November 8, 2018
9:30 am – 11:30 am

Policy Committee A Conference Room
SCAG's Main Office
900 Wilshire Blvd., Ste. 1700, Los Angeles, CA 90017

AGENDA

1. **WELCOME AND SELF INTRODUCTIONS**
   Ping Chang, Acting Manager, SCAG

2. **AUGUST EJWG MEETING SUMMARY**

3. **EJWG FEEDBACK DISCUSSION**
   Anita Au and Tom Vo, Associate Regional Planner, SCAG

4. **ENVIRONMENTAL JUSTICE TECHNICAL ANALYSIS Q&A**
   Kimberly Clark, Regional Planner Specialist, SCAG

5. **EJ APPENDIX REORGANIZATION ACTIVITY**
   How should we reorganize the EJ Appendix?

TO PARTICIPATE VIA WEB CONFERENCING
To join the meeting: https://zoom.us/j/880836377
Dial-In: 1 (646) 558-8656
Meeting ID: 880 836 377

TO PARTICIPATE VIA VIDEOCONFERENCING
Video conferencing will be available at SCAG's regional offices in Imperial, Orange, Riverside, San Bernardino, Ventura counties and in the Palmdale videoconference site. *Space is limited, so RSVP is required. Please RSVP here:* https://scag.wufoo.com/forms/z1krfx8q0a4g51k/

SCAG, in accordance with the Americans with Disabilities Act, is committed to providing special accommodations to those who are interested in participating in the workshop. SCAG is also committed to helping those with limited proficiency in the English language by providing translation services at the workshop in accordance with Title VI of the Civil Rights Act. We ask that you provide your request for special accommodations or translation services at least 72 hours prior to the meeting so that SCAG has sufficient time to make arrangements. Please contact Anita Au, Associate Regional Planner, at au@scag.ca.gov or by calling (213) 236-1874.

EJ Outreach Process

- Who are some key stakeholders SCAG should reach out to during the 2020 TRP/SCS EJ outreach process?

  - Non-governmental organizations
  - Grassroots groups
  - Air Pollution Control Districts
  - Department of Toxic Substances Control
  - Public health departments
  - Los Angeles County Measure A stakeholders
  - City of Los Angeles Neighborhood Councils
  - Faith-based organizations

- Who are some key stakeholders SCAG should reach out to during the 2020 TRP/SCS EJ outreach process? (cont.)

  - Specific Groups:
    - Southeast Asian Community Alliance; Chinatown Community for Equitable Development; Sustainable Little Tokyo; Anahugh Youth Sports Association; Comite Civico Del Valle; Focus Group at LACI (on climate vulnerability)
  - Consider analyzing existing stakeholder list and **fill in gaps** of communities not represented
  - Consider looking into communities and cities **going through climate action plans**

- How can we expand on SCAG's EJ outreach approach from the 2016 RTP/SCS for the 2020 RTP/SCS?

  - Consider holding **meetings in the evening**, not during work hours and in **accessible locations**
  - Consider **releasing budget on EJ outreach process** (to show how much resources SCAG can have)
  - Understand that there are food, childcare, and transit costs for participants and **consider compensation** for participants
  - Consider hosting **pop-up events** and meeting people where they are at
  - Consider **including anecdotal information** from community based organizations

EJ Outreach Process

- How can we expand on SCAG's EJ outreach approach from the 2016 RTP/SCS for the 2020 RTP/SCS? (cont.)

  - **Provide ample time** for outreach
  - Consider exploring **contingency plans** for meetings with low attendance
  - Consider **expanding online presence and surveys**

- What are some <u>new</u> strategies/ideas SCAG staff can use to engage more with EJ stakeholders?

  - Consider **reframing from heavy technical language**
  - Consider **inclusion of background and process** during outreach process (Why is the outreach occurring? What's the purpose)

EJ Outreach Process

- What are some best practices on EJ outreach from other agencies or regions you think SCAG staff should look into for the 2020 RTP/SCS development process?

  - Consider having **bilingual meetings**
  - Consider having **follow-up meetings** to show community voice is heard and included in the process
  - Consider including **short survey and more online presence**
  - Consider or look into best practice examples of EJ policy
    - Kings County, Seattle, WA; Portland, OR; Minneapolis, MD
  - Consider providing **stipend** for community participants
  - Consider **using anti-displacement as a common goal** to achieving improved air quality, parks and open space, and transit access

- SCAG conducted EJ analyses for the 2016 RTP/SCS at the regional, community-based, and localized levels, depending on specific performance indicators. How can these three levels of analyses be further refined or improved?

  - Consider **communities under AB1550**
  - Consider **identifying ways to combine multiple EJ areas** to create new EJ area by combining their indices
  - Consider **community proposed projects**
  - Consider **analyzing benefits and burdens on all people**
  - Consider **adding numerical disparities** in park access, health vulnerabilities, and exposure to toxics

- How can we improve or enhance on the existing 18 performance indicators of the 2016 RTP/SCS EJ Appendix?

  - Consider **Healthy Places Index**, **MATES IV** study from AQMD, **LA County Health Profile**, **Riverside County Climate Adaptation Plan**; **develop an inventory of Health Impact Study** in the region to identify the gap
  - Consider **expanding more on "Gentrification and Displacement"** analysis to non-transit areas
  - Consider **expanding on traffic safety to include collisions involving trucks**
  - Consider examining **industries impacted by sea level rise**
  - Consider providing more detail of **substandard housing**
  - Consider **race, educational attainment, rent vs. homeowners** as indicators to determine communities vulnerable to gentrification and displacement

EJ Technical Analysis

- What are some new performance indicators that we should consider in addition to the existing 18 performance indicators for the 2020 RTP/SCS EJ Appendix?

  - Consider providing an **Emerging Categories** that involves certain ports, truck routes, storage yards, etc.
  - Consider including **Heat island effects** (consider Urban Heat Islands (UHI) Index maps on CalEPA's website)
  - Consider including **Seismic risk, liquefaction, and disaster resilience**

EJ Technical Analysis

- How can we make the EJ Appendix more user-friendly for local jurisdictions and stakeholders (i.e. organization of performance indicators, format of appendix, etc.)?

  - Consider providing **funding information/sources** as it relates to specific EJ topics
  - Consider **reorganizing indicators** into categories
  - Consider creating **interactive application**
  - Consider **utilizing matrices** to better show results of EJ analyses

Thank you

SCAG's Environmental Justice Appendix
for the
2016 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS)

Kimberly Clark
Research & Analysis Department
SCAG

INNOVATING FOR A BETTER TOMORROW

WWW.SCAG.CA.GOV

Identifying EJ Population Groups

Minority:

- A person who is African American, Hispanic or Latino, Asian American, American Indian, Alaskan Native, Native Hawaiian and Other Pacific Islander
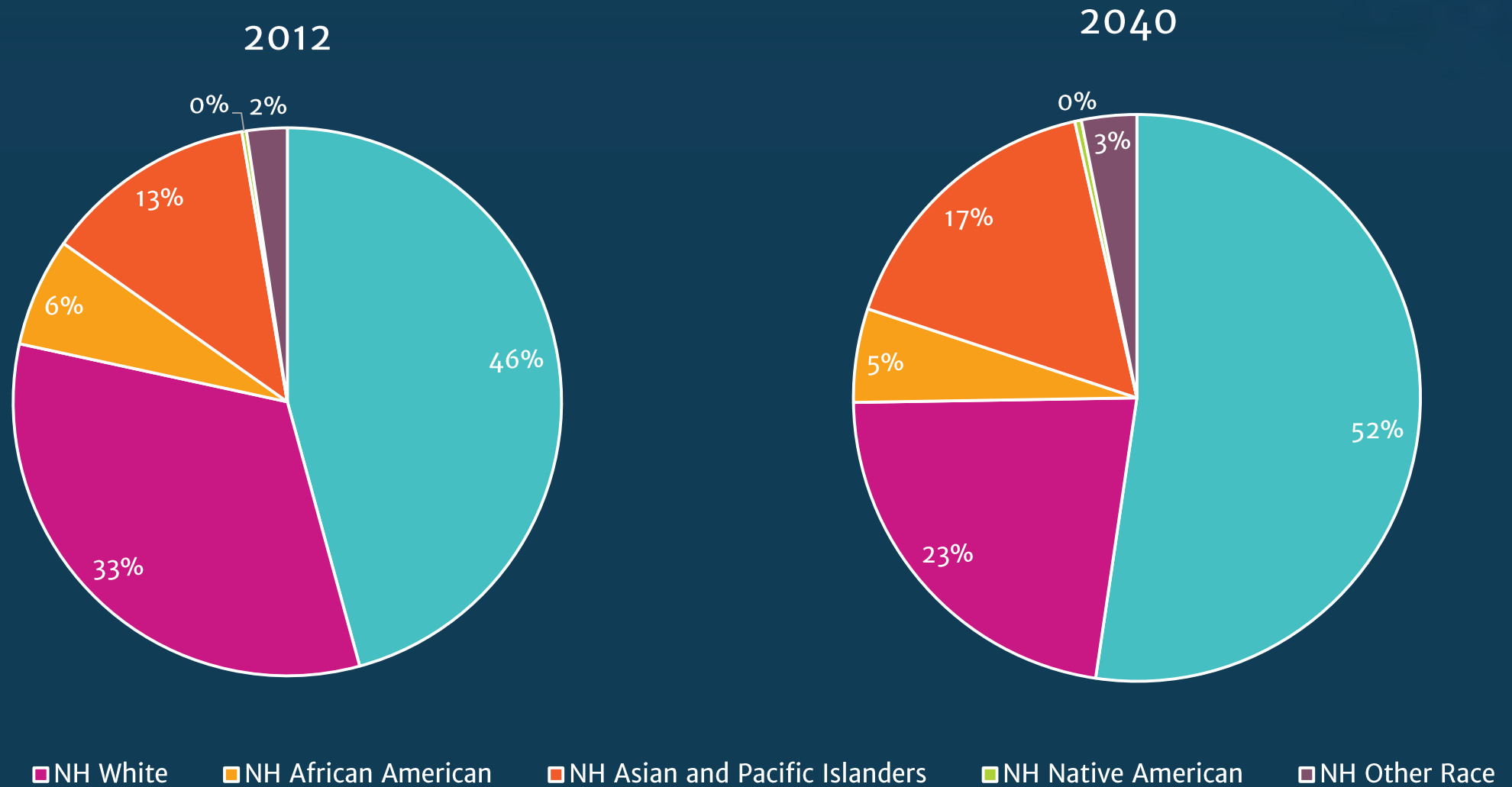
Low-Income:

- A person whose median income is at or below the Department of Health and Human Services (HHS) poverty guidelines
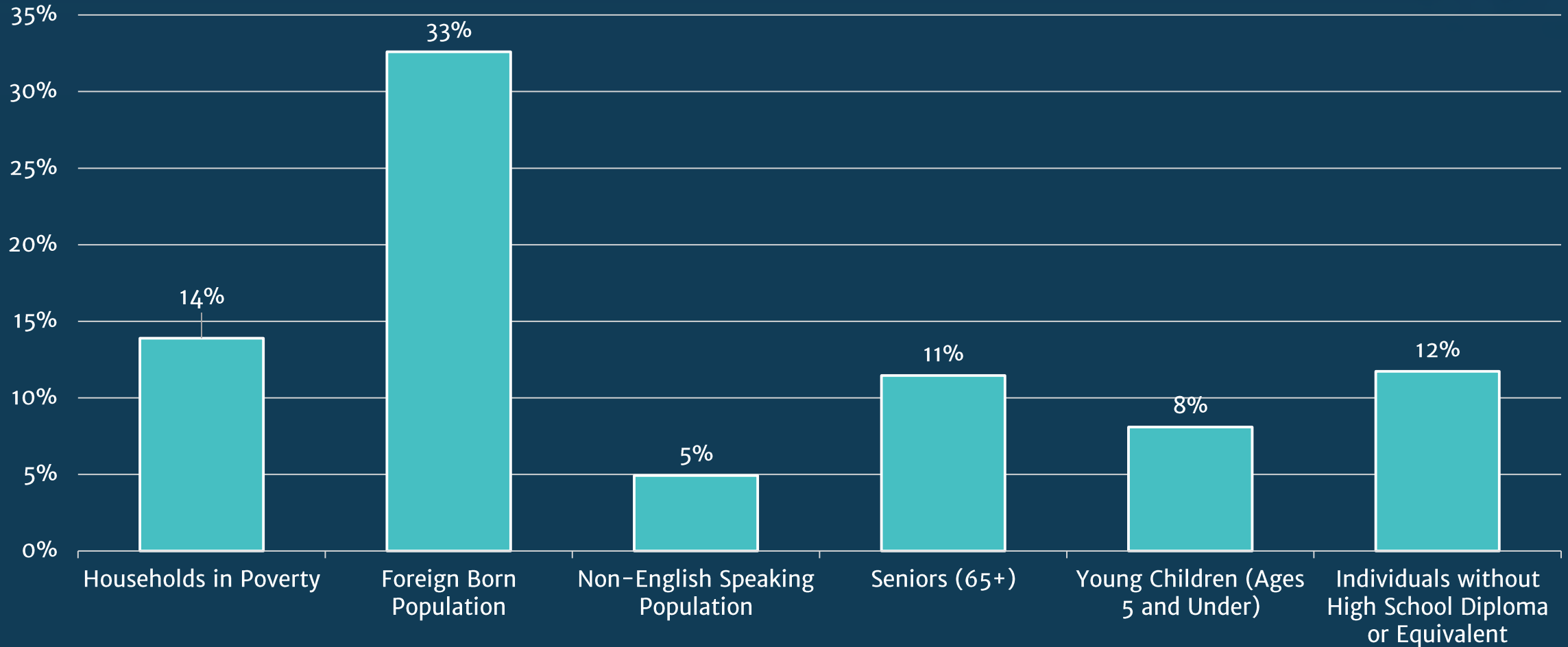
Other Groups:

- Non-English speakers, Households without vehicles, Population without a high school degree or equivalent, Disabled individuals, Seniors - ages 65 and over, Young children

SCAG Demographic Profile (2016 – 2040 RTP/SCS)

2012

- 46% Hispanic
- 33% NH White
- 6% NH African American
- 13% NH Asian and Pacific Islanders
- 0% NH Native American
- 2% NH Other Race

2040

- 52% Hispanic
- 23% NH White
- 5% NH African American
- 17% NH Asian and Pacific Islanders
- 0% NH Native American
- 3% NH Other Race

Legend: ■ Hispanic ■ NH White ■ NH African American ■ NH Asian and Pacific Islanders ■ NH Native American ■ NH Other Race

Sources: SCAG, American Community Survey 2009–13 5 Year Estimates

SCAG Socioeconomic Profile (2016 – 2040 RTP/SCS)

Sources: SCAG, American Community Survey 2009-13 5 Year Estimates

Regional, Local, and Community Analysis

Regional Analysis:

- Appropriate when determining system-wide impacts (e.g. Financial Benefits and Burdens)

Localized Analysis:

- Appropriate for determining adverse impacts at the community level (emissions, noise, etc.)

Community Analysis:

- Appropriate for tabulating impacts of the RTP/SCS in selected places according to a "Communities of Concern" approach

Performance Indicators

- Benefits and burdens analysis
  - RTP revenue sources in terms of tax burdens
  - Share of transportation system usage
  - RTP/SCS investments
- Distribution of travel time savings and travel distance reductions
- Geographic distribution of transportation investments (NEW in 2016)
- Jobs-housing imbalance or jobs-housing mismatch
- Impacts from funding through mileage-based user fees

- Accessibility to employment and services
- Accessibility to parks and schools
- Gentrification and displacement
- Emissions impacts
- Emissions impacts along freeways
- Active transportation hazards (NEW in 2016)
- Aviation noise impacts
- Roadway noise impacts
- Public health impacts (NEW in 2016)
- Rail-related impacts
- Climate vulnerability (NEW in 2016)

Performance Indicators (Current Conditions Analysis)
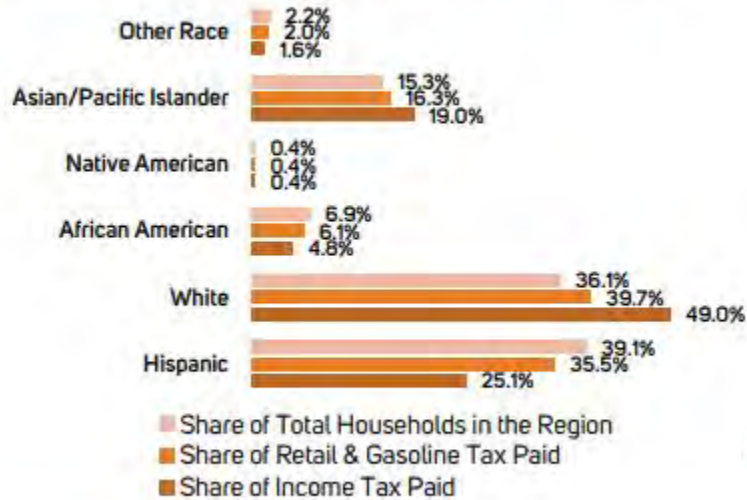
- Benefits and burdens analysis
  - RTP revenue sources in terms of tax burdens
  - Share of transportation system usage
  - RTP/SCS investments
- Distribution of travel time savings and travel distance reductions
- Geographic distribution of transportation investments (NEW in 2016)
- Jobs-housing imbalance or jobs-housing mismatch
- Impacts from funding through mileage-based user fees

- Accessibility to employment and services
- Accessibility to parks and schools
- Gentrification and displacement
- Emissions impacts
- Emissions impacts along freeways
- Active transportation hazards (NEW in 2016)
- Aviation noise impacts
- Roadway noise impacts
- Public health analysis (NEW in 2016)
- Rail-related impacts
- Climate vulnerability (NEW in 2016)

Share of Retail & Gasoline Taxes Paid & RTP Investments by Ethnicity

VS

FIGURE 23 Share of Households and Taxes Paid by Ethnicity (2012-2040 Average)

Other Race	2.2% / 2.0% / 1.6%
Asian/Pacific Islander	15.3% / 16.3% / 19.0%
Native American	0.4% / 0.4% / 0.4%
African American	6.9% / 6.1% / 4.8%
White	36.1% / 39.7% / 49.0%
Hispanic	39.1% / 35.5% / 25.1%

■ Share of Total Households in the Region
■ Share of Retail & Gasoline Tax Paid
■ Share of Income Tax Paid

Source: SCAG, California State Board of Equalization, California Franchise Tax Board, US Bureau of Labor Statistics

■ Examines who will pay for the RTP/SCS and who will benefit from the Plan

FIGURE 27 2016 RTP/SCS Transportation Investments by Ethnicity

2%
15%
0%
7%
41%
34%

■ Hispanic
■ White
■ African American
■ Native American
■ Asian/Pacific Islander
□ Other Race
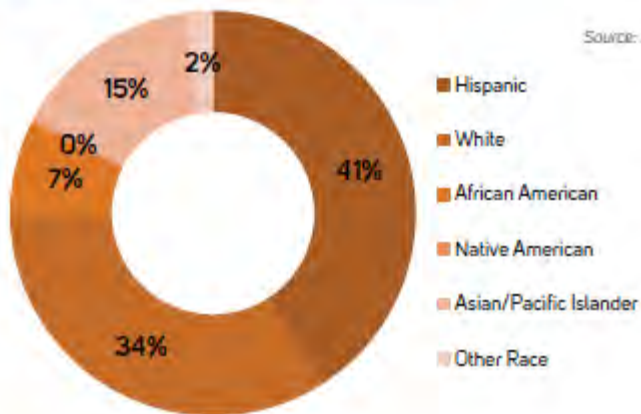
Source: SCAG 2010 Household Travel Survey, 2009 National Household Travel Survey
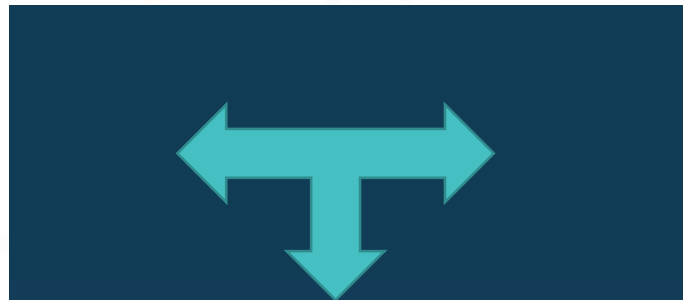
FIGURE 29 Share of Travel Time and Person-Mile Travel Benefits by Ethnicity

Hispanic
Other Race
Asian/Pacific Islander
Native American
African American
White

■ Usage: Local Bus
■ All Transit-Hours
■ Local Bus-Hours
■ Usage: Auto Mode
■ Person Hour Travel
■ Person Mile Travel

0% 20% 40% 60% 80%
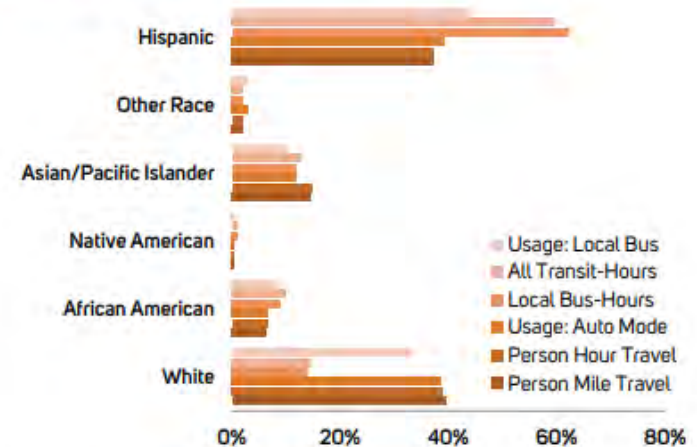
Source: SCAG 2010 Household Travel Survey, 2009 National Household Travel Survey

Performance Indicators – Travel Time Savings
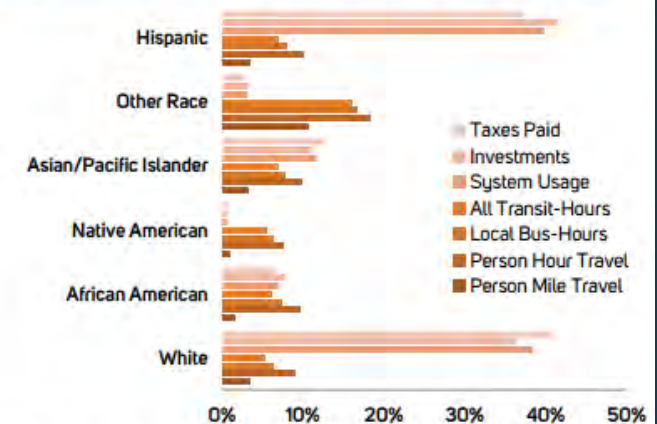

- Examines the potential savings in travel time that results from the 2016 RTP/SCS based on **each group's usage of** the transportation system

Photos: la.streetsblog.org, OCTA
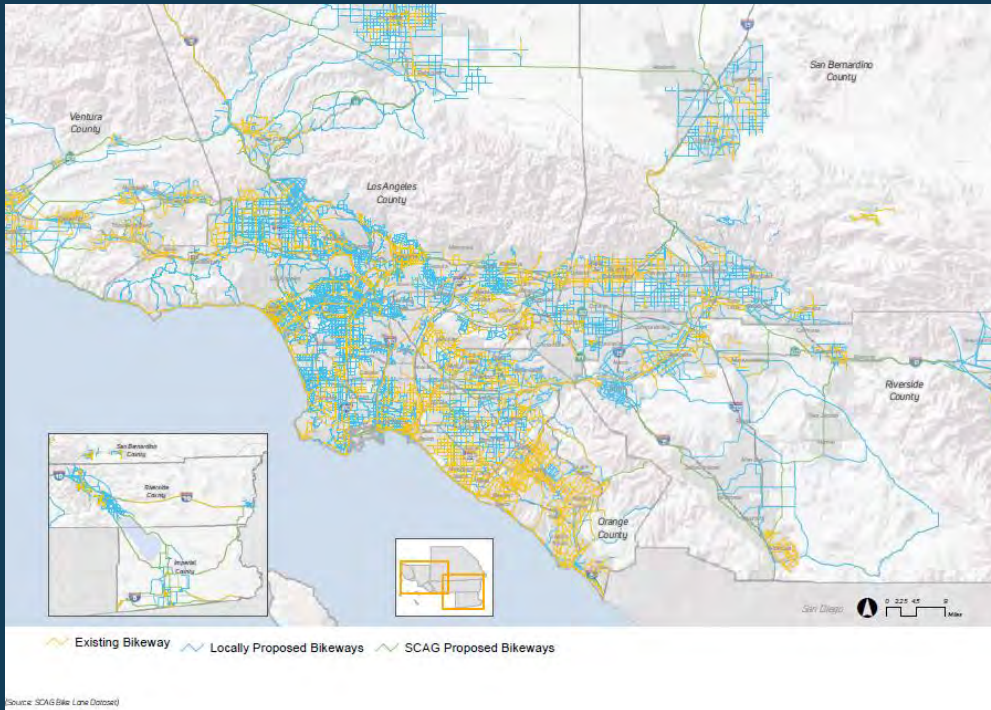
TABLE 30 RTP Highway Lane Mileage Share by Type

Project Type	Region	EJA	DAC	CoC	Urban	Rural
Express	25%	61%	47%	14%	89%	11%
HOV	25%	56%	42%	15%	89%	11%
Mixed-Flow	27%	58%	45%	19%	55%	45%
Toll (excl. Freight)	24%	47%	16%	5%	68%	32%
Region	100%	56%	38%	14%	75%	25%

Source: SCAG

TABLE 31 RTP Transit Mileage Share by Mode

Mode	Region	EJ	DAC	CoC	Urban	Rural
Local Bus	17%	66%	35%	10%	100%	0%
Express Bus	26%	54%	36%	14%	90%	9%
Rapid Bus	30%	80%	53%	37%	100%	0%
BRT	2%	89%	80%	62%	100%	0%
Heavy/Light Rail	12%	75%	57%	44%	100%	0%
Metrolink	10%	54%	55%	23%	98%	2%
High Speed Rail	4%	63%	30%	10%	48%	52%
TOTAL	100%	68%	46%	26%	95%	5%

Source: SCAG

FIGURE 33 Bicycle mileage increased from 2012 to 2040 plan

Source: SCAG

- Examines where transportation investments will occur throughout the region and in communities of concern
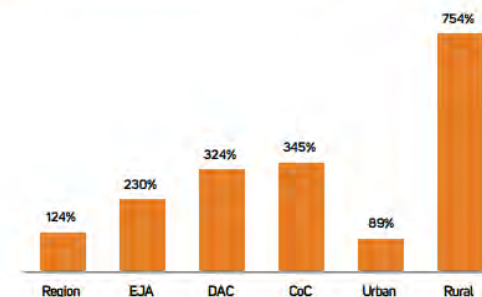
TABLE 34 Median Commute Distance (in Miles) by Wage in the SCAG Region, 2002-2012

2012					
Origin	Destination	All Jobs	Low Wage	Med. Wage	High Wage
SCAG	SCAG	10.1	9.0	9.7	11.3
Imperial	SCAG	8.5	6.3	9.1	9.6
Los Angeles	SCAG	9.1	8.1	8.9	10.1
Orange	SCAG	9.8	8.9	8.9	10.8
Riverside	SCAG	16.6	14.8	14.9	19.3
San Bernardino	SCAG	16.2	14.7	15.1	18.2
Ventura	SCAG	11.2	11.7	10.0	12.0

2008					
Origin	Destination	All Jobs	Low Wage	Med. Wage	High Wage
SCAG	SCAG	9.8	8.9	9.4	11.0
Imperial	SCAG	7.6	5.5	8.4	8.2
Los Angeles	SCAG	9.0	8.1	8.7	10.0
Orange	SCAG	9.3	8.6	8.4	10.3
Riverside	SCAG	15.8	14.2	14.3	18.5
San Bernardino	SCAG	15.7	14.8	14.7	17.4
Ventura	SCAG	10.5	11.2	9.3	11.4

2002					
Origin	Destination	All Jobs	Low Wage	Med. Wage	High Wage
SCAG	SCAG	9.4	8.6	8.8	11.0
Imperial	SCAG	7.5	8.1	7.2	5.6
Los Angeles	SCAG	8.8	8.2	8.4	10.2
Orange	SCAG	9.0	8.0	8.1	10.6
Riverside	SCAG	13.4	11.8	12.2	17.6
San Bernardino	SCAG	13.3	12.1	12.4	16.0
Ventura	SCAG	9.4	8.6	8.4	11.5

(Note: 'Low Wage' = Jobs with earnings $1250/month or less ; 'Med. Wage' = Jobs with earnings $1251/month to $3333/month; 'High Wage' = Jobs with earnings greater than $3333/month)

Source: SCAG, U.S. Census Bureau. 2015. LODES Data. Longitudinal-Employer Household Dynamics Program

EXHIBIT 10 Ratio of Low Wage Job-to-Low Wage Worker

Ratio of Low Wage Jobs to Low Wage Workers in 2012

- Less than 0.7 (More Workers)
- 0.7 to 0.9
- 0.9 to 1
- 1 to 1.1
- 1.1 to 1.3
- More than 1.3 (More Jobs)

(Source: U.S. Census Bureau. 2015. Longitudinal-Employer Household Dynamics Program.)
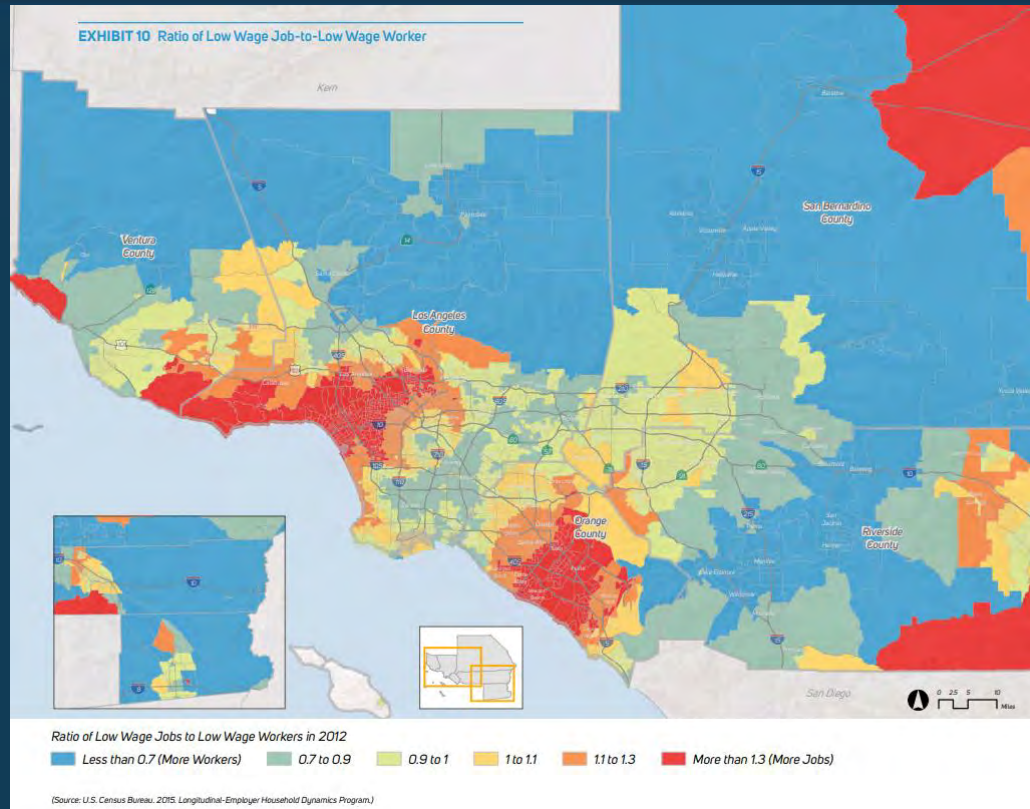
TABLE 35 Job-to-Worker Ratio by Wage in the SCAG Region, 2012

County	All Jobs	Low Wage	Med. Wage	High Wage
Imperial	0.94	0.93	0.93	1.01
Los Angeles	1.17	1.09	1.18	1.23
Orange	1.13	1.16	1.13	1.11
Riverside	0.86	0.88	0.85	0.88
San Bernardino	0.91	0.93	0.9	0.92
Ventura	0.91	0.97	0.91	0.86

Source: SCAG, U.S. Census Bureau. 2015. LODES Data. Longitudinal-Employer Household Dynamics Program

- Looks at the travel behavior of commuters and their relative incomes
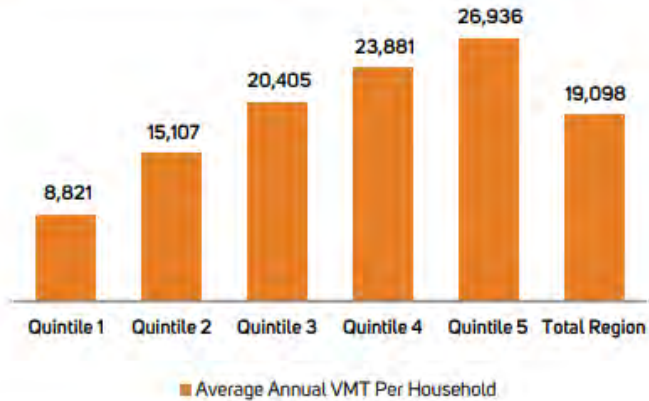- Also the distribution of low wage jobs and affordable housing throughout the region

Performance Indicators – Job Housing Imbalance
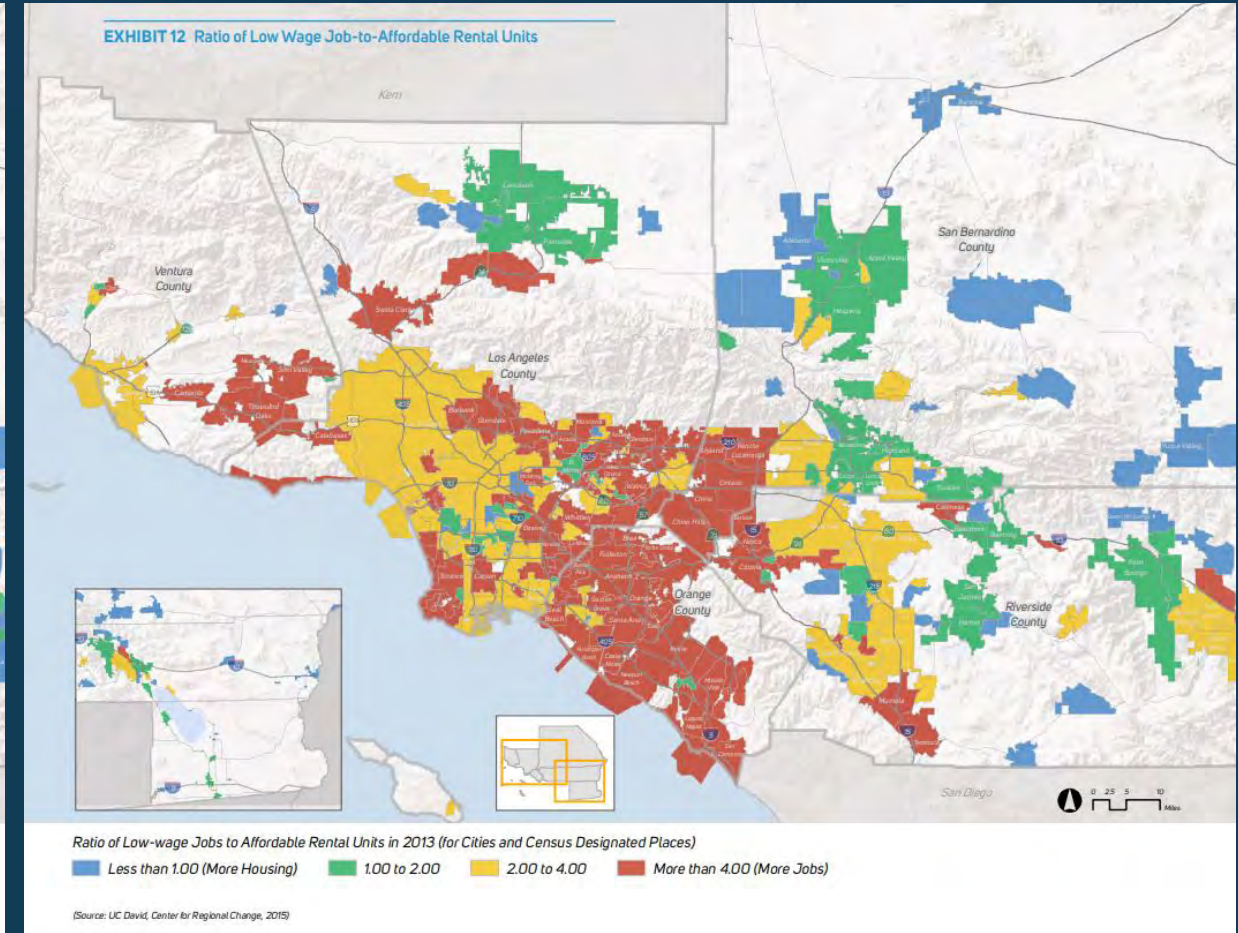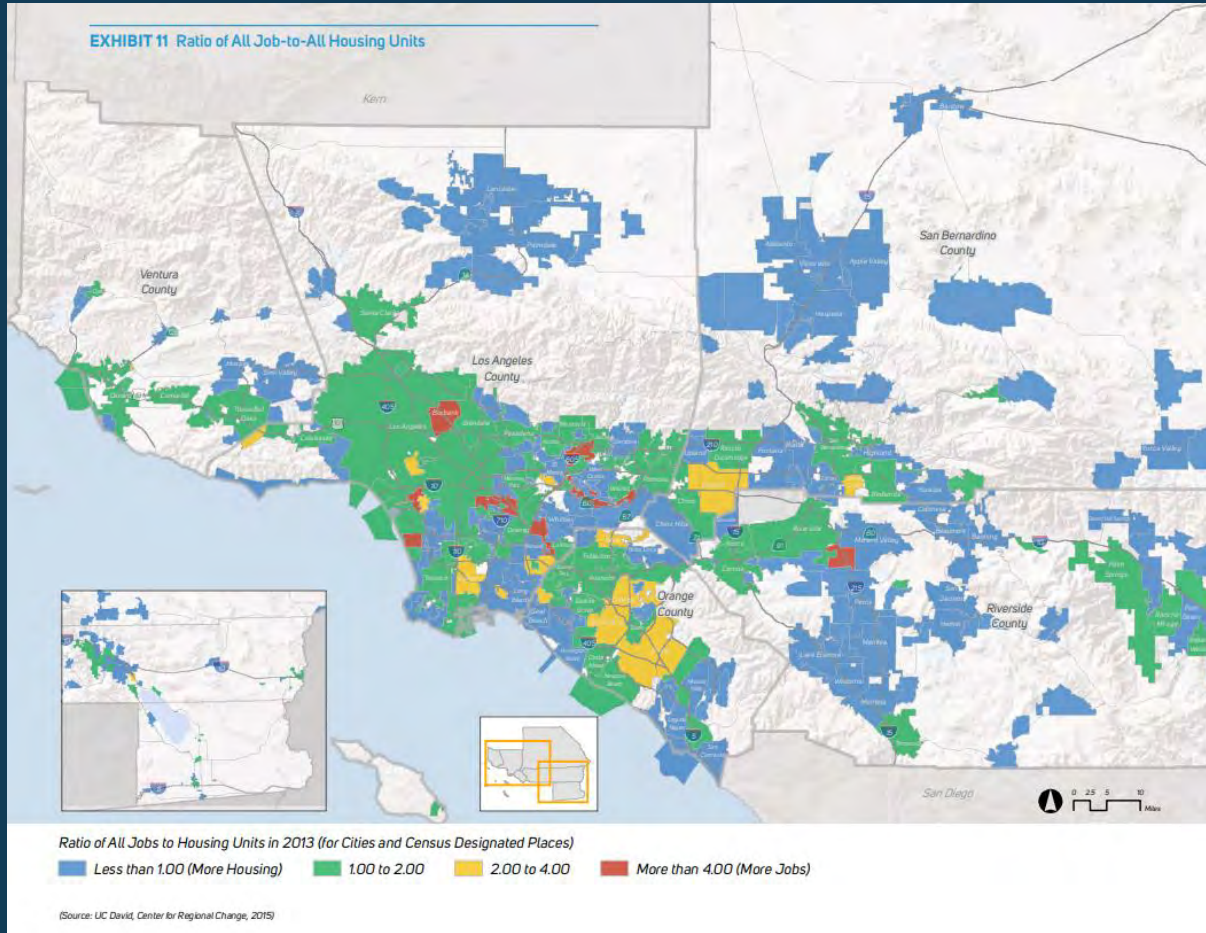
FIGURE 34 Average Annual VMT Per Household by Income Quintile

26,936
23,881
20,405
15,107
19,098
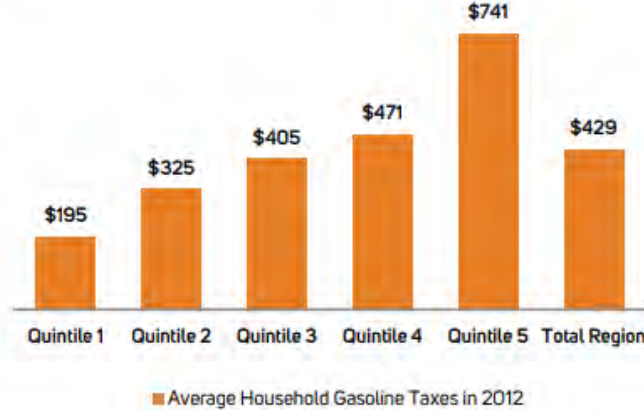8,821

Quintile 1 · Quintile 2 · Quintile 3 · Quintile 4 · Quintile 5 · Total Region

■ Average Annual VMT Per Household

Source: SCAG, 2009 National Household Travel Survey

FIGURE 36 Average Household Gasoline Taxes in 2012

$741
$471
$405
$429
$325
$195

Quintile 1 · Quintile 2 · Quintile 3 · Quintile 4 · Quintile 5 · Total Region

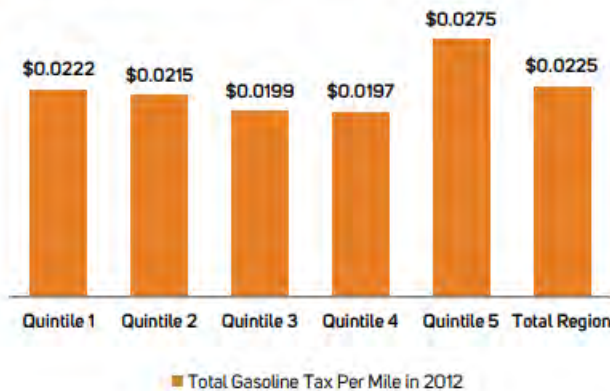■ Average Household Gasoline Taxes in 2012

Source: SCAG, 2009 National Household Travel Survey, California State Board of Equalization, California Franchise Tax Board, US Bureau of Labor Statistics

FIGURE 35 Average Daily VMT in Miles by Income Quintile

73.8
65.4
55.9
52.3
41.4
24.2

Quintile 1 · Quintile 2 · Quintile 3 · Quintile 4 · Quintile 5 · Total Region

■ Average Daily VMT in Miles
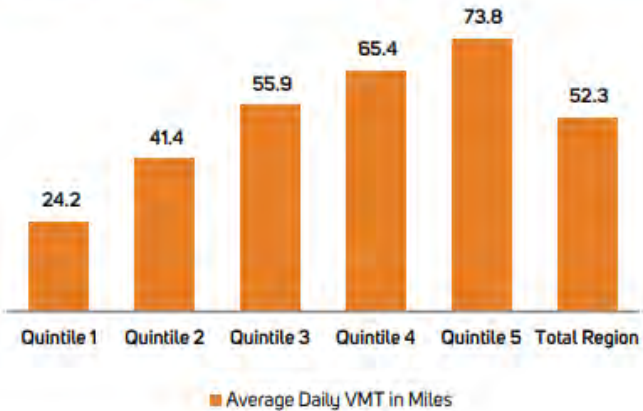
Source: SCAG, 2009 National Household Travel Survey

FIGURE 37 Gasoline Tax Per Mile in 2012

$0.0275
$0.0222
$0.0215
$0.0199
$0.0197
$0.0225

Quintile 1 · Quintile 2 · Quintile 3 · Quintile 4 · Quintile 5 · Total Region

■ Total Gasoline Tax Per Mile in 2012

Source: SCAG, 2009 National Household Travel Survey, California State Board of Equalization, California Franchise Tax Board, US Bureau of Labor Statistics

- Examines the regressive impact of the gasoline tax on low income households and compares the mileage-based user fee
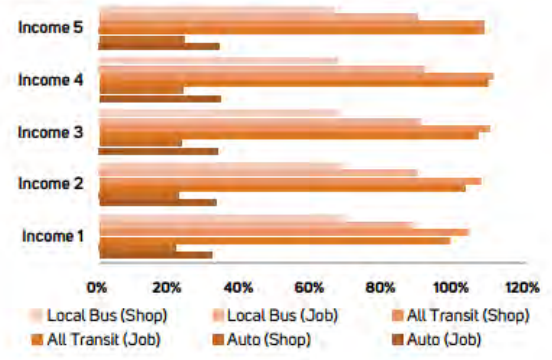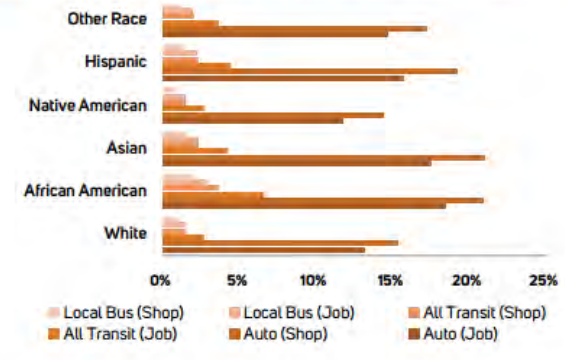
- Looks at the accessibility to employment, shopping destinations, and hospitals within a 30 minute travel area by car and 45 minute travel area by transit (rail and bus), also looks at the share of destinations within a 1 and 2 mile travel distance by EJ group

Photos: Metro, OCBC

FIGURE 64 Improvements in Park Accessibility by All Transit within 45 Minutes of Travel (2040)

FIGURE 65 Improvements in Park Accessibility by Local Bus within 45 Minutes of Travel (2040)
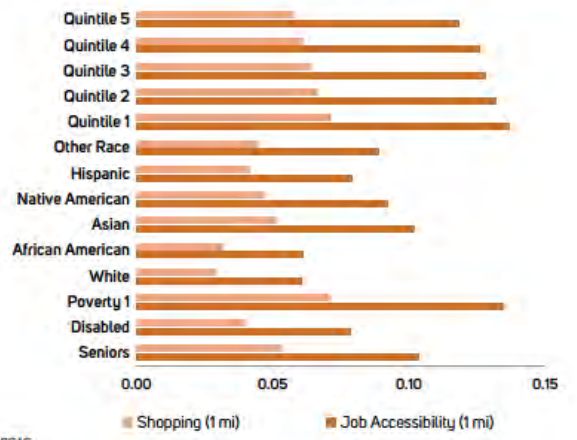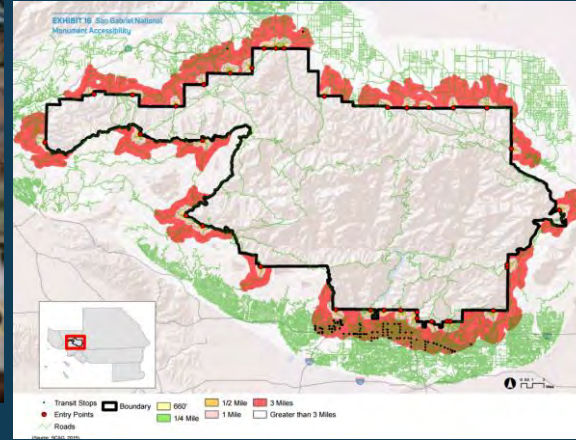
- Looks at the accessibility to local and regional parks within a 45 minute travel area by car and transit (rail and bus), also looks at the share of population within 1 and 2 miles travel distance of the **region's parks and** schools
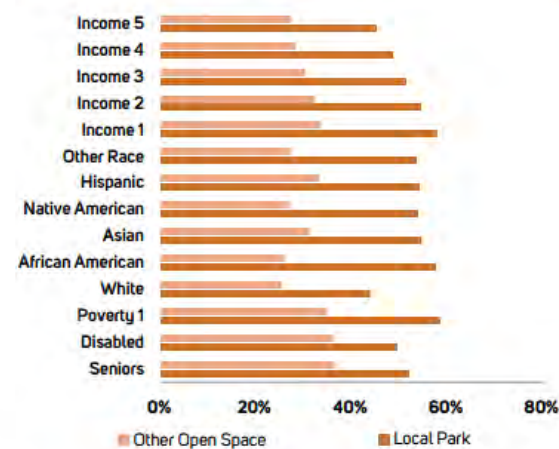
Photos: ClimateResolve.org, National Park Service

Performance Indicators – Gentrification and Displacement

- Examines historical trends in high quality transit areas and neighborhoods in close proximity to rail transit stations

Photos: la.streetsblog.org, cp-dr.com

Performance Indicators – Emissions Impacts

EXHIBIT 25 CO Emission Change
(2040 Baseline to 2040 Plan)

Ventura County
Los Angeles County
San Bernardino County
Riverside County
Orange County
Imperial County
San Diego

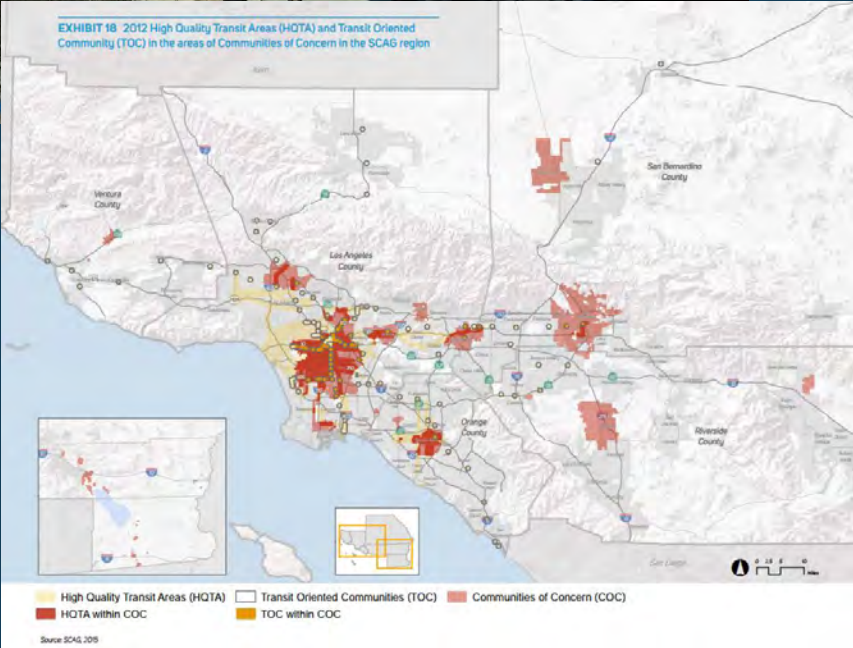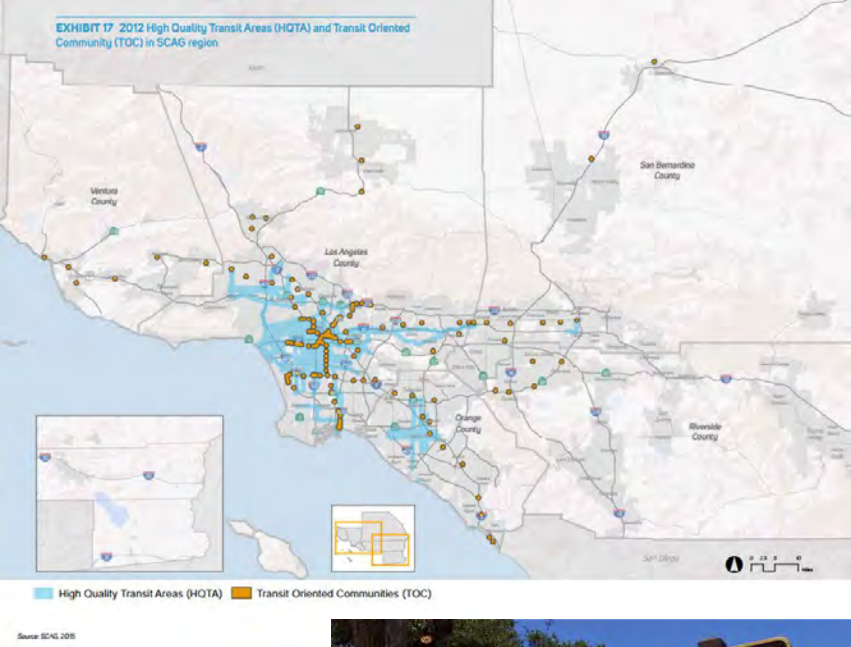County Boundaries Freeway
Worsen
Improved
Source: SCAG, 2015

TABLE 72 CO Emission Reductions

	Region	EJA	DAC	CoC	Urban	Rural
2012 Base Year vs. 2040 Baseline	79%	79%	79%	80%	80%	72%
Baseline vs. Plan	9%	9%	9%	9%	10%	7%

Source: SCAG

TABLE 73 PM 2.5 Emission Reductions

	Region	EJA	DAC	CoC	Urban	Rural
2012 Base Year vs. 2040 Baseline	27%	28%	30%	25%	25%	33%
Baseline vs. Plan	6%	6%	5%	6%	6%	3%

Source: SCAG

- Examines air quality impacts for particulate matter and carbon monoxide of the RTP/SCS at the regional level and for **SCAG's** environmental justice areas

Figures: ARB, sparetheair.org, Medscape.com

Performance Indicators – Air Quality Impacts Along Highways

- Examines air quality impacts of the RTP/SCS for areas in close proximity to highways

TABLE 82 Emissions along Freeways and Highly Traveled Corridors

Criteria Pollutant	Emissions within 500-Foot of Freeways (Tons per Day)			Emissions in the SCAG Region (Tons per Day)			Decrease in Emissions within 500-Foot Freeways		Decrease in Emissions in the SCAG Region	
	Base Year 2012	2040 Baseline	2040 Plan	Base Year 2012	2040 Baseline	2040 Plan	Base Year 2012 to 2040 Baseline	2040 Baseline to 2040 Plan	Base Year 2012 to 2040 Baseline	2040 Baseline to 2040 Plan
CO	445	89	80	1,545	326	296	-80%	-9%	-79%	-9%
$PM_{2.5}$	5.0	3.5	3.4	17.6	12.9	12.2	-28%	-6%	-27%	-6%

Source: SCAG

Photos: SCAG, latimes.com

Ground noise measurement locations

2000m 6500m

Approach point

Sideline

450m

Take-off point
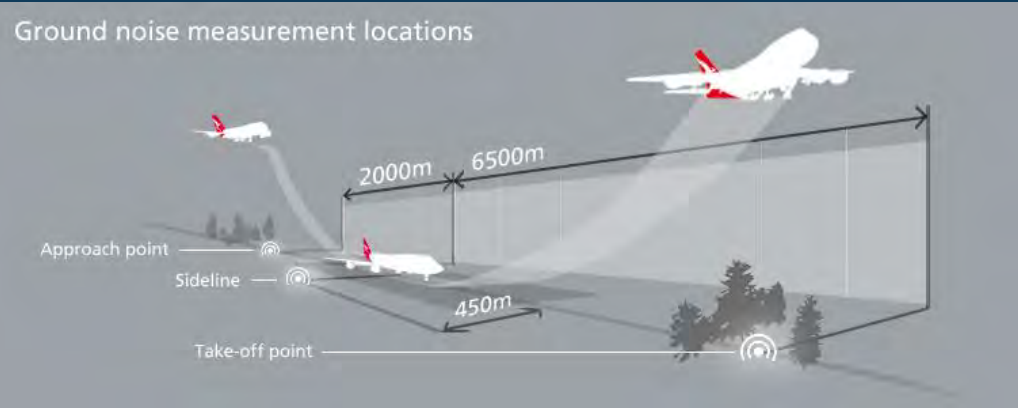
METHODOLOGY

To identify potentially impacted populations, the anticipated population within the 65 dB CNEL contour was calculated using the following steps:

- Use the Integrated Noise Model (INM) to generate aviation noise contour of 65 dB (community noise equivalent - CNEL), based on the estimated noise analysis from the aviation technical information in SCAG's 2001 RTP. Note that the noise contours estimated from the 2001 planning cycle represent potentially the largest noise contour areas in recent years, due to trends in the industry that have been signaling the adoption of quieter airplane engines and less aviation operations.

- Identify areas of concern within the aviation noise zone.

- Estimate and compare to the greater region the share of environmental justice groups for each area of concern within the noise zone.

TABLE 84 EJ Variables within the Aviation 65-dB Noise Impacted Areas for 2016 RTP/SCS

	2012 Base Year		2040 Baseline		2040 Plan		Plan - Baseline	Percent Difference
Population	91,928	0.5%	156,253	0.7%	134,277	0.6%	(21,976)	-14%
Hispanic	50,773	55%	86,253	55%	74,965	56%	(11,288)	-13%
White	12,873	14%	20,004	13%	17,622	13%	(2,383)	-12%
African American	23,096	25%	30,563	20%	24,711	18%	(5,852)	-19%
Native American	158	0%	430	0%	378	0%	(52)	-12%
Asian & PI	3,173	3%	14,343	9%	12,647	9%	(1,697)	-12%
Other Races	1,855	2%	4,659	3%	3,954	3%	(705)	-15%

- Examines population in areas incurring aviation noise at or above 65 dB Community Noise Equivalent Level (CNEL), a measure of noise that takes into account both the number and the timing of flights, as well as the mix of aircraft types

Figure: Qantas

Performance Indicators – Roadway Noise Impacts

EXHIBIT 30 Roadway Noise Level 65 dB and Over in Plan Scenario

Roadway 65db-Area in 2012 ; Roadway 65db-Area in 2040 Baseline ; Roadway 65db-Area in 2040 Plan

Source: SCAG, 2015
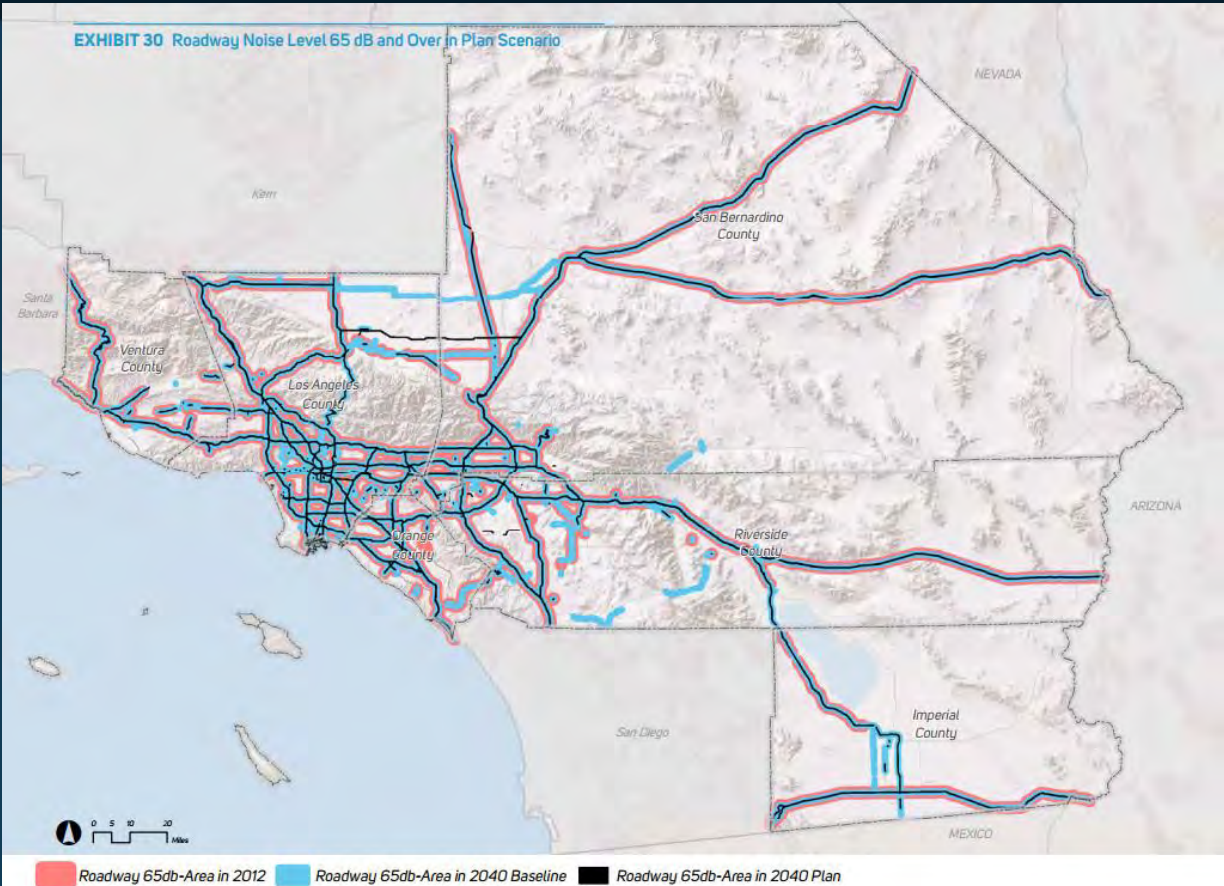
- Examines population in areas incurring noise along roadways at or above 65 dB Community Noise Equivalent Level (CNEL), which accounts for traffic volume, speed, and vehicle types including heavy duty trucks

Photo: RCTC

TABLE 88 Distribution of EJ population within 65-dB Roadway Noise Area

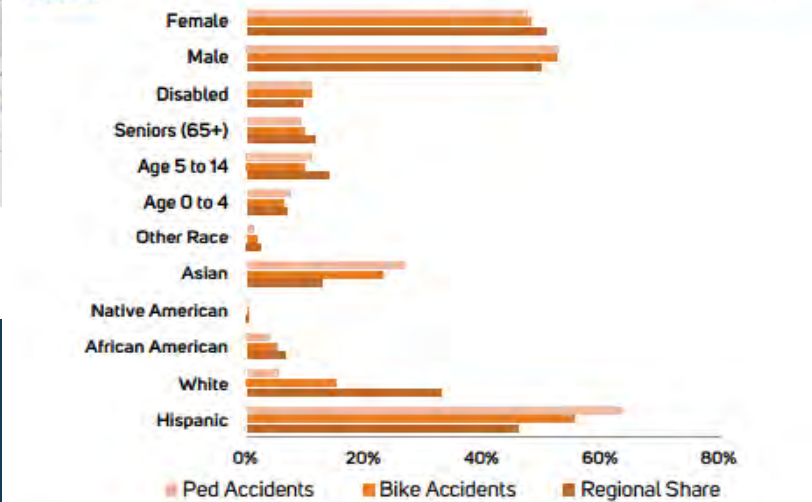| | 2012 Base Year | | | | | | 2040 Baseline | | | | | | 2040 Plan | | | | | |
| | Within 65 dB (2012) | | | | | | Within 65 dB (2040) | | | | | | Within 65 dB (2040) | | | | | |
	Region	EJA	DAC	CoC	Urban	Rural	Region	EJA	DAC	CoC	Urban	Rural	Region	EJA	DAC	CoC	Urban	Rural
Population	2.0%	74.1%	53.0%	27.5%	99.5%	0.4%	2.3%	71.8%	51.2%	26.4%	98.6%	1.4%	2.4%	71.4%	51.6%	26.3%	98.7%	1.3%
Hispanic	51.5%	60.6%	65.9%	73.1%	51.6%	37.2%	56.2%	61.5%	64.3%	69.4%	56.2%	57.7%	56.3%	61.9%	64.6%	69.6%	56.3%	58.0%
White	26.5%	16.8%	13.1%	8.1%	26.4%	50.4%	18.6%	13.6%	12.0%	9.4%	18.6%	21.2%	18.5%	13.4%	11.9%	9.3%	18.5%	20.5%
African American	6.5%	7.6%	7.9%	10.2%	6.5%	3.5%	5.0%	5.5%	5.5%	6.3%	5.0%	5.6%	5.0%	5.5%	5.4%	6.2%	4.9%	5.6%
Native American	0.3%	0.3%	0.2%	0.2%	0.2%	2.6%	0.3%	0.3%	0.3%	0.3%	0.3%	1.0%	0.3%	0.3%	0.3%	0.3%	0.3%	1.0%
Asian	12.9%	12.9%	11.2%	7.2%	13.0%	3.6%	17.0%	16.5%	15.5%	12.5%	17.0%	11.4%	16.9%	16.3%	15.4%	12.5%	17.0%	11.7%
Other Race	2.2%	1.9%	1.6%	1.2%	2.2%	2.6%	2.9%	2.6%	2.4%	2.1%	2.9%	3.2%	2.9%	2.6%	2.4%	2.1%	2.9%	3.2%

Performance Indicators – Active Transportation Hazards
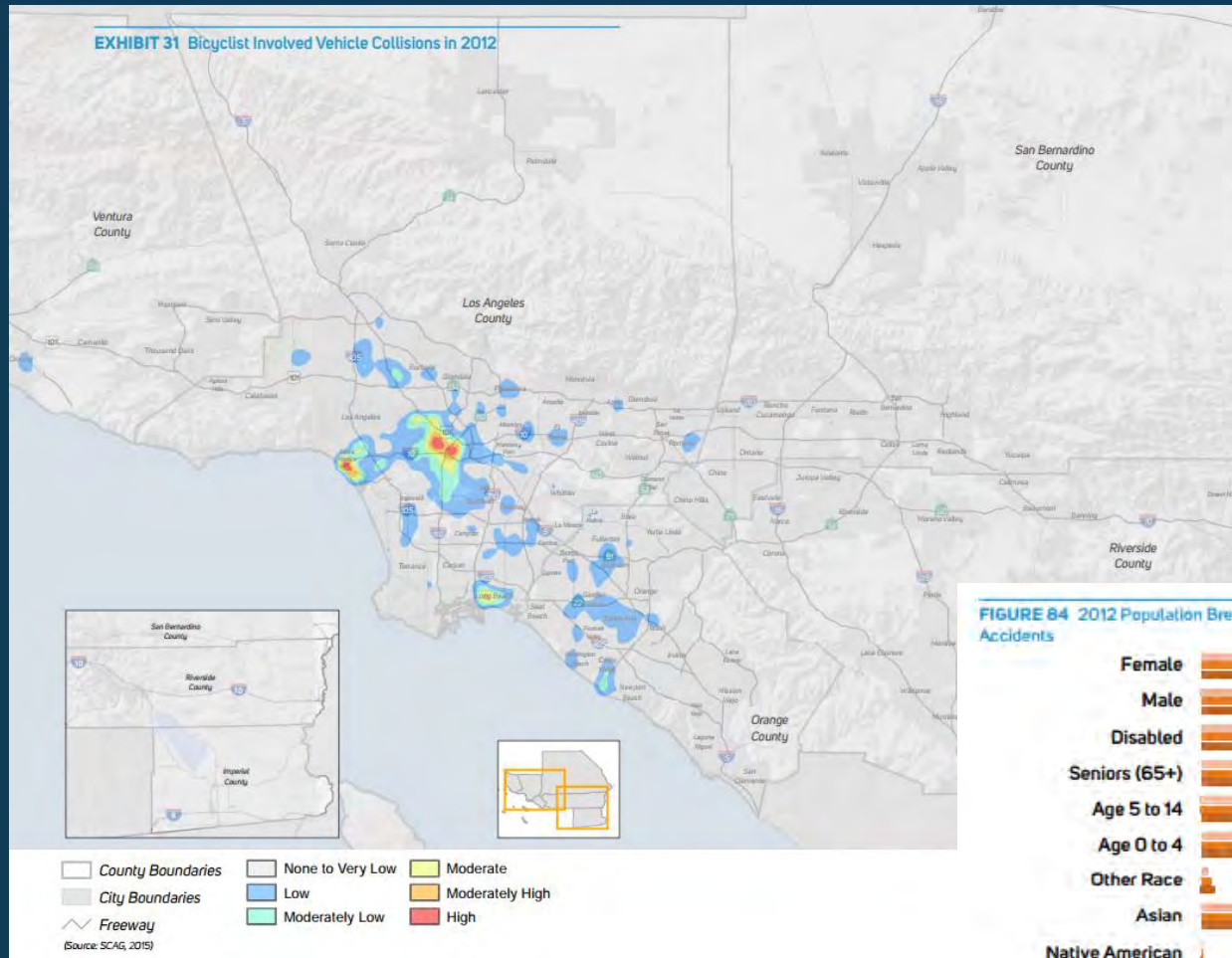
- Examines population in areas that experience the highest levels of bicycle and pedestrian collisions in recent periods

EXHIBIT 31 Bicyclist Involved Vehicle Collisions in 2012

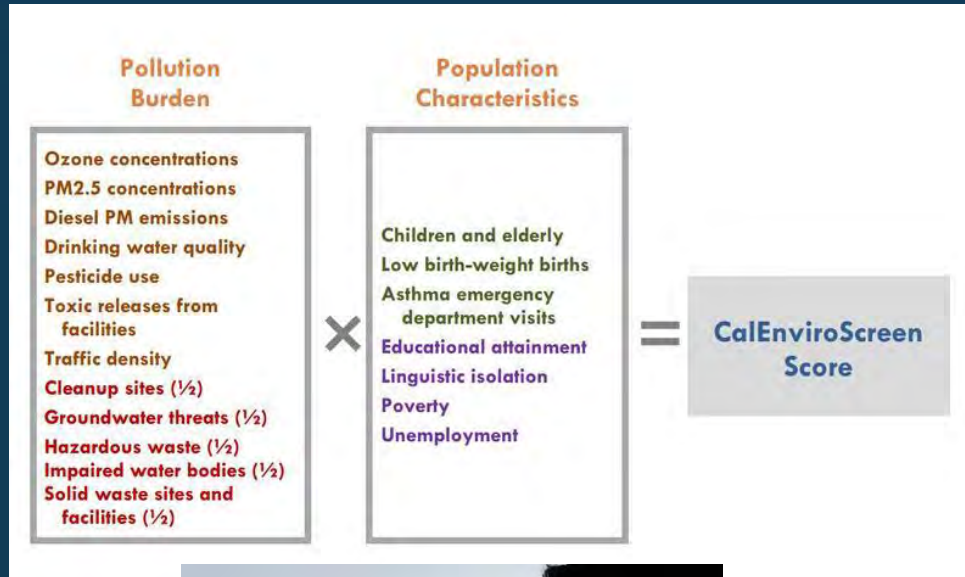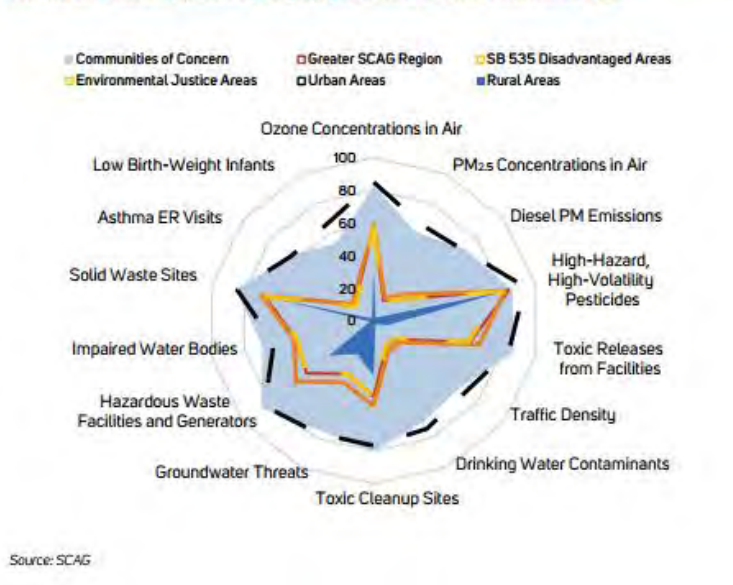FIGURE 84 2012 Population Breakdown of SCAG region and High Concentrated Area of Bike and Ped Accidents

Photos: Metro, Safe Routes to School

Pollution Burden
- Ozone concentrations
- PM2.5 concentrations
- Diesel PM emissions
- Drinking water quality
- Pesticide use
- Toxic releases from facilities
- Traffic density
- Cleanup sites (½)
- Groundwater threats (½)
- Hazardous waste (½)
- Impaired water bodies (½)
- Solid waste sites and facilities (½)

Population Characteristics
- Children and elderly
- Low birth-weight births
- Asthma emergency department visits
- Educational attainment
- Linguistic isolation
- Poverty
- Unemployment

× = CalEnviroScreen Score

- Examines existing public health conditions throughout the region based on **Cal/EPA's** CalEnviroScreen data

FIGURE 87 Criterion Exposure by Geography Relative to all Census Tracts in the State

- Communities of Concern
- Environmental Justice Areas
- Greater SCAG Region
- Urban Areas
- SB 535 Disadvantaged Areas
- Rural Areas

Ozone Concentrations in Air
Low Birth-Weight Infants
PM2.5 Concentrations in Air
Asthma ER Visits
Diesel PM Emissions
Solid Waste Sites
High-Hazard, High-Volatility Pesticides
Impaired Water Bodies
Toxic Releases from Facilities
Hazardous Waste Facilities and Generators
Traffic Density
Groundwater Threats
Drinking Water Contaminants
Toxic Cleanup Sites

Source: SCAG

Figures: Cal/EPA, California Office of the Attorney General, SCAG

Performance Indicators – Rail Related Impacts

TABLE 90 Distribution of Environmental Justice Demographic Groups in the Railroad Adjacent Areas

	Within 500-Foot of Railroads			SCAG Region		
	Base Year 2012	2040 Baseline	2040 Plan	Base Year 2012	2040 Baseline	2040 Plan
Population						
Hispanic	63.1%	64.2%	63.9%	45.7%	52.3%	52.3%
White	18.6%	14.3%	14.4%	32.7%	22.4%	22.4%
African American	6.1%	4.7%	4.7%	6.4%	5.3%	5.3%
Native American	0.3%	0.3%	0.3%	0.3%	0.4%	0.4%
Asian	10.2%	14.1%	14.3%	12.5%	16.4%	16.4%
Other Races	1.6%	2.4%	2.4%	2.4%	3.1%	3.1%

TABLE 91 Distribution of Environmental Justice Demographic Groups in the Areas Adjacent to Grade Separation Projects
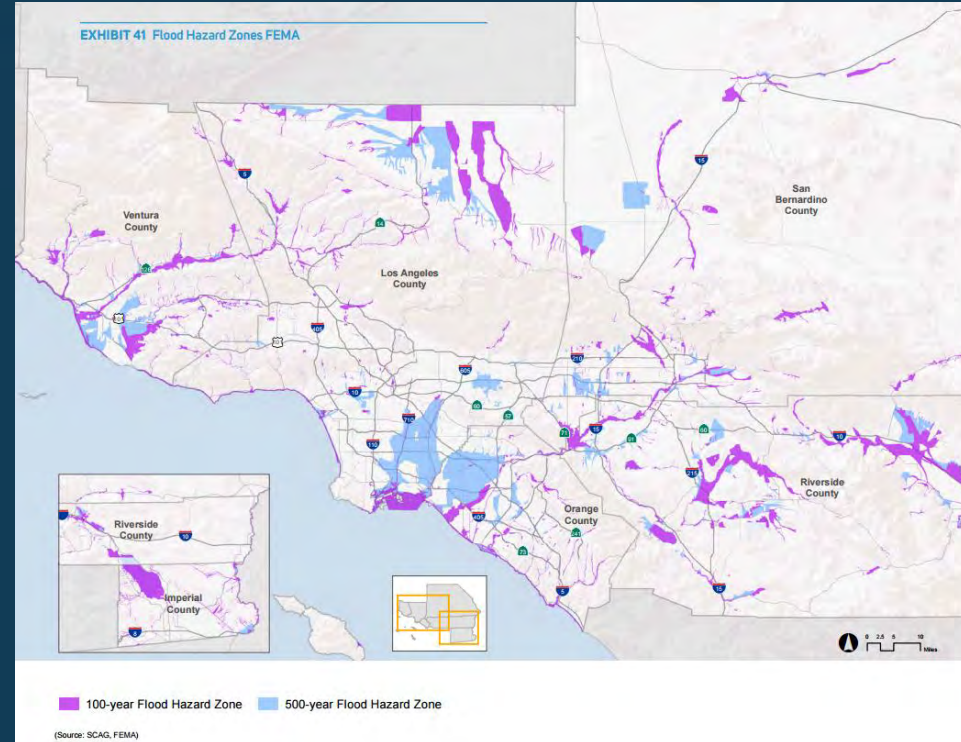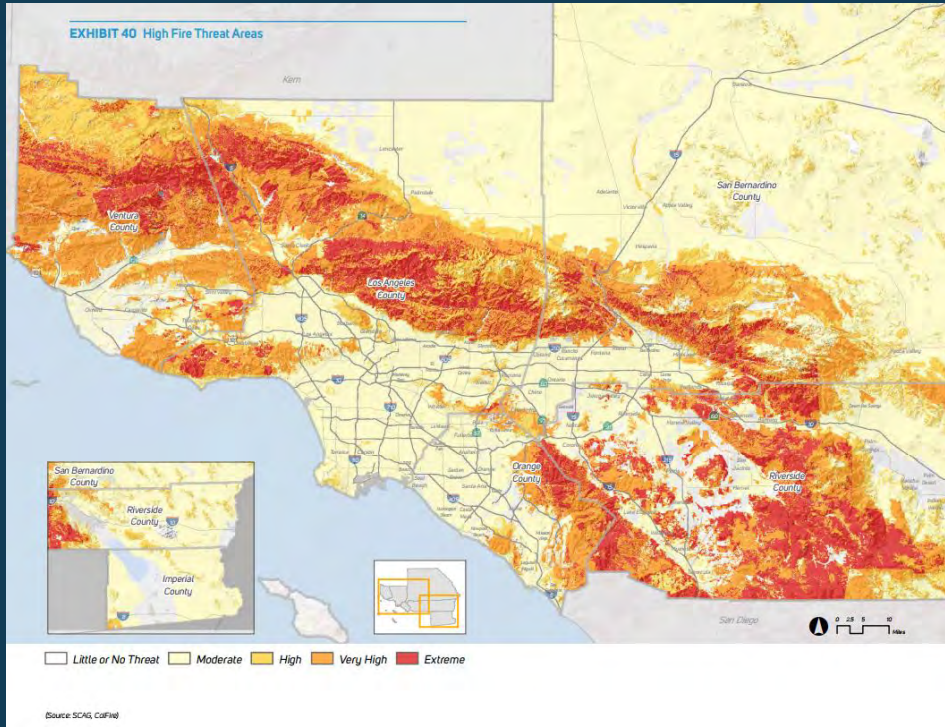
	Within 500-Foot of Grade Separation Projects			SCAG region		
	Base Year 2012	2040 Baseline	2040 Plan	Base Year 2012	2040 Baseline	2040 Plan
Population						
Hispanic	62.0%	64.2%	64.2%	45.7%	52.3%	52.3%
White	18.2%	13.5%	13.3%	32.7%	22.4%	22.4%
African American	2.8%	3.3%	3.4%	6.4%	5.3%	5.3%
Native American	0.3%	0.3%	0.3%	0.3%	0.4%	0.4%
Asian & PI	15.1%	16.6%	16.7%	12.5%	16.4%	16.4%
Other Races	1.6%	2.1%	2.1%	2.4%	3.1%	3.1%

- Examines population living in close proximity to freight/commuter rail lines, along with future grade separations

Photo: Port of Long Beach

Performance Indicators – Climate Vulnerability

EXHIBIT 40 High Fire Threat Areas

Little or No Threat | Moderate | High | Very High | Extreme

(Source: SCAG, CalFire)

EXHIBIT 41 Flood Hazard Zones FEMA

100-year Flood Hazard Zone | 500-year Flood Hazard Zone

(Source: SCAG, FEMA)

- Examines conditions in environmental justice communities related to potential climate vulnerability (e.g. sea level rise, wildfire risk)

TABLE 95 Impacts of Potential Adaptation Policies on EJ Populations

Climate Adaptation Policy	Source	Potential Impact on EJ Populations		
		Spatial	Financial	Health
Select materials/designs to improve road resiliency to high temperatures, and to reduce heat retention	State of California	New/reconstructed roads may run through vulnerable communities (-) investment could be prioritized for most vulnerable areas (+)	Higher cost treatments could divert funds from transit, other measures (-); could save costs in long term by avoiding need for reconstruction (+)	Noise impacts; air pollution impacts during construction and use (-). Reduce heat island impacts (+).
Fortify roadways vulnerable to storm surge and sea-level rise	City of Chula Vista; State of California	Roads may run through vulnerable communities (-); Could protect such communities, e.g. during evacuations (+)	Higher cost treatments could divert funds from transit, other measures (-); could save costs in long term by avoiding need for reconstruction (+)	Noise impacts; air pollution impacts during construction and use (-); Could improve safety (+)
Increasing shade trees	Western Riverside Council of Governments (WRCOG); City of Chula Vista	Investment could be prioritized for most vulnerable areas (+)	Funding greater availability of shade trees could divert funds from other measures (-); Shading can reduce cooling costs (+); Increased greening may increase gentrification/housing cost pressures (-)	Visual impacts (+); Reduction in ambient temperatures (+); Reduction in stress (+)

TABLE 3 Comparison of EJ Performance Measures between 2040 Plan and 2040 Baseline

EJ Topic	No.	EJ Performance Measures	Regional Impacts					
BENEFITS AND BURDENS	1	2016 RTP/SCS Revenue Sources in Terms of Tax Burdens	Improve					
	2	Share of Transprotation System Usage	Improve					
	3	2016 RTP/SCS Investments vs. Benefits	Improve					

EJ Topic	No.	EJ Performance Measures	Region	EJA	DAC	CoC	Urban	Rural
TRAVEL TIME AND TRAVEL DISTANCE SAVINGS	4	Distribution of Travel Distance Savings Reductions (30 Minute Auto)	Improve	Improve	Improve	Improve	Improve	Does Not Improve
		Distribution of Travel Time Reductions (30 Minute Auto)	Improve	Improve	Improve	Improve	Improve	Improve
		Distribution of Travel Time Reductions (45 Minute All Transit)	Improve	Improve	Improve	Improve	Improve	Improve
		Distribution of Travel Time Reductions (45 Minute Local Bus)	Improve	Improve	Improve	Improve	Improve	Improve
GEOGRAPHIC DISTRIBUTION OF TRANSPORTATION INVESTMENTS	5	Geographic Distribution of Transportation Investments in Bicycle (by lanemile)	Improve	Improve	Improve	Improve	Improve	Improve
		Geographic Distribution of Transportation Investments in Transit (by mile)	Improve	Improve	Improve	Improve	Improve	Improve
		Geographic Distribution of Transportation Investments in Highway (by lanemile)	Improve	Improve	Improve	Improve	Improve	Improve
JOBS-HOUSING BALANCE	6	Jobs-Housing Imbalance or Jobs-Housing Mismatch	Current Conditions Analysis Results show that higher wage workers tend to commute longer distances than lower wage workers. Average commute distance, however, grew in all six counties between 2002 and 2012, and especially in the inland counties where there is a lower job-to-worker ratio than coastal counties. The Plan will contribute to improvements in jobs-housing balance throughout the region, and especially in inland counties.					
IMPACTS FROM MILE-BASED USER FEE	7	Impacts from Funding Through Mileage-Based User Fee	There is no disproportionate impact. The proposed mileage-based user fee system is deemed more equitable to low income groups than both the gasoline tax and sales tax, which are highly regressive. Under the current structure, low income households pay more per mile in gasoline tax than their higher earning counterparts due to their lower adoption rates of new (more fuel efficient) vehicles. With the mileage-based user fee system, all households will pay in proportion to their usage of the transportation system.					

- Pages 12 to 15 show summarized findings at the regional level and by community of concern (as applicable) for each indicator

TABLE 3	Comparison of EJ Performance Measures between 2040 Plan and 2040 Baseline Continued							
EJ Topic	**No.**	**EJ Performance Measures**	**Region**	**EJA**	**DAC**	**CoC**	**Urban**	**Rural**
ACCESSIBILITY TO EMPLOYMENT AND SERVICES	8	Accessibility to Employment (time-based) (Weighted Average Job Accessibility by Auto within 30 Minutes)	Improve	Improve	Improve	Improve	Improve	Improve
		Accessibility to Employment (time-based) (Weighted Average Job Accessibility by All Transit within 45 Minutes)	Improve	Improve	Improve	Improve	Improve	Improve
		Accessibility to Employment (time-based) (Weighted Average Job Accessibility by Local Bus within 45 Minutes)	Improve	Improve	Improve	Improve	Improve	Improve
		Accessibility to Shopping (time-based) (Weighted Average Job Accessibility by Auto within 30 Minutes)	Improve	Improve	Improve	Improve	Improve	Improve
		Accessibility to Shopping (time-based) (Weighted Average Job Accessibility by All Transit within 45 Minutes)	Improve	Improve	Improve	Improve	Improve	Improve
		Accessibility to Shopping (time-based) (Weighted Average Job Accessibility by Local Bus within 45 Minutes)	Improve	Improve	Improve	Improve	Improve	Improve
		Accessibility to Employment within one mile (distance-based) (Weighted Average Job Accessibility within One Mile Distance)	Improve	Improve	Improve	Improve	Improve	Does Not Improve
		Accessibility to Shopping within one mile (distance-based) (Weighted Average Shopping Accessibility within One Mile Distance)	Improve	Improve	Improve	Improve	Improve	Improve
		Accessibility to Employment within two mile (distance-based) (Weighted Average Job Accessibility within Two Mile Distance)	Improve	Improve	Improve	Improve	Improve	Improve
		Accessibility to Shopping within two mile (distance-based) (Weighted Average Shopping Accessibility within Two Mile Distance)	Improve	Improve	Improve	Improve	Improve	Improve
ACCESSIBILITY TO PARKS AND NATURAL LANDS	9	Accessibility to Local Parks (Weighted Average Local Park Accessibility by Auto within 30 Minutes)	Improve	Improve	Improve	Improve	Improve	Improve
		Accessibility to Local Parks (Weighted Average Local Park Accessibility by All Transit within 45 Minutes)	Improve	Improve	Improve	Improve	Improve	Improve
		Accessibility to Local Parks (Weighted Average Local Park Accessibility by Local Bus within 45 Minutes)	Improve	Improve	Improve	Improve	Improve	Improve
		Accessibility to Natural Lands (Weighted Average Local Park Accessibility by Auto within 30 Minutes)	Improve	Improve	Improve	Improve	Improve	Improve
		Accessibility to Natural Lands (Weighted Average Local Park Accessibility by All Transit within 45 Minutes)	Improve	Improve	Improve	Improve	Improve	Improve
		Accessibility to Natural Lands (Weighted Average Local Park Accessibility by Local Bus within 45 Minutes)	Improve	Improve	Improve	Improve	Improve	Improve

- Pages 12 to 15 show summarized findings at the regional level and by community of concern (as applicable) for each indicator

TABLE 3 Comparison of EJ Performance Measures between 2040 Plan and 2040 Baseline Continued

EJ Topic	No.	EJ Performance Measures	Region	EJA	DAC	CoC	Urban	Rural
PROXIMITY TO SCHOOLS AND PARKS	10	Population within One Mile Distance From Local Parks	Does Not Improve	Does Not Improve	Does Not Improve	Does Not Improve	Does Not Improve	Improve
		Population within Two Mile Distance From Local Parks	Does Not Improve	Does Not Improve	Improve	Does Not Improve	Does Not Improve	Improve
		Population within One Mile Distance From Natural Lands	Does Not Improve	Does Not Improve	Improve	Improve	Does Not Improve	Improve
		Population within Two Mile Distance From Natural Lands	Improve	Improve	Improve	Improve	Improve	Improve
		Population within One Mile Distance From Schools	Does Not Improve	Does Not Improve	Does Not Improve	Does Not Improve	Does Not Improve	Improve
		Population within Two Mile Distance From Schools	Does Not Improve	Does Not Improve	Improve	Does Not Improve	Does Not Improve	Improve
GENTRIFICATION	11	Gentrification and Displacement	Current Conditions Analysis While comprehensive studies are underway, preliminary findings suggest potential indications of gentrification in Transit Oriented Communities (TOCs). In this analysis, TOCs were defined as the neighborhoods within a 1/2 mile distance of existing rail stations, and were analyzed to assess the levels of gentrification and displacement in these areas. Compared to the region, Hispanics and Seniors have seen less growth in TOCs during the period from 2000 to 2013. At the same time, median household income has decreased less and median gross rent increased more in TOCs than in the greater region. Median household income has also decreased less and median gross rent increased more in TOCs than in High Quality Transit Areas* (HQTAs). These different growth patterns in TOCs may be the evidence of gentrification which could cause displacement of minority and low income households. SCAG will continue to monitor gentrification and displacement in these areas.				
EMISSIONS IMPACT ANALYSIS	12	Emissions Impact Analysis (PM$_{2.5}$)	Improve	Improve	Improve	Improve	Improve	Improve
		Emissions Impact Analysis (CO)	Improve	Improve	Improve	Improve	Improve	Improve

EJ Topic	No.	EJ Performance Measures	Regional Impacts		Within 500' of Freeways and Urban Roads
IMPACTS ALONG FREEWAYS AND HIGHLY TRAVELED CORRIDORS	13	Impacts Along Freeways and Highly Traveled Corridors (Percentage of Minority Population)	No Change		Does Not Improve
		Impacts Along Freeways and Highly Traveled Corridors (Percentage of Low-Income Households)	No Change		Improve
		Impacts Along Freeways and Highly Traveled Corridors (Decrease in Emissions - CO)	Improve		Improve
		Impacts Along Freeways and Highly Traveled Corridors (Decrease in Emissions - PM$_{2.5}$)	Improve		Improve

* High Quality Transit Areas (HQTAs) represent the half mile zone surrounding all rail transit stations, ferry terminals served by bus or rail transit service, the intersection of two or more major bus routes with a frequency interval of 15 minutes or less during morning and afternoon peak commute periods, and corridors with fixed route bus service with headways of no longer than 15 minutes during peak commute hours.

- Pages 12 to 15 show summarized findings at the regional level and by community of concern (as applicable) for each indicator

TABLE 3 Comparison of EJ Performance Measures between 2040 Plan and 2040 Baseline Continued

EJ Topic	No.	EJ Performance Measures	Region	EJA	DAC	CoC	Urban	Rural
NOISE ANALYSIS	14	Aviation Noise Impacts	Improve	Improve	Improve	Improve	Improve	No Change
		Roadway Noise Impacts	Does Not Improve	Improve	Does Not Improve	Improve	Does Not Improve	Improve
AT HAZARD	15	Active Transportation Hazard	Current Conditions Analysis Collisions data from 2012 shows that low income and minority communities incur a higher rate of bicycle and pedestrian risk. Improvements in active transportation infrastructure and complete streets measures, such as those proposed in the Plan, have been shown to reduce hazard to cyclists and pedestrians. The Environmental Justice Toolbox, available at the end of this report, lists potential strategies to reduce risk at the local level					
PUBLIC HEALTH	16	Public Health Analysis	Current Conditions Analysis Recent trends indicate that air quality is improving throughout the region. For select areas that show increase, there is sometimes a higher proportion of minority and low income population. When examining public health indicators from the CalEnviroScreen tool, it appears that areas with the highest concentrations of minority and low income population incur some of the highest risks throughout the region.					

EJ Topic	No.	EJ Performance Measures	Region	Railroad Adjacent Areas	Areas Adjacent to Grade Separation Projects
RAIL RELATED IMPACTS	17	Rail-Related Impacts (Percentage of Minority Population)	No Change	Improve	Improve
		Rail-Related Impacts (Percentage of Low-Income Households)	No Change	Improve	No Change
CLIMATE ADAPTATION	18	Climate Adaptation	Current Conditions Analysis Present conditions indicate that minority and low income population are at a greater risk for experiencing negative impacts from Climate Change, such as extreme heat and other extreme events. These populations tend to have fewer resources to cope climate consequences. Lack of resources like air conditioning and automobiles may constrain people to become stranded in heat prone areas and may not be able to go to cooling centers. In addition, minority and low people may be greater impacted by the disruption to their place of work and the local economy, since many may have fewer financial reserves to sustain themselves. Please refer to the Environmental Justice Appendix for potential strategies to reduce harms at the local level.			

For items that show "Does Not Improve", strategies to reduce impacts for low income and minority groups are included in the Environmental Justice Toolbox, which is available at the end of this Appendix.

- Pages 12 to 15 show summarized findings at the regional level and by community of concern (as applicable) for each indicator
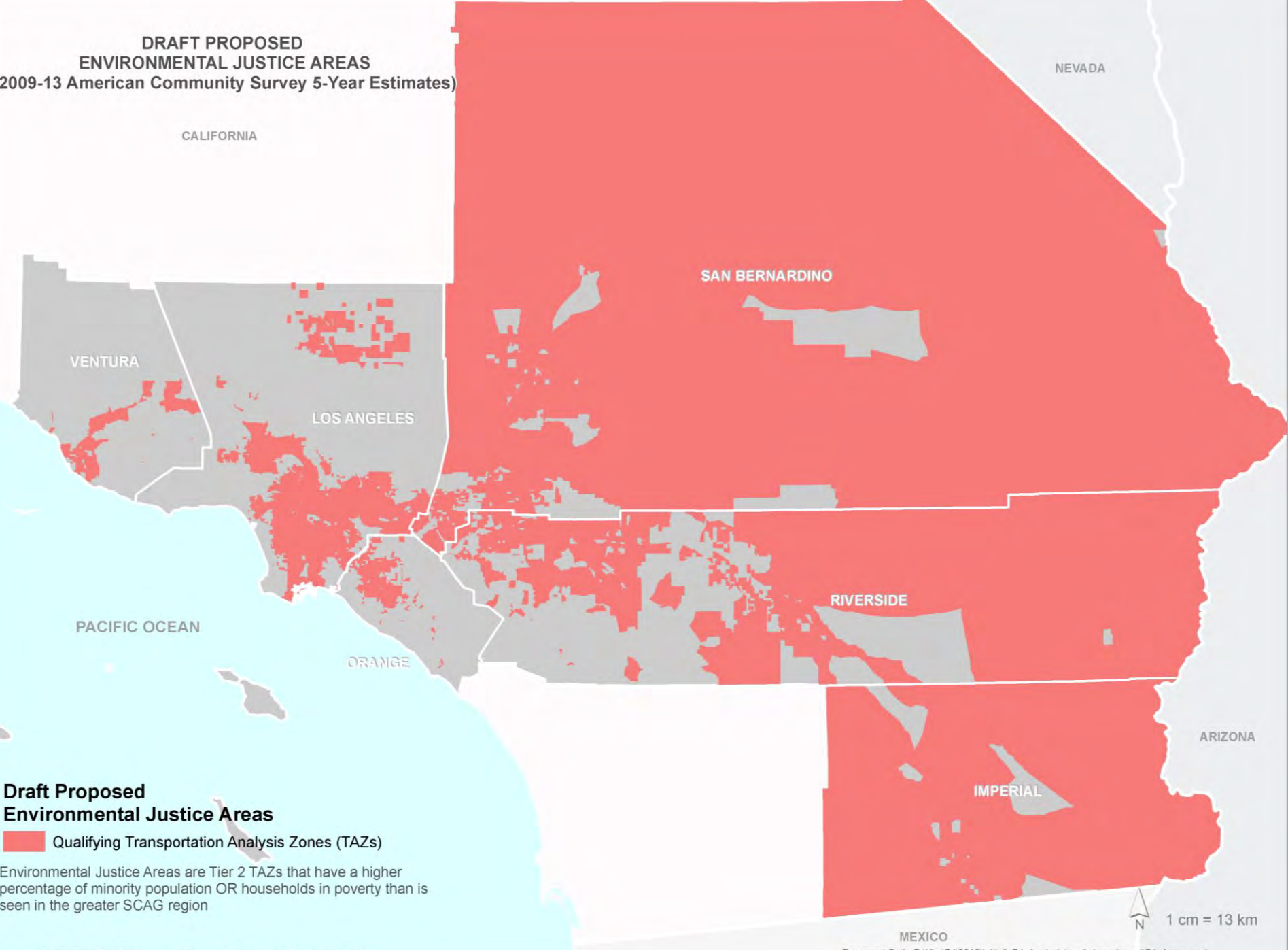
Thank you

Community-Based Analysis

- **Environmental Justice Areas** – *Transportation Analysis Zones (TAZs),* which are similar to block groups, that have a *higher concentration of minority OR low income households* than is seen in the region as a whole. The inclusion of this geography helps to fulfill SCAG's Title VI requirements, along with other state and federal environmental justice guidelines

- **SB 535 Disadvantaged Areas** – *Census tracts* that have been identified by *Cal/EPA as Disadvantaged Communities* based on the requirements set forth in SB 535, which seek to identify areas disproportionately burdened by and vulnerable to multiple sources of pollution
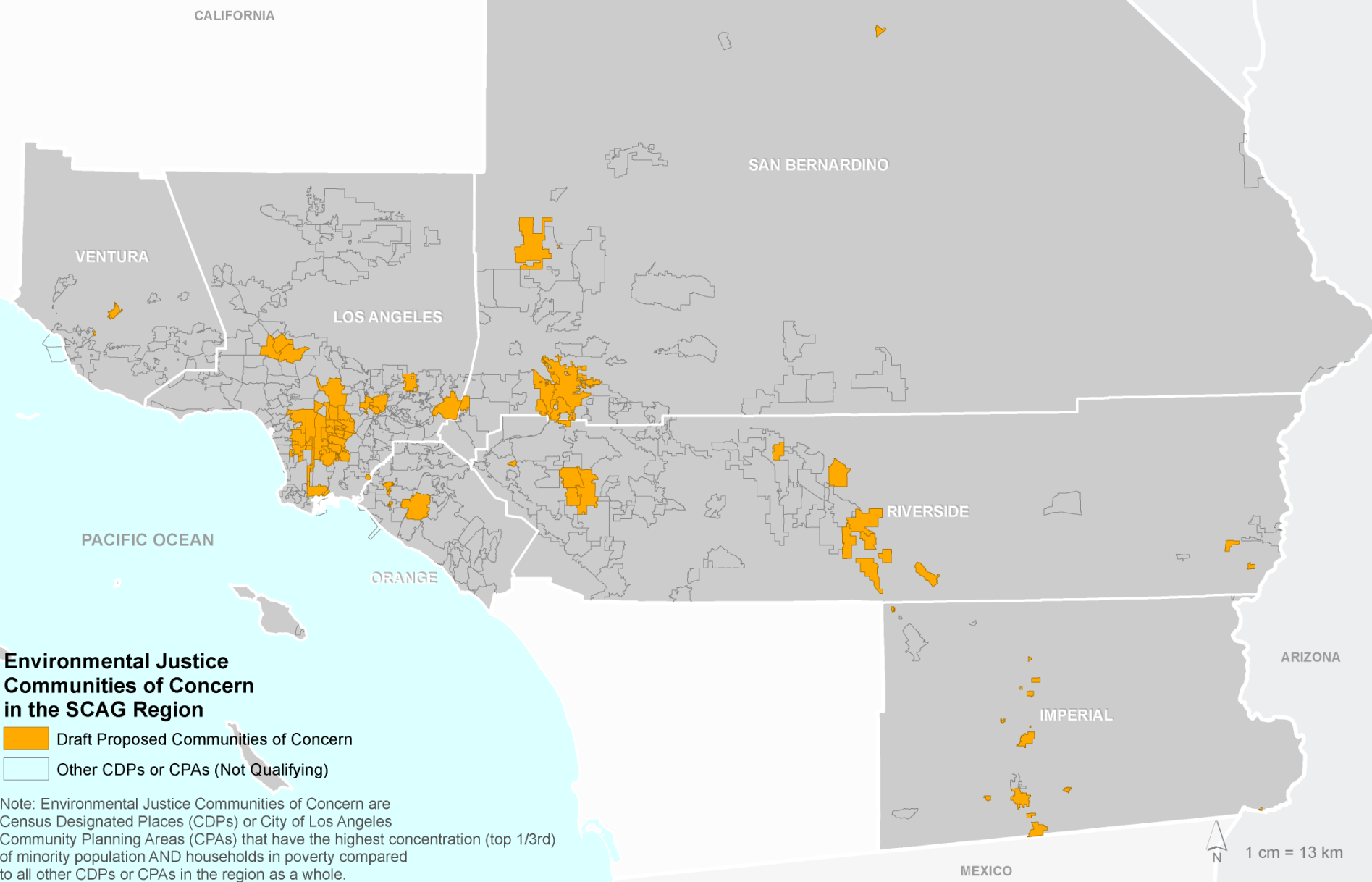
- **Communities of Concern** – *Census Designated Places (CDPs) and City of Los Angeles Community Planning Areas (CPAs)* that fall in the upper 1/3rd of all communities in the SCAG Region for having the *highest concentration of minority population AND low income households*

DRAFT PROPOSED
ENVIRONMENTAL JUSTICE
COMMUNITIES OF CONCERN
(2009-13 American Community Survey 5-Year Estimates)

CALIFORNIA

NEVADA

VENTURA

LOS ANGELES

SAN BERNARDINO

PACIFIC OCEAN

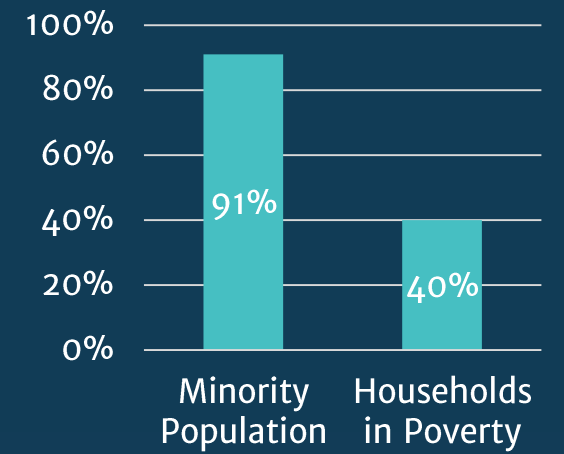ORANGE

RIVERSIDE

ARIZONA

IMPERIAL

MEXICO

N

1 cm = 13 km

**Environmental Justice
Communities of Concern
in the SCAG Region**

Draft Proposed Communities of Concern

Other CDPs or CPAs (Not Qualifying)

Note: Environmental Justice Communities of Concern are
Census Designated Places (CDPs) or City of Los Angeles
Community Planning Areas (CPAs) that have the highest concentration (top 1/3rd)
of minority population AND households in poverty compared
to all other CDPs or CPAs in the region as a whole.

Sources: SCAG, 2014; 2009-2013 American Community Survey (ACS), U.S. Census Bureau

Document Path: P:\Kim\EJ\2016\Initial_EJ_Analysis\mxd\place_based\Communities_of_Concern_0913.mxd

SCAG

4.2 Million People

23% of Region

100%

80%

60%

40% 91%

20% 40%

0%

Minority
Population

Households
in Poverty

Imperial County

Brawley
Calexico
Calipatria
Desert Shores
El Centro
Heber
Holtville
Niland
Seeley
Westmorland
Winterhaven

Los Angeles County

Alondra Park
Arleta - Pacoima
Azusa
Bell
Bell Gardens
Boyle Heights
Central City North
Commerce
Compton
Cudahy
East Los Angeles
East Rancho Dominguez
El Monte
Florence-Graham
Harbor Gateway
Hawaiian Gardens
Hawthorne
Huntington Park
Inglewood
Lennox
Lynwood

Los Angeles County (Con't)

Maywood
Mission Hills - Panorama City - North Hills
Northeast Los Angeles
Paramount
Pomona
Rosemead
South El Monte
South Gate
South Los Angeles
Southeast Los Angeles
Sun Valley - La Tuna Canyon
Vernon
Walnut Park
West Adams - Baldwin Hills - Leimert
West Athens
West Rancho Dominguez
Westlake
Westmont
Willowbrook
Wilmington - Harbor City

Orange County

Midway City
Santa Ana
Stanton

Riverside County

Coachella
Garnet
Good Hope
Highgrove
Home Gardens
Indio Hills
Mead Valley
Mecca
Mesa Verde
North Shore
Oasis
Perris
Ripley
Thermal
Vista Santa Rosa

San Bernardino County

Adelanto
Baker
Bloomington
Colton
Montclair
Muscoy
Rialto
San Bernardino

Ventura County

Santa Paula
Saticoy

Environmental Justice
Communities of Concern
in the SCAG Region

Draft Proposed Communities of Concern
Other CDPs or CPAs (Not Qualifying)

Note: Environmental Justice Communities of Concern are
Census Designated Places (CDPs) or City of Los Angeles
Community Planning Areas (CPAs) that have a minority population AND households in poverty compared
to all other CDPs or CPAs in the region as a whole

Urban Areas
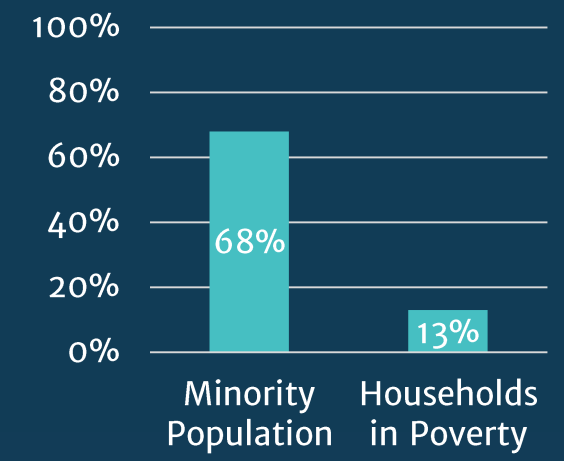
Environmental Justice
Urban and Rural Areas in the SCAG Region

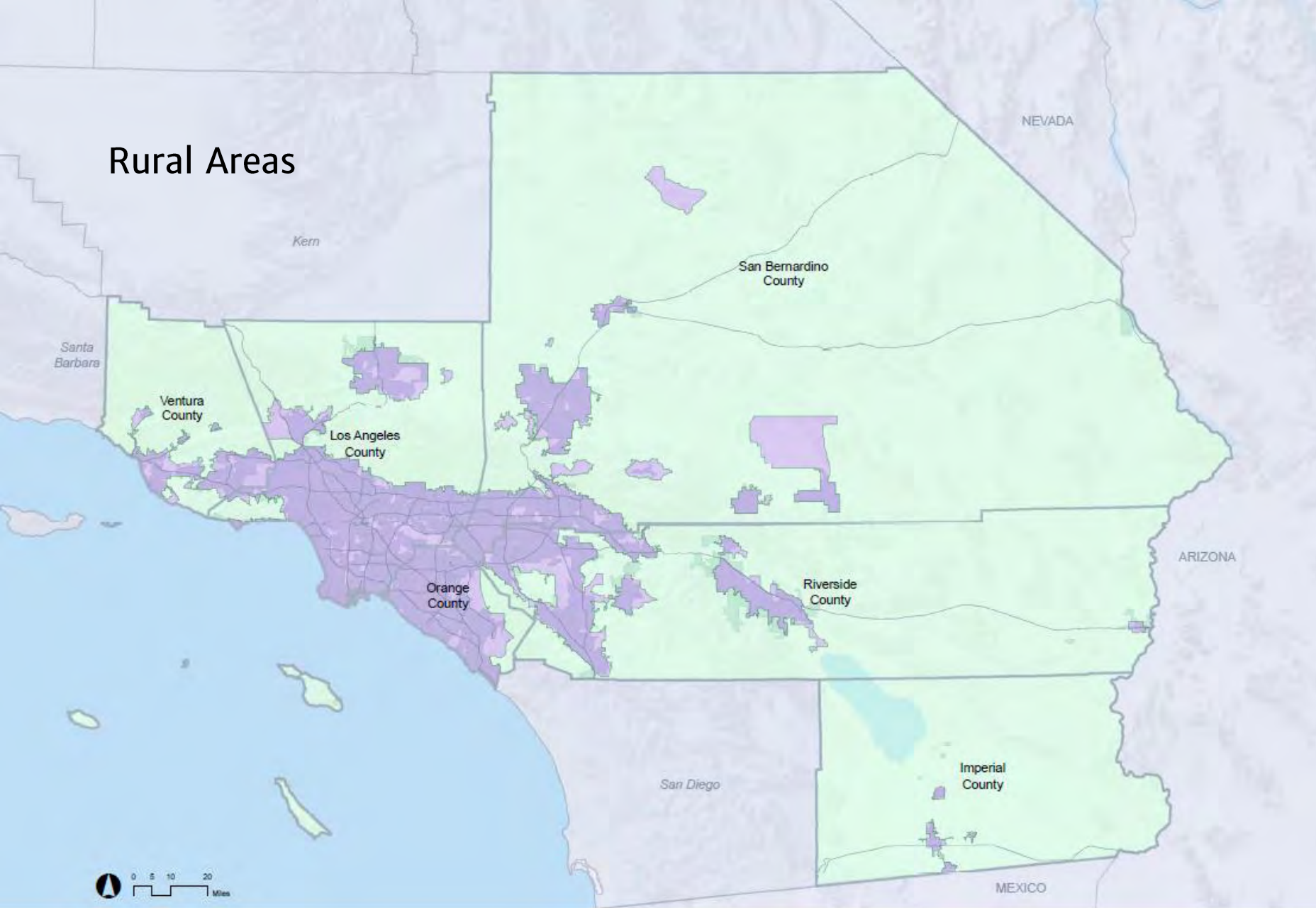Urban   Rural

(Source: SCAG, 2015; Caltrans, U.S. Census Bureau)

SCAG

17.9 Million People

98% of Region

Minority Population: 68%
Households in Poverty: 13%

Rural Areas

San Bernardino County
Kern
Santa Barbara
Ventura County
Los Angeles County
Orange County
Riverside County
Imperial County
San Diego
NEVADA
ARIZONA
MEXICO

Environmental Justice
Urban and Rural Areas in the SCAG Region

Urban   Rural

(Source: SCAG, 2015; Caltrans, U.S. Census Bureau)

SCAG

434,000 People 2% of Region
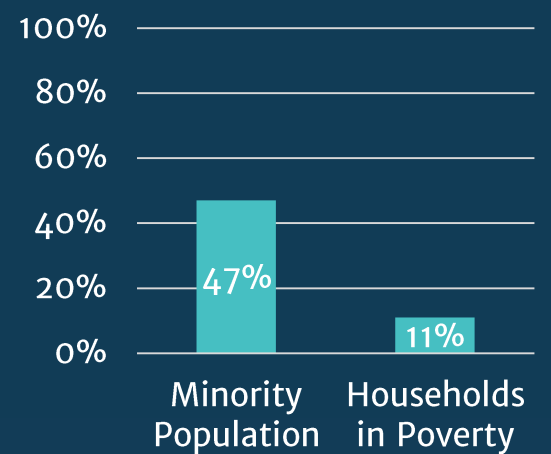
100%
80%
60%
40%
20%
0%

47%   11%

Minority Population   Households in Poverty

EJWG Appendix Reorganization Activity

November 8, 2018

Example #1 – Categories

Transportation Related Impacts

- Share of Transportation System Usage
- Distribution of Travel Time Savings & Travel Distance Reduction
- Active Transportation Hazards
- Rail-Related Impacts

Land Use Related Impacts

- Accessibility to Employment and Services
- Jobs-Housing Imbalance or Jobs-Housing Mismatch

Economic Related Impacts

- 2016 RTP/SCS Revenue Sources in Terms of Tax Burdens
- 2016 RTP/SCS Investments
- Geographic Distribution of Transportation Investments
- Impacts from Funding Through Mileage-Based User Fees

Health Related Impacts

- Accessibility to Parks and Natural Lands
- Regional Emissions Impacts Analysis
- Impacts Along Freeways and Highly Traveled Corridors
- Aviation Noise Impacts
- Roadway Noise Impacts
- Public Health Analysis

Special Topics

- Gentrification and Displacement
- Climate Vulnerability

Example #2 – General Plan Elements

Land Use

- Accessibility to Employment and Services
- Rail-related Impacts

Housing

- Jobs-Housing Imbalance or Jobs-Housing Mismatch
- Gentrification and Displacement

Circulation

- Distribution of Travel Time Savings & Travel Distance Reduction
- Geographic Distribution of Transportation Investments
- Rail-Related Impacts
- Share of Transportation System
- Regional Emissions Impacts Analysis
- Impacts Along Freeways and Highly Travelled Corridors

Conservation

- Climate Vulnerability

Noise

- Aviation Noise
- Roadway Noise

Safety

- Active Transportation Hazard
- Climate Vulnerablity
- Public Health Analysis

Open Space

- Accessibility to Parks and Open Space

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- Accessibility to Employment and Services
- Revenue Sources
- Investments
- Impacts from Funding Through Mileage-Based User Fees
- Gentrification and Displacement

Your Input Needed

What Categories do you want?

How would you divide the levels of analyses?

How would you format the EJ Appendix?

How many categories would you suggest?

Or is there another format we haven't thought of?