ALL ABOUT THE PLAN

Plan Development

Connect SoCal was developed through a four-year planning process that involved rigorous technical analysis, extensive stakeholder engagement, consultation with state and federal governments (such as land management agencies), and robust policy discussions with local elected leaders who make up SCAG's policy committees and Regional Council. This process also included formal input processes for our Project List from County Transportation Commissions and land use and growth data from local jurisdictions. In spring 2023, SCAG engaged with thousands of people across the region to gain a clear understanding of the issues and policy choices for the region.

Plan Goals

The goals for Connect SoCal are designed to help us achieve our vision. They fall into four core categories: mobility, communities, environment and economy. These goals are not mutually exclusive—they are mutually reinforcing. For example, the decisions and actions taken to achieve mobility goals can also help to achieve and support environmental goals. The top-line goals are highlighted below, and the supportive subgoals are further detailed in Chapter 3.

Mobility: Build and maintain an integrated multimodal transportation network

Communities: Develop, connect and sustain communities that are livable and thriving

Environment: Create a healthy region for the people of today and tomorrow

Economy: Support a sustainable, efficient and productive regional economic environment that provides opportunities for all residents

Focusing on Objectives

By 2050, the population of the region is projected in the Plan to increase by two million people, or 11 percent, with an increase of 1.6 million housing units, or 26 percent, and 1.3 million jobs, or 14.2 percent. However, growth is not expected to be uniform across the region's counties or cities.

This Plan invests $751.7 billion in our transportation system, primarily in operations and maintenance, to ensure the continued performance of our current network. Implementation of Connect SoCal 2024 will add 181,200 new miles of transit revenue service, 4,000 new miles of bike lanes and 869 new miles to the Regional Express Lane Network. More importantly, the Plan includes investments and strategies to better manage these and past investments, including an Intelligent Transportation System and policies for Transportation Demand Management.

This plan projects that 66 percent of new households and 54 percent of new jobs between 2019–2050 will be located in Priority Development Areas, either near transit or in walkable communities.

This will create a region with:

- Transit as a backbone of the transportation system
- More Complete Streets where people and safety are prioritized
- Policies that encourage emerging technologies and mobility innovations that support rather than hamper regional goals
- More housing, jobs and mobility options closer together in Priority Development Areas to preserve natural lands and open spaces
- More housing to address the "existing housing need" as defined by the Regional Housing Needs Assessment
- Safe and fluid movement of goods, with a commitment to the broad deployment of zero- and near-zero emission technologies

For more details on the policies and projects included in Connect SoCal, see Chapter 3.

TECHNICAL REPORT	SUMMARY
Public Participation and Consultation	Documentation of consultation, outreach and engagement activities
Mobility	Focuses on overarching and intersectional issues across all transportation modes. Subsequent modal–specific chapters: Transit/Rail, Active Transportation, and Streets and Highways. Each includes a discussion on our existing conditions, challenges and key strategies
Economic Impact Analysis	Discussion of the Plan's regional economic impacts
Demographics and Growth Forecast	Analysis of the region's current demographics and anticipated future population, household and employment growth patterns
Land Use and Communities	Discussion of the Plan's Forecasted Regional Development Pattern and strategies for sustainable and resilient land use
Housing	Discussion of the regional housing supply and strategies to increase access to housing
Travel and Tourism	Discussion of travel and tourism in the region, including key destinations, the transportation system, programs serving travel and tourism in the region, and the local, county and state agencies, and nonprofit organizations working on enhancing tourism in the region

A CHANGING REGION

Regional COVID-19 Pandemic Recovery

The COVID-19 pandemic and the response to it impacted the way we live, work and play in the region—and we are still feeling those impacts today. When SCAG's Regional Council adopted Connect SoCal 2020 for all purposes in September 2020, following the May 2020 adoption for federal transportation conformity only, they affirmed aligning Plan implementation with pandemic recovery and identified emerging trends to be monitored alongside future planning, like Connect SoCal 2024. The following are the key disruptions to the region that SCAG has been tracking since 2020. SCAG monitored these elements alongside Plan development to apply relevant updates to our inputs and assumptions. These changes and challenges are continuing to evolve.

Housing crisis: The COVID-19 pandemic and the corresponding economic fallout exacerbated the housing crisis and, for communities of color, widened the economic gap. While early concerns focused on the stalling of housing construction, the more immediate crisis became employment loss—particularly for low-income households—that resulted in a growing number of households falling behind on their mortgage or rent. To minimize this, local, state and federal policymakers prioritized urgent pandemic needs and responses, such as mortgage-relief policies and foreclosure and eviction moratoria. While this had a beneficial impact on households at risk for displacement, it shifted housing priorities away from those that increased housing supply.[2]

Demographic shifts: The region's population growth was already slowing during the 2010s due to lower fertility rates and more out-migration than in-migration. The pandemic response provided additional shocks—a near-zero level of foreign immigration, fewer births and excess deaths from the pandemic itself. While these shocks appear to be dissipating substantially, the region's population declined between 2019 and 2023.

Goods movement: Supply chains were disrupted on a global scale, leading to severe bottlenecks at ports and cascading bottleneck and congestion issues further across the entire goods movement system—from railyards to industrial warehouses and distribution centers.

Transit ridership: While vehicle miles traveled (VMT) and congestion have returned to pre-pandemic levels, transit/rail ridership has rebounded unevenly. These transit/rail ridership declines have resulted in reduced farebox recovery and impacts to operations budgets—and there is widespread concern that transit/rail operators are fast approaching a fiscal cliff. Many transit operators remain uncertain of the longer-term future, particularly if remote working remains a norm for discretionary riders who tend to take rail. Some returning riders are apprehensive about their safety and security as they resume using transit/rail services.

Active transportation: During the pandemic, the region saw an increased use of active transportation (i.e., bicycling [including via e-bikes], walking, rolling, etc.). Bicycling and walking were regarded as reliable and resilient options because they enabled physical distancing and carried a low risk of contracting or spreading COVID-19.[3] The increase in bicycling was reflected in the higher demand for bicycles and in bicycle sales figures. According to market research company NPD Group, sales of bicycles between April 2020 and April 2021 were up by 57 percent in the United States.[4] Numerous communities reconsidered how public space was allocated, and several prioritized opening up streets to bicyclists and pedestrians to make it easier to physically distance from others while traveling to essential businesses and engaging in recreation.[5] However, at the start of the pandemic, most dockless, shared micromobility providers temporarily withdrew from the public space.

Tele-everything: Relying on remote work and school (e-learning) as primary ways to physically distance exposed the region's digital divide of those who have access to reliable internet and those who do not. The internet, computers and smartphones have provided unprecedented access to information and have helped transform our relationship to transportation. Although many residents have benefited from these advancements, a significant portion of the population

While these relationships are driven by the nature of the work in each of these sectors, a regional plan must consider how to balance the needs of remote workers, who are largely in higher-wage occupations, and the needs of commuting, on-site workers, who are more likely to be in low-wage occupations. Some literature suggests that while flexible work schedules and telecommuting may reduce (or, in the case of satellite offices, reroute) single occupancy vehicle (SOV) commute trips, they likely increase SOV trips for other purposes, such as errands and trips for lunch while an employee is working from home (although not necessarily during peak congestion periods). This is known as the rebound effect.[11]

Working from home has long been part of the planner's toolbox for reducing travel. The significant rise of working from home following the pandemic, and the changing travel patterns that have resulted, underscore the importance of pursuing strategies that offer more transportation options for non-work trips, in particular. A key component of this is fostering more connected and accessible communities that allow a wide range of trips to be accomplished within a short distance or via alternative modes. More analysis is needed to better understand this changing trend and how it may impact long-term decisions, including choice of housing location. However, despite recent concerns about people fleeing urban areas in general, the fact that the hybrid work model is becoming more predominant than the fully remote work model, workers will have more incentive to return to—or stay near—cities.[12]

At the present time, these changes appear to be felt very heavily in downtown areas, which by definition have the most intense clusters of employment in a region or subregion. American downtowns have had numerous declines and resurgences. Declines occurred during the crime increases of the 1990s and as a result of post-9/11 security concerns. Then, beginning in the mid-2000s, an increase in residential population and amenities took place. Now, due to the post-pandemic work-from-home trend—as well as crime and the perception of crime—many headlines have been sounding the alarm about the future vitality of downtowns. For example, office utilization rates in U.S. downtowns averaged less than 50 percent in mid-2023, which affects both transit ridership and small businesses, like restaurants.[13] However, there remains a price premium for both commercial and residential property with connectivity and activity nearby. Livability improvements and continued monitoring of opportunities can help downtowns—which can pool the largest labor force and foster more activity density than anywhere else—and in turn help improve surrounding neighborhoods and the region as a whole.

Emerging Technology

New and emerging technologies have had a significant impact on the transportation sector, transforming various aspects of mobility, efficiency, safety and user experience. These technologies include advancements in vehicle technology, like electric vehicles and automated vehicles, as well as advancement in travel planning and safety systems, such as Mobility as a Service and Advanced Driver Assistance Systems. Several of the key technologies impacting the region today—and on the horizon—include:

Zero-Emission Vehicles (ZEVs): The rise of hydrogen and electric vehicles has disrupted the automotive sector. ZEVs offer lower emissions, reduced dependence on fossil fuels, and improved energy efficiency compared to traditional internal-combustion-engine vehicles.

Shared Mobility: Ride sharing services such as Uber and Lyft have transformed the way people travel, reducing the need for personal car ownership. Car sharing and bike sharing platforms have also gained popularity, providing convenient and cost-effective transportation options.

Intelligent Transportation Systems (ITS): ITS integrates advanced technologies into transportation infrastructure to improve efficiency, safety and sustainability. This includes traffic management systems, dynamic signaling, smart parking and real-time traveler information systems.

Key Mobility Challenges

Limited Reliable Travel Options Besides Driving: As mentioned in the introduction to this chapter, one of the top challenges noted by Connect SoCal survey respondents is having limited reliable travel options other than driving. Despite billions of dollars in investments in our transit and active-transportation infrastructure, gaps in service and reliability remain—and these gaps impact perceptions of available options. As evidenced by responses to other survey questions, many people in the region prefer to drive alone on some trips, like errands, but want different options, such as walking or transit, for other trips that might include going to work or school or visiting friends.

The current lack of travel options besides driving in parts of the region can lead to increased congestion on the regional transportation network, which then leads to time wasted in traffic and increased emissions and pollutants. In other parts of the region, people with access to a transit network have noted concerns about reliability and safety.

Transportation Safety: Safety can refer to both personal security when traveling on transit and safety when on our roadways, either in a vehicle, on a bike or on foot. Traffic-related fatalities and serious injuries are a critical and preventable public health and equity issue in the region. Approximately 1,600 people die, and 140,000 are injured—more than 7,000 of which are serious injuries—on roadways throughout the SCAG region every year.[15] Collisions are happening in every community in the region and to people from all walks of life, including those who drive, walk and bike. Approximately 90 percent of collisions occur in urban areas, with most taking place on local roads, not highways. Regionally, about 65 percent of fatalities and serious injuries occur on less than 1.5 percent of the roadway network. Of particular concern are vulnerable groups such as children, older adults, pedestrians, bicyclists and users of personal mobility devices like e-scooters.

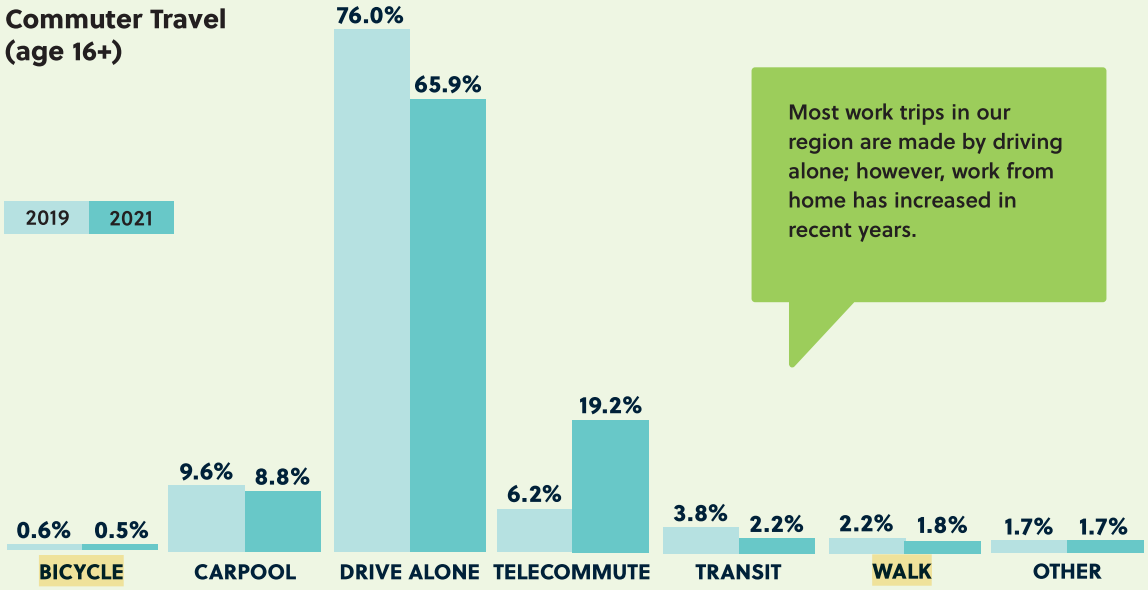
The regional housing crisis has resulted in people without housing seeking shelter in public spaces, particularly at locations with 24-hour transit/rail service. Unhoused persons frequently utilize buses or trains for overnight stays. The situation raises several concerns for both transit/rail agencies and riders. Returning riders are apprehensive about their safety and security as they resume using transit/rail services. Buses or trains occupied by unhoused persons may face lingering cleanliness issues, and there have been reports of threats, assault and crime incidents that deter ridership.[16] From the transit/rail agency's perspective, addressing homelessness on systems poses a complex challenge, particularly amidst many other pressing issues and limited funding. Across the region, transit/rail agencies will need to develop comprehensive strategies that address homelessness on their systems, considering factors such as safety, cleanliness and the welfare of both riders and unhoused persons.

Increasing safety for pedestrians and bicyclists can make transit and active transportation a more appealing travel option, thereby motivating mode shifts away from single occupancy vehicle travel and reducing GHG emissions. However, finding sustainable solutions within the context of limited resources will remain an ongoing challenge.

The Way We Move Today

The region's transportation network is extensive. However, the current lack of convenient travel options in areas of the region apart from driving create traffic congestion and air pollution. Responses to the COVID-19 pandemic sparked changes in travel behavior and trends, which spotlight what is needed and what is possible for the future of transportation in our region.

Commuter Travel (age 16+)

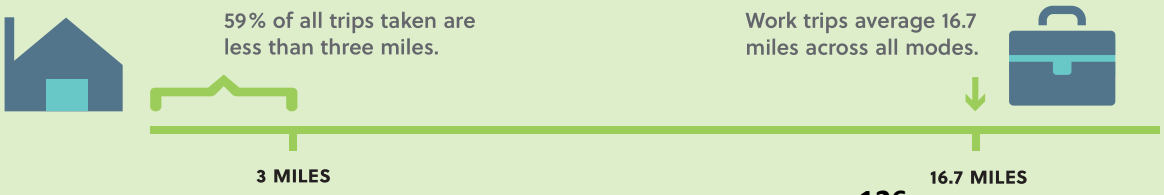


Most work trips in our region are made by driving alone; however, work from home has increased in recent years.

Source: 2021 American Community Survey 1-year Sample, Table B08006

Most Non-Work Trips are Short

While trips to work are longer on average, the short distance of most other trips taken in the region opens up possibilities for other modes like walking, biking or rolling.



Annual Safety Statistics

140,000 INJURIES

7,000 SERIOUS INJURIES

1,600 DEATHS

ABOUT **65%** OF COLLISION-RELATED DEATHS OCCUR ON LOCAL ROADS

Traffic-related deaths and injuries are a preventable public health and equity issue in the region.

Source: California Statewide Integrated Traffic Records System (SWITRS) (2021); Fatality Analysis Research System (FARS) 2021

ENVIRONMENT

Overview

What is the health of our people and environment? Despite significant improvements over the last several decades, the SCAG region still has some of the worst air quality in the country. Poor local air quality and the lack of dependable transportation options, active transportation, affordable housing, health care and job opportunities in many SCAG region communities can lead to poor health outcomes. The region is already facing the impacts of climate change, including extreme heat and severe wildfires. Heat-related events occurring from 2010 to 2019 resulted in more than 53,000 emergency room visits, 7,000 hospitalizations, and 600 deaths in California. Indicators show that the number and intensity of extreme-heat health events will worsen drastically throughout the state by midcentury. Extreme heat causes drier landscapes, which then make wildfires and drought more likely and extreme. In 2020, California experienced a record number of dry heat days due to a changing climate and had over 6,000 fires that burned millions of acres, making that year the largest wildfire season recorded in the state's modern history. Economic costs from wildfires include resources involved in fighting the fires, damage to property, health care bills, disrupted business costs, lost tax revenue, and decreased property values—and were estimated to be $10 billion in 2020.

Natural lands offer important benefits to the region, including capturing carbon emissions and recharging groundwater resources. However, natural lands have decreased by roughly 50,000 acres, or 0.2 percent, between 2012 and 2019. Farmland decreased by 40,000 acres, or 3.5 percent, between 2012 and 2018. While farming practices can contribute to GHG emissions, these are typically far less than emissions in urban environments, and farm and grazing lands can provide co-benefits such as wildlife habitats, flood control and groundwater recharge. Our agricultural sector generates $12.8 billion (2023 $US) average annual output each year and employs an average of 53,000 workers.

As the region faces unprecedented challenges, it is important to coordinate regional land use and transportation strategies. It is also essential to address Southern California's growth and sustainability challenges in order to protect the SCAG region's natural resources and reduce future risks from climate change.

Key Environmental Challenges

Climate Change: This challenge includes increased wildfires, flooding, extreme heat, drought, sea-level rise and heavy storms, among other hazards. These impacts influence public health, communities, natural systems and the economy, as well as how we travel if there are disruptions and damages to our transportation system.

Poor Air Quality and Related Health Impacts: Across the SCAG region, transportation and land use decisions are shaping neighborhoods while also influencing the health outcomes of residents. The way a community is designed impacts the likelihood that a person will bike or walk to school, work or local shops; have access to healthy food or parks; and breathe air free of pollutants. Conditions in the places where people are born, live, learn, work and play are known as the Social Determinants of Health (SDOH), and they help explain why some health outcomes (e.g., rates of asthma or diabetes) vary widely across the region. To improve health outcomes and reduce these inequities, it is critical to consider public health in integrated land use and transportation planning such as through meeting federal air quality standards. (For more details, see Chapter 5 for SCAG's transportation conformity, the Supplementals section for the South Coast Air Quality Management District's Contingency Measure Plan, and the Goods Movement Technical Report Section 5.2 for goods movement related air quality.)

Loss of Open Space: The urbanization of the region over the past several decades has led to the consumption of hundreds of thousands of acres of natural land and farmland. The diverse natural landscapes of Southern California are an invaluable asset to the millions of people, native plants and animal species that call the SCAG region home.

Local Technical Assistance Resources:

Local Information Services Program: Responding to the needs of local jurisdictions, SCAG has initiated the Local Information Services Program by providing tools, resources, technical assistance and training to local jurisdictions to support local planning projects. The program consists of three major services, which benefit local jurisdictions: Toolbox Tuesday Technical Webinars, Local Information Services Team (LIST) and GIS training services. The program has also created tools like the Safety Hub and the Housing Element Parcel Tool (HELPR). Overall, the purpose of the program is to:

1. Improve internal and external collaboration, education and engagement
2. Promote SCAG's available tools and resources
3. Provide personalized one-on-one (1:1) technical assistance to local jurisdictions
4. Enhance staff planning knowledge and technical capabilities

Go Human: To address the safety of people walking and biking in the region's transportation network, SCAG created the *Go Human* campaign, an award-winning community engagement program with the goals of reducing traffic collisions and encouraging people to walk and bike more in the SCAG region. With support from the California Office of Traffic Safety, SCAG's *Go Human* program has implemented four rounds of grant-funding opportunities since 2018, helping local organizations create and lead traffic-safety projects. With more than $893,000 distributed through grant funds in the SCAG region, *Go Human* funding has supported 106 traffic-safety projects and reached more than 981,000 people. In April 2023, *Go Human* launched its Community Hubs Program, which offers funding opportunities for community organizations to implement local traffic-safety and community-engagement strategies that leverage community gathering and resource sites or networks. The program aims to build street-level community resiliency and increase the safety of populations that have historically been and/or are currently most harmed by traffic injuries and fatalities, including Black, Indigenous and people of color; people with disabilities; and frontline workers, particularly those walking and biking.

Sustainable Communities Program: SCAG helps to advance Connect SoCal through the Sustainable Communities Program (SCP), which has facilitated over $16.9 million in funding to local jurisdictions since the adoption of Connect SoCal in 2020. This adds to the $17 million in funding to local jurisdictions through the SCP between the adoption of the 2016 RTP/SCS and Connect SoCal 2020. The funding program's goals are to provide needed planning resources to local jurisdictions so they can plan for active and multimodal transportation, sustainable land use and affordable housing—all to support the implementation of Connect SoCal and increase the region's competitiveness for federal and state funds. See Table 2.1 for the projects funded since 2020.

Regional Early Action Program: On July 5, 2023, SCAG was awarded $237 million from the California Department of Housing and Community Development. This was part of the Regional Early Action 2.0 program to accelerate progress toward state housing goals and climate commitments through a strengthened partnership between the state, its regions and local entities. These resources will enable SCAG to fund projects and programs that support Connect SoCal implementation.

TABLE 2.1 Sustainable Communities Program Projects Approved Since 2020

COUNTY	PROJECT TYPE	AGENCY	PROJECT NAME
Active Transportation & Safety			
Los Angeles	Pedestrian Plan	LA County Public Health	Lennox Community Pedestrian Plan
Los Angeles	Network Visioning & Implementation	Los Angles Dept. of Transportation	Wilshire Center/K-town AT Network Visioning
Los Angeles	Quick Build	City of Santa Monica	East Pico Safety Project
Riverside	Non-Infrastructure	Riverside County Public Health	Safe Routes for All - Coachella
Orange	First/Last Mile	OCTA	OCTA Bus Stop Safety and Accessibility Study
Riverside	Active Transportation Plan	City of Banning	Banning Comprehensive ATP
Los Angeles	Safe Routes	City of Lynwood	Lynwood Safe Routes To School Plan
Los Angeles	Network Visioning & Implementation	City of Pomona	Pomona Citywide Complete Streets Ordinance
Los Angeles	First/Last Mile	Montebello Bus Lines	First-Mile / Last-Mile Master Plan
Los Angeles	Safe Routes	City of Duarte	Safe Routes to School Program
Orange	Vision Zero	City of Santa Ana	Safe Mobility Santa Ana Plan Update
Housing & Sustainable Development			
Los Angeles	Advanced ADU Bundle	Pasadena	City of Pasadena ADU Incentive Program
Los Angeles		Santa Monica	ADU Accelerator Program
Orange		Laguna Beach	ADU Ordinance and Toolkits
Orange	Preliminary ADU Bundle	Buena Park	Advancing ADU Implementation
Los Angeles		Compton	ADU Housing Opportunity
Orange		Garden Grove	Advancing Accessory Dwelling Unit Implementation Programs
Los Angeles		Paramount	Paramount Small Model Homes
Los Angeles		Santa Fe Springs	ADU Implementation Program: Prototypes and Procedural Manual
Los Angeles	EIFD Bundle	Covina	Covina Downtown Enhanced Infrastructure Financing District
Los Angeles		LAC/USC Health Village	LAC/USC Healthy Village Vision
Riverside		Yucaipa	Yucaipa EIFD

TABLE 2.1 Continued Sustainable Communities Program Projects Approved Since 2020

COUNTY	PROJECT TYPE	AGENCY	PROJECT NAME
Housing & Sustainable Development continued			
Los Angeles	Workforce Housing	Palmdale	Central Palmdale Workforce Housing Project WHAR12
Los Angeles	EIFD	Heart of Hollywood (City of LA)	Heart of Hollywood Infrastructure Financing District
Los Angeles	EIFD	One San Pedro (HACLA)	One San Pedro
Riverside	Objective Development Standards Bundle	Coachella	Objective Design and Development Standards
San Bernardino		Grand Terrace	Permitting Software For Expediting Housing Opportunities
Los Angeles		Montebello	Streamlining Permitting Procedures
Orange		Newport Beach	Newport Beach Objective Development Standards
Los Angeles		Santa Fe Springs	Objective Design Standards and Design Manual
Los Angeles		Santa Monica	Objective Development Standards
Los Angeles		South Pasadena	Housing Application & Materials Streamlining and Training
Orange		Westminster	Westminster Objective Development Standards
Los Angeles	Specific Plan	San Dimas	San Dimas Downtown Specific Plan
San Bernardino	Specific Plan	Rialto	Foothill-Riverside Specific Plan Updates
Los Angeles	Specific Plan	Burbank	Media District Specific Plan Update
Los Angeles	Objective Zoning Standards	South El Monte	South El Monte Zoning Code Comprehensive Update for Housing Streamlining
Smart Cities & Mobility Innovations			
Los Angeles	Curb Space	Los Angeles Dept. of Transportation	Curb Zone Data Inventory for Digital Curb Management
Los Angeles		City of Long Beach	Long Beach Curb Space Management Study
Orange		City of Stanton	Stanton Citywide Curb Management Plan
Los Angeles	Technology	San Gabriel Valley Council of Govts	GoSGV Engagement & Evaluation
Riverside	Parking	City of Desert Hot Springs	Downtown and Light Industrial Parking Plan
Orange		City of Garden Grove	Garden Grove Curb Data Study
Orange	Technology	City of Laguna Woods	Laguna Woods Mobility Technology Plan
San Bernardino	Technology	City of Rialto	Smart Cities Plan for Warehousing & Logistics