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MEETING OF THE

TECHNICAL WORKING GROUP

Thursday, September 18, 2025 10:00 a.m. – 12:00 p.m.

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If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Kevin Kane at (213) 236-1828 or via email at kane@scag.ca.gov. Agendas & Minutes for the Technical Working Group are also available at: https://scag.ca.gov/technical-working-group

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 Connect SoCal 2050 Local Data Exchange: Overview and Timeline Echo Zheng
 minutes
 Packet Page 5

2. Connect SoCal 2050 Growth Forecast & Growth Vision: A High-Level Overview Kevin Kane, Lyle Janicek, Kimberly Clark 20 minutes

Packet Page 16

CARB's Evaluation of Connect SoCal 2024
 Camille Guiriba
 15 minutes
 Packet Page 33

 SCAG's AI White Paper Amanda McDaniel
 minutes
 Packet Page 39



TECHNICAL WORKING GROUP

Meeting Minutes (Abridged)

August 21, 2025 10 a.m. – 12 p.m.

The meeting was held via Zoom teleconferencing.

Meeting Attendance

MEMBERS

Angeles, Mariel City of Cerritos
Balderrama, Mary City of Cerritos
Diep, Deborah CDR/CSUF
Emery, Edward RCTC

Hollis, Jerilyn County of Ventura

Koblasz, Ginger SBCTA

Kim, Susan City of La Habra

Lancaster, Mark CVAG
Masters, Martha RCTC
Nguyen, Thomas CA HCD

Oliver, Tom City of Los Alamitos
Pinto, Erika SPUR
Shiomoto-Lohr, Gail City of Mission Viejo
Tendick, Jennifer CARB
Tso, Kristin OCTA
Zaman, Ruby CDR/CSUF

ALTERNATES & PUBLIC ATTENDEES

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TECHNICAL WORKING GROUP

Meeting Summary

1. CONNECT SOCAL SUBREGIONAL SCS FRAMEWORK AND PRELIMINARY MILESTONES

Camille Guiriba presented an overview of the Subregional SCS Framework and Guidelines, noting the process and implications if subregions opted not to delegate, and shared out preliminary milestones for the development of Connect SoCal 2050. Deborah Diep (CDR/CSUF), Kevin Kane (SCAG), Gail Shiomoto-Lohr (City of Mission Viejo) participated in discussion.

2. KEY LINKAGES BETWEEN RTP/SCS AND RHNA ALLOCATION

Kevin Kane presented the key linkages between the Regional Transportation Planning/Sustainable Communities Strategy (RTP/SCS) and the Regional Housing Needs Assessment (RHNA), both of which are anticipated to coincide for this next cycle. Kevin noted the statutory provisions, schedule comparison, and highlighted key similarities and differences between the two processes. Gail Shiomoto-Lohr provided a comment.

3. DEMOGRAPHIC DATA AND WORKSHOP UPDATE

Kevin Kane provided demographic updates, noting the upcoming 2025 Southern California Demographic Workshop in October, the 2028-2050 RTP/SCS preliminary growth projections, the upcoming September 9th expert panel, and when the TWG may expect to see preliminary figures. Deborah Diep, Kevin Kane, and Sungbin Cho (SCAG) participated in discussion.

4. GENERAL UPDATE ON AB 130 AND SB 131

Karen Calderon shared a verbal update on two major bills relating to the California Environmental Quality Act (CEQA) that were passed this summer: AB 130 and SB 131, highlighting key takeaways from each bill. No comments were provided.



Overview and Timeline

Echo Zheng, PhD Forecasting & Spatial Analytics September 2025



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What is LDX?

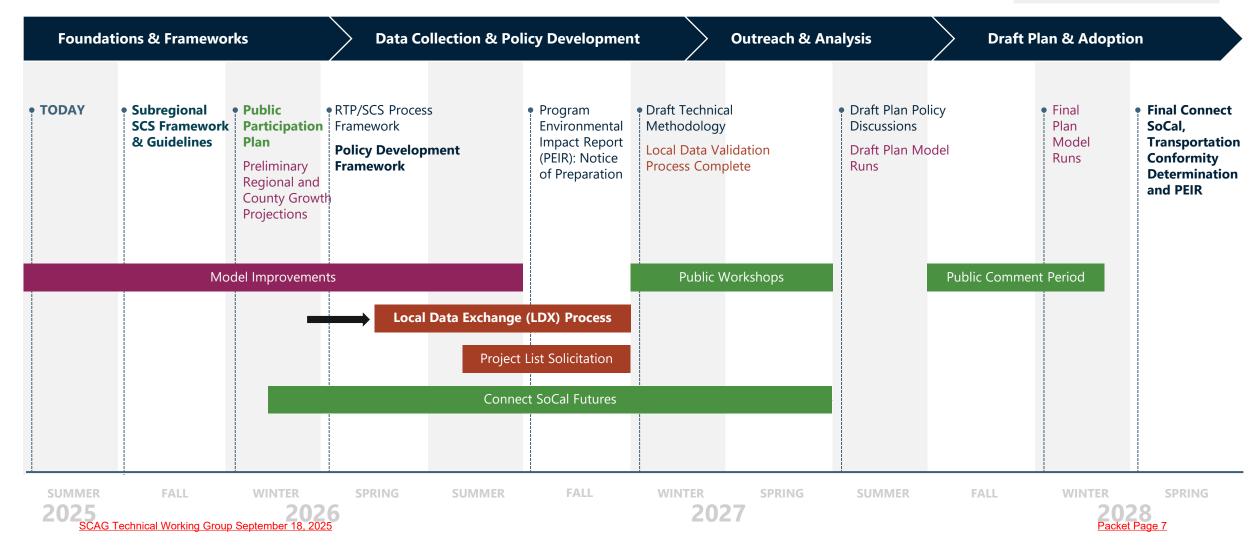
- The Local Data Exchange, or LDX, aims to collect and exchange information covering land use, growth, resource areas, and other related plan inputs to inform the development of Connect SoCal.
- LDX supports data collection and policy development for Connect SoCal 2050
- LDX involves
 - (1) preparing geographic datasets and a planning survey to collect local input
 - (2) one-on-one meetings with each of our 197 local jurisdictions



Connect SoCal Preliminary Milestones

COLOR KEY

Plan Foundation & Elements
Local Agency Input Process
Modeling/Forecast
Outreach and Engagement
BOLD = ACTION ITEM



The Local Data Exchange

Data with local input will inform the development of upcoming RTP/SCS.

SCAG

Prepares materials for local review and to collect input, including preliminary GIS maps in various topics and a planning survey

SCAG

City/County

Meet **one-on-one** to discuss the data/maps and opportunity to provide input

City/County

Reviews the data/maps, updates and corrects the data where appropriate, and completes the planning survey

The Local Data Exchange, Connect SoCal 2024

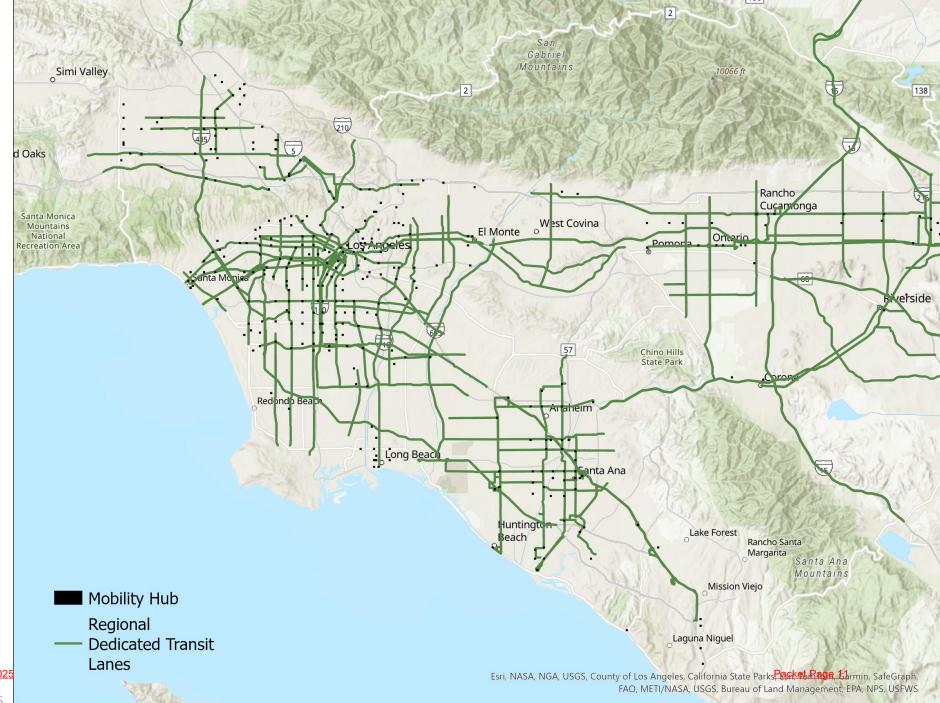
Update (U)	Reference (R)		Update	Update	Reference
A ···× ·································					
Land Use	Geographic Boundary	Transportation	Growth Forecast	Priority Development Area	Green Region Resource Area
General Plan land use	City boundary	Major transit stops (R)	Households 2019-2050	Neighborhood Mobility Areas (NMA)	Climate Hazards
Specific Plan land use	Sphere of influence	Transit Priority Areas (TPA) (R)	Employment 2019-2050	Livable Corridors	Habitat & Open Space
Existing land use	Census tract	High Quality Transit Corridors (HQTC) (R)		Job Centers	Administrative Areas
Zoning code	TAZ geography	Regional bikeways (U)			
Key Entitlements		Regional truck routes (U)			

Proposed Data Changes for Connect SoCal 2050

Update (U)	Reference (R)		Update	Update	Reference
Land Use	Geographic Boundary	Transportation	Growth Forecast	Priority Development Area	Green Region Resource Area
General Plan land use	City boundary	Update: Major transit stops	Households 2024-2050	Neighborhood Mobility Areas (NMA)	Climate Hazards
Specific Plan land use	Sphere of influence	Transit Priority Areas (TPA) High Quality Transit	Employment 2024-2050	Livable Corridors	Habitat & Open Space
Existing land use	Census tract	Corridors (HQTC) Regional bikeways		Job Centers	Administrative Areas
Zoning code	TAZ geography	Regional truck routes Add: Mobility Hubs		Exploring a singular- layer approach	
Entitlements/pipeline projects		Dedicated Transit Lanes Olympic legacy projects	Update	e data and/or metho	dology

Examples of Mobility Strategiesin CSC 2024

- Mobility hubs: locations offering seamless connections between at least two transportation modes
- Dedicated transit lanes:
 SCAG's Regional
 Dedicated Transit Lanes
 Study identifies
 opportunities and best practices for a regional network of bus lanes



Planning Survey

- Collecting feedback to refine established Connect SoCal Sustainable Communities Strategies.
- Understanding opportunities and constraints facing local governments in implementing the SCS.
- Identifying potential new and/or more effective land use and mobility strategies that support a forecasted regional forecasted development pattern that is integrated with the transportation network and reduces greenhouse gas emissions from automobiles and light trucks.

Planning Survey, CSC 2024

- For CSC 2024, the survey is organized into five parts including: Land Use & Housing, Transportation, Environmental, Public Health and Equity and Data. For example:
 - Has your jurisdiction adopted or implemented any of the following Transportation Demand Management (TDM) Strategies and, to your knowledge, have any major employers or other entities implemented any such strategies?

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Aaop	itea	ואוטו	strate	gies

Bike share system

Car share program

Designated pick-up/drop-off for ride sourcing or transportation network companies (TNCs, such as Lyft or Uber)

Dynamic pricing for parking

Employee training programs on multimodal travel options

Facilities or incentives for low speed modes (Neighborhood Electric Vehicles)

Guaranteed ride home programs

Incentives for telecommuting or hybrid work

Integrated mobility hubs

Intelligent parking programs

Micromobility program (bike share, scooter share, etc.)

Parking cash-out policies

Parking Pricing

Preferential parking or parking subsidies for carpoolers

Private employer shuttles or other transportation providers

Programs or mobility services aimed at local tourism travel (e.g. Shuttle bus)

Ridesharing incentives and rideshare matching

Transportation Network Company (TNC) partnership (providing first/last mile, dial-a-ride or

paratransit, microtransit, etc.)

Transit pass benefits

Transportation management areas

Vanpool programs

Jurisdiction		Major Employers		
Yes	No	Yes	No	

Any other TDM Strategies your jurisdiction is considering? What are barriers and/or opportunities to include these strategies in your plans, programs, or ordinances?

Packet Page 13

Timeline

EVENT	ANTICIPATED DATE
Schedule meetings and begin subregion-level outreach	February 2026
Finalize and complete LDX data	March 2026
Launch Local Data Exchange. Data made available for local review through Data/Map Books	March/April 2026
Begin one-on-one meetings with local jurisdictions to review the data package and feedback opportunity	April 2026
Deadline for local jurisdictions to provide feedback for possible inclusion in Connect SoCal	December 2026
Regional collaboration on plan development. Continued development of Connect SoCal strategies with stakeholders, working groups, and the public	2027
Draft RTP/SCS release	Fall 2027
Final RTP/SCS adoption SCAG Technical Working Group September 18, 2025	April 2028 Packet Page 14

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THANK YOU

SCAG Technical Working Group September 18, 2025 Packet Page 15



Connect SoCal 2050 Growth Forecast and Growth Vision

a high-level overview

Demographics and Growth Vision

September 18, 2025

Technical Working Group

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Presentation Outline

- Region & County Projections and Expert Panel
- The Forecasted Regional **Dev**elopment **Pattern**
- Connect SoCal 2024 Growth Prioritization Scale
- Connect SoCal 2050 Early Considerations for:
 - Green Region Resource Areas (GRRAs)
 - Priority Development Areas (PDAs)

Region & County Projections

Sept 9 Expert Panel considered major inputs:

- **1** Employment Growth
- 2 Births
- 3 Deaths
- 4 Immigration
- **5** Domestic Migration
- **6** Labor Force Participation
- **7** Household Formation (Headship)

Anticipate Preliminary Projections for Nov 20 TWG:







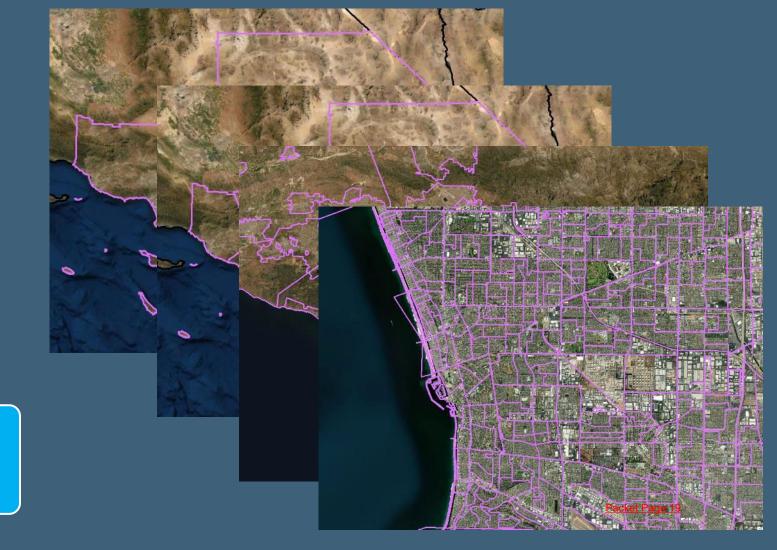
Four key forecast scales

SCAG Region

6 SCAG Counties

197 SCAG Jurisdictions

Approximately 13,000 City split Tier 2 Transportation Analysis Zones (TAZs)



Forecasted Regional <u>Dev</u>elopment <u>Pattern</u>

"set forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board, and (viii) allow the regional transportation plan to comply with Section 176 of the federal Clean Air Act (42 U.S.C. Sec. 7506)." California Government Code 65080(b)(vii)

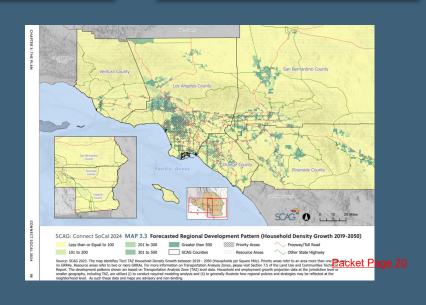
Preliminary May 2026 Locally-Reviewed April 2027

Draft

Release expected Oct 2027 **Final**

Adoption expected Apr 2028

- ✓ Demographic Expert Panel/Model
- ✓ Technical approach
- ✓ Statutory target
- ✓ Connect SoCal 2024 Regional Planning Policies



Connect SoCal 2024 Preliminary small area <u>household</u> forecast methodology

- 1. Estimate <u>remaining general</u> <u>plan capacity</u> and control to county/regional projection
- 2. Add RHNA/housing element rezone sites (if avail. & > GP)
- 3. Growth prioritization scale
 - Increase in Priority
 Development Areas (PDAs)
 - Minimize in Green Region Resource Areas (GRRAs)

PDAS

- Neighborhood Mobility Areas (NMAs)
- Livable Corridors
- Transit Priority Areas (TPAs)
- Spheres of Influence

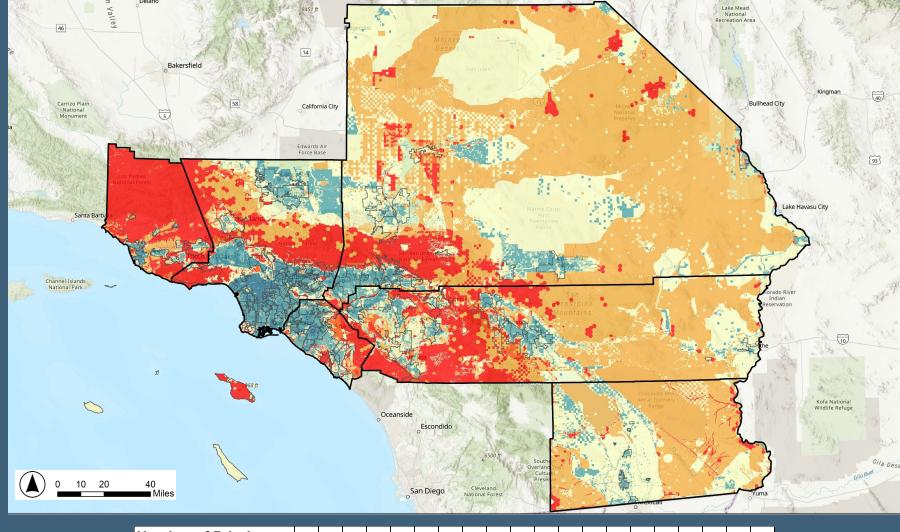
Notes: Small area <u>population projections</u> were derived from household projection (i.e., people-per-household). Small area <u>employment</u> <u>projections</u> used a shift-share approach based on county-level growth by sector. Technical Working Group September 18, 2025

GRRAs

- 100-year floodplains
- Wildfire risk within moderate, high and very high risk areas
- Wildland-urban interface and intermix areas
- 3.5 Feet Sea Level Rise
- Wetlands, Rivers, and Streams
- Areas providing habitat connectivity
- Areas of conservation emphasis
- Open space and parks SOAR (Ventura County only)
- Open space and parks CA Protected Areas Database
- Open space and parks CA Conservation Easement Database
- Tribal Nations
- Military Installations
- Farmlands

Packet Page 21

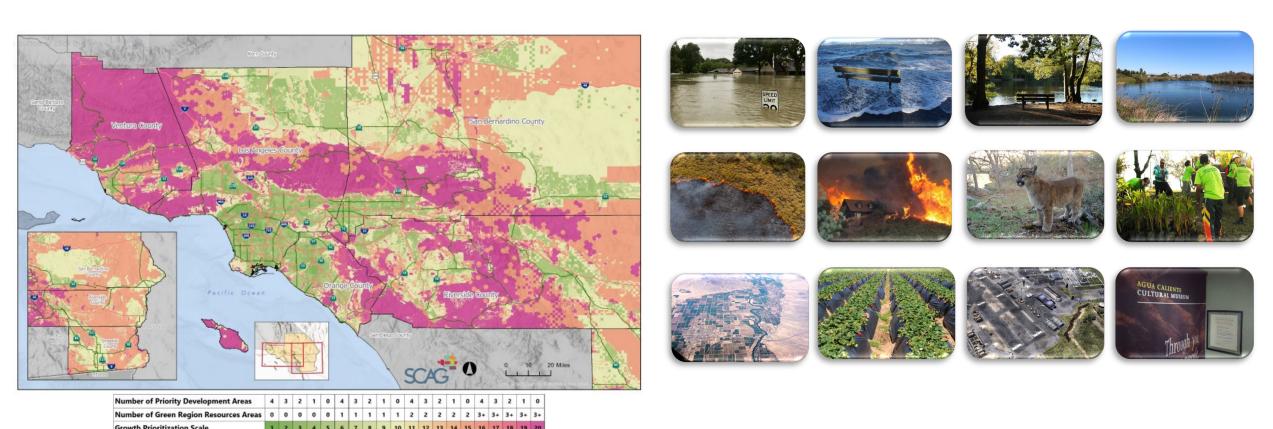
Connect SoCal 2024 Growth Prioritization Scale



- Used for the preliminary dev pattern
- Used to evaluate locallyreviewed dev pattern

Objective: Fulfill SB 375 Requirements for Resource Areas

"Gather and consider the best practically available scientific information regarding resource areas and farmland in the region" California Government Code 65080(b)(v).



Updated Datasets Required by SB 375

Category	2024 RTP/SCS Dataset	2028 Proposed Update
	California Protected Areas Database (CPAD), 2021	CPAD, 2024b
Open Space and Parks	Save Open Space and Agricultural Resources (SOAR), 2017	SOAR, 2017
	California Conservation Easement Database (CCED), 2021	CCED, 2024
Rare, Threatened, and Endangered Species*	California Natural Diversity Database (CNDDB), 2017	CNDDB, 2019
Sensitive Habitat Areas	Areas of Conservation Emphasis (ACE), 2015	ACE, 2018
	Habitat Essential Connectivity Project, 2010	Essential Habitat Connectivity Vector Data, 2021
	National Wetlands Inventory, 2020	National Wetlands Inventory, California Aquatic Resource Inventory (CARI), 2024
Natural Community and Habitat Conservation Plans	Natural Community Conservation Plan (NCCP) and Habitat Conservation Plan (HCP) boundaries, 2021	NCCP and HCP Reserve Designs, 2025
Farmland SCAG Technical Working Group September 18, 2025	Farmland Mapping and Monitoring Program (FMMP), 2018	FMMP, 2021; Williamson Act Contracts Packet Page 24

^{*} CNDDB data is not spatially accurate enough to the parcel level and will be provided to jurisdictions as reference (i.e. not in GRRAs)

Updated Hazard and Climate Risk Datasets

Category	2024 RTP/SCS Dataset	2028 Proposed Update
Flood Areas*	Digital Flood Insurance Rate Map, 2017 (DFIRM)	Digital Flood Insurance Rate Map, 2020 (DFIRM)
Coastal Inundation	CoSMoS for Southern California, v3.0, Phase 2, 2018	Data for 3.5 feet of SLR requested from USGS
Fire Hazard	FHSZ: Local (2008) and State Responsibility Area Maps (2007);	FHSZ: Local Maps (2025) and State Responsibility Area Maps (2024)
riie nazaru	CalFIRE Wildland Urban Interface & Intermix, 2018	CalFIRE Wildland Urban Interface & Intermix, 2018

Packet Page 25

^{*} Flood Areas are also required for consideration under SB 379

Recommended Additional Datasets for GRRA Analysis

Fire Risk and Vegetation Management

Cal Fire Priority Landscape: Reduce Wildfire Risk to Forest Ecosystem Services

Cal Fire Priority Landscape: Reduce Wildfire Risk to Communities

Reserve Design and "No Growth" Areas from NCCPs/HCPs

Western Riverside Reserve Design – Conserved Lands + Criteria Cells

Orange County Reserve Design – Central/Coastal NCCP

Orange County Transportation
Authority NCCP HCP

Coachella Valley Conservation Areas
– CVMSHCP

Services Datasets

Critical Coastal Areas (CCA)

California Aquatic Resource Inventory (CARI)

South Coast Missing Linkages

Priority Development Areas (PDA)

- Areas within the SCAG region where future growth can be located in order to help the region reach mobility and environmental goals
- Focus on areas with shorter trips to support VMT reduction and enhance placemaking:
- Technical tool to reflect adopted policies/strategies & advance plan development, measure performance, guide implementation
- Included as part of the **Local Data Exchange** (LDX) process

Four discrete types of PDAs in Connect SoCal 2024

PDA type	Description	Data
Neighborhood Mobility Areas	Areas focused on creating, improving, restoring, and enhancing safe and convenient connections to schools, hospitals, shopping, parks, and other amenities (Tier2 TAZ)	Intersection density Low-speed streets Land use entropy Access to amenities (within 1 mile)
Transit Priority Areas	Areas where local jurisdictions may plan and zone for increased density at nodes along key corridors and redevelop under-performing retail	HQTC + input from local jurisdictions
Livable Corridors	Areas that are within one half mile of existing or planned major transit stops in the region	Major transit stops Additional legacy data sources
Spheres of Influence	Existing or planned serve areas within the planning boundary outside an agency's legal boundary. In unincorporated areas only.	SOI information from Local Agency Formation Commissions (LAFCOs)



Considerations for Connect SoCal 2050 PDAs

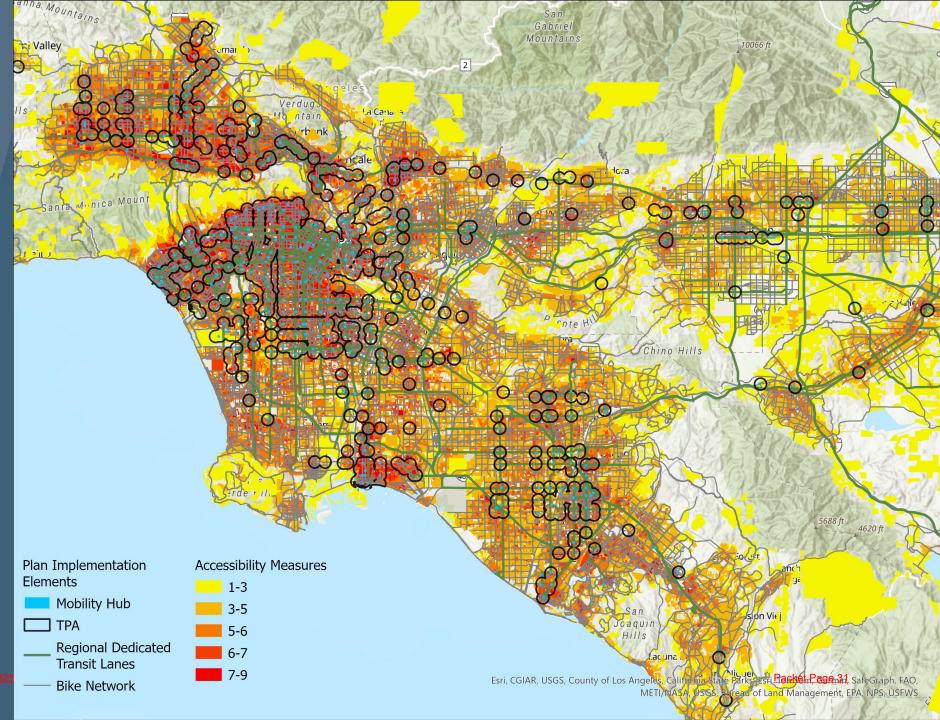
Component	Description	Source	Weight
Walkable destinations	Everyday destinations within 15 minutes walking	External/ SPM	TBD
Intersection density	Reflects improved walkability that may not be captured by a time threshold	External/ SPM	TBD
Bikeable destinations	Everyday destinations within 15 minutes on bike	External/ SPM	TBD
Transit access	Regional jobs within 45 minutes during AM peak (2019 base year and 2050 plan year)	Prior Plan/ SPM	TBD
Transit Priority Areas	Major transit stops + ½-mi. buffer	Prior Plan/ Polygon	TBD
Mobility hubs	At least two transportation modes that connect and interact with one another	2025 Study /Point	TBD
Bike network	Regional existing and planned bike network (excluding Class III)	Prior Plan/ Line	TBD
Dedicated transit lanes	wRegional dedicated transit lanes network	2023 Study /Line	TBD

- Components of priority
 development that can be assessed
 individually or as a whole
- A single, smaller geographic scale:
 Scenario Planning Zones (SPZs)
- Per-capita VMT closely linked to:
 - presence of everyday destinations,
 - their accessibility via multiple modes, and
 - local or regional <u>plan</u>
 implementation strategies
- Weight components into a single measure → ArcGIS suitability surface

SCAG Region Illustration of potential PDA components



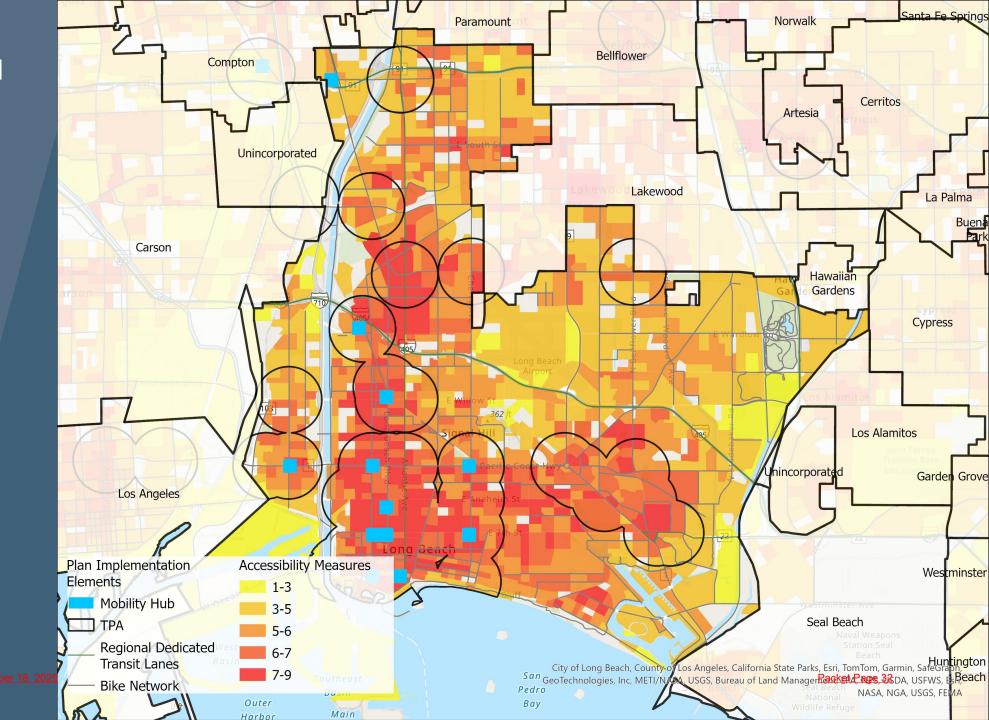
LA Basin Illustration of potential PDA components



Long Beach detail
Illustration of potential
PDA components

Next Steps:

- 1. Preliminary county/regional projections based on expert panel insights
- 2. Approach for combining PDA and GRRA components
- 3. Preliminary jurisdiction and TAZ projections
- 4. Local Data Exchange





CARB's Sustainable Communities Strategy (SCS) Evaluation of Connect SoCal 2024

Technical Working Group

September 18, 2024

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Overview and Determination

- SCAG submitted its 2024 SCS for the California Air Resources Board (CARB) staff's review on July 2, 2024. In consultation with CARB staff, SCAG submitted revisions and supplemental information to CARB staff on March 24, 2025.
- CARB accepts that SCAG's 2024 SCS, and the updated SCS submission on March 24, 2025, together demonstrate that the region would meet its 2035 target if fully implemented.
- However, CARB also indicates that the 2024 SCS is not likely to be fully implemented, and the region will not achieve the GHG reduction target by 2035 without additional actions to support implementation.
- CARB to add the evaluation report on their website here: https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-program/regional-plans-evaluations/southern-california

CARB Findings – Highlights

- CARB could not validate SCAG's auto operating cost methodology.
- SCAG's SCS includes actions and investments supporting implementation of land use, housing, transportation, new mobility, and electric vehicle strategies, but not all the pricing strategies.
 - The extent of express lane miles that will be new road capacity can limit this pricing strategy's GHG benefits.
- The project list also includes investment in road capacity projects, which is not supportive of reducing VMT.

CARB Recommendations

- A standard set of recommendations is customized for each MPO as needed.
- In its next SCS technical methodology, SCAG must describe how it has addressed these recommendations:
 - 1. Prioritize funding for transportation projects that advance SCS implementation and reduce VMT.
 - 2. Re-imagine highway expansion projects.
 - Minimize roadway expansion projects, including express lanes.
 - 3. Support infill development and affordable housing that advances SCS implementation and reduces VMT.

CARB Recommendations – Highlights (cont.)

- 4. Further advance pricing strategies.
 - Commit to the implementation timeline and steps in the next SCS.
- 5. Monitor implementation of the SCS.
 - Determine whether the SCS continues to achieve the 2020 GHG target.
- 6. Quantify long-term induced travel impacts.
 - Account for all potential effects of long-term induced travel.
- 7. Improve modeling and data.
 - Auto operating cost, zone size, land use model, autonomous vehicles, etc.



THANK YOU

Contact Camille Guiriba at guiriba@scag.ca.gov

SCAG Technical Working Group September 18, 2025 Packet Page 38



Making Sense of Al in Regional Planning—Take One

August 21, 2025

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SCAG Technical Working Group September 18, 2025

Packet Page 39

Background and Purpose

- Internal research task to <u>explore and leverage AI and big data</u> <u>methods and techniques</u> to establish innovative data processing, analytical, and visualization workflow for regional planning and decision-making.
- Survey:
 - Purpose: assess current <u>familiarity, adoption, challenges</u>, <u>concerns, and benefits</u> of AI and big data tools among SCAG Planners.
 - Insights will help <u>identify opportunities to better utilize</u> these technologies for regional decision-making, potential training needs, and outline potential risks and concerns to ensure the technologies are being used appropriately.
 - Sent to all Planning Staff (103)
 - Received 35 responses, 34% response rate

Deliverables:

Al and Big Data Potential White Paper

Internal AI and Big
Data Uses and
Experiences Survey

Survey Summary

- 49% of SCAG Planners currently using or previously used
 Al in their work; 37% for big data
- 71% believe AI will play a larger role in regional planning in the next 5-10 years; 91% for big data
- Top challenges and barriers to Al and big data adoption include <u>lack of technical expertise</u>, <u>data quality issues</u>, <u>resistance to Al adoption</u>, <u>privacy concerns</u>, <u>high cost</u>, and <u>narrow/limited use cases</u>
- Two emerging viewpoints: optimistic and cautious approach

Benefits

- Productivity, efficiency, saving time
- Minimizing human error
- •Code generation for simple tasks

Risks and Concerns

- •Data concerns (unreliable, inaccurate, etc.)
- •Inherent biases/lack of transparency/black box algorithm
- Data privacy concerns

SCACe Fedelpipa Le Vorking | Group September 18, 2025

Erosion of public trust and accountability

SCAG Planner familiarity with Al and Big Data



What are the main purposes for using AI tools in your work?



At SCAG, planners who use AI are predominately using it as <u>a tool to</u> <u>help assist with business productivity</u>, not as a replacement for analysis, fact finding, or report creation.

White Paper on Practical Applications of Al and Big Data for MPOs

- State of the Practice
- What's actually under the hood?
 - Natural Language Processing (NLP) / Large Language Models (LLM)
 - Computer Vision Applications—imagery + CCTV/LBS/etc.
- Transportation Applications
 - Traffic and Mobility Analysis
 - Congestion Management/Operations
 - Safety Analysis and Vision Zero
 - Infrastructure Management, multimodal integration
- Geospatial Intelligence (GeoAI) in Planning
 - E.g. Feature extraction, faster/better location modeling
- Digital Twins, Scenario Planning, Virtual Reality
- Smart Governance and Public Engagement

Practical Applications of AI and Big Data for Metropolitan Planning Organizations (MPOs)

Prepared by the Southern California Association of Governments

July 2025

Authors: KiHong Kim, Amanda McDaniel, Kevin Kane, Jung Seo, Mengdi Li¹

Corresponding author: Amanda McDaniel, mcdaniel@scag.ca.gov

Table of Contents

Table of Contents
Executive Summary4
Introduction6
Glossary of Common Terms
Al and Big Data in Regional Planning: State of the Practice
Al Usage 8
Big Data Usage9
Applications in Transportation Planning and Operations
Traffic and Mobility Analysis
Congestion Management and Traffic Operations
Safety Analysis and Vision Zero
Use Case: Al Techniques for Proactive Safety Planning11

White Paper on Practical Applications of Al and Big Data for MPOs

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- Digital Twins, Scenario Planning, Virtual Reality
- Smart Governance and Public Engagement

Examples:

MTC automated public comment analysis

LLM + Python

WRCOG Staff Report and information retrieval chatbot

Custom LLM

LA Metro Bus Lane Enforcement Program

Computer vision application

Chattanooga digital twin for signal timing simulations

Digital twins

Packet Page 43

Implementation Strategies, Challenges, & Considerations

Implementation Challenges and Considerations

- Data quality and availability
- Technical expertise and workforce readiness
- Algorithmic bias and equity
- Transparency and explainability
- Privacy and data governance
- Integration with existing processes
- Cost and sustainability

Strategies for Integrating AI and Big Data in MPOs

- Establish a clear vision and strategic goals
- Invest in digital infrastructure
- Building staff capacity
- Implementing scalable pilot projects
- Embedding ethics, equity, transparency, and privacy