may protect themselves by hiring a utilities consultant as part of the due diligence process to ensure capacity in all utilities. At the very least, they may do so during the study period that precedes closing.

This measure is especially needed because, under California law, when a new development in an area necessitates utility infrastructure upgrades, it is the final property buyer in the area who tips the balance into need for a new capital expenditure who pays the entire cost of the capital expenditure, meaning that the expenditure is not prorated among all the buyers who cumulatively necessitate the new capital expenditure. As panelist Sherry Okun-Rudnak of BAE Urban Economics points out, this harsh rule might be mitigated by impact fees that the municipality imposes on property owners, fees which in effect provide a kind of proration for each of the projects leading up to the final property buyer who, otherwise, would tip the balance.

### Closing gaps

The RUSH ULI ASP concluded that SCAG should close gaps and prioritize housing sites by coordinating SCAG maps of targeted housing sites with maps of the dry electric utilities and the wet ones—water, wastewater, and stormwater—particularly in the areas of their planned expansion; instituting a scoring template that further refines the prioritization depicted on the maps; and

improving overall systems.

The purpose of the RUSH panel was to set prioritization of housing sites well enough to enable decisions on a relatively small number of applications for RUSH demonstration grants, probably from a relatively small number of maps.

However, to close the gaps completely, the mapping, scoring, and systems need to increase in scope. That way they include all relevant utility facilities and housing targets in the SCAG service area, and they become more automatic, sophisticated, and continuous.

By converting utility cartography from GIS or even paper maps to advanced electronic target maps with identical, or at least comparable, systems, as well as by coordinating scoring systems, we can coordinate the maps in real time and minimize or even eliminate the new-unit electricity-hookup delays.

The mapping and software systems for an MPO should also have the flexibility to overlay maps, in various combinations, of different utilities—as in the SCAG region, so that the specific utility combination of each county and city may be customized. The software systems need to have enough flexibility to allow for the addition of renewable energy utilities as they come onstream.

### The role of MPOs

The Southern California Association of Governments can—and should—be a leader in finding solutions to the statewide and nationwide challenge of coordinating regional utili-

ties in supporting housing.

SCAG's regional data platform is already a kind of general civic data clearinghouse for the region, and is the perfect repository for data needed so that regional utilities can support housing.

As a carrot to all stakeholders, the state should allocate funds to convert GIS or paper utility, housing, and other needed maps into advanced electronic maps. Such conversion is a long-term capital equipment investment that would enable better coordination not only this year, and through the end of 2029, but also for several decades to come. The state is committed to improving housing provision and affordability and should make this investment, which will more than pay for itself.

As the geographically largest and arguably most complex MPO in the United States, SCAG has much to teach smaller and simpler MPOs on the subject of regional utilities supporting housing. Imagine if every MPO in the U.S. coordinated its utilities and housing in a manner analogous to what is recommended here for Southern California. The effective availability of as much as an additional year of new housing for the price of some mapping, scoring, and systems in each of these MPOs would make a noticeable dent in America's persistent national housing challenge. **UL**

**CHARLES SCHILKE** is a Washington, D.C.-based real estate strategist, developer, financier, lawyer, and real estate lecturer at Johns Hopkins University. He served as Implementation member of the RUSH SCAG ASP.



OCT 30-NOV 2, 2023 | LOS ANGELES  
**FALL MEETING**

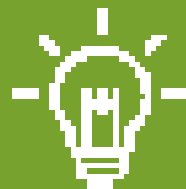
# JOIN US AT REAL ESTATE'S PREMIER EVENT

Build a network of cross-disciplinary professionals and discover  
Innovative strategies to fuel your success.



4

Program-Packed  
Days



45+

Thought-Provoking  
Sessions



21

Private Tours to Prominent  
L.A. Developments



6,000+

Real Estate  
Professionals



**"ULI is the crista de la crista of the industry-related organizations. The meeting content is incredible. The tours have been remarkable. It seems like everyone here is dedicated to doing great things in the world by transforming cities"**

—Mark Parth, CFO, Blackline

**Register Now**

