SCAG
INNOVATING FOR A BETTER TOMORROW

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

REGULAR MEETING

TRANSPORTATION COMMITTEE

PLEASE NOTE MEETING ROOM LOCATION*

Thursday, March 5, 2020
10:00 a.m. – 12:00 p.m.

SCAG MAIN OFFICE
900 Wilshire Blvd., Ste. 1700
Policy B Meeting 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. Agendas & Minutes are also available at: www.scag.ca.gov/committees

SCAG, in accordance with the Americans with Disabilities Act (ADA), will accommodate persons who require a modification of accommodation in order to participate in this meeting. SCAG is also committed to helping people with limited proficiency in the English language access the agency's essential public information and services. You can request such assistance by calling (213) 236-1908. We request at least 72 hours (three days) notice to provide reasonable accommodations and will make every effort to arrange for assistance as soon as possible.

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TC - Transportation Committee
Members – March 2020

1. **Hon. Cheryl Viegas-Walker**
   TC Chair, El Centro, RC District 1

2. **Hon. Jess Talamantes**
   TC Vice Chair, Burbank, RC District 42

3. **Hon. Sean Ashton**
   Downey, RC District 25

4. **Hon. Phil Bacerra**
   Santa Ana, RC District 16

5. **Hon. Rusty Bailey**
   Riverside, RC District 68

6. **Hon. Kathryn Barger**
   Los Angeles County

7. **Hon. Ben Benoit**
   Air District Representative

8. **Hon. Will Berg**
   Port Hueneme, VCOG

9. **Hon. Austin Bishop**
   Palmdale, North L.A. County

10. **Hon. Drew Boyles**
    El Segundo, President's Appt. (Member at Large)

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. JJohn Dutrey**
    Montclair, SBCTA

17. **Hon. Emily Gabel-Luddy**
    Burbank, AVCJPA

18. **Hon. James Gazeley**
    Lomita, RC District 39

19. **Hon. Jack Hadjinian**
    Montebello, Pres. Appt., (Member at Large)

20. **Sup. Curt Hagman**
    San Bernardino County

21. **Hon. Ray Hamada**
    Bellflower, GCCOG

22. **Hon. Jan Harnik**
    RCTC

23. **Hon. Dave Harrington**
    Aliso Viejo, OCCOG

24. **Hon. Steven Hofbauer**
    Palmdale, RC Disctrict 43

25. **Hon. Jose Huizar**
    Los Angeles, RC District 61

26. **Hon. Mike Judge**
    VCTC

27. **Hon. Trish Kelley**
    Mission Viejo, OCCOG

28. **Hon. Paul Krekorian**
    RC District 49/Public Transit Rep.

29. **Hon. Linda Krupa**
    Hemet, WRCOG

30. **Hon. Richard Loa**
    Palmdale, NCTC

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, RC District 7

35. **Hon. Marsha McLean**
    Santa Clarita, North L.A. County

36. **Hon. Dan Medina**
    Gardena, RC District 28

37. **Hon. L. Dennis Michael**
    Rancho Cucamonga, RC District 9

38. **Hon. Lisa Middleton**
    Palm Springs, CVAG

39. **Hon. Fred Minagar**
    Laguna Niguel, RC District 12

40. **Hon. Carol Moore**
    Laguna Woods, OCCOG

41. **Hon. Cory Moss**
    Industry, SGVCOG

42. **Hon. Ara Najarian**
    Glendale, SFVCOG

43. **Hon. Frank Navarro**
    Colton, RC District 6

44. **Hon. Hector Pacheco**
    San Fernando, RC District 67

45. **Hon. Chuck Puckett**
    Tustin, RC District 17

46. **Hon. Teresa RealSebastian**
    Monterey Park, RC District 34

47. **Hon. Ed Reece**
    Claremont, SGVCOG

48. **Hon. Dwight Robinson**
    Lake Forest, OCCOG

49. **Hon. Carlos Rodriguez**
    Yorba Linda, Pres. Appt., (Member at Large)

50. **Hon. Crystal Ruiz**
    San Jacinto, WRCOG

51. **Hon. Ali Saleh**
    Bell, RC District 27

52. **Hon. Tim Sandoval**
    Pomona, RC District 38

53. **Hon. Rey Santos**
    Beaumont, RC District 3

54. **Hon. Zak Schwank**
    Temecula, RC District 5

55. **Hon. Marty Simonoff**
    Brea, RC District 22

56. **Hon. Thomas Small**
    Culver City, WSCCOG

57. **Hon. Jeremy Smith**
    Canyon Lake, Pres Appt. (Member at Large)

58. **Hon. Larry Smith**
    Calimesa, Pres. Appt. (Member at Lage)

59. **Hon. Karen Spiegel**
    Riverside County

60. **Hon. Cynthia Sternquist**
    Temple City, SGVCOG

61. **Hon. Brent Tercero**
    Pico Rivera, GCCOG

62. **Hon. Steve Tye**
    Diamond Bar, RC District 37

63. **Hon. Donald Wagner**
    Orange County

64. **Hon. Alan Wapner**
    SBCTA

65. **Hon. Alicia Weintraub**
    Calabasas, LVMCOG

66. **Mr. Paul Marquez**
    Caltrans, District 7, Ex-Officio Non-Voting Member

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TRANSPORTATION COMMITTEE AGENDA

Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700 – Policy B Meeting Room
Los Angeles, California 90017
Thursday, March 5, 2020
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 Cheryl Viegas-Walker, 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 Item

Receive and File

INFORMATION ITEMS

(Richard Wolsfeld, Jr., Executive Vice President, AECOM)

9. Overview of Draft Connect SoCal Comments and Revision Approach ***(Naresh Amatya, Transportation Manager, SCAG)***	30 mins.	Page 74
10. 2021 Active Transportation Program Guidelines and Call for Projects ***(Cory Wilkerson, Program Manager, SCAG)***	10 mins.	Page 86
11. Road User Charges (RUCs) – Lessons Learned ***(Annie Nam, Manager of Goods Movement and Transportation Finance)***	20 mins.	Page 89

CHAIR'S REPORT
(The Honorable Cheryl Viegas-Walker, Chair)

METROLINK REPORT
(The Honorable Art Brown, SCAG Representative)

STAFF REPORT
(Hina Chanchlani, SCAG Staff)

FUTURE AGENDA ITEMS

ANNOUNCEMENT/S

ADJOURNMENT

Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017
March 5, 2020

TRANSPORTATION COMMITTEE
MINUTES OF THE MEETING
THURSDAY, FEBRUARY 6, 2020

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. Cheryl Viegas-Walker, El Centro. A quorum was present.

Members Present:

Hon.	Sean Ashton, Downey	District 25
Hon.	Rusty Bailey, Riverside	District 68
Hon.	Ben Benoit, Wildomar	Air District Representative
Hon.	Will Berg, Port Hueneme	VCOG
Hon.	Drew Boyles	El Segundo
Hon.	Art Brown, Buena Park	District 21
Hon.	Ross Chun, Aliso Viejo	OCTA
Hon.	Jonathan Curtis, La Cañada-Flintridge	District 36
Hon.	Diane Dixon, Newport Beach	OCCOG
Hon.	John Dutrey, Montclair	SBCTA
Hon.	Emily Gabel-Luddy	AVCJPA
Hon.	James Gazeley, Lomita	District 39
Hon.	Jack Hadjinian	Montebello
Hon.	Jan Harnik, Palm Desert	RCTC
Hon.	Steven Hofbauer, Palmdale	District 43
Hon.	Mike T. Judge	VCTC
Hon.	Trish Kelley, Mission Viejo	OCCOG
Hon.	Clint Lorimore, Eastvale	District 4
Hon.	Ray Marquez, Chino Hills	District 10
Hon.	Larry McCallon, Highland	SBCTA
Hon.	Dan Medina, Gardena	District 28
Hon.	L. Dennis Michael	District 9
Hon.	Fred Minagar, Laguna Niguel	District 12
Hon.	Carol Moore, Laguna Woods	OCCOG

Hon.	Cory Moss	SGVCOG
Hon.	Frank Navarro, Colton	District 6
Hon.	Hector Pacheco, San Fernando	District 67
Hon.	Charles Puckett, Tustin	District 17
Hon.	Ed Reece	SGVCOG
Hon.	Crystal Ruiz, San Jacinto	WRCOG
Hon.	Ali Saleh, Bell	GCCOG
Hon.	Tim Sandoval, Pomona	District 38
Hon.	Rey Santos, Beaumont	District 3
Hon.	Zak Schwank, Temecula	District 5
Hon.	Marty Simonoff, Brea	District 22
Hon.	Thomas Small, Culver City	Culver City
Hon.	Jeremy Smith	Canyon Lake
Hon.	Larry Smith	Calimesa
Hon.	Karen Spiegel	Riverside County
Hon.	Cynthia Sternquist, Temple City	SGVCOG
Hon.	Jess Talamantes **(Vice Chair)**	SFVCOG
Hon.	Brent Tercero, Pico Rivera	GCCOG
Hon.	Steve Tye	District 37
Hon.	Cheryl Viegas-Walker, El Centro **(Chair)**	District 1
Hon.	Don Wagner	Orange County
Hon.	Alan Wapner	SBCTA/SBCOG
Mr.	Paul Marquez, Caltrans District 7	Ex-Officio Member

Members Not Present:

Hon.	Kathryn Barger	Los Angeles County
Hon.	Austin Bishop, Palmdale	North L.A. County
Hon.	Joe Buscaino, Los Angeles	District 62
Hon.	Curt Hagman	San Bernardino County
Hon.	Ray Hamada	Bellflower
Hon.	Dave Harrington, Aliso Viejo	OCCOG
Hon.	Jose Huizar, Los Angeles	District 61
Hon.	Paul Krekorian	District 49
Hon.	Linda Krupa, Hemet	WRCOG
Hon.	Steve Manos, Lake Elsinore	District 63
Hon.	Marsha McLean, Santa Clarita	District 67
Hon.	Lisa Middleton, Palm Springs	CVAG
Hon.	Ara Najarian, Glendale	AVCJPA
Hon.	Teresa Real Sebastian, Monterey Park	SGVCOG
Hon.	Dwight Robinson, Lake Forest	OCCOG

Hon.	Carlos Rodriguez, Yorba Linda	President's Appointment
Hon.	Alicia Weintraub, Calabasas	LVMCOG

CALL TO ORDER & PLEDGE OF ALLEGIANCE

Hon. Cheryl Viegas-Walker, Imperial County Transportation Commission, called the meeting to order at 10:00 a.m. Hon. Steve Tye, Diamond Bar, led the Pledge of Allegiance.

PUBLIC COMMENT

No members of the public requested to comment.

CONSENT CALENDAR

1. Minutes of the Meeting – October 3, 2019

Receive and File

2. Advancement of the Growth Vision for Connect SoCal
3. Resolution No. 20-618-1 Regarding Regional Funding for Housing

A MOTION was made (Brown) and SECONDED (Puckett) to approve Consent Calendar items 1 – 3. The Motion passed by the following votes:

AYES: BAILEY, BENOIT, BERG, BROWN, CHUN, CURTIS, DUTREY, GABEL-LUDDY, GAZELEY, HADJINIAN, HARNIK, HOFBAUER, JUDGE, KELLEY, MCCALLON, MICHAEL, MINAGAR, MOORE, MOSS, NAVARRO, PACHECO, PUCKETT, REECE, RUIZ, SANDOVAL, SANTOS, SCHWANK, SIMONOFF, SMALL, SMITH J., SMITH L., STERNQUIST, TALAMANTES, TERCERO, TYE, VIEGAS-WALKER, WAPNER (37)

NOES: None (0)

ABSTAIN: None (0)

INFORMATION/ACTION ITEMS

4. Regional Safety Targets 2020

Courtney Aguirre, SCAG staff, provided an update on Regional Safety Targets. Ms. Aguirre stated that each year in the region, more than 1,500 traffic fatalities and 5,200 serious traffic related injuries and the number of incidents are increasing across all transportation modes. She noted that federal legislation, MAP-21, established a performance and outcome based transportation program and that it issued a final rule establishing five safety performance measures, including the number and rate of fatalities, the number and rate of serious injuries, and the combined number of non-motorized fatalities and serious injuries.

She noted that all states and Metropolitan Planning Organizations are required to establish annual safety targets for each of these measures. The Federal Highway Administration (FHWA) will determine whether California is making progress on achieving its established annual safety targets. She stated that California's 2020 safety targets are to annually reduce fatalities by 3.03% and serious injuries by 1.5% until 2050, when zero deaths will occur.

Hina Chanchlani, SCAG staff, reviewed the trends in regional fatalities and serious injuries and non-motorized fatalities and serious injuries, noting there is a trend in increased incidents since 2012. Ms. Aguirre reviewed SCAG's efforts to motivate reductions in traffic-related fatalities and serious injuries. She noted SCAG's participation in California's Strategic Highway Safety Plan Steering Committee and Zero Traffic Fatalities Task Force. She noted that Connect SoCal's Transportation Safety and Security Technical Report provides a framework for agencies interested in pursuing safety initiatives and strategies at the local level. She shared that SCAG's internal activities include mapping a Regional High Injury Network. She noted ongoing efforts such as SCAG's Sustainable Communities Planning Grants, which provide funding to local jurisdictions for safety planning, as well as SCAG's regional safety community outreach and advertising campaign, Go Human.

Hon. Steve Tye, Diamond Bar, asked if it is known how many accidents are caused by distracted driving and if there has been legislation considered to restrict cell phone use while driving. Ms. Aguirre noted that the currently available data is limited. Ms. Chanchlani responded that there has been discussion at the state level to restrict phone usage while driving.

Hon. Steven Hofbauer, Palmdale, stated that local jurisdictions are not able to establish safer speed limits on their roadways due to an existing code and asked if any legislative action is taking place to allow local jurisdictions to modify local road speeds to improve community safety. Ms. Aguirre responded that the California State Transportation Agency had just released the Zero Traffic Fatalities Task Force Findings and Recommendations Report, which identifies ways that the state can provide local agencies with greater flexibility in establishing speed limits in order to better combat our rising traffic fatalities and injuries. She noted that SCAG is working with Assemblymember Friedman's staff on developing legislation to enact the recommendations.

A MOTION was made (Bailey) and SECONDED (Hofbauer) to approve the 2020 transportation safety targets with a modification to eliminate reference to 2050 as the goal year and to add wording to reduce fatalities "at least" 3.03% and serious injuries "at least" 1.5% yearly with a goal toward zero incidents. The Motion passed by the following votes:

AYES: ASHTON, BAILEY, BENOIT, BERG, BOYLES, BROWN, CHUN, CURTIS, DIXON, DUTREY, GABEL-LUDDY, GAZELEY, HADJINIAN, HARNIK, HOFBAUER, KELLEY, LORIMORE, MARQUEZ, MCCALLON, MICHAEL, MINAGAR, MOORE, MOSS, NAVARRO, PACHECO, PUCKETT, REECE, RUIZ, SALEH, SANDOVAL, SANTOS, SCHWANK, SIMONOFF, SMALL, SMITH J., SMITH L., SPIEGEL, TALAMANTES, TERCERO, TYE, VIEGAS-WALKER, WAGNER, WAPNER (43)
NOES: None (0)
ABSTAIN: None (0)

5. Los Angeles World Airports (LAWA) Presentation on the Landside Access Modernization Program (LAMP), and the Airfield and Terminal Modernization Project (ATMP)

Stephanie Sampson, LAWA, reported on the Landside Access Modernization Program. Ms. Sampson stated LAX is undergoing a capital improvement program designed to improve traffic congestion and passenger experience. She noted LAMP includes several components including an Automated People Mover (APM), Consolidated Rent-a-Car Facility (ConRAC), Intermodal Transportation Facility (ITF-W) as well as roadway improvements. She noted the Automated People Mover is a 2.25-mile elevated guideway that will be free to passengers and will access three stations outside the central terminal area and three stations inside of it. Further, each train can transport 200 passengers and it will take 10 minutes. Ms. Sampson reviewed the Intermodal Transportation Facility which will provide a new pick-up, drop-off and parking location away from the terminal area. She noted the 1.7 million square feet facility will have 4,300 parking spaces offering short and long-term parking in addition to a meet and greet area.

She next reviewed the Consolidated Rent-A-Car Facility (ConRAC) which will house all rental vehicle activity in a 6.4 million square foot facility with 18,000 parking stalls which will also link with the APM. Ms. Sampson reviewed the construction schedule and the different communication tools to inform airport users during construction. Ms. Evelyn Quintanilla, LAWA, reported on the Airfield and Terminal Modernization Project. She stated there are three major components of ATMP including airfield, terminal and landside improvements. She reviewed the different concourse modifications including 12 new gates in Terminal 9 and 9 new gates in Concourse 0. She noted this will improve the experience for both passengers and the community, benefit safety and increase business opportunities.

Hon. Cheryl Viegas-Walker, El Centro, asked about the 14 rental car firms that will use the Consolidated Rent-A-Car Facility and how much of the market it represents. Ms. Sampson responded that those companies represent nearly all of the rental car market and noted that 13 of the top 15 airports use a consolidated rent-a-car facility.

Hon. Alan Wapner, Ontario, asked about the environmental impacts from the intended expansion efforts and if there is mitigation in response to the increased traffic taking into account the increased activity to be generated by the Inglewood sports complex. Ms. Sampson stated environmental clearance has been obtained for LAMP project and environmental clearance is being sought for the proposed ATMP.

6. Go Human Outlook – Safety Strategies and Resources

Dorothy Le Suchkova, SCAG staff, presented an update on Go Human's effort to promote safety and active transportation in the region. Ms. Le Suchkova stated Go Human features a Kit of Parts which serves as a pop up demonstration tool kit for jurisdictions. Additionally, Go Human Challenge Items are interactive games for outreach and public facing activities. Further, Open Streets Technical Assistance provides applicants access to specific technical assistance on hosting an open streets event. She noted Local Community Engagement Mini Call for Projects will take place from April to August 2020 where jurisdictions can apply for funds to increase community engagement.

Ms. Le Suchkova noted current efforts include 'Commit to Safety" where members can pledge to continue safety efforts in a more public facing way and become eligible for safety resources and co-branding. She stated current safety activities include hosting a temporary safety demonstration project, a vision zero resolution, safe routes to school plan and conducting bike and walk audits. She reviewed the Kit of Parts and noted the education pop-up games used at events enhance community engagement. Additionally, advertising and co-branding seek to link with schools and local police departments.

Hon. Alan Wapner, Ontario, asked how many jurisdictions have made the demonstration projects permanent. Julia Lippe-Klein, SCAG staff, responded that approximately one-quarter of jurisdictions followed up a Go Human event with additional development, secure additional funding or have become champions for the effort.

CHAIR'S REPORT

Hon. Cheryl Viegas-Walker, El Centro, reported that SCAG leaders recently travelled to New Zealand and Australia to study their use of road user charge and an extensive staff report will be provided in March including how these areas transitioned to a road user charge. Also, Hon. Megan Salhi-Wells, Culver City, is SCAG's representative on the Zero Traffic Fatalities Task Force and continues her effort on behalf of the region.

METROLINK REPORT

Hon. Art Brown, Buena Park, reported that Metrolink has had numerous grade crossing and trespasser incidents which delay service an average of two and a half hours each. Metrolink has hired a consultant to perform a right-of-way assessment at all incident locations and develop recommendations to reduce these incidents. Also, in December 2019, the Metrolink Board authorized its CEO to negotiate an operations and maintenance agreement with San Bernardino County Transportation Authority for future Redlands Rail Arrow Service. Additionally, in April of this year, a pilot project on the Ventura line will run weekend service for the first time.

STAFF REPORT

Hina Chanchlani, SCAG staff, reported that Connect SoCal's public comment period was closed January 24, 2020 and staff is currently reviewing comments. At the March 2020 meeting staff will provide a summary report on the comments received. At the April 2020 meeting, there will be a Joint Policy Committees meeting to discuss the final staff recommendations. She also encouraged members to register for SCAG's General Assembly to take place May 6-8, 2020 in Palm Desert.

ADJOURNMENT

Hon. Cheryl Viegas-Walker, El Centro, adjourned the meeting at 12:00 p.m.

[MINUTES ARE UNOFFICIAL UNTIL APPROVED BY THE TRANSPORTATION COMMITTEE]

TC															
2019- 20															
MEMBERS	CITY	Representing	MAY (GA)	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	Total Mtgs Attended To Date
Ashton, Sean	Downey	District 25		1		1	1	1				1			5
Bailey, Rusty	Riverside	WRCOG					1	1				1			3
Barger, Kathryn	Los Angeles County	Los Angeles County		1			1								2
Benoit, Ben	Wildomar	South Coast AQMD		1		1	1	1				1			5
Berg, Will	Port Hueneme	VCOG		1			1	1				1			4
Bishop, Austin	Palmdale	North L.A.													0
Boyles, Drew	El Segundo	El Segundo		1			1	1				1			4
Brown, Art	Buena Park	District 21		1		1	1					1			4
Buscaino, Joe	Los Angeles	District 62					1	1							2
Chun, Ross	Aliso Viejo	OCTA		1		1	1	1				1			5
Curtis, Jonathan	La Cañada Flintridge	District 36										1			1
Dixon, Diane	Newport Beach	OCCOG										1			1
Dutrey, J. John	Montclair	SBCTA					1	1				1			3
Gabel-Luddy, Emily	Burbank	AVCJPA		1		1	1					1			4
Gazeley, James	Lomita	District 39		1		1	1	1				1			5
Hadjinian, Jack	Montebello	SGVCOG		1		1						1			3
Hagman, Curt	San Bernardino Cnty	San Bernardino Cnty		1				1							2
Hamada, Ray	Bellflower	Bellflower		1		1	1								3
Harnik, Jan	Palm Desert	RCTC		1		1	1	1				1			5
Harrington, Dave	Aliso Viejo	OCCOG													0
Hofbauer, Steven	Palmdale	District 43				1	1	1				1			4
Huizar, Jose	City of Los Angeles	District 61													0
Judge, Mike	Simi Valley	VCTC		1		1	1					1			4
Kelley, Trish	Mission Viejo	OCCOG		1		1	1					1			4
Krekorian, Paul	Public Transit Rep	District 49													0
Krupa, Linda	Hemet	WRCOG				1		1							2
Lorimore, Clint	Eastvale	District 4		1		1	1	1				1			5
Manos, Steve	Lake Elsinore	District 63		1		1	1	1							4
Marquez, Paul	Caltrans District 7	Ex-Officio		1			1	1				1			4
Marquez, Ray	Chino Hills	District 10		1		1	1	1				1			5
McCallon, Larry	Highland	SBCTA		1		1	1	1				1			5
McLean, Marsha	No. L.A. County	District 67		1		1	1	1							4
Medina, Dan	Gardena	District 28		1		1	1	1				1			5
Michael, L. Dennis	Rancho Cucamonga	District 9		1		1		1				1			4
Middleton, Lisa	Palm Springs	CVAG				1	1	1							3
Minagar, Fred	Laguna Niguel	District 12				1		1				1			3
Moore, Carol	Laguna Woods	OCCOG				1	1	1				1			4
Moss, Cory	City of Industry	SGVCOG					1	1				1			3
Najarian, Ara	Glendale	AVCJPA		1			1								2
Navarro, Frank	Colton	District 6					1	1				1			3
Pacheco, Hector	San Fernando	District 67						1				1			2
Puckett, Charles	Tustin	District 17		1		1	1	1				1			5
Real Sebastian, Teresa	Monterey Park	SGVCOG		1		1	1								3
Reece, Ed	Claremont	SGVCOG					1	1				1			3
Robinson, Dwight	Lake Forest	OCCOG													0
Rodriguez, Carlos	Yorba Linda	President's Appt		1				1							2
Ruiz, Crystal	San Jacinto	WRCOG				1	1					1			3
Saleh, Ali	City of Bell	GCCOG					1	1				1			3
Sandoval, Tim	Pomona	District 38		1			1	1				1			4
Santos, Rey	Beaumont	District 3				1	1	1				1			4
Schwank, Zak	Temecula	District 5						1				1			2
Simonoff, Marty	Brea	District 22		1		1	1	1				1			5
Small, Thomas	Culver City	Culver City					1					1			2
Smith, Jeremy	Canyon Lake	Canyon Lake						1				1			2
Smith, Larry	Calimesa	Calimesa				1	1	1				1			4
Spiegel, Karen	Riverside County	Riverside County		1		1	1	1				1			5
Sternquist, Cynthia	Temple City	SGVCOG				1	1					1			3
Talamantes, Jess	Burbank	SFVCOG		1		1	1	1				1			5
Tercero, Brent	Pico Rivera	GCCOG				1	1	1				1			4
Tye, Steve	Diamond Bar	District 37		1		1	1	1				1			5
Viegas-Walker, Cheryl	El Centro	District 1		1		1	1	1				1			5
Wagner, Don	Orange County	Orange County		1		1						1			3
Wapner, Alan	Ontario	SBCTA		1		1	1	1				1			5
Weintraub, Alicia	Calabasas	LVMCOG		1			1								2

AGENDA ITEM 2
REPORT

Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017
March 5, 2020

To: Transportation Committee (TC)

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

From: Philip Law, Manager of Transit/Rail, Transit/Rail, 213-236-1841, LAW@scag.ca.gov
Subject: California High Speed Rail Authority Draft 2020 Business Plan

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:
On February 12, 2020, the California High Speed Rail Authority (CHSRA) released its Draft 2020 Business Plan for public review and comment. The draft document is available at https://www.hsr.ca.gov/about/business_plans/2020/. Staff is currently reviewing the draft document and will return to the TC with proposed comments on April 2, 2020. Comments are due to CHSRA by April 12, 2020.

BACKGROUND:
The Draft 2020 Business Plan builds upon the previous 2018 Business Plan and the 2019 Project Update Report. A brief summary of key points is provided in this staff report.

According to CHSRA, 350 miles of electrified high speed rail are currently under development in the state, with 119 miles of construction underway in the Central Valley. By 2022, 350 miles could be under construction and the full Phase 1 system from San Francisco to Los Angeles and Anaheim environmentally cleared. See attached, Exhibits 1.0 and 1.1 from the Draft 2020 Business Plan, depicting the system status in 2020 and 2022, respectively.

In terms of the environmental analysis, CHSRA has identified preferred alternatives for two Bay Area project sections between San Francisco and Merced and four Southern California sections between Bakersfield and Anaheim. The Draft 2020 Business Plan states that, although the CHSRA Board identified preferred alternatives, all alternatives are being evaluated equally in the draft environmental documents. The schedule for completing the environmental documents for the segments within the SCAG region are currently as follows.

Table 1. Schedule for Completing Environmental Documents

Project Segment	Draft Environmental Document	Record of Decision Date
Bakersfield to Palmdale	March 2020	April 2021
Palmdale to Burbank	December 2020	January 2022
Burbank to Los Angeles	May 2020	June 2021
Los Angeles to Anaheim	January 2021	February 2022

In the 2018 Business Plan and the 2019 Project Update Report, CHSRA advanced the concept of building high speed rail through a "building block approach" starting with an initial 171-mile line between Merced and Bakersfield. CHSRA has also advanced high speed rail in Northern California, investing $714 million in the Caltrain Electrification Project and $543 million in ten connectivity projects. In Southern California, CHSRA is investing $423 million in Prop. 1A funds towards Link Union Station, another $77 million in Prop. 1A funds for the Rosecrans/Marquardt Grade Separation Project, and $389 million in seven connectivity projects.

The Draft 2020 Business Plan updates the capital cost estimates for each project section and phase, including the Silicon Valley to Central Valley Line, which now includes the extension to Merced, and the full Phase 1 system. See attached, Exhibit 4.4 from the Draft 2020 Business Plan, depicting the funding status in 2020 for Phase 1. The capital cost estimates have not changed significantly from those presented in the 2018 Business Plan. Comparing the 2018 and Draft 2020 Business Plans, the full Phase 1 system was estimated to cost $77.3 billion in 2018 and is now estimated at $80.3 billion in 2020 (mid-range estimate, in year of expenditure dollars).

The Draft 2020 Business Plan describes potential funding options for closing the remaining gaps in the Phase 1 system, with a focus on extending and solidifying Cap-and-Trade to allow for financing. CHSRA projects $20.6 to $23.4 billion in total funding available through 2030, based on a Cap-and-Trade funding range up to $750 million per year. Extending Cap-and-Trade to 2050 could allow the Authority to finance against future auction proceeds.

Table 2. SCAG Region Project Section and Cost Range (in millions, year of expenditure dollars)

Segment	Low	Base	High
Bakersfield to Palmdale	$13,076	$16,345	$19,614
Palmdale to Burbank	$13,159	$17,546	$25,442
Burbank to Los Angeles	$1,256	$1,478	$1,699
Los Angeles to Anaheim	$3,049	$3,587	$4,125

The Draft 2020 Business Plan identifies a variety of program issues including litigation, funding and program delivery risks, and includes a description of how CHSRA is actively managing and mitigating those risks.

By 2045, CHSRA estimates the system will carry 40.5 million riders annually and generate approximately $5.3 billion in annual farebox revenue. In 2045, annual reduction of greenhouse gas emissions is estimated at nearly 1.5 million metric tons of carbon dioxide equivalent. Ridership forecasts incorporate updated ramp-up factors reflecting the initial Merced to Bakersfield operation's impact on riders' perception and awareness of future Silicon Valley to Central Valley and Phase 1 services.

Table 3. Phase 1 Ridership by Year (Riders in Millions)

Ridership Level	2033	2035	2045	2060
High Ridership	17.9	41.9	52.6	61.0
Medium Ridership	12.8	32.0	40.5	47.1
Low Ridership	10.3	24.5	30.8	35.7

Progress in Southern California

Specifically in Southern California, construction is expected to begin on the Rosecrans/Marquardt Grade Separation Project in early 2021 with project completion by 2023. For Link Union Station, CHSRA expects to complete a Project Management and Funding Agreement with Metro by the end of 2020. Construction on Phase A of the project to provide two initial run-through tracks is scheduled for completion by 2026. This will allow trains to enter and exit the station from both the existing northern tracks and the new run-through tracks to the south over the US-101 freeway. This would significantly increase capacity for rail service while reducing train idling. The larger Phase B will include up to 8 additional new run-through tracks, an elevated rail yard and a new modified and expanded at-grade concourse and passageway, and could be completed by 2031 pending funding.

The Draft 2020 Business Plan discusses additional strategic investments that will be considered to advance the program toward construction and maintain momentum in Southern California, as funding is identified. Examples include advancing grade separation projects at specific locations south of Bakersfield, providing short-term safety and traffic operational benefits while preparing for future high speed rail construction. Projects currently being environmentally cleared as part of the high speed rail program include the Rancho Vista Boulevard at the Union Pacific Railroad (UPRR) and Sierra Highway, and Palmdale Boulevard at the UPRR and Sierra Highway, both in the City of Palmdale.

The Draft 2020 Business Plan states that, through a partnership with Burlington Northern Santa Fe Railway (BNSF), the California State Transportation Agency (CalSTA) and regional rail providers, a concept was developed for the Los Angeles to Anaheim project section to accomplish largely the same capacity results with a four-track configuration (two freight and two electrified passenger) that will fit mostly inside the existing right-of-way, thereby reducing impacts in the main corridor.

Offsetting the capacity lost by reducing freight to two tracks will require new facilities to be constructed in the Inland Empire. These facilities include the Lenwood Staging Tracks near Barstow and the Colton Intermodal Facility.

As discussed in Connect SoCal, Virgin Trains USA is developing a high speed rail line, XpressWest, from the Victor Valley to Las Vegas, Nevada along existing Caltrans right-of-way on the I-15 corridor. In January 2019, CHSRA joined with CalSTA and Caltrans to collaborate with Virgin Trains USA through a Memorandum of Understanding (MOU) outlining the intent to work together, share information and explore opportunities for joint procurements and interoperability on both systems. This includes evaluating opportunities to extend to Palmdale and interconnect with the California high speed rail system.

Staff is currently reviewing the draft document and will return to the TC at its April 2, 2020 meeting with proposed comments. Comments are due to CHSRA by April 12, 2020.

FISCAL IMPACT:
Work associated with this item is included in the FY 2019-20 Overall Work Program (OWP) budget under project number 140.0121.02, Regional High Speed Transport Program.

ATTACHMENT(S):
1. Draft 2020 Business Plan Exhibits

Exhibit 1.0: Where We Are in 2020

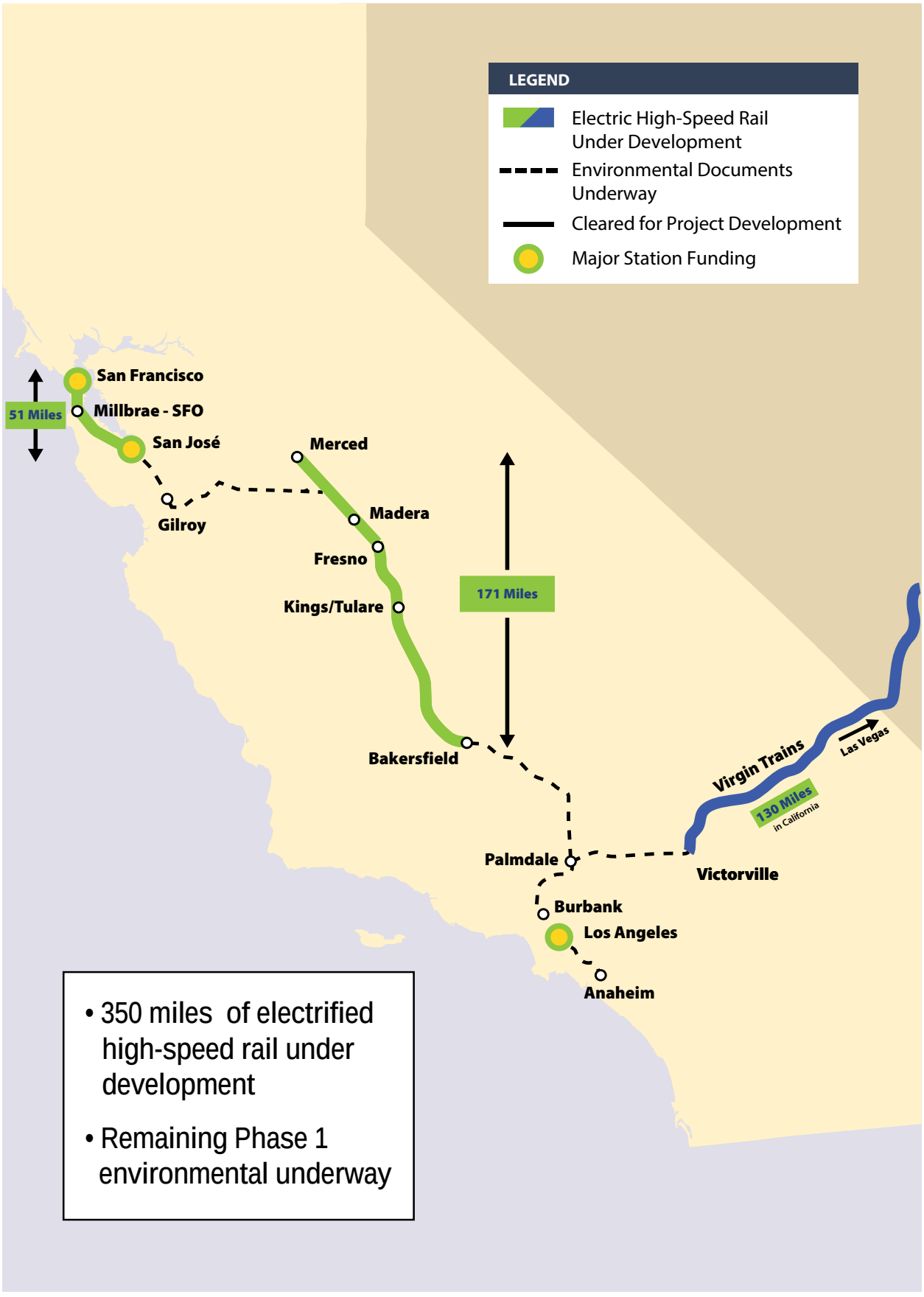

Exhibit 1.1: High-Speed Rail in 2022

Exhibit 4.4: 2020 Funding Status for Phase 1

P San Francisco to San Jose

43 miles
Capital Cost: $2.6 billion
EIR/EIS Complete: 08/2021
Contribution to Caltrain Electrification (Allocated) - $714 million

U San Jose to Carlucci Road

88 miles
Capital Costs: $14.2 billion
EIR/EIS Complete: 05/2021

Central Valley Construction

F Madera to Merced

33 miles
Capital Cost: $2.5 billion
EIR/EIS: Complete

F Madera to Poplar Avenue*

119 miles
Capital Cost: $12.4 billion
Completion Date: 06/2021
EIR/EIS: Complete

F Poplar Avenue to Bakersfield

19 miles
Construction Cost: $1.5 billion
EIR/EIS: Complete

P Central Valley Wye Balance

28 miles
Capital Cost: $2.4 billion
EIR/EIS Complete: 09/2020

*Includes partial funding for Central Valley Wye

Notes:
1. Estimates are from the Draft 2020 Business Plan and exclude vehicle costs and Heavy Maintenance Facility costs not yet allocated to a specific location.
2. Segment miles reflect Preferred Alternatives; total miles could vary pending final environmental decisions.

Legend
- F Funded
- P Partial
- U Unfunded

U Bakersfield to Palmdale

79 miles
Capital Costs: $16.3 billion
EIR/EIS Complete: 04/2021

U Palmdale to Burbank

41 miles
Capital Costs: $17.5 billion
EIR/EIS Complete: 01/2022

U Burbank to Los Angeles

13 miles
Capital Costs: $1.5 billion
EIR/EIS Complete: 06/2021

U Los Angeles to Anaheim

31 miles
Capital Costs: $3.6 billion
EIR/EIS Complete: 02/2022

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Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017
March 5, 2020

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

From: John Cho, Senior Regional Planner, Research & Analysis, 213-236-1847, choj@scag.ca.gov

Subject: 31st Annual Demographic Workshop - Save the Date

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

RECOMMENDED ACTION:
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:
The Save the Date information for the 31st Annual Demographic workshop provides a theme and the date of the workshop, which will be jointly held with the USC Sol Price School of Public Policy, on June 11, 2020 at the University of Southern California

BACKGROUND:
The USC Sol Price School of Public Policy and the Southern California Association of Governments (SCAG) are pleased to invite you to the 31th Annual Demographic Workshop at USC's Trojan Grand Ballroom on Thursday, June 11th, 2020 from 8:30 AM to 3:30 PM.

With an ever-slowing population growth, this year's program, "*What does it mean to be a slow growth state?* – Catching up to unmet needs with slower population growth" provides the most recent update on demographic trends and their implications as we begin a new decade. The decennial census of 2020 also is currently in the field and we will hear updates on progress and challenges. Close-ups will then be provided on the latest trends in migration, fertility, and aging statistics. Additional panels will focus on implications of demographic changes for housing and offer reflections on the close linkage between demographics and long-range regional planning.

The program will also include a special lunch keynote address (to be announced) and a series of expert-led roundtable discussions to build skills about topics discussed throughout the day.

FISCAL IMPACT:
Work associated with this item is included in the current FY 2019-20 Budget under 800-0160.04.

Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017
March 5, 2020

To: Community
Economic & Human Development Committee (CEHD)
Transportation Committee (TC)
Energy and Environment Committee (EEC)

From: Joseph Cryer, Associate Regional Planner, Sustainability, 213-236-1837, cryer@scag.ca.gov

Subject: Permitting Electric Vehicle Supply Equipment

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

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

RECOMMENDED ACTION FOR CEHD AND TC:
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. 4: Provide innovative information and value-added services to enhance member agencies' planning and operations and promote regional collaboration.

EXECUTIVE SUMMARY:
SCAG staff have partnered with the Governor's Office of Business and Economic Development (GO-Biz) to help accelerate electric vehicle supply equipment (EVSE) installations across the region. Lengthy permitting processes have been a barrier to the efficient and widespread deployment of EVSE across the state, so the State signed Assembly Bill 1236 into law in 2015 requiring authorities having jurisdiction to streamline EVSE permitting. A survey conducted by SCAG and GO-Biz found that only 12% jurisdictions in the SCAG region are substantially in compliance with AB 1236. A speaker from GO-Biz will discuss the findings of the assessment, their efforts to promote EVSE permit streamlining, and an upcoming permit streamlining workshop at SCAG on March 10th.

BACKGROUND:
In October 2015, former California Governor Jerry Brown signed Assembly Bill 1236 into law requiring authorities having jurisdiction in the state to streamline permitting for electric vehicle supply equipment (EVSE), also referred to as charging stations. The law requires cities and counties to enact an ordinance to create an expedited and streamlined permitting process for electric vehicle

charging stations. Jurisdictions with 200,000 or more residents were required to adopt an ordinance by September 30, 2016, while jurisdictions with under 200,000 had until September 30th, 2017. Several years later many jurisdictions in the state and SCAG region are still not fully compliant with AB 1236.

Non-compliance with AB 1236 has slowed the growth of EVSE needed to support the State's goal of 1.5 million zero-emission passenger vehicles on the road by 2025 and five million by 2030. Charging station developers report of frequent delays and barriers to obtaining a permit to install EVSE in most cities and counties in the state. Electrify America, one of the leading charging station developers in the state, has found that the average permitting time in California exceeds the national average by more than 70%, stations must be redesigned 30% more frequently during design and permitting in California, and stations in California cost 22% more to build. Other charging station developers indicate a similar experience working across California.

To support implementation of AB 1236 and speed development of EVSE infrastructure across the state, the Governor's Office of Business and Economic Development (GO-Biz) published the state's Electric Vehicle Charging Station Guidebook in July of 2019. As a companion to the guidebook, GO-Biz released an Electric Vehicle Charging Station Permit Streamlining Map to track progress toward streamlining permitting processes throughout the state. The map is designed to highlight communities that have implemented best practices and help other communities identify gaps in compliance. This map tracks California's EVCS permitting status progress by categorizing and color-coding jurisdictions as "Streamlined" (green), "Partially Streamlined" (yellow), and "Not Streamlined" (red). A preview of the map is shown in **Figure 1** on the following page. GO-Biz evaluates each jurisdiction based on ordinances, EVCS permitting checklist, city and county website information along with feedback from charging station developers. The seven AB 1236 criteria evaluated for grading are below:

1. **Streamlining Ordinance -** Ordinance creating an expedited, streamlined permitting process for electric vehicle charging stations (EVCS) including level 2 and direct current fast chargers (DCFC) has been adopted.
2. **Permitting checklists covering L2 and DCFC** - Checklist of all requirements needed for expedited review posted on city or county website
3. **Administrative approval of EVCS** - EVCS projects that meet expedited checklist are administratively approved through building or similar non-discretionary permit.
4. **Approval limited to health and safety review** - EVCS project review limited to health and safety requirements found under local, state, and federal law.
5. **Electric signatures accepted -** AHJ accepts electronic signatures on permit applications.
6. **EVCS not subject to association approval** - EVCS permit approval not subject to approval of an association (as defined in Section 4080 of the Civil Code).

7. **One complete deficiency notice -** AHJ commits to issuing one complete written correction notice detailing all deficiencies in an incomplete application and any additional information needed to be eligible for expedited permit issuance.

GO-Biz developed grading criteria based on the requirements of AB 1236 to evaluate if cities and counties have streamlined their EVCS permitting and met the requirements and intent of the law. SCAG staff partnered with GO-Biz to complete a survey of all jurisdictions in the SCAG region. Five years after the legislation was passed and three years after every jurisdiction in California needed to comply with the law, GO-Biz found that only **16%** of the cities and counties that have been graded in the state have met the requirements of AB 1236 to streamline their EVCS permitting. This compares to **12%** of cities and counties in SCAG's 6-county region that are considered streamlined. **Figure 2** and **Figure 3** show the state's and region's progress toward becoming fully compliant as of February 11th, 2020.

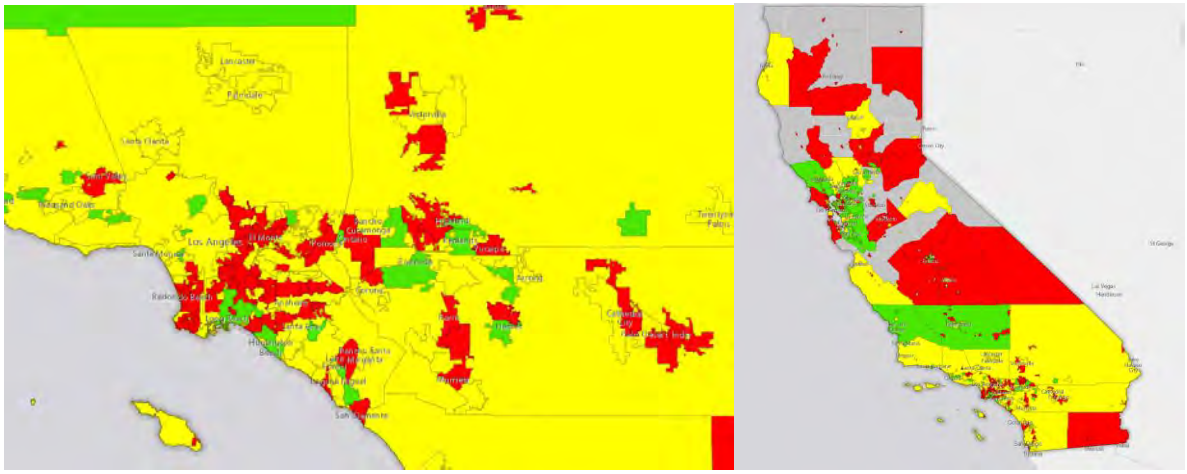


Figure 1 - Preview of the Electric Vehicle Charging Station Permit Streamlining Map available at https://business.ca.gov/ZEVReadiness

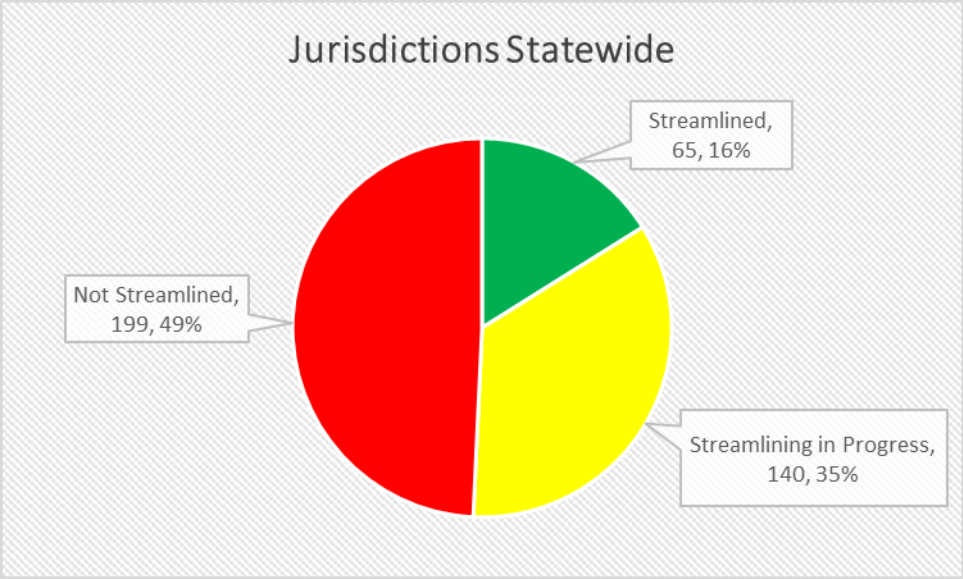


Figure 2 - Statewide Compliance with AB 1236 (404 graded cities and counties out of 540)

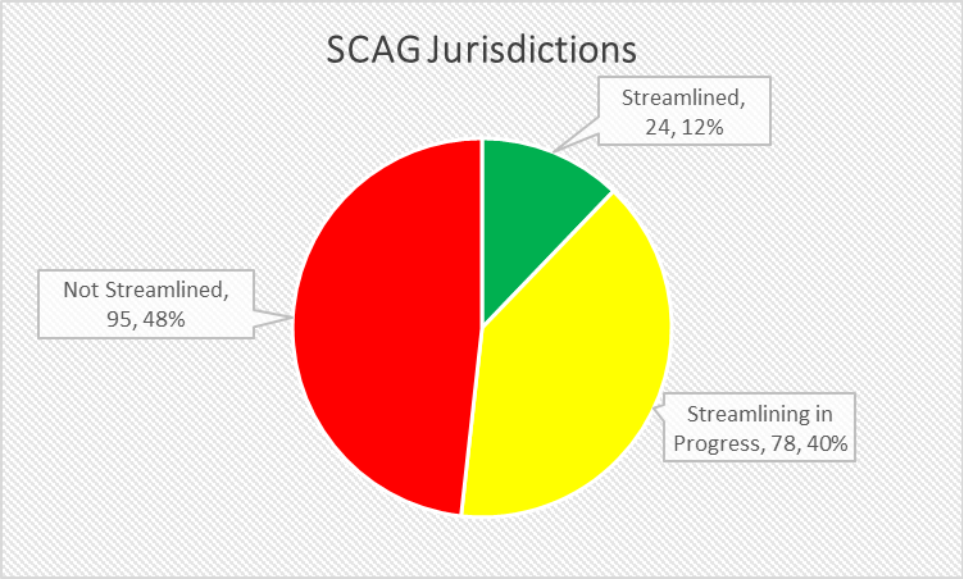


Figure 3 - SCAG Region Compliance with AB 1236 (all jurisdictions graded)

The EVSE permitting process remains a significant barrier for transportation electrification, but addressing permitting issues offers a tremendous opportunity to reduce the cost of installing charging infrastructure. The cost to install charging stations is currently three to five times higher than the cost of the charger itself, a much higher ratio compared to the average charger to

installation cost in Europe. According to the Rocky Mountain Institute and illustrated in **Figure 4**, soft costs (i.e., processing costs, marketing costs, opportunity costs and notably, the cost of delays in permitting) have the greatest possibility for cost reduction in installing EVSE. While it is vexing to establish streamlined permitting procedures in California's 540 jurisdictions, statewide compliance with AB 1236 offers a major chance to reduce the barriers to install charging stations and hastening the transition to an electrified transportation system that is a goal of the State and in the Draft Connect SoCal's plan for "Accelerated Electrification" in the region.

GO-Biz plans to continue working with SCAG by developing tools and resources to help the jurisdictions in Southern California prepare for a zero-emission future. On March 10th, SCAG and GO-Biz will host a workshop to help promote best practices supporting infrastructure for battery electric and hydrogen fuel cell passenger vehicles. A flyer for this event is included with this staff report. Based on the feedback from the March 10th Workshop, SCAG and GO-Biz will evaluate how to best tailor future ZEV outreach initiatives and events. This will be the first of many collaborations between GO-Biz and SCAG on EVCS permit streamlining across Southern California – particularly because complementary regional initiatives including the Los Angeles Clean Tech Incubator's (LACI) Zero Emissions 2028 Roadmap 2.0 and California's existing zero emission goals and policies.

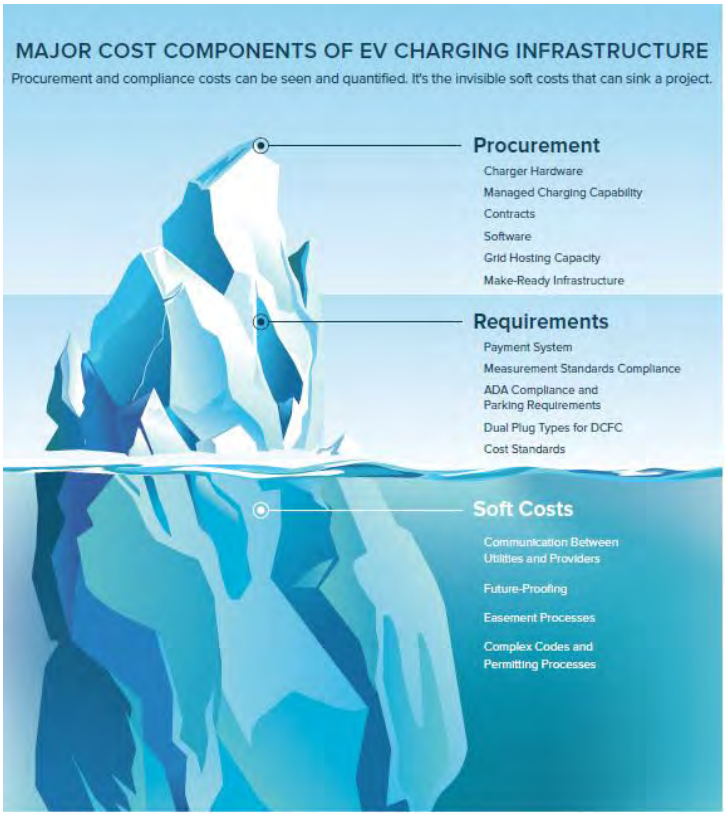


Figure 4 - From the Rocky Mountain Institute, Reducing EV Charging Infrastructure Costs, 2019

Other GO-Biz initiatives

The Governor's Office of Business and Economic Development (GO-Biz) serves as the State of California's leader for job growth, economic development and business assistance efforts. GO-Biz has a ZEV Market Development Team specifically dedicated to cultivating opportunities to accelerate zero emission vehicle market growth. The ZEV team works to develop stakeholder collaboration among government agencies, industry and the public as we work towards our zero emission vehicle goals as a state.

FISCAL IMPACT:
Work conducted under this program by SCAG staff is accounted for in OWP# 065.0137.12 Electric Vehicle (EV) Program Readiness Strategies.

ATTACHMENT(S):
1. Up to Code: Permit Streamlining and Funding for Zero-Emission Vehicle Infrastructure - March 10, 2020
2. GO-Biz Presentation

PRESENTED BY THE GOVERNOR'S OFFICE OF BUSINESS & ECONOMIC DEVELOPMENT (GO-BIZ)
AND THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS (SCAG)

UP TO CODE: PERMIT STREAMLINING AND FUNDING FOR ZERO-EMISSION VEHICLE INFRASTRUCTURE

Tuesday, March 10, 2020
10:00 a.m. – 4:30 p.m.
SCAG Main Office

The future of transportation is zero-emission. Is your city ready? Help be a part of the transition to zero-emission mobility by learning about the laws and best practices in permitting electric vehicle charging infrastructure and hydrogen refueling infrastructure.

Join us at the SCAG Main Office in downtown Los Angeles or via webinar on Tuesday, March 10, from 10:00 a.m. to 4:30 p.m., for a workshop covering new technologies, working with utilities, permitting best practices, funding opportunities and complying with the American with Disabilities Act. All city planners, building officials, sustainability managers and anyone interested in zero-emission vehicles are welcome to attend.

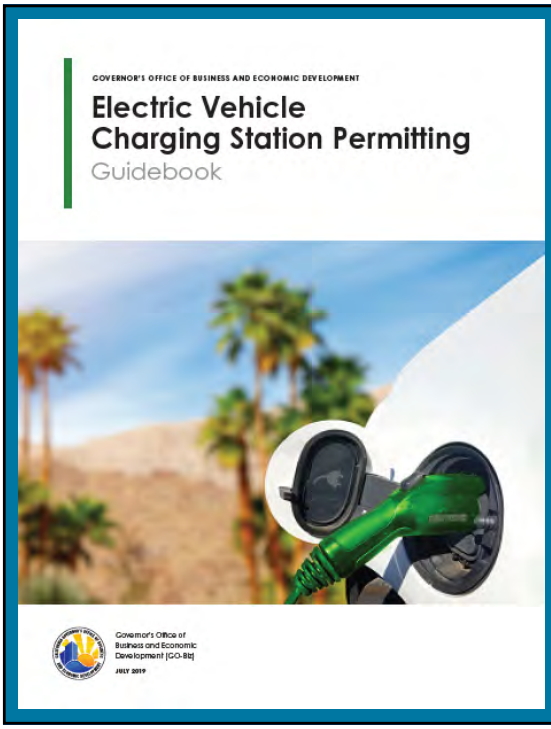
Doors open at 9:30 a.m. for a coffee reception. A complimentary lunch will be provided by Veloz and the workshop will conclude with zero-emissions vehicle test drives organized by the Center for Sustainable Energy.

Register To Attend:
bit.ly/ZeroEmissionWorkshop

Contact Joseph Cryer at cryer@scag.ca.gov with any questions.

CALIFORNIA GOVERNOR'S OFFICE OF BUSINESS AND ECONOMIC DEVELOPMENT

SCAG™
INNOVATING FOR A



Electric Vehicle Charging Station Permit Streamlining

SCAG Board Meeting

- March 5th, 2019 -

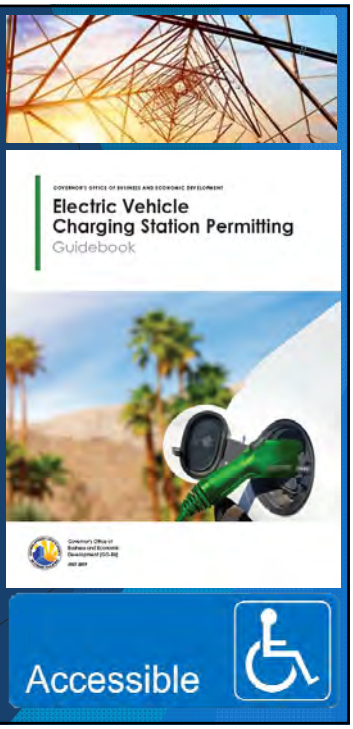
Intro: What are Electric Vehicle Charging Stations (EVCS)

Level 1	Level 2	Level 3 / Direct Current Fast Chargers / DCFC
(Up to 1.9 kW)	(Up to19.2 kW)	(50-350 kW)
- 4-5 miles per hour -	*- 12-70 miles per hour -*	*- 3-20 miles per minute -*

Attachment: GO-Biz Presentation (Permitting Electric Vehicle Supply Equipment)

Guidebook Key Sections

- 1. Planning and Site Selection
- 2. Permitting
  - AB 1236 Streamlining Map
- 3. Accessibility
- 4. Connecting to the Grid
- 5. Construction, Commissioning, and Operation



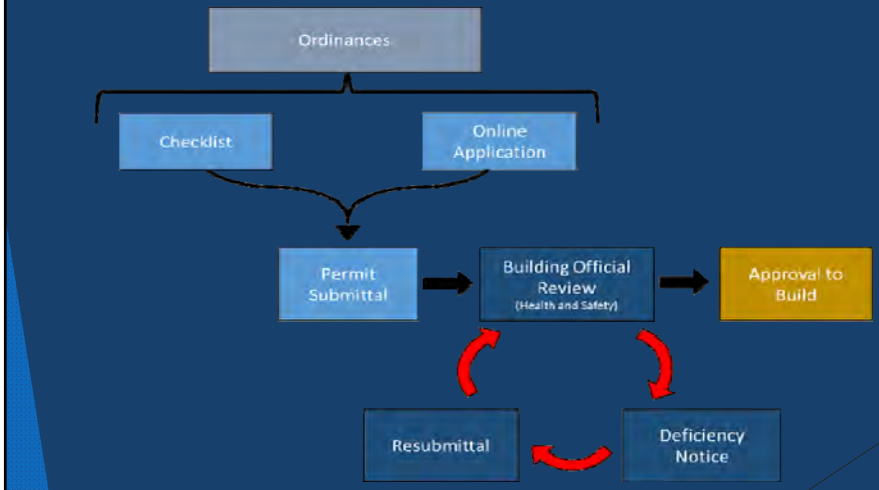
Planning and Site Selection

- Voluntary Building Codes
- Parking/Charging Clarification
  - AB 1100 (Kamlager-Dove, 2019)
- Climate Action Plans

Authority Having Jurisdiction (AHJ)	Policy
Sacramento County	EVCS spaces count as two spaces
Los Angeles County	EVCS spaces count as one space
City of Pleasanton	EVCS spaces count as one space
City of Santa Barbara	EVCS spaces count as one space
City of West Hollywood	EVCS spaces count as one space
City of Stockton	EVCS spaces count as two spaces, for up to 10% reduction of parking requirements

Permitting

- Assembly Bill 1236 Permit Streamlining Law



Best Practice Permitting Timelines

Application Submittal » Complete Response

Type of Charger	Within Best Practice	Optimal
L2 – Single Family	1 day	Same Day
Multi L2 – Shared (Multi Family/Workplace/Public)	5 days	
DCFC	5 days	

Complete package » Approval to Build

Type of Charger	Within Best Practice	Optimal
L2 – Single Family	1 day	Same Day
Multi L2 – Shared (Multi Family/Workplace/Public)	15 days*	
DCFC	15 days*	

Construction Complete Notice » Inspection

Type of Charger	Within Best Practice	Optimal
L2 – Single Family	5 days	Same Day
Multi L2 – Shared (Multi Family/Workplace/Public)	5 days	
DCFC	5 days	

Accessibility

- California is first in the nation to provide ADA compliance specificity

Total Number of EVCS at a Facility[1]	Minimum Number (by type of EVCS Required to Comply with Section 11B-812:[1] Van Accessible	Minimum Number (by type of EVCS Required to Comply with Section 11B-812:[1] Standard Accessible	Minimum Number (by type of EVCS Required to Comply with Section 11B-812:[1] Ambulatory
1 to 4	1	0	0
5 to 25	1	1	0
26 to 50	1	1	1
51 to 75	1	2	2
76 to 100	1	3	3
101 and over	1, plus 1 for each 200, or fraction thereof, over 100	3, plus 1 for each 60, or fraction thereof, over 100	3, plus 1 for each 50, or fraction thereof, over 100

Connecting to the Grid

- Working with Utilities
  - Communicate early with utilities
  - Working with designated interconnection teams

PG&E

SDGE
A Sempra Energy utility

SMUD
Sacramento Municipal Utility District

SOUTHERN CALIFORNIA EDISON
Energy for What's Ahead

LA DWP

Construction, Commissioning, and Operation

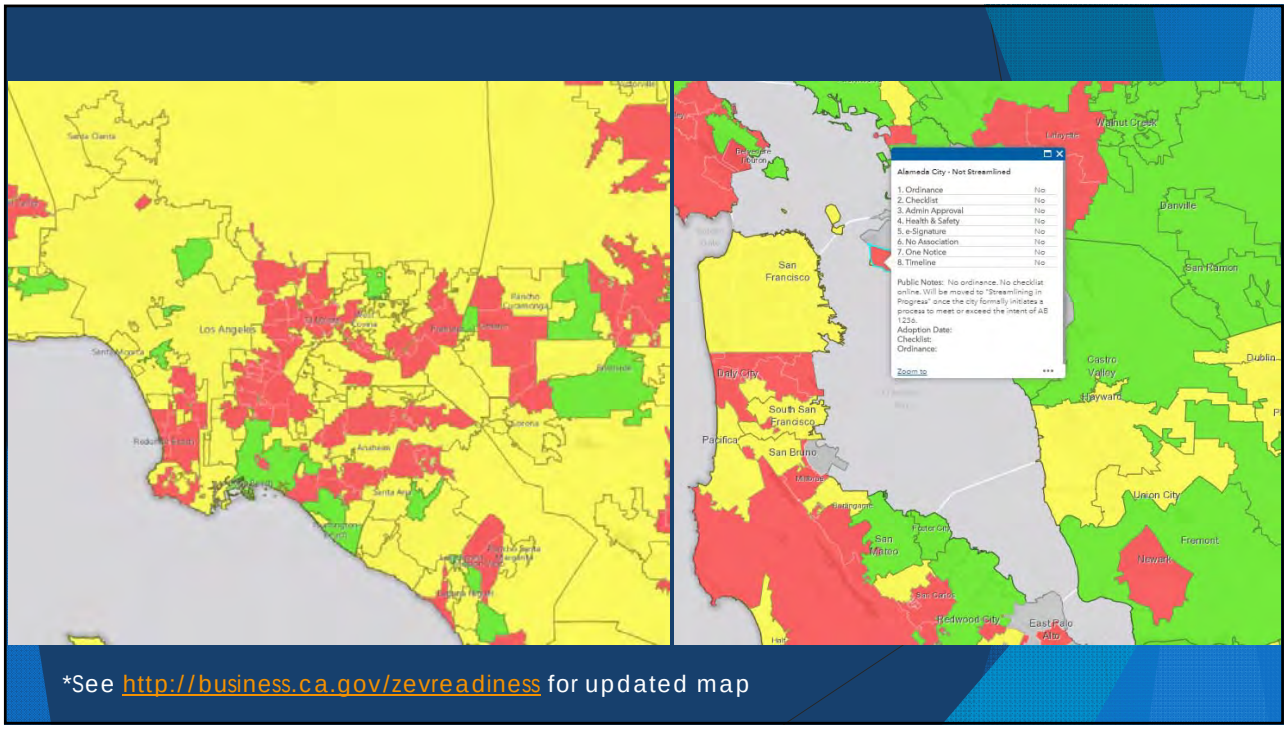
- Weight and Measures Certification
- Signage

cdfa
CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

CA Electric Vehicle Charging Station Permit Streamlining Map

*Interactive map available here

EVCS Permit Ready Score:
Green – City or County is EVCS Permit Ready, charging infrastructure permitting is streamlined
Yellow – City or County EVCS permit streamlining is in progress, or partially complete
Red – City or County is **not** streamlined for EVCS permitting
Grey – Not yet evaluated (or in process)



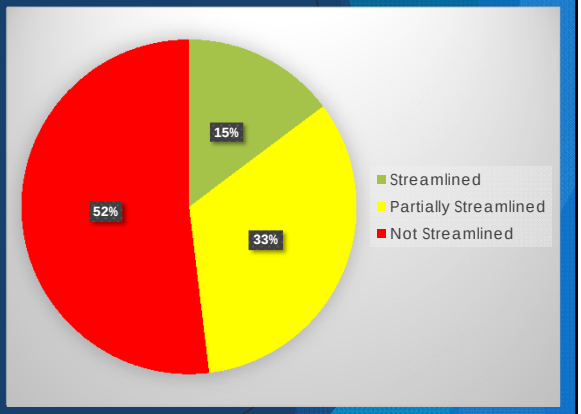
*See http://business.ca.gov/zevreadiness for updated map

Status of the State as of 2/12/20

- Cities and counties

- **Streamlined - 73**
- **Streaming in Progress - 165**
- **Not Streamlined - 257**

Only 14.7% of California has streamlined its EVCS permitting

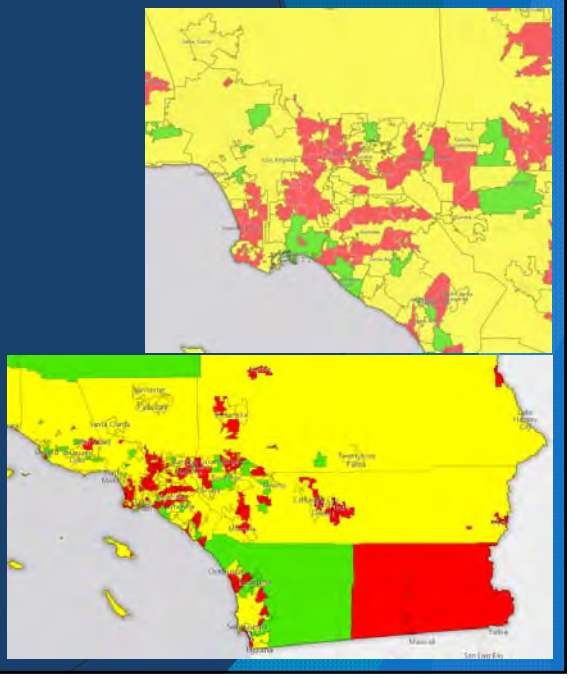


SCAG Territory Comparison

-191 cities and 6 counties

- **Streamlined - 24**
- **Streaming in Progress - 78**
- **Not Streamlined - 95**

Only 12.2% of SCAG has streamlined its EVCS permitting



Why is Permit Streamlining Important?

- Installing a charging station is 3 to 5 the cost of charger itself *(more expensive than other countries)*[1]
  - Soft Costs (i.e. permitting) have the greatest possibility for cost reduction with installing charging stations
- Electrify America data across states:
  - Average permitting time in California exceeds the national average by more than 70%
  - Stations must be redesigned in California 30% more frequently
  - Cost 22% more to build in California
- New jobs, economic development and cleaner air

1. From *Reducing EV Charging Infrastructure Costs*, Rocky Mountain Institute.

	Scoring Criteria:	Complete if:
☐	**1. Streamlining Ordinance** Ordinance creating an expedited, streamlined permitting process for electric vehicle charging stations (EVCS) including level 2 and direct current fast chargers (DCFC) has been adopted.	– Streamlining ordinance has been adopted
☐	**2. Permitting checklists covering Level 2 and DCFC** Checklist of all requirements needed for expedited review posted on city or county website.	– Permitting checklist is available and easily found on city or county website
☐	**3. Administrative approval of EVCS** EVCS projects that meet expedited checklist are administratively approved through building or similar non-discretionary permit.	– The streamlining ordinance states that permit applications that meet checklist requirements will be approved through non-discretionary permit (or similar)
☐	**4. Approval limited to health and safety review** EVCS project review limited to health and safety requirements found under local, state, and federal law.	– The streamlining ordinance states that no discretionary use permit is required and permit approval will be limited to health and safety review

☐	**5. Electric signatures accepted** AHJ accepts electronic signatures on permit applications.*	– Electronic signatures accepted on City or County website (usually specified in the ordinance)
☐	**6. EVCS not subject to association approval** EVCS permit approval not subject to approval of an association (as defined in Section 4080 of the Civil Code).	– The streamlining ordinance states that EVCS permits do not require association approval
☐	**7. One complete deficiency notice** AHJ commits to issuing one complete written correction notice detailing all deficiencies in an incomplete application and any additional information needed to be eligible for expedited permit issuance.	– The streamlining ordinance dictates that a written correction notice must detail all deficiencies
☐	***8. Bonus: Expedited timeline for approval*** Consistent with the intent of AB 1236, AHJ establishes expedited timelines for EVCS permit approval compared to standard project approval procedures.	– The streamlining ordinance (or other policy mechanism) outlines expedited approval timelines for EVCS permits

Common Problems

- Aesthetics – Requiring additional landscaping, colored bollards, public art etc.
- Zoning Concerns
- Parking Counts
- No Electronic Signature
- Different ADA Interpretations
- Lack of Awareness of AB 1236

Common Problem: Multiple Rounds of Deficiency Comments

ADA Compliance

Second, Third, Forth Round of Comments

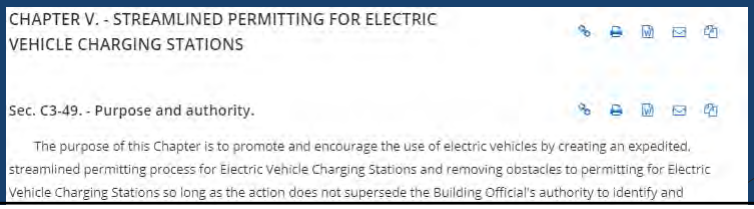
Building Review Comments

Planning Review Comments

Parking Count Issues

How to become "Green" on the AB 1236 Map

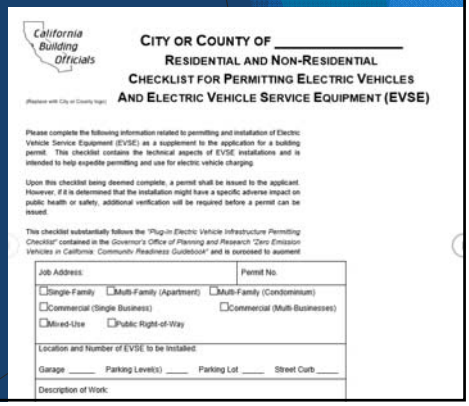
- Pass an Ordinance
- Create EVCS permitting checklist
  - Based on the ordinance and checklist, develop permitting process that (in practice) streamlines the permitting process
    - Removing Planning Department decisions from the process as much as possible



CHAPTER V. - STREAMLINED PERMITTING FOR ELECTRIC VEHICLE CHARGING STATIONS

Sec. C3-49. - Purpose and authority.

The purpose of this Chapter is to promote and encourage the use of electric vehicles by creating an expedited, streamlined permitting process for Electric Vehicle Charging Stations and removing obstacles to permitting for Electric Vehicle Charging Stations so long as the action does not supersede the Building Official's authority to identify and



California Building Officials

CITY OR COUNTY OF _____

RESIDENTIAL AND NON-RESIDENTIAL CHECKLIST FOR PERMITTING ELECTRIC VEHICLES AND ELECTRIC VEHICLE SERVICE EQUIPMENT (EVSE)

Please complete the following information related to permitting and installation of Electric Vehicle Service Equipment (EVSE) as a supplement to the application for a building permit. This checklist contains the technical aspects of EVSE installations and is intended to help expedite permitting and use for electric vehicle charging.

Upon this checklist being deemed complete, a permit shall be issued to the applicant. However, if it is determined that the installation might have a specific adverse impact on public health or safety, additional verification will be required before a permit can be issued.

This checklist substantially follows the "Plug-In Electric Vehicle Infrastructure Permitting Checklist" contained in the Governor's Office of Planning and Research "Zero Emission Vehicles in California: Community Readiness Guidebook" and is purposed to augment

Job Address: | Permit No.

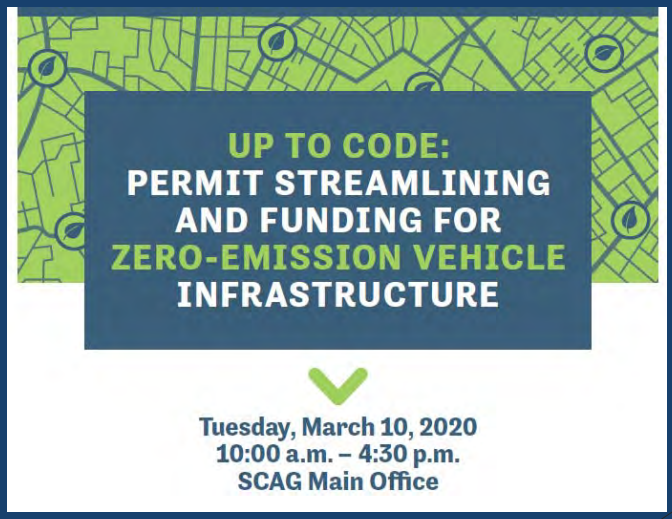
☐Single-Family ☐Multi-Family (Apartment) ☐Multi-Family (Condominium)
☐Commercial (Single Business) ☐Commercial (Multi-Businesses)
☐Mixed-Use ☐Public Right-of-Way

Location and Number of EVSE to be Installed:

Garage _____ Parking Level(s) _____ Parking Lot _____ Street Curb _____

Description of Work:

Learn More About Permit Streamlining in LA on March 10th



Online and in-person attendance (free lunch provided)

Register to attend here: bit.ly/ZeroEmissionWorkshop

Contact us with your questions:

Kielan Rathjen
kielan.rathjen@gobiz.ca.gov
(916) 447-7936

Tyson Eckerle
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(916) 322-0563

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Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017
March 5, 2020

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: Building Sector Decarbonization

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

RECOMMENDED ACTION FOR EEC:
Information Only – No Action Required

RECOMMENDED ACTION FOR CHED AND TC:
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:
Panama Bartholomy, Executive Director for the Building Decarbonization Coalition will present an overview of recent trends in building decarbonization in California, and discuss opportunities to transition to a clean energy future.

BACKGROUND:
According to the California Air Resources Board (CARB), California is not currently on track to meet its 2045 goal of carbon neutrality and an 80% reduction in GHG emissions from all sectors by 2050. To reduce statewide emissions to these levels, California needs to double the rate at which it is cutting carbon. Achieving a low carbon economy by 2050 requires an early start and continuous progress on decarbonization. Residential buildings produce roughly two-thirds of the state's building emissions. SCAG's 2050 Pathways Study (2019) concluded that rapid and sustained decarbonization in both the transportation and building sectors are needed in the SCAG region to meet statewide GHG emission reduction targets. In response to the challenge of decarbonizing buildings, dozens of California cities have adopted stricter energy codes and other strategies to ensure that new buildings are highly energy efficient or carbon neutral.

Panama Bartholomy, Executive Director for the Building Decarbonization Coalition will present an overview of recent trends in building decarbonization in California, and discuss opportunities to transition to a clean energy future. The Coalition works with local and statewide decision-makers to develop and support strong policies to reduce building emissions. The Coalition includes building industry stakeholders, energy providers, environmental organizations and local governments.

FISCAL IMPACT:
No Fiscal Impact. This is not a SCAG funded project.

Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017
March 5, 2020

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

From: Roland Ok, Senior Regional Planner, Compliance & Performance Monitoring, (213) 236-1819, ok@scag.ca.gov

Subject: Status Update on the Connect SoCal Final PEIR

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

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

RECOMMENDED ACTION FOR CEHD, TC, AND RC:
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. 2: Advance Southern California's policy interests and planning priorities through regional, statewide, and national engagement and advocacy.

EXECUTIVE SUMMARY:
The purpose of this report is to provide a status update on comments received in response to the Draft Connect SoCal Program Environmental Impact Report (PEIR) that SCAG released for a 45-day public review and comment period on December 9, 2019 to January 24, 2020. Additionally, this report provides a preliminary draft outline and a schedule of key milestones for the Final PEIR. For information regarding Draft Connect SoCal comments and revisions, please see Agenda Item No. 3 in the EEC Packet.

BACKGROUND:
Pursuant to the federal Fixing America's Surface Transportation (FAST) Act (Pub. L. No. 114-94) and Section 65080 of the California Government Code, SCAG is required to adopt and update a long-range regional transportation plan (RTP) every four (4) years. SCAG's last RTP was adopted in 2016 and an updated RTP is required to be adopted by April 2020. In accordance with the Sustainable Communities and Climate Protection Act of 2008, or Senate Bill (SB) 375 (Steinberg), the RTP will include a Sustainable Communities Strategy (SCS) which details strategies to reduce greenhouse gas (GHG) emissions from passenger vehicles (automobiles and light-duty trucks). As one of the State's

18 MPOs, SCAG must prepare an SCS that demonstrates the region's ability to attain GHG emission-reduction targets through integrated land use, housing, and transportation planning.

CEQA and its implementing regulations (*State CEQA Guidelines*) require SCAG as the Lead Agency to prepare an EIR for any discretionary government action, including programs and plans that may cause significant environmental effects. *Connect SoCal* is a regional planning document updated every four years and provides an update the 2016 RTP/SCS. Given the regional level of analysis provided in *Connect SoCal*, a Program EIR (PEIR) is the appropriate CEQA document. A PEIR is a "first-tier" CEQA document designed to consider "broad policy alternatives and program wide mitigation measures" (*State CEQA Guidelines* Sec. 15168). The programmatic environmental analysis for the *Connect SoCal* PEIR will evaluate potential environmental effects consisting of direct and indirect effects, growth-inducing impacts, and cumulative impacts resulting from the Plan, and will include mitigation measures to offset any identified potentially significant adverse environmental effects. As a first-tier document, the PEIR may serve as a foundation for subsequent, site-specific environmental review documents (including Addendums, Supplemental EIRs, Subsequent EIRs) for individual transportation and development projects in the region (*State CEQA Guidelines* Sec. 15385).

In addition to fulfilling legal requirements, the PEIR provides an opportunity to inform decision makers and the public about potential environmental effects associated with the implementation of the Connect SoCal Plan and alternatives. This first-tier regional-scale environmental analysis will also help local agencies evaluate and reduce direct and indirect impacts, growth-inducing impacts, and cumulative environmental effects with respect to local projects. For a copy of the Draft PEIR, please visit: https://connectsocal.org/Pages/Draft-2020-PEIR.aspx

SUMMARY OF COMMENTS FOR THE *CONNECT SOCAL* PEIR:

On November 7, 2019, with EEC's recommendation and RC's subsequent approval, SCAG released the Draft PEIR for a 45-day public review and comment period from December 9, through January 24, 2019. Additionally, Staff conducted a public workshop on January 9, 2020 that provided an overview of the Draft PEIR, as well as information on the schedule and how to submit comments on the Draft PEIR. A total of 41 participants, which includes representatives from SCAG member jurisdictions, organizations and sister agencies participated in the workshop. For information regarding materials presented at the workshops, please visit the Connect SoCal PEIR website at: https://connectsocal.org/Pages/Draft-2020-PEIR.aspx

SCAG received fifty-two (52) comment letters on the Draft PEIR. Breakdown of commenters by category for the Draft PEIR are listed below:

Table 1: Breakdown of Commenters by Category on the Draft PEIR

Commenter Category	Number
Federal Agencies	1
State Agencies	2
Regional Agencies	6
Sub-regional Agencies	1
County Transportation Commission	4
Local Jurisdictions	13
Sovereign Nations	2
Organizations	18
Individuals	5

For a complete list of commenters please refer to *Attachment 1 – List of Commenters on the Draft PEIR.*

Among the 53 comment letters, there were approximately 262 unique comments[1] directly related to the Draft PEIR. While some comment letters included substantively similar or duplicative comments, a broad range of Draft PEIR topic areas was raised by the comments. Breakdown of comments by topic area are listed below:

Table 2: Breakdown of Comments by Topic Area on the Draft PEIR

Topic Area	No. of Comments
Corrections and Revisions	95
Regional Housing Needs Assessment	21
VMT analysis	20
Mitigation Measures	19
Air Quality	19
Greenhouse Gas Emissions	14
Biological Resources	14
Project List	8
Transportation	8
Aviation	7
Parks and Recreation	6
Land Use and Planning	6
Baseline Conditions	3

[1] SCAG received a total 327 comments, 66 of which were considered redundant (i.e. cross-referencing comments from other local jurisdictions or agencies). Only unique categories are presented in this staff report. A complete list and copy of comments will be provided in the Final PEIR.

Wildfire	2
Wastewater	2
Project Description	2
Thresholds of Significance	2
Health Risk Assessment	2
Alternatives	2
Cultural Resources	3
Hazards and Hazardous Materials	1
Water Quality	1
Solid Waste	2
Environmental Justice	1
Cumulative Impacts	1
Modeling	1
Total Unique Comments	262

SUMMARY OF KEY COMMENTS:
Upon evaluation, SCAG determined that several comments related to certain topics have recurred. SCAG has identified these comments as "Key Comments". Key Comments include but are not limited to the following:

Vehicle Miles Travelled (VMT) Analysis: Several commenters have posed strong concerns over California Air Resources Board's (CARB) emphasis on VMT reduction as a strategy to reduce greenhouse gas (GHG) emissions. Commenters have stated that GHG reduction targets are inaccurate, unattainable, and in conflict with SB 375. Commenters have stated that attempts to reduce VMT and potential fees attached to them would result in negative impacts to disadvantaged communities. Furthermore, with the housing shortage in California, VMT regulation would exacerbate the problem. Commenters against VMT reduction strategies have requested that SCAG undertake the preparation of an alternative planning scenario (APS) as CARBs high targets for GHG and VMT reduction are unrealistic. Commenters who oppose VMT based analysis have also requested that SCAG should reject CARB's decision to impose VMT reduction targets.

Biological Resources: Commenters have stated that SCAG's Connect SoCal PEIR and Plan place a greater emphasis on wildlife corridors, protection to flora, wildlife connectivity, conservation lands and wetlands protection. Commenters have also requested that SCAG analyze impacts to biological resources as it relates to climate change. Furthermore, commenters have requested that SCAG develop stronger mitigation measures to protect biological resources. Commenters have requested that SCAG provide additional analysis and mitigation measures that would protect mountain lion population within the region and expand the analysis that links the effects of climate change on wildlife.

Climate Change and Greenhouse Gas Emissions: Commenters have urged SCAG to utilize the RTP/SCS process to aggressively reduce VMT at levels necessary to combat climate change and meet the state's GHG reduction goals. Additionally they state that any VMT increase would negatively impact communities by leading to more vehicle crashes, poorer air quality, public health issues and impacts to wildlife corridors and habitats. However, and as stated previously, several commenters believe that the utilization of VMT to reduce GHG emissions are unattainable and infeasible.

Air Quality: Commenters have requested that the PEIR be revised to use a 2045 no project scenario as the baseline condition and update SCAG's Health Risk Assessment with the revised baseline. Commenters have also provided an extensive list of mitigation measures to SCAG and requested that the Final PEIR incorporate said measures. Additionally, commenters have requested clarification regarding our analysis of construction activities, thresholds of significance and other topics regarding air quality analysis.

Regional Housing Needs Assessment: Commenters have raised concerns about the RHNA process and its consistency with the Plan and that the PEIR should address impacts of RHNA. For example, commenters argue that the RHNA methodology is inconsistent with the Connect SoCal growth forecast and that the PEIR does not consider the cumulative impacts of accommodating 1.34 new homes assigned to the region in the latest RHNA cycle. Commenters have also asked SCAG to revise and clarify the language describing the RHNA process within the regulatory framework subsection in **Section 3.14, Population and Housing**.

Mitigation Measures: Commenters have posed concerns over the sufficiency of the mitigation measures as they believe that the PEIR does not recognize all feasible mitigation measures for each of the dozens of significant unavoidable impacts identified for the Connect SoCal Plan. Other commenters have requested that SCAG drop the "can and should" language in the project level mitigation measures, given the limitation of SCAG's authority pursuant to SB 375 over local jurisdictions' land use authority.

As part of the Final PEIR process, SCAG will respond to all comments and clarify our position and if needed apply revisions to the document. For the key comments identified above, SCAG will provide "Master Responses" for each of those issues. Master responses will address multiple similar comments on an issue and provide a comprehensive reply as well as additional information, as needed.

CONTENTS OF THE FINAL *CONNECT SOCAL* PEIR:

Pursuant to CEQA Guidelines § 15132, the Final PEIR is required to consist of:

a. The Draft PEIR or a revision of the draft

b. Comments and recommendations received on the Draft PEIR either verbatim or in summary
c. A list of persons, organizations, and public agencies commenting on the Draft PEIR
d. The responses of the Lead Agency to significant environmental points raised in the review and consultation process
e. Any other information added by the Lead Agency.

As such the contents of the proposed Connect Final PEIR will include the following items:

1. Draft Connect SoCal PEIR, which includes the following:
   - Executive Summary
   - Chapter 1.0 – Introduction
   - Chapter 2.0 – Project Description
   - Chapter 3.0 – Environmental Impact Analysis and Mitigation Measures
   - Chapter 4.0 – Alternatives
   - Chapter 5.0 – Long Term CEQA Considerations
   - Chapter 6.0 – List of Preparers
   - Chapter 7.0 - Glossary
   - Technical Appendices supporting the Draft PEIR

2. Chapter 8.0 – Introduction to the Final PEIR: This chapter will provide a brief summary of overview of what has occurred since the Draft PEIR and a brief overview of the Final PEIR process.

3. Chapter 9.0 – Response to Comments: This chapter provides background information on the Final PEIR for the Connect SoCal PEIR and includes public written comments on the Draft PEIR and its responses. It includes Master Responses to comments that recurred in a number of comment letters, and responses to written comments made by public agencies, organizations, and interested parties.

4. Chapter 10.0 – Clarifications and Revisions: This chapter provides clarifications and revisions, including staff-initiated revisions, to the Draft PEIR. Based on the staff's assessment, none of the corrections or additions constitutes significant new information that results in finding of a new mitigation measure that is not analyzed in the Draft PEIR; no finding of a new impact or any increase in existing impacts that have been identified in the Draft PEIR; and thus, none of the corrections or additions significantly change the conclusions presented in the Draft PEIR.

5. Mitigation Monitoring and Reporting Program - The Mitigation Monitoring and Reporting Program (MMRP) is a standalone document that is prepared in compliance with the requirements of §21081.6 of the California Public Resources Code and CEQA Guidelines § 15091 (d) and § 15097. The MMRP, the monitoring plan, applies to the goals, policies, and strategies

articulated in the 2016 RTP/SCS and related mitigation measures to be implemented by SCAG, and project-level performance standards-based mitigation measures which are within responsibility, authority, and/or jurisdiction of project-implementing agency or other public agency serving as lead agency under CEQA in subsequent project- and site- specific design, CEQA review, and decision-making processes, to meet the performance standards for each of the CEQA resource categories.

6. Findings of Fact and Statement of Overriding Considerations - The statement of Findings of Fact is prepared in compliance with the requirements of § 21081.6 of the California Public Resources Code and CEQA Guidelines § 15091. It describes facts, discussions, and conclusions reached in the environmental review relative to impacts, mitigation measures, and selection of an alternative. This chapter also includes a Statement of Overriding Considerations that is prepared in compliance with § 21081 of Public Resources Code and CEQA Guidelines § 15093. The existence of significant unavoidable impacts as identified in the Draft PEIR requires the preparation of a Statement of Overriding Considerations. The Statement of Overriding Consideration explains why SCAG is willing to accept the residual significant impacts. It describes the economic, social, environmental and other benefits of the 2016 RTP/SCS that override the significant unavoidable environmental impacts. It "reflect[s] the ultimate balancing of competing public objectives when the agency decides to approve a project that will cause one or more significant effects on the environment" (CEQA Guidelines § 15021 (d)).

NEXT STEPS:
Staff is reviewing and will respond to all of the public written comments on the Draft PEIR to be included as a component of the proposed Final PEIR (CEQA Guidelines §15132), and intends to seek action by the Environment and Energy Committee to recommend that the RC adopt and certify the Final PEIR at its April 2, 2020 meeting. As such, the proposed Final PEIR will be posted on SCAG's website on March 23, 2020 to comply with the CEQA requirement that the Final PEIR be published at least 10 days prior to the proposed April 2, 2020 certification date (CEQA Guidelines § 15088).

FISCAL IMPACT:
Work associated with this item is included in the current Fiscal Year 2019/20 Overall Work Program (020.0161.04: Regulatory Compliance).

ATTACHMENT(S):
1. List of Commenters

Attachment
List of Commenters on the Draft EIR

Sovereign Nations	
SOV-1	Santa Ynez Band of Chumash Indians
SOV-2	San Manuel Band of Mission Indians
Federal Agencies	
FED-1	Environmental Protection Agency
State Agencies	
STA-1	State of California, California State Transportation Agency
STA-2	California High-Speed Rail Authority
Regional Agencies	
REG-1	John Wayne Airport / Orange County
REG-2	South Coast Air Quality Management District
REG-3	Ventura County Air Pollution Control District
Subregional Agencies	
SUB-1	Orange County Council of Governments
County Transportation Commission	
TRANS-1	Los Angeles County Metropolitan Transportation Authority
TRANS-2	Orange County Transportation Authority
TRANS-3	San Bernardino County Transportation Authority & San Bernardino Council of Governments
TRANS-4	Transportation Corridor Agencies
Local Jurisdictions	
LOC-1	County of Los Angeles Department of Parks and Recreation
LOC-2	County of Ventura Resource Management Agency
LOC-3	Ventura County Public Works Watershed Protection Division
LOC-4	City of Costa Mesa
LOC-5	City of Huntington Beach
LOC-6	City of Indio
LOC-7	City of Irvine
LOC-8	City of La Habra
LOC-9	City of Laguna Hills
LOC-10	City of Lancaster
LOC-11	City of Los Angeles
LOC-12	City of Mission Viejo
LOC-13	City of Moreno Valley
LOC-14	City of South Pasadena
LOC-15	City of West Hollywood
LOC-16	City of Yorba Linda
Organizations	
ORG-1	Coalition for a Safe Environment, et al.
ORG-2	Sierra Club Pomona Valley
ORG-3	Sierra Club Moreno Valley

ORG-4	The Two Hundred
ORG-5	Westwood South of Santa Monica Blvd Homeowner's Association
ORG-6	Alliance for a Regional Solution to Airport Congestion
ORG-7	BizFed
ORG-8	Center for Biological Diversity
ORG-9	Center for Demographic Research
ORG-10	Climate Resolve
ORG-11	Keep Nuevo Rural
ORG-12	UNITE HERE Local 11
ORG-13	Southern California Leadership Council
ORG-14	Service Employees International Union
ORG-15	Bolsa Chica Land Trust
ORG-16	Friends of Harbors, Beaches, and Parks
ORG-17	Sierra Club Save Hobo Alisa Task Force
ORG-18	California Cultural Resource Preservation Alliance
Individuals	
IND-1	Marven Norman
IND-2	Albert Perdon
IND-3	Henry Fung
IND-4	Jordan Sisson
IND-5	Stephanie Johnson and Ghassan Roumani

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Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017
March 5, 2020

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

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

From: Rongsheng Luo, Program Manager II, Compliance & Performance Monitoring, (213) 236-1994, LUO@scag.ca.gov

Subject: Status Update on Final Federal Safer, Affordable, Fuel-Efficient Vehicles Rule

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

RECOMMENDED ACTION FOR CEHD, TC AND RC:
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:
At the October 3, 2019 EEC meeting, staff made a presentation on the final federal Safer, Accountable, Fuel-Efficient (SAFE) Vehicles Rule Part I: One National Program Rule. Subsequently, the federal rule became effective on November 26, 2019. This staff report is a status update on the federal rule including major developments since the October 3, 2019 staff report, implications for the Final Connect SoCal, and the next steps.

BACKGROUND:

Federal Safer, Accountable, Fuel-Efficient (SAFE) Vehicles Rule

On August 24, 2018, the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Transportation's National Highway Transportation and Safety Administration (NHTSA) jointly issued a proposed rule, "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule for Model Years 2021–2026 Passenger Cars and Light Trucks." The proposed rule is designed to roll back the federal Corporate Average Fuel Economy (CAFE) and vehicle greenhouse gas (GHG) emissions standards

promulgated under the Obama Administration.

On September 27, 2019, EPA and NHTSA jointly published "The Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule Part One: One National Program" to finalize elements of the proposed SAFE Vehicles Rule. Effective November 26, 2019, under the Part I Rule, NHTSA affirms that its statutory authority to set nationally applicable fuel economy standards preempts such state and local programs; and that EPA withdraws the Clean Air Act (CAA) preemption waiver that it granted to the State of California in January 2013 as it relates to California Air Resources Board (ARB) GHG and Zero-Emission Vehicle (ZEV) programs.

NHTSA and EPA are in the process of finalizing the remaining portions of the SAFE Vehicles Rule and are anticipated to issue a final rule on the federal fuel economy and GHG vehicle emissions standards in the near future.

Major Developments since Last Update

State Interagency Coordination Working Group

California State Transportation Agency (CalSTA), Caltrans, and ARB have established a coordinating group amongst the three agencies. The Working Group have been partnering with MPOs including SCAG and all stakeholders to identify near-term and long-term solutions, including developing adjustments to ARB's EMFAC models. The Working Group also have had one-on-one consultations with agencies that may have the largest impacts and held larger stakeholder meetings for interested parties.

Release of EMFAC Off-Model Adjustment Factors by ARB

As previously reported, because of the CAA waiver withdrawal, ARB's EMFAC model may not be used because the model reflects ARB's ACC Regulations which are now invalidated by the Part I Rule. To address the issue, ARB developed and released off-model adjustment factors for both the EMFAC2014 and EMFAC2017 models to account for the impact of the Part I Rule on November 20, 2019. These adjustments provided in the form of multipliers can be applied to emissions outputs from the EMFAC model to account for the impact of the Part I Rule. If accepted or approved by the U.S. EPA, these adjustment factors will enable the use of the EMFAC model for both regional and project-level conformity analysis.

Application of Off-Model Adjustment Factors to Connect SoCal

Due to the complexity in applying these off-model adjustment factors, SCAG modeling staff first developed a rough and conservative method for an immediate evaluation of these adjustment

factors. Subsequently, SCAG modeling staff has developed an accurate method to apply these adjustment factors to the conformity analysis for the Draft Connect SoCal. The analysis results confirm that the Draft Connect SoCal continues to demonstrate transportation conformity.

Positions of Applicable Federal Agencies towards Off-Model Adjustment Factors

Despite the positive developments, at the December 4, 2019 meeting of the California Transportation Commission, Federal Highway Administration (FHWA) Regional Administrator publicly announced that FHWA was waiting on direction from U.S. EPA on how to move forward with the adjustment factors. In the meantime, FHWA would not approve regional transportation plans, programs, and projects needing new conformity determination until U.S. EPA approves the adjustment factors.

U.S. EPA has been directly working with FHWA and Federal Transit Administration (FTA) regarding the use of ARB's EMFAC adjustment factors for transportation conformity determination. However, ARB has not officially submitted the adjustment factors to U.S. EAP and U.S. EPA has not provided any directions as of the writing of this staff report.

Implications for Final Connect SoCal

For the transportation conformity analysis of the Final Connect SoCal scheduled to be adopted by the Regional Council in April 2020, staff plans to perform two regional emissions analyses, one with the off-model adjustment factors and the other without. Staff anticipates that the Final Connect SoCal will demonstrate transportation conformity with and without these adjustment factors. However, unless and until U.S. EPA provides direction to accept or approve the adjustment factors, FHWA will not approve transportation conformity determination for the Final Connect SoCal.

As alerted previously, if the transportation conformity determination for Connect SoCal would not be approved by the FHWA/FTA by June 1, 2020, a 12-month transportation conformity lapse grace period would be triggered. During the conformity lapse grace period, all projects in the 2016 RTP/SCS and 2019 FTIP as amended can still receive federal approval; however, no new projects may be added and no changes may be made to the projects in the transportation plan or program, with the exception of exempt (mainly safety projects) and committed transportation control measure (TCM) (committed HOV lanes, transit, active transportation, and ITS projects in approved air plans) projects.

If the underlying issues would not be resolved in time, transportation conformity lapse would occur after the grace period. A conformity lapse impacts non-exempt projects (mainly mixed-flow capacity expansion projects) as well as TCM projects not in an approved air plan unless these projects have received federal authorization prior to the lapse. Specifically, these impacted projects

can neither receive federal funding, federal approval, nor be amended into the regional transportation plan or program.

Next Steps

In order for the ARB's off-model adjustment factors to be a solution approvable by FHWA, it is critical that ARB officially submits these factors to U.S. EPA as soon as possible and U.S. EPA performs an expedited review and provide timely directions. If U.S. EPA would accept or approve these adjustment factors, ARB's EMFAC model can again be used for both regional and project-level conformity analysis and FHWA/FTA will resume their review/approval of new transportation conformity determinations. If U.S. EPA would not accept or approve these adjustment factors, it is important that U.S. EPA provide clarifications on what other remedy would be needed so we can work through the State Interagency Coordination Working Group to develop such remedy.

The off-model adjustment factors only account for the impact of the Part I Rule, not the pending Part II Rule. Therefore, upon the publication of the Part II Rule, staff will conduct interagency consultation to seek clarification and guidance especially from ARB, U.S. EPA, and FHWA/FTA regarding transportation conformity implications of the Part II Rule and to develop any necessary remedy.

Despite these uncertainties, SCAG staff will continue work to complete the Final Connect SoCal including the associated transportation conformity analysis. It will be still very challenging but staff will work proactively and closely with all involved agencies with the ultimate goal of resolving the underlying issues before our current transportation conformity determination will expire on June 2, 2020.

Finally, staff will provide regular updates to RC and/or Policy Committees as appropriate.

FISCAL IMPACT:
Work associated with this item is included in the FY 2019-2020 Overall Work Program under project number 025.0164.01: Air Quality Planning and Conformity.

Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017
March 5, 2020

To: Transportation Committee (TC)

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

From: Philip Law, Manager of Transit/Rail, Transit/Rail, 213-236-1841, LAW@scag.ca.gov

Subject: Automated Bus Consortium

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:
Mr. Richard Wolsfeld, AECOM, will provide a presentation on the Automated Bus Consortium, an association of transit agencies nationwide that are collaborating to accelerate development of automated transit technologies and pilot the deployment of full-sized automated buses in live service environments. Within the SCAG region, consortium members Foothill Transit, Long Beach Transit, and the Los Angeles County Metropolitan Transportation Authority (Metro) have identified potential pilot projects.

BACKGROUND:
In May 2019, an association of transit and transportation agencies coalesced to form the Automated Bus Consortium, a collaboration to assess the feasibility of implementing automated bus pilots across the country. Created and managed by AECOM, the Consortium includes the three SCAG region agencies (Foothill Transit, Long Beach Transit and Metro) and agencies from Texas, Georgia, Illinois, Michigan, Minnesota, Florida and Virginia. The Consortium is currently assessing the feasibility of pilot projects including the development of automated bus specifications.

The Federal Transit Administration (FTA) released the Strategic Transit Automated Research Plan in 2018, outlining the FTA's research agenda to move the transit industry forward through enabling research, integrated demonstrations, and strategic partnerships. While advances in automation technology have already begun to transform the transportation industry, and automation is relatively mature in rail transit operations, the FTA states that the domestic bus industry lags behind other transportation sectors and international bus manufacturers and providers. The nation's transit industry is often conservative in adopting new technologies, services and business models,

and this aversion to risk is a reasonable approach given the myriad funding and policy constraints faced by public transit providers. The FTA's research plan is therefore intended to address these issues by providing a framework for the transit industry to pursue transit bus automation in a safe, efficient and economically sound manner.

The FTA research plan includes a review of potential costs and benefits of selected vehicle automation technologies and applications for transit vehicles. The five technology packages considered are: transit bus advanced driver assistance system, automated shuttles, automation for maintenance, yard and parking/storage operations, automation for mobility-on-demand service, and automated bus rapid transit (BRT). In analyzing potential costs and benefits, severe data limitations and the rapidly changing environment of automation costs and capabilities must be taken into account when considering the preliminary findings. Additionally, the business case for automation is highly influenced by local context such as the specific characteristics of the transit service or facility.

Given these caveats, the results of FTA's analysis suggest that all of the technology packages analyzed have the potential for a positive return on investment. In particular, for fully driverless shuttle vehicles, paratransit and BRT, there could potentially be large cost savings when compared to conventional service with human drivers, but only in scenarios without an on-board attendant. More research is needed on the safety, security and accessibility of fully-unattended operation and customer acceptance.

Regarding workforce and labor, FTA states that requirements under Federal law do affect transit agencies' ability to change staffing levels as they adopt automated transit vehicles. Labor standards set forth in 49 USC 5333 requires the Department of Labor (DOL) to determine whether the interests of employees affected by assistance under most FTA grant programs are protected under arrangements DOL concludes are fair and reasonable. These arrangements include the preservation of rights and benefits of employees under existing collective bargaining agreements, the continuation of collective bargaining rights, the protection of employees against a worsening of their positions in relation to their employment, assurances of employment to employees of acquired transit systems, priority of reemployment, and paid training or retraining programs.

In 2018, Neil Quarles and Kara Kockelman presented research at the 97th Annual Meeting of the Transportation Research Board on the costs and benefits of electrifying and automating U.S. bus fleets. They wrote that speculation on how fully autonomous vehicles will impact public transit varies among experts, from predictions that shared automated fleets of personal-sized vehicles will replace public transit, to future fleets of smaller autonomous shuttles, to public transit being strengthened by autonomous technology. However, increase in vehicle miles traveled (and therefore congestion) through reliance on more vehicles with lower occupancy, as well as the cost to riders of more expensive shared automated options, would be problematic. The authors'

research focuses on full-size automated transit buses, as these would maintain current capacity without a need to add vehicles. They conclude that, in addition to lower costs, automated buses may improve the quality of service, reduce fuel consumption and emissions, and operate more safely. Cost savings could free up funding to support improvements such as additional service or the cost of electrification.

FISCAL IMPACT:
Work associated with this item is included in the FY 2019-20 Overall Work Program (OWP) budget under project number 140.0121.01, Transit Planning.

ATTACHMENT(S):
1. Automated Bus Consortium Presentation

Automated Bus Consortium Program Overview

March, 2020

ACCELERATING AUTOMATED TECHNOLOGY FOR TRANSIT SERVICES

ABC Automated Bus Consortium ACCELERATED BY AECOM

Summary of Concept

- Automated small vehicle shuttle technology is proven
- Appears feasible to transfer AV shuttle technology to full-sized buses (80-85,000 in operation)
- Vendors need a market to cost-effectively produce these buses
- Concept: Joint procurement of 50 – 60 buses by multiple consortium agencies from “up to three” vendors

Benefits and Limitations of Automated Small Shuttles (260 demonstrations)

- Proves automated, electric buses work
- Refreshes the image of transit
- Speed limited to 20-25 mph
- Capacity is 12 passengers
- Applications limited

Automated Bus Technology Deployment Program

Goal of Automated Bus Consortium Project

Deploy full-sized, full-speed accessible automated (Level 4) buses:

- In a variety of geographies and applications to advance the industry understanding of the technology
- Leverage the technology to improve safety, reliability, operating efficiency and customer experience

What is Level 4 Automation?

0	1	2	3	4	5
No Automation Zero autonomy, the driver performs all driving tasks.	**Driver Assistance** Vehicle is controlled by the driver, but some driving assist features may be included in the vehicle design.	**Partial Automation** Vehicle has combined automated functions, like acceleration and steering, but the driver must remain engaged with the driving task and monitor the environment at all times.	**Conditional Automation** Driver is a necessity, but is not required to monitor the environment. The driver must be ready to take control of the vehicle at all times with notice.	**High Automation** The vehicle is capable of performing all driving functions under certain conditions. The driver has the option to control the vehicle.	**Full Automation** The vehicle is capable of performing all driving functions under all conditions. The driver may have the option to control the vehicle.

Source: Society of Automotive Engineers (SAE) / National Highway Traffic Safety Administration (NHTSA) Levels of Automation

Business Case: Why **Automation**?

TRANSIT CHALLENGES

- **Diminishing Safety**
- **Diminishing Ridership**
- **Reduction in Service Frequency**
- **Increasing Operating Costs**
- **Driver Shortages**

AUTOMATED TECHNOLOGY BENEFITS

- **Improves Safety of Systems through Enhanced Connectivity**
- **Improves Rider Experience**
- **Optimizes System Operations**
- **Improves Environmental Quality**
- **Enables Mobility on Demand**

Costs of Automated Bus

COST ELEMENT	ESTIMATED COST (2020$)
Base Bus	$ 600,000
Electrification	$ 350,000
Automation	$ 450,000
TOTAL	$1,400,000

OPERATING COST: Wages Typically Make Up 60-65% Of Costs. Level 4 Automation Will Not Reduce These Costs. Level 5 Automation Will Likely Have An "Ambassador" On Board For Some Time.

Consortium Agencies

Dallas Area Rapid Transit (DART) | Foothill Transit | Long Beach Transit (LBT) | Los Angeles County Metropolitan Transportation Authority (Metro) | MetroLINK (Moline) | Metropolitan Atlanta Rapid Transit Authority (MARTA) | Metropolitan Transit Authority of Harris County (Houston) | Michigan Department of Transportation (MDOT)/Michigan's mobility initiative, PlanetM | Minnesota Department of Transportation (MnDOT)/Rochester Public Transit | Pinellas Suncoast Transit Authority (PSTA) | Virginia Department of Rail and Public Transportation (DRPT)/Hampton Roads Transit

Various Bus Manufacturers Have Announced Automated Bus Programs

Conclusions: Accelerating Automated Transit

- Significant investment is being made in automation
- Industry “appears able” to produce a Level 4 full-size, full-speed, and accessible automated bus in the 2022 – 2023 timeframe
- The technology needs a market
- Labor partnerships are important
- FTA has an interest in automated bus deployment
- Federal, state, and local regulatory framework needs to be refined

Program to Advance Full-Sized Automated Bus

Overview of Automated Bus Consortium Program

One Program to Gain Extensive Experience

Variety of Geographies

- Cold Weather
- Desert
- Hot and Humid
- Rainy

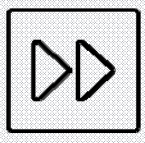
Variety of Applications

- Bus Rapid Transit
- Shuttle Service
- Arterial Rapid Transit
- Express Service
- Fixed-Route Service
- Point-to-Point
- Maintenance Depot

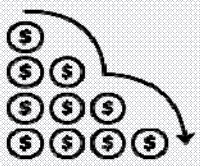
Variety of Vehicle Options

- New Vehicles
- Retrofit Existing Vehicles
- **Electric Vehicles**
- CNG Vehicles
- Diesel Vehicles
- Hydrogen Fuel Cell

Potential Value of the Consortium



Accelerate Technology Development and Deployment



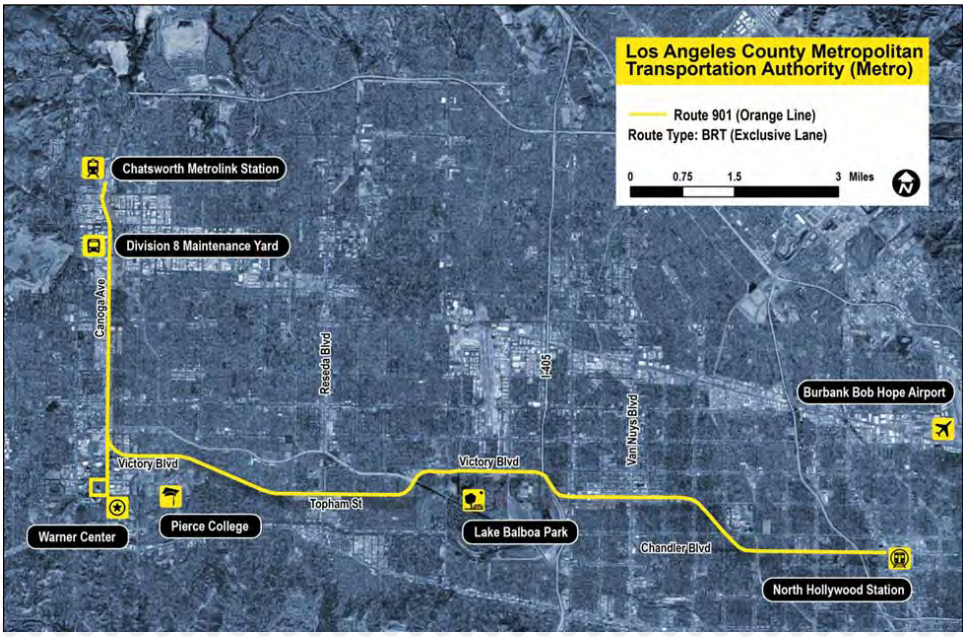
Reduce Planning and Procurement Costs

Stimulate Technology Demand

Shared Lessons Learned

Pilot Projects

Sample: LA Metro

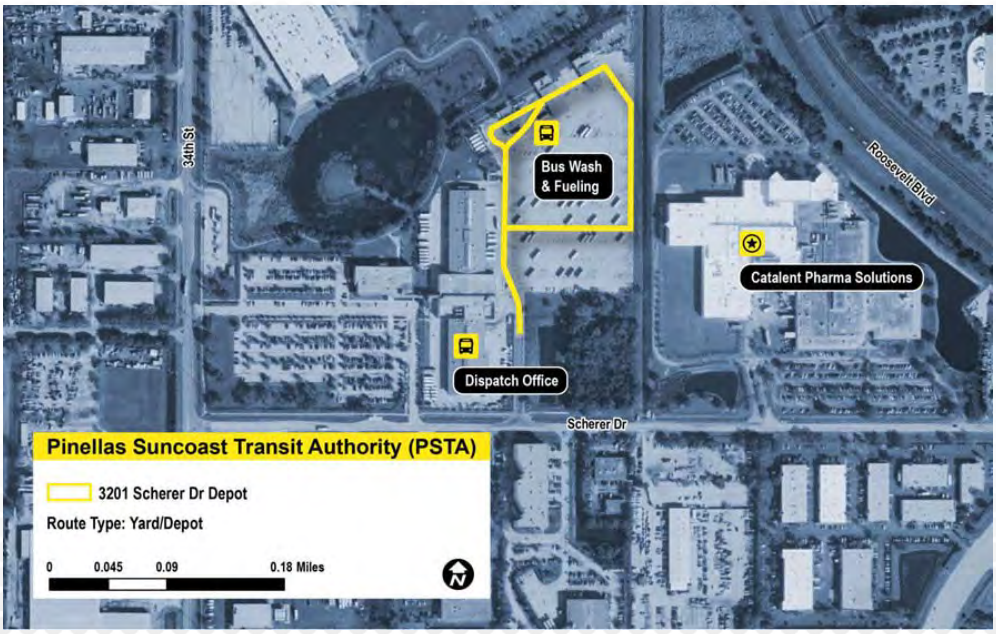


AECOM

Sample: Dallas Area Rapid Transit

AECOM

Sample: Pinellas Suncoast Transit Authority



AECOM

Draft Automated Driving System (ADS) Specification

Key Elements of ABC Specification

1. Base Bus Specification (leverage APTA White Book)
2. Bus Electrification (leverage APTA White Book)
3. Automated Driving System (ADS) (new, leverage Industry input)

ADS STAGE 1

- **OPERATIONAL DESIGN DOMAIN (ODD)**
  - BUS SERVICE ROUTES (LOCAL ROADS, ARTERIALS, FREEWAYS AND HIGHWAYS) WITH SPEEDS GOVERNED BY SERVICE ROUTE SPEED LIMITS, INCLUDING INTERSECTIONS
  - VARYING LIGHTING AND WEATHER CONDITIONS
  - MAINTENANCE YARD: NAVIGATION AND TASK EXECUTION
- **BEHAVIORS**
  - ACQUIRE AND NAVIGATE SERVICE ROUTES INCLUDING BUS STOPS AND LOW SPEED BUS MERGES
  - CALCULATE AND TRACK ESTIMATED TIME TO ARRIVAL FOR BUS STOPS
  - TRACK OTP
  - LANE NAVIGATION, LANE CHANGES
  - DETECT AND NAVIGATE INTERSECTIONS CONTROLLED BY TRAFFIC SIGNALS, AND 2- AND 4-WAY STOP SIGNS
  - INTERACT WITH BUS STOPS AND BOARDING, EXITING PASSENGERS
  - ACCOMMODATE PASSENGERS WITH BICYCLES
  - ACCOMMODATE PASSENGER COUNTS
- **FUNCTIONALITY**
  - ADS SHALL BE ADA COMPLIANT
  - COMPONENT AND CRITICAL SYSTEM REDUNDANCY
  - COMFORTABLE PASSENGER EXPERIENCE
  - PROVIDE MECHANISM FOR MANUAL TAKEOVER, AND TO RELINQUISH CONTROL TO THE ADS
  - PREVENT UNAUTHORIZED ACCESS
  - MONITORING AND LOGGING OF INTERNAL SYSTEMS
  - DYNAMIC DRIVING TASK (DDT) FALLBACK AND MINIMAL RISK CONDITION (MRC)
  - PERFORM ALL OBJECT AND EVENT DETECTION AND RECOGNITION (OEDR)
  - MINIMIZE FALSE POSITIVES AND FALSE NEGATIVES
  - COMMUNICATE VIA WI-FI, CELLULAR, AND DEDICATED SHORT RANGE COMMUNICATIONS (DSRC)
  - PHYSICAL AND ELECTRONIC SECURITY
  - MANAGE DEPLOYMENT, VERIFICATION, AND DEPLOYMENT OF OVER-THE-AIR UPDATES (OTA)

ADS STAGE 2

- **STAGE 1 PLUS:**
  - **OPERATIONAL DESIGN DOMAIN (ODD)**
    - DOES NOT REQUIRE MODIFICATIONS TO THE ENVIRONMENT
  - **BEHAVIORS**
    - MERGE AT SPEEDS BELOW 45MPH
    - DETECT AND NAVIGATE INTERSECTIONS WITH FLASHING YELLOW BALL, RED FLASHING BALL, ALL-WAY FLASHING RED
    - NAVIGATION WITHIN A TRANSIT CENTER
  - **FUNCTIONALITY**
    - MONITOR AND RECORD VIDEO AND AUDIO INSIDE THE BUS
    - TRANSIT SIGNAL PRIORITY (TSP)
    - SCMS FOR DSRC

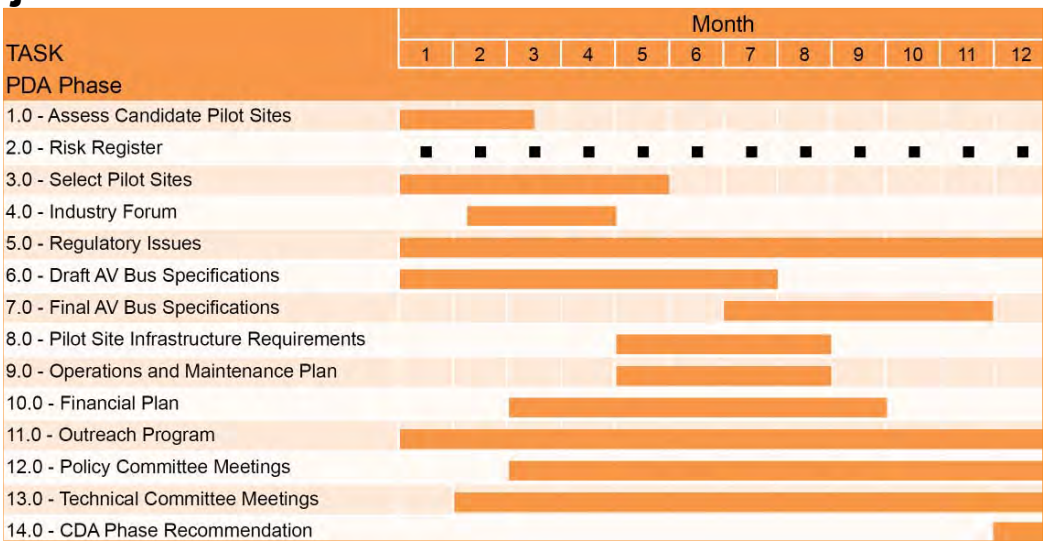
ADS STAGE 3

- **STAGE 2 PLUS:**
  - **OPERATIONAL DESIGN DOMAIN (ODD)**
    - DETECT DEGRADED PAVEMENT CONDITIONS
    - DETECT AND RESPOND TO EMERGENCY VEHICLES AND SCHOOL BUSES
  - **BEHAVIORS**
    - PLAN AND EXECUTE A SAFE RETURN ROUTE TO MAINTENANCE YARD
    - MERGE AT SPEEDS ABOVE 45MPH
    - EXECUTE AN UNPROTECTED LEFT TURN
    - DETECT AND NAVIGATE INTERSECTIONS WITH YIELD SIGNS AND FLASHING YELLOW ARROWS
    - NAVIGATE ROUNDABOUTS
  - **FUNCTIONALITY**
    - DETECT DISRUPTIVE PASSENGER BEHAVIOR
    - ADA: DETECT AND SECURE WHEELCHAIRS, DETECTION AND INTERACTION WITH OTHER IMPAIRED PASSENGERS
    - CONFIGURABLE TSP

Schedule

Overview of Automated Bus Consortium Program

Automated Bus Consortium Program – Phase 1
Project Schedule: 4.01.19 – 3.31.20



Discussion/Questions

Phased Approached from Feasibility to Implementation

1

Feasibility Phase

- Service Visioning/Pilot Projects
- National & Local Outreach
- Vehicle and Infrastructure Technology
- Financial Planning
- Regulations
- Implementation Strategy
- Go/No-Go to Phase 2

GO/NO-GO

2

2A. Automated Bus Procurement

- Bid, Evaluate, Negotiate, and Award
- Testing Plan
- Electric Charging Design
- Regulatory Clearance

GO/NO-GO

2B. Deployment

- Infrastructure Design
- Technology Testing
- Deployment/Construction
- Operation
- Evaluation
- Next Steps

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Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017
March 5, 2020

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

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

Subject: Overview of Draft Connect SoCal Comments and Revision Approach

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

RECOMMENDED ACTION:
For information and discussion only.

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 purpose of this report is to provide an overview of the comments received on the Draft Regional Transportation Plan/Sustainable Communities Strategy ("RTP/SCS," "Connect SoCal" or "Plan") and receive input on staff's intended approach for responding to comments and preparing revisions for finalizing Connect SoCal.

BACKGROUND:
As the designated Metropolitan Planning Organization for the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura, SCAG is required by state and federal statutes to prepare and update a long range (20 year minimum) Regional Transportation Plan that provides for the development and integrated management and operation of transportation systems and facilities that will function as an intermodal transportation network for the SCAG metropolitan planning area. Pursuant to the federal Clean Air Act, Connect SoCal is required to meet all federal transportation conformity requirements, including regional emissions analysis, financial constraint, timely implementation of transportation control measures, and interagency consultation and public involvement (42 U.S.C. §7401 et seq.).

The passage of California Senate Bill 375 (SB 375) in 2008 requires that an MPO prepare and adopt a

Sustainable Communities Strategy (SCS) that sets forth a forecasted regional development pattern which, when integrated with the transportation network, measures, and policies, will reduce greenhouse gas emissions (GHG) from automobiles and light duty trucks (Govt. Code §65080(b)(2)(B)). The SCS outlines certain growth strategies that provide for more integrated land use and transportation planning, and maximize transportation investments. The SCS is intended to provide a regional land use policy framework that local governments may consider and build upon. The development of the RTP/SCS is subject to the California Environmental Quality Act (CEQA). Therefore, SCAG also prepares a Program Environmental Impact Report (PEIR) that evaluates the potential environmental impacts associated with the Connect SoCal.

Through a continuing, cooperative, and comprehensive planning process with its stakeholders, SCAG developed the Draft Connect SoCal Plan, which meets state and federal requirements and lays out a collective vision for improving the region's mobility, economy, and sustainability.

SCAG released the Draft Connect SoCal for over the required 60-day public comment period that began on November 14, 2019 and ended on January 24, 2020. The public review and comment period completes more than three years of dialogue and consultation on this planning effort. During the public review and comment period, SCAG conducted a large-scale outreach campaign throughout the six-county region to educate and solicit feedback on the Plan. Throughout the public comment period, SCAG held 21 elected official briefings (which were also open to the public), one tele-town hall, one webinar, and three public hearings which were video-conferenced simultaneously to the five regional offices to make them more accessible to residents throughout the region. All of the materials for the briefings, public hearings, and workshops were posted on the Connect SoCal website. During our outreach, many expressed their support for Connect SoCal and offered feedback on how it could be further improved.

SCAG encouraged the public to comment on the Plan at the aforementioned outreach events and through the online commenting form, regular mail, and email. SCAG received 107 separate communications (both oral and written) containing over 1,800 comments on the Draft Connect SoCal. A total of 81 comments were received from agencies/organizations and 26 were received from individuals. A summary list of commenters is attached to this report (Attachment 1).

Based on staff's review, all elements of the Draft Connect SoCal received supportive comments with the majority of comments that sought further clarification. At a summary level, comments can be combined into 16 major categories. Staff seeks to inform the Regional Council and Policy Committee members and receive input on the intended approach for responding to comments and preparing revisions. The major categories of Connect SoCal comments and requests for clarification, with a proposed approach described, are as follows.

1. **Active Transportation**

Areas Seeking Clarification - Many commenters, including advocacy and county transportation commissions, were supportive of the importance the Draft Connect SoCal places on active transportation, e-scooters and bikeshare. Many encouraged the need for a stronger approach to the implementation of Complete Streets in the region. While many comments were supportive of the increase in active transportation funds, there were many on the need to further increase the amount of funding allocated to regions for active transportation projects. Additionally, comments called for the prioritization of bikeway classes by safety levels.

Proposed Approach - SCAG will strengthen language on implementation of Complete Streets in the region and prioritization of bikeway classification preference. SCAG will also continue to assist our local jurisdictions in applying for active transportation planning and implementation funds in order to increase safety and equity outcomes.

2. **Aviation and Airport Ground Access**

Areas Seeking Clarification - Many comments sought minor clarifications on the role of aviation within the plan as well as SCAG's role in aviation system planning. A few questions related to the aviation demand forecast process, assumptions and results. Some requested exploring additional opportunities to connect airports, particularly Ontario International Airport, with high quality transit options.

Proposed Approach - Most of the responses to comments involved clarifying the relationship as well as roles and responsibilities between SCAG, Airport Authorities, County Transportation Commissions, Federal Aviation Administration (FAA) and others. Some comments resulted in minor revisions, primarily to address unintended errors and provide minor clarifications. No changes to the underlying data, analysis and policies were recommended in finalizing the Aviation and Airport Ground Access element of the proposed Final Connect SoCal.

3. **Emerging Technology**

Areas Seeking Clarification - SCAG received numerous comments on the importance of transitioning to zero-emissions vehicles in various sectors including passenger, transit and goods movement vehicles. Other comments stated that SCAG should remain technology-neutral with regard to vehicle fuel and power technology. Additionally SCAG received comments regarding the importance of micro-mobility and other "slow-speed" modes in achieving the goals of Connect SoCal.

Proposed Approach - SCAG's policies are technology neutral with regard to supporting zero and/or near-zero emissions vehicles in order to achieve regional objectives. Regarding micro-mobility, these devices are regulated by local jurisdictions. SCAG will continue to conduct research and disseminate best practices to our member jurisdictions.

4. **Environmental Justice**

   Areas Seeking Clarifications - Many respondents reported positive feedback on the Environmental Justice (EJ) Toolbox, General Plan Element indicators and the report's new structure, which were developed based on extensive stakeholder engagement. Other comments received were on various topics including developing EJ metrics and quantifiable targets, developing funding lists, examining park inequities, and clarification on certain maps and tables. Others requested to include additional consideration with public health and goods movement to increase collaboration with such topics.

   Proposed Approach - Staff will provide clarifications and corrections where applicable in the narrative, tables, maps and charts. Suggestions related to including EJ metrics and quantifiable targets, developing funding lists, examining park inequities and more collaboration will be addressed after Connect SoCal adoption and with engagement from the Environmental Justice Working Group. Staff will continue to address these suggestions by developing an ongoing Environmental Justice Program.

5. **Goods Movement**

   Areas Seeking Clarification - Many comments focused on electrification of the regional freight rail system, strategies to reach a zero-emission freight system, and increased funding allocation to deploy zero-emission cargo movement system(s).

   Proposed Approach -SCAG recognizes that there are numerous issues to resolve in order to achieve our regional objective of a zero-emissions goods movement system. SCAG concurs that the region needs to move to cleaner modes of freight transportation and will continue to advance strategies that reduce emissions in all modes. Further evaluation regarding costs, funding, and implementation of electrification of the regional freight rail system and zero-emission cargo movement system(s) should be conducted. SCAG remains open to evaluating all technologies that will help the region to reduce emissions and associated health impacts, and achieve regional air quality goals.

6. **Natural & Farm Lands Conservation**

   Areas Seeking Clarification - Comments were generally supportive of conservation strategies, and asked for further strengthening of conservation policies. Several comments described the need to identify further incentives and mechanisms to conserve lands to avoid growth on the urban fringe and further encourage infill development. Several comments were in support of the Regional Advance Mitigation Program (RAMP) strategy and sought more detail.

   Proposed Approach - Text will be updated to clarify and reinforce conservation strategies and next steps. In the coming years, SCAG will support local entities and other stakeholders to assist in the cross-jurisdictional coordination and implementation of conservation

strategies, especially developing a Regional Greenprint data tool and exploring opportunities through partnerships to design a RAMP.

7. **Passenger Rail**

   Areas Seeking Clarification - Many comments supported the passenger rail investments included in Connect SoCal, including the Metrolink SCORE program. A number of comments were on project updates or clarifications, including the XpressWest Project, and updates from the California High Speed Rail Authority.

   Proposed Approach - Revisions to the Final Connect SoCal will reflect those updates.

8. **Project List**

   Areas Seeking Clarification - Most comments involved requests for project listing modifications to modeled and non-modeled projects. In addition, several commenters support or oppose, or seek clarification on, individual projects.

   Proposed Approach - SCAG worked closely with the six county transportation commissions (CTCs) to identify the projects included in the draft Connect SoCal, and each CTC likewise coordinated their countywide projects with local transportation agencies. Final determinations regarding projects are the responsibility of the appropriate lead agency and determined through local planning and project development processes. Minor project modifications were accepted when received from CTCs. In total, approximately 172 project listings were modified. For additional projects that are regional in nature, SCAG worked collaboratively with stakeholders to identify them. Decisions to delete, replace or modify a project should similarly undergo a coordinated process involving the affected CTC and lead agency. Substantive changes to projects may be addressed in the next update or amendment to the plan.

9. **Public Health**

   Areas Seeking Clarification - Numerous comments encouraged more robust data collection on public health. Other comments emphasized the need to further consider impacts to low income/minority communities.

   Proposed Approach - Many concerns regarding impacts to low income/minority communities are discussed in the Environmental Justice Technical Report. As part of an on-going effort, SCAG plans to improve data collection on public health. Healthy places index scores will be included as part of the Final Connect SoCal.

10. **Public Participation & Consultation**

    Areas Seeking Clarification - Comments received expressed the need to perform more intentional engagement in traditionally underrepresented and/or underserved communities

throughout the SCAG region. Commenters also commended the use of new technologies, such as, live webinars and tele-town halls as effective tools for communication as they allow for greater access and participation from diverse audiences. There was also strong interest in continued engagement of Community Based Organizations (CBOs) pre and post development of draft Connect SoCal.

Proposed Approach - SCAG conducted a robust community engagement program after the draft Connect SoCal was released. Additional language in the Final Connect SoCal will be included to reflect those activities. For future cycles and in plan implementation activities, SCAG will continue to explore innovative ways to further engage traditionally underrepresented and/or underserved communities throughout the SCAG region.

11. **Relationships between Connect SoCal and the Regional Housing Needs Assessment (RHNA)**

Areas Seeking Clarification - Comments received focused on the relationships between Connect SoCal and RHNA. Specifically, questions arose as to how the 6th Cycle RHNA has been considered in Connect SoCal, and how the Connect SoCal addressed the SB 375 requirements to identify areas within the region sufficient to house an eight year projection of the regional housing need for the region pursuant to California Government Code Section 65584.

Proposed Approach - Recent state RHNA legislation has changed the relationship between RHNA and the RTP/SCS. Legislative changes in 2018 modified the nature of the regional housing need determination for the 6th cycle RHNA. The 6th Cycle RHNA regional housing need total per HCD of 1,341,827 units consists of "projected need" (504,970 units) intended to accommodate the growth of population and households during the 6th Cycle RHNA (2021-2029) as well as "existing need" (836,857 units) intended to address the latent needs of the existing population. The "projected need" portion of the 6th Cycle RHNA is derived from the Connect SoCal Growth Forecast. Specifically, the Connect SoCal Growth Forecast projects 466,958 additional households over 2021-2029 (the RHNA planning period). These 466,958 households represent occupied housing units, to which are added two adjustment factors: vacancy need (14,467 units) and replacement needs (23,545 units) to yield the 504,970 housing units reflecting "projected need" for the 6th Cycle RHNA. In addition, the Final Connect SoCal will include information identifying areas within the region sufficient to house an eight year projection of the regional housing need. Existing need is allocated consistent with Connect SoCal goals and policies. Pending availability of local housing element updates resulting from the 6th cycle of RHNA's existing need and analysis of the market response, existing need will be evaluated for inclusion into future RTP/SCS growth forecasts. Since the intent of existing need is to provide additional housing to the current population, it does not impact population growth and as such is consistent with the Connect SoCal population growth forecast.

12. Sustainable Communities Strategy

Areas Seeking Clarification - Numerous comments were received about housing and the impact of Connect SoCal strategies on housing affordability. The comments varied from wanting to see more explicit housing related policies from SCAG to suggesting a change in the growth strategies. Other comments questioned the inclusion of any discussion on housing in Connect SoCal. Comments sought further clarity about the GHG reduction strategies, concern about the use of vehicle miles travelled as a metric, and proposals to focus on certain strategies, such as electrification, over others. One comment suggested that SCAG stall the process for one year, similar to San Diego Association of Governments, or submit an alternative planning scenario instead of an SCS to the California Air Resources Board. A few comments requested a more descriptive final growth vision. SCAG also received input from local jurisdictions requesting technical refinements to the growth vision datasets. Other comments included requests for more climate data and polices to address climate change.

Proposed Approach - The land use policies included in Connect SoCal reflect an update and refinement but general consistency with the land use policies and strategies included in the first RTP/SCS (2012). SCAG staff will better clarify the impact of strategies on development decisions and that local jurisdictions retain land use authority. Technical refinements will be made to growth vision datasets where input improves alignment with plan policies and strategies. Staff will clarify GHG reduction strategies but will not be changing the focus or emphasis of certain strategies. Additional strategies suggested for incorporation into the SCS can be considered for next cycle after additional discussion with SCAG Policy Committee Members and stakeholders.

13. Transit

Areas Seeking Clarification - Comments were specific to individual projects/ proposals, freeway High Quality Transit Areas (HQTAs), and Regional Housing Needs Assessment (RHNA) allocation in regards to planned High Quality Transit Corridors (HQTCs).

Proposed Approach - SCAG will review and address project specific comments on a case-by-case basis. Generally, SCAG works with the county transportation commissions to identify specific transportation projects for inclusion in the RTP/SCS. Final determinations regarding transit technologies, project costs, project alignments, and project completion dates are the responsibility of the appropriate lead agency and determined through local planning and project development processes. For the 6th cycle of RHNA, SCAG is assigning a portion of housing unit need on the basis of 2045 HQTAs. These HQTAs will be consistent with those developed for Connect SoCal. Additionally, SCAG will revise the definition of HQTAs such that freeway transit corridors with no bus stops on the freeway alignment do not have a directly associated HQTA.

14. Transportation Conformity Analysis

Areas Seeking Clarification - Numerous comments recommended language on the challenge of attaining federal air quality standards be included in the Final Connect SoCal. Other comments were regarding clarifications on the transportation and emission models, conformity requirements, and overall appreciation to SCAG staff.

Proposed Approach - SCAG will include language regarding the challenges of attaining federal air quality standards and its potential implications. Clarifying language related to the transportation and emission models, conformity requirements, and other requested areas will be incorporated in the Final Connect SoCal.

15. Transportation Finance

Areas Seeking Clarification - Comments were focused on clarifying details on the financial model, implementation guidelines for new revenue sources and need for more evaluation, including assurances on distribution of funds and consideration of impacts of fees on different segments of the population.

Proposed Approach - Text clarifications will be made regarding assumptions for the financial model and guidelines for implementation of new revenue sources. SCAG agrees that additional work is needed including, but not limited to, evaluating options for implementation, accountability and approaches for addressing income and geographic (e.g., urban vs. rural) equity impacts before the mileage-based user fee (or road charge) would become effective (which is why the draft Connect SoCal does not assume revenues from this source before 2030). SCAG, in collaboration with local, regional, state and federal stakeholders, will continue to actively participate in efforts to make transportation funding more sustainable in the long-run.

16. Other

Areas Seeking Clarification - Other comments raise questions or concerns that do not fit into the above categories, such as copy editing and factual errors.

Proposed Approach - SCAG will consider revisions to the Final Connect SoCal generated by other comments on a case-by-case basis. In general, staff will consider revisions where adequate justification has been provided by the commenter.

Next Steps:

April 2, 2020

- Joint Policy Committee will discuss proposed Final Connect SoCal and consider forwarding a recommendation for adoption by the Regional Council.
- Energy and Environment Committee will review Final PEIR and consider forwarding a recommendation for approval by the Regional Council.

- Regional Council will consider approving the Final PEIR and adopting the proposed Final Connect SoCal.

Early June 2020

- CARB will review SCAG's determination that the SCS would, if implemented, achieve established GHG reduction targets.
- FHWA and FTA in consultation with US EPA will review Connect SoCal for transportation conformity determination.

FISCAL IMPACT:
The budget for this work is primarily included in the WBS 010.0170.01 RTP Support, Development and Policy Implementation.

ATTACHMENT(S):
1. List of Commenters

Draft Connect SoCal (2020 RTP/SCS) – Summary List of Comments (See Note*)

Agencies/Organizations:

- Alliance for a Regional Solution to Airport Congestion
- Bolsa Chica Land Trust
- Bureau of Engineering, City of Los Angeles
- California Air Resources Board
- California Community Builders / The Two Hundred
- California Cultural Resources Preservation Alliance, Inc.
- California Department of Transportation
- California Dept. of Fish and Wildlife
- California High Speed Rail Authority
- California Native Plant Society
- Californians for Electric Rail
- Center for Biological Diversity
- Center for Demographic Research, Cal State Fullerton
- City of California City
- City of Corona
- City of Costa Mesa
- City of Huntington Beach
- City of Indio
- City of Irvine
- City of La Habra
- City of Laguna Hills
- City of Lancaster
- City of Los Angeles
- City of Los Angeles, Department of Transportation
- City of Mission Viejo
- City of Moreno Valley
- City of Ontario
- City of Oxnard
- City of Palmdale
- City of San Marino
- City of South Gate
- City of South Pasadena
- City of West Hollywood
- City of Yorba Linda
- Climate Resolve
- Diamond Bar Pomona Valley Sierra Club Task Force
- Friends of Harbors, Beaches and Parks
- Friends of the Whittier Hills Association
- Have A Go
- Hills for Everyone
- Imperial County Transportation Commission
- Leadership Counsel for Justice and Accountability
- Los Angeles County Bicycle Coalition
- Los Angeles County Business Federation
- Los Angeles County Metropolitan Transportation Authority
- Natural Lands Coalition
- Omnitrans
- Orange County Business Council
- Orange County Council of Governments
- Orange County Transportation Authority
- Public Health Alliance of Southern California
- Rail Propulsion Systems LLC
- RailPAC
- Responsible Land Use

*Reflects comments received and logged as of 02/19/2020 and may not be complete. Provided for informational purposes at this time.
Commenters wishing to confirm receipt of any comment not shown may contact SCAG staff.

Agencies/Organizations (continued):

- Retro Bicycle corp.
- Right of Say
- Riverside County Transportation Commission
- Ron Milam Consulting
- Safe Routes Partnership
- San Bernardino Community College
- San Bernardino County Transportation Authority
- Save Hobo Aliso Task Force
- Save The Rivera
- Service Employees International Union - United Service Workers West
- Sierra Club Los Angeles Chapter
- Sierra Club Moreno Valley Group
- SoCalGas
- South Bay Cities Council of Governments
- South Coast Air Quality Management District
- Southern California Edison
- Southern California Leadership Council
- Southern California Regional Rail Authority (SCRRA)
- Transportation Now of San Gorgonio Pass
- Transportation Corridor Agencies
- UNITE HERE Local 11
- United State Environmental Protection Agency
- Ventura County Air Pollution Control District
- Ventura County Planning Division
- Ventura County Transportation Commission
- Walk Bike Long Beach
- Westwood South of Santa Monica Blvd Homeowner's Association

*Reflects comments received and logged as of 02/19/2020 and may not be complete. Provided for informational purposes at this time.
Commenters wishing to confirm receipt of any comment not shown may contact SCAG staff.

Contacts with No Affiliation:

- Anonymous Submitter
- Adam Aitoumeziane
- Alan
- Albert Perdon
- Alexander Yessayantz
- Andrew Yoon
- Anna Jaiswal
- Don Salveson
- Garreth Wybenga
- Henry Fung
- Holly Osborne
- Ivan Garcia
- Jordan Sisson
- Mark Westerdale
- Marven Norman
- Meghan Kwast
- Michael Garlan
- Michael Rotcher
- Mitchel Kahn
- Pete Freeman
- Pilar Reynaldo
- Richard Sandbrook
- Stephanie Johnson and Ghassan Roumani
- Steven Shepherd
- T.L. Brink
- Tamara Zavinski

*Reflects comments received and logged as of 02/19/2020 and may not be complete. Provided for informational purposes at this time.
Commenters wishing to confirm receipt of any comment not shown may contact SCAG staff.

Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017
March 5, 2020

To: Transportation Committee (TC)

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

From: Cory Wilkerson, Active Transportation Program Manager II, Active Transportation & Special Programs, (213) 236-1992, wilkerson@scag.ca.gov

Subject: 2021 Active Transportation Program Guidelines and Call for Projects

RECOMMENDED ACTION:
Information Only - No Action Required

STRATEGIC PLAN:
This item supports the following Strategic Plan Goal 7: Secure funding to support agency priorities to effectively and efficiently deliver work products.

EXECUTIVE SUMMARY:
The California Transportation Commission (CTC) has released the Draft 2021 Active Transportation Program (ATP) Guidelines for public comment. The CTC is expected to adopt the Guidelines on March 27, 2020 and host a call for projects from March 27, 2020 to June 15, 2020. The 2021 ATP will award approximately $440 million through fiscal years 2021/22 to 2024/25. The total funding available is consistent with the previous ATP cycle. Following the adoption of the statewide 2021 ATP Guidelines, SCAG staff will prepare the Draft 2021 Regional ATP Guidelines for consideration and approval by the Regional Council in April 2020.

BACKGROUND:
The ATP was created in 2013 by Senate Bill 99 (Chapter 359, Statutes 2013) and Assembly Bill 101 (Chapter 354, Statutes 2013), to encourage increased use of active modes of transportation, such as biking and walking, as well as to ensure compliance with the federal transportation authorization Moving Ahead for Progress in the 21st Century (MAP-21). The 2021 ATP is the fourth cycle of the program.

Funds awarded through the ATP program are selected by the State (60% of total funds) as well as regional MPOs (40% of total funds). The CTC prepares statewide funding guidelines for each cycle of ATP to provide direction on the programming of the State and regional MPO programs. Subsequently, SCAG prepares the regional ATP guidelines in collaboration with the county transportation commissions to guide the selection and programming of resources allocated to the

SCAG region. Through the first four funding cycles, the SCAG region has received funding for 337 projects totaling $719 million. The ATP awards funds for both infrastructure and non-infrastructure projects, with the majority of the funds awarded to infrastructure improvements.

To ensure ongoing competitiveness for ATP infrastructure funds and support the implementation 2020 Connect SoCal Regional Transportation Plan/Sustainable Communities Strategy, SCAG has prioritized five percent of the funding from each ATP cycle for non-infrastructure and planning projects to build local capacity and create a pipeline of competitive projects. In addition, SCAG has hosted a dedicated call for projects for ATP planning projects through the Sustainability Communities Program. This approach has resulted in $12.6 million in Regional ATP funding awards since 2014 to fill local planning gaps and has helped SCAG secure an additional $13.5 million through a combination of grants and local resources to fund local plans and programs; such as the Go Human Program. While many of these planning efforts are still underway, SCAG staff anticipates that by addressing planning gaps there will be a pipeline of highly competitive proposals from the SCAG region for the 2021 ATP and subsequent funding cycles.

2021 ATP

The CTC has released the Draft 2021 Active Transportation Program (ATP) Guidelines for public comment and will adopt the Guidelines on March 29, 2020. In conjunction, the CTC will commence the call for projects window spanning March 29, 2020 to June 15, 2020. As with the previous cycle, the 2021 ATP applications are specific to size and scope of the project:

- Infrastructure –Large
- Infrastructure –Medium
- Infrastructure –Small
- Non-infrastructure
- Plans

The 2021 ATP will award approximately $440 million through fiscal years 2021/22 to 2024/25. As in past cycles, the 2021 ATP will award 50% ($220 million) of funding to the highest scoring projects statewide. 10% of funding will be awarded to Small Urban and Rural Areas (no SCAG communities qualify under this component). 40% ($175 million) of the remaining funding will be programmed through MPOs. The SCAG region receives approximately $93 million of the MPO funding and will develop the SCAG regional program in collaboration with the six county transportation commissions.

In order to develop SCAG's Regional Program, SCAG develops the ATP Regional Guidelines in partnership with the six county transportation commission. The draft Regional Guidelines will be presented to Transportation Commission and submitted for approval to Regional Council and the CTC in April 2020.

SCAG Staff will host a 2021 ATP applicant's workshop in April 2020 and continue to work with county transportation staff and local staff to provide technical guidance on projects and applications. For more information on the 2020 ATP, visit https://catc.ca.gov/programs/active-transportation-program. If you have any questions, please contact SCAG staff, Cory Wilkerson, wilkerson@scag.ca.gov, 213-236-1992.

FISCAL IMPACT:
Funding is included in SCAG's FY 2019-20 Overall Work Program (OWP) Budget. Staff's work budget for the current fiscal year is included in the FY 2019-20 OWP (50-0169.06: Active Transportation Program).

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Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700, Los Angeles, California 90017
March 5, 2020

To: Executive/Administration Committee (EAC)
Transportation Committee (TC)
Regional Council (RC)

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

From: Annie Nam, Manager of Goods Movement, Planning Division, 213-236-1827, Nam@scag.ca.gov

Subject: Road User Charges (RUCs) – Lessons Learned

RECOMMENDED ACTION:
For Information Only – No Action Required

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 adopted RTP/SCS in 2012 and 2016, as well as the current draft 2020 RTP/SCS "Connect SoCal," call for a more sustainable funding future with emphasis on transitioning our fuel tax-based system to a more direct, user fee-based approach. Such a change requires additional investigation by local leaders as well as legislative action by state and federal leaders over the next decade. A critical aspect of SCAG's transportation finance work program includes engaging elected and appointed officials in sharing best practices. Accordingly, SCAG collaborated with government agencies in New Zealand and Australia and other stakeholders, in a study tour focused on sharing information about the use of RUCs. The primary objective was for the SCAG delegation to observe and discuss with officials from New Zealand and Australia, their respective nations' experience with RUCs and extract from that experience, practical lessons for the SCAG region. A report is provided, highlighting the scope of the study tour in January of 2020, background, key system elements, and observations. To provide additional context, an overview of California's Road Charge Pilot is provided as well.

BACKGROUND:
With public agencies facing significant funding gaps to build, maintain, and operate transportation infrastructure, states and regions across the country are exploring the concept of road user charges (RUC) – also called vehicle miles traveled fees or mileage-based user fees. In addition to addressing funding gaps, user fees can be structured and implemented to advance environmental, economic, equity, and congestion reduction goals. The adopted RTP/SCS in 2012 and 2016, as well as the

current draft 2020 RTP/SCS "Connect SoCal," call for a more sustainable funding future with emphasis on transitioning our fuel tax-based system to a more direct, user fee-based approach. Such a change requires additional investigation by local leaders as well as legislative action by state and federal leaders over the next decade.

The SCAG Regional Council, in adopting the 2012 and 2016 RTP/SCS, essentially issued a challenge to our state and federal partners to take a leadership role in advancing such innovative transportation solutions. Following the passage of Senate Bill 1077, California completed the largest road charge research effort to date, piloting more than 5,000 vehicles over a nine-month duration. At the federal level, the 2015 Fixing America's Surface Transportation (FAST) Act included the Surface Transportation System Funding Alternatives (STSFA) Program, providing grants to support states as they conduct demonstrations of user-based alternative revenue mechanisms.

A critical aspect of SCAG's transportation finance work program includes engaging elected and appointed officials in sharing best practices. Accordingly, SCAG collaborated with government agencies in New Zealand and Australia, in a study tour focused on sharing information about the use of RUCs to fund system development and operational performance, issues associated with RUC design and implementation, practical lessons learned, and opportunities associated with the evolution of technology and public policy. The primary objective of the study was for the SCAG delegation to observe and discuss with officials from New Zealand and Australia, their respective nations' experience with RUCs and extract from that experience, lessons that may be informative to the region. The SCAG delegation also learned about congestion pricing initiatives, including recent efforts in Auckland, New Zealand and studies in Melbourne, Australia. Congestion pricing generally involves tailoring prices to manage congestion (e.g., increases or decreases in vehicle charges based on congestion levels). In contrast, RUCs are typically seen as a revenue mechanism (to replace existing fuel taxes) but could also incorporate a congestion pricing component to achieve policy objectives.

A report is attached, describing the scope of the study tour, background, key system elements, and observations. To provide additional context, an overview of California's Road Charge Pilot is provided as well.

FISCAL IMPACT:
Funding was allocated from SCAG's FY19-20 Overall Work Program and General Fund Budget.

ATTACHMENT(S):
1. PowerPoint Presentation - RUC Report
2. RUC Report March 5, 2020

Road User Charges

Overview of California Road Charge Pilot & Lessons Learned from New Zealand and Australia

Norma Ortega, Principal, Ortega Consulting (Retired CFO, Caltrans)
Annie Nam, Manager of Goods Movement & Transportation Finance
March 5, 2020

www.scag.ca.gov

SCAG
INNOVATING FOR A BETTER TOMORROW

Source: Caltrans

Overview

ROAD USER CHARGES

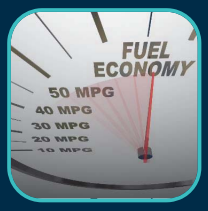
Why Explore Road Charge?

Aging Infrastructure

Shrinking Funding

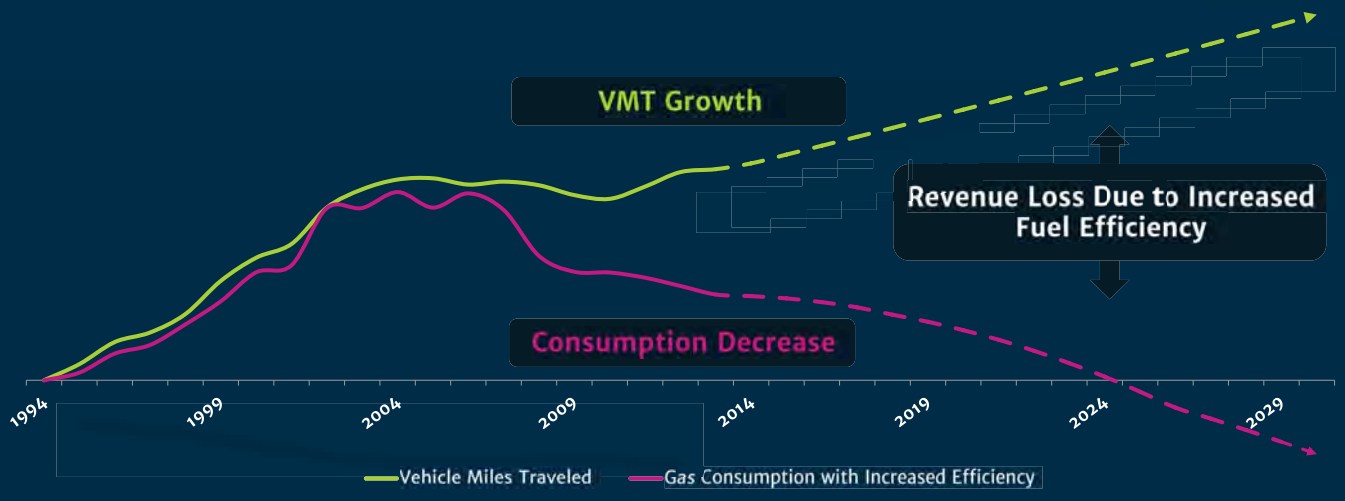
Increased Requirements

Fuel Efficiency



Source: Caltrans

Fuel Efficiency Contributes to Revenue Loss



In this conceptual chart, Vehicle Miles Travelled and Fuel Consumption have been indexed to the same starting point in 1994 to enable comparison of the relative change of the two metrics over time

Source: Caltrans

Road Charging is...

- A policy whereby motorists pay for use based on the distance they travel on the roadway network.
- A "User Pays" principle – the more you drive, the more you pay (by mileage).
- Similar to other utilities such as electricity, water, and telephone.

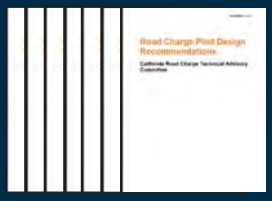
Source: Caltrans

California Road Charge Pilot Program

- Senate Bill 1077 (2014)
- Directed the California Transportation Commission (CTC) to establish a Technical Advisory Committee (TAC)
- TAC provided report recommendations to the California State Transportation Agency (CalSTA)
- Requires CalSTA to implement a pilot program by July 2016
- Requires a report of findings and recommendations by July 2017

Source: Caltrans

Public Input Drives TAC Process



- Extensive Public Outreach Efforts
- TAC Pilot Design Recommendations
  - 5,000 participants statewide
  - Diversity in vehicle types
  - Commercial and State account managers
  - Multiple mileage reporting methods
  - Protect privacy
  - Ensure data security
  - Independent evaluation

Source: Caltrans

Key Concerns Raised by the Public

- Privacy and Data Security
- Urban vs. Rural Differential Impacts
- Income Equity Implications
- Fleet Parity
- Rate Setting

Source: Caltrans

Mileage Reporting Methods

Operational Concepts	Corresponding Technology
Concept 1: Time Permit	Time Permit Technology
Concept 2: Mileage Permit	Mileage Permit Technology
Concept 3: Odometer Charge (post-pay)	Odometer Technology
Concept 4: Automated Mileage Reporting with No Location Data	Usage-based Insurance Devices Smartphone In-Vehicle Telematics Other Location-based Devices
Concept 5: Automated Mileage Reporting with General Location	

Source: Caltrans

CALIFORNIA

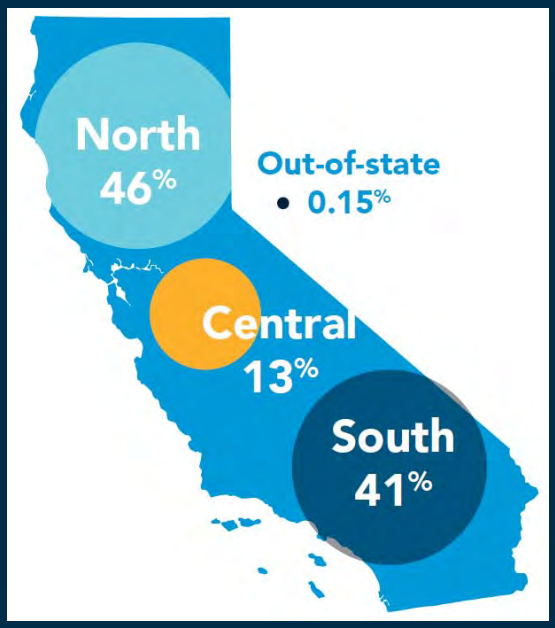
ROAD CHARGE

PILOT PROGRAM

2017 | Final Report
Senate Bill 1077

Source: Caltrans

By the Numbers



The Road Charge Pilot Program Achieved Many First

- Maintained more than 5,000 participating vehicles over a nine-month period
- Demonstrated six reporting and recording methods
- Offered manual, low tech, and high tech reporting methods
- For the first time included heavy commercial vehicles

Making it the largest road charge pilot in the nation to date!

Source: Caltrans

Pilot Observations – Participation & Perception

TAC Participant Targets

		North	Central	South	Trucks
Commercial Vehicles (Businesses)		100	50	175	50
Private Vehicles (Individuals & Households)					Other
Urban & Suburban	$	475	175	1050	
	$$	475	175	1050	
Rural & Agriculture	$	200	200	150	125
	$$	200	200	150	

85% overall pilot satisfaction, which is further supported by the low rate of 4% attrition

- Certain demographic targets and sub-targets set by the TAC were unattainable
- 85% were satisfied with the overall pilot
- 78% were satisfied with the security of their data
- 73% agree that a road charge is more fair than a gas tax
- 90% say they would participate in another road charge demonstration

Source: Caltrans

Pilot Observations – Third Party Vendors

74% satisfied with account manager chosen for the pilot

- Successful in studying the viability of using third-party vendors (Account Managers)
- Demonstrated the ability to offer value-added features as an enhancement to the user experience
- Account managers provided flexibility to pilot participants
- No direct relationship with Account Managers
  - Communication Issues
  - Unclear Expectations

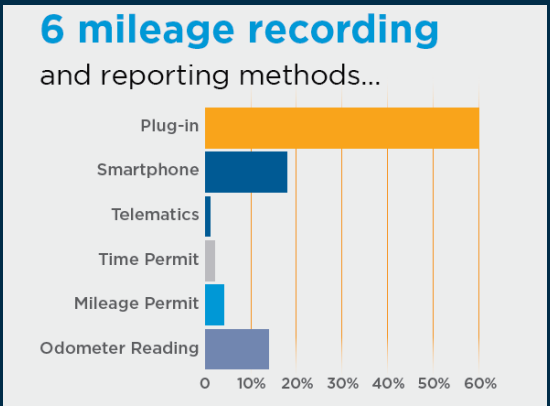
Source: Caltrans

Pilot Observations – Privacy & Data Security

- Privacy and data security provisions were implemented, ensuring pilot participant information was secure
- No breaches or complications
- Privacy and data security were not of significant concern for the majority of focus group participants
- 78% participant satisfaction rating in regards to the pilot privacy and data security

Source: Caltrans

Pilot Observations – Mileage Reporting Methods

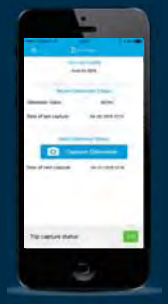


86% satisfied with mileage reporting method

- Manual and automated mileage reporting options offered
- At enrollment the clarity of communications and instructions regarding the mileage reporting methods caused a level of concern

Source: Caltrans

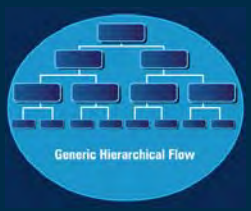
Pilot Observations – Technology



- Range of mileage recording and reporting technologies offered
- 62% of the participants with a technology based mileage recording and reporting device, chose a GPS enabled device
- Plug-in device reliable, but could be obsolete as vehicle technology evolves
- Smartphone applications and In-Vehicle Telematics show promise, but need further development

Source: Caltrans

Next Steps



- Pay-at-the-Pump
- Revenue Collection
- In-Vehicle Telematics
- Technology Collaborative
- Organizational Considerations

Source: Caltrans

Purpose of Study Tour

- Explore the concept of road user charges (RUC) – also called vehicle miles traveled fees or mileage based user fees.
- Collaborate with government agencies in New Zealand, Australia, and other stakeholders, to share information about the use of RUC to fund system development and operational performance.
- SCAG calls for a more sustainable funding future with emphasis on transitioning our fuel tax-based system to a more direct, user fee-based approach:
  - 2012 and 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)
  - 2020 Draft Connect SoCal
- State level – SB 1077 – California completed the largest Road Charge research effort to date, piloting more than 5,000 vehicles over a nine-month duration.
- Federal level – 2015 Fixing America's Surface Transportation (FAST) Act included the Surface Transportation Systems Funding Alternatives (STSFA) Program - providing grants to conduct demonstrations of user-based alternative revenue mechanisms.

New Zealand's Road User Charge System (40+ Years)

All motorized users of NZ's roads contribute towards their upkeep

Most road users pay taxes when they buy fuel

Drivers of light diesel vehicles and heavy vehicles like trucks, pay through RUC.

- Heavy-duty vehicles: payment based on weight and distance traveled
- Light-duty vehicle (diesel) & all vehicles over 3.5 metric tonnes (any fuel source) must have a distance license

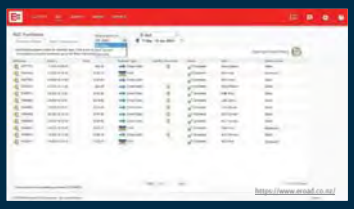
Exemptions

- Light electric vehicles: exempt until the end of 2021
- Heavy electric vehicles: exempt until electric vehicles in the heavy vehicle fleet reaches 2 percent.
- Vehicles unsuitable for regular road use – tractor, forklift, etc.
- Vehicles used for off-road for a certain purpose – agricultural, defense, medical, etc.

Image Source: Icons designed by Freepik, Smashicons, monkik, Kiranshastry, and Good Ware from Flaticon

Key Elements of the New Zealand RUC System

RUC license – pre-purchased – 1,000 km (621 miles), or multiples
RUC revenues – directly placed in National Land Transport Fund (NLTF)



LIGHT DUTY VEHICLES

Vehicles must display their RUC paper license on the inside of the windshield.

Manual, paper-based system that relies on self-reporting.

HEAVY DUTY VEHICLES

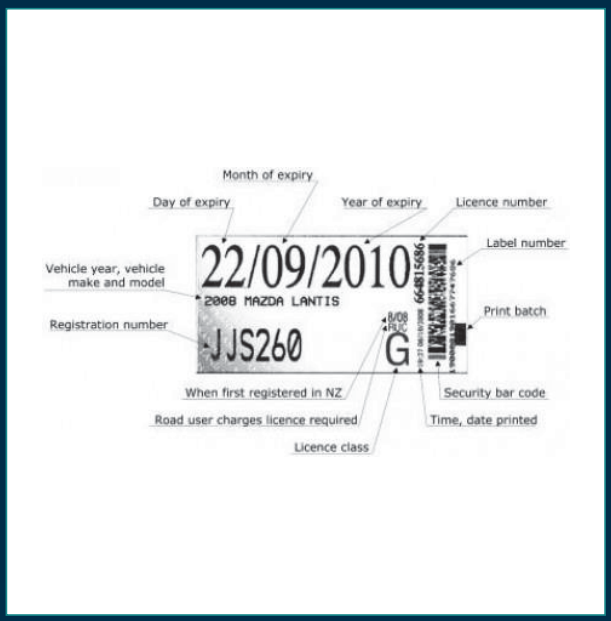
Predominantly a paper-based system, in 2010, electronic distance recording systems (eRUC) were piloted for more efficient compliance and collection.

Starting in 2012, eRUC systems were permitted. Roughly half of heavy-duty RUC revenue is now collected via eRUC.

These systems use GPS and mobile data communications to measure distance and public road usage.

Four Electronic System Providers operate the eRUC system as a contract agent for the NZTA. They handle the RUC permitting, administration, and collection of RUC fund.

Key Elements of the New Zealand RUC System



Changes to original RUC legislation

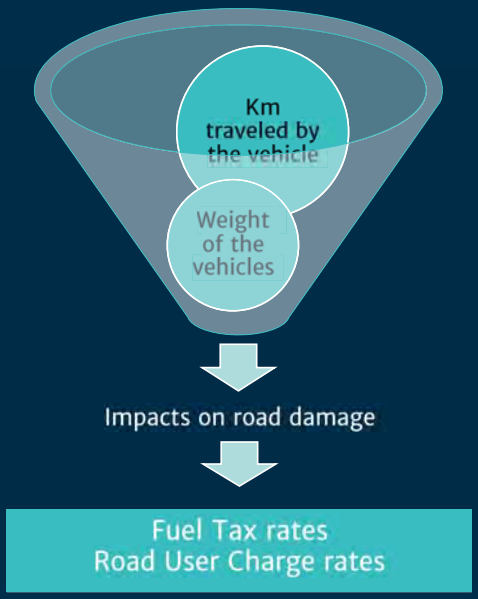
- Lower compliance cost for users and reduce the administrative costs and burden for government
- All revenue goes to NLTF
- Weight bands are introduced
- Exemptions are simplified

RUC Compliance and Evasion Enforcement

- High degree of personal trust built into the system
  - Regular vehicle inspection– every 6 or 12 months based on age of the vehicle
  - Heavy vehicles inspection– every 3, 6, or 12 months based on vehicle type and usage
- Police checks – traffic stops, weigh-in stations
- Audits

Image Source: https://www.transport.govt.nz

New Zealand's Cost Allocation Model (CAM)



- The RUC system is considered a levy, rather than a tax or charge. Changes to the RUC rate is not a decision by Parliament, but a policy decision of the Executive.
- NZ calculates RUC rates using the CAM.
- The CAM generates RUC rates needed to cover road damage costs—based on weight and distance.
- The calculation is based on the average estimated per-kilometer cost share for a vehicle type, rather than tied to specific routes.
- This system is also used to calculate fuel tax rates for gasoline powered vehicles, so that they pay similar amounts to the RUC rates for light-duty vehicles.

Australia's Road Usage Studies

Heavy Vehicle Road Reform: Broader effort to create stronger links between road usage, charges and services for heavy vehicle road users. Collaborative partnership among government agencies to test direct road user charging options for heavy vehicles, including:

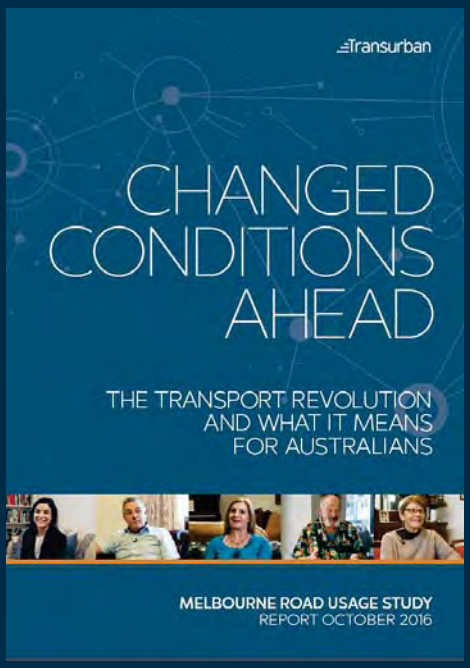
- setting up a dedicated road fund establishing independent price setting for RUC rates
- setting minimum service standards for road managers to meet
- developing a forward-looking cost base to predict future spending and set rates accordingly

Small Scale On-Road Trial - 11 operators and 140 heavy vehicles – testing whether telematics devices already installed in heavy vehicles can measure mass and distance effectively. The six month study uses mock invoices generated by on-board technology that measures the distance traveled by heavy vehicles.

Large Scale On-Road Trial - Expected to begin in mid-late 2020 with 100 operators and 1,000 vehicles. The various approaches include:

- mass-distance charge (applied nationally)
- mass-distance-location charge (variable by state)
- mass-distance-location charges (variable by road type and based on marginal cost, as well as variable by road type and based on service level)

Transurban – Melbourne Road Usage Study



- 1,635 participants.
- Usage-based model –Three usage-based charging options were tested: charge per kilometer; charge per trip; and a flat rate (capped kilometers).
- Congestion-based model – Two methods were tested: cordon (area); and time of day.
- Results:
  - Road-charging model based on user-pays could work in Australia
  - User-pays system could offer flexibility →
    - manage demand
    - modify behaviors that impact traffic congestion
    - optimize network usage
  - Need for a coordinated approach across the different modes of transportation to provide Australians the choice they need to initiate change

Key Observations

Administrative and Program Management

-NZ RUC system is more administratively burdensome than the fuel excise tax system.
-RUC is managed at a national level by a single entity so costs are lower than if numerous entities (states or regions) were also involved.

Cost Allocation Model

-The NZ RUC cost allocation methodology considers all future transport spending from the NLTF.
-Around 23-30% of spending from the fund is not road infrastructure.

Public Perceptions and Engagement

-Little to very limited knowledge of how roads are paid for: Any changes to transportation revenue policies need heavy public outreach.
-The requirement to pre-purchase miles could be a financial hardship to some drivers.

Compliance and Enforcement

Though non-compliance is difficult to measure in NZ's case, the annual (or more frequent) vehicle inspections appear to provide sufficient oversight.

Technology and eRUC

-Technology can simplify the RUC process.
-eRUC provides insights into where vehicles are going, while protecting individual privacy as it is explicitly stated in the RUC legislation.

Future Opportunities

The RUC system can be expanded and/or modified to address new policy goals or challenges such as cordon charging or congestion pricing

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Next Steps for SCAG

- Consider partnering with Caltrans to apply for a federal Surface Transportation Systems Funding Alternatives (STSFA) grant to pilot how a road charge might work at a regional level.
- Align with the recommendations outlined in the California Transportation Commissions' 2019 Annual Report to the California Legislature, to test the collection of revenue process and/or the impact of a road charge on disadvantaged communities.
- Assess how a road charge aligns with broader transportation system/demand management, air quality and climate goals, consistent with policies and programs identified in its draft 2020 RTP/SCS, "Connect SoCal.".

Thank You!

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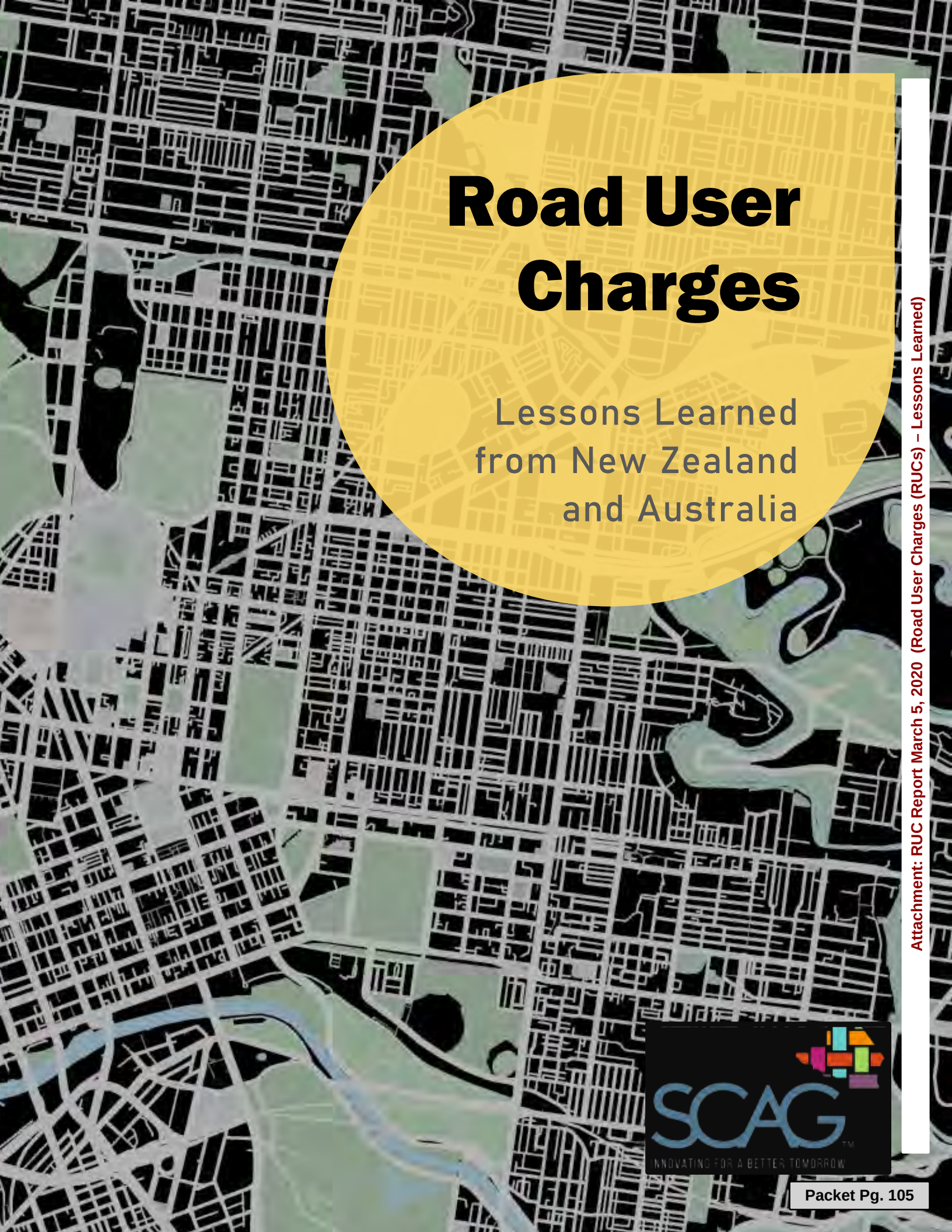

Road User Charges

Lessons Learned from New Zealand and Australia

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Road User Charges

Lessons Learned from New Zealand and Australia

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Purpose of Study Tour

With public agencies facing significant funding gaps to build, maintain and operate transportation infrastructure, states and regions across the country are exploring the concept of road user charges (RUC) – also called vehicle miles traveled fees or mileage based user fees. In addition to addressing funding gaps, RUC can be structured and implemented to advance environmental, economic, equity, and congestions reduction goals.

In its 2012 and 2016's adopted Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), as well as the current draft 2020 RTP/SCS "Connect SoCal", the Southern California Association of Governments (SCAG), calls for a more sustainable funding future with emphasis on transitioning our fuel tax-based system to a more direct, user fee-based approach. Such a change requires additional investigation by local leaders, as well as legislative action by state and federal leaders over the next decade.

Following the passage of SB 1077, California completed the largest Road Charge research effort to date, piloting more than 5,000 vehicles over a nine-month duration. At the federal level, the 2015 Fixing America's Surface Transportation (FAST) Act included the Surface Transportation Systems Funding Alternatives (STSFA) Program, providing grants to support states as they conduct demonstrations of user-based alternative revenue mechanisms.

Scope of Study

A critical aspect of SCAG's transportation finance work program includes engaging elected and appointed officials in sharing best practices. Accordingly, SCAG collaborated with the Ministry of Transport in New Zealand and the comparable agency in Australia and other stakeholders – to participate in a study tour focused on sharing information about the use of RUC to fund system development and operational performance, issues associated with RUC design and implementation, practical lessons learned, and opportunities associated with the evolution of technology and public policy. The primary objective of the study was for the SCAG delegation to observe and discuss with officials from New Zealand and Australia, their respective nations' experience with RUC and extract from that experience, lessons that may be informative to the region. Meetings were held not only with government policy officials but also with key stakeholders involved such as light and heavy vehicle user groups, service providers, enforcement and compliance officials, and analysts of telematics data for other purposes. In Australia, a briefing was provided from a toll operator that conducted the Melbourne Road Usage Study.

New Zealand's Road User Charge System

All (motorized) users of New Zealand's roads contribute towards their upkeep. Most road users pay taxes when they buy fuel. Others, such as drivers of light diesel vehicles and heavy vehicles like trucks, pay through road user charges (RUC). New Zealand has over 40 years of experience with RUC. It is recognized internationally as a successful test case in road funding.

New Zealand established the RUC system under the Road User Charges Act 1977 as a means for collecting revenue from ALL users of diesel vehicles. The original focus and intent of the RUC system was to recover road wear and damage costs caused by heavy-duty vehicles. Diesel fuel vehicles were singled out for the RUC system as heavy-duty vehicles were the largest users of diesel (payment based on weight and distance traveled). All light-duty vehicles that use diesel and all vehicles over 3.5 metric tonnes, (regardless of their fuel source) must have a distance license associated with its vehicle license.

Today, the RUC system applies to nearly 20 percent of the overall New Zealand vehicle fleet, with 150,000 heavy-duty vehicles and approximately 700,000 light diesel vehicles. Certain vehicles are currently exempted from the RUC system, primarily off-road vehicles and agricultural vehicles. The Government continues to promote and encourage the purchase of electric vehicles by keeping them RUC exempt at this time. The current strategy would sunset the RUC exemption for light electric vehicles at the end of 2021 and for heavy electric vehicles when the percentage of the electric vehicles in the heavy vehicle fleet reaches 2 percent.

Key Elements of the NZ RUC System

Changes to original RUC legislation

- In 2012, New Zealand adopted a new Road User Charges Act replacing the initial 1977 legislation aimed at simplifying and modernizing the RUC system. The new legislation introduced policies to lower the compliance cost for users and reduce the administrative cost and burden for the Government.
- All revenues from the RUC system are placed directly in the National Land Transport Fund (NLTF).
- Permanent RUC weight bands were established. Vehicles pay based on the maximum allowable weight of the vehicle assuming an average load factor. Previously, vehicles were charged based on declared weight. This standardization of the RUC rates simplifies the information required for the user and minimizes potential evasion in the self-reporting system.
- RUC exemptions were simplified. The list of vehicles exempt from paying RUC, such as off-road and agricultural vehicles, was increased, simplifying the system for users that used to pay little RUC.

Requirements of the RUC System

All RUC eligible vehicles are required to obtain and be able to correctly display RUC licenses at all times of road operation. Light duty vehicles must display their RUC paper license on the inside of the windshield. Drivers of heavy-duty vehicles may carry their paper license on their person, but it must be produced on demand by any enforcement officer or official. Distance traveled by light duty vehicles is recorded by their odometer, heavy-duty vehicles must be equipped with either a hubodometer or a certified eRUC device (see below). Heavy-duty trailers must be equipped with their own hubodometer or eRUC device to record distance traveled.

A RUC license is linked to a specific vehicle, through its vehicle license plate, and to the vehicle's primary owner. The owner is responsible for ensuring the vehicle has a valid RUC license, regardless of who drives the vehicle.

Licenses are distance based and pre-purchased in units of 1,000 km (621 miles), or multiples. Once the distance on the license is reached, a driver must have purchased a new license. There is no expiration date for RUC licenses for light-duty vehicles. Heavy duty vehicles have licenses valid only for the period of the current RUC rate, plus 30 days. Licenses are pre-purchased directly from the NZTA, or authorized RUC agents throughout the country such as Post Offices, the Automobile Association or other independent agents (such as gas stations).

RUC Rate Setting, Cost Allocation Model

Under New Zealand legal classification, the RUC system is a levy, rather than a tax or charge. This designation means that changes to the RUC rate is not a decision by Parliament, but a policy decision of the Executive. There is no legislatively mandated process that addresses when or how often RUC rates must be analyzed or changed. The most recent RUC rate increases were on October 1, 2018.

The NZTA calculates RUC rates using a Cost Allocation Model, or CAM. This model calculate rates to recover forecast revenue for the National Land Transport Fund, based on what rates would need to be to cover the road damage costs forecasted for the following year and projected new capital spending on the road network (and other outputs). The calculation is based on the average estimated per-kilometer cost share for a vehicle type, rather than tied to specific routes traveled by the individual user. The CAM calculates the impacts on road damage using both the weight and distance of the vehicles. This system is also used to calculate fuel tax rates for gasoline powered vehicles, so that they pay similar amounts to the RUC rates for light-duty vehicles (basing the fuel tax on average fuel consumption per km for the gasoline fleet).

Electronic RUC (eRUC) Systems

Between 1978 and 2012, the RUC system in New Zealand operated only as a manual, paper-based system. About 2010, electronic distance recording systems (eRUC) were piloted to evaluate if they could be a more efficient method of RUC compliance and

collection. This was followed by allowing use of the eRUC systems within the 2012 legislation. New Zealand currently has certified four companies to operate as eRUC providers: EROADS Ltd., Coretex Ltd., Navman Wireless Ltd, and RUC Monkey. These electronic system providers (ESPs) operate the eRUC systems as a contract agent for the NZTA. The ESP handles the RUC permitting, administration, and collection of RUC funds on behalf of the NZTA. Around 50% of heavy-duty RUC revenue is now collected via eRUC. These systems use GPS and mobile data communications technology, with connections to the vehicle systems to accurately measure distance, distinguish between distance travelled on public roads from private roads and private property. eRUC devices must also be able to report distance traveled by both tractor and trailer units independently.

RUC Compliance and Evasion Enforcement

Compliance and enforcement is handled by the NZTA during regular vehicle inspections. Personal vehicles are inspected annually if a car is less than 6 years old. Older vehicles are inspected every six months. Heavy duty vehicles are inspected every 3, 6 or 12 months depending on the vehicle type and usage. The New Zealand Police check for RUC compliance during routine traffic stops, and at weigh-in stations for the heavy-duty fleet. NZTA authorize audits of truck and bus companies for RUC compliance, with similar powers to the Inland Revenue to check operator records.

The RUC system in New Zealand has a high degree of personal trust built into the system, and since the RUC relies (to an extent) on the honesty of the vehicle owner, it has been difficult to accurately quantify the level of evasion. However, as long as vehicles comply with safety inspections, they are subject to RUC compliance inspections as well. There is a considerable focus on compliance stops for operators that do not use eRUC, because it is difficult to evade using such systems, compared to a manual system based on paper.

Australia's Road Usage Studies

The Australian Government, through its Department of Infrastructure, Transport, Cities and Regional Development has partnered with key stakeholders – state, territory, and local governments as well as industry and communities - to test potential direct road user charging options for heavy vehicles. The studies provide a platform that is intended to inform and shape future policy for collection of heavy vehicle charges. The studies are part of the broader policy known as Heavy Vehicle Road Reform, which is a about creating stronger links between road usage, charges and services for heavy vehicle road users. Heavy Vehicle Road Reform includes: setting up a dedicated road fund establishing independent price setting for RUC rates, setting minimum service standards for road managers to meet and developing a forward-looking cost base to predict future spending and set rates accordingly. At this time, the Government is not

considering light duty vehicles, however, information from these studies could inform future discussions.

Small Scale On-Road Trial
A small Scale On-Road Trial, with 11 operators and 140 heavy vehicles, is testing whether telematics devices already installed in heavy vehicles can measure mass and distance effectively. The six month study uses mock invoices generated by on-board technology that measures the distance traveled by heavy vehicles. This trial is intended to conclude later in 2020.

Large Scale On-Road Trial
Work is underway on a larger scale pilot that models and analyzes the impact of alternative charging approaches for heavy vehicles. This study is expected to begin in mid-late 2020 with 100 operators and 1,000 vehicles across every state and territory in Australia. The various approaches include a mass-distance charge (applied nationally), a mass-distance-location charge (variable by state) and mass-distance-location charges (variable by road type and based on marginal cost, as well as variable by road type and based on service level).

Melbourne Road Usage Study
Transurban, one of the world's largest toll-road operators, undertook the first Australian study into user-pays congestion charging in the city of Melbourne in 2015. It included 1,635 participants.

The study looked at both a Usage-base model and a Congestion-based model.

- Usage-based model – This model tested participants responses to a user-pays funding approach that is more transparent and sustainable as a funding source. Three usage-based charging options were tested: charge per kilometer; charge per trip; and a flat rate (capped kilometers).
- Congestion-based model – This model tested how motorists responded to demand-management pricing signals to reduced road use in highly congested areas or at peak travel times. Two methods were tested: cordon (area); and time of day.

The study delivered many insights into how Australians would respond to a new road-charging model. The study demonstrated that a road-charging model based on user-pays could work in Australia. It demonstrated the flexibility a user-pays system could offer in enabling a wide range of price signal options to help manage demand and modify behaviors that impact traffic congestion optimizing the network usage.

The Melbourne Study highlights the need for a coordinated approach across the different modes of transportation that provide Australians the choice they need to initiate change.

Key Observations

Administrative and Program Management

- NZ RUC system is more administratively burdensome than the fuel excise tax system (though higher administrative costs are also associated with tolling and other non-fuel excise tax revenue alternatives).
- RUC is managed at a national level by a single entity so costs are lower than if numerous entities (states or regions) were also involved in the management and collection processes. If an expansion of the system was implemented to address other policies such as congestion or cordon pricing, coordination with different jurisdictions could add complexity and cost.

Cost Allocation Model

- The NZ RUC cost allocation methodology considers all future transport spending from the National Land Transport Fund, including road maintenance and improvements, public transit subsidies, improvement to cycling and pedestrian infrastructure, road manager planning and administration costs and the costs of road policing. Around 23-30% of spending from the fund is not road infrastructure.

Public Perceptions and Engagement

- Similar to surveys done in the United States, both New Zealand and Australia, found that a very high percentage of drivers have little to very limited knowledge of how roads are paid for. Any changes to transportation revenue policies or systems need heavy public outreach.
- Engagement with users of the RUC system led to modifications of the original legislation in New Zealand.
- Australia's federal government approach to partner with key stakeholders – state, territory, and local governments as well as industry and communities – is critical in discussing and assessing changes to transportation policy and process.
- The requirement to pre-purchase miles could be a financial hardship to some drivers.

Compliance and Enforcement

- RUC compliance is an added responsibility to NZ Police's safety and other enforcement activities, so non-compliance is difficult to measure. However, the annual (or more frequent) vehicle inspections appear to provide sufficient oversight.

Technology and eRUC

- Technology can simplify the RUC process, can address other government requirements and provide value-added benefits.
- eRUC systems provide anonymized data that helps inform investment and maintenance decisions.
- eRUC provides insights into where vehicles are going, though RUC legislation explicitly protects individual privacy. Data collected can only be used for enforcement of RUC, and not for other purposes.

Future Opportunities

- The RUC system can be expanded and/or modified to address new policy goals or challenges such as cordon charging or congestion pricing.

Next Steps for SCAG

SCAG should consider partnering with the California Department of Transportation to apply for a federal STSFA grant to pilot how a road charge might work at a regional level. The demonstration could also align with the recommendations outlined in the California Transportation Commissions' 2019 Annual Report to the California Legislature, to test the collection of revenue process and/or the impact of a road charge on disadvantage communities.

SCAG should assess how a road charge aligns with broader transportation system/demand management, air quality and climate goals, consistent with policies and programs identified in its draft 2020 RTP/SCS, "Connect SoCal".

Appendix

Final Agenda

SCAG AU & NZ Study Tour, January 2020

Day 1 – Monday, January 20, Auckland

6 AM -	Arrive in Auckland
6:00 PM	Review Agenda for Study Tour, Address Questions

Day 2 – Tuesday, January 21, Auckland* - Eroad, Level 3, 260 Oteha Valley Road, Albany

10:30 AM – 10:45 AM Welcome to New Zealand	Marian Willberg, Ministry of Transport (MOT)
10:45 AM -11:00 AM Introduction of Delegates and Objectives of Trip	Bill Jahn and Kome Ajise, SCAG
11:00 AM – 12:00 PM Context for Road Usage Charge (RUC)	-Marian Willberg, MOT -Brent Lewers, Principal Advisor to MOT -Iain McGlinhy, MOT
12:00 PM – 12:30 PM	LUNCH BREAK
12:30 PM – 1:30 PM Cost Allocation Plan, application of investment intentions and past usage data to: - determine revenue share - set RUC rates by vehicle type and class	Jonathan Petterson, former Principal Advisor, Ministry of Transport

Day 2 – Tuesday, January 21, Auckland - Eroad, Level 3, 260 Oteha Valley Road, Albany

1:30 PM - 2:30 PM Drivers and consequences of digitizing RUC delivery Evolution and introduction of eRUC idea The conditions supporting adoption of eRUC in New Zealand Directions of change in the technology Emerging options for the future revenue stream	Steven Newman, Chief Executive Officer, EROAD
	BREAK
2:45 PM – 3:30 PM RUC Monitoring and Compliance Role and functions of the RUC collector	John Freeman, New Zealand Transport Agency
3:30 PM - 4:30 PM Roadside Enforcement Role and functions of the Commercial Vehicle Safety Team	Sr Sargent Mike Moloney, New Zealand Police

Day 3 – Wednesday, January 22, Auckland

9:00 AM – 9:30 AM eRUC Service Provider - RUC Monkey	Monoj Dolli, Founder & Chief Executive Officer, Picobyte and RUC Monkey
9:30 AM - 11:30 AM Overview of Congestion Pricing in Auckland	-David Hawkey, Transport and Infrastructure Manager, Auckland Council -Christine Perrins, former Group Manager Strategic Transport Planning, Auckland Transport
11:30 AM -12:30 PM	LUNCH BREAK

12:30 PM – 1:45 PM How RUC Works, key design elements Statutory framework including objective, scope, and obligations User requirements and how transactions are undertaken Regulations of RUC agents Data and privacy framework General enforcement model	 -Iain McGlinhy,MOT -Peter Carr, EROAD
1:45 PM – 2:30 PM Road User Perspectives of RUC Public's understanding of RUC Pros and Cons Desired directions of change	 -Barney Irvine, Principal Advisory, New Zealand Automobile Association -Nina Elter for Road Transport Forum
2:30 PM – 2:45 PM	BREAK
2:45 PM – 3:30 PM Operation and implications of RUC eRUC Service Provider certification and Code of Practice Monitoring and enforcement benefit Downstream Benefit	 -Peter Carr, ERoAD -Geoff Fowke, Head of Customer Service & New Zealand Operations for Cortex -Everett Shiina, Chief Revenue Officer, U & NZ, Cortex
3:30 PM – 4:15 PM The Power of eRUC Use of data in transportation planning, asset and network management Driver behavior insight and management	 Chris Vallyon, Greater Wellington Regional Council/BECA
4:15 PM – 4:45 PM Considerations and Recommendations Overall Lessons learnt and parallels to US	 Nina Elter, EROAD
4:45 PM – 5:00 PM Clarify Any Outstanding Questions	 Kome Ajise, SCAG

Day 4 – Thursday, January 23, Melbourne

4:45 AM	Depart to Airport for 7AM NZ Air#0721 flight
1:00 PM – 2:45 PM Australia's fuel and registration-based RUC system and prospects for reform	-Ramon Staheli, Head of Economics, National Transport Commission -Matt Barry, Economics Manager, NTC -Chris Egger, Senior Policy Analyst, NTC -Joel Martin, Senior Policy Analyst, NTC
3:00 PM -4:30 PM Overview of Melbourne Pilot Study and Lessons Learned	-Daniel Sheridan, Strategy Manager, Transurban -Stephen McDonald, General Manager Strategic Initiatives, Transurban

Day 5, Friday January 24, Canberra

7:30 AM	Depart to airport for 9:15 AM Qantas, #0814 flight
1:00 PM –4:00 PM Overview of the National Heavy Vehicle Charging Pilot Policy Discussions on Lite Vehicle Charging	-Gareth Prosser, Transport Economic Reform Section, Land Transport Market Reform Branch, -Blair Thompson, Pilot Director and Team, Department of Infrastructure, Transport, Cities and Regional Development -Fiona Perry, Assistant Director, NHVCP -Jason Yeoh, Assistant Director, Transport Economic Reform Section -Sandra I'Anson, Assistant Director, Strategic Policy Section -Alex Rae, Acting Assistant Director, Sustainable Transport, Land Transport Policy
6:00 PM – 7:10 PM	Return flight to Melbourne, Qantas #0833

Meeting Participants

The New Zealand Ministry of Transport (MoT) is the public service department of New Zealand charged with advising the government on transport policy. Through this advice it aims to improve the overall performance of the transport system, improve the performance of transport Crown entities and achieve better value for money for the government from its investment in the transport system. MOT is responsible for creating and maintaining the road user charge legislation.

The New Zealand Transport Agency (NZTA) is a New Zealand Crown Entity tasked with promoting safe and functional transport by land, including responsibility for driver and vehicle licensing, investigating rail accidents and administering the New Zealand state highway network. It was created on 1 August 2008 by the Land Transport Management Act 2008, merging Transit New Zealand with Land Transport New Zealand. The NZ Transport Agency is responsible for collecting (and enforcing) road usage charges and land transport legislation.

New Zealand Police works with the community to make New Zealanders be safe and feel safe. With over 12,000 staff, they provide policing services 24 hours a day, every day. They operate by land, sea and air, manage over 860,000 emergency calls a year and are always actively preventing crime and crashes. They are working towards specific goals and targets that highlight their intent to work collaboratively with communities, other government sectors and business partners to deliver 'Our Business' and achieve long-term change.

The Auckland Council organization is led by the chief executive, who works closely with the mayor. The chief executive appoints an executive leadership who direct organizational staff. The organization as a whole is responsible for operation and service delivery, advising the governing body and local boards and carrying out their decisions.

Founded in 1903, the New Zealand Automobile Association has grown from a pioneering automobile club to an organization that offers motoring advice, insurance, finance, maps and travel guides. AA is the leading advocate for NZ motorists and their interests.

Road Transport Forum New Zealand was set up as a national body in 1997 to responsibly promote and advance the interests of the road transport industry and its member associations.

EROAD is a fully integrated technology, tolling and services provider. An approved NZTA supplier, its advanced technology provides road charging, compliance and commercial services with the same platform.

Coretex develops and supplies world-class telematics and fleet management solutions that allow transport operators to optimize every aspect of their business. It is a third party supplier of RUC services to NZTA. It has offices in New York, Denver, Auckland, Melbourne, Sydney, Perth and Singapore, along with an extensive dealer network in the USA.

The Greater Wellington Council works with the community towards achieving a sustainable economy and environment. They are responsible for the water supply: collecting, treating and delivering water - environment management: resources, harbours, emergencies - transport: funding public transport, building public transport infrastructure, planning and monitoring transport network - land: controlling plant and animal pests, forest and water catchments and promoting sustainable land management - regional parks and forests - planning and delivering flood protection.

Australia National Transportation Commission leads national land and transport reform in support of Australian governments to improve safety, productivity, environmental outcomes and regulatory efficiency.

Transurban manages and develops networks of urban toll roads in Australia and the USA. As one of the world's largest toll-road operators, they design and build new roads to researching new vehicle and road safety technology. An Australian-owned company, Transurban builds and operates toll roads in Melbourne, Sydney and Brisbane, as well as in Greater Washington, United States and Montreal, Canada.

The Australia Department of Infrastructure, Transport, Cities and Regional Development is responsible for the design and implementation of the Australian Government's infrastructure, transport and regional development policies and programs.