



SOUTHERN CALIFORNIA  
ASSOCIATION OF GOVERNMENTS  
900 Wilshire Blvd., Ste. 1700  
Los Angeles, CA 90017  
T: (213) 236-1800  
[www.scag.ca.gov](http://www.scag.ca.gov)

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Energy & Environment  
Linda Parks, Ventura County

Transportation  
Curt Hagman, San Bernardino  
County

## REGULAR MEETING

# TRANSPORTATION COMMITTEE

*Thursday, November 1, 2018*  
**10:00 AM**

**SCAG MAIN OFFICE**  
**900 Wilshire Blvd., Ste. 1700**  
**Regional Council Room**  
**Los Angeles, CA 90017**  
**(213) 236-1800**

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Tess Rey-Chaput at (213) 236-1908 or via email at [REY@scag.ca.gov](mailto:REY@scag.ca.gov). Agendas & Minutes for the Transportation Committee are also available at: [www.scag.ca.gov/committees](http://www.scag.ca.gov/committees)

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### Transportation Committee *Members – November 2018*

1. **Sup. Curt Hagman**  
TC Chair, San Bernardino County
  2. **Hon. Cheryl Viegas-Walker**  
TC Vice Chair, El Centro, RC District 1
  3. **Hon. Sean Ashton**  
Downey, RC District 25
  4. **Hon. Rusty Bailey**  
Riverside, RC District 68
  5. **Hon. Glen Becerra**  
Simi Valley, RC District 46
  6. **Hon. Ben Benoit**  
Air District Representative
  7. **Hon. Will Berg**  
Port Hueneme, VCOG
  8. **Hon. Russell Betts**  
Desert Hot Springs, CVAG
  9. **Hon. Austin Bishop**  
Palmdale, North L.A. County
  10. **Hon. Drew Boyles**  
El Segundo, President's Appt.
  11. **Hon. Art Brown**  
Buena Park, RC District 21
  12. **Hon. Joe Buscaino**  
Los Angeles, RC District 62
  13. **Hon. Ross Chun**  
Aliso Viejo, OCCOG
  14. **Hon. Jonathan Curtis**  
La Canada Flintridge, RC District 36
  15. **Hon. Diane Dixon**  
Newport Beach, OCCOG
  16. **Hon. Emily Gabel-Luddy**  
Burbank, AVCJPA
-



## TRANSPORTATION COMMITTEE AGENDA

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- 17. Hon. James Gazeley**  
Lomita, RC District 39
  - 18. Hon. Jeffrey Giba**  
Moreno Valley, RC District 69
  - 19. Hon. Lena Gonzalez**  
Long Beach, RC District 30
  - 20. Hon. Jack Hadjinian**  
Montebello, SGVCOG
  - 21. Hon. Jan Harnik**  
Palm Desert, RCTC
  - 22. Hon. Dave Harrington**  
Aliso Viejo, OCCOG
  - 23. Hon. Carol Herrera**  
Diamond Bar, RC District 37
  - 24. Hon. Steven Hofbauer**  
Palmdale, RC District 43
  - 25. Hon. Jose Huizar**  
Los Angeles, RC District 61
  - 26. Hon. Jim Hyatt**  
Calimesa, RC District 3
  - 27. Hon. Mike Judge**  
Simi Valley, VCTC
  - 28. Hon. Trish Kelley**  
Mission Viejo, OCCOG
  - 29. Hon. Linda Krupa**  
Hemet, WRCOG
  - 30. Hon. Randon Lane**  
Murrieta, RC District 5
  - 31. Hon. Clint Lorimore**  
Eastvale, RC District 4
  - 32. Hon. Steve Manos**  
Lake Elsinore, RC District 63
  - 33. Hon. Ray Marquez**  
Chino Hills, RC District 10
-



- 34. Hon. Larry McCallon**  
Highland, SBCTA
  - 35. Hon. Marsha McLean**  
Santa Clarita, RC District 67
  - 36. Hon. Dan Medina**  
Gardena, RC District 28
  - 37. Hon. Barbara Messina**  
Alhambra, RC District 34
  - 38. Hon. L. Michael**  
Rancho Cucamonga, RC District 9
  - 39. Hon. Fred Minagar**  
Laguna Niguel, RC District 12
  - 40. Hon. Carol Moore**  
Laguna Woods, OCCOG
  - 41. Hon. Kris Murray**  
Anaheim, RC District 19
  - 42. Hon. Ara Najarian**  
Glendale, SFVCOG
  - 43. Hon. Frank Navarro**  
Colton, RC District 6
  - 44. Sup. Shawn Nelson**  
Orange County
  - 45. Hon. Sam Pedroza**  
Claremont, RC District 38
  - 46. Hon. Greg Pettis**  
Cathedral City, RC District 2
  - 47. Hon. Chuck Puckett**  
Tustin, RC District 17
  - 48. Hon. Teresa RealSebastian**  
Monterey Park, SGVCOG
  - 49. Hon. Dwight Robinson**  
Lake Forest, OCCOG
  - 50. Hon. Crystal Ruiz**  
San Jacinto, WRCOG
-



## TRANSPORTATION COMMITTEE AGENDA

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- 51. Hon. Ali Saleh**  
Bell, RC District 27
  
  - 52. Hon. Damon Sandoval**  
Morongo Band of Mission Indians
  
  - 53. Hon. Marty Simonoff**  
Brea, RC District 22
  
  - 54. Hon. Thomas Small**  
Culver City, WSCCOG
  
  - 55. Hon. Barb Stanton**  
Town of Apple Valley, RC District 65
  
  - 56. Hon. Cynthia Sternquist**  
Temple City, SGVCOG
  
  - 57. Hon. Jess Talamantes**  
Burbank, RC District 42
  
  - 58. Hon. Brent Tercero**  
Pico Rivera, GCCOG
  
  - 59. Hon. Alan Wapner**  
SBCTA
  
  - 60. Hon. Alicia Weintraub**  
Calabasas, LVMCOG
  
  - 61. Hon. Michael Wilson**  
Indio, RC District 66
-



## TRANSPORTATION COMMITTEE AGENDA

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Southern California Association of Governments  
900 Wilshire Boulevard, Suite 1700 – Regional Council Room  
Los Angeles, California 90017  
**Thursday, November 1, 2018**  
**10:00 AM**

The Transportation Committee may consider and act upon any of the items on the agenda regardless of whether they are listed as Information or Action items.

### **CALL TO ORDER AND PLEDGE OF ALLEGIANCE**

*(The Honorable Curt Hagman, Chair)*

### **PUBLIC COMMENT PERIOD**

Members of the public desiring to speak on items on the agenda, or items not on the agenda, but within the purview of the Committee, must fill out and present a Public Comment Card to the Assistant prior to speaking. Comments will be limited to three (3) minutes per speaker. The Chair has the discretion to reduce the time limit based upon the number of speakers and may limit the total time for all public comments to twenty (20) minutes.

### **REVIEW AND PRIORITIZE AGENDA ITEMS**

#### **CONSENT CALENDAR**

##### Approval Items

1. Minutes of TC Meeting, October 4, 2018 (page 8)

##### Receive and File

2. Draft 2019 Local Profiles Data Update (page 14)
3. Status Update on the 2020 RTP/SCS PEIR (page 24)
4. Future Communities Pilot Program Guidelines (page 26)
5. Update on SCAG's Bottom-Up Local Input and Envisioning Process (page 44)
6. Transit Climate Adaptation and Resiliency Assessment (page 56)
7. 4th California Climate Change Assessment - SCAG Regional Report (page 59)

#### **INFORMATION ITEMS**

8. The Role of Renewable Natural Gas in Transportation (page 82) 15 Mins.  
*(Ken Chawkins, Business Policy Manager, Southern California Gas Company)*
  9. Promoting Sustainable Transport Solutions – Volvo Group (page 91) 20 Mins.  
*(Aravind Kailas, Research and Innovation Manager, Volvo Group,)*
  10. Transportation Electrification Partnership – Los Angeles Cleantech Incubator 15 Mins.
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(page 99)

***(Michelle Kinman, Director of Transportation, Los Angeles Cleantech Incubator)***

11. Virgin Hyperloop One Presentation (page 108) 30 Mins.

***(Tony Bauer, Tunnel Engineer, Virgin Hyperloop One)***

12. RCTC Logistics Fee/Truck Study (page 119) 20 Mins.

***(John Standiford, Deputy Executive Director, RCTC)***

13. Last Mile Freight Study (page 135) 10 Mins.

***(Scott Strelecki, Senior Regional Planner, Goods Movement and Transportation Finance, SCAG)***

### **CHAIR'S REPORT**

***(The Honorable Curt Hagman, Chair)***

### **METROLINK REPORT**

***(The Honorable Art Brown)***

### **STAFF REPORT**

***(John Asuncion, SCAG Staff)***

### **FUTURE AGENDA ITEMS**

### **ANNOUNCEMENT/S**

### **ADJOURNMENT**

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Southern California Association of Governments
900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017
November 1, 2018

TRANSPORTATION COMMITTEE
MINUTES OF THE MEETING
THURSDAY, OCTOBER 4, 2018

THE FOLLOWING MINUTES ARE A SUMMARY OF ACTIONS TAKEN BY THE TRANSPORTATION COMMITTEE. A DIGITAL RECORDING OF THE ACTUAL MEETING IS AVAILABLE FOR LISTENING IN SCAG'S OFFICE.

The Transportation Committee (TC) met at SCAG, 900 Wilshire Blvd., 17th Floor, Los Angeles, CA 90017. The meeting was called to order by Chair Hon. Curt Hagman, San Bernardino County. A quorum was present.

Members Present:

- Hon. Sean Ashton, Downey District 25
Hon. Rusty Bailey, Riverside District 68
Hon. Ben Benoit, Wildomar South Coast AQMD
Hon. Will Berg, Port Hueneme VCOG
Hon. Russell Betts, Desert Hot Springs CVAG
Hon. Art Brown, Buena Park District 21
Hon. Emily Gabel-Luddy AVCJPA
Hon. James Gazeley, Lomita District 39
Hon. Jack Hadjinian, Montebello SGVCOG
Hon. Curt Hagman (Chair) San Bernardino County
Hon. Jim Hyatt, Calimesa District 3
Hon. Mike T. Judge, Simi Valley VCTC
Hon. Linda Krupa, Hemet WRCOG
Hon. Randon Lane, Murrieta District 5
Hon. Steve Manos, Lake Elsinore District 63
Hon. Ray Marquez, Chino Hills District 10
Hon. Larry McCallon Highland
Hon. Marsha McLean, Santa Clarita District 67
Hon. Dan Medina, Gardena District 28
Hon. Barbara Messina, Alhambra District 34
Hon. L. Dennis Michael District 9
Hon. Carol Moore, Laguna Woods OCCOG
Hon. Kris Murray, Anaheim District 19
Hon. Frank Navarro, Colton District 6
Hon. Greg Pettis, Cathedral City District 2
Hon. Charles Puckett, Tustin District 17
Hon. Teresa Real Sebastian, Monterey Park SGVCOG
Hon. Crystal Ruiz, San Jacinto WRCOG
Hon. Ali Saleh, Bell GCCOG

Attachment: Minutes of the TC Meeting - October 2018 (Minutes of TC Meeting, October 4, 2018)

Hon. Marty Simonoff, Brea	District 22
Hon. Jess Talamantes	SFVCOG
Hon. Brent Tercero, Pico Rivera	GCCOG
Hon. Cheryl Viegas-Walker, El Centro <b>(Vice Chair)</b>	District 1
Hon. Alan Wapner, Ontario	SBCTA/SBCOG
Mr. Paul Marquez	Caltrans District 7

**Members Not Present:**

Hon. Glen Becerra, Simi Valley	District 46
Hon. Austin Bishop, Palmdale	North L.A. County
Hon. Joe Buscaino, Los Angeles	District 62
Hon. Ross Chun, Aliso Viejo	OCTA
Hon. Jonathan Curtis, La Cañada-Flintridge	District 36
Hon. Diane Dixon, Newport Beach	OCCOG
Hon. Jeffrey, Giba, Moreno Valley	District 69
Hon. Gonzalez, Lena, Long Beach	District 30
Hon. Jan Harnik, Palm Desert	RCTC
Hon. Dave Harrington, Aliso Viejo	OCCOG
Hon. Carol Herrera, Diamond Bar	District 37
Hon. Steven Hofbauer, Palmdale	District 43
Hon. Jose Huizar, Los Angeles	District 61
Hon. Trish Kelley, Mission Viejo	OCCOG
Hon. Clint Lorimore, Eastvale	District 4
Hon. Fred Minagar, Laguna Niguel	District 12
Hon. Ara Najarian	Glendale
Hon. Shawn Nelson	Orange County
Hon. Sam Pedroza, Claremont	District 38
Hon. Dwight Robinson, Lake Forest	OCCOG
Hon. Damon Sandoval	Morongo Band of Mission Indians
Hon. Thomas Small, Culver City	Culver City
Hon. Barb Stanton, Apple Valley	SBCTA/SBCOG
Hon. Cynthia Sternquist, Temple City	SGVCOG
Hon. Alicia Weintraub, Calabasas	LVMCOG
Hon. Michael Wilson, Indio	District 66

**CALL TO ORDER & PLEDGE OF ALLEGIANCE**

Hon. Curt Hagman, San Bernardino County, called the meeting to order at 10:08 a.m. Hon. Art Brown, Buena Park, led the Pledge of Allegiance.

**PUBLIC COMMENT**

No members of the public requested to comment.

**ACTION/DISCUSSION ITEMS**

1. Los Angeles and San Bernardino Inter-County Transit and Rail Connectivity Study

Steve Fox, SCAG staff, reported on the Los Angeles and San Bernardino Inter-County study. Mr. Fox stated that the study area includes east Los Angeles County and western San Bernardino County and examined three major corridors in the region, Metrolink’s San Bernardino and

Riverside lines and Interstate 10. He noted that the objectives include assessing the market for transit and rail travel in the corridor, including geographic distribution of origins for employee and passenger trips to Ontario International Airport. The study seeks to estimate potential ridership, travel, economic benefits as well as capital/operating costs associated with different transit and rail options and to recommend a path forward for cost-effective transit service that best serves local communities.

Mr. Fox reviewed the different study alternatives including, No Build, Transportation Systems Management, Light Rail, Commuter Rail, Hybrid Rail and Express Bus/Bus Rapid Transit. Next, he reviewed the various strengths and weaknesses associated with each alternative.

Hon. Russell Betts, Desert Hot Springs, asked if the study examined the total passenger trip time from home to the airport considering that the passenger will have luggage when travelling on transit. Mr. Fox responded that origin and destination information was used to understand trip length for each of the alternatives examined.

A MOTION was made (Brown) and SECONDED (Simonoff) to receive the Inter-County Transit and Rail Connectivity Study findings and direct staff to finalize the report and transmit the Final Report to Los Angeles County Metropolitan Transportation Authority and San Bernardino County Transportation Authority. The motion passed by the following votes:

AYES: Ashton, Bailey, Benoit, Berg, Betts, Brown, Gabel-Luddy, Gazeley, Hadjinian, Hagman, Hyatt, Judge, Krupa, Manos, Marquez, McCallon, McLean, Messina, Michael, Murray, Navarro, Pettis, Puckett, Ruiz, Simonoff, Talamantes, Viegas-Walker (27)

NOES: None (0)

ABSTAIN: None (0)

## **CONSENT CALENDAR**

### 2. Minutes of the September 6, 2018 Meeting

#### **Receive and File**

3. Future Communities Pilot Program Update
4. Environmental Justice Working Group Update
5. Notification to HCD & Caltrans of Estimated RTP Adoption Date
6. High Quality Transit Area (HQT) Pilot Program
7. APA California Recognizes Outstanding Planning in SCAG Region
8. Go Human Campaign Update
9. Highlights from 29<sup>th</sup> Annual Demographic Workshop – June 11, 2018

A MOTION was made (Navarro) and SECONDED (Brown) to approve Consent Calendar items 2 – 9. The Motion passed by the following votes:

AYES: Ashton, Bailey, Benoit, Berg, Betts, Brown, Gabel-Luddy, Gazeley, Hadjinian, Hagman, Hyatt, Judge, Krupa, Manos, Marquez, McCallon, McLean, Messina, Michael, Moore, Murray, Navarro, Pettis, Puckett, Real Sebastian, Ruiz, Saleh, Simonoff, Talamantes, Tercero, Viegas-Walker (31)

NOES: None (0)

ABSTAIN: None (0)

**INFORMATION ITEMS**

10. Customer-Based Ridesharing and Transit Interconnectivity Study

Heather Menninger, AMMA Transit Planning, reported on the SBCTA Customer-Based Ridesharing and Transit Interconnectivity Study. Ms. Menninger stated that the study area includes the San Bernardino Valley and examines, from the customer view point, how to increase multi-modalism, attract new transit riders, retain existing ones and take advantage of revolutions occurring in transportation technology, communications and big data. She reviewed commute data in the study area which indicated that while two-thirds drive alone there is a segment of potential users who are open to using other modes of transportation. Ms. Menninger noted that the customer experience can be enhanced with improvements in first and last mile enhancements, customer information, and institutional and rider support.

Ms. Menninger reviewed the different action steps outlined in the study. She noted that customer information can be improved through the use of modern digital applications and customer facing technology. Further, first-mile/last-mile strategies can include improved feeders to the West Valley Connector, a ride hail pilot project to Ontario Airport, on-demand flex service within downtown San Bernardino, an Omnitrans warehouse-district connecting service, bikeshare and improved bike/pedestrian infrastructure. Rider support enhancements can include electronic fare payment, rideshare incentives as well as targeted safety enhancement. She noted that institutional strategies can include improved linkage between agencies and the creation of seamless technology interoperability. Ms. Menninger stated that the action plan seeks to build a customer-based, technology-enabled, multi-modal experience to attract and retain new riders.

Hon. Alan Wapner, Ontario, announced that the Emerging Technology Committee is being formed and those interested in serving on it can make their interest known. He noted that it would continue efforts of the Open Data/Big Data Committee and would report directly to the Regional Council.

Hon. Curt Hagman, San Bernardino County, asked if it is known how many of those surveyed for the study indicated that they do not have access to technology such as a cell phone and is it significant enough for policy makers to consider implementing digital screens at transit stops. Ms. Menninger responded that survey results indicate that transit riders are increasingly using digital technology to access mobility information and that she would forward the data.

11. Goods Movement Border Crossing – Study Phase II/Industrial Warehousing Study Revised Releases

Mike Jones, SCAG staff, provided an update on the Goods Movement Border Crossing Study Phase II and the Industrial Warehousing study. Mr. Jones stated that the studies have been revised and re-released to insure critical findings are made available to partners, local, state, and federal agencies, academics and other goods movement stakeholders. He noted the studies were first released in 2016 and they explore existing and future challenges associated with regional freight such as capacity and infrastructure issues as well as identifying potential strategies and recommendation to accommodate projected freight growth. He noted the studies have become a useful resource for goods movement partners and that they are available at freightworks.org.

12. I-105 Corridor Sustainability Study Status Report

Gary Hamrick, Cambridge Systematics, provided a status report on I-105 Corridor Sustainability Study. Mr. Hamrick stated the study examines an area extending 3 miles around I-105. He noted

it examines multi-modal conditions along the corridor and the study objectives include reducing per capita delays, vehicle miles traveled, improve system efficiency and improve connectivity between modes. Mr. Hamrick reviewed current conditions for the I-105 corridor and connecting corridors such as peak speed conditions, pavement roughness conditions and bridge ratings. Next, truck, vehicle, bicycle and pedestrian collisions were reviewed.

Mr. Hambrick noted that in the future population and employment in the study area is expected to grow. Additionally, traffic volume on the I-105 is expected to increase in the future further congesting corridor flow. He noted that a series of project ideas are being assembled to help improve conditions for all modes of transportation in the study area. He noted next steps include completing evaluation and improvement scenarios, issuing a draft report November 2018 and a final report December 2018.

Hon. Jim Hyatt, Calimesa, noted the high number of bicycle and pedestrian accidents and fatalities and asked about the reporting time period. Mr. Hambrick responded that it was a 3-year reporting period.

Hon. Curt Hagman, San Bernardino County, asked how much future transportation technology is integrated into planning. Mr. Hamrick responded that several projects being developed for the area that would utilize technology such as interconnecting traffic signals, changeable message and advance warning signs as well as integrating timing of traffic flow from the feeder corridors.

**CHAIR'S REPORT**

Curt Hagman, San Bernardino County, encouraged jurisdictions to consider the importance of future technology in managing mobility and transportation including connecting traffic signals to assist traffic management for different day part needs. Further, to consider the implications of 5G and the benefit of traffic flow planning that extends across multiple jurisdictions.

**METROLINK REPORT**

Art Brown, Buena Park, reported that beginning July 1, 2018 the San Bernardino line reduced fare prices 25% as a pilot program and has seen a 7% increase in ridership since that time. Additionally, the fall schedule will begin October 8, 2018 and some schedules will change. Additionally, Metrolink leadership, staff, elected officials, industry leaders and first responders gathered at Union Station recently to remember the 10-year anniversary of the Chatsworth accident.

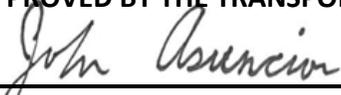
**STAFF REPORT**

John Asuncion, SCAG staff, offered committee members a SCAG label to help identify their building access cards.

**ADJOURNMENT**

Hon. Curt Hagman, San Bernardino County, adjourned the meeting at 11:36 a.m.

**[MINUTES ARE UNOFFICIAL UNTIL APPROVED BY THE TRANSPORTATION COMMITTEE]**

  
\_\_\_\_\_  
John Asuncion, Senior Regional Planner  
Transportation Planning

**Transportation Committee Attendance Report**

**2018**

Member (including Ex-Officio) Last Name, First Name	Representing	X = County Represented						X = Attended			= No Meeting			NM = New Member		Mtgs Attended		
		IC	LA	OC	RC	SB	VC	Feb	Mar	April	GA May	June	July	Aug	Sept		Oct	Nov
Ashton, Sean*	Downey		X					X	X	X					X	X		
Bailey, Rusty*	Riverside, WRCOG				X			X	X						X	X		
Becerra, Glen*	Simi Valley						X	X	X	X								
Benoit, Ben*	South Coast AQMD				X			X	X	X							X	
Berg, Will	VCOG, Port Hueneme							X	X	X					X	X		
Betts, Russell	CVAG				X			X	X	X					X	X		
Bishop, Austin	County																	
Brown, Art*	Buena Park			X				X	X	X					X	X		
Buscaino, Joe*	Los Angeles		X					X	X	X					X			
Chun, Ross	Aliso Viejo, OCTA			x				X	X	X					X			
Curtis, Jonathan*	La Cañada Flintridge		X							X								
Dixon, Diane	Newport Beach														X			
Gabel-Luddy, Emily	Burbank, AVCJPA		X							X							X	
Gazeley, James*	Lomita		X					X	X	X					X	X		
Giba, Jeffrey*	Moreno Valley				X			X	X	X					X			
Gonzalez, Lena*	Long Beach		X															
Hadjinian, Jack	Montebello, SGVCOG		X					X		X					X	X		
Hagman, Curt* (Chair)	San Bernardino County					X		X	X	X					X	X		
Harnik, Jan*	Palm Desert, RCTC				X													
Harrington, Dave	Aliso Viejo, OCCOG			X														
Herrera, Carol*	Diamond Bar		X					X	X	X								
Hofbauer, Steven*	County		X					X	X	X					X			
Huizar, Jose*	Los Angeles		X															
Hyatt, Jim*	Calimesa				X			X	X	X					X	X		
Judge, Mike*	Simi Valley, VCTC						X	X	X	X					X	X		
Kelley, Trish	Mission Viejo, OCCOG			X				X	X	X					X			
Krupa, Linda	Hemet, WRCOG				X												X	
Lane, Randon* (Vice Chair)	Murrieta				X			X	X	X					X	X		
Lorimore, Clint*	Eastvale				X			X	X	X					X			
Manos, Steve*	Lake Elsinore				X			X	X	X					X	X		
Marquez, Ray*	Chino Hills					X		X	X	X					X	X		
McCallon, Larry	Highland					X		X	X	X					X	X		
McLean, Marsha*	Santa Clarita		X					X	X	X					X	X		
Medina, Dan*	Gardena		X					X	X	X					X	X		
Messina, Barbara*	Alhambra		X					X	X	X					X	X		
L. Dennis Michael*	Rancho Cucamonga					X		X		X					X	X		
Minagar, Fred*	Laguna Niguel				X			X	X						X			
Moore, Carol	Laguna Woods, OCCOG				X			X	X	X					X	X		
Murray, Kris*	Anaheim				X				X	X							X	
Najarian, Ara	Glendale														X			
Navarro, Frank*	Colton					X		X		X					X	X		
Nelson, Shawn*	County of Orange				X													
Pedroza, Sam*	Claremont		X					X	X	X					X			
Pettis, Greg*	Cathedral City				X			X	X	X					X	X		
Puckett, Charles*	Tustin							X	X	X					X	X		
Real Sebastian, Teresa	Monterey Park/SGVCOG		X					X	X	X					X	X		
Robinson, Dwight	Lake Forest, OCCOG				X													
Ruiz, Crystal	WRCOG/San Jacinto				X				X								X	
Saleh, Ali*	City of Bell, GCCOG		X					X	X	X					X	X		
Sandoval, Damon	Morongo Band of Mission Indians																	
Simonoff, Marty*	Brea				X			X	X	X					X	X		
Small, Thomas																	NM	
Stanton, Barb*	Apple Valley					X												
Sternquist, Cynthia	Temple City		X					X										
Talamantes, Jess			X						X	X					X	X		
Tercero, Brent	Pico Rivera		X					X	X	X							X	
Viegas-Walker, Cheryl*	El Centro		X					X	X	X							X	
Wapner, Alan*	SBCTA/SBCOG					X		X	X	X					X	X		
Weintraub, Alicia	Calabasas/LVMCOG		X					X							X			
Wilson, Michael*	Indio, CVAG				X			X										
<b>Totals</b>		<b>1</b>	<b>19</b>	<b>10</b>	<b>12</b>	<b>7</b>	<b>2</b>											

Attachment: Minutes of the TC Meeting - October 2018 (Minutes of TC Meeting, October 4, 2018)



Southern California Association of Governments  
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017  
November 1, 2018

**To:** Energy & Environment Committee (EEC)  
Transportation Committee (TC)  
Transportation Committee (TC)  
**From:** Michael Gainor, Senior Regional Planner, Compliance &  
Performance Monitoring, (213) 236-1822, Gainor@scag.ca.gov  
**Subject:** Draft 2019 Local Profiles Data Update

INTERIM  
EXECUTIVE DIRECTOR'S  
APPROVAL

**RECOMMENDED ACTION FOR CEHD:**

For Information Only - No Action Required

**RECOMMENDED ACTION FOR EEC AND TC:**

Receive and File

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 3: Be the foremost data information hub for the region.

**EXECUTIVE SUMMARY:**

*Since 2009, SCAG has prepared and updated the Local Profiles reports every two years as a service to our member jurisdictions. The reports provide current and historical demographic, socio-economic, housing, transportation, public health, and education data compiled from a variety of sources. The 2019 Local Profiles reports, to be released at the SCAG General Assembly in May 2019, generally focus on changes that have occurred since 2000. The information is presented to help identify current trends that provide a useful resource to local governments with activities and research supportive of community planning, economic development, grant writing, and public outreach efforts. The Local Profiles are also used as a resource for businesses evaluating expansion or relocation options, academic research, and to members of the public who seek to learn more about their communities.*

**BACKGROUND:**

The Local Profiles were first released at the SCAG Regional Conference and General Assembly in May 2009, and have been updated every two years since. The Local Profiles provide a quick, but comprehensive, resource for local data and analytical support. As part of the biennial update, the new 2019 Local Profiles reports, scheduled for release at the SCAG General Assembly in May 2019, will include updated information and data related to local and regional demographic trends, housing, employment, income, education and public health. The data included in the Local Profiles reports is compiled through a wide variety sources and refined through extensive input from our member jurisdictions.

The Local Profiles reports have served as information and communication resources for elected officials, businesses, and residents in our local communities. Local government staff have used the reports to respond to a wide variety of public information inquiries regarding growth and change occurring within their jurisdictions. The Local Profiles are also frequently used by local jurisdictions in support of community planning, public outreach, local visioning initiatives, economic development, grant applications, and marketing and promotional materials. In addition, the biennially produced reports provide a useful tool in support of regional and local performance monitoring. Some examples of how the reports have been used include the provision of locally specific data to support residential and commercial development decision-making by private development firms; as a community information resource for local jurisdictions in support of General Plan updates; as an appendix to local strategic plans; and as a compendium of relevant local data to support various grant applications by local jurisdictions throughout the SCAG region.

With each edition of the Local Profiles, the selection of specific data and topics to be presented in the reports evolves to some extent to ensure consistency with the overall goal of providing a highly relevant product that reflects the current priorities in the SCAG region in a concise, easy to read format. For the 2019 Local Profiles several data enhancements are being introduced in the reports including a stronger focus on sustainable transportation and disadvantaged communities.

Attachment 1 of this staff report features the set of data items continuing from the 2017 Local Profiles reports to be included in the 2019 edition.

Attachment 2 of this report provides the set of proposed new data items to be included in the 2019 Local Profiles reports.

The 2017 Local Profiles are posted on the SCAG website:  
[www.scag.ca.gov/resources/profiles.htm](http://www.scag.ca.gov/resources/profiles.htm)

**FISCAL IMPACT:**

Work associated with this item is included in the Fiscal Year 2018-2019 Overall Work Program (WBS Number 080.0153.04: Performance Assessment & Monitoring).

**ATTACHMENT(S):**

1. Attach 1\_2019 Local Profiles\_Continuing Data Items
2. Attach 2\_2019 Local Profiles\_Proposed New Data Items
3. Attach 3\_2019 Local Profiles\_Presentation

# Attachment 1: 2019 Local Profiles: Data Items Continuing from 2017

Category	Data Type	Data Source
Population	Total Population: 2017 & 2018	California Department of Finance
	Population: % Hispanic: 2018	US Census, Nielsen Co
	Population: % Non-Hispanic White: 2018	US Census, Nielsen Co
	Population: % Non-Hispanic Asian: 2018	US Census, Nielsen Co
	Population: % Non-Hispanic Black: 2018	US Census, Nielsen Co
	Population: % Non-Hispanic American Indian: 2018	US Census, Nielsen Co
	Population: % All Other Non-Hispanic: 2018	US Census, Nielsen Co
	Population by Age: 2017 & 2018	US Census, Nielsen Co
	Median Age: 2018	US Census, Nielsen Co
	Population Density: 2018	SCAG
Households	Number of Households: 2017 & 2018	California Department of Finance
	Average Household Size: 2017 & 2018	California Department of Finance
	Share of Households by Household Size: 2018	US Census, Nielsen Co
	Median Household Income: 2018	US Census, Nielsen Co
	Share of Households by Household Income: 2018	US Census, Nielsen Co
Housing	Homeownership Rate: 2018	US Census, Nielsen Co
	Median Existing Home Sales Price: 2017 & 2018	Dataquick (CoreLogic)
	Number of Foreclosures	Dataquick (CoreLogic)
	Share of Housing Stock by Decade Built	US Census, Nielsen Co
	Number of Housing Units: 2017 & 2018	California Department of Finance
	Number of Housing Units by Housing Type: 2018	California Department of Finance
	Total Housing Building Permits Issued: 2017 & 2018	Construction Industry Research Board
	Single-Family Housing Building Permits Issued: 2017 & 2018	Construction Industry Research Board
	Multi-Family Housing Building Permits Issued: 2017 & 2018	Construction Industry Research Board
Housing Cost Share of Household Income: Homeowners	American Community Survey (ACS)	
Housing Cost Share of Household Income: Renters	American Community Survey (ACS)	
Transportation	Transportation Mode Share: 2018	US Census, Nielsen Co
	Average Travel Time to Work: 2018	US Census, Nielsen Co
	Top 10 Commuter Work Destination Cities: Table	LEHD O/D Employment Statistics
	Top 10 Commuter Work Destination Cities: Map	SCAG
	Vehicles per Household: 2000, 2010, 2018	American Community Survey (ACS)
	Travel Time to Work Distribution (by range of minutes): 2000-2018	US Census, Nielsen Co
Active Transportation	Miles of Bicycle Lanes by Class (by county): 2016	County Transportation Commissions
Employment	Total Number of Jobs: 2016 & 2017	California Employment Development Dept
	Number of Jobs by Sector: 2017	California Employment Development Dept
	Number of Manufacturing Jobs: 2016 & 2017	California Employment Development Dept
	Number of Construction Jobs: 2016 & 2017	California Employment Development Dept
	Number of Retail Trade Jobs: 2016 & 2017	California Employment Development Dept
	Number of Professional & Management Jobs: 2016 & 2017	California Employment Development Dept
	Average Annual Salary: 2017	California Employment Development Dept
	Average Annual Salary by Sector: 2017	California Employment Development Dept
Public Health	Obesity Rate	California Health Interview Survey
	Physical Activity Rate (Walking)	California Health Interview Survey
Retail Sales	Real Retail Sales: 2016 & 2017	California Board of Equalization
Education	% Completed High School or Higher: 2018	US Census, Nielsen Co
	% Completed Bachelor Degree or Higher: 2018	US Census, Nielsen Co
	K-12 Public School Enrollment: 2017 & 2018	California Department of Education
	K-6 Public School Student Enrollment: 2017 & 2018	California Department of Education
	Grades 7-9 Public School Student Enrollment: 2017 & 2018	California Department of Education
	Grades 10-12 Public School Student Enrollment: 2017 & 2018	California Department of Education

Attachment: Attach 1\_2019 Local Profiles\_Continuing Data Items (Draft 2019 Local Profiles Data Update)

## Attachment 2: 2019 Local Profiles: Potential New Data Items

Data Item	Local Profiles Section	Definition	Data Required	Data Source
Travel distance distribution	Transportation	Commute distance travelled (by range)	Commute travel distance data at jurisdictional level.	U.S. Census American Community Survey (ACS)
Average travel distance	Transportation	Average commute distance travelled	Commute travel distance data at jurisdictional level.	U.S. Census American Community Survey (ACS)
English language fluency	Population	Share of population with limited English language fluency	Share of population 5+ years of age with limited English language fluency	U.S. Census American Community Survey (ACS)

# 2019 Local Profiles Data Update

## Community, Economic, & Human Development Committee

November 1, 2018

Mike Gainor  
Senior Regional Planner



## Local Profiles Program Overview

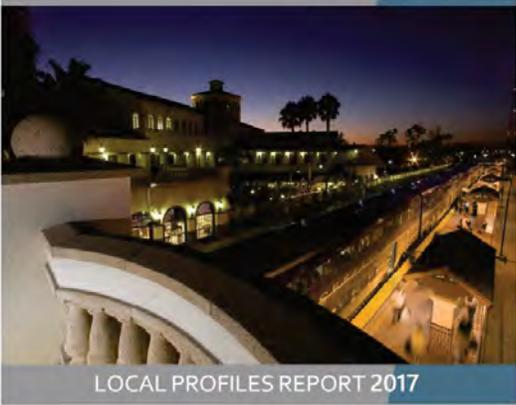


- Prepared biennially for each member city, county, & unincorporated area in the SCAG region
- Contains current demographic, socio-economic, housing, transportation, & education data within historical context
- Helps identify current & evolving demographic trends in local jurisdictions
- Provided as a service to our member jurisdictions
- The 2017 Local Profiles are posted on the SCAG website:  
[www.scag.ca.gov/resources/profiles.htm](http://www.scag.ca.gov/resources/profiles.htm)

# 2017 Local Profiles



 **Profile of the City of Santa Ana**  
Southern California Association of Governments' (SCAG) Regional Council includes 69 districts which represent 191 cities in the SCAG region  
SCAG Regional Council District 16 includes only Santa Ana  
Represented by: Hon. Michele Martinez

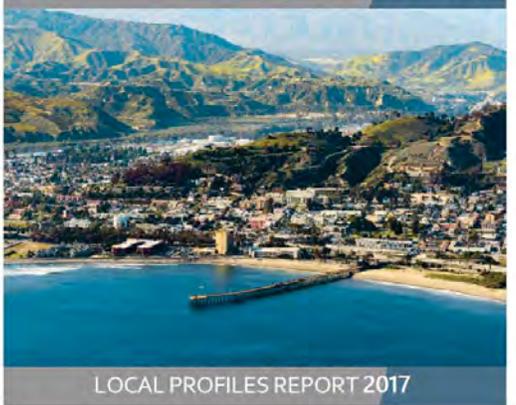


**LOCAL PROFILES REPORT 2017**

This profile report was prepared by the Southern California Association of Governments and shared with the City of Santa Ana. SCAG provides local governments with a variety of benefits and services including, for example, data and information, GIS training, planning and technical assistance, and sustainability planning grants.

May 2017  
Southern California Association of Governments

 **Profile of the City of San Buenaventura**  
Southern California Association of Governments' (SCAG) Regional Council includes 69 districts which represent 191 cities in the SCAG region  
SCAG Regional Council District 47 includes Fillmore, Ojai, San Buenaventura, and Santa Paula  
Represented by: Hon. John Procter



**LOCAL PROFILES REPORT 2017**

This profile report was prepared by the Southern California Association of Governments and shared with City of San Buenaventura. SCAG provides local governments with a variety of benefits and services including, for example, data and information, GIS training, planning and technical assistance, and sustainability planning grants.

May 2017  
Southern California Association of Governments

Attachment: Attach 3\_2019 Local Profiles\_Presentation (Draft 2019 Local Profiles Data Update)

# 2017 Local Profiles



## 2017 Local Profiles Data Categories

- **Population:** Total, by Age, by Ethnicity
- **Households:** Number, Size, Income, Owner/Renter Status
- **Housing:** Production by Type, Permits Issued, Median Sales Price, Housing Stock Age, Foreclosures
- **Transportation:** Mode Choice, Travel Time
- **Employment:** Top Employment Destinations, Total Number of Jobs, Jobs by Sector, Average Salary
- **Retail Sales:** Total Sales, Sales per Person
- **Education:** Enrollment by Grade Level, Educational Attainment

# 2017 Local Profiles



## 2017 New Data Categories

- **Active Transportation:** Bike Lane Mileage by Class (by County)
- **Public Health:** Rates for Obesity, Physical Activity, Asthma, Diabetes, & Heart Disease

## 2017 New Data Items

- Population Density
- Housing Cost Share (for Renters & Homeowners)
- Travel Time to Work (by Range of Minutes)
- Household Vehicle Ownership (Number of Vehicles per Household)

# 2019 Local Profiles



## 2019 Proposed New Data Items

- Travel Distance Distribution (Transportation Section)
- Average Travel Distance (Transportation Section)
- English Language Fluency (Population Section)

# 2019 Local Profiles



## 2019 Proposed New Data Items

### Travel Distance Distribution:

- Commute travel distance provided by range of minutes by local jurisdiction
- Data obtained through U.S. Census American Community Survey (ACS)
- Five travel distance data ranges displayed in pie chart format

Attachment: Attach 3\_2019 Local Profiles\_Presentation (Draft 2019 Local Profiles Data Update)

7

# 2019 Local Profiles



## 2019 Proposed New Data Items

### Average Travel Distance:

- Average commute distance travelled by local jurisdiction
- Data obtained through U.S. Census American Community Survey (ACS)
- Average travel distance data for years 2000, 2010, & 2018 displayed in bar chart format

8

# 2019 Local Profiles



## 2019 Proposed New Data Items

### English Language Fluency:

- Share of population (age 5+) that speak English at a 'Less than Well' level of fluency
- Data obtained through U.S. Census American Community Survey (ACS) 5-year estimates
- English fluency data for the years 2010, 2013, & 2016 displayed in bar chart format

9

# 2019 Local Profiles

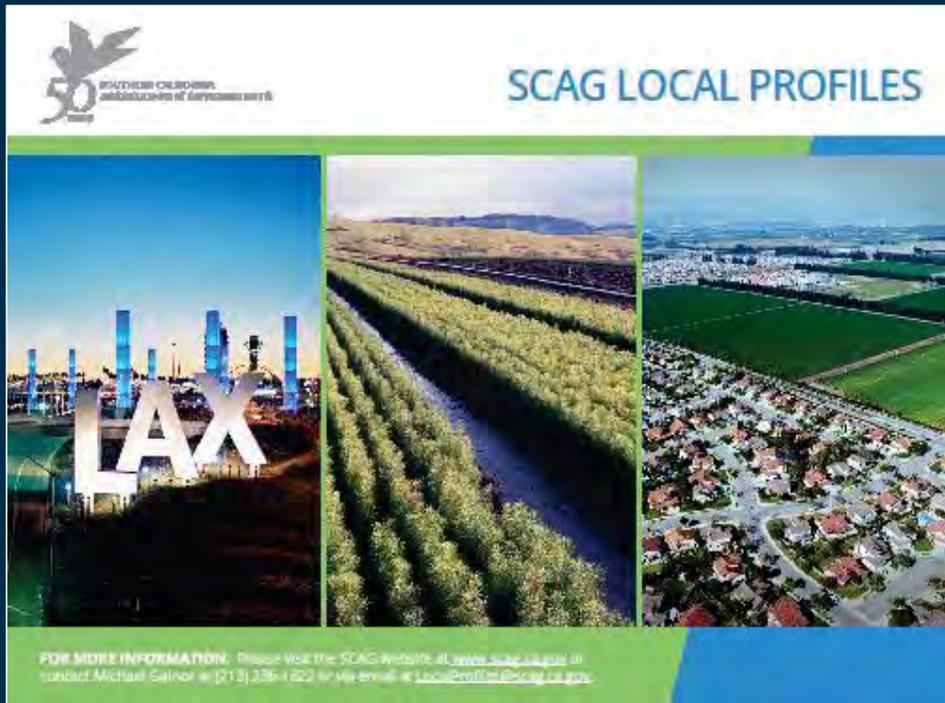


## Next Steps:

- Data acquisition, processing, & analysis (through January, 2019)
- Draft reports provided for local jurisdictional review & comment (mid-February, 2019)
- Draft report jurisdiction comment period (February-March, 2019)
- Revise draft reports to incorporate jurisdictional comments & SCAG QA process (March-April, 2019)
- Production of final reports (late April, 2019)
- Release of final 2019 Local Profiles reports & post on SCAG website (May, 2019)

10

# 2019 Local Profiles



17

## Thank you!

Mike Gainor  
(213) 236-1822  
[gainor@scag.ca.gov](mailto:gainor@scag.ca.gov)



Attachment: Attach 3\_2019 Local Profiles\_Presentation (Draft 2019 Local Profiles Data Update)



Southern California Association of Governments  
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017  
November 1, 2018

**To:** Community  
Economic & Human Development Committee (CEHD)  
Energy & Environment Committee (EEC)  
Transportation Committee (TC)  
**From:** Roland Ok, Senior Regional Planner, Compliance &  
Performance Monitoring, (213) 236-1819, ok@scag.ca.gov  
**Subject:** Status Update on the 2020 RTP/SCS PEIR

INTERIM  
EXECUTIVE DIRECTOR'S  
APPROVAL

**RECOMMENDED ACTION:**

Receive and File

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians.

**EXECUTIVE SUMMARY:**

*The purpose of this staff report is to inform the EEC, CEHD, TC and RC that staff has initiated environmental documentation for the 2020 Regional Transportation Plan/Sustainable Communities Strategy (Connect SoCal or Plan). A Program Environmental Impact Report (PEIR) for the Plan will be prepared in accordance with the California Environmental Quality Act (CEQA). The PEIR will be a program-level document that will analyze the cumulative effects of the proposed actions, as well as transportation improvements and land use developments discussed in the Plan.*

**BACKGROUND:**

Connect SoCal is a long-term plan which emphasizes the development and preservation of the region’s transportation system. For a transportation project to become eligible for federal and state funding, it must be included in the financially-constrained portion of the RTP. In addition, per state law, the Plan must include a Sustainable Communities Strategy (SCS) that demonstrates compliance with California Air Resources Board greenhouse gas (GHG) emission reduction targets from cars and light duty trucks.

CEQA, Pub. Res. Code § 21000 et seq., and its implementing regulations, CEQA Guidelines, codified at 14 C.C.R. § 15000 et seq., require SCAG as the Lead Agency to prepare an Environmental Impact Report for the Plan. The Plan necessitates preparation of a PEIR, which is a “first-tier” CEQA document designed to consider “broad policy alternatives and program-wide mitigation measures” (CEQA Guidelines §15168).

The PEIR will serve as a programmatic document that provides a region-wide assessment of potential significant environmental effects of the Plan. The PEIR will provide an opportunity to inform decision-makers and the public about these effects. The PEIR will evaluate region-wide,

potential significant environmental effects, including direct and indirect effects, growth-inducing impacts, and cumulative impacts of the Plan at a programmatic level. The PEIR will consider a range of reasonable alternatives to the Plan, including the no-project alternative and alternatives capable of achieving most of the basic objectives of the Plan and that may be capable of avoiding or substantially lessening any of the significant environmental effects the Plan. The PEIR will also evaluate proposed feasible mitigation measures capable of avoiding or reducing the significant effects of the Plan.

**STATUS OF THE 2020 RTP/SCS PEIR:**

On August 20, 2018, SCAG's Executive Administration Committee (EAC), approved the Consultant's contract (18-026-C01) to assist SCAG with the preparation of a legally defensible PEIR. The Consultant will assist SCAG in completing the PEIR and provide services to ensure compliance with federal and state planning and environmental laws in the PEIR.

On September 6, 2018, SCAG staff informed the Energy and Environment Committee (EEC) that the CEQA documentation process had been initiated. After the September 6 meeting, a formal kick-off meeting occurred with SCAG and the Consultant on September 27, 2018. The kick-off meeting focused on the scope of work and strategies to complete a legally defensible PEIR.

**NEXT STEPS:**

While SCAG initially planned to release the Notice of Preparation (NOP) prior to the end of 2018, SCAG and the Consultant decided that January 2019 would be the optimal release date for the NOP as it would allow for a robust description of the Connect SoCal Plan, its proposed goals, policies, scenarios and alternatives. The NOP will formally kick-off the PEIR process and will undergo a 30-day public review period which will allow for public comments. Following the release of the NOP and public review phase, SCAG will host two (2) scoping meetings. The scoping meetings will provide a presentation on the Plan's process and vision and allow for further comments on the Plan and the PEIR. Comments received will be incorporated into the PEIR and will potentially serve as a guidance tool to assist with the environmental analysis. Pursuant to AB 52, SCAG will request for formal consultation with Native American Tribes within 14 days after the NOP release date. After the request, SCAG will work towards hosting tribal consultation meetings to fulfill AB 52 requirements.

**FISCAL IMPACT:**

Work associated with this item is included in the current Fiscal Year 2018/19 Overall Work Program (020.0161.04: Regulatory Compliance).



Southern California Association of Governments  
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017  
November 1, 2018

To: Executive/Administration Committee (EAC)  
Community  
Economic & Human Development Committee (CEHD)  
Energy & Environment Committee (EEC)  
Transportation Committee (TC)  
Regional Council (RC)

INTERIM  
EXECUTIVE DIRECTOR'S  
APPROVAL

From: Kome Ajise, Director of Planning, Planning Division, 213-236-1835, Ajise@scag.ca.gov

Subject: Future Communities Pilot Program Guidelines

**RECOMMENDED ACTION FOR EAC:**

Recommend that Regional Council approve the Future Communities Pilot Program Guidelines.

**RECOMMENDED ACTION FOR TC, EEC, CEHD:**

Receive and File

**RECOMMENDED ACTION FOR RC:**

Approve the Future Communities Pilot Program Guidelines.

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians. 2: Advance Southern California’s policy interests and planning priorities through regional, statewide, and national engagement and advocacy. 3: Be the foremost data information hub for the region. 4: Provide innovative information and value-added services to enhance member agencies’ planning and operations and promote regional collaboration. 7: Secure funding to support agency priorities to effectively and efficiently deliver work products.

**EXECUTIVE SUMMARY:**

*SCAG, in partnership with the Mobile Source Air Pollution Reduction Committee of the South Coast Air Quality Management District (MSRC), created the Future Communities Pilot Program (FCPP) to support city and county agencies in implementing innovative pilot projects that reduce emissions-producing vehicle miles traveled (VMT) from local travel and municipal operations. The FCPP will award approximately \$2.7 million to cities and counties within the South Coast Air Basin. SCAG, with support and input of consultants, technical experts and stakeholders, has prepared funding guidelines for the FCPP that outline the program goals, funding requirements, scoring criteria and application process. Following the review and adoption of the FCPP Guidelines by the Regional Council, SCAG will issue the FCPP Call for Proposals and conduct outreach to solicit project proposals. Staff anticipates returning to the Regional Council in February with funding recommendations for 5 to 10 pilot projects.*

**BACKGROUND:**

SCAG hosted an Open Data/Big Data – Smart and Connected SCAG Region Committee (Committee) from June to November of 2017 to assess the changing landscape of technology in regional planning and to provide guidance for local governments. The Committee’s key achievement was the development and adoption by the Regional Council of a Future Communities Framework to help the region with smart technology implementation.

In addition to the policy framework, the Committee reviewed and endorsed the Future Communities Initiative, a short-term work program including the following work elements: Regional Data Platform, a Policy Lab/Tool Builder, a Data Science Fellowship, and an annual forum and a new grant program called the Future Communities Pilot Program (FCPP). Each initiative harnesses the power of new technologies, big data, open data as well as enhanced analytics to promote innovation in regional and local planning and reduce transportation demand.

The FCPP is a project to support city and county agencies in implementing innovative pilot projects that reduce emissions-producing vehicle miles traveled (VMT) from local travel and municipal operations through the use of new technologies and enhanced data analytics. In July 2018, SCAG partnered with the MSRC to implement the FCPP in four phases: 1) Promising Practice Research 2) Call for Projects 3) Implementation and 4) Evaluation and Final Report.

In July 2018, SCAG hired Nelson Nygard to conduct the Promising Practice Research phase of the program. Research included the following tasks:

- Technical Advisory Committee (TAC)
- Expert Interviews
- Promising Practice Identification
- Case Studies
- Readiness Survey

Building on the Promising Practice Research, SCAG staff and the consultant team developed program guidelines and an application for a Future Communities Pilot Program Call for Projects.

The FCPP project team shared key components of the program guidelines with and incorporated feedback from a variety of stakeholders, including the Energy and Environment Committee, MSRC, Caltrans, and the TAC. The guidelines were reviewed for coordination with the 2016 RTP/SCS and upcoming Connect SoCal, consistency with funding source goals and requirements, and for support of innovative advancements in Transportation Demand Management (TDM) initiatives.

**Program Goals**

The goals ensure that the projects selected will meet statutory requirements for the funding sources used for the program as well as the direction of the Committee and the Future Communities Framework.

The goals of the FCPP are:

- 
- Apply new technologies and data analytics to test innovative approaches for reducing emissions-producing VMT from local travel and municipal operations.
  - Explore opportunities for data analytics and technology projects in a variety of contexts/communities, including projects that support and engage disadvantaged communities.
  - Improve efficiency and reduce the costs of city and county municipal services.
  - Identify and quantify relative impacts of a variety of technology-based VMT reduction strategies.
  - Promote replicable Pilot Projects that support new policy development, improve processes for government service provision, and pilot innovative engagement practices with private sector mobility providers.

#### Eligibility & Funding

SCAG has a total of \$2.7 million to award with a requirement of a 25% local match from each applicant. Due to MSRC funding restrictions, projects must be located within the South Coast Air District and will be limited to cities and county agencies from Los Angeles, Riverside, Orange, and San Bernardino counties. The maximum project size is \$500,000. Funding awards will be made on a competitive basis and in accordance with geographic equity requirements set by the MSRC.

#### Project Examples

A wide range of data analytics and technology projects are eligible for FCPP funding within the framework of the program goals. The program guidelines, supplemental case studies, and promising project research include eligible project examples. SCAG's research primarily focused on the following two project areas but, due to the desire to fund innovative projects, applications are not limited to these specific project areas.

- Projects that reduce VMT generated by municipal operations
  - Use of remote/teleconference services
  - Use of fleet telematics to track vehicle use
  - Use of route optimization to improve efficiencies
  - Use of Internet of Things (IoT) or asset management applications to improve fleet deployment efficiency
- Projects that reduce VMT by using technology to maximize benefits of new mobility services
  - Curbside management projects
  - Smart parking projects
  - Mobility as a Service projects
  - Mobile apps that implement direct incentives for switching to non-auto modes that reduce VMT

#### Scoring Criteria

FCPP applications will be scored according to the criteria outlined below. The top-scoring applications will be short-listed. Short-listed applicants will be invited for a one-on-one presentation and discussion with SCAG staff in early January 2019.



Scoring Criteria - Application	Point Value
Topic 1: Project Rationale	15 pts
Topic 2: Project Design	60 pts
Topic 3: Readiness and Sustainability	25 pts

Scoring Criteria - Interview	Point Value
Topic 1: Presentation	15 pts
Topic 2: Interview	15 pts

Schedule

The schedule for the Call for Projects and the Pilot Program Period moves quickly. The program guidelines outlines all project milestones including the following important dates.

Milestone	Date
Call for Applications Opens	November 1, 2018
Application Workshop #1	November 13, 2018
Application Workshop #2	December 4, 2018
Call for Project Application Deadline	December 13, 2018
One-on-One Meetings with Potential Awardees	January 7-11, 2019
SCAG Regional Council Approval of 2018 FCPP Awards	February 7, 2019
Pilot Launch	Spring 2019
Pilot Programs Conclude	December 2020
Pilot Program Final Reporting	December 2020

**FISCAL IMPACT:**

The Future Communities Pilot Program is funded by \$2,000,000 in funding from the Mobile Source Air Pollution Reduction Committee (MSRC) and \$1,000,000 in SB1 Funding in OWP Task Number 280.4824.01. An additional \$1,000,000 will be provided by awardees in the form of local match.

**ATTACHMENT(S):**

1. DRAFT Final\_SCAG FCPP\_Call for Projects Guidelines
2. Future Communities

# FUTURE COMMUNITIES PILOT PROGRAM

## PROGRAM GUIDELINES

### BACKGROUND

The Future Communities Pilot Program (FCPP) is a new grant program designed to provide local cities and counties with the resources needed to reduce emissions-producing vehicle miles traveled (VMT) using new technology and data solutions. The FCPP is a partnership between the [Southern California Association of Governments](#) (SCAG) and the [Mobile Source Air Pollution Reduction Committee \(MSRC\)](#) to improve air quality and implement SCAG’s [2016 Regional Transportation Plan/Sustainable Communities Strategy](#) (RTP/SCS). VMT and emission reduction goals support the [State’s Climate Change Scoping Plan](#), which outlines strategies for achieving California’s 2030 greenhouse gas target. The FCPP is also a major component of [SCAG’s Future Communities Initiative](#), which is a three-year work program for implementing the policy direction from SCAG’s [Open Data/Big Data](#), Smart and Connected SCAG Region Committee.

FCPP funding is available to cities and municipalities within the South Coast Air Quality Management District (SCAQMD) portions of Los Angeles, Orange, Riverside and San Bernardino counties, and is funded through a combination of MSRC funding and Senate Bill 1 – The Road Maintenance and Rehabilitation Program (SB1). Proposed projects must consider the requirements outlined below to ensure compliance with the requirements of both funding sources.

### GOALS

The FCPP has the following goals, which will shape the pilot selection process described in this document:

- Apply new technologies and data analytics to test innovative approaches for reducing emissions-producing VMT from local travel and municipal operations.
- Explore opportunities for data analytics and technology projects in a variety of contexts/communities, including projects that support and engage disadvantaged communities.
- Improve efficiency and reduce the costs of city and county municipal services.
- Identify and quantify relative impacts of a variety of technology-based VMT reduction strategies.
- Promote replicable Pilot Projects that support new policy development, improve processes for government service provision, and pilot innovative engagement practices with private sector mobility providers.

### ELIGIBLE PROJECT TYPES AND PROMISING PRACTICES

Eligible projects must be implemented and demonstrate measurable VMT reduction during the project period. A wide range of data analytics and technology projects are eligible for FCPP funding within the framework of the program goals. To support applicants and provide examples

**Future Communities Pilot Project – Call For Projects Guidelines**  
**SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS**

of possible projects, SCAG has conducted research into promising practices for the reduction of municipal VMT, as well as the role of technology and data analytics for the identification and deployment of strategies/tactics to decrease the production of VMT and greenhouse gases.

SCAG has developed in depth case studies to provide project applicants of potential project concepts. **While SCAG’s case studies focus on two main themes for VMT reduction (VMT reduction from municipal operations and technology solutions for working with new mobility services)**, applicants are encouraged to submit a wide range of accessibility and mobility related proposals that meet the goals of the program. In addition to the case studies, SCAG developed a list of other promising practices that could support the goals of the program. Information regarding the case studies and promising practices can be found on [SCAG’s website](#).

The first theme that SCAG studied and developed case studies for includes projects that reduce VMT generated by municipal operations. Existing municipal services can be responsible for the production of significant VMT and emissions. Pilot Projects in this arena would reduce the production of VMT through the implementation of innovative data collection and analytic techniques to improve municipal operating policies, practices, and guidelines. These could include use of remote/teleconference services, use of fleet telematics, use of route optimization, use of Internet of Things (IoT), or asset management applications to improve fleet deployment efficiency.

**SCAG’s** research also considered projects that reduce VMT by using technology to maximize benefits of new mobility services – **or to reduce “new” VMT sources**. New technologies have spawned several new forms of mobility services, adding to the demands placed on the existing transportation network and increasing competition for operating space and resources. Pilot Projects in this category would develop innovative solutions for managing the operation of these new services within the local jurisdiction. These could include curbside management projects, smart parking projects, Mobility as a Service (MaaS) projects, or mobile apps that implement direct incentives for switching to non-auto modes that reduce VMT.

As mentioned above, applicants are not limited to the project types included in the case studies or the promising practices spreadsheet. Rather, those examples are provided to help applicants explore potential project ideas and identify implementation considerations. Given the limitations on timeline for deployment and completion of this Call for Projects, applications should be focused, clear, and action-oriented/plug and play ready. Entities considering applying to the FCPP should ask themselves the following questions when determining which type of Pilot Project to submit:

- Does it use data or technology in innovate ways?
- Does it clearly identify how it will aim to reduce VMT?
- Is it feasible to implement/operationalize and measure VMT reduction within the short project period (~18 months)?
- Has the jurisdiction identified matching resources?

## **ELIGIBLE APPLICANTS**

Given the restrictions of funding sources, only city and county municipal applicants from within the South Coast Air Quality Management District (SCAQMD) portions of San Bernardino, Riverside, Los Angeles, and Orange Counties are eligible to apply for FCPP funding.

SCAG will consider sub-applicants within the following contexts:

**Future Communities Pilot Project – Call For Projects Guidelines**  
SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

- To encourage participation by cities with a variety of resource levels, cities may apply in partnership with sub-regional or regional agencies or multi-jurisdictional partners (e.g. councils of government), if such a partnership will improve the likelihood of successful implementation. Given that the sustainability of the projects is important, applicants in these situations will need to describe how they would sustain the knowledge of processes and maintenance of products once the project is completed and the partnering agency is no longer available to provide technical assistance.
- Departments outside of the immediate confines of a municipal structure, such as school districts, may be included as sub-applicants in partnership with a city- or county-lead agency.
- Sub-regional and regional entities may be included as sub-applicants to provide guidance on project design and implementation, and to ensure regional or sub-regional consistency with similar efforts and data standards. However, SCAG does not desire to enter into complicated contracting structures due to the limited time for project implementation. It is recommended that such participation be considered for meeting the local matching requirements.
- Collaboration between multiple partners is allowed; however, the tight timeline for project implementation and completion (~18 months) requires rapid deployment. Partnerships that may involve lengthy new collaborative experiences may not be competitive.
- Due to the inclusion of SB1 funding, at the time of award notice an applicant, sub-applicant and/or jurisdiction will be required to have a housing element in substantial compliance with the State Housing Element Law, and must have submitted updated Housing Element Annual Progress Reports.

Because these are implementation-oriented projects tied to municipal VMT reduction goals, it is important that the implementer of the project is closely involved and represented in the application package. Having the available resources to successfully implement the project is not only an important factor for project selection, but will also be important for project success given the limited time available to complete the projects.

Commensurate with the limited timeline for project delivery and the technical capacity required to effectively implement and execute Pilot Projects, significant effort will be required in the staffing and mobilization of resources for successful deployment. Therefore, SCAG expects that consultants or other third party professional service providers may be critical to successfully implementing projects.

## **FUNDING SOURCES AND MATCH REQUIREMENTS**

The funding available for these projects totals \$2.7 million and is a combination of both MSRC funding and SB1 funding. Funding awards and mix will depend on the number and type of applications received and regional equity funding targets. Below are important factors about the funding sources that applicants should consider:

- Maximum project size for applications is \$500,000.
- Funding is only available to city and county municipal applicants within the [South Coast Air Quality Management District \(SCAQMD\)](#) portion of the counties of Los Angeles, Orange, Riverside and San Bernardino.

**Future Communities Pilot Project – Call For Projects Guidelines**  
**SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS**

- The grant program requires a 25% match from applicants.
  - In-kind matches, cash matches, and leveraged resources from other supporting projects (e.g. grants, parallel development efforts, etc.) are eligible as co-funding.
    - Agencies using match other than cash will be required to document their staff hours and/or other expenses on a quarterly basis.
    - If a cash match is provided, the Agency should identify the source of funding (i.e. General Fund, AB 2766, Prop A, etc.) and include it in the project budget.
    - In kind participation of agency staff participation can count towards funding match contributions.
  - The match should, if possible, be expended concurrently in proportion to the grant funding. All matching funds must be spent by the completion of the project.
- In accordance with SB funding requirements, SB-1 funds may only be used for planning activities; not program implementation. Therefore, applicants should clearly identify and distinguish planning-related tasks from those aligned with implementation of the Pilot Projects in the proposed project scopes of work (SOW) and budgets.

SCAG does not intend to directly fund **applicants’ internal labor costs** through this grant program. Due to the complexity of projects and rapid mobilization requirements, SCAG expects to hire professional service providers on behalf of successful applicants to implement the projects. While the proposed projects are likely to rely heavily on consultant staff, their approach to implementation and operation should give thought toward developing a project that is sustainable in the post-pilot phase. Applicants that intend on using their own internal labor force to complete the majority of the work must justify the need to do so in their applications and show that their staff will have the capacity and skills to complete the project within the timeframe of the project.

## **APPLICATION PROCESS**

Applications are due by December 13, 2018 by 5:00 p.m. as outlined in the submittal section of these guidelines. All project types will follow a single application process, which reflects the goals and requirements described in these guidelines. The application is posted on the [project website](#).

Multiple applications from an agency are possible. However, due to the limited amount of funding available through the Call for Projects, applicants should be judicious in only submitting their best projects that meet the goals of the program and can be completed within the timeline set out in these guidelines.

Project sponsors do not need a board resolution in order to apply, but they will be required to agree to submit a supporting resolution from the elected body or a letter of intent in support of the project from the appropriate executive officer prior to project kickoff.

Once the Call for Projects opens, SCAG will hold two application workshops to help guide potential applicants through the process as they finalize submissions. **SCAG also has an “open door” policy** during this application period, and is able to answer technical questions about the application content or process at any point during the call for projects.

## SCORING RUBRIC & CRITERIA

The scoring criteria for all projects funded through the FCPP will be the same. Question topics and their relationships to the scoring criteria are outlined below. Exact questions and further clarification regarding how points are awarded are provided in the call for projects application packet.

**Table 1: FCPP Application Scoring Rubric**

Scoring Criteria	Point Value
Topic 1: Project Rationale	15 pts
Source of VMT Production	5
Baseline Estimation of Current VMT Production	5
VMT Reduction Approach and Methodology	5
Topic 2: Project Design	60 pts
Goals, Objectives, and Outcomes	5
Innovation, Technology and Data Analytics	10
Project Implementation and Management	20
VMT Reduction Estimate and Cost Reduction Potential	15
Proposed Schedule and Budget	5
Performance Reporting	5
Topic 3: Readiness and Sustainability	25
Supportive Policies and Commitments	5
Expansion and Replicability	5
Match and Resource Leveraging	5
Disadvantaged Community Considerations	10

FCPP applications will be scored according to the rubric above. The top-scoring applications will be short-listed. Short-listed applicants will be invited for a one-on-one presentation and interview between January 7 and January 11, 2019 **at SCAG’s offices**. All short-listed applicants will be scored as follows:

**Table 2: Individual Interview and Presentation Scoring Rubric**

Scoring Criteria	Point Value
Presentation	15 pts
Management Approach and Technical Capacity	
Project Readiness and Sustainability	

**Future Communities Pilot Project – Call For Projects Guidelines**  
SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

Scoring Criteria	Point Value
Value Added Opportunities/Benefits	
Interview	15 pts
Project Specific Interview Questions	

## EVALUATION PROCESS

SCAG will coordinate an internal review process for applications received. Review will include multidisciplinary teams from multiple SCAG planning groups. Each application will be scored by a minimum of three reviewers. Upon completion of the review process, SCAG will rank projects in accordance with the geographic representation and regional equity considerations required by each funding source to create a short-list of projects.

SCAG will then conduct one-on-one interviews with the short-listed applicants in each county to determine project readiness and availability of resources to successfully complete the projects. Applicants will be asked to provide a presentation on the project which will be followed by a standardized set of structured interview questions. Applicants should ensure that any critical personnel required for these meetings are available between January 7 and January 11, 2019.

Pending review of application details, SCAG reserves the right to request that potential grant recipients modify their proposed project scope of work to maximize the use of available funds. Final selection of grantee recipients will be based on the combined results of the technical application evaluation and interview. All one-on-one meetings will occur at SCAG’s main office building; however, in the spirit of reducing VMT, SCAG will coordinate videoconferencing with regional offices if necessary.

## SCHEDULE

The Call for Projects and the Pilot Program Period will both move quickly. The following schedule outlines important dates:

Milestone	Date
SCAG Future Communities Pilot Project Call for Applications Opens	November 1, 2018
Application Workshop #1	November 13, 2018
Application Workshop #2	December 4, 2018
Call for Project Application Deadline	December 13, 2018
One-on-One Meetings with Potential Awardees	January 7-11, 2019
SCAG Regional Council Approval of 2018 FCPP Application Rankings	February 7, 2019
Pilot Launch	Spring 2019
Pilot Programs Conclude	December 2020
Pilot Program Final Reporting	December 2020

## **TIMELY USE OF FUNDS AND TIME EXTENSIONS**

SCAG intends all selected projects to be completed in a timely manner and requires that applicants coordinate internal resources to ensure timely completion of the projects by December 31, 2020. A project initiation schedule and expectations regarding period of performance will be determined within three months of project award announcements and will be based on project complexity, funding source, and SCAG staff capacity.

Once the project schedule has been established, extensions will be considered on a case-by-case basis. Extensions and scope changes must be requested in letter format. All requests must include an explanation of the issues and actions the agency has taken to correct the issues. All extensions will be contingent on funding availability and the program requirements of the funding source assigned to the project when awarded. No extensions will be allowed beyond December 31, 2020.

## **SUBMITTAL INFORMATION**

Applications are due, via electronic submittal, by **December 13, 2018 by 5:00 p.m.** using the instructions provided in the application. Required application components include:

- Cover letter
- Signatory page
- FCPP application form
- Scope of Work and Management Plan
- Project schedule and proposed budget (including local match contribution)

Applications should include all supporting documents in a single PDF file. Files should be labeled using the format below:

- City/Agency Name\_Project Name.pdf
  - For example: SCAG\_Future-Communities-Pilot-Program.pdf

## **CONTACT INFORMATION**

Direct questions about the Future Communities Pilot Project application or process to:

Rye Baerg, Senior Regional Planner

(213) 236-1866

baerg@scag.ca.gov

or

Deanna Dupuy, Assistant Regional Planner

(213) 236-1884

dupuy@scag.ca.gov

# Future Communities Pilot Program Guidelines

Regional Council

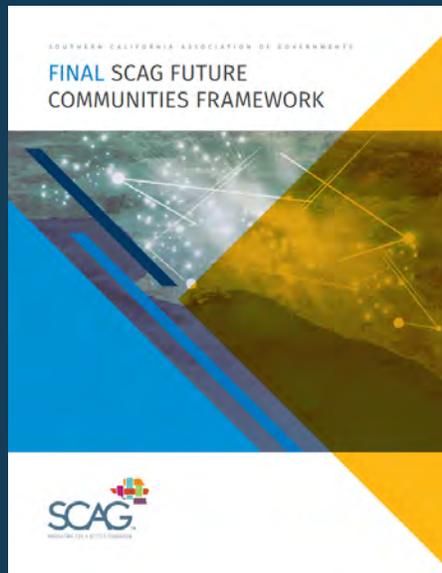
Rye Baerg

Senior Regional Planner, SCAG

November 1, 2018



## Future Communities Framework



Attachment: Future Communities (Future Communities Pilot Program Guidelines)

# Future Communities Pilot Projects

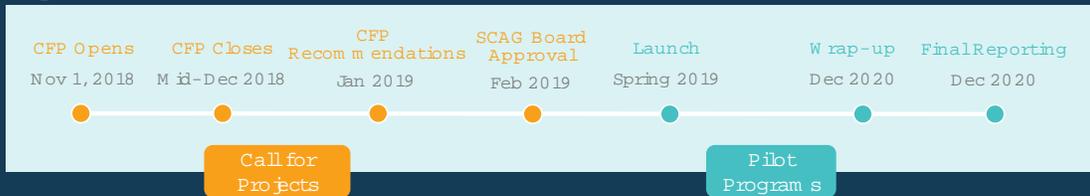


## Overview

- Available Funding: \$2.7 M
- 25% local match requirement
- Maximum project request \$500,000
- Pilot Projects must be located in South Coast Air Basin
- Research and Best Practices inform Connect SoCal (2020 RTP/SCS) and serve as local resource



## Key Dates



# Research: Expert Interview Takeaways



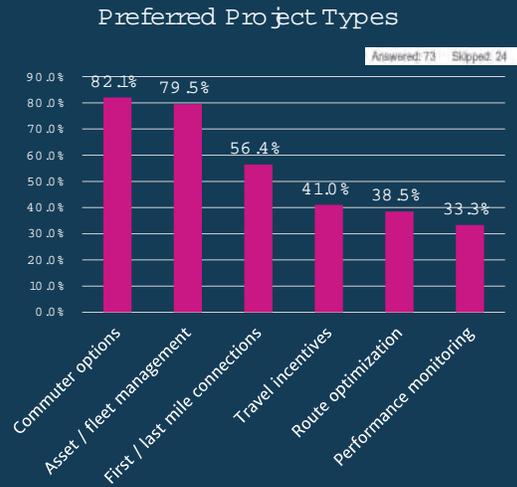
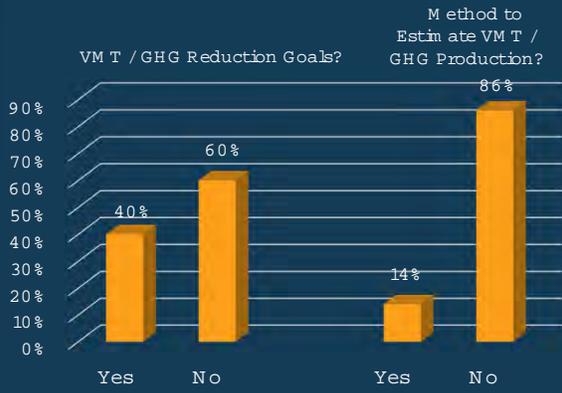
Interviewed 10 Experts

## Reoccurring Themes

- Many identified quality data as a gap in VMT reduction
- Opportunities for policy frameworks
- Three big VMT reduction moves
  - Pricing
  - Parking
  - Land Use
- Opportunities in fleet management

Academic/Researcher/Sustainability Policy
Applied Data Management
Emerging Technology
Fleet/Freight/Delivery
Municipal Planning or Operations
Private Sector Partnerships or Products
Transportation Demand Management

# Research: Readiness Survey Takeaways



# Search for New Ideas



M aking better use of data and technology



Attachment: Future Communities (Future Communities Pilot Program Guidelines)

## Search for New Ideas



Looking at all types of municipal operations

The screenshot shows a news article from the website 'GOVERNING THE STATES AND LOCALITIES'. The article is titled 'A Quiet Revolution in Trash Trucks' and is dated July 10, 2014, by Daniel C. Vock. The article's sub-headline reads: 'Garbage trucks get as little as 3 miles per gallon, making them prime targets in cities' efforts to trim costs and curb greenhouse gas pollution.' The main image shows a worker in a yellow safety suit loading a trash bin onto a white garbage truck. A smaller image below shows a white garbage truck parked on a city street.

## Search for New Ideas



Learning from different disciplines (e.g., economic incentives, behavioral science)

The poster is for a 'FINAL EVENT' for 'MOBIWALLET Mobility and Transport Digital Wallet'. The event is scheduled for September 27th, 2016, from 10:00h to 16:00h at the Palacio de la Magdalena in Santander, Spain. The poster features a list of sponsors on the left, including Indra, Ayuntamiento de Santander, UC, TST, Santander, Intec, Gest, Aleph, Gest, Finance, Dunav, and H. The background image shows a modern tram at a station at night. The MobiWallet logo is in the top right corner.

Attachment: Future Communities (Future Communities Pilot Program Guidelines)

## Program Goals



- Apply new technologies and data analytics to reduce emissions-producing VMT from local travel and municipal operations
- Explore opportunities for projects in a variety of contexts/communities (with consideration for disadvantaged communities)
- Improve efficiency and reduce costs of county and municipal services
- Identify and quantify relative impacts of a variety of technology-based VMT reduction strategies
- Promote replicable Pilot Projects

## Eligible Project Types—Examples



Analysis of Current Policy Contributions to VMT	Fleet Telematics	Internet of Things (IoT) Applications	Paratransit Service Optimization
Asset Management & Fleet Dispatch	Foundational Data/IT Infrastructure	Mobility as a Service (MaaS)	Remote Services
Curb-side Management	Incentives for Non-Auto Trips	New/Emerging VMT Sources	Route Optimization

## Evaluation Criteria



Scoring Criteria - Application	Point Value
Topic 1: Project Rationale	15 pts
Topic 2: Project Design	60 pts
Topic 3: Readiness and Sustainability	25 pts

Scoring Criteria - Interview	Point Value
Topic 1: Presentation	15 pts
Topic 2: Interview	15 pts

## Call for Projects Schedule



Milestone	Date
SCAG Future Communities Pilot Project Call for Applications Opens	November 1, 2018
Application Workshop # 1	November 13, 2018
Application Workshop # 2	December 4, 2018
Call for Project Application Deadline	December 13, 2018
One-on-One Meetings with Potential Awardees	January 7-11, 2019
SCAG Regional Council Approval of 2018 FCPP Awards	February 7, 2019
Pilot Launch	Spring 2019
Pilot Programs Conclude	December 2020
Pilot Program Final Reporting	December 2020

# Thank you

Rye Baerg

baerg@scag.ca.gov

213-236-1866





Southern California Association of Governments  
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017  
November 1, 2018

**To:** Energy & Environment Committee (EEC)  
Transportation Committee (TC)  
Community, Economic and Human Development Committee (CEHD)  
**From:** Kimberly Clark, Regional Planner Specialist, Research & Analysis, (213) 236-1844, Clark@scag.ca.gov  
**Subject:** Update on SCAG's Bottom-Up Local Input and Envisioning Process

INTERIM  
EXECUTIVE DIRECTOR'S  
APPROVAL

**RECOMMENDED ACTION FOR CEHD:**

For Information Only – No Action Required

**RECOMMENDED ACTION FOR TC and EEC:**

Receive and File

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians. 4: Provide innovative information and value-added services to enhance member agencies' planning and operations and promote regional collaboration.

**EXECUTIVE SUMMARY:**

*In preparation for adoption of the region's next RTP/SCS in Spring 2020, SCAG has been engaging with local jurisdictions, subregions, and other stakeholders to inform development of the Regional Housing Needs Assessment (RHNA) and Connect SoCal. SCAG's Bottom-Up Local Input and Envisioning Process kicked off in fall 2017 with a regional training and webinar, and staff have been engaging stakeholders to establish a clear picture of local existing conditions and best practices to help inform potential regional policy options. Over the course of the last year, SCAG staff have met one-on-one with every city, town, and county in the Southern California region to review the planning process and local data elements that will inform both the RHNA and Connect SoCal; SCAG also offered on-site technical assistance to over 90 agencies requesting additional help. The deadline for jurisdictions to provide feedback on SCAG's base data was October 1, 2018, and SCAG received feedback from 88% of jurisdictions on one or more data elements under local review.*

**BACKGROUND:**

Southern California will be facing new challenges in the development of the region's upcoming vision for the future – Connect SoCal; principally, transformational technologies in the transportation and employment sectors, new greenhouse gas (GHG) reduction targets from the California Air Resources Board (CARB), new Federal Highway Administration planning requirements, MAP 21 performance metrics/goals, and a concurrent Regional Housing Needs

Assessment (RHNA) cycle. Given these factors, it is important to establish a solid baseline of existing policies and plans to understand how Southern California can accommodate future growth and thrive in the coming decades.

To ensure that all jurisdictions are fully informed of the planning process and have clear and adequate opportunities to provide input, SCAG kicked off our Bottom-Up Local Input and Envisioning Process in fall 2017 to solicit local feedback on base land use data, anticipated population/household/employment growth, resource areas, sustainability practices, and transit-supportive measures to help decision makers understand how the region will perform under current circumstances in future years. Each jurisdiction was sent a detailed work plan during the first week of December 2017 to explain this process, identify support from subregional organizations, outline milestones, and provide instructions on submitting feedback. Several trainings have also been hosted throughout the region, and session content is available as webinars on SCAG's website.

To review this material and answer questions, SCAG staff met one-on-one with all 197 local jurisdictions in our region with the help of our subregional partners and offered on-site technical assistance to over 90 agencies requesting additional help. As of mid-October, 88% of jurisdictions (174) provided feedback on one or more of SCAG's data elements. 21 jurisdictions requested an extension of one to four weeks to review these data elements, and SCAG has granted all extensions on a case-by-case basis. For a complete listing of input provided by jurisdiction, please refer to Attachment 1. Moving forward, SCAG will be updating our datasets with input received to date. This information will then be used to develop potential scenarios for Connect SoCal through a structured and collaborative engagement with local jurisdictions, CTCs, a broad range of stakeholder groups, and the general public.

The 2020 RHNA will also be completed concurrently and in coordination with the Bottom-Up Local Input and Envisioning Process. The projection period for the 6th cycle of the RHNA will be from year 2021 to 2029. Staff will begin to meet with the California Department of Housing and Community Development (HCD) starting early next year to initiate the regional housing need determination process, after which a methodology will be reviewed and adopted by the RHNA Subcommittee, Community, Economic, and Human Development Policy Committee, and Regional Council. The regional determination will use input submitted during the Bottom-Up Local Input and Envisioning Process as the starting point for the RHNA allocation. SCAG plans to distribute the draft RHNA allocation to each jurisdiction in early winter 2020 and adopt the final RHNA allocation by October 2020. SCAG will continue to explore ways to maximize outreach and participation in the RHNA process.

**FISCAL IMPACT:**

Work associated with this item is included in the current FY 2018-2019 Overall Work Program (150-4069.04, Outreach and Technical Collaboration).

**ATTACHMENT(S):**

1. Input Received by Jurisdiction for SCAG's Bottom-Up Local Input and Envisioning Process (as of October 18, 2018)



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2. PowerPoint Presentation: Bottom Up Local Input Process

Input Received by Jurisdiction for SCAG's Bottom-Up Local Input and Envisioning Process  
October 19, 2018

ID	COUNTY	SUBREGION*	JURISDICTION	Input Received on One or More Data Elements**	Input on Geographic Data within GIS Data/Map Book	Input on Growth Forecast (Jurisdictional Level and/or TAZ Level) within GIS Data/Map Book	Input on Survey (PDF or Survey Monkey Submission)	Data Approval (GIS Data/Map)	Data Approval (Growth Forecast)	Data Input and Approval Form (or Other Form of Confirmation)	Subregional TAC Presentation	One on One Meeting Scheduled
1	Imperial	ICTC	Brawley	Input Received	Input Received	Input Received	-	-	-	10/2/2018	-	12/13/2017
2	Imperial	ICTC	Calexico	-	-	-	-	-	-	-	-	12/13/2017
3	Imperial	ICTC	Calipatria	Input Received	Input Received	-	-	-	-	-	-	12/12/2017
4	Imperial	ICTC	El Centro	Input Received	Input Received	Input Received	-	Approved	-	9/25/2018	-	12/12/2017
5	Imperial	ICTC	Holtville	Input Received	Input Received	-	-	-	-	-	-	12/12/2017
6	Imperial	ICTC	Imperial	Input Received	Input Received	-	-	-	-	-	-	12/11/2017
7	Imperial	ICTC	Unincorporated	-	-	-	-	-	-	-	-	12/11/2017
8	Imperial	ICTC	Westmorland	Input Received	Input Received	Input Received	-	Reviewing	-	-	-	6/12/2018
9	Los Angeles	Arroyo Verdugo	Burbank	-	-	-	-	-	-	-	-	4/17/2018
10	Los Angeles	Arroyo Verdugo	Glendale	Input Received	Input Received	Input Received	Input Received	-	-	10/1/2018	-	4/17/2018
11	Los Angeles	Arroyo Verdugo	La Canada Flintridge	Input Received	Input Received	Input Received	Input Received	Approved	-	9/5/2018	-	1/31/2018
12	Los Angeles	City of Los Angeles	Los Angeles	Input Received	Input Received	Input Received	Input Received	-	-	-	-	6/5/2018
13	Los Angeles	City of Los Angeles	San Fernando	Input Received	Input Received	Input Received	Input Received	Approved	Approved	8/27/2018	-	3/26/2018
14	Los Angeles	City of Los Angeles	Unincorporated	Input Received	Input Received	Input Received	Input Received	-	Approved	10/3/2018	-	6/13/2018
15	Los Angeles	GCCOG	Artesia	Extension Requested	-	-	-	-	-	-	-	6/12/2018
16	Los Angeles	GCCOG	Avalon	Input Received	Input Received	Input Received	Input Received	Reviewing	-	10/17/2018	-	5/31/2018
17	Los Angeles	GCCOG	Bell	Input Received	Input Received	-	-	-	-	-	-	5/22/2018
18	Los Angeles	GCCOG	Bell Gardens	-	-	-	-	-	-	-	-	5/14/2018
19	Los Angeles	GCCOG	Bellflower	Input Received	Input Received	Input Received	Input Received	-	-	10/12/2018	-	5/7/2018
20	Los Angeles	GCCOG	Cerritos	Input Received	Input Received	Input Received	Input Received	Reviewing	-	9/18/2018	-	5/16/2018
21	Los Angeles	GCCOG	Commerce	Input Received	Input Received	Input Received	Input Received	-	Approved	-	-	5/16/2018
22	Los Angeles	GCCOG	Compton	Input Received	Input Received	Input Received	Input Received	-	-	-	-	6/6/2018
23	Los Angeles	GCCOG	Cudahy	-	-	-	-	-	-	-	-	4/12/2018
24	Los Angeles	GCCOG	Downey	Input Received	Input Received	Input Received	Input Received	-	-	10/1/2018	-	5/14/2018
25	Los Angeles	GCCOG	Hawaiian Gardens	Input Received	Input Received	Input Received	-	Approved	-	10/4/2018	-	5/24/2018
26	Los Angeles	GCCOG	Huntington Park	-	-	-	-	-	-	-	-	5/15/2018
27	Los Angeles	GCCOG	La Habra Heights	-	-	-	-	-	-	-	-	5/30/2018
28	Los Angeles	GCCOG	La Mirada	Input Received	-	-	Input Received	-	-	-	-	5/10/2018
29	Los Angeles	GCCOG	Lakewood	Input Received	Input Received	-	Input Received	-	-	-	-	6/7/2018
30	Los Angeles	GCCOG	Long Beach	Input Received	Input Received	Input Received	Input Received	-	-	-	-	5/22/2018
31	Los Angeles	GCCOG	Lynwood	-	-	-	-	-	-	-	-	6/4/2018
32	Los Angeles	GCCOG	Maywood	-	-	-	-	-	-	-	-	7/3/2018
33	Los Angeles	GCCOG	Norwalk	Input Received	Input Received	Input Received	Input Received	Approved	-	9/26/2018	-	5/30/2018
34	Los Angeles	GCCOG	Paramount	Input Received	Input Received	Input Received	-	Reviewing	-	10/2/2018	-	6/5/2018
35	Los Angeles	GCCOG	Pico Rivera	Extension Requested	-	-	-	-	-	-	-	5/15/2018
36	Los Angeles	GCCOG	Santa Fe Springs	Input Received	Input Received	Input Received	-	-	-	10/1/2018	-	5/17/2018
37	Los Angeles	GCCOG	Signal Hill	Input Received	Input Received	Input Received	-	-	Approved	10/1/2018	-	5/21/2018
38	Los Angeles	GCCOG	South Gate	Input Received	-	-	Input Received	-	-	-	-	5/23/2018
39	Los Angeles	GCCOG	Vernon	Input Received	Input Received	Input Received	Input Received	Approved	Approved	9/10/2018	-	5/31/2018
40	Los Angeles	GCCOG	Whittier	-	-	-	-	-	-	-	-	6/12/2018
41	Los Angeles	Las Virgenes Malibu COG	Agoura Hills	Input Received	Input Received	Input Received	Input Received	-	-	9/27/2018	-	2/15/2018
42	Los Angeles	Las Virgenes Malibu COG	Calabasas	Input Received	Input Received	Input Received	Input Received	Approved	-	5/31/2018	-	3/6/2018
43	Los Angeles	Las Virgenes Malibu COG	Hidden Hills	-	-	-	-	-	-	-	-	3/20/2018
44	Los Angeles	Las Virgenes Malibu COG	Malibu	Input Received	Input Received	Input Received	Input Received	-	-	10/1/2018	-	3/15/2018
45	Los Angeles	Las Virgenes Malibu COG	Westlake Village	Input Received	Input Received	Input Received	Input Received	Reviewing	Approved	8/22/2018	-	6/6/2018
46	Los Angeles	North Los Angeles County	Lancaster	Extension Requested	-	-	-	-	-	-	-	4/2/2018
47	Los Angeles	North Los Angeles County	Palmdale	Input Received	Input Received	Input Received	Input Received	-	-	9/27/2018	-	5/29/2018
48	Los Angeles	North Los Angeles County	Santa Clarita	Extension Requested	-	-	-	-	-	-	-	3/5/2018
49	Los Angeles	SBCCOG	Carson	-	-	-	-	-	-	-	-	4/12/2018
50	Los Angeles	SBCCOG	El Segundo	Input Received	Input Received	-	Input Received	-	-	-	-	4/19/2018
51	Los Angeles	SBCCOG	Gardena	Input Received	Input Received	Input Received	Input Received	Approved	Approved	9/27/2018	-	6/8/2018
52	Los Angeles	SBCCOG	Hawthorne	Input Received	Input Received	Input Received	Input Received	-	-	-	-	4/9/2018
53	Los Angeles	SBCCOG	Hermosa Beach	Input Received	Input Received	Input Received	Input Received	-	-	10/2/2018	-	6/14/2018
54	Los Angeles	SBCCOG	Inglewood	Extension Requested	-	-	-	-	-	-	-	2/5/2018
55	Los Angeles	SBCCOG	Lawndale	Input Received	-	-	Input Received	-	-	-	-	4/9/2018
56	Los Angeles	SBCCOG	Lomita	Input Received	Input Received	Input Received	Input Received	-	Approved	9/14/2018	-	4/12/2018
57	Los Angeles	SBCCOG	Manhattan Beach	Input Received	Input Received	Input Received	Input Received	-	-	10/1/2018	-	4/10/2018
58	Los Angeles	SBCCOG	Palos Verdes Estates	Input Received	-	-	Input Received	-	-	-	-	6/14/2018
59	Los Angeles	SBCCOG	Rancho Palos Verdes	Input Received	Input Received	Input Received	-	Reviewing	-	10/1/2018	-	4/16/2018
60	Los Angeles	SBCCOG	Redondo Beach	Input Received	Input Received	Input Received	Input Received	-	-	9/27/2018	-	4/18/2018
61	Los Angeles	SBCCOG	Rolling Hills	Input Received	Input Received	-	-	-	-	-	-	4/30/2018
62	Los Angeles	SBCCOG	Rolling Hills Estates	Input Received	-	-	Input Received	-	-	-	-	4/16/2018
63	Los Angeles	SBCCOG	Torrance	Input Received	Input Received	Input Received	Input Received	Approved	-	10/1/2018	-	6/11/2018
64	Los Angeles	SGVCOG	Alhambra	Input Received	-	-	Input Received	-	-	-	11/30/2017	2/20/2018
65	Los Angeles	SGVCOG	Arcadia	-	-	-	-	-	-	-	11/30/2017	2/14/2018
66	Los Angeles	SGVCOG	Azusa	-	-	-	-	-	-	-	11/30/2017	3/22/2018
67	Los Angeles	SGVCOG	Baldwin Park	Input Received	Input Received	Input Received	Input Received	Reviewing	-	9/26/2018	11/30/2017	2/12/2018
68	Los Angeles	SGVCOG	Bradbury	Input Received	Input Received	Input Received	Input Received	-	-	-	11/30/2017	3/14/2018
69	Los Angeles	SGVCOG	Claremont	Input Received	Input Received	-	-	Reviewing	-	-	11/30/2017	3/8/2018
70	Los Angeles	SGVCOG	Covina	Input Received	Input Received	Input Received	-	-	-	-	11/30/2017	3/20/2018
71	Los Angeles	SGVCOG	Diamond Bar	Input Received	Input Received	Input Received	-	Reviewing	-	9/26/2018	11/30/2017	2/26/2018
72	Los Angeles	SGVCOG	Duarte	Input Received	Input Received	-	-	-	-	-	11/30/2017	2/13/2018
73	Los Angeles	SGVCOG	El Monte	Input Received	Input Received	Input Received	Input Received	-	Approved	10/1/2018	11/30/2017	1/17/2018
74	Los Angeles	SGVCOG	Glendora	Input Received	Input Received	Input Received	Input Received	Reviewing	-	-	11/30/2017	2/8/2018
75	Los Angeles	SGVCOG	Industry	Extension Requested	-	-	-	-	-	-	11/30/2017	3/6/2018
76	Los Angeles	SGVCOG	Irwindale	Input Received	Input Received	Input Received	Input Received	-	-	-	11/30/2017	3/15/2018
77	Los Angeles	SGVCOG	La Puente	Input Received	-	-	Input Received	-	-	10/1/2018	11/30/2017	2/21/2018
78	Los Angeles	SGVCOG	La Verne	Input Received	Input Received	Input Received	Input Received	-	-	-	11/30/2017	2/22/2018
79	Los Angeles	SGVCOG	Monrovia	Input Received	Input Received	Input Received	-	Approved	-	10/8/2018	11/30/2017	2/7/2018
80	Los Angeles	SGVCOG	Montebello	-	-	-	-	-	-	-	11/30/2017	3/20/2018
81	Los Angeles	SGVCOG	Monterey Park	-	-	-	-	-	-	-	11/30/2017	1/29/2018
82	Los Angeles	SGVCOG	Pasadena	Input Received	Input Received	-	Input Received	-	-	-	11/30/2017	1/31/2018
83	Los Angeles	SGVCOG	Pomona	Input Received	Input Received	-	-	-	-	-	11/30/2017	2/22/2018
84	Los Angeles	SGVCOG	Rosemead	Input Received	Input Received	-	-	-	-	-	11/30/2017	2/12/2018
85	Los Angeles	SGVCOG	San Dimas	Input Received	Input Received	Input Received	-	-	-	10/1/2018	11/30/2017	2/8/2018
86	Los Angeles	SGVCOG	San Gabriel	Extension Requested	-	-	-	-	-	-	11/30/2017	4/4/2018
87	Los Angeles	SGVCOG	San Marino	Input Received	Input Received	-	Input Received	Approved	-	10/2/2018	11/30/2017	3/15/2018
88	Los Angeles	SGVCOG	Sierra Madre	Input Received	Input Received	Input Received	Input Received	Approved	-	9/26/2018	11/30/2017	2/7/2018
89	Los Angeles	SGVCOG	South El Monte	Input Received	Input Received	-	Input Received	Approved	-	8/7/2018	11/30/2017	2/21/2018
90	Los Angeles	SGVCOG	South Pasadena	Input Received	-	-	Input Received	-	-	-	11/30/2017	2/20/2018
91	Los Angeles	SGVCOG	Temple City	Input Received	Input Received	Input Received	Input Received	Approved	-	8/1/2018	11/30/2017	1/29/2018
92	Los Angeles	SGVCOG	Walnut	Input Received	Input Received	Input Received	Input Received	Approved	-	6/27/2018	11/30/2017	2/14/2018
93	Los Angeles	SGVCOG	West Covina	Input Received	Input Received	Input Received	Input Received	-	-	10/1/2018	11/30/2017	2/26/2018
94	Los Angeles	WCCOG	Beverly Hills	Input Received	Input Received	-	Input Received	-	-	10/1/2018	-	6/7/2018
95	Los Angeles	WCCOG	Culver City	Input Received	Input Received	Input Received	Input Received	Approved	Approved	10/1/2018	-	6/13/2018
96	Los Angeles	WCCOG	Santa Monica	Input Received	Input Received	-	-	-	-	10/17/2018	-	6/4/2018
97	Los Angeles	WCCOG	West Hollywood	Extension Requested	-	-	-	-	-	-	-	5/30/2018
98	Orange	OCCOG	Aliso Viejo	Input Received	Input Received	Input Received	Input Received	Approved	-	9/27/2018	12/5/2017	3/27/2018
99	Orange	OCCOG	Anaheim	Input Received	Input Received	Input Received	Input Received	-	-	-	12/5/2017	3/27/2018
100	Orange	OCCOG	Brea	Input Received	Input Received	Input Received	Input Received	Approved	-	10/4/2018	12/5/2017	3/19/2018
101	Orange	OCCOG	Buena Park	Input Received	Input Received	Input Received	Input Received	-	-	-	12/5/2017	3/8/2018
102	Orange	OCCOG	Costa Mesa	Input Received	Input Received	Input Received	Input Received	-	-	10/8/2018	12/5/2017	3/21/2018
103	Orange	OCCOG	Cypress	Input Received	Input Received	Input Received	Input Received	-	-	-	12/5/2017	3/27/2018
104	Orange	OCCOG	Dana Point	Input Received	Input Received	Input Received	Input Received	Approved	-	8/9/2018	12/5/2017	3/13/2018
105	Orange	OCCOG	Fountain Valley	Input Received	Input Received	Input Received	Input Received	-	-	10/3/2018	12/5/2017	3/21/2018
106	Orange	OCCOG	Fullerton	Input Received	Input Received	Input Received	Input Received	-	-	-	12/5/2017	3/21/2018
107	Orange	OCCOG	Garden Grove	Input Received	Input Received	Input Received	Input Received	Approved	-	9/24/2018	12/5/2017	3/14/2018
108	Orange	OCCOG	Huntington Beach	Input Received	Input Received	Input Received	Input Received	-	-	9/28/2018	12/5/2017	3/20/2018
109	Orange	OCCOG	Irvine	Input Received	Input Received	Input Received	Input Received	-	-	-	12/5/2017	3/7/2018
110	Orange	OCCOG	La Habra	Input Received	Input Received	Input Received	Input Received	-	-	10/1/2018	12/5/2017	3/19/2018
111	Orange	OCCOG	La Palma	Input Received	Input Received	Input Received	Input Received	-	-	-	12/5/2017	3/20/2018
112	Orange	OCCOG	Laguna Beach	Input Received	Input Received	Input Received	Input Received	-	-	-	12/5/2017	3/28/2018
113	Orange	OCCOG	Laguna Hills	Input Received	Input Received	Input Received	-	-	-	-	12/5/2017	3/7/2018
114	Orange	OCCOG	Laguna Niguel	Input Received	Input Received	Input Received	Input Received	-	-	-	12/5/2017	3/19/2018
115	Orange	OCCOG	Laguna Woods	Input Received	Input Received	Input Received	-	Approved	-	-	12/5/2017	3/12/2018
116	Orange	OCCOG	Lake Forest	Input Received	Input Received	Input Received	Input Received	-	-	-	12/5/2017	3/8/2018
117	Orange	OCCOG	Los Alamitos	Input Received	Input Received	Input Received	-	Approved	-	9/10/2018	12/5/2017	3/14/2018
118	Orange	OCCOG	Mission Viejo	Input Received	Input Received	Input Received	Input Received	-	-	-	12/5/2017	3/19/2018
11												

Input Received by Jurisdiction for SCAG's Bottom-Up Local Input and Envisioning Process  
October 15, 2018

ID	COUNTY	SUBREGION*	JURISDICTION	Input Received on One or More Data Elements**	Input on Geographic Data within GIS Data/Map Book	Input on Growth Forecast (Jurisdictional Level and/or TAZ Level) within GIS Data/Map Book	Input on Survey (PDF or Survey Monkey Submission)	Data Approval (GIS Data/Map)	Data Approval (Growth Forecast)	Data Input and Approval Form (or Other Form of Confirmation)	Subregional TAC Presentation	One on One Meeting Scheduled
167	San Bernardino	SBCTA	Chino Hills	Input Received	Input Received	Input Received	-	-	-	10/16/2018		3/26/2018
168	San Bernardino	SBCTA	Colton	Input Received	Input Received	Input Received	-	Reviewing	-	5/15/2018		4/18/2018
169	San Bernardino	SBCTA	Fontana	Input Received	Input Received	Input Received	Input Received	-	-	9/27/2018		3/26/2018
170	San Bernardino	SBCTA	Grand Terrace	Input Received	Input Received	Input Received	Input Received	Reviewing	-	-		4/19/2018
171	San Bernardino	SBCTA	Hesperia	Input Received	Input Received	Input Received	Input Received	Reviewing	Approved	-		3/29/2018
172	San Bernardino	SBCTA	Highland	Input Received	Input Received	Input Received	-	-	-	10/2/2018		3/20/2018
173	San Bernardino	SBCTA	Loma Linda	Input Received	-	Input Received	-	-	-	10/18/2018		4/25/2018
174	San Bernardino	SBCTA	Montclair	Input Received	Input Received	Input Received	Input Received	-	-	10/1/2018		4/19/2018
175	San Bernardino	SBCTA	Needles	Input Received	Input Received	Input Received	-	-	-	-		5/31/2018
176	San Bernardino	SBCTA	Ontario	Input Received	Input Received	Input Received	Input Received	-	-	10/1/2018		3/27/2018
177	San Bernardino	SBCTA	Rancho Cucamonga	Input Received	Input Received	Input Received	-	-	-	10/18/2018		3/27/2018
178	San Bernardino	SBCTA	Redlands	Input Received	Input Received	Input Received	Input Received	-	-	10/1/2018		4/26/2018
179	San Bernardino	SBCTA	Rialto	Input Received	Input Received	Input Received	-	-	-	-		5/7/2018
180	San Bernardino	SBCTA	San Bernardino	Input Received	-	Input Received	Input Received	-	-	-		4/23/2018
181	San Bernardino	SBCTA	Twentynine Palms	Input Received	Input Received	Input Received	Input Received	Reviewing	Approved	10/15/2018		3/21/2018
182	San Bernardino	SBCTA	Unincorporated	Input Received	Input Received	Input Received	Input Received	-	-	10/2/2018		-
183	San Bernardino	SBCTA	Upland	Input Received	Input Received	Input Received	-	-	-	-		4/18/2018
184	San Bernardino	SBCTA	Victorville	Input Received	Input Received	Input Received	-	-	Approved	9/27/2018		3/15/2018
185	San Bernardino	SBCTA	Yucaipa	Input Received	Input Received	Input Received	Input Received	Reviewing	-	9/20/2018		4/24/2018
186	San Bernardino	SBCTA	Yucaipa Valley	Input Received	Input Received	Input Received	-	-	-	10/5/2018		3/21/2018
187	Ventura	VCOG	Camarillo	Input Received	Input Received	Input Received	-	Reviewing	-	7/10/2018		4/26/2018
188	Ventura	VCOG	Fillmore	-	-	-	-	-	-	-		3/6/2018
189	Ventura	VCOG	Moorpark	Input Received	Input Received	Input Received	Input Received	-	Approved	10/1/2018		3/22/2018
190	Ventura	VCOG	Ojai	Input Received	Input Received	Input Received	Input Received	-	Approved	10/1/2018		6/12/2018
191	Ventura	VCOG	Oxnard	Input Received	Input Received	Input Received	-	-	-	9/27/2018		4/3/2018
192	Ventura	VCOG	Port Hueneme	Input Received	Input Received	Input Received	Input Received	-	-	9/27/2018		4/11/2018
193	Ventura	VCOG	San Buenaventura	Input Received	Input Received	Input Received	Input Received	-	-	9/27/2018		4/26/2018
194	Ventura	VCOG	Santa Paula	Input Received	Input Received	Input Received	Input Received	-	-	10/1/2018		5/8/2018
195	Ventura	VCOG	Simi Valley	Input Received	Input Received	Input Received	Input Received	-	-	10/8/2018		4/25/2018
196	Ventura	VCOG	Thousand Oaks	Input Received	Input Received	Input Received	Input Received	-	-	10/1/2018		3/15/2018
197	Ventura	VCOG	Unincorporated	Input Received	Input Received	Input Received	Input Received	-	-	10/1/2018		4/23/2018
			<b>Input</b>	<b>174</b>	<b>147</b>	<b>138</b>	<b>113</b>	<b>0</b>	<b>0</b>	<b>101</b>	<b>65</b>	<b>196</b>
			Remaining Jurisdictions	23	50	59	84	150	180	96	132	1
			Percent Completed	88%	75%	70%	57%	0%	0%	51%	33%	99%

**KEY**

STATUS	Input Received	Extension Requested
	Input was received from local jurisdiction on one or more data elements	Local jurisdiction has requested additional time to provide feedback on one or more datasets

\* Note: Many jurisdictions belong to more than one subregion. For the purposes of tracking input and avoiding double-counting, SCAG assigns a primary subregion for each jurisdiction

# Update on the Bottom-Up Local Input and Envisioning Process for the 2020 RTP/SCS and RHNA

Community, Economic, and Human Development  
Committee

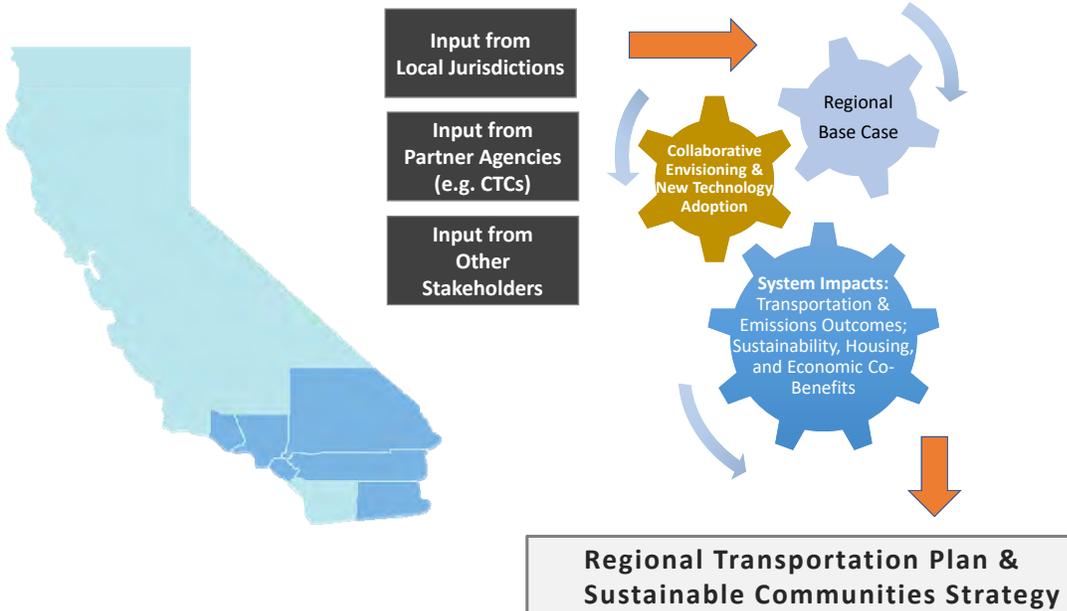
Kimberly Clark

Regional Planner Specialist

November 1, 2018

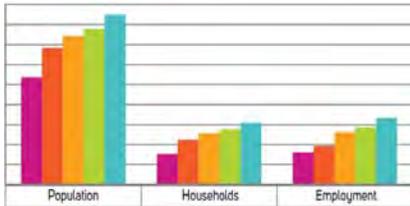


## 2020 RTP/SCS Plan Development Process

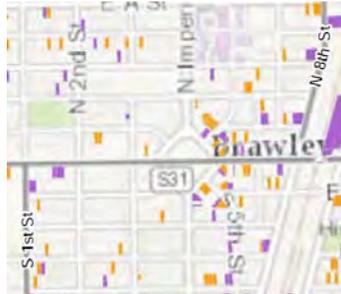


# 2020 RTP/SCS Plan Development Process

## *Regional Base Case*



*Current and Future  
Population, Households, Employment*



*Existing and Planned Land Use,  
Local Transportation Infrastructure,  
Resource Areas, Potential Infill Parcels*



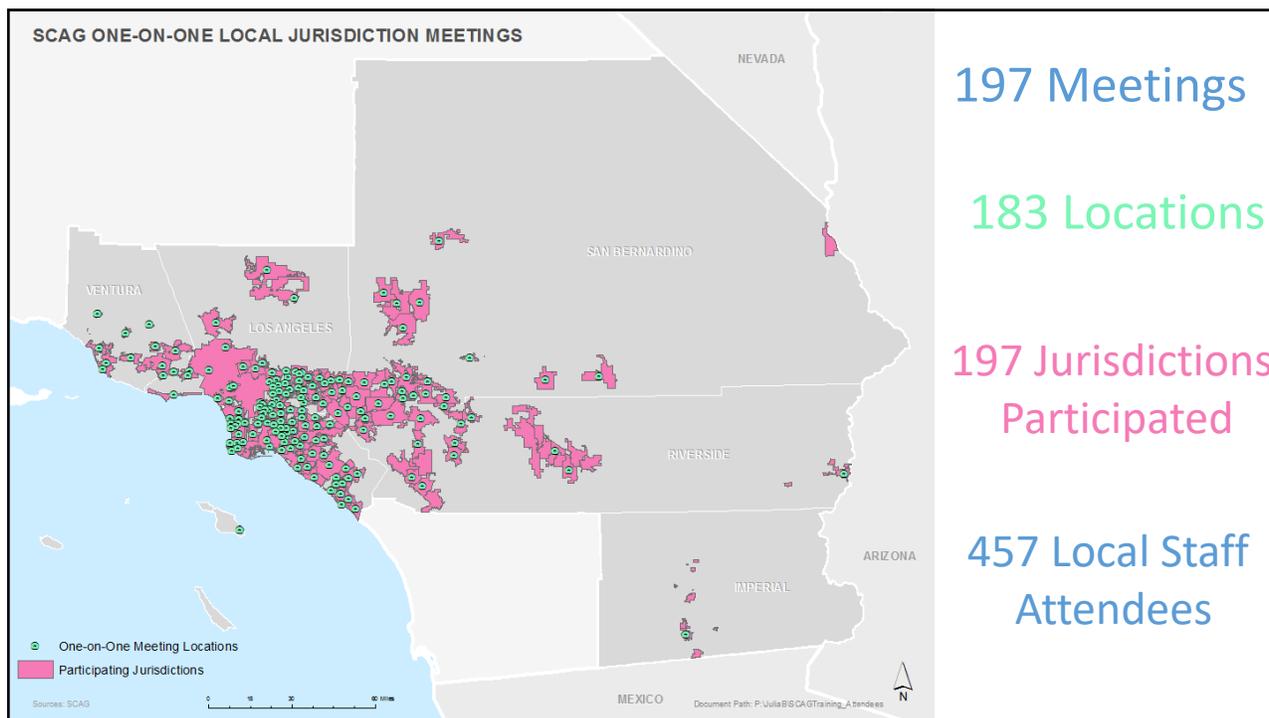
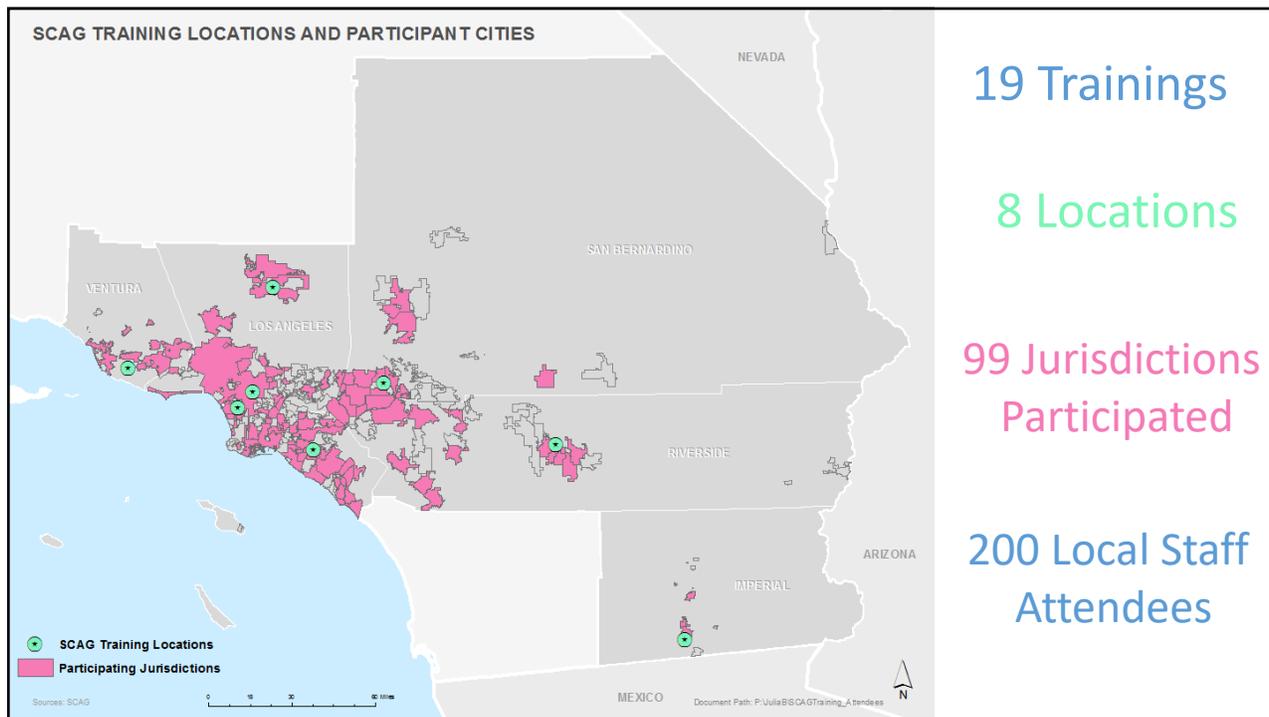
*Sustainability Best Practices,  
Transit Supportive Measures*

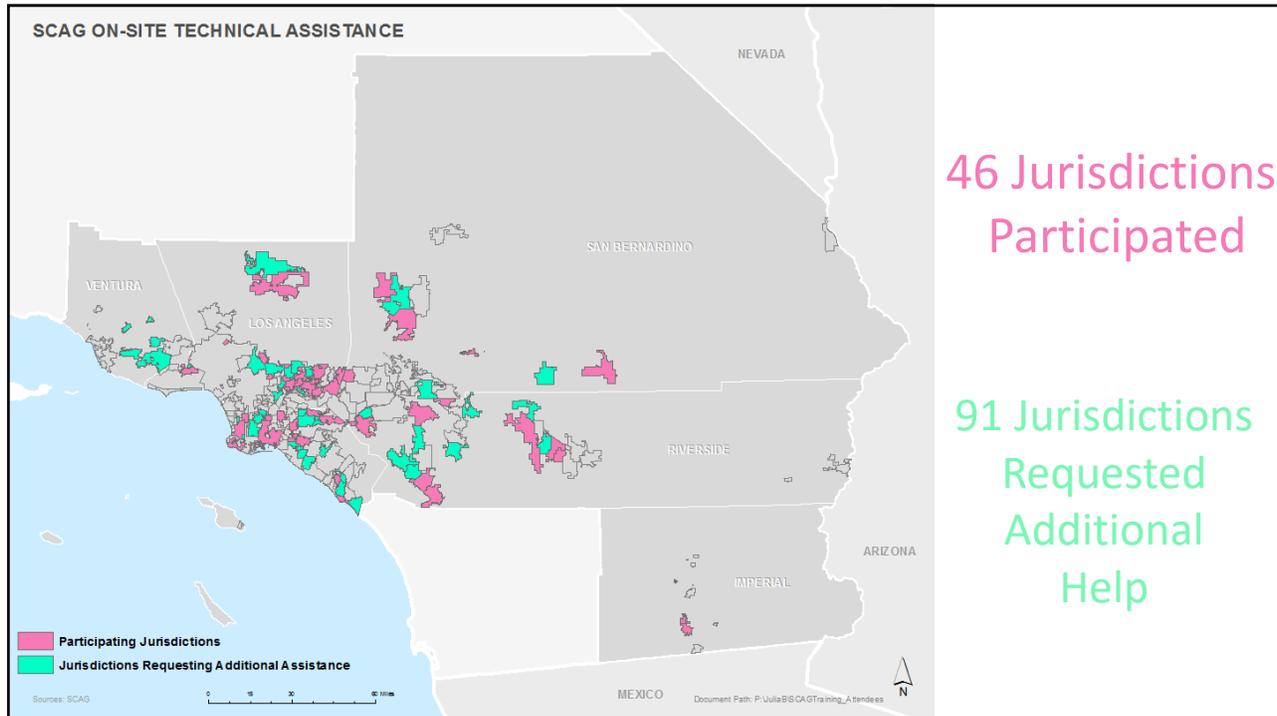
# Bottom-Up Local Input and Envisioning Process

## *Outreach to Date*

- 197 Letters and Work Plans Distributed to Local Jurisdictions
- 197 One-on-One Meetings
- 80 Jurisdictions Offered On-Site Technical Assistance
- 21 Subregional Presentations
- 19 Regional and Classroom-Style Trainings
- 1 City Council Study Session







## Bottom-Up Local Input and Envisioning Process

In preparation for adoption of Southern California's next Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS) in spring 2020, SCAG will be engaging with local jurisdictions, subregions, and other stakeholders to inform development of the upcoming Plan. SCAG's Bottom-Up Local Input and Envisioning Process is being conducted to solicit feedback from local jurisdictions on base land use, anticipated population/household/employment growth, resource areas, sustainability practices, and local transit-supportive measures to help decision makers understand how the region will perform under current circumstances in future years.

This information will then be used to develop potential scenarios for the 2020 RTP/SCS, through a structured and collaborative engagement with local jurisdictions, county transportation commissions, a broad range of stakeholder groups, and the general public. Input from jurisdictions on locally anticipated household and population growth will also be used by SCAG as part of the regional housing need determination process with the California Department of Housing and Community Development (HCD).

For ease of review, core data items have been mapped in draft format and assembled in an individual map book for each local jurisdiction (available below). County-level maps showing the first draft of anticipated growth are also accessible for review.

### Draft Data/Map Books

To request draft high-quality maps and shapefiles of SCAG's Data/Map Book or related materials, please contact [RTPLocalInput@scag.ca.gov](mailto:RTPLocalInput@scag.ca.gov).

Please note that SCAG's draft data is undergoing refinement based on feedback from local jurisdictions, and material included here is subject to revision; inquiries for official data should be directed to each respective local jurisdiction.

**IN THIS SECTION** ▾

- [Draft Data/Map Books](#)
- [Training Materials](#)
- [Regional Housing Needs Assessment](#)
- [Bottom-Up Local Input & Envisioning Process](#)

<b>Imperial County</b>	
<ul style="list-style-type: none"> <li>• Brawley</li> <li>• Calexico</li> <li>• Calipatria</li> <li>• El Centro</li> <li>• Holtville</li> <li>• Imperial</li> <li>• Imperial County (Unincorporated Area)</li> <li>• Westmorland</li> <li>• Imperial County-Wide Socioeconomic Data Map (Household)</li> <li>• Imperial County-Wide Socioeconomic Data Map (Employment)</li> <li>• Regional Entitlements Map</li> </ul>	
<b>Los Angeles County</b>	+
<b>Orange County</b>	+
<b>Riverside County</b>	+
<b>San Bernardino County</b>	+
<b>Ventura County</b>	+

**Training Materials**



On October 31, 2017, SCAG held a regional training on the Bottom-Up Local Input and Envisioning Process to help local jurisdictions and other stakeholders understand how this early stage of data refinement will impact the RTP/SCS and Regional Housing Needs Assessment (RHNA).

[Watch the Video](#)

**Regional Housing Needs Assessment**



The Regional Housing Needs Assessment (RHNA) is mandated by State Housing Law as part of the periodic process of updating local housing elements of the General Plan.

[View the Factsheet](#)

**Bottom-Up Local Input & Envisioning Process**



SCAG will engage with jurisdictions one-on-one to establish a regional profile of base land use, population, household and employment growth, resource areas, sustainability practices, and local transit-supportive plans and policies.

[More Information](#)

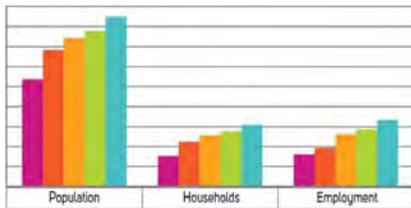
## Deadline to Submit Input to SCAG

# October 1<sup>st</sup>, 2018

For additional information on this process, including a detailed work plan, please contact SCAG staff at [RTPLocalInput@scag.ca.gov](mailto:RTPLocalInput@scag.ca.gov).

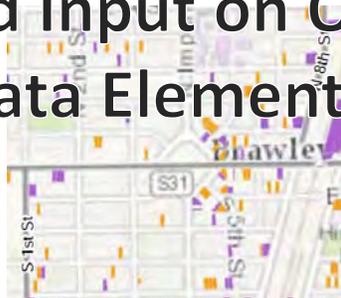
## 2020 RTP/SCS Plan Development Process *Regional Base Case*

# 88% Provided Input on One or More Data Elements



Current and Future  
Population, Households, Employment

75%



Existing and Planned Land Use,  
Local Transportation Infrastructure,  
Resource Areas, Potential Infill Parcels

70%



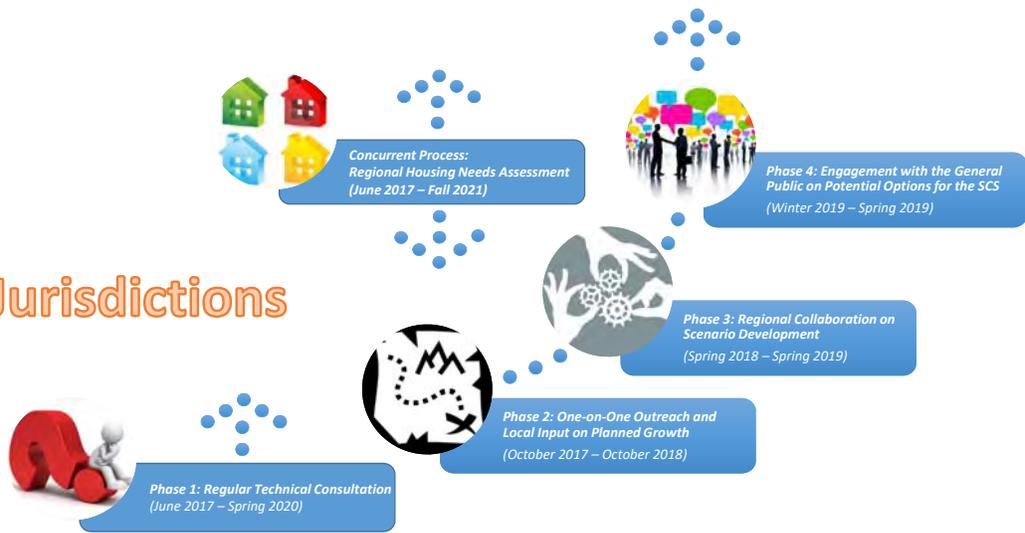
Sustainability Best Practices,  
Transit Supportive Measures

57%

## Bottom-Up Local Input and Envisioning Process *Phases and Schedule*

2020 RTP/SCS

197 Jurisdictions



# Thank you

Kimberly Clark

[clark@scag.ca.gov](mailto:clark@scag.ca.gov)

213-236-1844





Southern California Association of Governments  
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017  
November 1, 2018

**To:** Transportation Committee (TC)  
**From:** Matthew Gleason, Senior Regional Planner, Transit/Rail, (213)  
236-1832, gleason@scag.ca.gov  
**Subject:** Transit Climate Adaptation and Resiliency Assessment

INTERIM  
EXECUTIVE DIRECTOR'S  
APPROVAL

**RECOMMENDED ACTION:**

Receive and File

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians.

**EXECUTIVE SUMMARY:**

*Work recently concluded on the Transit Climate Adaptation and Resiliency assessment, an 18-month effort to provide a toolbox of resources that local providers of public transportation could use to incorporate resilience to the impacts of global climate change into their planning, contracting, and asset management practices. The report below provides an overview of the project and its products.*

**BACKGROUND:**

At its February 15, 2013 meeting, the High-Speed Rail and Transit Subcommittee directed staff to pursue efforts to improve the resiliency of the region's transit systems in the face of natural disasters. Subsequent to that direction, staff applied for and received a grant to assist local providers of public transportation incorporate climate change resiliency into their planning. The grant was used to fund the production of a toolbox of resources.

**PROJECT AIMS AND OBJECTIVES:**

The Transit Climate Adaptation and Resiliency effort sought to evaluate the potential effects of changes in climate stressors, and developed resources to aid local agency staff in incorporating climate change adaptation strategies into their planning processes, to ensure system resiliency. The study team developed a toolbox of resources, provided an asset class based inventory of regional transit assets, sought out regional climate forecast information, and performed a high level assessment of vulnerability to, and risk from, climate stressors. Work concluded in June 2018, and the resources are available at:

<http://scagmain-auth/programs/Pages/Adaptation-and-Resilience-Planning.aspx>.

This effort's methodology included producing a toolbox of resources to be used to identify critical assets and routes; integrate climate considerations into local and regional planning processes; and implement adaptation practices to improve transit system resilience while complying with state and

federal regulations. These resources were developed via a collaborative process with local agencies, through in-person workshops and panel reviews, to develop a toolbox of resources that will assist transit agencies in completing these activities with limited resources. This project, including the final “Climate Resilience Toolbox”, achieved the following five objectives through engagement with transit agencies and completion of project deliverables:

- **Objective 1 – Provide an actionable climate adaptation and resilience plan.** The Toolbox empowers transit agencies to conduct their own high level criticality and vulnerability assessments efficiently and cost-effectively, enabling them to quickly move to adaptation planning and implementation.
- **Objective 2 - Identify critical assets and routes.** Through collaboration workshops with local transit agencies, resources for determining the criticality of existing transit assets were developed.
- **Objective 3 - Integrate climate change forecast data.** The Toolbox provides guidance for transit agency staff seeking to access and apply local climate change projection data. The toolbox also includes a summary of projected changes in climate in the SCAG Region, reducing the need for transit agencies to locate and interpret projected climate trends themselves.
- **Objective 4 - Increase regional transit system disaster recovery and resilience.** Collaborative workshops allowed us to work with local transit agencies to begin and continue to promote transit system resilience. The Toolbox also includes resources to assist agencies in pursuing climate resiliency initiatives.
- **Objective 5 - Support local planning efforts.** The Toolbox includes guidance for integrating climate change information and considerations into existing processes, including those required by local or federal standards.

#### **OUTREACH:**

Local agency input was key to the effort. This study was presented to the Regional Transit Technical Advisory Committee in May 2017, November 2017, and April 2018.

In addition, there were three outreach workshops with invited staff from participating transit agencies. The first workshop focused on vulnerability and criticality. The consultant team shared climate forecast information and exposure maps, illustrated how routes might be exposed to key stressors, and provided guidance for obtaining climate information in a cost-effective manner. The second two workshops focused on potential adaptation strategies, evaluating their feasibility and effectiveness, and developing a framework for incorporating these strategies into normal agency processes, including planning, procurement, and asset management.

**THE TOOLBOX:**

The project team prepared a series of resources. The final adaptation toolbox includes eleven different elements, based on input from the workshop process, and intended to help guide providers to improve their resilience climate change related stresses.

#	Resource Name	Purpose
1	Projected Changes in Climate in the SCAG Region	Overview of projected changes in sea level, extreme precipitation, inland flooding, and extreme heat across the SCAG region.
2	Assessing Vulnerability and Consequences: Getting Started	Guidance on articulating goals, refining the assessment focus, and using available frameworks and other resources.
3	Integrating Climate Change into Transit Planning Processes	Overview of how climate change resiliency can be worked into three key transit processes: procurement/contracting, transit asset management, and short range transit plans.
4	How to Obtain Detailed Climate Projection Data	For some analyses, detailed data are needed. This resource provides guidance on where and how to obtain this information.
5	Assessing Criticality	Some agencies may wish to focus efforts on the most critical components of their system. Different approaches for assessing criticality are discussed, and a scoring system to rank assets based on criticality is presented. The accompanying Excel spreadsheet helps automate criticality calculations.
6	Sensitivity Matrix	Simple to use Excel matrix discusses how common transit assets may be sensitive to changes in climate.
7	Example Adaptation Measures	Discusses different categories of adaptation measures, and gives examples of actual adaptation measures being implemented by transit agencies. The accompanying Excel file allows these measures to be filtered by type.
8	Tips for Selecting and Implementing Adaptation Measures	Provides suggestions to consider when determining which adaptation measures are right for your agency.
9	Climate Resilience Planning Template	Simple template that outlines roles, responsibilities, timelines, and key next steps in the resiliency planning process.
10	Contingency Plan Template	Template for developing a contingency plan in advance of adverse climate events.
11	Transit Resiliency Funding Opportunities	Profiles five state and federal grant programs that could be used to fund resiliency efforts.

**FISCAL IMPACT:**

This project is complete and was funded in the FY 2017-18 OWP under Work Element No 18-145.SCG03475.01. Work on this project was funded through a Caltrans FTA 5304 Statewide and Urban Transit Planning Grant.



Southern California Association of Governments  
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017  
November 1, 2018

**To:** Community  
Economic & Human Development Committee (CEHD)  
Transportation Committee (TC)  
Energy and Environment Committee (EEC)  
**From:** Grieg Asher, Program Manager I, Sustainability, (213) 236-1869, asher@scag.ca.gov  
**Subject:** 4th California Climate Change Assessment - SCAG Regional Report

INTERIM  
EXECUTIVE DIRECTOR'S  
APPROVAL

**RECOMMENDED ACTION FOR EEC:**  
For Information Only – No Action Required

**RECOMMENDED ACTION FOR TC AND CEHD:**  
Receive and File

**STRATEGIC PLAN:**  
This item supports the following Strategic Plan Goal 2: Advance Southern California’s policy interests and planning priorities through regional, statewide, and national engagement and advocacy.

**EXECUTIVE SUMMARY:**  
*The State of California has released the Fourth Climate Change Assessment (Fourth Assessment) which provides the scientific foundation for understanding climate-related vulnerability at the local scale and informing adaptation actions. The Fourth Assessment seeks to promote effective and integrated action at the state and local level to safeguard California from climate change. The Fourth Assessment includes research on the SCAG region that was led by University of California Los Angeles (UCLA) researchers and affiliates. Dr. Neil Berg, Associate Director for the Center for Climate Science at the UCLA Institute of the Environment and Sustainability, served as the lead author for the Los Angeles Region report, and SCAG served on the Report’s stakeholder advisory committee. Dr. Berg will brief the Committee on the Fourth Assessment, which summarizes the state of climate change in California, and will specifically focus on findings relevant to the SCAG region.*

**BACKGROUND:**  
California has produced periodic assessments on the potential impacts of climate change and reports on potential mitigations and adaptation responses. Required by California Executive Order #S-03-05 signed by Governor Schwarzenegger, these assessments influence legislation and inform policy makers. As a global leader in using, investing in, and advancing research to set proactive climate change policy, California’s climate change assessments provide the scientific foundation for understanding climate-related vulnerability at the local scale and informing adaptation actions. The

assessments directly inform State policies, plans, programs, and guidance to promote effective and integrated action to safeguard California from climate change.

The Fourth Assessment was released in late August 2018, and focused reports were prepared for the Los Angeles and Inland Desert regions. Some key statewide findings include:

- The average annual maximum daily temperature is projected to increase by 5.6 – 8.8 degrees Fahrenheit by 2100.
- Water supply from snowpack is projected to decline by two-thirds by 2050.
- 31 to 67 percent of Southern California beaches may completely erode by 2100 without large-scale human interventions.
- Heat-Health Events (HHEs) will worsen drastically throughout the state; by 2050 heat waves in cities could cause 2-3 times more heat-related deaths, and vulnerable populations will experience the worst of these effects.

This cutting-edge research initiative is comprised of a wide-ranging body of technical reports, including rigorous, comprehensive climate change scenarios at a scale suitable for illuminating regional vulnerabilities and localized adaptation strategies in California; datasets and tools that improve integration of observed and projected knowledge about climate change into decision-making; and recommendations and information to directly inform vulnerability assessments and adaptation strategies for California’s energy sector, water resources and management, oceans and coasts, forests, wildfires, agriculture, biodiversity and habitat, and public health. These technical reports have been distilled into summary reports and a brochure, allowing the public and decision-makers to easily access relevant findings from the Fourth Assessment.

Dr. Neil Berg, Associate Director for the Center for Climate Science at the UCLA Institute of the Environment and Sustainability, will brief the Committee and describe the findings from the Fourth Assessment, which included over 50 technical studies and 9 regionally-focused reports. He will specifically address findings and conclusions applicable to the SCAG region.

**FISCAL IMPACT:**

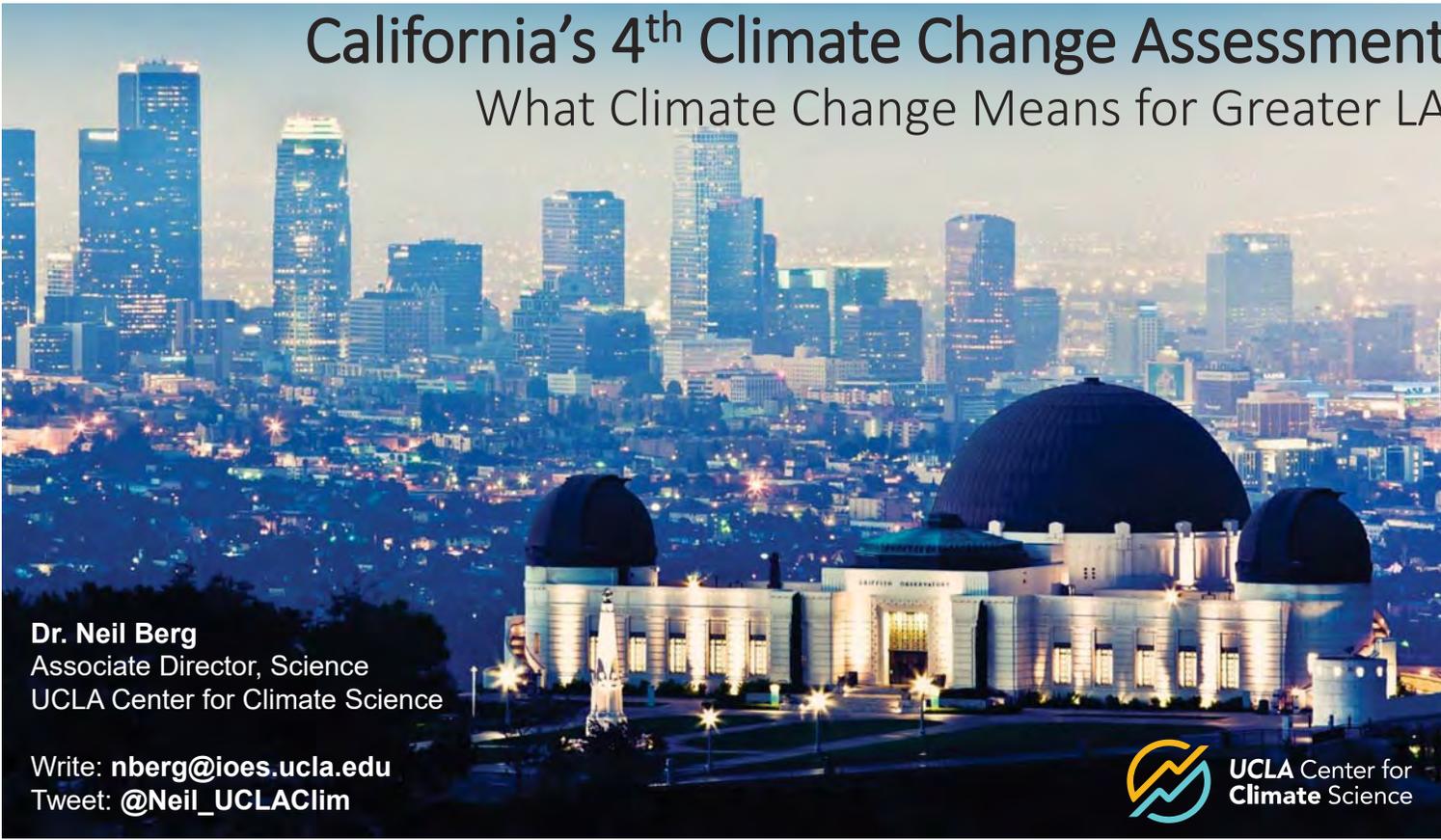
No Fiscal Impact. This is not a SCAG funded project.

**ATTACHMENT(S):**

1. PowerPoint Presentation: 4th Climate Assessment

# California's 4<sup>th</sup> Climate Change Assessment

## What Climate Change Means for Greater LA



**Dr. Neil Berg**  
Associate Director, Science  
UCLA Center for Climate Science

Write: [nberg@ioes.ucla.edu](mailto:nberg@ioes.ucla.edu)  
Tweet: [@Neil\\_UCLAClim](https://twitter.com/Neil_UCLAClim)



## Overview: California's 4<sup>th</sup> Climate Change Assessment

<http://www.climateassessment.ca.gov/>

- Understand climate-related vulnerability at local scales
- Inform resilience actions, State policies, plans, programs, and guidance
- Promote effective and integrated action to safeguard California from climate change



Statewide Summary Report + special breakout reports on:

- Climate Justice
- Tribal and Indigenous Communities
- California's Ocean and Coast

# Overview: California's 4<sup>th</sup> Climate Change Assessment

<http://www.climateassessment.ca.gov/>

- Understand climate-related vulnerability at local scales
- Inform resilience actions, State policies, plans, programs, and guidance
- Promote effective and integrated action to safeguard California from climate change



9 regional reports:

North Coast, Sierra Nevada, San Francisco Bay Area, San Joaquin Valley, Sacramento Valley, Central Coast, **Los Angeles**, **Inland Desert**, and San Diego

# Overview: California's 4<sup>th</sup> Climate Change Assessment

<http://www.climateassessment.ca.gov/>

- Understand climate-related vulnerability at local scales
- Inform resilience actions, State policies, plans, programs, and guidance
- Promote effective and integrated action to safeguard California from climate change



44 technical reports:

Energy, water, agriculture, coasts, forests, public health, biodiversity, governance, and details on the projections, data, and tools from the Assessment.

# Overview: California's 4<sup>th</sup> Climate Change Assessment

<http://www.climateassessment.ca.gov/>

- Understand climate-related vulnerability at local scales
- Inform resilience actions, State policies, plans, programs, and guidance
- Promote effective and integrated action to safeguard California from climate change



6 tools:

1. Cal-Adapt
2. Cal-Heat
3. Coastal Storm Modeling System (CoSMoS)
4. Hazard Exposure Reporting and Analytics (HERA)
5. Adaptation Capability Advancement Toolkit (Adapt-CA)
6. CA Emergency Response Infrastructure Climate Vulnerability (CERA-Climate)

## Highlights from the LA Regional Chapter



Los Angeles region topography and boundary definition as a solid red line, which encompasses Los Angeles, Ventura, and Orange Counties, and adjacent urbanized portions of San Bernardino and Riverside Counties.

# Highlights from the LA Regional Chapter

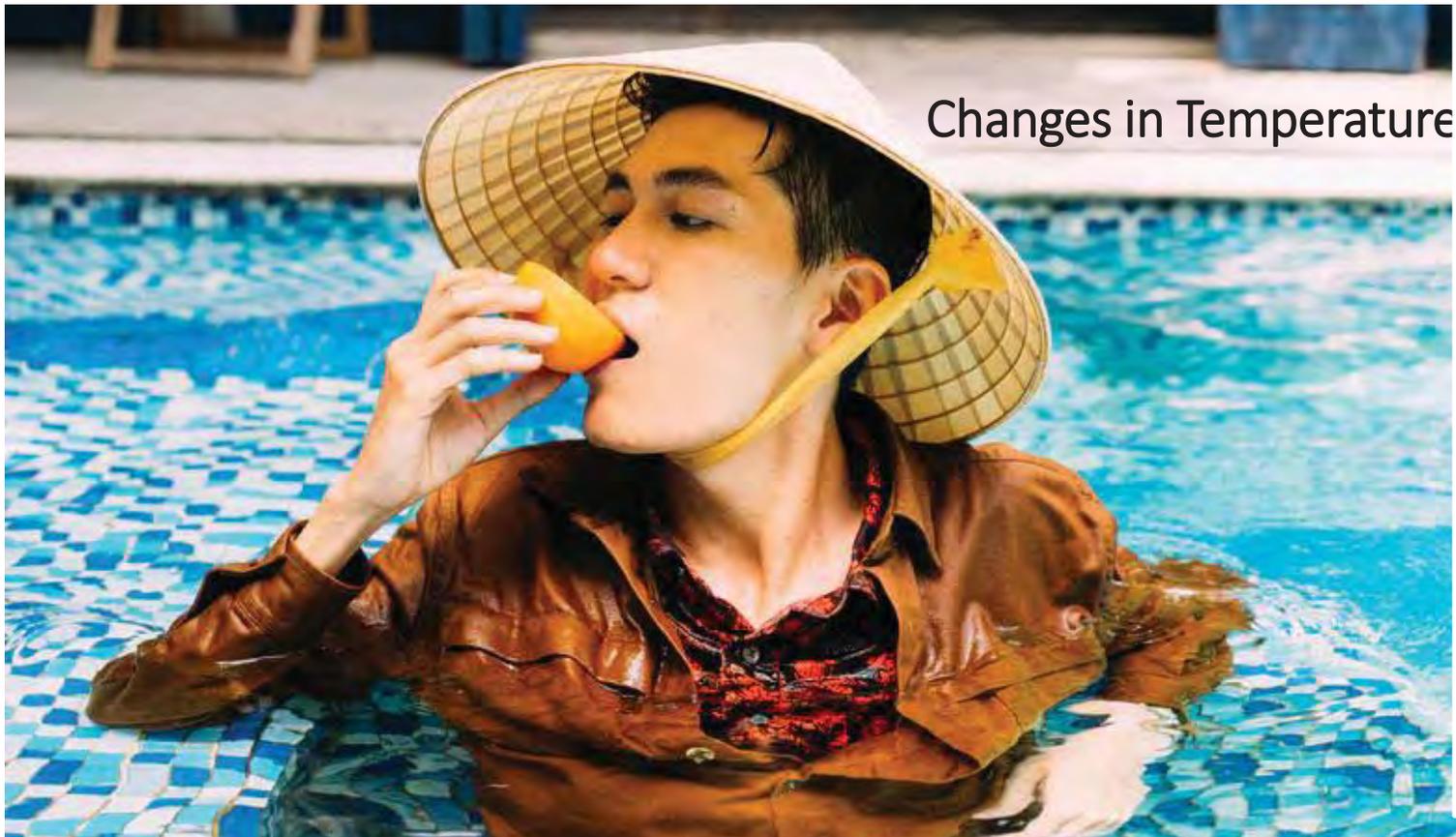
Climate Science	Impacts to Systems
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# Highlights from the LA Regional Chapter

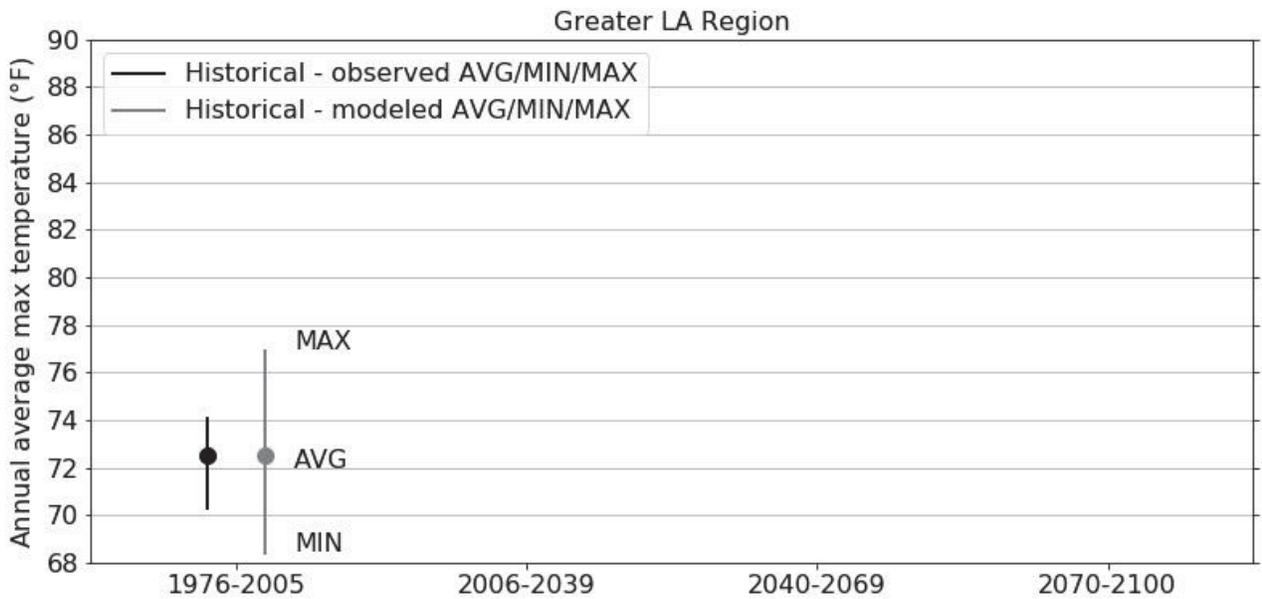
Climate Science	Impacts to Systems
<ul style="list-style-type: none"><li>• Temperature</li><li>• Precipitation</li><li>• Extreme storms</li><li>• Santa Ana winds</li><li>• Sea level rise</li><li>• Wildfire</li><li>• Drought</li><li>• Clouds</li><li>• Humidity</li><li>• Air quality</li></ul>	

# Highlights from the LA Regional Chapter

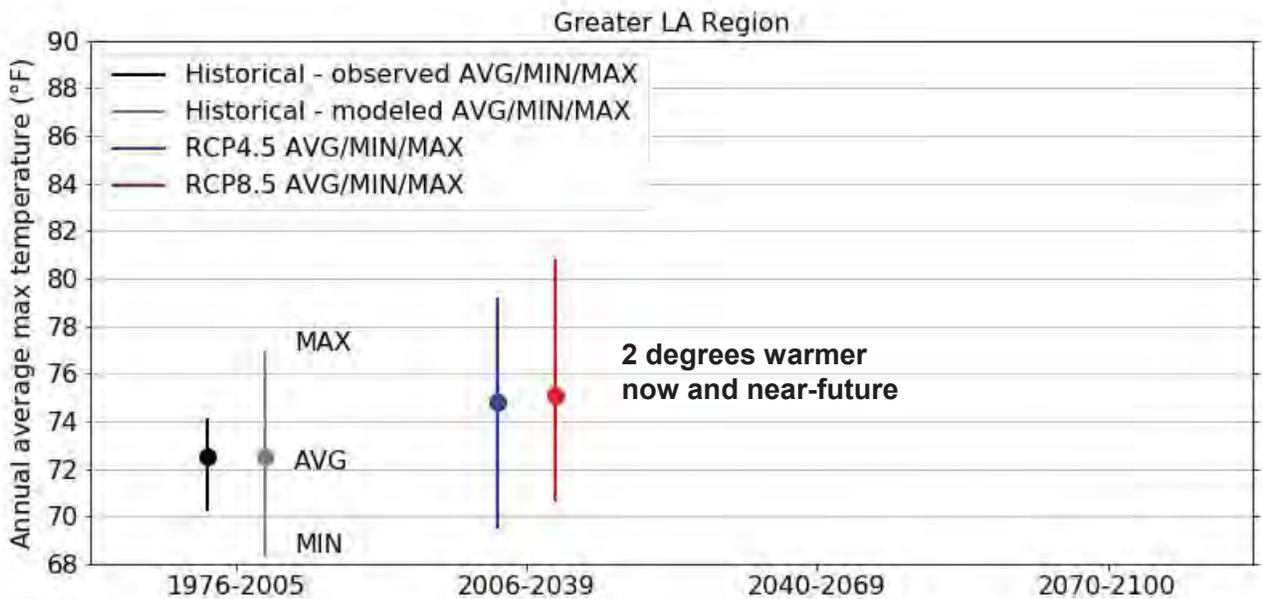
Climate Science	Impacts to Systems		
<ul style="list-style-type: none"> <li>• Temperature</li> <li>• Precipitation</li> <li>• Extreme storms</li> <li>• Santa Ana winds</li> <li>• Sea level rise</li> <li>• Wildfire</li> <li>• Drought</li> <li>• Clouds</li> <li>• Humidity</li> <li>• Air quality</li> </ul>	Human	Economic	Natural and Managed
	<ul style="list-style-type: none"> <li>• Public Health</li> <li>• Emergency Mgmt.</li> <li>• Env. Justice</li> </ul>	<ul style="list-style-type: none"> <li>• Energy</li> <li>• Transportation</li> <li>• Land Use and Development</li> </ul>	<ul style="list-style-type: none"> <li>• Water</li> <li>• Agriculture</li> <li>• Veg &amp; Flora</li> <li>• Oceans &amp; Coasts</li> </ul>



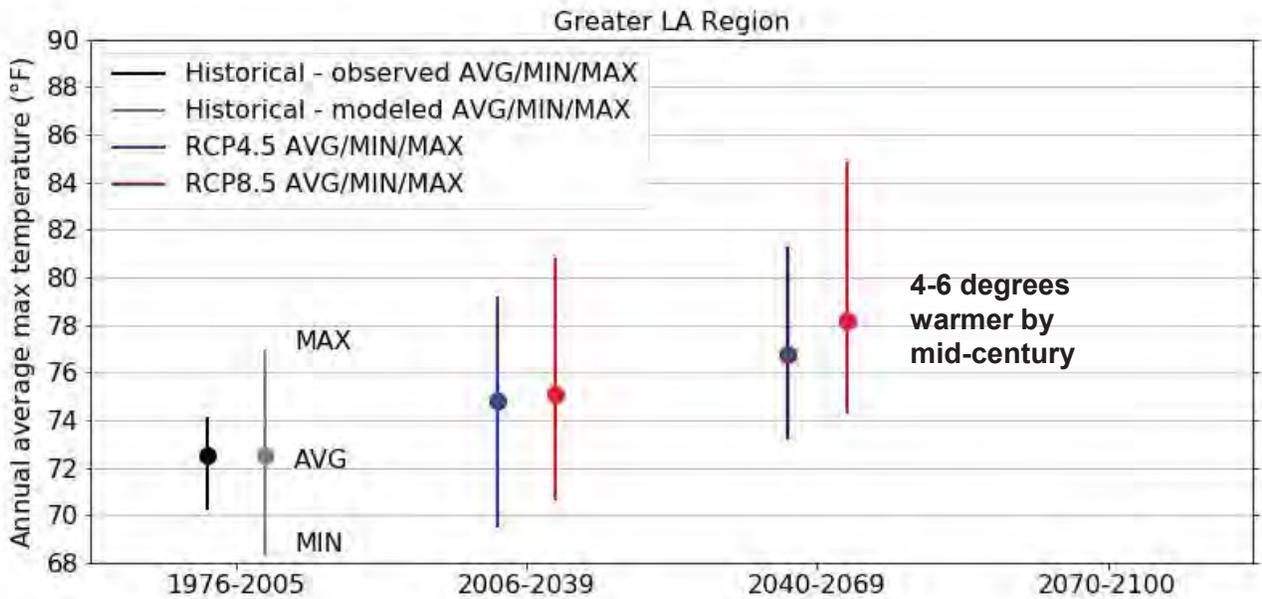
# Higher Average Max Temperatures



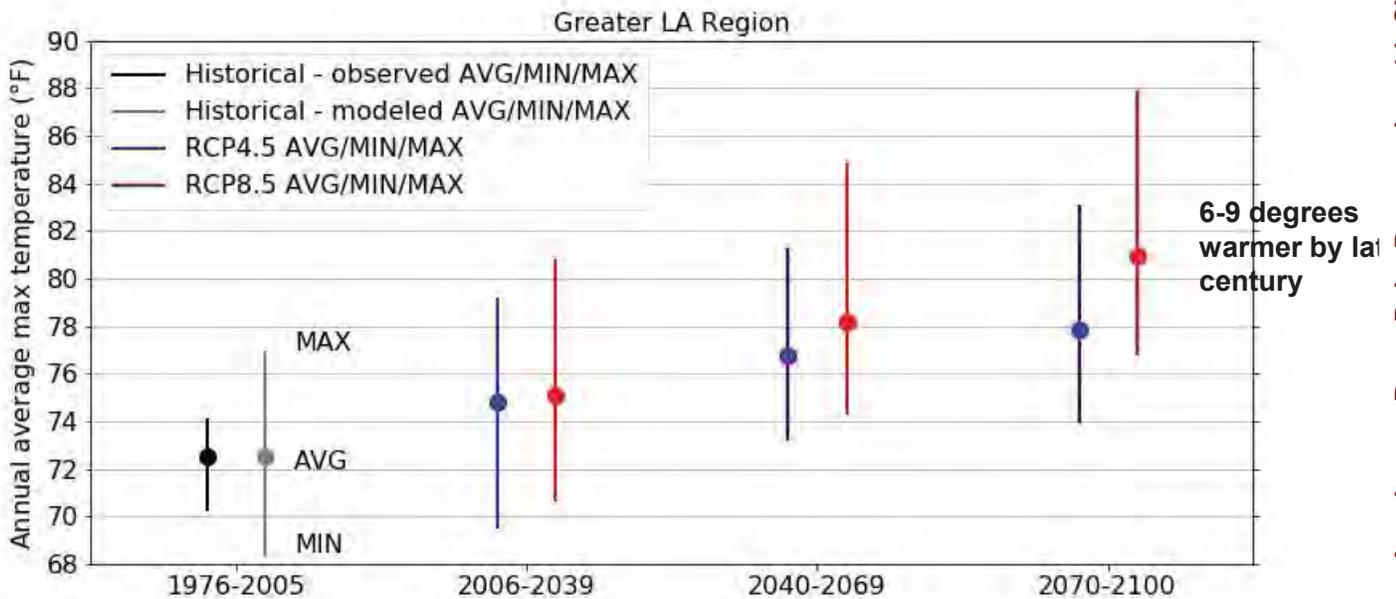
# Higher Average Max Temperatures



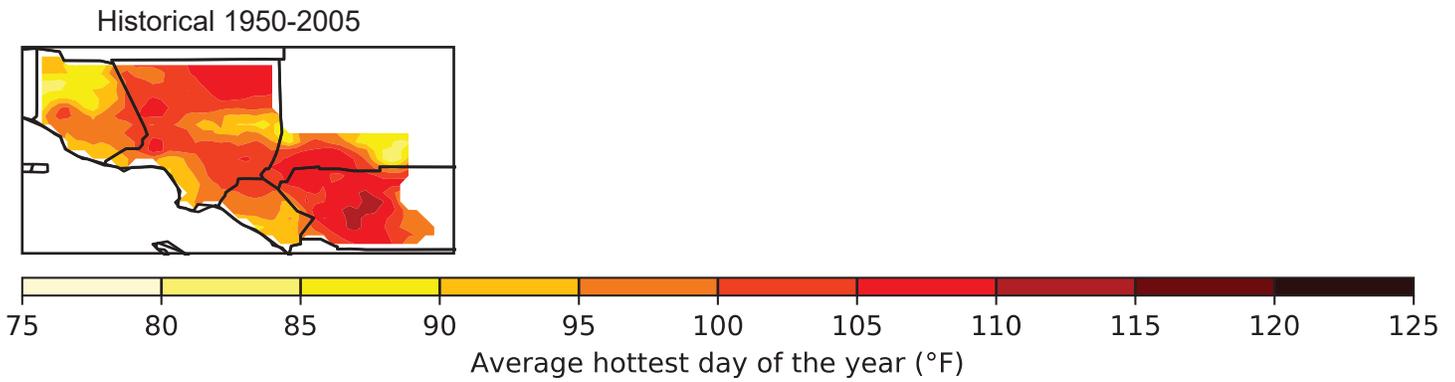
# Higher Average Max Temperatures



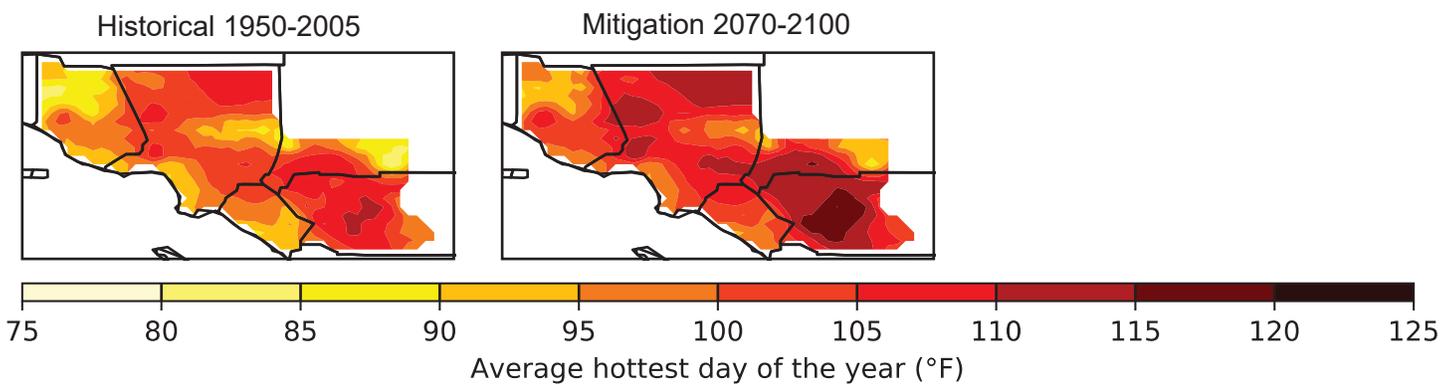
# Higher Average Max Temperatures



# Even Hotter Hottest Day of the Year

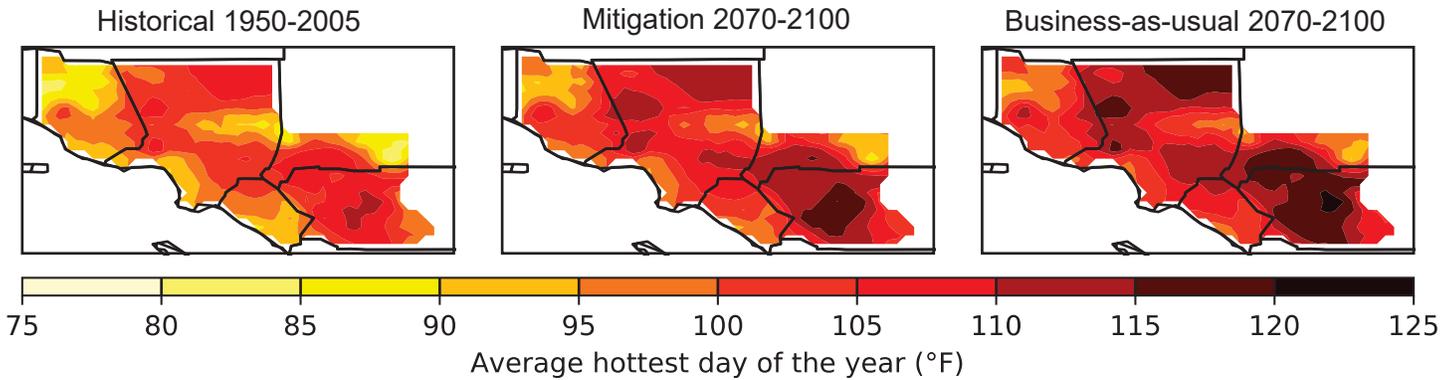


# Even Hotter Hottest Day of the Year



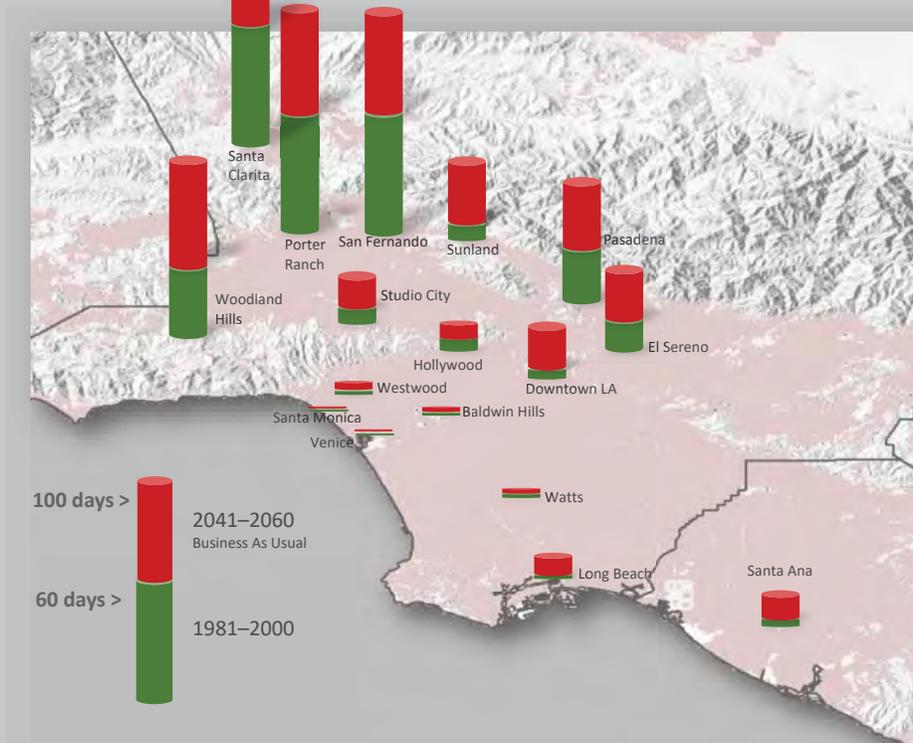
**4-8 degrees warmer by late-century**

# Even Hotter Hottest Day of the Year



## 5-12 degrees warmer by late-century

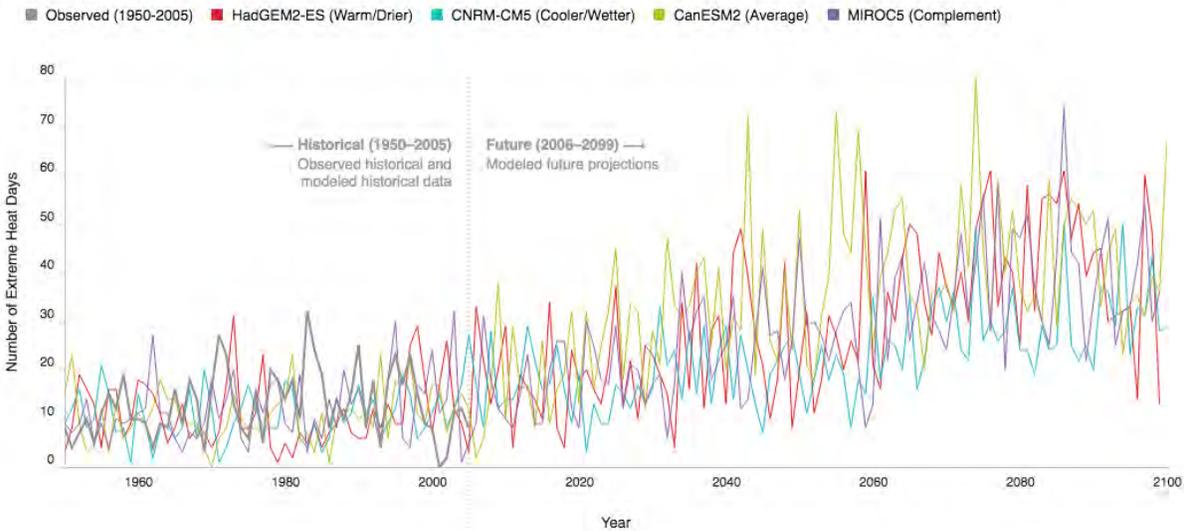
### More Extremely Hot Days (>95F)



# Extreme heat tools: [cal-adapt.org/tools/extreme-heat/](http://cal-adapt.org/tools/extreme-heat/)

## Number of Extreme Heat Days by Year

This chart shows number of days in a year when daily maximum temperature is above the extreme heat threshold of 90 °F. Data is shown for Grid Cell (34.03125, -118.28125) under the RCP 4.5 scenario in which emissions peak around 2040, then decline.

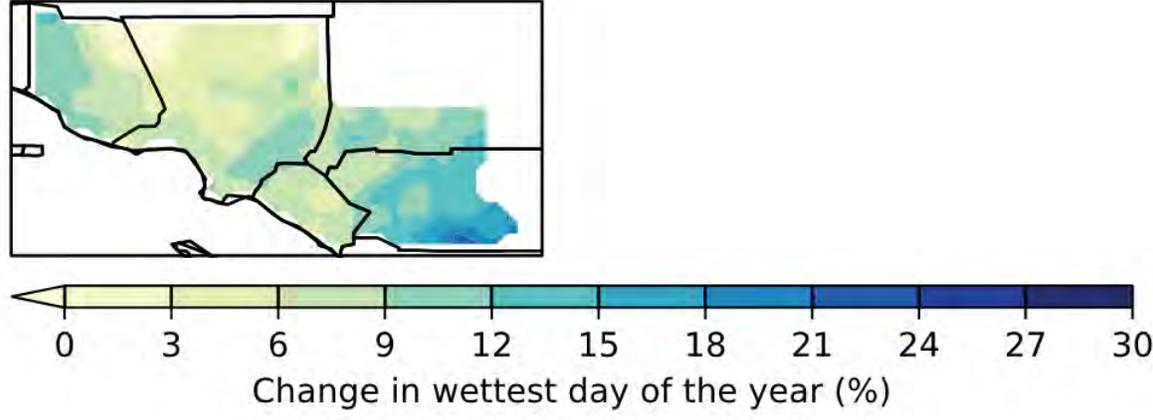


## Changes in Precipitation

# Even Wetter Wettest Day of the Year

Mitigation 2070-2100

RCP4.5 - Historical

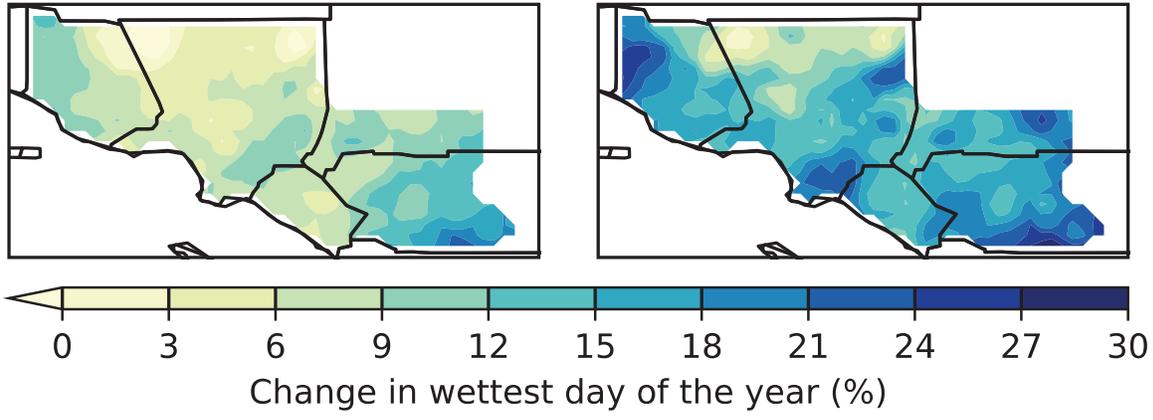


**Up to 15% wetter by the late-century**

# Even Wetter Wettest Day of the Year

Mitigation 2070-2100

Business-as-usual 2070-2100



**Up to 30% wetter by the late-century**

# More Extremely Wet Years like 2016-2017

2016-2017 was an extremely wet year in California.

It produced a magnificent super bloom.

Swain et al. (2018) Increasing Precipitation Volatility in 21st Century California. Nature Climate Change.

<https://www.hcn.org/articles/photos-superbloom-in-california>

# More Extremely Wet Years like 2016-2017

2016-2017 was an extremely wet year in California.

These types of years are projected to **double in frequency** by late-century.

Swain et al. (2018) Increasing Precipitation Volatility in 21st Century California. Nature Climate Change.

<https://www.hcn.org/articles/photos-superbloom-in-california>

# More Extremely Dry Years like 1976-1977



1976-1977 was an extreme drought year in California.

Economic losses exceeded \$1 billion.

Swain et al. (2018) Increasing Precipitation Volatility in 21st Century California. Nature Climate Change.

<http://framework.latimes.com/2014/06/23/1976-california-drought/>

# More Extremely Dry Years like 1976-1977



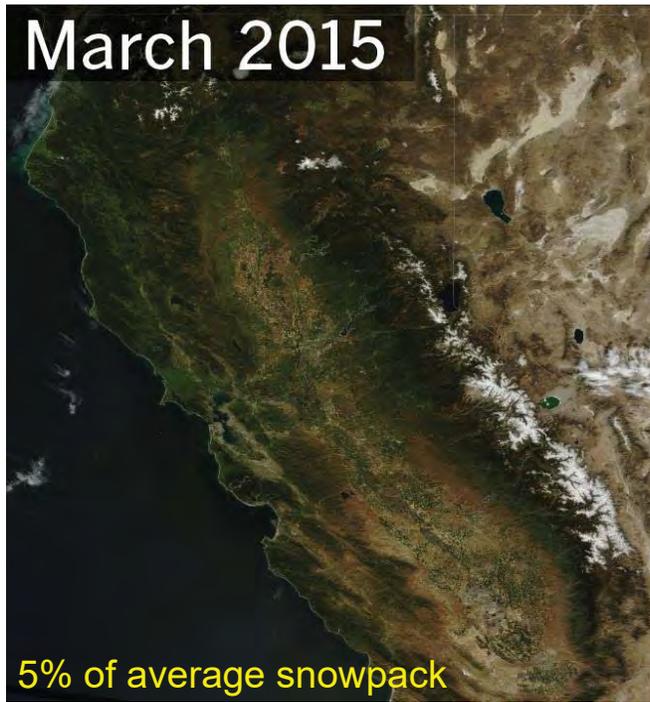
1976-1977 was an extreme drought year in California.

These types of years are also projected to **double in frequency** by late-century.

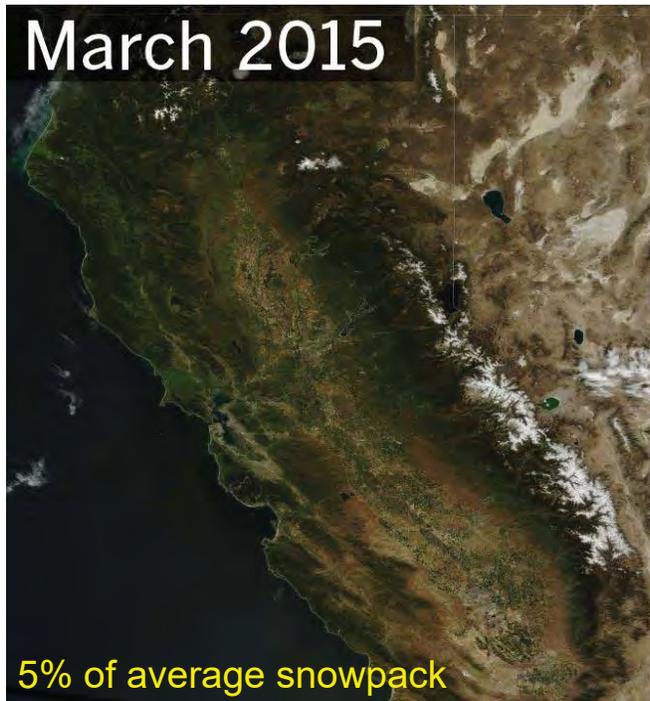
Swain et al. (2018) Increasing Precipitation Volatility in 21st Century California. Nature Climate Change.

<http://framework.latimes.com/2014/06/23/1976-california-drought/>

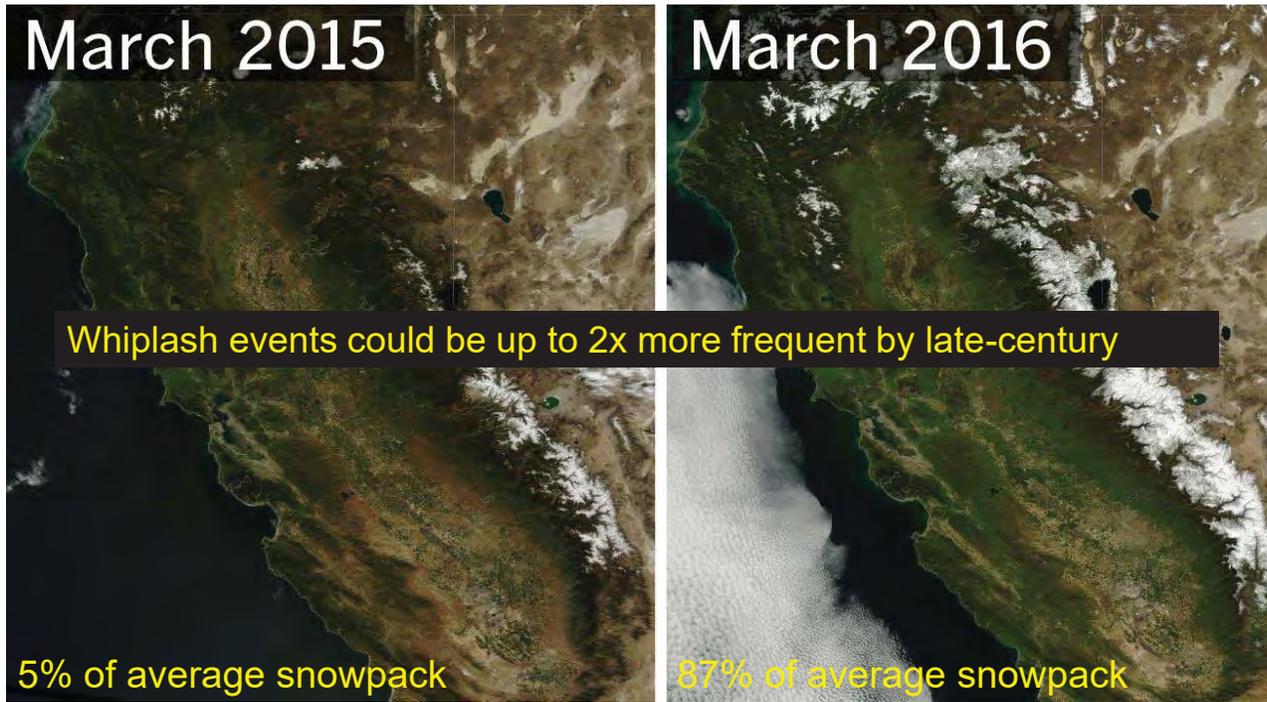
# More Extremely Dry to Extremely Wet Years: “whiplash”



# More Extremely Dry to Extremely Wet Years: “whiplash”

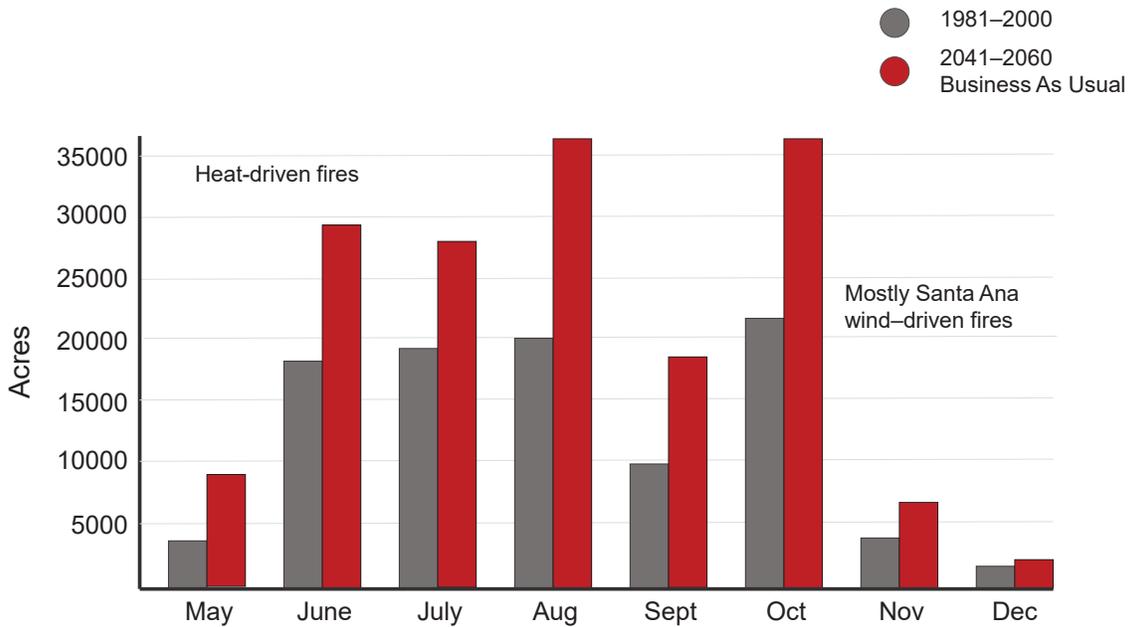


# More Extremely Dry to Extremely Wet Years: “whiplash”



## Changes in Wildfire

# Increased Area of Wildfire



Jin et al. (2015). Identification of two distinct fire regimes in Southern California: implications for economic impact and future change. ERL.

Wildfire tools:  
[cal-adapt.org/tools/wildfire/](http://cal-adapt.org/tools/wildfire/)

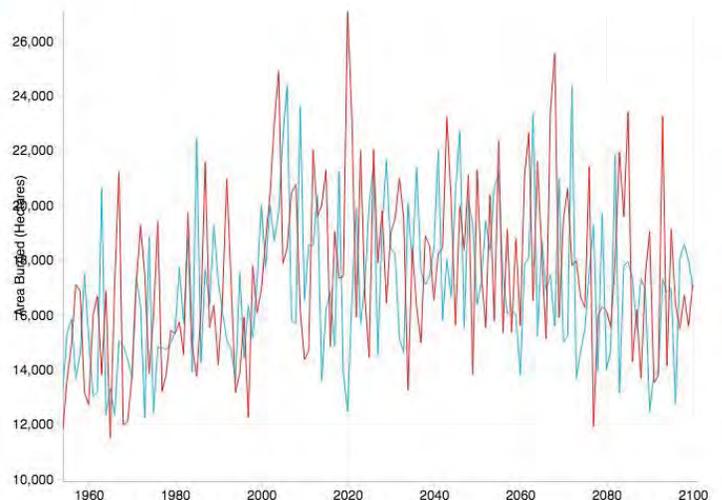
## Annual Average of Area Burned

Los Angeles Region

Emissions continue to rise strongly through 2050 and plateau around 2100 (RCP 8.5). High Population Growth Projections.

Modeled Data (2006-2099)

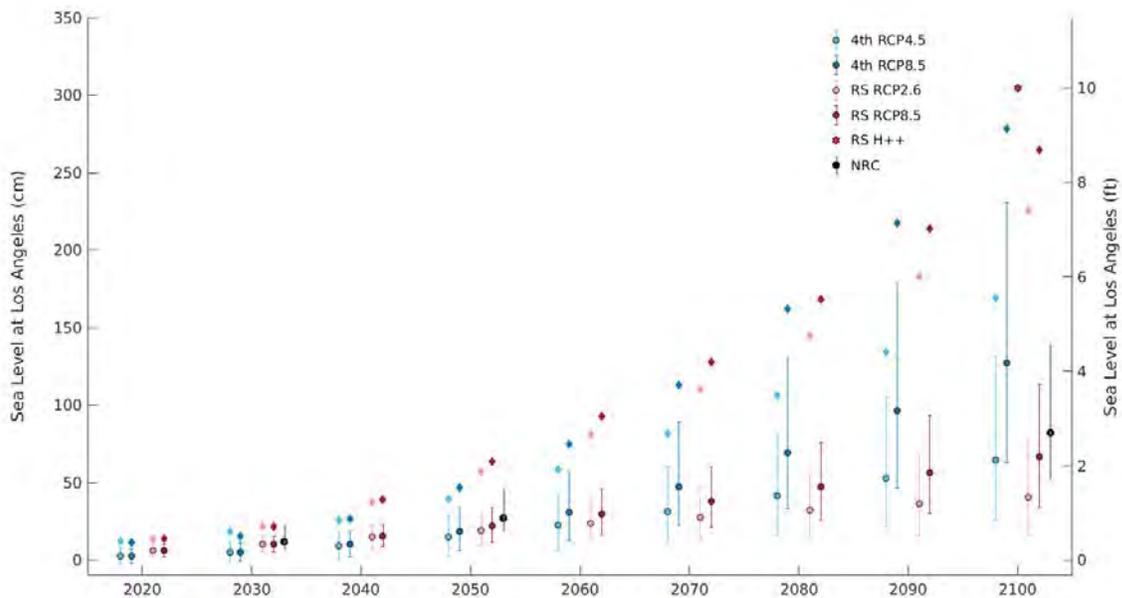
- CNRM-CM5
- HadGEM2-ES



# Sea Level Rise



## Los Angeles SLR Projections Through 2100



# CoSMoS Model and Mapping Tool

<http://data.pointblue.org/apps/ocof/cms/>

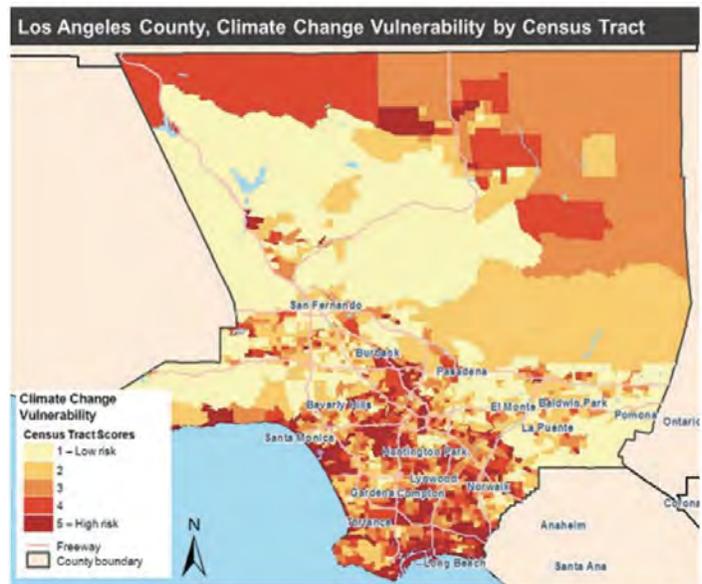
Our Coast Our Future (OCOF) hosts the data visualization tool for different SLR scenarios and storm types for the entire CA coastline.

The image to the right is for ~6 ft SLR + 20-year storm event.



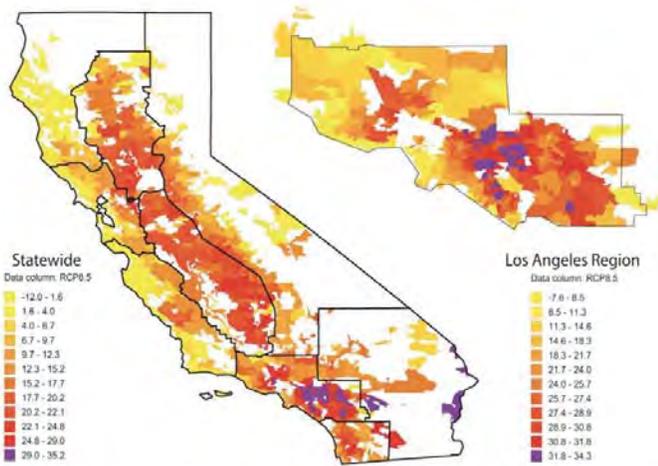
## Environmental Justice

Vulnerability map for LA County that considers future climate change.



Distribution of cumulative impact and vulnerability screening scores using the Environmental Justice Screening Method (Sadd et al. 2011) that includes a climate change impacts score. The impact is more concentrated in urban portions of the region. (Map from English, et al, 2013: <https://escholarship.org/uc/item/8h669570>)

# Increased Energy Demand



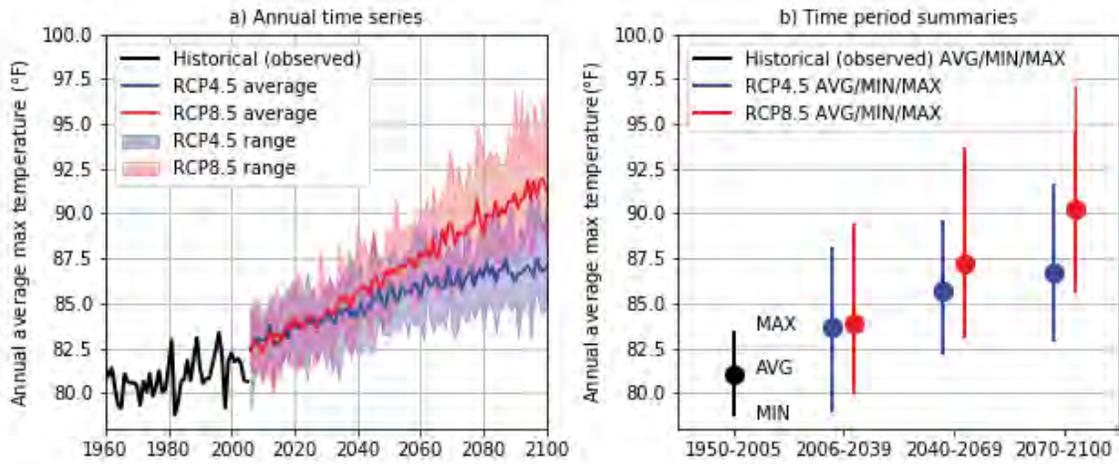
Forecasted percentage increases in total annual electricity consumption by zip code by the year 2100 under RCP8.5 (Auffhammer 2018).

The highest projected increases in electricity demand by 2100 across the entire state are within the LA region.

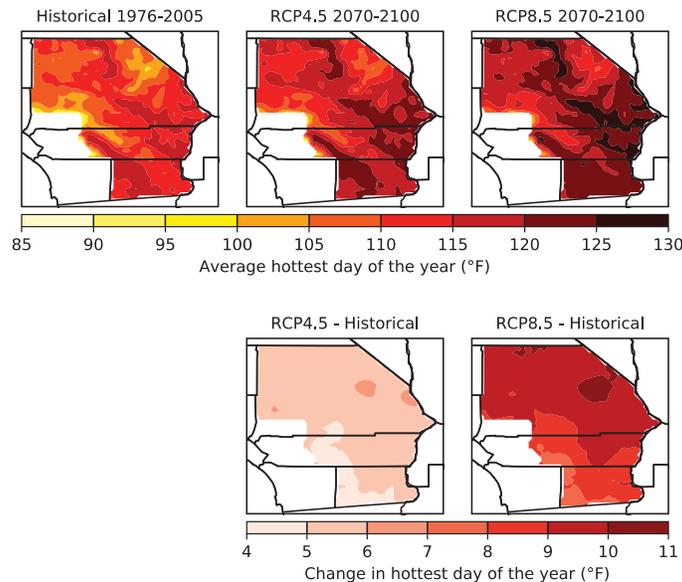
# Inland Desert Highlights



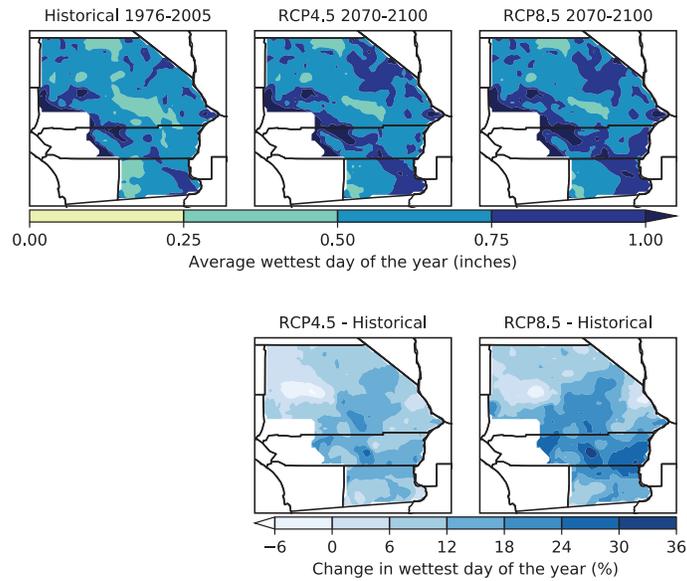
# Rising Temperatures Throughout the 21<sup>st</sup> Century



# Even Hotter Hottest Day of the Year



# Even Wetter Wettest Day of the Year



**Dr. Neil Berg**  
 Associate Director, Science  
 UCLA Center for Climate Science

Write: [nberg@ioes.ucla.edu](mailto:nberg@ioes.ucla.edu)  
 Tweet: [@Neil\\_UCLAClim](https://twitter.com/Neil_UCLAClim)



**UCLA Center for  
 Climate Science**

[www.ioes.ucla.edu/climate/](http://www.ioes.ucla.edu/climate/)



Southern California Association of Governments  
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017  
November 1, 2018

To: Transportation Committee (TC)

INTERIM  
EXECUTIVE DIRECTOR'S  
APPROVAL

From: Naresh Amatya, Manager, Planning Division, (213) 236-1885,  
amatya@scag.ca.gov

Subject: The Role of Renewable Natural Gas in Transportation –  
Addressing California's Environmental Challenges

**RECOMMENDED ACTION:**

For Information Only – No Action Required.

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 4: Provide innovative information and value-added services to enhance member agencies' planning and operations and promote regional collaboration.

**EXECUTIVE SUMMARY:**

*This report updates TC members on the Southern California Gas Company's efforts to help California meet its greenhouse gas reduction goals. Mr. Ken Chawkins, Business Policy Manager of Southern California Gas Company, will provide a presentation and update the committee.*

**BACKGROUND:**

The energy needs in the State of California are vast. With new climate goals for years 2030 and 2050, the need to have energy be safe, reliable, affordable and clean make the challenge of providing that energy complicated.

The Southern California Gas Company will present on how natural gas and renewable natural gas must be part of an integrated solution if California is to achieve its goals quickly and efficiently. This presentation will highlight a few of the natural gas technologies available as part of the effort.

**FISCAL IMPACT:**

None.

**ATTACHMENT(S):**

- 1. Natural Gas



# Natural Gas – Part of a Balanced Energy Approach that Can Work for Everyone

SCAG Transportation Committee – November 1, 2018  
Ken Chawkins, SoCalGas Business Policy Manager

## We are aligned in our climate goals

Governing Law – SB32	Long-Term Goal
By 2030, reduce GHG emissions	By 2050, further reduce GHG emissions
<b>40%</b>	<b>80%</b>
below 1990 levels	below 1990 levels



OUR CHILDREN??  
CHANGE IS !!!  
REQUIRED  
R PLANET  
UR PATIENT  
OUR FUTUR

2

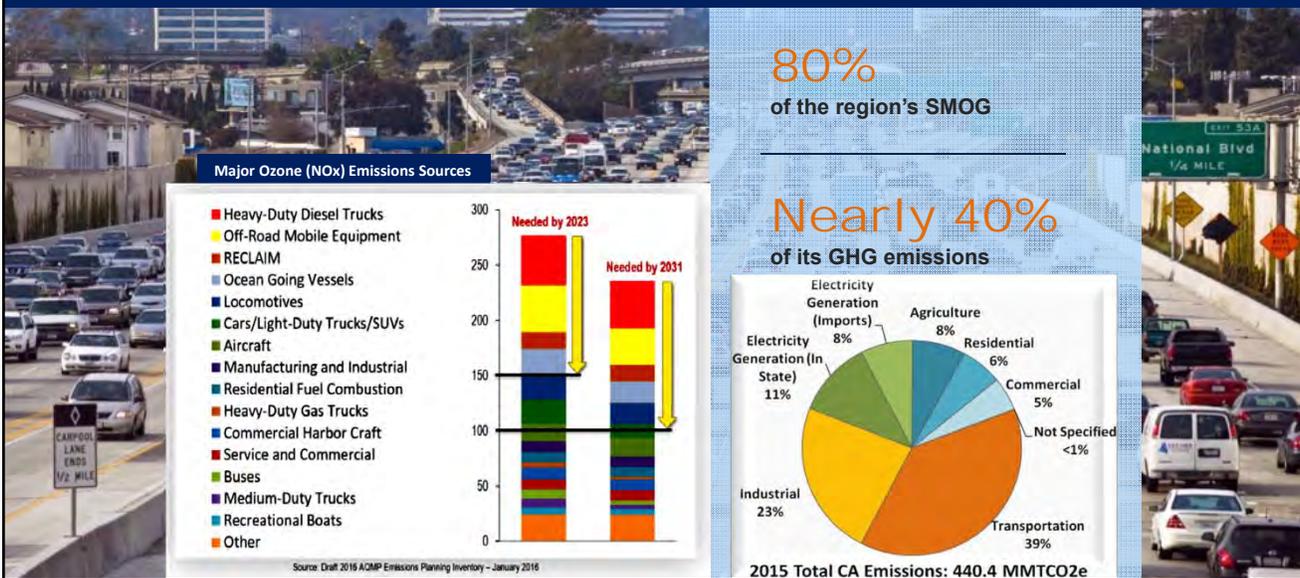
## But First – Good Old Fashioned SMOG

- Two (2) Air Basins in Extreme Nonattainment for Ozone Pollution
  - Extreme: 8 hour Ozone >0.175 ppm
  - South Coast & San Joaquin Valley
- Pollution
  - NO<sub>x</sub> => O<sub>3</sub> (Ozone) = Smog
  - Particulate Matter (PM) – get trapped deep in lungs and potentially blood
  - Causing
    - Asthma
    - Heart/lung disease
- Sources?



<https://www.arb.ca.gov/consprod/geninfo/cpsmog.htm>

## We have a CLEAR FOCUS: Transportation



# NGV Game Changer:

NEW "NEAR-ZERO" TRUCK ENGINE TO BE *READY FOR PRIME TIME*



- Heavy Duty truck engine with 90% lower NOx emissions **TODAY**
- Tailpipe emissions are the same as emissions from generating electricity to run a similar electric truck
- For Goods Movement, this truck will meet California's ambitious 2050 targets **decades before** any other technology
- RNG already delivering greatest GHG reductions from diesel **TODAY?**

Near-Zero Emissions  
Natural Gas Engine

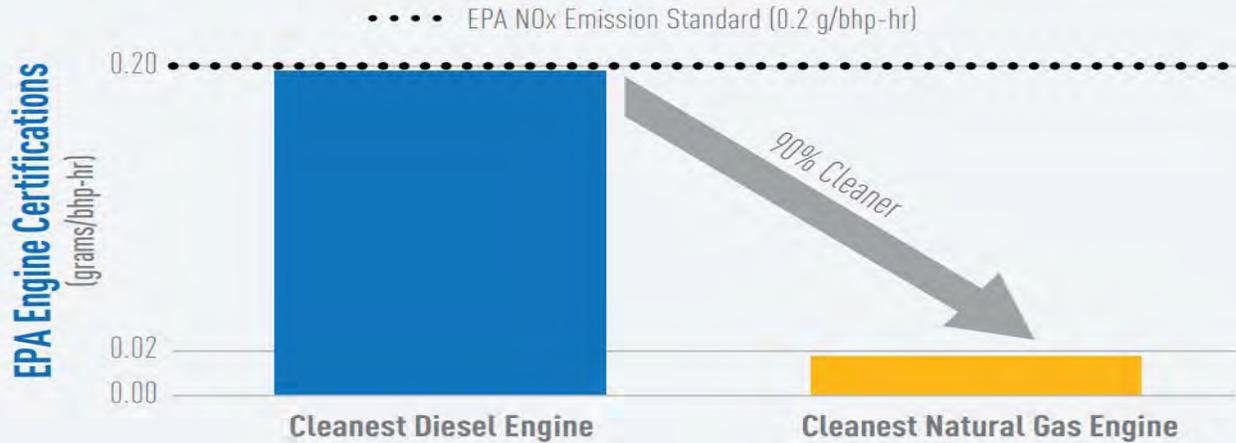
**<0.02 g NOx**  
90% NOx reduction

Renewable Natural Gas as Transportation Fuel

**> 80% GHG reduction**

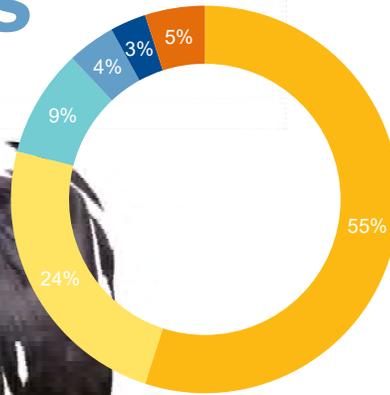
## Switching Away from Diesel

### Comparing EPA Engine Certifications



Source: <http://www.cert.ucr.edu/research/efr/NOx-Fact-Sheet.pdf>

# And RNG gives us a clear path to address CA's biggest methane emitters



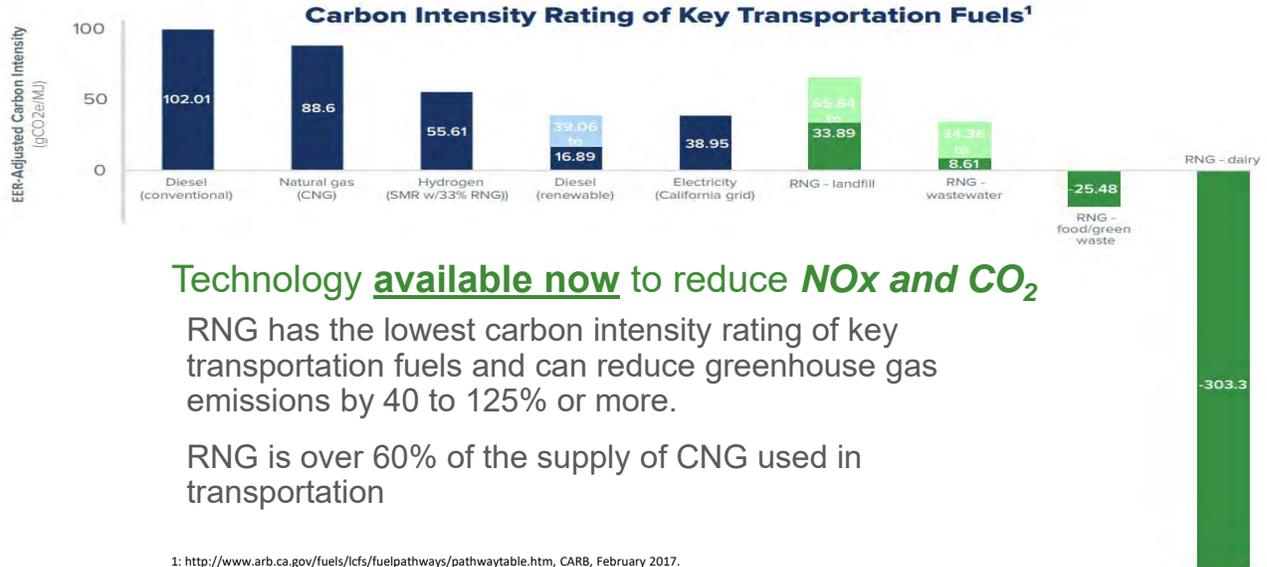
- Dairies & Livestock
- Landfills & Waste Water
- Pipelines
- Oil & Gas Extraction
- Agriculture
- Industrial & Misc.

Source: CARB 2015 Greenhouse Gases Emissions Inventory, 2013 Methane Emissions 7

## Biogas to Renewable Gas Pathways: De-carbonizing the Pipeline



## Renewable Natural Gas: a Game Changer Fuel



Technology available now to reduce **NOx and CO<sub>2</sub>**

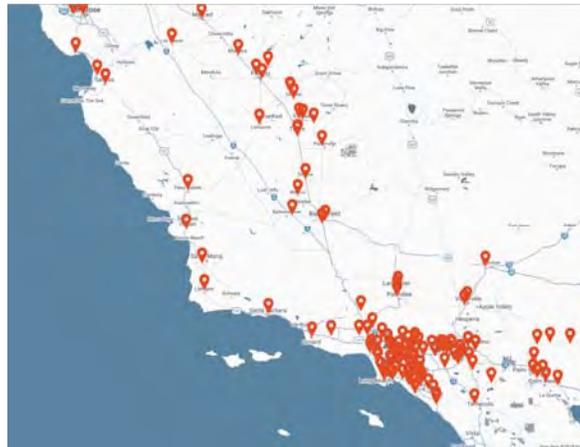
RNG has the lowest carbon intensity rating of key transportation fuels and can reduce greenhouse gas emissions by 40 to 125% or more.

RNG is over 60% of the supply of CNG used in transportation

1: <http://www.arb.ca.gov/fuels/cfs/fuelpathways/pathwaytable.htm>, CARB, February 2017. Adjusted for heavy-duty truck applications, Adapted from <https://cdn.nggamechanger.com/pdfs/game-changer-technical-fact-sheet.pdf>

## CNG Fueling Infrastructure

- 378 stations in CA
- 165 are open to the public
- Grant financing available for CNG station building
- CNG does not have time dependent premium pricing



Map source: <https://maps.cngnow.com/search/california>

# CNG Public Fueling Infrastructure

## Public “fast-fill” stations

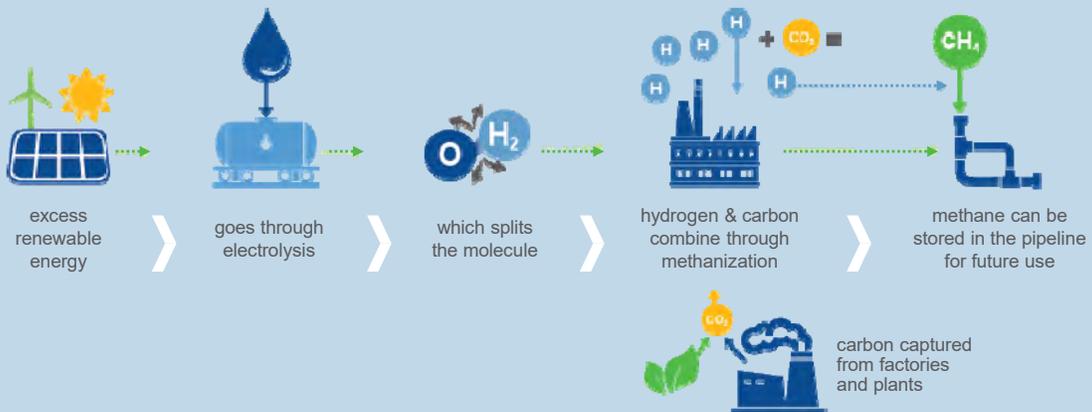


- On-the-go fueling
- Can accommodate all vehicle classes
- Fueling speeds equivalent to diesel



# Power-to-gas

converts excess renewable electricity into renewable natural gas

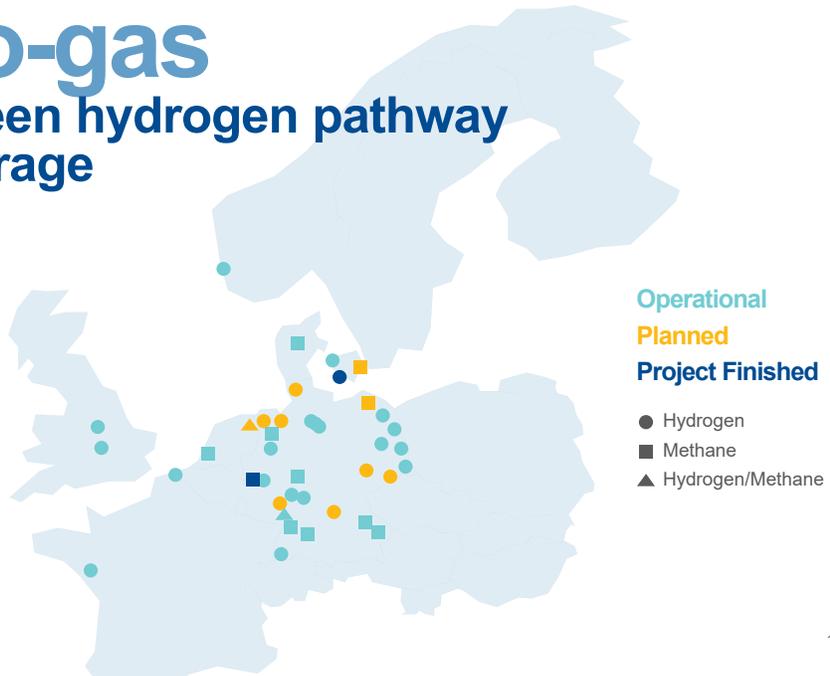


12

# Power-to-gas

provides green hydrogen pathway  
and grid storage

- 70 Projects Now Launched In Europe
- 40 Projects Launched in Germany, with more in development
- 30 MW of installed capacity



13

## Recap

### Natural Gas in Transportation

- Environmental advantages over diesel / NOx and GHG
- Next-generation Low-NOx CNG engines – Available NOW
- CNG range and performance equivalent to diesel
- RNG – from zero to negative carbon
- Power To Gas – Uses NG pipelines as grid scale storage and enables renewable energy





Southern California Association of Governments  
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017  
November 1, 2018

**To:** Transportation Committee (TC)  
**From:** Mike Jones, Senior Regional Planner, Goods Movement & Transportation Finance, (213) 236-1978, jonesm@scag.ca.gov  
**Subject:** Promoting Sustainable Transport Solutions – Volvo Group

INTERIM  
EXECUTIVE DIRECTOR'S  
APPROVAL

**RECOMMENDED ACTION:**

For Information Only - No Action Required

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians.

**EXECUTIVE SUMMARY:**

*The Volvo Group is a leading manufacturer of trucks, buses, construction equipment, and drive systems for marine and industrial applications. The Volvo Group solutions to global challenges are driven by its mission to drive prosperity through transport solutions and its vision to be the most desired and successful transport solution provider in the world. Innovations within transport will reshape the cities of tomorrow. Automated driving, electromobility, and connected vehicles will allow for quieter, cleaner and safer megacities to grow and prosper. Keeping this in mind, Aravind Kailas from the Volvo Group will discuss Volvo's preparation for the emerging connected and autonomous vehicle ecosystems.*

**BACKGROUND:**

The Volvo Group is one of the world's leading manufacturers of trucks, buses, construction equipment and marine and industrial engines. The Group also provides complete solutions for financing and service. Recognizing that innovations within the transport sector will reshape the cities of tomorrow, the Volvo Group is pursuing a variety of initiatives globally in vehicle automation, electromobility, and connected solutions that will enable safer, cleaner and quieter megacities to grow and prosper. In fact, connectivity is one of the key technology areas for Volvo Group, and an enabler for some automation and electromobility solutions.

The technology choices will be determined by its added value for customers and society, and will be introduced in real customer operations gradually. For example, the autonomous mining truck in the mines at Boliden, Sweden have not only enhanced safety (for humans at the mining sites), but are also starting to show productivity efficiencies. Working with as many as sixteen partners from the public and private sectors, the electric bus (Route 55) in Gothenburg, Sweden is another success story to make cities cleaner and quieter.



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Aravind Kailas from the Volvo Group will discuss his role, and present a ringside view of select Volvo Group initiatives to develop and commercialize sustainable transport solutions by engaging public agencies and local communities, both globally and in the US.

**FISCAL IMPACT:**

No Fiscal Impact

**ATTACHMENT(S):**

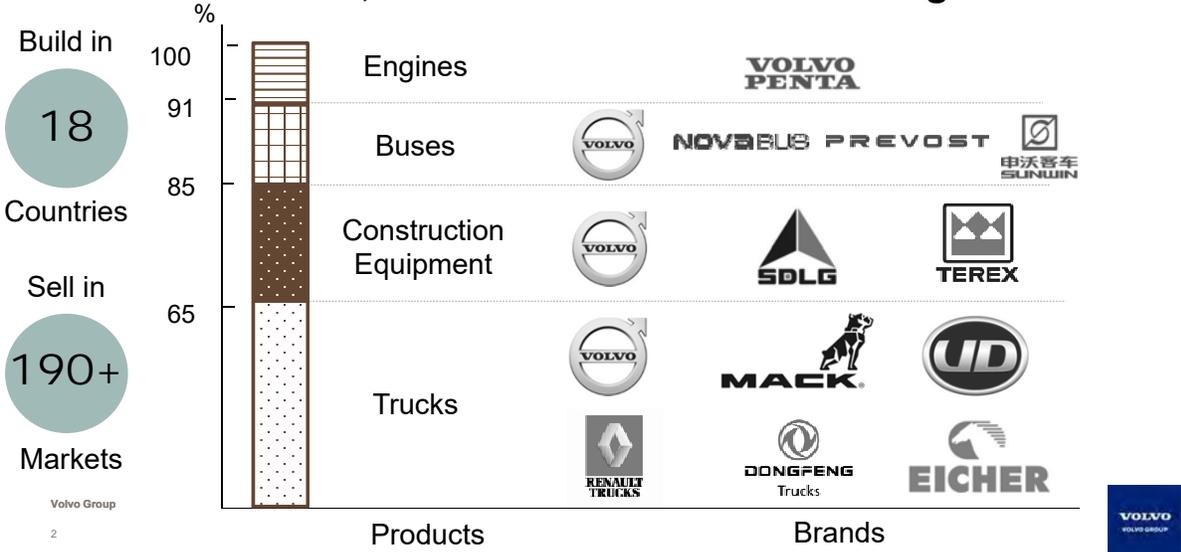
1. PowerPoint Presentation: Volvo Group



### Promoting Sustainable Transport Solutions

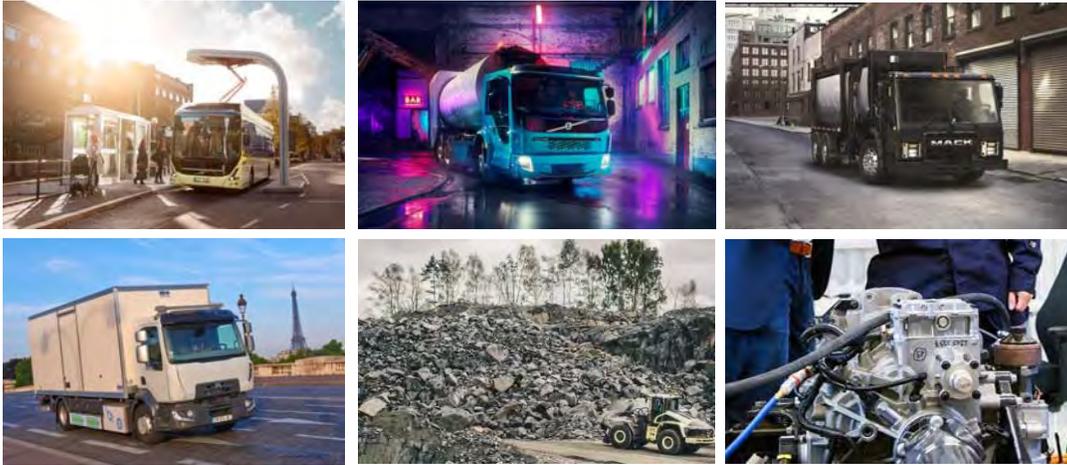
Aravind Kailas, PhD

### Leading global manufacturer of trucks, buses, construction EQ, and marine and industrial engines



Attachment: PowerPoint Presentation: Volvo Group (Promoting Sustainable Transport Solutions – Volvo Group)

## Globally, the group is pushing ahead to commercialize sustainable transportation products at a rapid pace



Volvo Group

3

Volvo aims to sell electric trucks in North America by 2020.

VOLVO  
VOLVO GROUP

## Many initiatives in CA to develop and demonstrate environmentally sustainable transport solutions



Volvo Group

4

Technology choices are addressed by business needs and operations, and will vary

VOLVO  
VOLVO GROUP

## Volvo believes platooning offers major advantages for its customers and the society



SARTRE



EU TPC



SE4P

...

2009

PATP

SERET

Today



Volvo Group

5



## Truck platooning in real traffic on CA roads inspired dialogs with policymakers and trucking community



- 10 miles round trip on I-880
- **First** Volvo truck platoon demonstration in North America



- 12 miles round trip on I-110
- **First** truck platoon demonstration in SoCal



- 12 miles round trip on I-66
- **First** truck platoon demonstration in the DC area

Jun 2016

Mar 2017

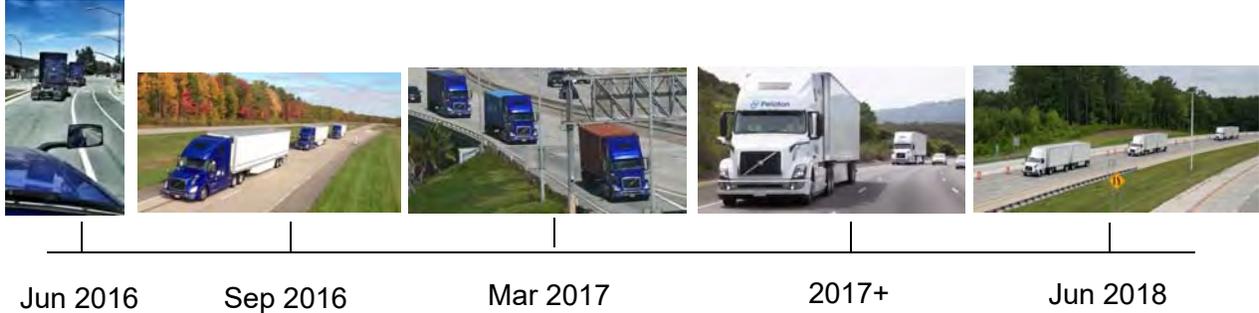
Sep 2017

Volvo Group



6

## Increasing momentum around technology policies and deployment guidelines is needed



Jun 2016

Sep 2016

Mar 2017

2017+

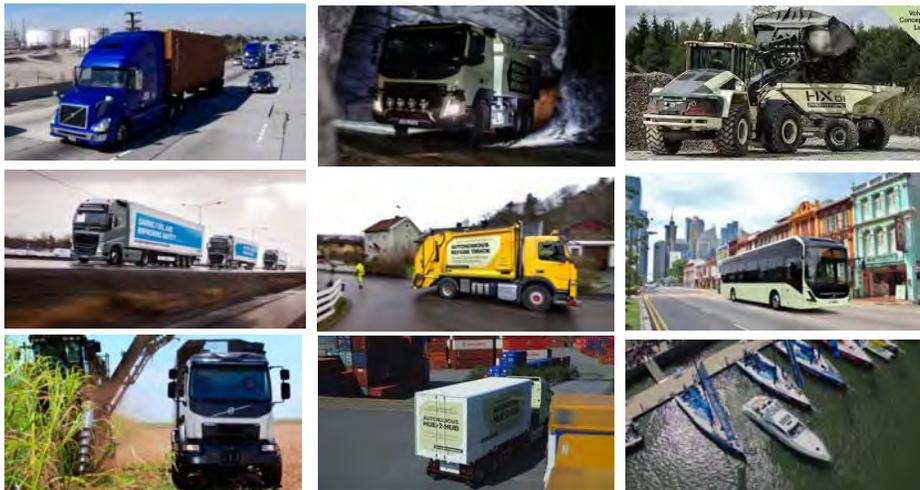
Jun 2018

Volvo Group

7

VOLVO  
VOLVO GROUP

## Connectivity and automated driving will allow for cleaner and safer megacities to grow and prosper



Automation levels decided by business needs and operations, and will vary

Volvo Group

8

VOLVO  
VOLVO GROUP

## Working with LD OEMs + public agencies to test and deploy V2X technologies to increase road safety



- Nov 2015 • **First-ever** testing of V2I apps on public roads in Farmington Hills, MI
- Mar 2016 • **First-ever** FHWA V2I demonstration in Fowlerville, MI
- Oct 2016 • Testing on public roads and live work zones in MI
- Jan 2017 • **First-ever** V2I demonstration in Washington, DC
- Sep 2017 • **Seminal** efforts for standardization and harmonization of V2I across US - in MI, TX, AZ, CA, ...



Volvo Group

9

## Two California projects with a common goal to implement and evaluate eco-driving on arterials near the ports

Plug-in Hybrid Electric Vehicle (PHEV) Ultra

Eco-Freight Advanced Traveler Information Systems (FRATIS)



Onboard app

Cloud-based app

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10

**Pooling resources has resulted in the first ITS corridor at the ports, spanning 6-8 miles, demo planned for 2/8**



15

Connected traffic lights

3



+4



1st

ITS deployment at the ports

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11





Southern California Association of Governments  
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017  
November 1, 2018

**To:** Community  
Economic & Human Development Committee (CEHD)  
Energy & Environment Committee (EEC)  
Transportation Committee (TC)  
**From:** Mike Jones, Senior Regional Planner, Goods Movement &  
Transportation Finance, (213) 236-1978, jonesm@scag.ca.gov  
**Subject:** Transportation Electrification Partnership – Los Angeles  
Cleantech Incubator

INTERIM  
EXECUTIVE DIRECTOR'S  
APPROVAL

**RECOMMENDED ACTION:**

For Information Only – No Action Required

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians.

**EXECUTIVE SUMMARY:**

*The Los Angeles Cleantech Incubator (LACI) is advancing the Transportation Electrification Partnership, an unprecedented collaboration among regional stakeholders to accelerate transportation electrification and zero emissions goods movement by 2028, coinciding with the 2028 Olympic and Paralympic Games in Los Angeles. LACI represents an alliance among the Office of the Mayor of Los Angeles, Los Angeles area universities and research organizations (i.e., UCLA, USC, Caltech, and Jet Propulsion Laboratory), the Los Angeles County Economic Development Corporation (LAEDC), the Los Angeles Business Council, the Los Angeles Area Chamber of Commerce, Los Angeles Department of Water and Power (LADWP) and the CRA/LA. As an organization, LACI aims to advance the commercialization of clean technologies and accelerate the development of innovative products by independent entrepreneurs. Through its 2028 Zero Emissions Roadmap, LACI intends to move the region toward transportation to achieve key goals including meeting statewide greenhouse gas (GHG) emissions targets, improving regional air quality, and ensuring that an autonomous future is shared and electric.*

**BACKGROUND:**

On September 13, 2017, Los Angeles Mayor Garcetti signed the host city contract with the International Olympic Committee which fully committed the City of Los Angeles to serving as the host of the 2028 Olympic and Paralympic Games. Building on Los Angeles’ historic success in hosting the Games in 1932 and 1984, and following recent precedent set by London, England during the 2012 Olympic and Paralympic Games, Los Angeles intends to rely heavily on existing venues and event infrastructure. However, a significantly larger regional population and expected attendance will drive Los Angeles, and the region itself, to plan for the additional critical transportation necessary infrastructure to accommodate the Games. While this will be a challenge, it also offers the opportunity for the region to expedite sorely needed projects. The region is already pursuing

strategies to realize these opportunities, such as the “Twenty-Eight by 28” initiative being considered by the Los Angeles County Metropolitan Transportation Authority (Metro). Recognizing this opportunity, and consistent with recent approved legislation such as California Senate Bill 100 (SB 100) which sets an aspirational goal of California getting its power from 100 percent renewable sources by 2045, Los Angeles Cleantech Incubator (LACI) has set a goal of reducing greenhouse gas (GHG) emissions and air pollution by 25 percent by 2028 in the region through development of the 2028 Zero Emissions Roadmap (Roadmap).

LACI is a non-profit organization funded by the CRA/LA and the Los Angeles Department of Water and Power (LADWP). In partnership with the city’s exceptional educational and research organizations – University of California Los Angeles (UCLA), University of Southern California (USC), California Institute of Technology (Caltech), and NASA Jet Propulsion Laboratory (JPL) – LACI helps accelerate the commercialization of clean technologies and accelerate new products developed by independent entrepreneurs. LACI is a result of the Clean Tech Los Angeles (CTLA) alliance among the Office of the Mayor of Los Angeles, Los Angeles area universities and research organizations (i.e., UCLA, USC, Caltech, and Jet Propulsion Laboratory), the Los Angeles County Economic Development Corporation (LAEDC), the Los Angeles Business Council, the Los Angeles Area Chamber of Commerce, Los Angeles Department of Water and Power (LADWP) and the CRA/LA.

With a focus on overall mobility, LACI’s Roadmap operates within the framework of four guiding principles: 1) ensuring that people and goods can move emissions-free throughout the region when they arrive for the Games, 2) eliminating anxiety related to range distances by ensuring sufficient charging infrastructure for vehicles, 3) enhancing quality of life through improved car quality, jobs, and access to mobility, and 4) growing the regional economy through transportation electrification. The Roadmap recognizes a future grid infrastructure that is dependent on renewable energy and able to meet the increased demands from vehicle electrification. Achieving this end goal will ensure that the transition to electrified passenger cars and trucks is frictionless for consumers and businesses, and integrates emerging technologies. To achieve this, the Roadmap seeks to expand electrical grid infrastructure in a way that ensures resilience and promotes electric vehicle adoption at scale. The initiative focuses strongly on the movement of people and goods.

For goods movement, the Roadmap acknowledges that medium and heavy-duty long-haul and drayage trucks comprise the second largest categories of GHG emissions in the transportation sector, and goods movement represents the region’s largest source of air pollution. This category represents a streamlined effort to map out the future of zero emissions goods movement in the region. To improve freight efficiency and the transition of goods movement modes to zero-emissions technologies, the Roadmap aims to ensure that infrastructure planning and investments support modern zero-emission freight corridors in a way that increases competitiveness and future economic growth for the region and state. Some of the identified goals include:

- Goods movement charging infrastructure: 10,000-100,000 zero emission chargers installed for goods movement;
- Heavy-duty drayage trucks: 10-40% of drayage trucks on the road are zero emissions;
- Heavy-duty long-haul trucks: 5-25% of trucks on the road are zero emission vehicles;

- 
- Medium-duty delivery trucks: 25-50% of medium-duty delivery trucks are electric;
  - Marine shipping and freight terminals: Begin electrification of shipping and freight rail in the region; and
  - Aerial: Ensure local delivery drones are electric.

The movement of people is also a significant focus of the Roadmap. Passenger vehicles including cars, SUVs, large pickups, and vans are the largest emitting group of transportation vehicles and represent the greatest opportunity for transportation electrification. The Roadmap also addresses public buses and light rail transportation, along with first mile and last mile solutions that increase transit ridership as well as encourage walking and biking. The Roadmap endeavors to ensure: 1) equal access to zero-emission transportation options that are cost-competitive, safe, and convenient, 2) an autonomous future is electric and does not increase vehicle-miles-traveled (VMT), and 3) that first and last mile electric options complement the region's public transit network. Some of the identified goals include:

- Charging infrastructure: 60,000 to 130,000 public chargers installed;
- Light-duty private vehicles: 20-45% of all light-duty private vehicles on the road are electric;
- Shared cars: 50-100% of shared cars are electric;
- Local transit: 80-100% of Metro and LADOT buses on the road, and 100% of new buses being introduced are electric;
- Commuter rail: Begin planning for electrification of one or more commuter rail lines with key partners;
- Light electric vehicles (LEVs): All disadvantaged communities with a walk score of less than 65 have LEV hubs to reduce single-occupancy vehicle (SOV) trips; and
- Aerial: Ensure short-haul and VTOL transit is electric.

**FISCAL IMPACT:**

No Fiscal Impact.

**ATTACHMENT(S):**

1. LACI TEP Deck



# Introducing the Transportation Electrification Partnership

LACI is convening an unprecedented collaboration to accelerate transportation electrification and zero emissions goods movement by the 2028 Olympics.



Attachment: LACI TEP Deck (Transportation Electrification Partnership – Los Angeles Cleantech Incubator)

# Time is of the essence, and Los Angeles is uniquely positioned to launch the LACI Partnership for Transportation Electrification



## LA Challenges

Los Angeles is the nation's center for transportation innovation

The Los Angeles region has the worst traffic in the U.S. (104 hours/year stuck in traffic) and ranks high in traffic fatalities

Transportation is the greatest source of California's greenhouse gas emissions and L.A.'s worsening air quality

L.A. boasts western hemisphere's busiest shipping ports (2), Int'l airports (3), major OEM presence

## LA Leadership

Measure M \$120B committed for transportation in the next 40 years.

Electric vehicles and related technologies (e.g., batteries) are rapidly advancing

Motivation and interest from key regulators, utilities, transit agencies, and private sector (e.g., OEMs)

L.A. is a world leader in mobility, climate action, data, smart cities, and clean technologies

Welcoming the world for the 2028 Olympic Games

**Transportation is LACI's top priority. As the front door of innovation in LA, it has the expertise and credibility to convene the critical leaders**



### Why LACI?

LACI is under new leadership, putting an emphasis on transportation, energy and smart cities.

LACI is the #1 Business and #3 Cleantech Incubator Globally

LACI has more than 200 active participants in the transportation sector working group

Key Partners are already convened around zero emissions transportation (e.g., CARB, utilities) with initial funding commitments in place

LACI's campus has a robust infrastructure, & is exploring expansion for a dedicated mobility lab

LACI currently hosts 10 transportation start ups, just completed first global mobility start up search

**Together we will lead the convergence toward a zero emission transportation future**



With a focus on delivering results now and on the road to 2028, the Partnership will accelerate progress toward key goals including:

- Statewide greenhouse gas emissions
- Regional air quality improvement
- Ensuring the autonomous future is shared & electric

LACI's partnership will launch in 2018 with an agenda that accelerates transportation electrification and zero emissions goods movement



- 1 Unprecedented Collaboration**  
Convening key leadership for transportation electrification & statewide zero emissions goods movement
- 2 Ambitious 2028 Roadmap**  
Shaping goals to accelerate results for shared mobility and zero emissions transportation
- 3 Identify Needed Market Signals and Rules**  
LACI will work with policy makers needed to create change at scale
- 4 Pilots and Showcases**  
LACI will work with partners to identify catalytic pilots, demonstration showcases and testbeds for electrification & shared mobility
- 5 Startups & Workforce Development**  
LACI will host technology competitions & incubate start-ups, while helping develop the needed workforce.

Attachment: LACI TEP Deck (Transportation Electrification Partnership – Los Angeles Cleantech Incubator)

LACI will convene and catalyze the unprecedented collaboration required to accelerate regional & statewide progress

### Leadership Group

- LACI CEO, Convener
- LA Mayor's Office
- CARB Chair
- SCE President
- LADWP GM
- PG&E Sr. VP
- CEO, MTA

### Advisory Group

- Key mobility/transit executives
- OEM CEOs
- Academic partners
- Autonomous vehicles leaders
- Key regional & national partners
- Statewide Ports/Goods movement partners
- Disadvantaged community representatives



# The Zero Emissions 2028 Roadmap will set ambitious targets to accelerate shared goals for mobility in SoCal and zero emissions transportation statewide



- ▶ **Establish Strong Baseline**  
Starting from a strong baseline of existing regional emissions, transportation & statewide goods movement policies, plans (e.g. Sustainable City Plan, CARB scoping plan, etc.)
- ▶ **Identify Gaps**  
In funding, technology, infrastructure, rules, & market signals, etc.
- ▶ **Set Ambitious yet Achievable Goals & Prioritize Needs**  
Setting shared goals for policies, projects, & initiatives needed to accelerate emissions reductions, regional transportation, & statewide goods movement
- ▶ **Imagine the Future**  
Scenarios for LA's land use future with shared, electric AVs
- ▶ **Integrate Partners**  
Working groups & key partners (e.g., Metro's Office of Extraordinary Innovation, AQMD, etc.)

# The partnership will accelerate zero emissions goods movement statewide to improve air quality and reduce greenhouse gas (GHG) emissions



Goods movement is the single greatest source of air emissions in greater Los Angeles, and is a major contributor to GHGs statewide. The partnership will:

- ▶ Work with CARB to release an RFI for the 100 EV trucks pilot called for in the Joint Clean Air Action Plan.
- ▶ Conduct a study of the I-5 Corridor, including the infrastructure needs for electric heavy duty trucks, technology gaps, anticipated air quality benefits, and other measures.
- ▶ Create a zero emissions goods movement pilot along the I-5 Corridor (e.g., along the Grapevine).
- ▶ Partner with the Climate Mayors to advance their Green Ports Collaborative with West Coast port cities.

The partnership will set ambitious goals in the 2028 Roadmap while launching pilots, programs, and a platform to deliver results



**Deliver**  
**Goods movement pilots & study**  
 by developing & releasing RFI for Ports 100 EV Truck Pilot in collaboration with CARB, & conduct I-5 infrastructure assessment with statewide partners

**Launch catalytic**  
**Passenger mobility pilots**  
 in a high profile location (e.g., Arts District, Expo Park) to educate public and decision makers on convergence of shared mobility, electrification, and autonomy

**Host**  
**LACI "Collider" of representatives**  
 from every level of government; serve as one-stop shop to collaborate and expedite demos and pilots with private sector companies

**Develop platform for**  
**Data & autonomous technology testbeds**  
 to measure progress (eg., GHGs, traffic, air pollution, safety) and allow real-time testing of technology

LACI will host technology competitions & incubate start-ups while providing workforce development & innovation tools



**Transportation Electrification**  
 Zero emission EV & charging technologies  
 Vehicle-to-grid integration (e.g., connectivity, telematics, autonomy)  
 Infrastructure electrification planning & coordination  
 Airport and aviation related solutions

**Electric and Active Shared Mobility**  
 Electric autonomous vehicle development  
 Last mile/first mile solutions for active and electric mobility (e.g., biking, electric scooters, etc)  
 IoT & FinTech solutions including for the unbanked to access solutions

**Zero Emissions Goods Movement**  
 Truck technology  
 Cargo movement efficiency  
 Electric aircraft

**Workforce Development & DACs**  
 New technology training & education, career prep  
 Partnerships w/ private, public agencies, community stakeholders  
 New models for bringing benefits to disadvantaged communities

**Our inaugural 2018  
action plan and 10  
year timetable  
demonstrate the  
partnerships near-  
and long-term  
ambitions**



### 2018 ACTION PLAN

<b>MAY</b>	<ul style="list-style-type: none"> <li>Announce goals and launch LACI Transportation Electrification Partnership</li> </ul>
<b>SUMMER</b>	<ul style="list-style-type: none"> <li>Continue '28 ZE Road Map partner and advisory group</li> <li>Launch mobility technology &amp; start up competition</li> <li>Release RFI for EV trucks</li> <li>Identify additional funding and resource partners</li> </ul>
<b>FALL</b>	<ul style="list-style-type: none"> <li>Unveil 2028 ZE Roadmap</li> <li>Global Transportation Summit</li> </ul>
<b>WINTER</b>	<ul style="list-style-type: none"> <li>Announce start up competition winners</li> <li>First pilot launch</li> </ul>

### 10 YEAR TIMETABLE

<b>ANNOUNCE</b> YEAR 1	<b>DEVELOP &amp; TEST</b> YEAR 2 TO 6	<b>DELIVER</b> YEAR 7 TO 10
<ul style="list-style-type: none"> <li>See 2018 Action Plan</li> </ul>	<ul style="list-style-type: none"> <li>Lessons from pilots</li> <li>Policy development</li> <li>Pilots &amp; Test Bed(s)</li> <li>Start up convening</li> <li>LACI Expansion/Mobility Lab</li> </ul>	<ul style="list-style-type: none"> <li>Unveil tech expansion</li> <li>Continue partnerships</li> <li>2028 Games Previews</li> <li>Showcase Successes</li> </ul>



Southern California Association of Governments  
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017  
November 1, 2018

To: Transportation Committee (TC)

INTERIM  
EXECUTIVE DIRECTOR'S  
APPROVAL

From: Annie Nam, Manager of Goods Movement, Goods Movement  
& Transportation Finance, 213-236-1827, Nam@scag.ca.gov

Subject: Virgin Hyperloop One Presentation

**RECOMMENDED ACTION:**

For Information Only – No Action Required.

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians.

**EXECUTIVE SUMMARY:**

*Tony Bauer, Senior Tunnel Engineer of Virgin Hyperloop One, will present an overview the company's hyperloop system.*

**BACKGROUND:**

Hyperloop is a vision for a ground-transport system that would travel faster than a commercial airliner and at a fraction of the price. The concept was initially popularized by "Hyperloop Alpha", a paper produced by Elon Musk in 2013. Practically, hyperloop is expected to offer substantial speed for the transport of cargo, with top speed estimates of up to 620 miles per hour (mph). At the end of 2017, Virgin Hyperloop One set a test speed record of nearly 240 mph during its third phase of testing at DevLoop, the world's first full-scale hyperloop test site.

In May 2018, it was announced that the Dubai-based terminal operator DP World and Virgin Hyperloop One formed a joint venture to expedite the implementation of hyperloop for land cargo transportation. A focal point for hyperloop is global e-commerce, which is projected to grow to a \$4.1 trillion industry over the next few of years. Based on recent published information, hyperloop costs are expected to be about 50-percent greater than trucks, but taking only 16 hours versus a 4-day shipment. Compared with air cargo, costs are estimated to be only one-eighth of the cost, with some time savings.

Within the United States, the company has partnered in Missouri and Texas where hyperloop feasibility studies are currently underway in select corridors. Earlier this year, the Mid-Ohio Regional Planning Commission (MORPC) announced it will be conducting two studies related to hyperloop including a feasibility study, followed by components of an environmental study of a corridor connecting Chicago, Columbus, and Pittsburgh.



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Tony Bauer, Senior Tunnel Engineer of Virgin Hyperloop One, will present an overview of the company's hyperloop system for the Committee's information.

**FISCAL IMPACT:**

None.

**ATTACHMENT(S):**

1. PowerPoint (and video) Presentation: Virgin Hyperloop

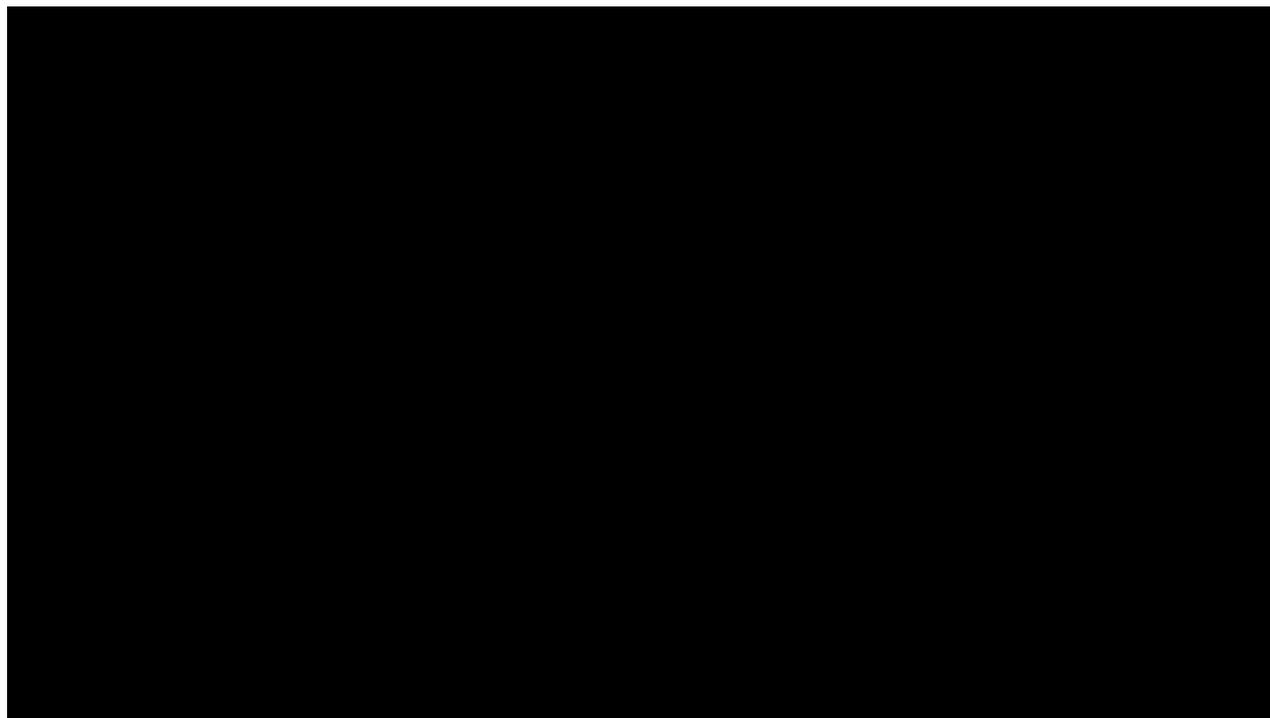


Virgin  
hyperloop one

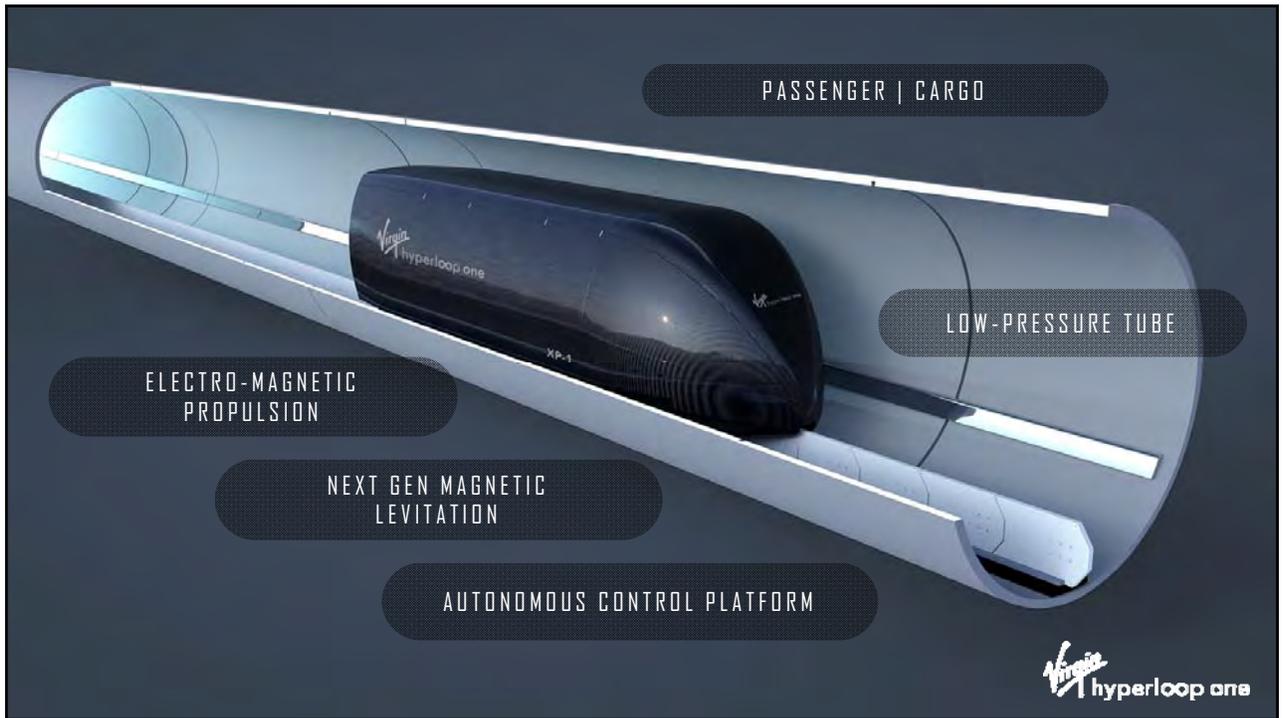
## Making Hyperloop a Reality

Tony Bauer  
Sr. Tunnel Engineer  
Anthony.Bauer@hyperloop-one.com

VIDEO WILL BE SHOWN



Attachment: PowerPoint (and video) Presentation: Virgin Hyperloop (Virgin Hyperloop One Presentation)



300 m/s  
1080 km/h  
671 mph



Higher Energy Efficiency Per Passenger Mile

100% ELECTRIC

ZERO DIRECT EMISSIONS

RENEWABLE ENERGY  
PROVIDER



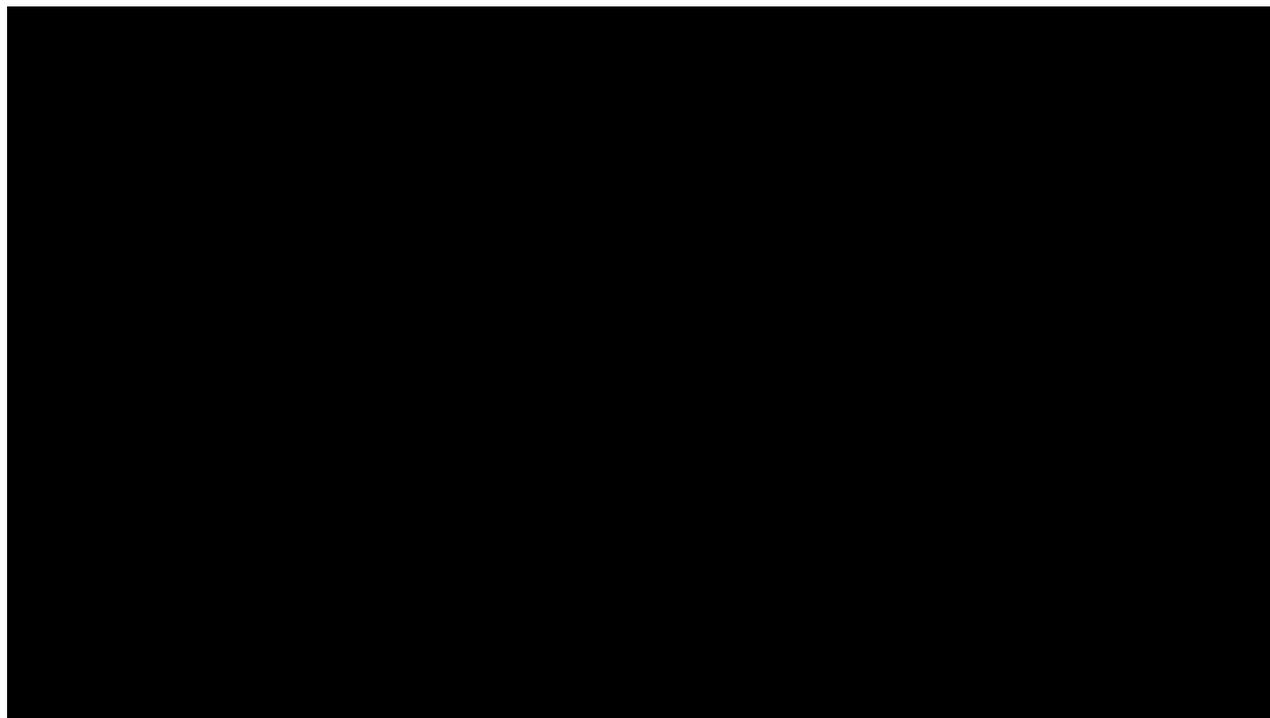


## Efficient Land-Use

FITS WITHIN EXISTING  
RIGHT OF WAYS

ELEVATED ABOVE OR  
BELOW GROUND

LESS DISRUPTION TO  
PEOPLE & WILDLIFE



Attachment: PowerPoint (and video) Presentation: Virgin Hyperloop (Virgin Hyperloop One Presentation)



Delivering results in years, not decades

Virgin hyperloop one

## Strong Global Projects

**MISSOURI**  
Completed feasibility study with Black & Veatch for St. Louis – Kansas City corridor

**COLORADO**  
Partnering with State of Colorado to study a state-wide hyperloop network connecting to Denver International Airport

**MIDWEST**  
Partnering with Columbus-area transportation agency on an environmental study and feasibility study for a Chicago-Pittsburgh hyperloop

**TEXAS**  
Included in Tier 2 EIS study between Dallas and Ft. Worth and a feasibility study for Ft. Worth to Laredo

**SPAIN**  
New R&D Facility Underway

**INDIA**

- MoUs signed with 3 States
- Pre-feasibility study completed for Maharashtra Mumbai – Pune
- Framework Agreement signed for Mumbai - Pune
- Detailed Feasibility, Financial and economic assessments completed

**DUBAI - RTA**  
Initial study for a passenger system between Dubai & Dubai South

Virgin hyperloop one

Attachment: PowerPoint (and video) Presentation: Virgin Hyperloop (Virgin Hyperloop One Presentation)



Attachment: PowerPoint (and video) Presentation: Virgin Hyperloop (Virgin Hyperloop One Presentation)



## The First European Hyperloop Development Facility



### Historic Framework Agreement with the Government of Maharashtra

- PMRDA and GoM to [provide right-of-way](#) for route & will assist with establishing regulatory process
- Project will begin in 2019 with construction of [Demonstration Track](#) (10-15km) along the route.
- VHO completed a [Detailed Feasibility Study and Concept Design](#).
- VHO started [Detailed Project Report and Preliminary Engineering](#)

## Mumbai Pune Project Overview

MUMBAI

NAVI MUMBAI INTL

PUNE

Pune to Mumbai (~144 km)



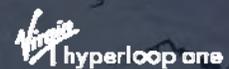
25 min



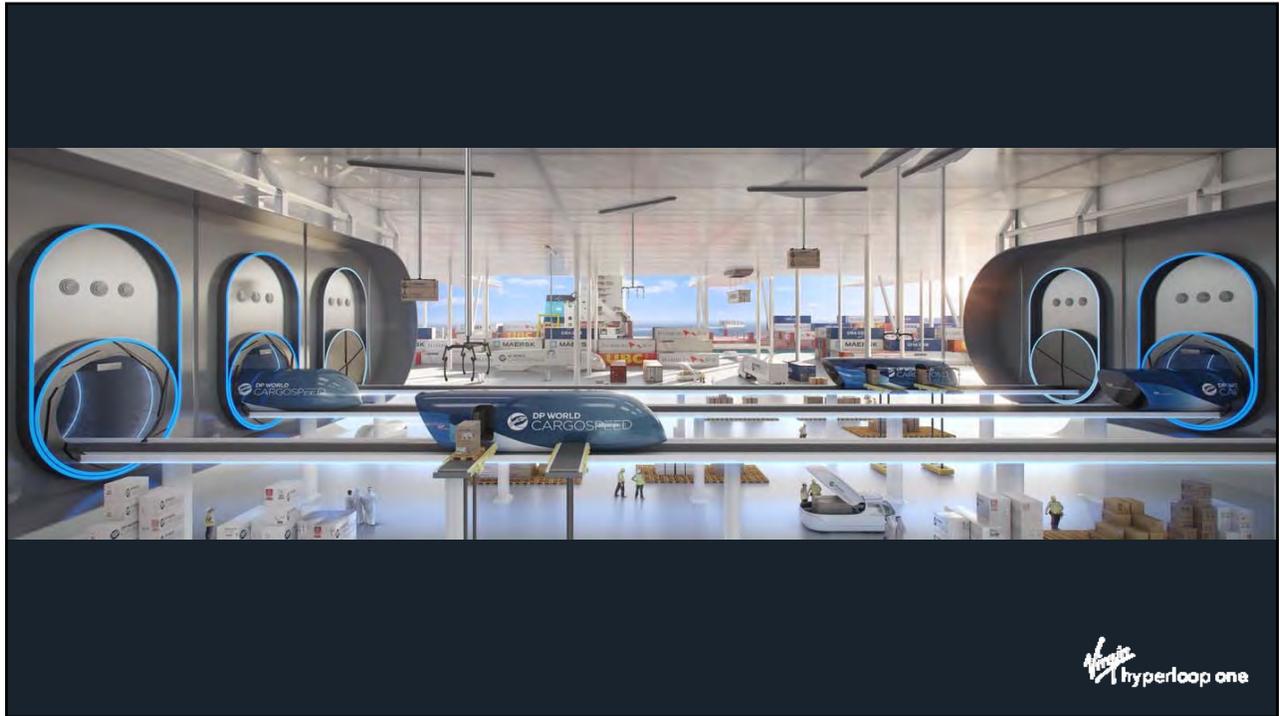
2.5 hours



3+ hours



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# Making Hyperloop A Reality...Now



TECHNOLOGY      PEOPLE      RESOURCES



WWW.HYPERLOOP-ONE.COM



@HYPERLOOPONE

Attachment: PowerPoint (and video) Presentation: Virgin Hyperloop (Virgin Hyperloop One Presentation)



Southern California Association of Governments  
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017  
November 1, 2018

To: Transportation Committee (TC)

INTERIM  
EXECUTIVE DIRECTOR'S  
APPROVAL

From: Stephen Yoon, Senior Regional Planner, Goods Movement &  
Transportation Finance, 213-236-1991, yoon@scag.ca.gov

Subject: RCTC Logistics Fee/Truck Study

**RECOMMENDED ACTION:**

For Information Only - No Action Required

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians. 2: Advance Southern California’s policy interests and planning priorities through regional, statewide, and national engagement and advocacy. 4: Provide innovative information and value-added services to enhance member agencies’ planning and operations and promote regional collaboration.

**EXECUTIVE SUMMARY:**

*The impact of trucks and other traffic associated with warehousing and logistics uses has increasingly emerged as an issue of concern in Riverside County as more of these developments are located within the county. The issue of adequate mitigation of the impacts of these uses on regional freeways recently culminated with a multi-party lawsuit involving mitigation of the Highland Fairview development in Moreno Valley. As part of a settlement agreement between the respective parties to the lawsuit, it was agreed that the Riverside County Transportation Commission (RCTC) would undertake a regional truck study to verify the cumulative level of impact of warehousing and logistics uses on the freeway system in Riverside County as the basis for establishing a regional logistics mitigation fee. The RCTC Truck Study (Study) and Development and Implementation of Regional Logistics Mitigation Fee are intended to verify the anticipated rate of growth in warehousing and logistics-related development in Riverside County, and to quantify the associated level of traffic impacts on the Riverside County highway system because of the expected growth in warehousing and logistics activities. In quantifying impacts, the Study is also intended to determine the amount that each new warehousing or logistics development should pay in lieu of completing actual freeway improvements to mitigate the cumulative regional traffic impacts specifically associated with truck trips generated by new warehousing and logistics developments. The findings of this Study are intended to provide the framework for implementing a program to collect impact fees that will contribute to mitigating the truck traffic impacts associated with new warehousing and logistics developments in Riverside County. RCTC staff will provide an overview presentation of the Study.*

**STRATEGIC PLAN:**

This item supports SCAG's Strategic Plan, Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians, Objective A: Create plans that enhance the region's strength, economy, resilience and adaptability by reducing greenhouse gas emissions and air pollution. Objective B: Be the leading resource for best practices that lead to local implementation of sustainable and innovative projects. Objective E: Facilitate inclusive and meaningful engagement with diverse stakeholders to produce plans that are effective and responsive to community needs.

**BACKGROUND:**

In 2015, RCTC and the County of Riverside (County) filed a lawsuit against the City of Moreno Valley and Highland Fairview, the developer of the World Logistics Center (WLC) project. The lawsuit challenged the environmental impact report to ensure adequate mitigation to impacts created by the WLC project. The WLC is proposed to be located in the eastern portion of the city, southerly of State Route 60, between Redlands Boulevard and Gilman Springs Road. The project would encompass over 2,610 acres with 40 million square feet for a large-scale logistics operation and is estimated to attract over 14,000 truck trips and 68,721 trips daily. In July 2016, a settlement agreement was reached between RCTC, the County, the City of Moreno Valley, and Highland Fairview. A key provision of the settlement required that the four parties each contribute \$250,000, for a total of \$1 million, for RCTC to conduct a regional transportation study to evaluate a logistics-related regional fee, including the fee structure and implementing mechanism. A result of the Study could be a new fee program that would, for example, set a fee on new distribution center warehouses, based on facility size, to help pay for highway improvements. This fee would differ from existing Transportation Uniform Mitigation Fee (TUMF) Programs in that it would only focus on highway projects, as compared to the regional TUMF Programs, which collect funds for regional arterials and local streets. Per the settlement agreement, if the County or at least 75 percent of RCTC's member cities adopt a regional warehouse fee within two years after a final court judgment is issued, Highland Fairview will pay 65 cents per square foot for each operating warehouse within the WLC. If no regional fee is adopted, the fee would be 50 cents per square foot. Proceeds would be used for projects identified as part of the regional truck study.

**Project Status**

In January 2017, RCTC approved the award of a contract to conduct a regional truck study and development and implementation of a regional logistics mitigation fee to WSP USA, formerly Parsons Brinckerhoff, Inc. The Study was kicked off in spring 2017 and a Study advisory team was created to review and discuss the data and deliverables provided by the consultant team. Since then, staff also provided updates on the Study to RCTC's Technical Advisory Committee (TAC), comprised of Public Works Directors and City Engineers as appointed by the City Managers within Riverside County. At its June 2018 Commission meeting, staff and the project consultant provided an update on this effort as follows:

- Sufficient data sources are available to justify the completion of a Nexus Study;
- Logistics warehousing is estimated to grow in Riverside County by about 37 million square feet by 2040;

- Future deficiencies in the highway network caused by logistics growth were identified in Western County;
- Proposed projects to mitigate the logistics growth could range from the addition of an auxiliary lane at on-and-off ramps, or, the widening of a mainline;
- Existing capacity deficiencies, pass-through trips in Riverside County, and infrastructure improvements that are already planned or have been completed (i.e. SR-91 Capital Improvement Program or French Valley Parkway) would be excluded;
- Total cost of infrastructure improvements is estimated at \$383.3 million, of which the attributable share to logistics growth is \$47.8 million; and
- A potential fee could be up to \$1.28 per square foot of gross floor area. A Nexus Study is under development to establish the relationship between growth related to logistics facilities and truck traffic and the improvements needed to mitigate such growth. The Mitigation Fee Act requires an agency to make five findings with respect to a proposed fee, as follows:
  1. Purpose of the Fee
  2. Use of Fee Revenues
  3. Use/Type-of-Development Relationship
  4. Need/Type-of-Development Relationship
  5. Proportionality Relationship

The scope also calls for an analysis of the Fee Allocation Structure and Implementing Mechanism. This task is also underway and will include the review of other similar types of fees, the administration and structure of a logistics-related fee program, and an economic market analysis to see how a fee might impact development growth in the county.

John Standiford, Deputy Executive Director of RCTC and Lorelle Moe-Luna, Acting Multimodal Services Director of RCTC will present an overview of the Study.

**FISCAL IMPACT:**

There is no financial impact for this item.

**ATTACHMENT(S):**

1. PowerPoint Presentation: Regional Logistics Fee Study



# REGIONAL LOGISTICS FEE STUDY

SCAG TRANSPORTATION COMMITTEE  
NOVEMBER 1, 2018

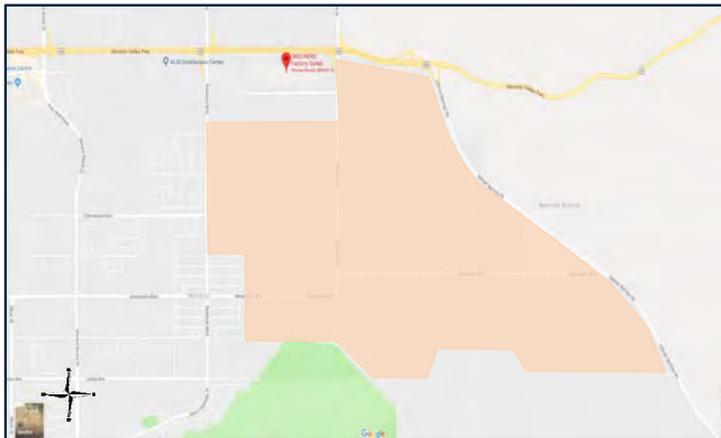
John Standiford, Deputy Executive Director  
Lorelle Moe-Luna, Acting Multimodal Services Director



## Study Background



## World Logistics Center



- Large-scale logistics operations with 40.6 million SF of building space
- Covers 2,610 acres
- Expected to draw as many as 14,000 truck trips per day at build-out
- Skechers is 1.8 million SF



## Challenging the EIR

- RCTC filed suit in Sept. 2015
- Additional suits filed by the County and SCQAMD
- Additional CEQA lawsuits filed by environmental organizations
- Highland Fairview launched initiatives to supplant city approval of the project
- RCTC filed suit challenging the initiatives in Feb. 2016





## Reaching a Settlement

- World Logistics Center Settlement
- Each party to contribute \$250,000

**HIGHLANDFAIRVIEW**



SETTLEMENT AGREEMENT

This settlement agreement ("Agreement") is made at Riverside, California, as of July 21, 2016, between THE COUNTY OF RIVERSIDE (the "County") and the RIVERSIDE COUNTY TRANSPORTATION COMMISSION (the "RCTC"), on the one hand, and the CITY OF MORENO VALLEY and the MORENO VALLEY COMMUNITY SERVICES DISTRICT (collectively the "City"), HF PROPERTIES,

2. Highland Fairview, the City, the County and the RCTC will each contribute, directly or indirectly, \$250,000, for a total of \$1,000,000, to be used for an RCTC-conducted regional transportation study to evaluate a logistics-related regional fee. The contributions shall be submitted to the RCTC and shall be managed according to its regular accounting practices. The contributions will be made no later than 60 calendar days after a final

...regional transportation study to evaluate a logistics-related regional fee...

these funds at any time.



## Other Terms and Conditions

- HF and Moreno Valley must contribute \$100,000 each for air quality studies
- HF to receive TUMF credit for widening Gilman Springs
- HF to contribute \$3 million for Gilman Springs safety improvements
- HF to contribute \$2 million for widening the 60 and \$1 million for improving the Theodore Interchange



## Potential Regional Fee

- HF will pay \$0.65/SF in-lieu fee if there is an established regional logistics fee program
- A regional fee would need approval of the county or 75 percent of the cities
- Approval must take place within 24 months of the HF and Moreno Valley \$250,000 contribution for the study
- Should no regional fee be approved, the fee is reduced to \$0.50/SF



## Implementing a Truck Study

- Key is to establish nexus for a fee program to mitigate project impacts
- Can only assess fees and mitigate for *new projects*
- Pass through trips and existing development cannot be borne by this kind of fee program
- No overlap with the existing TUMF programs, this study focuses on mainline freeway truck impacts and mitigation (which are not a part of either TUMF).





# Study Participation



# Project Timeline

Task/Scope	Status
May 2017	Study Kick-Off
May 2017 – May 2018	Data Collection/Analysis 1) Existing and Future Conditions Analysis 2) Funding and Cost Analysis
May 2018 – Sept 2018	Nexus Study
Sept 2018 – Dec 2018	Stakeholder Outreach
Dec 2018 – Jun 2018	Study Recommendations



# Completed Tasks



## Major Study Tasks

### Task/Scope

- 1) Existing and Future Conditions Analysis
  - ✓ Forecast logistics growth
  - ✓ Forecast truck trips
  - ✓ Identify capacity deficiencies
- 2) Funding and Cost Analysis
  - ✓ Attribute deficiencies to new logistics development
  - ✓ Estimate project costs
  - ✓ Compute fee amount
- 3) Nexus Study
  - ✓ Prepare report to establish the relationship between logistics-related facilities growth, truck traffic, and the improvements to mitigate such growth



# Forecast Logistics Growth

Warehouse Employment Growth for Riverside County			
	2016 Employees	2040 Employees	Growth Employees
SCAG 2016 RTP/SCS Employment Forecast	5,343	13,612	8,269
EDD Employment Trend Forecast	13,080	27,662	14,582

Basis to model impacts

- EDD warehouse employment trend forecast was used for modeling purposes

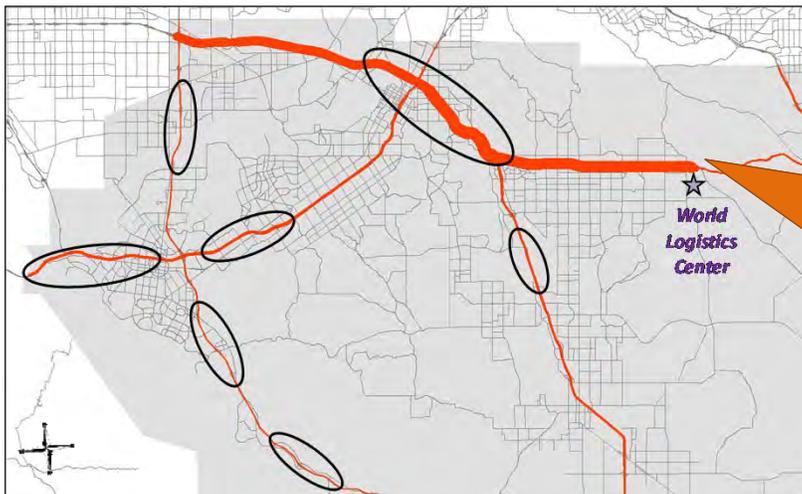
Warehouse Building Area Growth for Riverside County			
	2016 SF GFA	2040 SF GFA	Growth SF GFA
SCAG 2016 RTP/SCS HDT Model GFA Forecast	63,309,990	100,642,169	37,332,179
EDD Employment Trend Forecast	29,312,280	61,990,542	32,678,262

Basis to calculate fee

- EDD employment trend forecast was multiplied by 2,241 square feet per employee ratio from NAIOP *Logistics Trends and Specific Industries that Will Drive Warehouse and Distribution Growth and Demand for Space*, March 2010



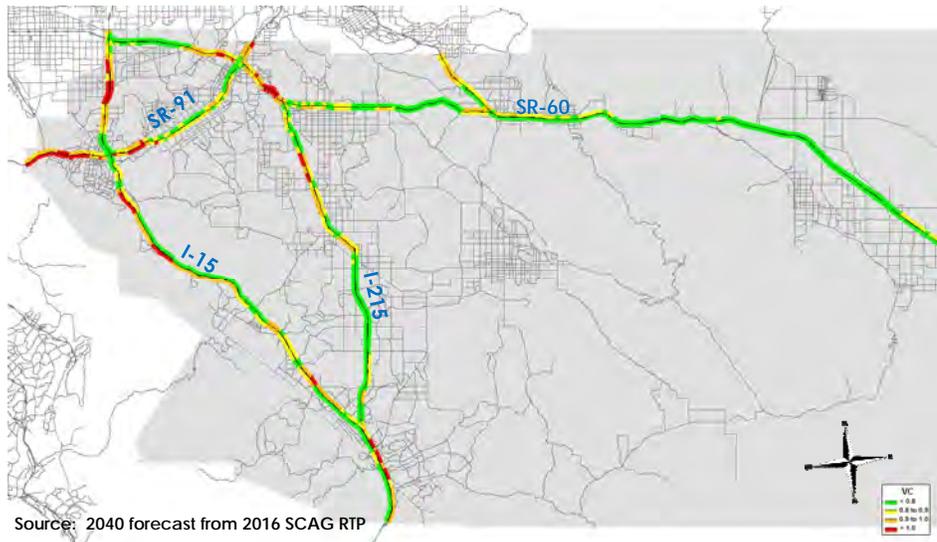
# New Logistics Truck Impact



- Bandwidth reflects proportional increased volume
- Largest increases in truck flows would occur on SR-60 and I-215

Source: 2040 forecast from 2016 SCAG RTP

## Identified Deficiencies Based on New Warehousing Development



## Attributing the Share of Impacts

- **Adjust for the following factors:**
  - Existing capacity deficiency
  - Share of future traffic growth that is attributable to other development activity
  - Pass through trips that have a trip end outside Riverside County
- **Accomplished by comparing base model run to model run that separates warehouse and logistics uses**



## Attributing the Share of Impacts

ID	Route Name	Dir	Beginning	End	Segment Length (mi)	2040 Max V/C	Recommended Improvement	% Deficiency Attributable to New Logistics Trucking	
1	I-15	NB	SR-79 S	Rancho California Rd	1.0	1.01	Add aux lane between the on- and off-ramps	1%	
2			Rancho California Rd	Winchester Rd	1.1	1.01		1%	
3			Winchester Rd	Lane Add south of I-15/I-215 Split	0.7	1.08		1%	
4			Clinton Keith Rd	Baxter Rd	0.8	1.03		0.3%	
5			El Cerrito Rd	Ontario Ave	0.2	1.03		1%	
6		SR-60	SB	Norco Dr/6th Street	Limonite Ave	2.0	1.14	Add aux lane between the on- and off-ramps	1%
7		Cantu Galeano Ranch Rd		Limonite Ave	1.3	1.02	Add aux lane between the on- and off-ramps	4%	
8		Limonite Ave		Norco Dr/6th Street	2.0	1.04	Add aux lane between the on- and off-ramps	5%	
9		El Cerrito Rd		Dos Lagos Dr	2.1	1.09	Widen mainline to 4 lanes	2%	
10		Temescal Canyon Rd		Indian Truck Trail	2.2	1.01	Add aux lane between the on- and off-ramps	1%	
11	SR-60	EB	Rubidoux Blvd	Market St	0.8	1.03	Add aux lane between the on- and off-ramps	31%	
12			Market St	Main St	0.1	1.06		39%	
13	I-215	NB	Box Springs Rd	Central Ave	0.4	1.07	Add aux lane between the on- and off-ramps	14%	
14			Watkins Dr	Martin Luther King Jr	0.8	1.23		38%	
15			University Ave Off-Ramp	Upstream of Univ Ave On-ramp	0.4	1.04		Add aux lane upstream of the on-ramp to the off-ramp	13%
16		SR-91	SB	Center St Off-Ramp	Riverside County Line/Iowa Ave	0.5	1.03	Add aux lane between the off-ramp and the county line	12%
17		Martin Luther King Jr		Sycamore Canyon Rd	1.6	1.25	Add aux lane between the on- and off-ramps	57%	
18	SR-91	NB	Van Buren Blvd	Harley Knox Blvd	1.2	1.06	Add aux lane between the on- and off-ramps	4%	
19			Riverside County Line	Green River Rd Off-Ramp	0.8	1.23	Add aux lane from the county line to Green River Rd. off-ramp	1%	
20			Green River Rd Off-Ramp	SR-71	1.3	1.02	Widen mainline to 6 lanes	10%	
21		SR-71	Serfas Club Dr Off-Ramp	1.4	1.27	Widen mainline to 6 lanes	1%		
22		Serfas Club Dr Off-Ramp	Grand Blvd Off-Ramp	2.3	1.23	Widen mainline to 5 lanes	9%		
23		SR-91	SB	On-Ramp from SB I-15	On-Ramp from NB I-15	0.3	1.07	Add aux lane	8%
24		Mckinley St Off-Ramp		Pierce St	1.6	1.14	Widen mainline to 4 lanes	10%	
25	Magnolia Ave	La Sierra Ave		0.3	1.00	Add aux lane between the ramps	8%		
26	Serfas Club Dr Off-Ramp	Lane Add at SR-71		2.3	1.12	Widen mainline to 5 lanes	3%		
27	Lane Add at SR-71	Riverside County Line	1.7	1.07	Widen mainline to 6 lanes	2%			



## Cost Estimation Methodology

- Deficient segments were reviewed to determine project limits/logical termini for mitigation project concepts
- Mitigation project concepts were compared to completed and ongoing RCTC program to determine where deficiencies have been/are being mitigated
- Conceptual designs were developed using Google desktop research.
  - All costs and impacts based on visual analysis
  - No detailed engineering completed for verification

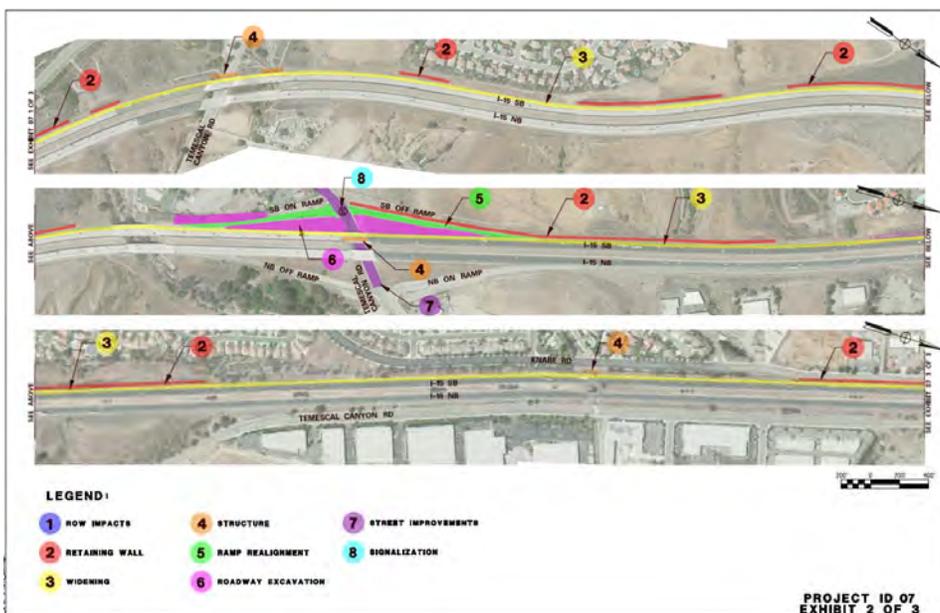


## Cost Estimation Methodology

- Conceptual costs were developed based on the quantification of construction elements in the conceptual designs
- Unit cost values based on Caltrans 2016/2017 Construction Cost Database
- Various ancillary and support cost factors, and contingency factor applied



## Conceptual Design Example – I-15 SB Cajalco to Indian Truck





# Total Conceptual Cost Estimate

RCTC Truck Study and Regional Logistics Mitigation Fee Capacity Improvement Project Conceptual Cost Estimate Summary *						
ID	Route Name	Dir	Beginning	End	Total Conceptual Project Cost	Findings
1	I-15	NB	SR-79 S	Rancho California Rd	\$36,237,000	Cost reduced by TUMF inclusion of I-15 at Rancho California
2			Rancho California Rd	Winchester Rd	-	Mitigated by French Valley Parkway Project
3			Clinton Keith Rd	Lane Add south of I-15/I-215 Split	-	Cost reduced by TUMF inclusion of I-15 at Baxter
4			El Cerrito Rd	Baxter Rd	\$7,406,000	Mitigated by I-15 Tolloed Express Lanes (TEL)
5		Norco Dr/6th St	Ontario Ave	-	Mitigated by I-15 Tolloed Express Lanes (TEL)	
6		Cantu Galeano Ranch Rd	Limonite Ave	-	Mitigated by I-15 Tolloed Express Lanes (TEL)	
7		Limonite Ave	Norco Dr/6th	-	Mitigated by I-15 Tolloed Express Lanes (TEL)	
8		SB	Cajalco Rd	Indian Truck Trail	\$37,825,000	Cost reduced by TUMF inclusion of I-15 at Temescal Canyon
9	SR-60	EB	El Cerrito Rd	Cajalco Rd	\$10,408,000	Cost reduced by TUMF inclusion of I-15 at Cajalco
10			Rubidoux Blvd	Market St	\$40,234,000	
11	I-215	NB	Market St	Main St	-	
12			Box Springs Rd	Central Ave/Watkins Dr	\$26,513,000	
13			Central Ave/Watkins	Martin Luther King	\$55,081,000	
14		Martin Luther King Blvd	SR-91	\$42,212,000	Cost reduced by TUMF inclusion of I-215 at Highgrove/Center	
15		Center St Off-Ramp	Riverside County Line/Iowa	\$13,403,000		
16	SR-91	NB	Martin Luther King Jr	Sycamore Canyon Rd	\$95,365,000	Cost reduced by TUMF inclusion of I-215 at Perris, Nuevo, Placentia (MCP), Ramona and Harley Knox
17			Van Buren Blvd	Case Rd	-	
18	SR-91	NB	Riverside County Line	Green River Rd Off-Ramp	-	Mitigated by SR-91 Express Lane Extension Project
19			Green River Rd Off-Ramp	SR-71	-	Mitigated by SR-91 Express Lane Extension Project
20			SR-71	Serfas Club Dr Off-Ramp	Grand Blvd Rd Off-Ramp	-
21		Serfas Club Dr Off-Ramp	On Ramp from SB-I-15	On Ramp from NB- I-15	\$7,611,000	Mitigated by SR-91 Express Lane Extension Project
22		On-Ramp from SB-I-15	Pierce St	Magnolia St	\$13,040,000	
23		McKinley St Off-Ramp	Lane Add at SR-71	Riverside County Line/Iowa	-	Mitigated by SR-91 Express Lane Extension Project
24	SR-91	SB	Serfas Club Dr Off-Ramp	Lane Add at SR-71	-	
25	SR-91	SB	Lane Add at SR-71	Riverside County Line/Iowa	-	
<b>Sum Total:</b>					<b>\$385,335,000</b>	

\*Includes auxiliary lane improvements

**Total Conceptual Cost Estimate: \$385,335,000**



# Total Logistics Cost Share

RCTC Truck Study and Regional Logistics Mitigation Fee Capacity Improvement Project Adjusted Conceptual Cost Share Summary *							
ID	Route Name	Dir	Beginning	End	Total Conceptual Project Cost	Logistics Attributable Share	Logistics Cost Share
1	I-15	NB	SR-79 S	Rancho California Rd	\$36,237,000	0.7%	\$258,000
3			Rancho California Rd	Winchester Rd	-	0.3%	\$19,000
7		SB	Cajalco Rd	Indian Truck Trail	\$37,825,000	2.2%	\$820,000
8			El Cerrito Rd	Cajalco Rd	\$10,408,000	1.4%	\$142,000
9	SR-60	EB	Rubidoux Blvd	Market St	\$40,234,000	31.8%	\$12,802,000
10			Market St	Main St	-		
11	I-215	NB	Box Springs Rd	Central Ave/Watkins Dr	\$26,513,000	30.0%	\$7,963,000
12			Central Ave/Watkins	Martin Luther King	\$55,081,000	13.3%	\$7,317,000
13			Martin Luther King Blvd	SR-91	\$42,212,000	11.8%	\$4,978,000
14		SB	Center St Off-Ramp	Riverside County Line/Iowa	\$13,403,000	57.1%	\$7,658,000
15			Martin Luther King Jr	Sycamore Canyon Rd	\$95,365,000	4.4%	\$4,235,000
16	SR-91	NB	Van Buren Blvd	Case Rd	\$7,611,000	7.5%	\$571,000
17			On-Ramp from SB-I-15	On Ramp from NB- I-15	\$13,040,000	8.3%	\$1,078,000
18	SR-91	SB	Pierce St	Magnolia St	-		
<b>Sum Total:</b>					<b>\$385,335,000</b>	<b>12.4%</b>	<b>\$47,841,000</b>

\*Includes auxiliary lane improvements

**Total Logistics Cost Share: \$47,841,000**

Attachment: PowerPoint Presentation: Regional Logistics Fee Study (RCTC Logistics Fee/Truck Study)



## Draft Logistics and Warehouse Impact Fee

Logistics and Warehouse Impact Fee for Riverside County		
Fee Options	2016 RTP Heavy Duty Truck Model	EDD Employment Trend Forecast
Logistics Cost Share of Freeway Mitigation		\$47,841,000
Growth in Warehouse SF Gross Floor Area	37,332,179	32,678,262
Fee per SF Gross Floor Area	\$1.28	\$1.46



## Next Steps



## Next Steps

- Public Outreach/Public Comment Period
  - Stakeholder Workshops
- Analysis of Fee Allocation and Implementation
  - Research fees of similar nature, Economic elasticity analysis and impact on local employment and economic development



Southern California Association of Governments  
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017  
November 1, 2018

To: Transportation Committee (TC)

INTERIM  
EXECUTIVE DIRECTOR'S  
APPROVAL

From: Scott Strelecki, Senior Planner, Goods Movement &  
Transportation Finance, (213) 236-1893, strelecki@scag.ca.gov

Subject: Last Mile Freight Study

**RECOMMENDED ACTION:**

For Information Only – No Action Required.

**STRATEGIC PLAN:**

This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians.

**EXECUTIVE SUMMARY:**

*This report updates TC members on the Last Mile Freight Study. SCAG is conducting the Last Mile Freight Study to assess delivery conditions and recommend best practices in a complete streets context for both commercial freight delivery operators and recipients.*

**BACKGROUND:**

E-commerce growth estimates call for the parcel delivery market in the United States to more than double by 2025. This will impact dense urban areas and business districts, commercial and industrial streets, as well as residential neighborhoods. With e-commerce on the rise, and considering the growth of transportation network companies (TNCs) like Uber and Lyft along with bike share, car share, and enhanced transit, there is a fundamental need to account for, maintain, and manage curb and sidewalk space in many city areas throughout the region. Augmenting “complete streets” initiatives with the commercial aspect of last-mile deliveries is an important consideration in today’s highly complex transportation environment.

SCAG is conducting the Last Mile Freight Study to assess localized delivery conditions including the identification of specific issues experienced by commercial freight delivery operators and recipients; and the initial documentation of TNCs in terms of curbside access and utilization. Solutions to be evaluated by the study will consider strategies looking to reduce costs and delays, ensure safety, and enable efficient utilization and management of curbside assets. The initial case study area is within the City of Los Angeles, focused on methods and recommendations suitable for consideration throughout the Southern California region and across the United States.

**FISCAL IMPACT:**

Work associated with this item is included in the Fiscal Year 2017-19 Overall Work Program under Project No. 19-130.0162.18 for Goods Movement Planning.



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**ATTACHMENT(S):**

1. PowerPoint Presentation: LM Freight Study

# Last Mile Freight Study

Transportation Committee

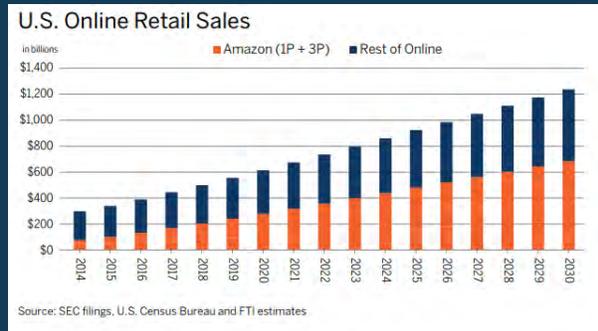
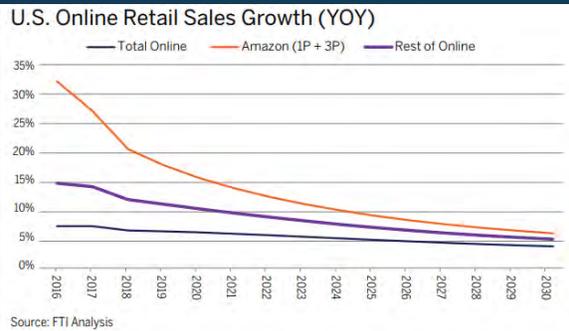
Scott Streliecki  
 Senior Transportation Planner  
 November 1, 2018



## Overview of Key Trends



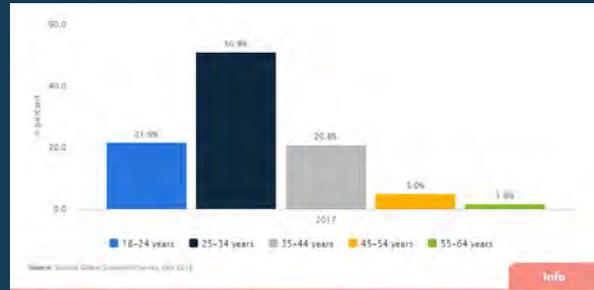
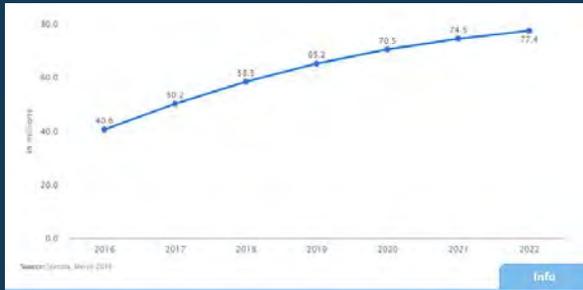
- E-Commerce Performance



## Overview of Key Trends



### ■ Ride Sharing Performance



## Study Update



### ■ Study Goals

- Create transparency of last-mile delivery conditions as it relates to complete streets
- Understand the challenges and needs from a variety of users
- Quantify delivery issues and conditions
- Balance conflicting demands for street space
- Develop strategies appropriate for different areas
- Identify pilot projects for delivery improvements
- Have a stakeholder-driven process

## Study Update



- Study Elements
  - Citywide data analysis
  - Field data collection
  - Stakeholder input
  - Final report and toolbox of strategies



## Study Update



- Stakeholder Input
  - Ongoing
  - Delivery/receiver interviews
  - Input from case study areas



## Study Update



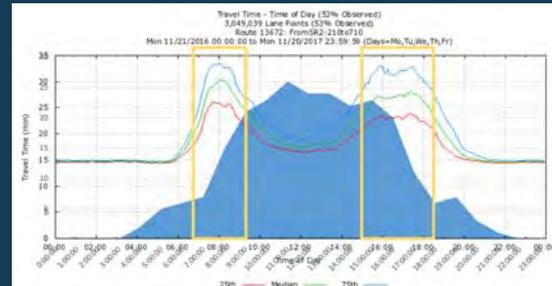
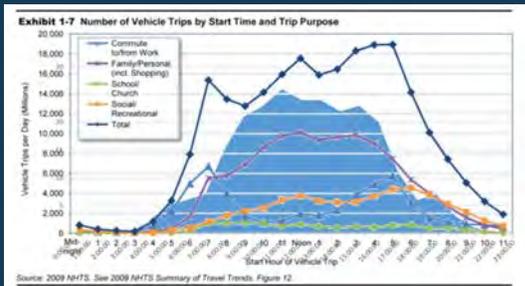
- Citywide Data Analysis
  - PAC meeting discussions
  - Defined existing conditions
  - Identified case study locations



## Study Update



- Field Data Collection
  - Developed processes and methodologies
  - Data collection and analysis
    - Video cameras
    - Technician documentation



## Study Update



### Transportation Network Companies (TNCs)

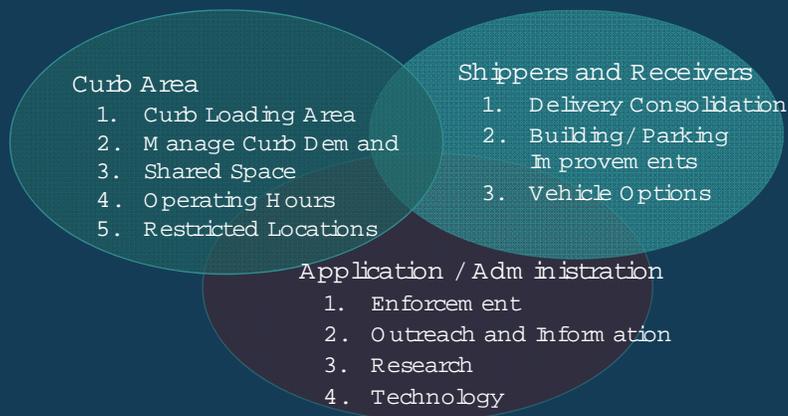
Type	All Passenger Loading	Type of Curb Area Used For Passenger Loading				
		Red	Parking	Yellow	White	Other (e.g. Driveway)
TNC (e.g. Uber, Lyft)	10%	73%	9%	3%	5%	10%
Taxi / Shuttle	3%	44%	15%	11%	19%	11%
Bus	46%	99%	0%	0%	0%	1%
Personal Vehicle	41%	47%	12%	5%	27%	9%
Total	100%	73%	6%	3%	12%	7%



## Study Update



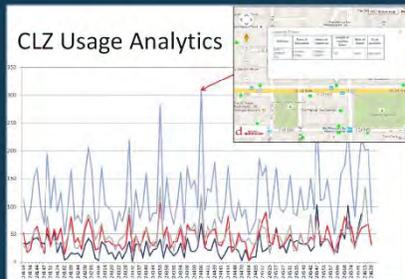
### Delivery Strategy Categories



## Study Update



- Toolbox of Strategies Elements
  - Site specific recommendations within the context of typologies
  - Policy/citywide recommendations
  - Compendium matrix
  - Potential pilot projects



Pay to Load: Indicates length of stay permitted (2 hours maximum)

Park Mobile Zone Number: Used for carrier paying by cell phone.

Service Times: beginning and end time of when a loading zone requires payment.



## Study Update



- Next Steps
  - Draft Report/findings review and discussions
    - PAC and other local jurisdiction stakeholders
  - Identification of key strategies
    - Potential pilot projects
  - Final Report completion fall 2018

# Thank you

Scott Strellecki

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213-236-1893

