Regional Dedicated Transit Lanes Study

Technical Advisory Committee Meeting #2

SCAG/Cambridge Systematics/Nelson Nygard/HereLA

January 25, 2022

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Agenda

• Welcome & Introductions	10:00 am
• Project Recap	10:05 am
• Existing Conditions Review	10:15 am
• Corridor Screening Goals, Criteria, and Methodology	10:40 am
• Next Steps	11:25 am

Welcome & Introductions

Engaging Today

Click on the following icons in your menu bar. Additional windows will appear with a list of participants and chat.

- Chat with other participants
- "Raise Your Hand"

- See names of other participants
- Mute or unmute yourself

Project Recap

Project Purpose

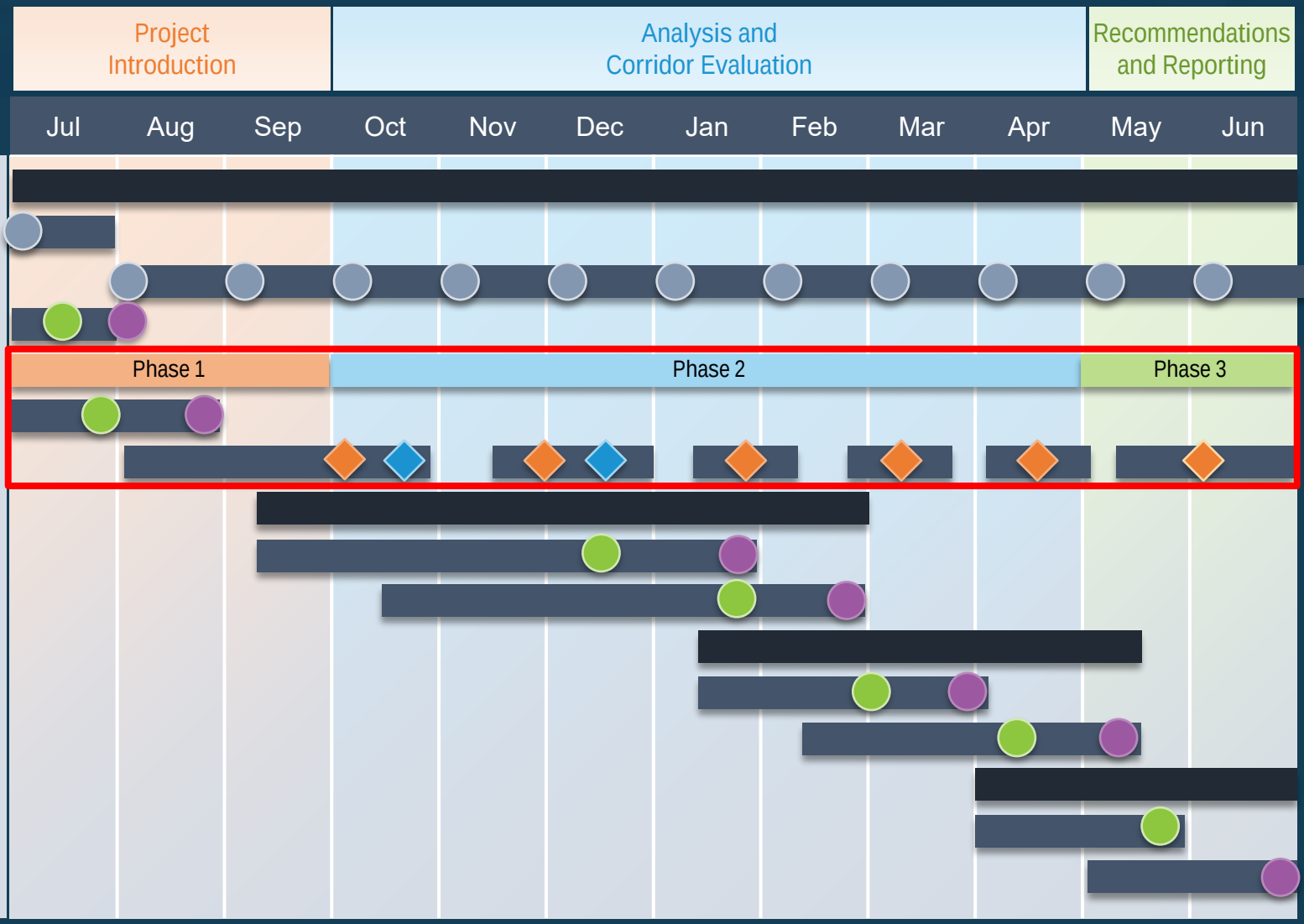
Support the development of a regional network of dedicated bus lanes and priority treatments to enable enhanced transit services, improve mobility, accessibility and sustainability, and advance implementation of Connect SoCal.

The Study will :

- Identify key benefits of dedicated bus lanes and priority treatments and primary factors for implementation,
- provide a preliminary assessment on where dedicated bus lanes and priority treatments might be most feasible and beneficial in the SCAG region, and
- provide recommendations and guidance for local jurisdictions that are seeking to pilot or implement bus lanes or priority treatments.

Project Schedule

Management Meeting
Draft Deliverable
Final Deliverable
Stakeholder/TAC Meeting
Other Stakeholder Meetings



Task	
1.	**Project Initiation and Workplan**
	1.1 Project Kickoff Meeting
	1.2 Monthly Project Meeting
	1.3 Project Work Plan and Schedule
2.	**Stakeholder Engagement**
	2.1 Stakeholder Engagement Plan
	2.2 Stakeholder Engagement Process
3.	**Best Practices and Existing Conditions Report**
	3.1 Best Practices
	3.2 Review of Existing Conditions
4.	**Corridor Identification Report**
	4.1 Corridor Identification
	4.2 Corridor Evaluation
5.	**Draft and Final Report**
	5.1 Draft Report
	5.2 Final Report

Stakeholder Series

	Stakeholder Kickoff	TAC 1	TAC 2	TAC 3	TAC 4	Draft Report Review
Audience	• CTC • COG • Other agency staff • Transit operators	• Technical Advisory Committee Discovery & Visioning	• Technical Advisory Committee Corridor Identification and Eval Framework	• Technical Advisory Committee Refined Corridor Evaluation	• Technical Advisory Committee Recommendations and Implementation	• TAC • Other CTC, COG, CBO, or agency staff
When	October 6	November 30	January 25	March 8	April 19	June
Discussion Topics	• Introduce project • Discuss objectives and needs • Identify TAC participants • Identify discovery interviewees • Identify document and data sources	• Review best practices and peer cases • Group meeting themes • Identify additional interview or data needs	• Review existing conditions and future forecasts • Discuss screening goals, criteria, methodology • Discuss preliminary screening universe	• Discuss screening results • Select evaluation corridors • Discuss evaluation methodology	• Discuss evaluation results • Discuss implementation planning • Discuss final report format and roll out	• Review draft report (purpose, best practices, existing conditions, evaluation method and results, implementation guidance)

Best Practices Case Studies and Research includes:

1. WHY build dedicated lanes and priority treatments?

- Four key elements: **Reliability, Speed, Comfort,** and **Convenience.**
- Results in faster travel times, safer traveling environments, improved schedule reliability, user confidence, convenience and experience

2. WHERE are lanes and priority treatments most feasible and beneficial?

- Metrics used to identify and evaluate potential corridors
- Supportive conditions and context for potential implementation

3. HOW do jurisdictions pilot or implement?

- Peer regions and agency stakeholders with track record of successful implementation

Potential Transit Priority Treatments and Solutions

1. Example Capital Improvements

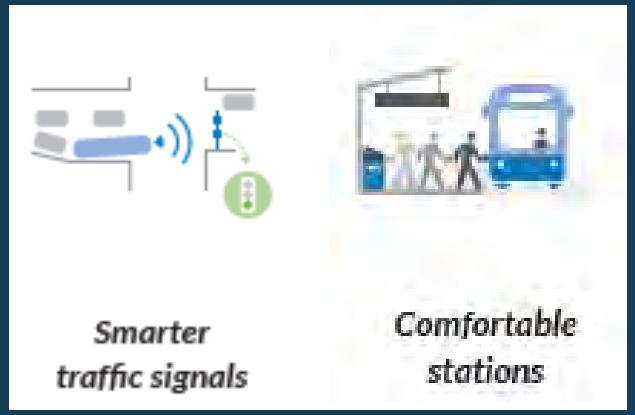
- Transit-only lane configurations
- Stop positioning and spacing/consolidations
- Curb extensions (bus bulbs) and bus pullout lanes
- Station area enhancements and level boarding
- Bus and bicycle facilities

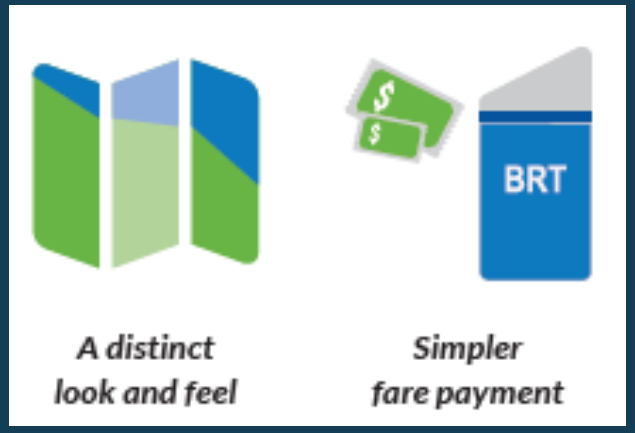
2. Example Operational and Technology Enhancements

- Traffic Signal Priority (TSP) and queue jumps
- Real-time information
- Fare collection and all door boarding
- Route realignment

3. Example Policies and Other Actions

- Technology, information, and responsibility sharing
- Enforcement
- Project programming and funding





Existing Conditions Review

Research and Data Collection

Planning Documents

- Regional short and long range plans
- Transit strategic and mobility plans
- Active transportation plans
- Climate action plans

Policy Decisions

- Planning (SB288 CEQA Exemption)
- Funding
- Operations (AB917 Lane Enforcement)
- Housing Coordination

Data Sources

- Population, employment, and equity demographics
- Land use and development
- Trip origins & destinations
- Transit, roadway, bicycle, and pedestrian features
- Transit ridership and performance
- Traffic data
- Climate and environmental data

Source Materials

Los Angeles

- *Metro's Recovery Task Force Final Report*
- *LADOT Strategic Plan Update 2021-2023*
- *Metro NextGen Bus Plan*
- *Metro's Long Range Transportation Plan*
- *Metro's Bus Rapid Transit Vision and Principles Study*
- *LA Metro Transit-to-Parks Strategic Plan*
- *LADOT Mobility Plan 2035*
- *Metro Active Transportation Strategic Plan*
- *LA County Climate Action Plan (mention other related plans within LA County)*
- *Metro First/last Mile Strategic Plan*
- *Metro's Bus Rapid Transit and Street Design Improvement Study*
- *SGVCOG Transit Feasibility Study FAQ Sheet*
- *Foothill Transit COA – Existing Conditions*
- *A Budding Model: Los Angeles' Flower Street Bus Lane*

Imperial

- *Imperial County Active Transportation Plan*
- *Imperial Climate Action Plan*

Orange

- *OCTA OCBus360*
- *OCTA Active Report (ATP)*
- *OC Transit Vision*
- *OCTA 2018 Long Range Transportation Plan*

Riverside

- *RCTC Long Range Transportation Study*
- *Riverside County Climate Action Plan*
- *Western Riverside County Active Transportation Plan*
- *CVAG regional synchronization documentation*

San Bernardino

- *San Bernardino Pedestrian Points of Interest Plan*
- *System-wide Transit Corridor Plan for the San Bernardino Valley*
- *Omnitrans Strategic Plan*
- *San Bernardino Greenhouse Gas Reduction Plan*
- *San Bernardino County Long Range Transit Plan*

Ventura

- *VCTC Intercity Five-Year Service Plan*
- *VCTC Short Range Transit Plan*
- *VCTC FY2021 Transit Needs Assessment*
- *Ventura County Climate Protection Report*

Region

- *SCAG Connect SoCal RTP*

Common Goals for Improving Transit

Goal Area	Representative Goals: "We strive to…"
Improve Quality of Transit Service	• Improve and expand public transportation service to our customers and community • Provide an attractive, convenient and reliable mode choice that is safe, secure, inviting, and comfortable experience for all users for the entire trip • Identify and install at least two new bus-only lanes per year • Close gaps in regional rail and bus service by 2045
Improve Overall Mobility	• Advance mobility without congestion; accommodate more trips through a variety of high-quality mobility options • Provide high-quality mobility options that enable people to spend less time traveling • Improve the speed and reliability of bus and rail transit
Improve Sustainability	• Reduce GHG emissions • Align land use and transportation • Move people more efficiently
Improve Quality of Life	• Connect people to where they need and want to go • Enhance communities and lives through mobility and access to opportunity • Consider community needs and enhance quality of life

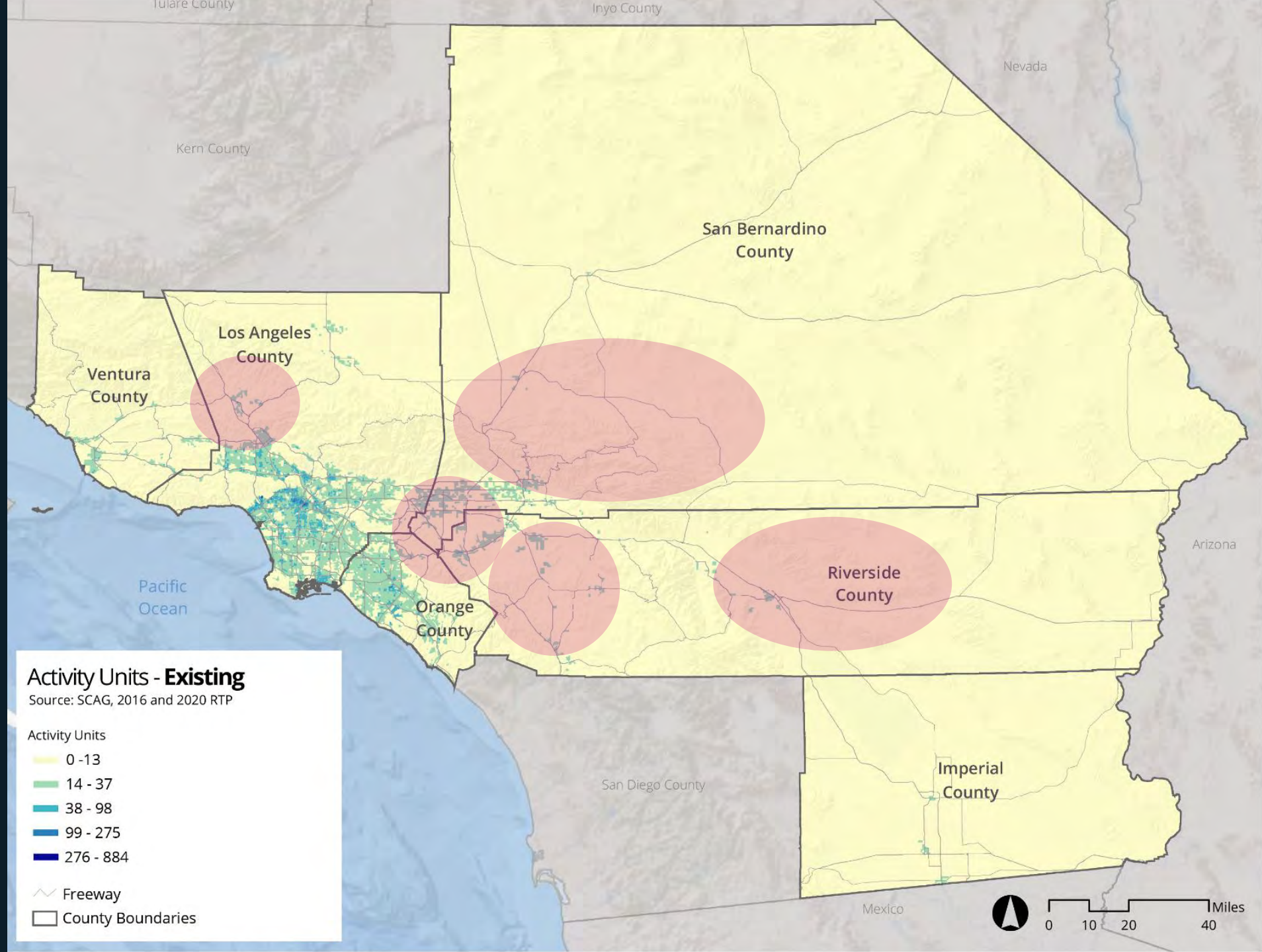
Opportunities and Challenges for Transit Priority Treatments

Opportunities	Challenges
• Improve frequency, speed, and reliability of the bus network • Close gaps in regional transit network • Decrease congestion • Increase transit mode share • Leverage public tax and funding mechanisms • Improve travel times for roadway users • Improve travel times and schedule reliability; cost-effective technique to improve quality of street life • Improve regional connectivity • Reduce VMT • Lots of room to grow and attract new riders	• Limited funding • Municipal coordination • Multi-jurisdictional coordination • Roadways geometric design constraints

Visualizing Existing and Future Conditions

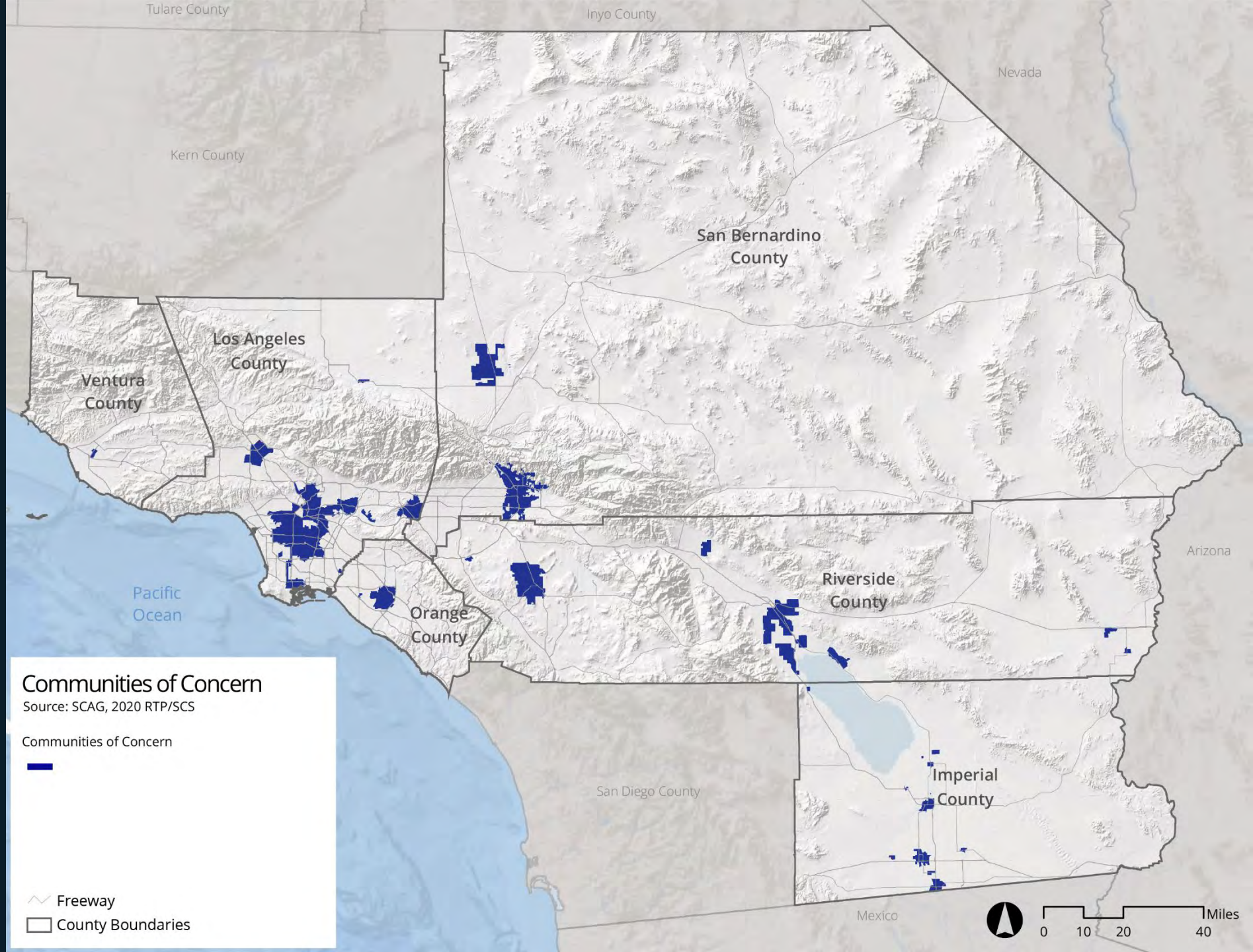
- **Where do people live?**
  - Population Density, 2016 and 2045
  - Population Growth, 2016 to 2045
- **Where do people work?**
  - Employment Density, 2020 and 2045
  - Activity Units, 2016/2020 and 2045
- **Where are equity communities located?**
  - Race/Ethnicity, 2020
  - Median Income, 2020 and 2045
  - Vehicle Access, 2019
  - SCAG Communities of Concern, 2020
- **What challenges do equity communities face?**
  - Healthy Places Index , 2021
  - CalEnviroScreen 4.0, 2021
  - Protected Open Spaces, 2021
- **How is the region built?**
  - Land Use, 2019
  - Transit Network, 2016
  - Transit Priority, 2019 and Proposed*
  - Bikeways and Bike Shed, 2016 and Planned
- **How do people travel?**
  - Travel Demand, 2019 and 2045
  - Corridor Delay, 2016 and 2045
  - Transit Ridership, 2019 and 2045

Activity Units (Population + Employment), 2020

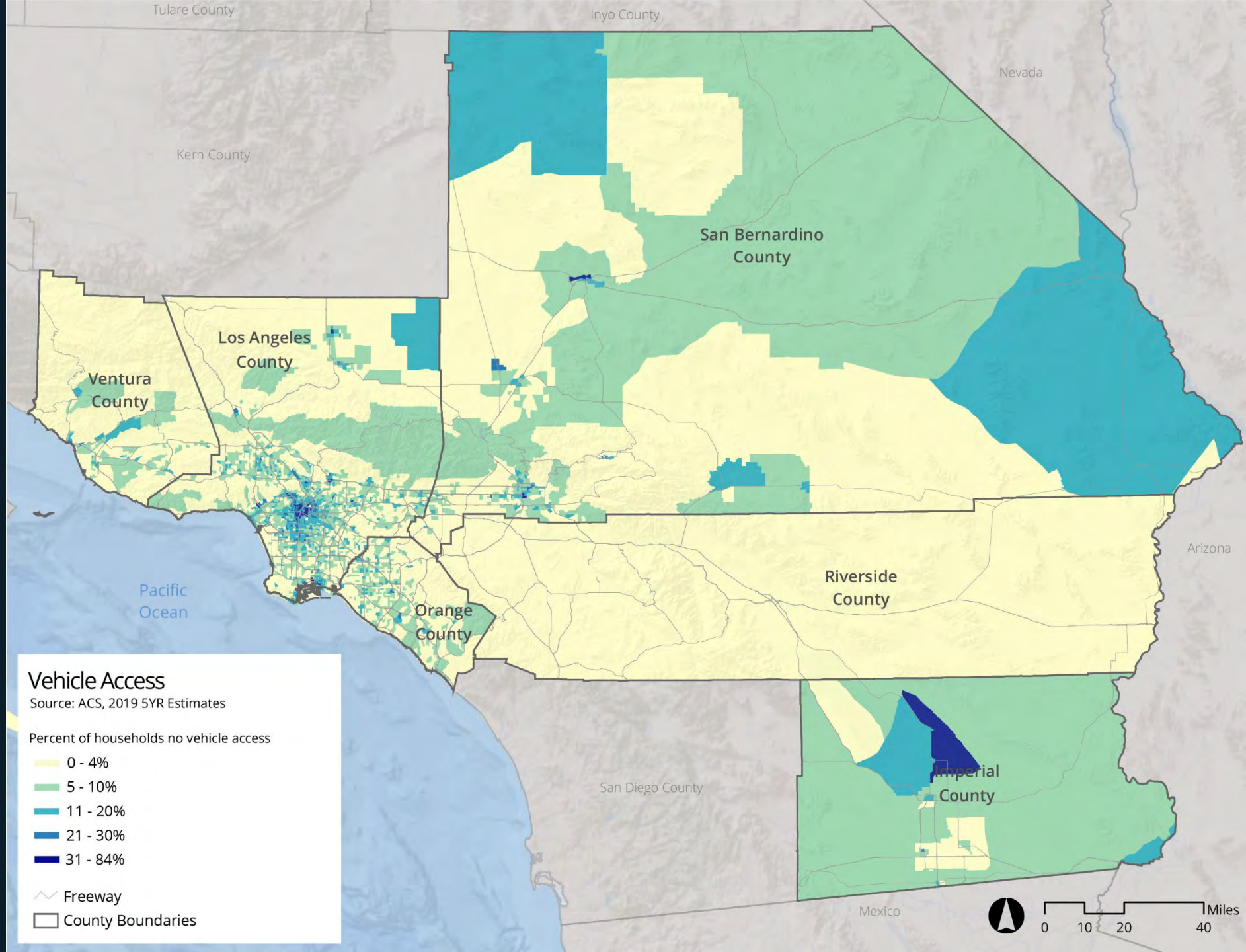


Future Growth Area

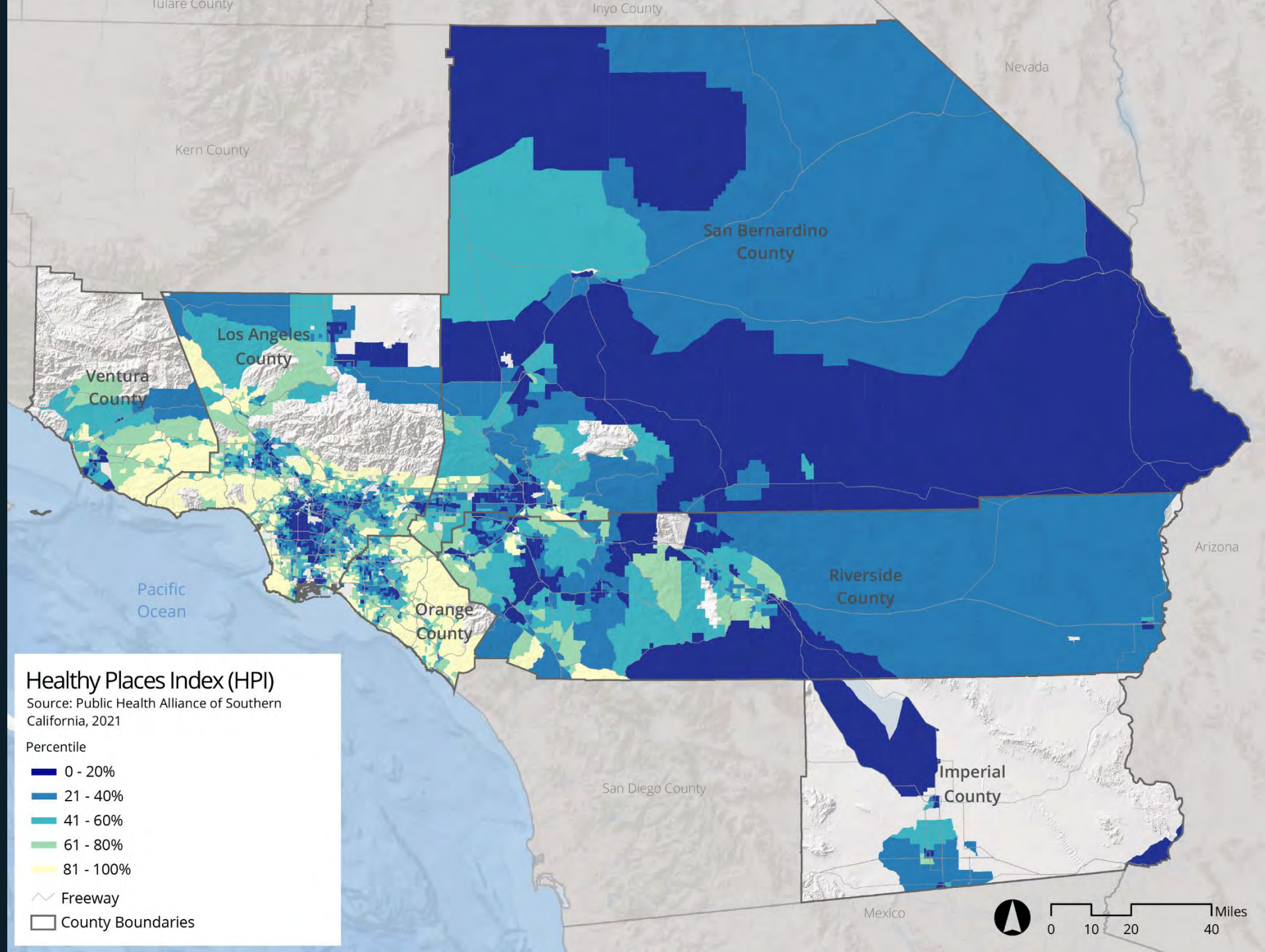
SCAG Communities of Concern, 2020



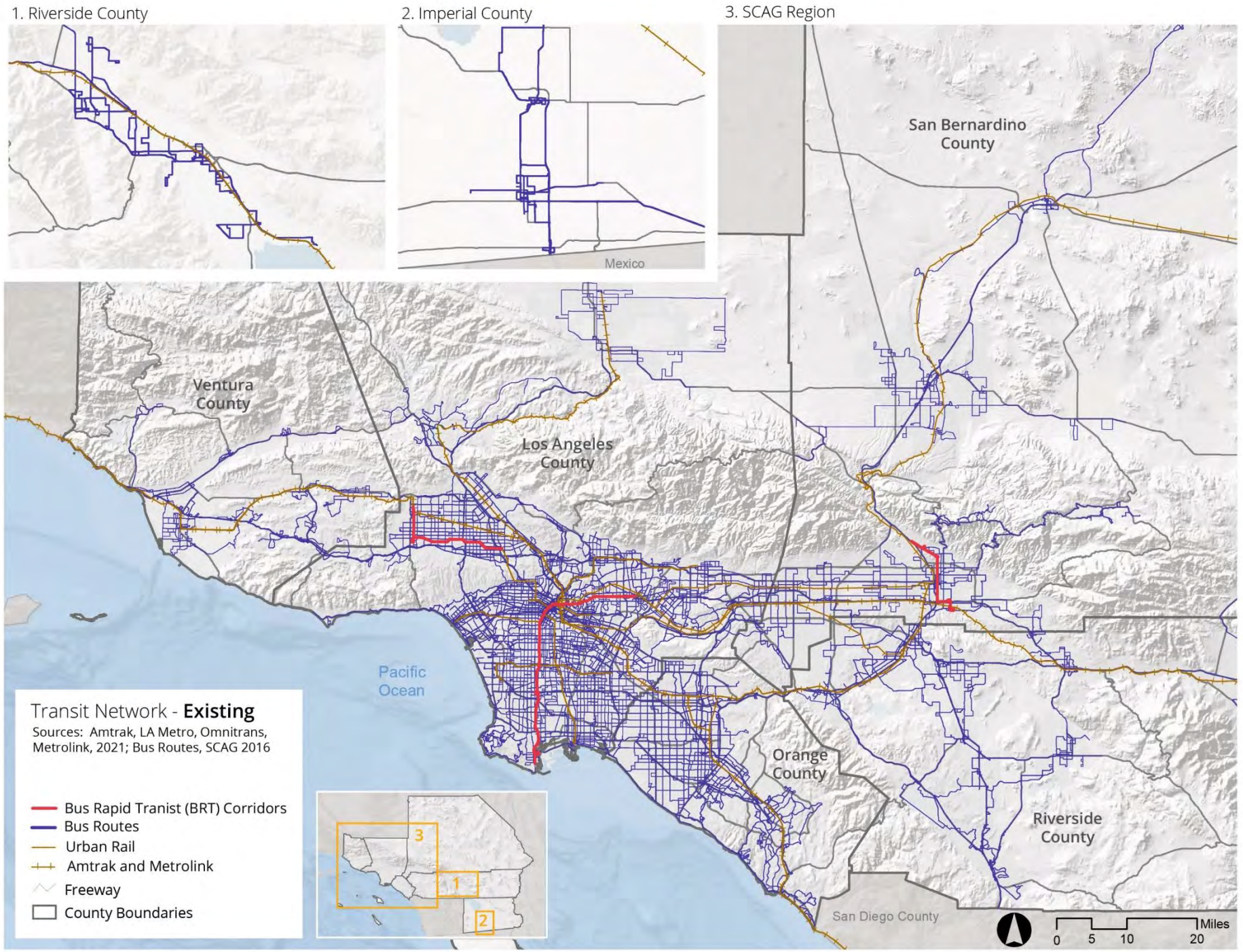
Households with No Vehicle Access, 2019



Healthy Places Index, 2021



Regional Transit Network, 2016/2021



Existing and Agency-Proposed Transit Priority Treatments

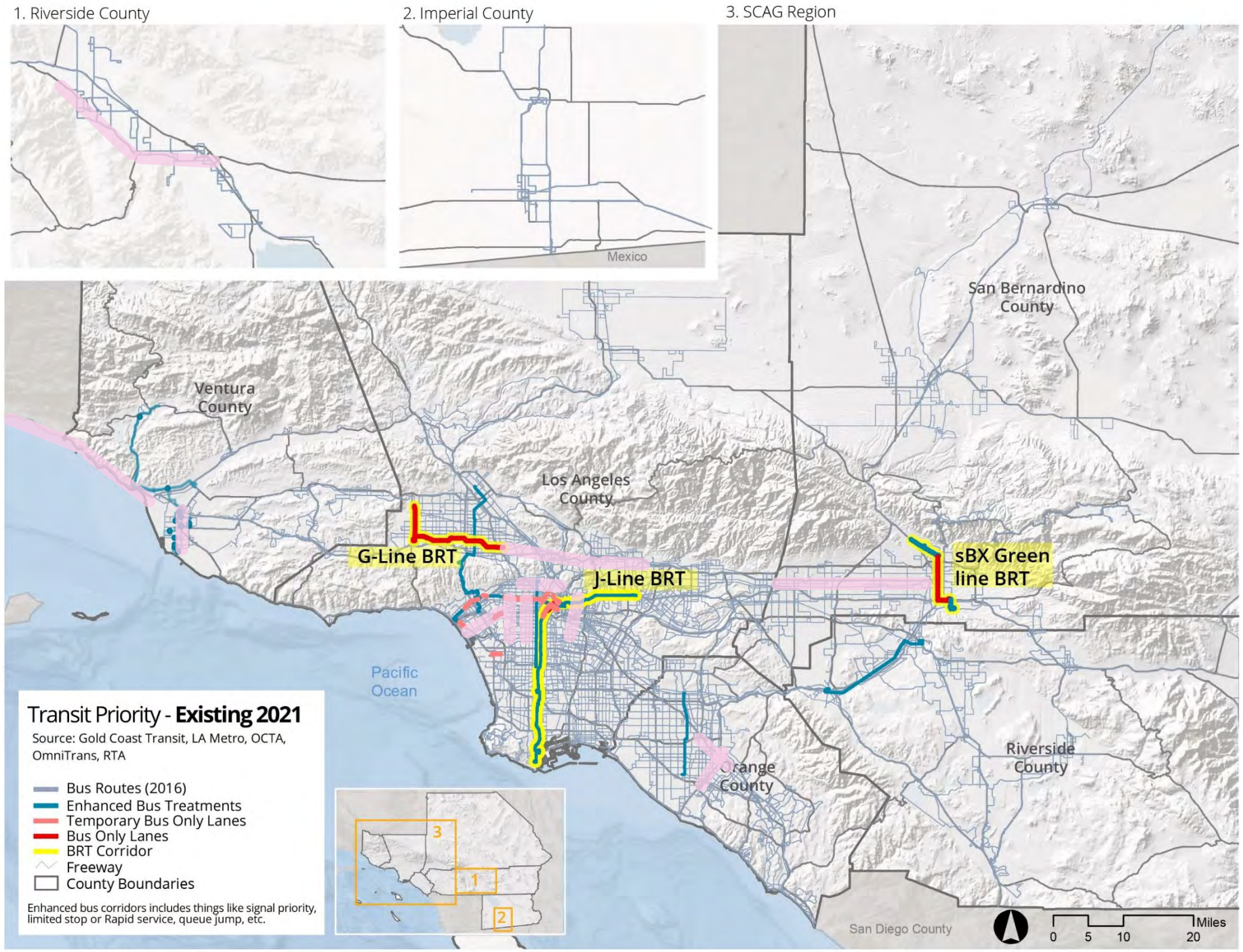
County	Project Name	Organization	Capital	Ops/Tech	Policy/Other
Los Angeles	Metro Rapid	LA Metro		●	●
	J (Silver) Line	LA Metro	●	●	●
	G (Orange) Line	LA Metro	●	●	●
	Wilshire Blvd Peak Hour Bus Lane	LA Metro	●		
	Grand Av & Olive St Bus Priority Lanes	LA Metro & LADOT	●		
	Alvarado St Peak Hour Bus Lanes	LA Metro & LADOT	●		
	Flower St & Figueroa St Peak Hour Bus Lanes	LA Metro & LADOT	●		
	5th & 6th St Peak Hour Bus Lanes, Signal Queue Jumper 5th/ Flower	LA Metro & LADOT	●		
	Aliso St Peak Hour Bus Lane and Curb Treatments	LA Metro & LADOT	●		
	La Brea Av Bus Priority Lanes	LA Metro & LADOT	●		
	BRT Candidates (Atlantic, Broadway, Cesar Chavez/Sunset, La Cienega, Venice)	LA Metro	●		
	NoHo to Pasadena Transit Corridor	LA Metro	●		
	Culver and Washington Blvd Mobility Lanes	Culver City	●		
	Colorado Blvd Transit Priority Corridor	Foothill Transit		●	
	Lincoln Blvd Bus-Only Lanes	Santa Monica/Big Blue Bus	●		
Orange	Bravo Service (Beach, Harbor, Westminster/17th)	OCTA		●	●
	I-5 BRT	OCTA	●		
	SR-55 BRT	OCTA	●		
Riverside	RapidLink	RTA		●	
	Highway 111 Transit Signal Priority	CVAG		●	
San Bernardino	sbX Green line	Omnitrans	●		
	West Valley Connector	Omnitrans	●		
Ventura	GoVC Bus Pass	VCTC		●	●
	Right Turn Priority Lanes	Gold Coast Transit			●
	Oxnard Blvd Transit Signal Priority	VCTC		●	
	US 101 Express Bus Lanes	VCTC	●		

Transit Priority Treatments, 2022

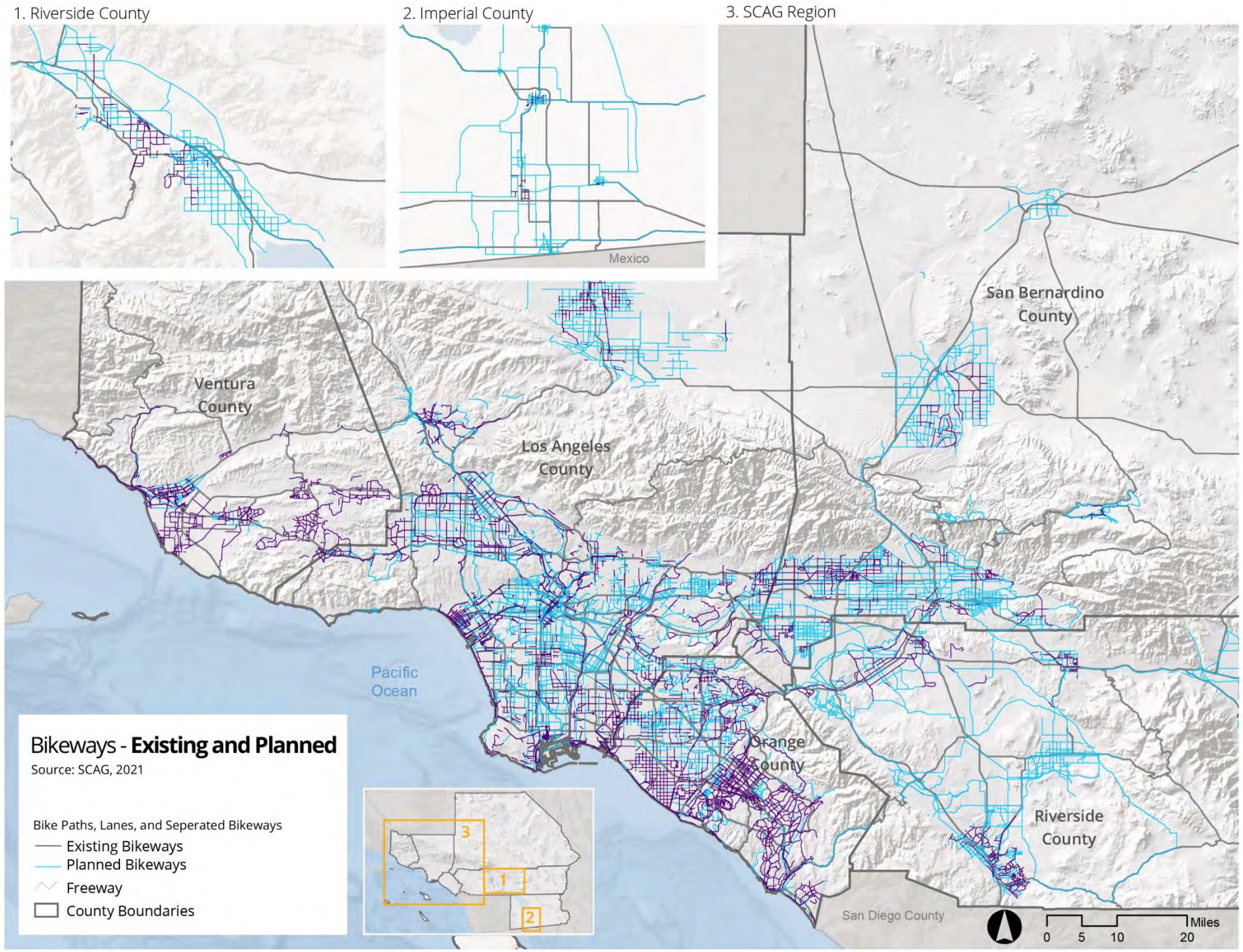
Existing One-Way Miles	All Routes (2016)	With Priority (2022)
Imperial	600	-
Los Angeles	12,900	249
Orange	2,700	22
Riverside	2,400	38
San Bernardino	3,100	30
Ventura	1,000	28*
Total	**22,800**	**367***

*Queue jump estimated as 1-mile of priority benefit

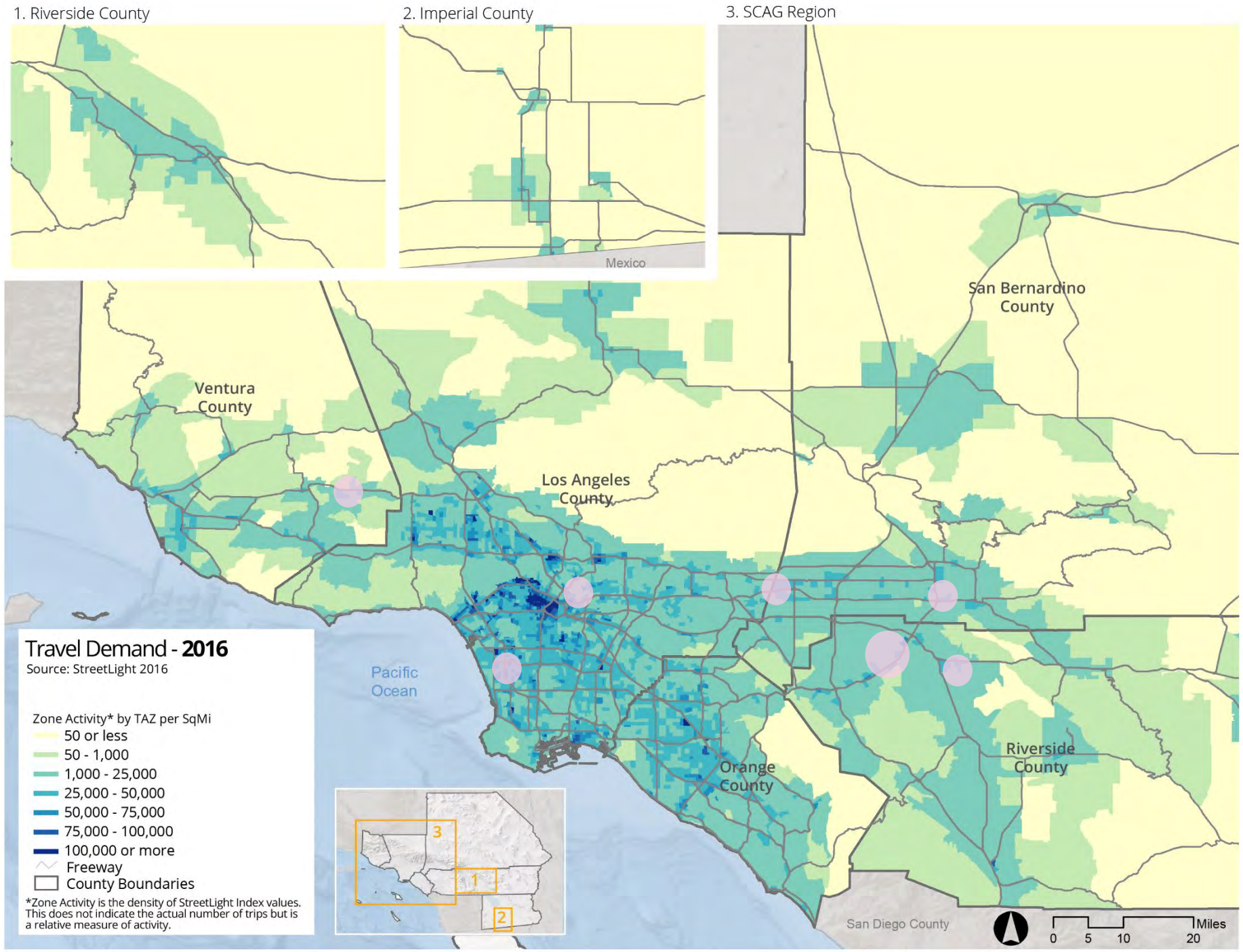
Agency Proposed Future Corridors



Bikeways, 2021 Existing and Planned



Trip Activity, 2016

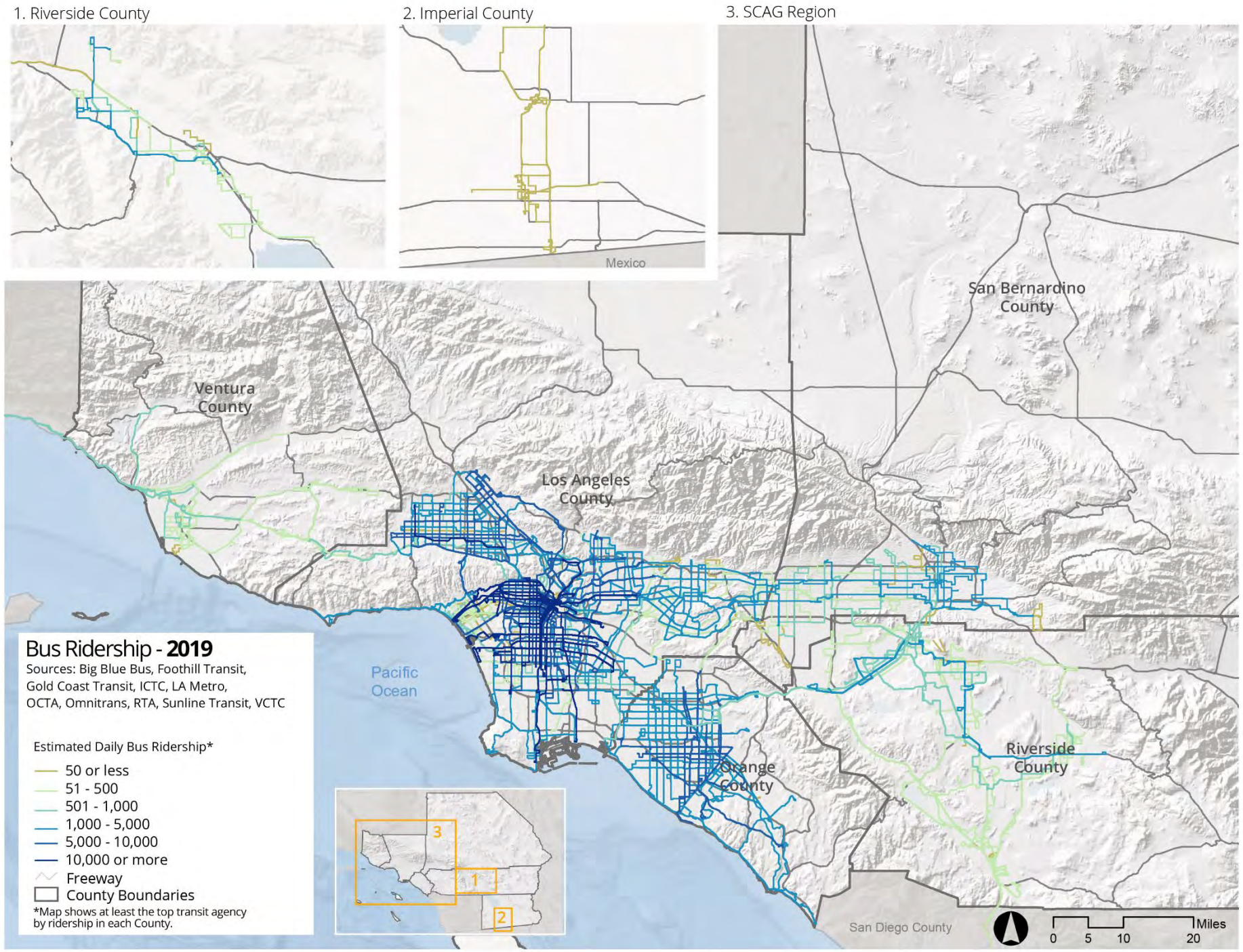


Expected Growth Areas

Generalized Transit Ridership*, 2019

Transit Mode	% Growth to 2045 (RTP Baseline)
Commuter Rail	49%
Urban Rail	106%
Local/Rapid Bus	34%
Express Bus	2%
Total	**46%**

*Based on operators providing line level ridership data. Not inclusive of all operators



Corridor Screening Goals, Criteria, and Methodology

Corridor Screening and Evaluation

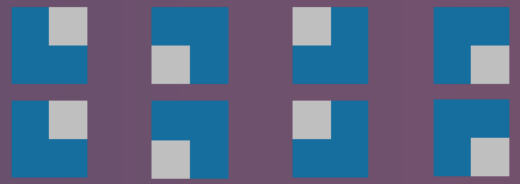
CORRIDOR IDENTIFICATION

All corridors where bus-only lanes are appropriate

CORRIDOR SCREENING

Corridors screened by feasibility and effectiveness

CORRIDOR EVALUATION



Corridors evaluated across qualitative and quantitative criteria

PRIORITIZATION

Corridors ranked based on defined criteria and local priorities

Screen and evaluate for:

- Ridership, mode split and throughput
- Travel time and reliability benefits
- VMT and GHG
- Equity and accessibility
- Ease of implementation
- Cost, funding, and ROI
- Corridor compatibility

High Level Methodology

Step I. Identification & Screening

1. Develop goals (and relative importance) for priority treatments
2. Associate metrics and weights to each goal
3. GIS assessment of metrics for corridors throughout region
4. Alternative methods for goals or treatments that are less quantifiable
5. Develop a first list of corridors or areas that pass screening thresholds

Step II. Evaluation & Prioritization

1. Apply treatment types to screened corridors based on feasibility/suitability criteria
2. Code and run in SCAG model based on sensitivity test results
3. Calculate and weight model-derived metrics
4. Off-model calculations and adjustments as needed (minimize)
5. Review and prioritize based on goals and geographic considerations

Developing Goals and Priorities

	Proposed Goal Area	Considerations
Step I + II	Improve Transportation System Performance	• Transit Speed and Reliability Potential • Minimizing Traffic Impacts • Regional Connectivity
	Increase People Throughput and Attract Riders	• Population and Employment Density • Travel Markets / Trip Intensity • Transit Ridership
Step II	Improve Access for Equity Communities	• Equity Community Proximity • Job, Education, and Institutional Access
	Promote Local Priorities and Built Environment	• Alignment to Local Priorities • Supportive First/Last Mile and AT Network • Transit Supportive Land Use and TOC
	Improve Climate and Health Outcomes	• GHG and Emissions Impacts • Benefits to Healthy Places

Screening for Performance and Ridership

Goal Area	Considerations	Potential Metrics
System Performance	• Transit Speed and Reliability Potential • Minimizing Traffic Impacts • Regional Connectivity	• Travel Delay; Peak and All-Day V/C Ratios • Facility Type; Number of Lanes; V/C Ratios • Proximate HC Transit Connections
Throughput and Riders	• Population and Employment Density • Travel Markets / Trip Intensity • Transit Ridership	• Existing & Future Pop & Emp Density • Existing & Future Trip Origins & Destinations • Existing Transit Ridership
Equity Access	• Equity Community Proximity • Job, Education, and Institutional Access	
Local Considerations	• Alignment to Local Priorities • Supportive First/Last Mile and AT • Transit Supportive Land Use and TOC	
Climate and Health	• GHG and Emissions Impacts • Benefits to Healthy Places	

Contributing to Healthier and Equitable Communities

Goal Area	Considerations	Potential Metrics
System Performance	• Transit Speed and Reliability Potential • Minimizing Traffic Impacts • Regional Connectivity	
Throughput and Riders	• Population and Employment Density • Travel Markets / Trip Intensity • Transit Ridership	
Equity Access	• Equity Community Proximity • Job, Education, and Institutional Access	• Existing Race, Income, Vehicle Access, COC • Proximate Features
Local Considerations	• Alignment to Local Priorities • Supportive First/Last Mile and AT • Transit Supportive Land Use and TOC	• Identified Projects; Relevant Policies* • Proximate Bike/Ped Features • Multi-Family LU; Proximate TPA, HQTA, TOC
Climate and Health	• GHG and Emissions Impacts • Benefits to Healthy Places	• GHG; Cal Enviroscreen • Proximate Low HPI, High Cal Enviroscreen

Breakout Group Discussion

Breakout Discussion (30 min)

- Do the Goals capture the most important values to evaluate for transit priority potential?
- What other Goals would you include?
- Which Goals are more important for screening versus prioritizing?

- Are the potential Metrics reasonable?
- Which Metrics are redundant and could be simplified?
- What other Metrics should be considered?

- What else is important to consider during the Corridor Screening phase?

Breakout Discussion Regroup (10 min)

- Readout from breakout discussions

Coming Up

Next Steps

Before TAC #3

- Conduct initial corridor screening
- Complete model sensitivity testing
- Additional committee briefings (including RTTAC)
- Finalize best practices review
- Finalize existing conditions report

TAC Meeting #3

- March 8, 2022 | 10:00–11:30am
- Preliminary Agenda
  - Discuss screening results
  - Select evaluation corridors
  - Discuss evaluation methodology

The RTL Technical Advisory Committee

The Technical Advisory Committee

What is the role of the TAC?

- Guide the direction of the project
- Review methods, insights, and major deliverables
- Provide input on key decision points in the project

What is the commitment of the TAC?

- The TAC will meet four times over the course of the project, about every 6–8 weeks

Who is serving on the TAC?

- Transportation planning directors and staff at CTCs, COGs, and other transit operators or municipalities
- Relevant participants from other governmental groups or CBOs identified by these stakeholders

The Technical Advisory Committee

County	Organization	Primary	Alternate
Imperial	ICTC	Virginia Mendoza	Marlene Flores
	ICTC	David Aguirre	Marlene Flores
Los Angeles	LA Metro	James Shahamiri	Mark Yamarone
	LA Metro	Paul Backstrom	Mark Yamarone
	AVCJPA	Nader Asmar	Talin Shahbazian
	GCCOG	Karen Heit	
	LADOT	Tim Fremaux	
	LADOT	Makenzi Rasey	
	NCTC	Art Sohikian	Michael Behen
	SBCCOG	Steve Lantz	
	SFVCOG	John Bwari	
	SGVCOG	Eric Shen	Alexander Fung
	WSCOG	Riley O'Brien	
	AVTA	Gina Romo	Martin Tompkins
	Big Blue Bus	Alfredo Torales	
	Culver City	Diana Chang	Jane Chan
	Foothill Transit	Joe Raquel	Josh Landis
	Long Beach Transit	Shirley Hsiao	Christopher MacKechnie

County	Organization	Primary	Alternate
Orange	OCTA	Kurt Brotcke	Charles Main
	OCCOG	Marnie O'Brien Primmer	
Riverside	RCTC	Eric DeHate	Jillian Guizado
	CVAG	Jonathan Hoy	
	WRCOG	Christopher Gary	Chris Tzeng
	RTA	Kristin Warsinski	Jennifer Nguyen
	Sunline Transit	Rohan Kuruppu	Jeff Guidry Victor Duran Brittney B. Sowell
San Bernardino	SBCTA	Nancy Strickert	Rebekah Soto Josh Lee
	Omnitrans	Jeremiah Bryant	Anna Jaiswal
	VVTA	Simon Herrera	Nancy Goff
Ventura	VCTC	Amanda Fagan	Martin Erickson
	VCOG	Hugh Riley	
	County of Ventura	Christopher Kurgan	
	GCTD	Matt Miller	Vanessa Rauschenberger
	Conejo Climate Coalition	Clint Fultz	