

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

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Energy & Environment David Pollock, Moorpark

Transportation Cheryl Viegas-Walker, El Centro

REMOTE PARTICIPATION ONLY

TRANSPORTATION COMMITTEE

Thursday, January 7, 2021 9:30 a.m. – 11:30 a.m.

To Participate on Your Computer: https://scag.zoom.us/j/253270430

To Participate by Phone:

Call-in Number: 1-669-900-6833 Meeting ID: 253 270 430

Please see next page for detailed instructions on how to participate in the meeting.

PUBLIC ADVISORY

Given recent public health directives limiting public gatherings due to the threat of COVID-19 and in compliance with the Governor's recent Executive Order N-29-20, the meeting will be held telephonically and electronically.

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Peter Waggonner at (213) 630-1402 or via email at waggonner@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) 630-1402. 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.



Instructions for Public Comments

You may submit public comments in two (2) ways:

1. Submit written comments via email to: TCPublicComment@scag.ca.gov by 5pm on Wednesday, January 6, 2021.

All written comments received after 5pm on Wednesday, January 6, 2021 will be announced and included as part of the official record of the meeting.

2. If participating via Zoom or phone, during the Public Comment Period, use the "raise hand" function on your computer or *9 by phone and wait for SCAG staff to announce your name/phone number. SCAG staff will unmute your line when it is your turn to speak. Limit oral comments to 3 minutes, or as otherwise directed by the presiding officer.

If unable to connect by Zoom or phone and you wish to make a comment, you may submit written comments via email to: TCPublicComment@scag.ca.gov.

In accordance with SCAG's Regional Council Policy, Article VI, Section H and California Government Code Section 54957.9, if a SCAG meeting is "willfully interrupted" and the "orderly conduct of the meeting" becomes unfeasible, the presiding officer or the Chair of the legislative body may order the removal of the individuals who are disrupting the meeting.



Instructions for Participating in the Meeting

SCAG is providing multiple options to view or participate in the meeting:

To Participate and Provide Verbal Comments on Your Computer

- 1. Click the following link: https://scag.zoom.us/j/253270430
- 2. If Zoom is not already installed on your computer, click "Download & Run Zoom" on the launch page and press "Run" when prompted by your browser. If Zoom has previously been installed on your computer, please allow a few moments for the application to launch automatically.
- 3. Select "Join Audio via Computer."
- 4. The virtual conference room will open. If you receive a message reading, "Please wait for the host to start this meeting," simply remain in the room until the meeting begins.
- 5. During the Public Comment Period, use the "raise hand" function located in the participants' window and wait for SCAG staff to announce your name. SCAG staff will unmute your line when it is your turn to speak. Limit oral comments to 3 minutes, or as otherwise directed by the presiding officer.

To Listen and Provide Verbal Comments by Phone

- 1. Call **(669) 900-6833** to access the conference room. Given high call volumes recently experienced by Zoom, please continue dialing until you connect successfully.
- 2. Enter the **Meeting ID: 253 270 430**, followed by #.
- 3. Indicate that you are a participant by pressing # to continue.
- 4. You will hear audio of the meeting in progress. Remain on the line if the meeting has not yet started.
- 6. During the Public Comment Period, press *9 to add yourself to the queue and wait for SCAG staff to announce your name/phone number. SCAG staff will unmute your line when it is your turn to speak. Limit oral comments to 3 minutes, or as otherwise directed by the presiding officer.



TC - Transportation Committee Members - January 2021

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

2. Hon. Steven Hofbauer TC Vice Chair, Palmdale, RC District 43

3. Hon. Sean Ashton Downey, RC District 25

4. Hon. Phil BacerraSanta Ana, RC District 16

5. Hon. Kathryn Barger Los Angeles County

6. Hon. Ben BenoitAir District Representative

Hon. Russell Betts Desert Hot Springs, CVAG

8. Hon. Art Brown Buena Park, RC District 21

9. Hon. Joe Buscaino Los Angeles, RC District 62

10. Hon. Ross ChunAliso Viejo, OCCOG

11. Hon. Jonathan CurtisLa Canada Flintridge, RC District 36

12. Hon. Diane DixonNewport Beach, OCCOG

13. Hon. J John Dutrey Montclair, SBCTA

14. Hon. James Gazeley Lomita, RC District 39

15. Sup. Curt HagmanSan Bernardino County



16. Hon. Ray HamadaBellflower, RC District 24

17. Hon. Jan C. Harnik RCTC

18. Hon. Mike Judge VCTC

19. Hon. Trish KelleyMission Viejo, OCCOG

20. Hon. Paul KrekorianRC District 49/Public Transit Rep.

21. Hon. Linda Krupa Hemet, WRCOG

22. Hon. Richard Loa Palmdale, NCTC

23. Hon. Clint Lorimore Eastvale, RC District 4

24. Hon. Steven LyRosemead, RC District 32

25. Hon. Steve ManosLake Elsinore, RC District 63

26. Hon. Ray Marquez Chino Hills, RC District 10

27. Hon. Larry McCallonHighland, RC District 7

28. Hon. Marsha McLean Santa Clarita, NCTC

29. Hon. L. Dennis MichaelRancho Cucamonga, RC District 9

30. Hon. Fred MinagarLaguna Niguel, RC District 12

31. Hon. Carol MooreLaguna Woods, OCCOG

Be Open | Lead by Example | Make an Impact | Be Courageous



32. Hon. Ara Najarian Glendale, SFVCOG

33. Hon. Frank Navarro Colton, RC District 6

34. Hon. Hector PachecoSan Fernando, RC District 67

35. Hon. Ed Reece Claremont, SGVCOG

36. Hon. Crystal RuizSan Jacinto, WRCOG

37. Hon. Ali SalehBell, RC District 27

38. Hon. Tim Sandoval Pomona, RC District 38

39. Hon. Rey SantosBeaumont, RC District 3

40. Hon. Zak Schwank Temecula, RC District 5

41. Hon. Marty Simonoff Brea, RC District 22

42. Hon. Jeremy SmithCanyon Lake, President's Appointment (Member at Large)

43. Hon. Ward Smith Placentia, OCCOG

44. Hon. Jose Luis Solache Lynwood, RC District 26

45. O Maren Spiegel Riverside County

46. Hon. Cynthia Sternquist Temple City, SGVCOG

47. Hon. Jess TalamantesBurbank, President's Appointment (Member at Large)

OUR MISSION



48. Hon. Steve TyeDiamond Bar, RC District 37

49. Hon. Donald Wagner Orange County

50. Hon. Colleen WallaceBanning, President's Appointmnet (Member at Large)

51. Hon. Alan Wapner SBCTA

52. Hon. Alicia Weintraub Calabasas, LVMCOG

53. Mr. Paul MarquezCaltrans, District 7, Ex-Officio Non-Voting Member



Southern California Association of Governments
Remote Participation Only
Thursday, January 7, 2021
9:30 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 are encouraged to submit written comments by sending an email to: TCPublicComment@scag.ca.gov by 5pm on Wednesday, January 6, 2021. Such comments will be transmitted to members of the legislative body and posted on SCAG's website prior to the meeting. Written comments received after 5pm on Wednesday, January 6, 2021 will be announced and included as part of the official record of the meeting. Members of the public wishing to verbally address the Transportation Committee will be allowed up to 3 minutes to speak, with the presiding officer retaining discretion to adjust time limits as necessary to ensure efficient and orderly conduct of the meeting. The presiding officer has the discretion to reduce the time limit based upon the number of comments received and may limit the total time for all public comments to twenty (20) minutes.

REVIEW AND PRIORITIZE AGENDA ITEMS

CONSENT CALENDAR

Approval Item

1. Minutes of TC Meeting, November 5, 2020

Receive and File

- 2. California Air Resources Board (CARB) Acceptance of Connect SoCal and Recommendations
- California Transportation Commission Adoption of Senate Bill (SB) 1 Competitive Programs

ACTION/DISCUSSION ITEM

RECOMMENDED ACTION:

4. Regional Safety Targets 2021 (Courtney Aguirre, Program Manager)

(courtine) riguine, rrogram manager

Recommend that the Regional Council adopt the 2021 regional safety targets and the supporting Regional Safety Policy Resolution.



INFORMATION ITEMS

5. California High-Speed Rail Los Angeles to Anaheim Section *(Stephen Fox, Senior Regional Planner)*

20 Mins.

6. Update on Comments Received for Draft 2021 Federal Transportation Improvement Program (FTIP)

5 Mins.

(Naresh Amatya, Manager of Transportation and Programming)

CHAIR'S REPORT

(The Honorable Cheryl Viegas-Walker, Chair)

METROLINK REPORT

(The Honorable Art Brown, SCAG Representative)

STAFF REPORT

(David Salgado, SCAG Staff)

FUTURE AGENDA ITEMS

ANNOUNCEMENT/S

ADJOURNMENT



AGENDA ITEM 1

REPORT

Southern California Association of Governments Remote Participation Only January 7, 2021

MINUTES OF THE REGULAR MEETING TRANSPORTATION COMMITTEE (TC) THURSDAY, NOVEMBER 5, 2020

THE FOLLOWING MINUTES IS A SUMMARY OF ACTIONS TAKEN BY THE TRANSPORTATION COMMITTEE (TC). A VIDEO AND AUDIO RECORDING OF THE ACTUAL MEETING IS AVAILABLE AT: http://scag.iqm2.com/Citizens/

The Transportation Committee of the Southern California Association of Governments (SCAG) held its meeting telephonically and electronically given public health directives limiting public gatherings due to the threat of COVID-19 and in compliance with the Governor's recent Executive Order N-29-20. A quorum was present.

Members Present:

Hon.	Sean Ashton, Downey	District 25
Hon.	Phil Bacerra, Santa Ana	District 16
Hon.	Rusty Bailey, Riverside	District 68
Hon.	Ben Benoit, Wildomar	South Coast AQMD
Hon.	Will Berg, Port Hueneme	VCOG
Hon.	Russell Betts	CVAG
Hon.	Art Brown, Buena Park	District 21
Hon.	Ross Chun, Aliso Viejo	OCTA
Hon.	Diane Dixon, Newport Beach	OCCOG
Hon.	James Gazeley, Lomita	District 39
Hon.	Dean Grose, Los Alamitos	District 20
Hon.	Jack Hadjinian	Montebello
Hon.	Curt Hagman	San Bernardino County
Hon.	Ray Hamada, Bellflower	District 24
Hon.	Jan Harnik, Palm Desert	RCTC
Hon.	Steven Hofbauer, Palmdale (Vice Chair)	District 43
Hon.	Mike T. Judge, Simi Valley	VCTC
Hon.	Trish Kelley, Mission Viejo	OCCOG
Hon.	Linda Krupa, Hemet	WRCOG
Hon.	Richard Loa, Palmdale	NCTC
Hon.	Steven Ly, Rosemead	District 32
Hon.	Steve Manos, Lake Elsinore	District 63
Hon.	Ray Marquez, Chino Hills	District 10

OUR MISSIONTo foster innovative regional solutions that improve

OUR VISION

Southern California's Catalyst for a Brighter Future

OUR CORE VALUES

Be Open | Lead by Example | Make an Impact | Be Courageous





SBCTA Hon. Larry McCallon, Highland Hon. Marsha McLean, Santa Clarita District 67 Hon. L. Dennis Michael District 9 Hon. Fred Minagar, Laguna Niguel District 12 OCCOG Hon. Carol Moore, Laguna Woods **AVCJPA** Hon. Ara Najarian, Glendale Hon. Frank Navarro, Colton District 6 Hon. Charles Puckett, Tustin District 17 Hon. Ed Reece **SGVCOG** Hon. Crystal Ruiz, San Jacinto **WRCOG** Hon. Tim Sandoval, Pomona District 38 District 3 Hon. Rev Santos, Beaumont 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. Ward Smith, Placentia OCCOG Hon. Karen Spiegel **Riverside County** Hon. Cynthia Sternquist, Temple City SGVCOG **SFVCOG** Hon. Jess Talamantes Hon. Steve Tye District 37 Hon. Cheryl Viegas-Walker, El Centro (Chair) District 1 Hon. Don Wagner **Orange County** Hon. Colleen Wallace Banning SBCTA/SBCOG Hon. Alan Wapner, Ontario Hon. Alicia Weintraub, Calabasas **LVMCOG**

Members Not Present:

Mr. Paul Marquez, Caltrans District 7

Hon. Kathryn Barger Los Angeles County Hon. Joe Buscaino, Los Angeles District 62 Hon. Jonathan Curtis, La Cañada-Flintridge District 36 **SBCTA** Hon. John Dutrey, Montclair Hon. Emily Gabel-Luddy **AVCJPA** Hon. Paul Krekorian District 49 Hon. Clint Lorimore, Eastvale District 4 Hon. Hector Pacheco San Fernando Hon. Ali Saleh, Bell **GCCOG** Hon. Jose Luis Solache, Lynwood District 26

Ex-Officio Member



Hon. Brent Tercero, Pico Rivera

GCCOG

CALL TO ORDER & PLEDGE OF ALLEGIANCE

Chair Cheryl Viegas-Walker, District 1, called the meeting to order at 9:30 a.m. Hon. Ben Benoit, Air District Rep, led the Pledge of Allegiance. A quorum was present.

PUBLIC COMMENT

No members of the public requested to comment.

CONSENT CALENDAR

Approval Item

1. Minutes of the Meeting, October 1, 2020

A MOTION was made (Hofbauer) to approve Consent Calendar Item 1, Minutes of the Meeting, October 1, 2020. The motion was SECONDED (Marquez) and passed by the following votes:

AYES:

ASHTON, BACERRA, BAILEY, BENOIT, BERG, BETTS, BROWN, CHUN, DIXON, GAZELEY, GROSE, HADJINIAN, HAGMAN, HAMADA, HARNIK, HOFBAUER, JUDGE, KELLEY, KRUPA, LOA, MANOS, MARQUEZ, MCCALLON, MCLEAN, MICHAEL, MINAGAR, MOORE, NAJARIAN, PUCKETT, REECE, RUIZ, SANDOVAL, SANTOS, SCHWANK, SIMONOFF, SMALL, SMITH J., SMITH L., SPIEGEL, STERNQUIST, TALAMANTES, TYE, VIEGAS-WALKER, WAGNER, WALLACE, WAPNER, WEINTRAUB

(47)

NOES: None (0)

ABSTAIN: Navarro, Smith W. (2)

Receive and File

2. California High Speed Rail Los Angeles to Anaheim Section

Hon. Larry McCallon, Highland, stated the High-Speed Rail Section from Los Angeles to Anaheim calls for the location of an intermodal freight facility in Colton which would significantly increase the level of harmful emissions to Colton and surrounding communities. He asked for a review of this project in a lengthier committee discussion preferably with the agencies involved.

Kome Ajise, Executive Director, responded that there have been conversations with High-



Speed Rail with an effort to understand the project scope. He further noted it would be useful for a member of HSR to speak to the committee about their concerns.

A MOTION was made (McCallon) to approve Consent Calendar Item 2, California High-Speed Rail Los Angeles to Anaheim Section with a direction to staff to communicate to the appropriate representatives of High-Speed Rail and BNSF Railway the depth of concern expressed by committee members about the proposed intermodal facility in Colton. The motion was SECONDED (McLean) and passed by the following votes:

AYES: ASHTON, BACERRA, BAILEY, BENOIT, BERG, BETTS, BROWN, CHUN, DIXON, GAZELEY, GROSE, HADJINIAN, HAGMAN, HAMADA, HARNIK, HOFBAUER, JUDGE, KELLEY, KRUPA, LOA, LY, MANOS, MARQUEZ, MCCALLON, MCLEAN, MICHAEL, MINAGAR, MOORE, NAJARIAN, NAVARRO, PUCKETT, REECE, RUIZ, SANDOVAL, SANTOS, SCHWANK, SIMONOFF, SMALL, SMITH J., SMITH L., SMITH W., SPIEGEL, STERNQUIST, TYE, VIEGAS-WALKER, WAGNER, WALLACE, WAPNER, WEINTRAUB (49)

NOES: None (0) ABSTAIN: None (0)

ACTION/DISCUSSION ITEMS

3. Release of the Draft 2021 Federal Transportation Improvement Program (FTIP)

John Asuncion, SCAG staff, reported on the release of the Draft 2021 Federal Transportation Improvement Program (FTIP). Mr. Asuncion stated the FTIP is a federally mandated list of multimodal transportation investment priorities in the SCAG region over a six-year period. Federal regulations require it to be updated at least every four years, but SCAG updates every two years. He noted the FTIP is prepared in coordination with the County Transportation Commissions and reflects the region's overall strategy for providing mobility and improving safety. It contains approximately 2,000 regional projects representing an investment of \$35.2 billion. Mr. Asuncion reviewed the funding sources noting 56% originates locally, 28% from the state and 16% federal. He stated that, with the committee's approval, the 2021 FTIP will be released for a 30-day public comment period beginning November 6, 2020 and ending December 7, 2020.

A MOTION was made (Brown) to approve and recommend that the Regional Council authorize the release of the Draft 2021 FTIP for public review and comment, beginning November 6, 2020 and ending December 7, 2020. The motion was SECONDED (Wallace) and passed by the following votes:





AYES: ASHTON, BACERRA, BAILEY, BENOIT, BETTS, BROWN, CHUN, DIXON, GAZELEY,

GROSE, HADJINIAN, HAGMAN, HAMADA, HARNIK, HOFBAUER, JUDGE, KELLEY, KRUPA, LOA, LY, MANOS, MARQUEZ, MCCALLON, MCLEAN, MICHAEL, MINAGAR, MOORE, NAJARIAN, NAVARRO, PUCKETT, REECE, RUIZ, SANDOVAL, SANTOS, SCHWANK, SIMONOFF, SMALL, SMITH J., SMITH L., SMITH W., SPIEGEL, STERNQUIST, TALAMANTES, TYE, VIEGAS-WALKER, WAGNER, WALLACE,

WAPNER, WEINTRAUB (49)

NOES: None (0) ABSTAIN: None (0)

4. Last Mile Freight Program Draft Guidelines

Scott Strelecki, SCAG staff, reported on the Last Mile Freight Program (LMFP) Draft Guidelines. Mr. Strelecki stated SCAG will serve to implement the last mile component of the Mobile Source Air Pollution Reduction Committee's (MSRC) Goods Movement Program. He noted the first phase calls for projects focusing on the purchase and commercial deployment of zero-emission or near-zero emission (ZE/NZE) heavy and/or medium duty on road trucks and supporting infrastructure. A subsequent phase would broaden implementation strategies and explore further uses particularly in e-commerce. He noted SCAG has been working with a MSRC subcommittee to develop the plan and reviewed the desired investment impacts and targets. He noted \$10 million is available to be awarded with a focus on efforts in the South Coast Air Basin. Mr. Strelecki reviewed eligibility guidelines noting the focus on last mile delivery vehicles supporting e-commerce industries including business to business commerce.

He reviewed the selection criteria noting the goal is to seek innovative technologies that advance emission reductions for NOx, PM2.5 and greenhouse gases and provide a competitive advantage over conventional operations. Mr. Strelecki reviewed the application schedule stating there will be workshops and assistance available for those submitting applications.

A MOTION was made (McCallon) to recommend the Regional Council approve the LMFP Draft Guidelines and authorize staff to release the LMFP Call-for-Projects, pending the execution of an agreement with the South Coast Air Quality Management District. The motion was SECONDED (Ashton) and passed by the following votes:

AYES: ASHTON, BENOIT, BETTS, BROWN, CHUN, DIXON, GAZELEY, GROSE, HADJINIAN, HAGMAN, HAMADA, HARNIK, HOFBAUER, JUDGE, KELLEY, KRUPA, LOA, LY, MANOS, MARQUEZ, MCCALLON, MICHAEL, MINAGAR, MOORE, NAJARIAN,

NAVARRO, PUCKETT, REECE, RUIZ, SANDOVAL, SANTOS, SCHWANK, SIMONOFF,



SMALL, SMITH L., SMITH W., STERNQUIST, TALAMANTES, TYE, VIEGAS-WALKER, WAGNER, WALLACE, WAPNER, WEINTRAUB (44)

NOES: None (0) ABSTAIN: None (0)

5. SunLine Transit Advancing Alternative Fuel Buses and Infrastructure

Lauren Skiver, CEO/General Manager, SunLine Transit Agency, reported on their alternative fuel buses and infrastructure. Ms. Skiver stated SunLine is a small transit agency employing 370 employees operating a fleet of 80 buses and 39 paratransit vehicles providing 4.5 million passenger trips annually. The fleet includes 60 CNG, 17 Hydrogen Electric Fuel Cell, 4 Electric Battery BYD, and 39 CNG Paratransit Vehicles. She noted the agency is undergoing a redesign for post-COVID, making their service network faster with fewer transfers and adding a line to Cal State San Bernardino in addition to providing rideshare service using taxis. Ms. Skiver introduced their zero emissions efforts, noting it began with policy development in 1993. She noted they were the first transit agency to produce hydrogen on their facility, and they are the largest producer of hydrogen for transit in North America. She reviewed their fleet of vehicles noting mixed propulsion is likely a future scenario for many transit operators. She stated that hydrogen vehicles are electric vehicles, and in addition to passenger vehicles, their service vehicles will be transitioned to electric.

Ms. Skiver reported on their hydrogen fueling station, stating the facility produces 900 kilograms of hydrogen per day and is operated with a combination of grid and solar power with a goal to become 100% renewable using solar. Ms. Skiver reviewed the proposed solar to hydrogen effort which will include a solar farm on the facility to power hydrogen production. She reported on their West Coast Center for Zero Emission Technology which serves as an on-site trade school to train workers in zero emission technology.

Hon. Collen Wallace, Banning, asked if the agency will move away from their CNG technology. Ms. Skiver responded that CNG vehicles will not achieve rules established by California Air Resources Board and at some point, they will be discontinued.

Hon. Cynthia Sternquist, Temple City, stated she serves on Foothill Transit's Board which recently visited SunLine Transit and will be moving forward with the purchase of 20 fuel cell busses.

6. Overview of 2022 South Coast Air Quality Management Plan and Near-term Air Quality Planning Challenges

Dr. Philip Fine, Deputy Executive Officer, South Coast AQMD, reported on air quality planning efforts and challenges. Dr. Fine stated AQMD includes the South Coast Air Basin as



well as the Coachella Valley. He stated Environmental Protection Agency standards for the South Coast Basin calls for attainment of 35 micrograms per cubic meter in a 24-hour period and 12 pcm annually. Dr. Fine stated that emissions in the South Coast Basin have decreased since 1997; however, it remains short of attainment standard. Next, the Coachella Valley's ozone levels were reviewed, and he noted the area remains in nonattainment although long term results show a downward decline. Additionally, ozone levels in the Coachella Valley are primarily due to the direct transport of ozone from the South Coast Air Basin. and attainment in Coachella Valley depends on reducing emissions in the South Coast Basin.

Dr. Fine reviewed the 2022 Air Quality Management Plan and noted partner agencies share a role in achieving the goals. He stated the main elements of the plan are due August 2022, and he reviewed the control strategy including a transition to zero-emission technology or near zero-emission, engaging both regulatory measures and incentives. Further, working groups are being convened to examine mobile source on and off-road activities as well as impacts from residential and commercial building. Next, he reviewed the incentive funding and its role in supporting programs benefitting emission goals.

Hon. Cheryl Viegas-Walker, District 1, asked if the plan considers the impacts of the shrinking of the Salton Sea. Dr. Fine responded that there is awareness of the air quality impacts and they are working with local entities in Imperial County to address this situation.

Hon. Russell Betts, Desert Hot Springs, asked about ozone contributions from Asia and overseas sources. Dr. Fine responded that background ozone is measured regularly but is not a factor that drives the condition of nonattainment.

METROLINK REPORT

Hon. Art Brown, Buena Park, reported schedule changes will take place November 16, 2020. Schedules will be modified, and some lines will run less frequently in response to a decline in ridership due to the pandemic.

ADJOURNMENT

Hon. Cheryl Viegas-Walker, District 1, adjourned the meeting at 11:42 a.m.

[MINUTES ARE UNOFFICIAL UNTIL APPROVED BY THE TRANSPORTATION COMMITTEE]

	2020- 21															
MEMBERS	CITY	Representing	JUN (GA)	JUL	AUG	SEP	ОСТ	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	Total Mtgs Attended To Date
Ashton, Sean	Downey	District 25		1		1	1	1								4
Bacerra, Phil	Santa Ana	District 16		1		1	1	1								4
Bailey, Rusty	Riverside	WRCOG		1		1	1	1								4
Barger, Kathryn	Los Angeles County	Los Angeles County														
Benoit, Ben	Wildomar	South Coast AQMD		1			1	1								3
Berg, Will	Port Hueneme	vcog		1		1	1	1								4
Betts, Russell	Desert Hot Springs	CVAG		1		1		1								3
Brown, Art	Buena Park	District 21		1		1	1	1								4
Buscaino, Joe	Los Angeles	District 62				1										1
Chun, Ross	Aliso Viejo	ОСТА		1		1	1	1								4
Curtis, Jonathan	La Cañada Flintridge	District 36					1									1
Dixon, Diane	Newport Beach	occog		1		1	1	1								4
Dutrey, J. John	Montclair	SBCTA		1		1	1									3
Gabel-Luddy, Emily	Burbank	AVCJPA		1		1	1									3
Gazeley, James	Lomita	District 39		1		1	1	1								4
Grose, Dean	Los Alamitos	Dist 20		1		1	1	1								4
Hadjinian, Jack	Montebello	sgvcog		1		1	1	1								4
Hagman, Curt	San Bernardino Cnty	San Bernardino Cnty		1		1	1	1								4
Hamada, Ray	Bellflower	Bellflower		1		1	1	1								4
Harnik, Jan	Palm Desert	RCTC		1		1	1	1								4
Hofbauer, Steven	Palmdale	District 43		1		1	1	1								4
Judge, Mike	Simi Valley	vстс				1	1	1								3
Kelley, Trish	Mission Viejo	occog		1		1	1	1								4

									r	
Krekorian, Paul	Public Transit Rep	District 49								
Krupa, Linda	Hemet	WRCOG	1	1	1	1				4
Loa, Richard	Palmdale	NCTC	1	1	1	1				4
Lorimore, Clint	Eastvale	District 4	1	1	1					3
Ly, Steven	Rosemead	District 32	1	1	1	1				4
Manos, Steve	Lake Elsinore	District 63	1	1	1	1				4
Marquez, Paul	Caltrans District 7	Ex-Officio	1		1					2
Marquez, Ray	Chino Hills	District 10	1	1	1	1				4
McCallon, Larry	Highland	SBCTA	1	1	1	1				4
McLean, Marsha	No. L.A. County	District 67	1	1	1	1				4
Michael, L. Dennis	Rancho Cucamonga	District 9	1	1		1				3
Minagar, Fred	Laguna Niguel	District 12			1	1				2
Moore, Carol	Laguna Woods	occog	1	1	1	1				4
Najarian, Ara	Glendale	AVCJPA	1	1	1	1				4
Navarro, Frank	Colton	District 6		1		1				2
Pacheco, Hector	San Fernando	District	1	1	1					3
Puckett, Charles	Tustin	District 17	1			1				2
Reece, Ed	Claremont	sgvcog	1	1	1	1				4
Ruiz, Crystal	San Jacinto	WRCOG	1	1	1	1				4
Saleh, Ali	City of Bell	GCCOG	1		1					2
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	1	1				4
Simonoff, Marty	Brea	District 22	1		1	1				3
Small, Thomas	Culver City	Culver City	1	1	1	1				4
Smith, Jeremy	Canyon Lake	Canyon Lake	1	1	1	1				4
Smith, Larry	Calimesa	Calimesa	1	1	1	1				4
Smith, Ward	Placentia	occog	1	1		1				3
Solache, Jose Luis	Lynwood	District 26			1					1
Spiegel, Karen	Riverside County	Riverside County	1	1	1	1				4
Sternquist, Cynthia	Temple City	sgvcog		1	1	1				3
Talamantes, Jess	Burbank	AVCJPA		1	1	1				3
Tercero, Brent	Pico Rivera	GCCOG		1	1					2

Tye, Steve	Diamond Bar	District 37	1	1	1	1				4
Viegas-Walker, Cheryl	El Centro	District 1	1	1	1	1				4
Wagner, Don	Orange County	Orange County	1	1	1	1				4
Wallace, Colleen	Banning	Banning		1	1	1				3
Wapner, Alan	Ontario	SBCTA	1	1	1	1				4
Weintraub, Alicia	Calabasas	LVMCOG	1	1	1	1				4



AGENDA ITEM 2

REPORT

Southern California Association of Governments Remote Participation Only

January 7, 2021

To: Executive/Administration Committee (EAC)

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

Community, Economic & Human Development Committee (CEHD)

Energy & Environment Committee (EEC)

Transportation Committee (TC)

Regional Council (RC)

From: Sarah Dominguez, Senior Regional Planner,

(213) 236-1918, dominguezs@scag.ca.gov

Subject: California Air Resources Board (CARB) Acceptance of Connect

SoCal and Recommendations

RECOMMENDED ACTION FOR CEHD, EEC AND TC:

Receive and File

RECOMMENDED ACTION FOR EAC AND RC:

Information Only - No Action Required

STRATEGIC PLAN:

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

EXECUTIVE SUMMARY:

The California Air Resources Board (CARB) released Executive Order G-20-239 which accepts SCAG's determination that the 2020 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS, Connect SoCal) meets the applicable 2035 greenhouse gas emission reduction target. The acceptance was issued on October 30, 2020, enabling projects from the SCAG region to be eligible for the Senate Bill 1 (SB 1) grants approved at the California Transportation Commission meeting in December. The CARB determination included several recommendations which staff will work to address in the coming months through collaboration with local and state partners.

BACKGROUND:

In compliance with the Sustainable Communities and Climate Protection Act of 2008 (SB 375) SCAG completes a Sustainable Communities Strategy as part of its Regional Transportation Plan (RTP/SCS) every four years. Once adopted, SCAG submits the SCS to CARB to make the determination "that



the strategy submitted would, if implemented, achieve the greenhouse gas emission reduction targets established by the state board."1

SCAG's 2020 RTP/SCS, Connect SoCal, faced a new, higher target for 2035 of 19 percent per capita greenhouse gas (GHG) emissions reduction, relative to 2005 levels, as well as needed to comply with updated SCS Evaluation Guidelines from CARB. These new guidelines broadened the scope of CARB's review to include more detailed assessment of the SCS strategies such as the policy commitments relating to implementation. The review also included reporting components to evaluate equity, incremental progress (compared to the last SCS) and tracking implementation (related to CARB's Senate Bill 150 responsibility).

SCAG staff submitted the SCS Submittal Package to CARB on August 28, 2020 and worked with CARB staff to promptly answer subsequent clarification questions and requests over the following weeks. CARB's extensive review of SCAG's SCS submittal data, modeling and supportive documentation enabled them to issue Executive Order G-20-239 to accept SCAG's determination that the SCS, if implemented, will reduce per capita GHG emissions by 19 percent in 2035, compared with 2005 levels. CARB's evaluation of the 2020 SCS concludes that the plan includes sufficiently supportive indicator trends; near-term policy support actions; active transportation, transit, and other SCS-supportive project investments; and adjustments in response to observed implementation challenges. The acceptance of the SCS by CARB came just in time for projects from the SCAG region to be eligible for SB 1 grants from the Trade Corridor Enhancement Program and Solutions for Congested Corridors programs approved by the California Transportation Commission in December.

However, while CARB staff "commend SCAG and its member jurisdictions for demonstrating innovative thinking and leadership with the additional strategies included within the 2020 SCS²" they expressed concerns about SCAG's ability to implement the plan.

CARB shared eight specific recommendations with its determination:

- 1. Deprogram Capacity Expansion Projects and Prioritize Funding for Transportation Projects that Advance SCS Implementation and Goals
 - a. CARB recommends that SCAG develop a more rigorous vetting process and a project analysis tool to be used by local agencies when submitting projects for consideration

¹ Government Code 65080(b)(2)(J)(ii)

² California Air Resources Board Executive Order G-20-239 and CARB Evaluation Packet of SCAG's 2020 RTP/SCS https://scag.ca.gov/sites/main/files/file-attachments/carb-2020-scs-evaluation-packet.pdf?1606337689



in the RTP project list in order to advance projects that are well-aligned with the SCS³.

- 2. Monitor Implementation of the Adopted SCS Strategies, Actions, and Transportation Project List
 - a. CARB recommends tracking and reporting on the implementation of all strategies and providing data-supported metrics in order to determine which strategies are performing well or which should be adjusted in future SCSs.
- 3. Accelerating Infill to Further SCS Implementation and Goals
 - a. CARB recommends that jurisdictions should align planning and local policies and actions that support the goals of the SCS and the regional housing needs assessment (RHNA) and that in the next SCS the Open Space and Natural Lands Mitigation Program should be fully developed.
- 4. State and Regional Partnership on Pricing Pilot Options
 - a. CARB states that SCAG needs to identify further progress on implementation of its pricing strategies in order to receive credit for the full GHG emission reductions in the next SCS.
- 5. Improve GHG Benefit Estimates for 2020 SCS New Strategies
 - a. CARB expects more detailed local data and specific supporting actions to be provided in the next SCS.
- 6. Provide All Trend Analysis Metrics
 - a. CARB requests that additional specific performance indicators are included in the next SCS.
- 7. Improve Modeling and Data
 - a. CARB recommends specific model improvements such as incorporation of transportation network companies (TNCs) and autonomous vehicles as part of the mode choice model of the activity-based travel demand model (ABM) as well as adjustments to the off-model assumptions documentation.
- 8. Analyze Induced Travel Demand
 - a. CARB recommends that SCAG explores methods of analyzing long-term induced demand that can identify the geographic areas of induced travel through an integrated land use and travel demand model.

SCAG staff are working to evaluate and determine how best to approach each recommendation and will collaborate with state and local partners to identify paths forward. These recommendations will also inform the development of the 2024 RTP/SCS in order to ensure that SCAG continues to receive full GHG emission reduction credit for the strategies and efforts identified in the SCS. However, further discussion with CARB staff will be necessary to ensure that SCAG can comply with the intent

Packet Pg. 21

³ CA Government Code section 65080(b)(2)(L) specify that "Nothing in this section shall require a transportation sales tax authority to change the funding allocations approved by the voters for categories of transportation projects in a sales tax measure adopted prior to December 31, 2010"





of the recommendations without diverting resources away from our support of local jurisdictions and agencies in implementing the plan in order to provide enhanced documentation for CARB.

It will take the continued leadership of SCAG's Regional Council and Committee members and partnership with our local jurisdictions and County Transportation Commissions to implement Connect SoCal and to address these recommendations raised by CARB.

CARB's Determination and Evaluation can be found on SCAG's website, under "Approvals" on the Adopted Final Connect SoCal page here: https://scag.ca.gov/read-plan-adopted-final-plan

FISCAL IMPACT:

Work associated with this item is included in the current FY 2020-21 Overall Work Program (310.4874.01 Connect SoCal Development).

ATTACHMENT(S):

 California Air Resources Board Executive Order G-20-239 and CARB Evaluation Packet of SCAG's 2020 RTPSCS



October 30, 2020

Mr. Kome Ajise Executive Director Southern California Association of Governments 900 Wilshire Boulevard, Suite 1700 Los Angeles, California 90017

Dear Mr. Ajise:

In accordance with the Sustainable Communities and Climate Protection Act of 2008, please find enclosed the California Air Resources Board's (CARB) Executive Order G-20-239 and CARB staff's determination based on its evaluation of the Southern California Association of Governments' SB 375 2020 Regional Transportation Plan/Sustainable Communities Strategy (2020 SCS). The Executive Order accepts the Southern California Association of Governments' (SCAG) determination that its 2020 SCS would, when implemented, meet the applicable 2035 greenhouse gas (GHG) emissions reduction target for automobiles and light trucks as established by CARB in 2018, specifically, a 19 percent per capita reduction by 2035 relative to 2005 levels. CARB staff's determination summarizes its assessment, findings, and recommendations relating to the determination on the 2035 target. CARB's full evaluation report of SCAG's 2020 SCS will be transmitted to you separately and posted on CARB's website in the coming weeks.

While SCAG appropriately provided a determination to CARB as to whether its 2020 SCS meets the 2020 target, its reliance on modeled evidence without consideration of observed data and the performance indicators, as called for in CARB's SCS evaluation guidelines, was inappropriate. As a result, CARB staff could not evaluate the adequacy for the 2020 determination and therefore does not include a conclusion on the 2020 determination. Furthermore, observed data regarding housing development and transit ridership show that SCAG may not in fact be achieving the target. CARB explains in its determination the importance of this information to support a 2020 target determination in SCSs to meet SB 375 requirements and achieve anticipated GHG reductions needed to meet State climate commitments.

CARB staff commend SCAG and its member jurisdictions for demonstrating innovative thinking and leadership with the additional strategies included within the 2020 SCS. Though the Executive Order accepts the 2020 SCS 2035 target determination based on a sufficient presentation of information that would support achievement if every

Mr. Kome Ajise October 30, 2020 Page 2

strategy and measure were in fact implemented, CARB staff were reluctant to approve this SCS due to serious concerns about whether this plan will really be implemented. Many of the SCAG's key actions rely heavily on others to implement them and there are no existing commitments to do so. For example, the average vehicle ridership for job centers, parking deregulation in transit priority areas, co-working, and job center parking strategies require local or private support and buy-in to implement. Additionally, many of the funding sources identified to support the SCS strategies, key actions, and projects, rely on legislative authority for implementing its congestion pricing and mileage-based user fee strategies that may or may not be forthcoming. Furthermore, transit and active transportation projects that will support GHG emission reductions are back loaded to occur around or after 2035, suggesting they will not be implemented in time to meet the 2035 target.

Even with a commitment to 100 percent zero-emission vehicles sales in 2034¹, California needs strong commitments to implement vehicle miles traveled (VMT) reduction strategies by every region in the State to meet its SB 375 targets and support the statewide effort to successfully mitigate the worst impacts of climate change. Commitment to implementing SCAG's latest adopted 2020 SCS strategies is an important piece of this. At the same time, commitment is needed to reduce project investments in projects that are counter to the region's adopted SCS land use and housing strategy, and will increase VMT. Future regional target setting for 2035 will need to consider whether a more aggressive GHG reduction target is appropriate given that the SCS appears to achieve its targets despite the inclusion of these types of roadway capacity expansion projects. This suggests more needs to be done to realize SB 375's goals.

To support successful implementation of the 2020 SCS, and the GHG benefits claimed, CARB staff include specific recommendations within the SCS Evaluation Report and requests SCAG regularly monitor the implementation actions associated with its SCS in consultation with CARB and other relevant agencies.

CARB staff appreciates SCAG's continued work to advance the sustainability of transportation and land use planning in California, and looks forward to an ongoing partnership to implement this plan. If you have any questions or need further information, please contact Jennifer Gress, Chief, Sustainable Transportation and Communities Division, at jennifer.gress@arb.ca.gov.

¹ See Governor Gavin Newsom's Executive Order N-79-20. September 2020.

Mr. Kome Ajise October 30, 2020 Page 3

Sincerely,

Richard W. Corey Executive Officer

· w. g/

Enclosures

cc: (via email)

Ms. Sarah Jepson Planning Director Southern California Association of Governments (SCAG) Jepson@scag.ca.gov

Mr. Rex Richardson SCAG President & Council Member, Long Beach Sacramento Area Council of Governments (SACOG) district9@longbeach.gov

Ms. Jennifer Gress, Ph.D. Division Chief Sustainable Transportation and Communities Division jennifer.gress@arb.ca.gov Page Intentionally Left Blank

State of California AIR RESOURCES BOARD

Executive Order G-20-239

Southern California Association of Governments' (SCAG) 2020 Sustainable Communities Strategy CARB Acceptance of GHG Quantification Determination

WHEREAS, SB 375 (Steinberg, Chapter 728, Statutes of 2008), also known as the Sustainable Communities and Climate Protection Act, aims to reduce greenhouse gas (GHG) emissions from passenger vehicle travel through improved transportation and land use planning at the regional scale;

WHEREAS, SB 375 requires each of the State's 18 federally designated Metropolitan Planning Organizations (MPOs), including the Southern Califoria Association of Governments (SCAG), to develop a Sustainable Communities Strategy (SCS) or an Alternative Planning Strategy that meets the regional GHG emissions reduction targets for automobiles and light trucks set by the California Air Resources Board (CARB or Board);

WHEREAS, on September 23, 2010, the Board set targets for the SCAG region of an 8 percent per capita reduction by 2020, and a 13 percent per capita reduction by 2035 relative to 2005 levels;

WHEREAS, on June 4, 2012, CARB accepted SCAG's quantification of GHG emissions reductions for automobiles and light trucks as meeting the applicable targets in its first SCS, adopted by the SCAG Regional Council on April 4, 2012;

WHEREAS, on June 28, 2016, CARB accepted SCAG's quantification of GHG emissions reductions for automobiles and light trucks as meeting the applicable targets in its second SCS, adopted by the SCAG Regional Council on April 7, 2016;

WHEREAS, on March 22, 2018, the Board set targets for the SCAG region of an 8 percent per capita reduction by 2020 and a 19 percent per capita reduction by 2035 relative to 2005 levels:

WHEREAS, in preparation for its 2020 SCS, SCAG staff engaged the public via advisory committee meetings, stakeholder working group meetings, public workshops, and public hearings between September 2018 and September 2020;

WHEREAS, in November 2019, SCAG published its draft 2020 SCS, which was available for public review through January 2020;

WHEREAS, on September 3, 2020, SCAG's Regional Council adopted the final 2020 SCS, known as the Connect SoCal 2020 - 2045 Regional Transportation

Plan/Sustainable Communities Strategy, with a determination that the SCS would achieve the region's GHG target of an 8 percent per capita reduction by 2020 and a 19 percent per capita reduction by 2035 relative to 2005 levels;

WHEREAS, SCAG submitted the final 2020 SCS to CARB on September 11, 2020, as required by California Government Code section 65080, subdivision (b)(2)(J)(ii), and completed its submittal of supporting information on October 9, 2020;

WHEREAS, CARB staff performed an evaluation of the 2020 SCS's quantification of the GHG emissions reductions the strategy would achieve and the technical methodology used to obtain that result based on CARB's November 2019 document entitled *Final Sustainable Communities Strategy Program and Evaluation Guidelines*;

WHEREAS, CARB staff's evaluation indicated that SCAG appropriately included a determination as to whether its 2020 SCS meets the 2020 GHG emissions reduction target, however, CARB staff found that the determination was made relying on modeled evidence only, without consideration of observed data and performance indicators as called for in CARB's SCS evaluation guidelines, which prevented CARB from performing an evaluation of the 2020 target determination;

WHEREAS, CARB staff's evaluation indicated that SCAG used technical methodologies that would reasonably quantify GHG emissions reductions from the 2020 SCS for 2035;

WHEREAS, CARB staff's evaluation indicated that SCAG's 2020 SCS included strategies, key actions, and investments to support its stated GHG emissions reductions for 2035;

WHEREAS, CARB staff's evaluation showed SCAG's 2020 SCS, when implemented, would meet the applicable GHG emissions reduction target that the Board established for the region for 2035;

WHEREAS, CARB staff's technical evaluation of SCAG's GHG emissions reduction determination is included in Attachment A, Evaluation of the Southern California Association of Governments' SB 375 2020 Sustainable Communities Strategy, October 2020;

WHEREAS, California Government Code section 65080, subdivision (b)(2)(J)(ii), calls for CARB to accept or reject an MPO's determination that the Sustainable Communities Strategy submitted would, if implemented, achieve the GHG emissions reduction targets established by the Board;

WHEREAS, California Health and Safety Code sections 39515 and 39516 delegate to the Board's Executive Officer the authority to act on behalf of the Board in this manner;

NOW, THEREFORE, BE IT RESOLVED that under California Government Code section 65080, subsection (b)(2)(J)(ii), the Executive Officer hereby accepts SCAG's determination that the SCS adopted by the SCAG Regional Council on September 3, 2020, would, when implemented, achieve the applicable GHG emissions reduction target for automobiles and light trucks of 19 percent per capita reduction by 2035,

relative to 2005 levels, as established by CARB for the region.

NOW, THEREFORE, CARB staff is directed to forward this executive order to the SCAG Executive Director.

Executed at Sacramento, California this 30th day of October 2020.

Richard W. Corey Executive Officer Page Intentionally Left Blank

EVALUATION OF THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS' SB 375 2020 SUSTAINABLE COMMUNITIES STRATEGY

October 2020



This document has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the California Air Resources Board, nor does the mention of trade names or commercial products constitute endorsement or recommendation for use.

Electronic copies of this document are available for download from the California Air Resources Board's internet site at:

https://ww2.arb.ca.gov/our-work/programs/sustainable-communities-climate-protection-program

In addition, written copies are also available. Please email California Air Resources Board program staff at <u>sustainablecommunities@arb.ca.gov</u> to place your request.

For individuals with sensory disabilities, this document is available in Braille, large print, audiocassette, or computer disk. Please contact CARB's Disability Coordinator at (916) 323-4916 by voice or through the California Relay Services at 711, to place your request for disability services. If you are a person with limited English and would like to request interpreter services, please contact CARB's Bilingual Manager at (916) 323-7053.

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Background

The Sustainable Communities and Climate Protection Act of 2008 (SB 375) is intended to support the State's broader climate goals by encouraging integrated regional transportation and land use planning that reduces greenhouse gas (GHG) emissions from passenger vehicle use. California's metropolitan planning organizations (MPO) develop regional Sustainable Communities Strategies (SCS) – as part of their regional transportation plans (RTP) – which contain land use, housing, and transportation strategies that, when implemented, can meet the per capita passenger vehicle GHG emission reductions targets for 2020 and 2035 set by the California Air Resources Board (CARB or Board). Once an MPO adopts an SCS, SB 375 directs CARB to accept or reject an MPO's determination that its SCS, when implemented, would meet the targets.

On September 3, 2020, Southern California Association of Governments (SCAG)¹, which serves as the MPO for the Southern California region, adopted its 2020 Regional Transportation Plan/Sustainable Communities Strategy, also known as *Connect SoCal*.² SCAG provided for CARB staff's review, a complete submittal of the 2020 SCS and all necessary supporting information on October 9, 2020. SCAG's 2020 SCS estimates an 8 percent and a 19 percent decrease in GHG per capita emissions from light-duty passenger vehicles by 2020 and 2035, respectively, compared to 2005. The region's per capita GHG emissions reduction targets are 8 percent in 2020 and 19 percent in 2035, compared to 2005 levels, as adopted by the Board in 2018.³ This report reflects CARBs evaluation of SCAG's 2020 SCS GHG quantification.

¹ Southern California Association of Governments is the largest MPO in California, covering six counties and 191 cities in the Southern California region. The SCAG region includes 48 percent of California's population with about 19.1 million people.

² Southern California Association of Governments. 2020 Regional Transportation Plan/Sustainable Communities Strategy. Available at: https://www.connectsocal.org/Pages/Connect-SoCal-Final-Plan.aspx. ³ Board Resolution 18-12 (March 22, 2018) Available at: https://www2.arb.ca.gov/sites/default/files/2020-06/SB375 Final Target Staff Report %202018 Resolution 18-12.pdf.

CARB's Evaluation

After CARB set the first SB 375 GHG emission reduction targets in 2010, CARB staff developed the first guidelines⁴ on how SCSs would be evaluated for the purposes of CARB's determination in 2011. These 2011 Evaluation Guidelines focused on the technical aspects of regional travel demand modeling and analysis for how CARB would determine acceptance or rejection of an MPO's determination that it met its applicable GHG emission reduction targets. In 2018, when CARB updated the SB 375 GHG emission reduction targets, the Board directed CARB staff to place greater attention on the strategies, key actions, and investments committed by the MPOs rather than on modeling outputs. Pursuant to Board direction, CARB staff updated its 2011 Evaluation Guidelines in the document *Final Sustainable Communities Strategy Program and Evaluation Guidelines*⁵ (2019 Evaluation Guidelines). Under CARB staff's 2019 Evaluation Guidelines, evaluation of SCS strategies, key supporting actions and investments serve as the basis for accepting or rejecting an MPO's SB 375 GHG determination.

CARB's evaluation of the SCS consists of two components - the determination and reporting components and is based on the general method described in CARB staff's 2019 Evaluation Guidelines. This report summarizes CARB staff's evaluation of SCAG's 2020 SCS.

The determination component covers the analyses conducted by CARB staff to determine whether the SCS would achieve the applicable GHG emission reduction targets when implemented. This component consists of a series of four policy analyses, which evaluate whether the strategies, key actions and investments from the SCS support its stated GHG emission reductions. These four analyses include Trend Analysis, Policy Analysis, Investment Analysis, and Plan Adjustment Analysis. CARB staff's evaluation relied on a review of SCAG's 2020 SCS, additional SCS submittal materials provided by SCAG further explaining its modeling inputs and assumptions, performance indicators trends, key actions, investments, current trends and plan

⁴ California Air Resources Board. Description of Methodology for ARB Staff Review of Greenhouse Gas Reductions from Sustainable Communities Strategies Pursuant to SB 375. July 2011. Available at: https://ww3.arb.ca.gov/cc/sb375/scs review methodology.pdf.

⁵ California Air Resources Board. *Final Sustainable Communities Strategy Program and Evaluation Guidelines*. November 2019. Available at: https://ww2.arb.ca.gov/sites/default/files/2019-11/Final%20SCS%20Program%20and%20Evaluation%20Guidelines%20Report.pdf.

adjustments, as well as on information gathered in follow up conversations with SCAG staff. For a summary of strategies and quantification methods evaluated as part of SCAG's 2020 SCS submittal see Appendix A.

With respect to the reporting component, the 2019 Evaluation Guidelines includes three elements: tracking implementation, incremental progress, and equity. Tracking implementation reporting captures progress the region has made toward its SCS implementation based on observed data and whether it is on track to meet the GHG reduction targets based on how well the observed data track with what the plan said would happen. Incremental progress reports on whether an MPO's SCS includes more or enhanced strategies compared to its prior SCS that are consistent with the information the MPO shared during the 2018 target-setting process. The equity section identifies the efforts the MPO has undertaken to meet federal and State requirements related to equity. These reporting components are included as Appendix C: MPO Reporting, and serves to identify the effectiveness of prior SCS implementation efforts and increase overall transparency of the SCS for the public and other stakeholders.

Trend Analysis

This section summarizes CARB's analysis of key plan performance indicators to determine if the data provided by SCAG support the 2020 SCS's stated GHG and vehicle miles traveled (VMT) reductions. As part of the 2019 Evaluation Guidelines, CARB staff requested data on the following eight performance indicators: 1) household vehicle ownership, 2) mode share, 3) average travel time by mode, 4) daily transit ridership, 5) average trip length by mode, 6) seat utilization, 7) VMT per capita, and 8) GHG per capita. These indicators represent how a region can show changes to its per capita VMT over time through policies and investments undertaken and reflected in its SCS.

SCAG provided data associated with these metrics from the output of its travel demand model, SCAG Activity-Based Travel Demand Model (ABM). Staff analyzed how these metrics change over time (i.e., 2016 to 2035)⁶ to determine whether these eight SCS

⁶ The trend analysis is intended to analyze trends for the target year compared to 2005. However, SCAG did not provide 2005 data for some performance indicators, including Average Trip Length by Mode, Daily Transit Ridership, and Average Travel Time by Mode due to a change in the modeling platform from a trip-based model to a new activity-based travel demand model. Therefore, CARB's trend analysis is based on 2016 and 2035 data.

performance indicators are trending in a direction that supports the stated GHG/VMT reductions. Table 1 provides a summary of the trend analysis for SCAG's 2020 SCS. SCAG did not provide transit seat utilization data, so CARB staff could not review the trend for those data.

Table 1. Trend Analysis Results

Performance Indicator	Forecast Change* 2016** to 2035	Trend Analysis
maicator	2010 10 2000	SCAG's 2020 SCS forecasts a decrease in the
	SOV (-3.8%)	average single-occupancy vehicle (SOV) trip length from 12.1 miles/day in 2016, to 11.7
Average Trip	HOV (-3.6%)	miles/day in 2035. Over the same time period, trip lengths for bike/walk increase from 1.7 to
Length By Mode	Transit (+19.8%)	1.8 and transit increases from 7.3 to 8.8 over the same period. CARB finds these trends
Wode	Bike (+7.4%)	directionally supportive and consistent with the relationship shown in the empirical literature
	Walk (+1.3%)	that reducing SOV trip length reduces VMT and GHG emissions. Please see Appendix B: Data Table for more details.
Average Travel Time By Mode	SOV (-10.7%) HOV (-6%) Transit (+16.3%)	SCAG's 2020 SCS forecasts a decrease in the average SOV travel time (20 minutes in 2016 to 17.9 minutes in 2035) and high-occupancy vehicle (HOV) travel time (13 minutes to 12.2 minutes); with increasing transit travel time (39.1 minutes to 45.4 minutes) over the same time period. CARB finds these trends directionally supportive and consistent with the relationship shown in the empirical literature that travel time and trip length change proportionally and are supportive of reducing VMT and GHG emissions. Please see Appendix B: Data Table for more details.
Mode Share	SOV (-0.2%) Transit (+1.4%) Bike/Walk (+1.0%)	SCAG's 2020 SCS forecasts that mode share for SOV will slightly decrease from 36% in 2016 to 35.8% in 2035, while mode share for transit and walk/bike will increase from 3.2% to 4.7%, and 9.1% to 10.1%, respectively, over the same period. CARB finds these trends directionally supportive and consistent with the relationship shown in the empirical literature that shifting away from driving alone to other modes such as transit, walk and bike reduces per capita VMT

		10110 : : 51
		and GHG emissions. Please see Appendix B: Data Table for more details.
Daily Transit Ridership	+115.4%	SCAG's 2020 SCS forecasts daily transit ridership increases from 2,074,697 in 2016 to 4,469,294 in 2035. CARB staff finds these trends directionally supportive and consistent with the relationship shown in the empirical literature that increasing transit ridership will reduce GHG emissions. However, CARB staff has concern about this trend when looked at in the context of the trend in transit travel time (which increase from 39.1 minutes to 45.4 minutes in 2035 as noted above) compared to driving alone (which decrease from 20 minutes to 17.9 minutes in 2035 as noted above). Transit travel time is more than two times longer than driving alone despite transit trip lengths being one-third the length of SOV trips. This is not consistent with the empirical literature that shows decreasing SOV travel times alongside increasing and longer transit travel times would increase transit ridership and reduce GHG emissions. Please see Appendix B: Data Table for more details.
Household Vehicle Ownership	-1.2%	SCAG's 2020 SCS forecasts a decrease in household vehicle ownership from 1.90 in 2016 and 1.88 in 2035. CARB staff finds the 2016 to 2035 trend directionally supportive of reducing GHG emissions and consistent with the relationship shown in the empirical literature that reducing vehicle ownership reduces GHG emissions. However, CARB staff has concern about this trend when looked at in the context of transit ridership per household (i.e., 0.34 in 2016 to 0.62 in 2035). The magnitude of increase in transit ridership forecasted may not be consistent with the modest reduction in vehicle ownership between 2016 and 2035, even though transit ridership increases over the same period. This is contrary to the empirical literature where a household that uses more transit tends to own fewer vehicles. These results are not consistent and may not support

		reducing GHG emissions. Please see Appendix B: Data Table for more details.
VMT per Capita	-13.9%	SCAG's 2020 SCS forecasts VMT to decrease from 23.1 VMT/day in 2016 to 19.8 VMT/day in 2035. CARB staff finds this trend supportive and consistent with the relationship shown in the empirical literature that reducing VMT per capita will reduce GHG emissions. Please see Appendix B: Data Table for more details.
GHG per Capita Reduction Between 2005 and 2020	-8.3%	The GHG per capita reduction forecasted by SCAG meets the target established by CARB. Please see Appendix B: Data Table for more details.
GHG per Capita Reduction Between 2005 and 2035	- 19.1%	The GHG per capita reduction forecasted by SCAG meets the target established by CARB. Please see Appendix B: Data Table for more details.
Seat Utilization	SCAG did not provide data.	

* (-) decreasing, (+) increasing, (~) no change

CARB staff finds that taken as a whole, the performance indicators used to conduct the Trend Analysis support the GHG reductions projected in SCAG's SCS.

Policy Analysis

The following section summarizes CARB staff's evaluation of whether or not SCAG's 2020 SCS contains key policy, investment, and other actions that support its identified strategies for meeting its GHG emission reduction targets using the general method described in CARB's 2019 Evaluation Guidelines. This analysis focuses on what policy commitments are contained in the SCS to support implementation and provides CARB with qualitative evidence on whether an MPO's claimed GHG reductions from its SCS strategies are likely, risky, or unlikely. CARB staff's analysis is organized across four broad SCS strategy categories: (1) land use and housing, (2) transportation infrastructure and network, (3) local/regional pricing, and (4) electric vehicle and new mobility. Within each strategy category, CARB staff discusses: the applicable SCS strategies; the planned outcomes that the SCS assumes will occur in 2035 when strategies are fully

^{**} For its 2020 RTP/SCS, SCAG used a new activity-based travel demand model. The output from this modeling included the performance indicators used for the trend analysis. SCAG was not able to provide modeled output for 2005 for all metrics, but did provide output for calendar year 2016, the base year of the plan.

implemented; and CARB staff's analysis of whether the SCS contains key policy and investment actions that will support implementation of the SCS strategies and planned outcomes.

CARB staff's analysis of key supporting actions looked at a number of policy factors that, when considered together, are expected to explain how the MPO region will achieve the development pattern, transportation network characteristics, and travel pattern assumed in its SCS by 2035. In general, across all strategy categories, CARB staff looked for:

- Whether the SCS provided policy actions that corresponded to each of its individual strategies.
- Whether the actions were clear with respect to scope, who will be involved, what will be done, and the anticipated implementation timeline.
- Whether the actions were measurable and included specific regional investment commitments in the RTP/SCS project list, policy and/or financial incentives; technical assistance; and if legislative or other entity action is needed, partnership activities to advance needed changes.

Information used for this effort was collected from SCAG's 2020 SCS and through additional supporting materials provided by SCAG in its submittal to CARB.

Land Use and Housing Strategy Commitments

SCAG's 2020 SCS includes four land use- and housing-related strategies, including infill development, increasing density near transit infrastructure, job/housing balance, and mixed land uses. Together, these land use and housing strategies support SCAG's goals of encouraging development of diverse land uses in areas that are supported by multiple transportation options and promoting conservation of natural and agricultural lands and restoration of habitats. SCAG estimates these strategies, in aggregate, will contribute to 14.2 percent⁷ of its total per capita GHG emissions reductions.

7

⁷ SCAG estimates VMT changes from its land use and housing strategies, along with transportation network changes, and pricing strategies in aggregate using its activity-based travel demand model.

SCS Planned Outcomes

The SCS includes assumptions about the type and character of new land use and housing development that will take place in the region between 2016 and 2035. Specifically, the plan⁸.

- Adds 1,158,000 new housing units and 1,177,000 new jobs.
- Increases the region's residential density by 20 percent.
- Includes 393,000 new single-family housing units (30 percent of the total new units) and 906,000 (70 percent) multi-family or attached housing.
- Forecasts 64 percent of households⁹ and 74 percent of employment to occur in the regions priority growth areas.
- Increases growth within priority areas¹⁰ (which include job centers, high-quality transit areas, and neighborhood mobility areas), avoids growth in absolute constrained areas¹¹, and avoids growth in variable constraint areas¹², where

SCAG uses these estimates to calculate the change in per capita GHG emissions. Therefore, the percent reduction reflected here represents SCAG's estimated reductions from implementing its land use and housing strategies, along with transportation network changes, and pricing strategies together. CARB is unable to isolate the emissions reductions associated with SCAG's land use and housing strategies only.

8 This subsection includes information based on the data table and compares demographic and land use indicators from the 2016 base year to 2035.

⁹ This bullet point refers to growth comparison tables provided by SCAG..

¹⁰ Priority growth areas are designated areas prioritized for new development based on established criteria (e.g., infrastructure, location, market). These include transit priority areas, high-quality transit areas, livable corridors, neighborhood mobility areas, jobs centers, and spheres of influence.

¹¹ Absolute constrained areas include tribal lands, military, open space, conserved lands, sea level rise areas, and farmlands in unincorporated areas. These areas were identified during the scenario development process to be used during the modeling process to redirect jurisdictional growth into other areas. These are intended to be regional guidelines and do not supersede existing regulations or protections, or local land use policy.

¹² Variable constrained areas included Wildland Urban Interface (WUI), grazing lands, farmlands in incorporated jurisdictions, 500-year flood plains, CalFire Very High Severity Fire Risk, and Natural Lands Conservation Areas. These areas were identified during the scenario development process to be used during the modeling process to redirect jurisdictional growth into other areas when feasible. These are intended to be regional guidelines and do not supersede existing regulations or protections or local land use policy.

possible¹³. See Figure 1 for locations of priority growth vs. regional growth constraints, or where development is assumed to occur and not occur in the region.

• Assumes 735,919 new housing units and 1,034,810 new jobs are located within a ½-mile of high-quality transit stations¹⁴ (a 35 percent and 29 percent increase, respectively, compared to 2016 levels).

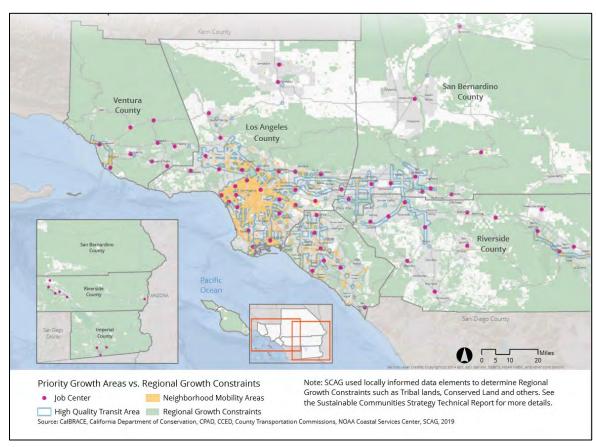


Figure 1. Priority Growth Areas vs. Regional Growth

Source: SCAG, 2020 RTP/SCS

¹³ SCAG 2020 RTP/SCS, Sustainable Community Strategy Technical Report pages 18-19.

¹⁴ This is an area within a ½-mile of a well-serviced transit stop or a transit corridor with 15-minute or less service frequency during peak commute hours.

Supporting Actions

While MPOs create SCSs that forecast regional growth patterns, local government staff and elected officials have almost exclusive authority over land use decisions relevant to implementing the SCS. Achieving the plan outcomes discussed above will therefore require local government action. Local actions that do not align with regional goals, such as allowing leapfrog development in natural or agricultural areas, and failing to allow enough infill, especially affordable housing and growth in walkable or transitoriented areas, stifles the Southern California region's ability to implement the plan.

CARB staff checked for evidence that appropriate funding, other incentives, technical assistance, or other key actions were present to support the assumed development pattern in the SCS. In particular, CARB staff considered whether the SCS identified region-specific funding or technical assistance programs that support developers and local governments in prioritizing growth in the SCS's preferred growth areas. In addition, CARB staff checked to see how the SCS's assumptions about future housing unit development within the SCS's preferred growth areas compared against existing local plans, as alignment of regional and local plans is an important first step toward ensuring that future needs can be accommodated.

CARB staff found that the 2020 SCS land use and housing planned outcomes are supported by region-specific funding and planning program actions. In particular, the 2020 SCS carries over a number of positive, well-established programs and commitments to support implementation of the Southern California region's SCS land use and housing strategy. Notable examples include SCAG's technical assistance to help potential applicants compete for the Affordable Housing Sustainable Communities (AHSC) grant program ¹⁵, as well as other technical assistance through programs such as Tool Box Tuesdays, where SCAG staff provide a range of practical skills and knowledge for local planners, including training in the use of computer-based tools and education in practical approaches to timely planning issues ¹⁶. Applicants within the SCAG region have received funding from the AHSC grant program to help with the construction of affordable housing. Between 2014 and 2018 there were 36 projects awarded within the SCAG region, totaling over \$380 million in funding. These 36 projects will bring an additional 3,665 units of affordable housing in addition to improvements to the

¹⁵ More information can be found at: http://ahsc.scag.ca.gov/Pages/Home.aspx.

¹⁶ More information can be found at: http://sustain.scaq.ca.gov/Pages/ToolboxTuesdayTraining.aspx.

surrounding transit, bicycle, and pedestrian infrastructure. SCAG's member agencies will continue to compete for AHSC funding.

The 2020 SCS also identifies that SCAG will provide technical support to local jurisdictions for new pilot projects and will examine and evaluate the viability of tax increment financing tools for local sustainable infrastructure projects and local economies. SCAG has assumed \$3 billion in financing¹⁷ available from these value-capture strategies for infrastructure to support housing in transit areas, which is a new supporting action in the region.

To support its assumptions about absolute and constrained areas and other key provisions in the RTP/SCS, SCAG is also working on developing an Open Space and Natural Lands Mitigation Program¹⁸ to continue to engage partners and stakeholders on potential approaches to prioritize open space resources in the SCAG region.

Additionally, SCAG will continue to provide resources to local jurisdictions in the SCAG region for implementing new CEQA transportation impact assessment regulations as mandated by Senate Bill 743¹⁹. For example, a cooperative effort with the City of Los Angeles focuses on the evaluation of opportunities for developing a regional VMT exchange or banking program as potential VMT mitigation options to benefit local agencies throughout the SCAG region.

Table 2 shows CARB staff's summary of SCAG's 2020 SCS land use and housing strategy commitments and associated supporting actions and investments.

¹⁷ SCAG 2020 RTP/SCS, Transportation Finance Technical Report, page 9.

¹⁸ SCAG Final Overall Work Program Fiscal Year 2020-2021, page 77.

¹⁹ Senate Bill 743 (Steinberg, Chapter 386, Statutes of 2013).

Table 2. SCAG's 2020 SCS Land Use and Housing Strategy Commitments and Supporting Actions

SCAG's SCS Strategies	Estimated GHG Emission Reductions in 2035	SCS Supporting Actions and Investments	CARB Staff's Analysis
Infill Development	Strategy contributes an unknown amount to the total - 14.2% reduction from all on-model strategies. Specific proportion not provided.	This strategy seeks to increase infill development in priority growth areas. SCAG intends to continue to fund local planning efforts through its Sustainable Communities Program ²⁰ to accelerate infill and development near transit. SCAG will also provide technical assistance to local governments, transit agencies and developers within the region to build housing capacity and to compete in the statewide Affordable Housing Sustainable Communities (AHSC) grant program.	Actions Identified ²¹ : Yes Funding in the RTP/SCS Project List ²² : N/A ²³ SCAG Program Funding Available ²⁴ : Yes, SCAG has identified resources to provide funding and technical assistance.

²⁰ SCAG's Sustainable Communities Program provides resources and direct technical assistance to jurisdictions to complete important local planning efforts and enable implementation of the RTP/SCS. The 2020-2021 Sustainable Communities Program will provide local jurisdictions with multiple opportunities to seek funding and resources to meet the needs of their communities, address recovery and resiliency strategies considering COVID-19, and support regional goals. More information can be found at http://sustain.scaq.ca.gov/Pages/DemoProjApplication.aspx.

²¹ Actions identified refers to if SCAG has identified how the SCS strategy will be implemented through actions.

²² Funding in the RTP/SCS Project List refers to if there are projects and investments in the financially constrained project list that support the SCS strategy.

²³ N/A means not applicable.

²⁴ SCAG Program Funding Available refers to if SCAG has resources to support the SCS strategy.

Increasing Density Near Transit	Strategy contributes an unknown amount to the total - 14.2% reduction from all on-model strategies. Specific proportion not provided.	This strategy seeks to increase density near transit. SCAG intends to continue to fund local planning efforts through its Sustainable Communities Program to accelerate infill and development near transit. SCAG will also provide technical assistance to local governments, transit agencies, and developers within the region to build housing capacity and to compete in the statewide AHSC grant program. SCAG also assumes \$3 billion from the formation of Enhanced Infrastructure Financing Districts (EIFD) and the use of tax increment financing for transit-supportive, housing-related infrastructure. SCAG seeks to expand activities to support local agencies in establishing self-help tax-increment financing districts. SCAG also seeks to leverage resources to support local activities that stimulate development near transit and in priority growth areas.	Actions Identified: Yes Funding in the RTP/SCS Project List: N/A SCAG Program Funding Available: Yes, SCAG has identified resources to provide funding and technical assistance, however, CARB staff is concerned about the certainty of funding from yet to be created EIFDs and the negative impacts of not obtaining needed funding to achieving reduction associated with the strategy.
Jobs/Housing Balance	Strategy contributes an unknown amount to the total - 14.2% reduction from all on-model strategies. Specific proportion not provided.	This strategy seeks to create jobs/housing balance within the region in order to shorten vehicle trips. SCAG intends to continue to fund local planning efforts through the Sustainable Communities Program to accelerate the shortening of trips through land use strategies. SCAG will also provide technical assistance and host meetings and Toolbox Tuesdays to provide solutions to address jobs/housing imbalances. In order to address jobs/housing imbalances and reduce sprawl, SCAG is working to develop an Open Space and Natural	Actions Identified: Yes. However, CARB staff is concerned that SCAG's analysis of growth constraints is not reflected or well- supported by SCAG and its member jurisdictions as it is not well-aligned with local land use policies.

		Lands Mitigation Program to encourage conservation measures in the region.	Funding in the RTP/SCS Project List: N/A SCAG Program Funding Available: Yes, SCAG has identified resources and can provide technical assistance.
Mixed Land Uses	Strategy contributes an unknown amount to the total - 14.2% reduction from all on-model strategies. Specific proportion not provided.	intends to continue to fund local planning efforts through its Sustainable Communities Program to	Actions Identified: Yes Funding in the RTP/SCS Project List: N/A SCAG Program Funding Available: Yes. SCAG has existing resources to provide funding, research and technical assistance.

In addition to CARB staff's evaluation of strategies and supporting actions, CARB staff also looked for general alignment of regional and local planning assumptions around the location of future housing unit development. CARB staff found that the 2020 SCS forecasted housing units appeared to be generally aligned with General Plan buildout capacities for the region. However, CARB staff was unable to conclude that this was the case because SCAG only provided information on priority growth areas, not all 35 place types identified in the region or at the jurisdictional level. These priority growth areas overlap, so growth totals are unclear. (See "Recommendation" section in this report).

While CARB staff's analysis supports a conclusion that SCAG's 2020 SCS would meet the target, when implemented, CARB staff has significant concerns that SCAG will not be able to implement the land use and housing strategies in the 2020 SCS to achieve its GHG reduction and planned outcome benefits. While there are local plans in place within the SCAG region that support the 2020 SCS housing growth scenario local plan alignment does not guarantee this housing will be built. As shown in CARB's 2018 Progress Report: California's Sustainable Communities and Climate Protection Act, 25 prepared pursuant to SB 150 (Allen, Chapter 646, Statutes of 2017), local housing planning is mostly compliant with Regional Housing Needs Allocation (RHNA) law, but actual permits issued are lagging, especially for affordable housing. In the four largest regions, according to local jurisdiction reports that were submitted to the California Department of Housing and Development (HCD), most regions are ahead of schedule in issuing permits for housing for the wealthiest "above-moderate-income" households but are falling short in housing that is affordable for households in the three lower-income categories: moderate-income, low-income, and very low-income.

SCAG's process for developing the 2020 SCS includes actions to help address observed shortfalls, however CARB staff finds that these actions rely on funding that has yet to be secured and local measures that have yet to be developed such as EIFDs and growth constraints that limit development in natural and working lands. While some cities, such as Placentia²⁶ have implemented EIFDs to support streetscape, sewer and water infrastructure improvements and to reduce the cost of housing construction in transit-oriented locations, there is some risk to this action, as EIFDs require local approval and participation in creating these districts in order to generate revenue. The Open Space

²⁵ Available at: https://ww2.arb.ca.gov/sites/default/files/2018-11/Final2018Report SB150 112618 02 Report.pdf.

²⁶ SCAG, 2020 RTP/SCS, Chapter 3: A Path to Greater Access, Mobility & Sustainability, page 11.

and Natural Lands Mitigation Program, also appears to be in its initial stages and will require local buy-in to implement measures identified in this program. While these actions and assumptions align with addressing the challenges the region faces with getting development in the right places, implementing the actions will require a series of local actions that today have no definite commitments or guarantees. Therefore, CARB staff has concerns as to whether the SCS will achieve its planned outcomes based on the land use and housing strategy commitments identified.

Transportation Infrastructure and Network Strategy Commitments

SCAG has included nine transportation strategies in the 2020 SCS. These strategies seek to complement its land use and housing strategies and focus on increasing non-SOV mode share and reducing driving. The strategies include transportation demand management (TDM), new transit capital projects, improved bike infrastructure, average vehicle ridership (AVR) for job centers, parking deregulation in transit priority areas, coworking, improved pedestrian infrastructure, safe routes to school, and multimodal dedicated lanes. These transportation strategies support SCAG's goals of improving mobility, accessibility, reliability, and travel safety and increasing personal travel and choices within the transportation system. Altogether, SCAG estimates these strategies will contribute to approximately 16.1 percent²⁷ of its total per capita GHG emission reductions.

SCS Planned Outcomes

These strategies translate into assumptions about changes to the transportation infrastructure and network that will serve the region between 2016 and 2035²⁸. Specifically, the plan:

- Increases the region's total transit operational miles by 24 percent compared to 2016.
- More than doubles bike and pedestrian lanes miles compared to 2016.

²⁷ Transportation strategies are aggregated with other on-model strategies. Only a portion of the reduction would come from transportation strategies.

²⁸ This subsection includes information based on the data table and compares transportation indicators from the 2016 base year to 2035. It also includes information from Strategies Table 2, Off-Model Calculations, and Off-Model Trip and Emissions Data documentation.

- Increases Freeway/General Purpose lanes (4 percent), Freeway Toll lanes (231 percent), Arterial/Expressways (6 percent), Collector Lanes (5 percent), and decreases Freeway HOV lanes (20 percent) compared to 2016.
- Increases vehicle occupancy²⁹ to 1.5 at 21 strategically identified jobs centers through additional TDM measures starting in 2035, mainly in Los Angeles and Orange Counties as shown in Table 3.
- Reduces parking for 76,190 multifamily residential households in Transit Priority Areas³⁰ throughout the region.
- Assumes 40 regional co-working centers³¹ will be created and located in strategically identified areas starting in 2025 as shown in Table 4.
- Adds multimodal dedicated lanes starting in 2025 consistent with the Transit Enhanced Network in the City of Los Angeles Mobility Plan 2035 as shown in Figure 2.

²⁹ The average vehicle ridership strategy aims to increase occupancy. Average vehicle ridership is a measure used by South Coast AQMD that is generally calculated as the total trips to a location such as a worksite, divided by the total vehicles arriving at that location.

³⁰ Transit priority areas are areas within ½-mile of a major transit stop that is existing or planned.

³¹ Co-working is an arrangement in which workers of different companies share an office space, allowing cost savings and convenience through the use of common infrastructure, such as equipment, utilities, and custodial services, and in some cases refreshments and parcel acceptance services. Co-working spaces may charge membership dues. An example is WeWork, which has co-working centers in the SCAG region.

Table 3. Assumed Average Vehicle Ridership Job Center Locations in SCAG

Anaheim-Fullerton	Loma Linda	Santa Ana
Culver City	Long Beach	Santa Monica
Downtown Los Angeles	Marina del Rey	Sherman Oaks
Glendale-Burbank	Newport-Mesa	Thousand Oaks-Newbury
Hollywood	North Hollywood	Torrance-Carson
Irvine-Spectrum	Pasadena	San Fernando Valley
LAX	SNA-Irvine	West Los Angeles

Source: SCAG Submittal to CARB

Table 4. Assumed Key Co-Working Job Center Locations in SCAG

Palmdale	Downtown Riverside	El Monte	Calabasas
Santa Clarita	San Clemente	West Los Angeles	Desert Hot Springs
Lancaster	Chino	Pasadena	Corona
Victorville	Moreno Valley	Pomona	North Hollywood
Lake Elsinore	Downtown Los Angeles	Downey	Newport-Mesa
Anaheim-Fullerton	Long Beach	Slymar	Ventura
Temecula-	ONT-Rancho Cucamonga	San Bernardino	Glendora
Murietta			
Torrance-Carson	Sherman Oaks	San Pedro	Arcadia
Glendale-Burbank	LAX	Industry-Rowland Heights	Irvine-Spectrum
Fontana	Moorpark	Commerce- Montebello	San Fernando Valley

Source: SCAG Technical Methodology

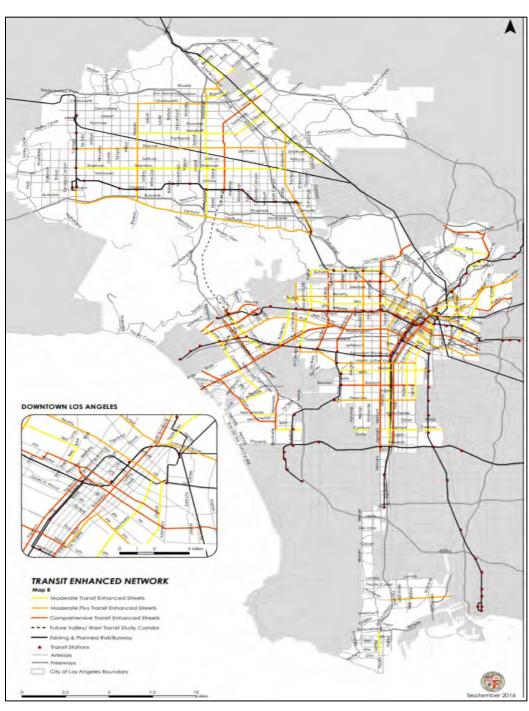


Figure 2. Enhanced Transit Network in the City of Los Angeles

Supporting Actions

Per the 2019 Evaluation Guidelines, CARB staff checked for evidence that appropriate funding, other incentives, technical assistance, or other key actions were present to support the development of the transportation network in the SCS. CARB staff looked for alignment against the project list adopted with the 2020 SCS, as well as other supporting documents³² to see whether the actions are planned and funded within the 2035 target timeframe. CARB staff also considered whether SCAG identified other region-specific funding or technical assistance programs to support implementation of its transportation strategies. In addition, CARB staff evaluated the extent to which the projects included in the SCS complement its land use and housing strategies, with a particular focus on capacity-increasing projects that induce travel and therefore increase VMT/GHG emissions.

CARB staff found that the 2020 SCS transportation strategies are supported by region-specific funding and planning program actions, as well as through direct investments in the project list adopted with the 2020 SCS. In particular, the 2020 SCS includes a number of positive project commitments that align with the Southern California region's SCS land use strategy and help advance GHG emission reductions. As part of the project list adopted with SCAG's 2020 SCS, CARB staff found multi-modal projects that are intended to improve transit, bike and walk options in the region by the 2035 target year. Examples include:

- Extension of Section 1 (\$2.9 billion) and Section 2 (\$2.5 billion) of the Metro Purple Line Westside Subway from Wilshire/La Cienega to Century City and Section 3 to Westwood (\$3.9 billion).
- Extension of Phase 2 of the Metro Gold line from its terminus at Atlantic Station in East Los Angeles to Eastern Los Angeles County (\$44 million).
- Pedestrian and streetscape enhancements along Market Street from the Los Angeles River to Cherry Avenue in Long Beach, including Class II/IV bike lanes, bulb outs, wayfinding signage, crosswalk and transit stop enhancements, construction of at least four curb ramps, pedestrian lighting, traffic signal

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³² Other documents include SCAG's Overall Work Program Fiscal 2020-2021, the SCS Strategies Table 2, and other materials submitted by SCAG.

installation/upgrades, flashing beacons, landscaping, and street trees (\$4.6 million).

- Community linkages to the Hawthorne/Lennox Green Line station in Los Angeles County. The project includes pedestrian and bicycle facility improvements, wayfinding, and landscaping on the major corridors around the station (\$3 million).
- A Safe Routes to School Program in the City of Lake Elsinore, in Riverside County, including community pedestrian/bike safety training, walkability workshops, on campus safety campaigns and increased targeted enforcement, and walk/bike to school days. This program would incorporate SCAG's Go Human Campaign³³ (\$625,000).
- Transportation Demand Management in Riverside County, including rideshare programs, incentives, vanpool programs (e.g. vanpool lease, asset management, consultants), program outreach, etc. (\$16 million).

Table 5 shows CARB staff's summary of SCAG's 2020 SCS transportation strategy commitments and associated supporting actions and investments.

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³³ Go Human is a community outreach and advertising campaign with the goals of reducing traffic collisions in Southern California and encouraging people to walk and bike more through education, advocacy, information sharing and events that help residents reenvision their neighborhoods. More information can be found at http://gohumansocal.org/Pages/Home.aspx.

Table 5. SCAG's 2020 SCS Transportation Infrastructure and Network Strategy Commitments and Supporting
Actions

SCAG's SCS Strategies	Estimated GHG Emission Reductions in 2035	SCS Supporting Actions and Investments	CARB Staff's Analysis
Transportation Demand Management (TDM)	Strategy contributes an unknown amount to the total - 14.2% reduction from all on-model strategies. Specific proportion not provided.	This strategy aims to encourage ridesharing, telecommuting, park-and-ride programs, walking, biking, and alternative work schedules. SCAG has planned expenditure of \$7.3 billion in the project list for TDM strategies to incentivize drivers to reduce driving and encourage other modes. SCAG had developed a TDM Strategic Plan ³⁴ , which identifies new strategies and promote TDM across the region. SCAG will pursue implementation of these strategies in coordination with regional and local partners. In addition, Los Angeles Metro will continue with implementation of AB 2548 ³⁵ , which authorizes Metro to adopt for Los Angeles County a commute benefit ordinance that requires covered employers to offer all covered	Actions Identified: Yes Funding in the RTP/SCS Project List: Yes. While SCAG has dedicated funding to TDM, about 56 percent or \$4.1 billion is planned for expenditure after the 2035 target year. CARB staff is concerned that back loading these investments puts the strategy at risk of not being implemented. SCAG Program Funding Available: Yes. SCAG has

³⁴ SCAG's Transportation Demand Management (TDM) Strategic Plan provides an objective-driven, performance-based planning framework for identifying TDM strategies and programs that increase the efficiency of the transportation system through alternative modes of travel. More information can be found at http://www.scag.ca.gov/Documents/TDMStrategicPlanFinalReportwAppendicesweb.pdf.

³⁵ Assembly Bill 2548 (Friedman, Chapter 173, Statutes of 2018).

		employees a pretax option program with transit passes or vanpool charges. The ordinance is projected to start in January 2021.	existing resources to provide funding, research and technical assistance.
New Transit Capital Projects	Strategy contributes an unknown amount to the total - 14.2% reduction from all on-model strategies. Specific proportion not provided.	This strategy includes investments in transit to encourage mode shift. SCAG has planned expenditure of about \$321 billion (capital, operations and maintenance) in the project list for transit projects including extensions of Metro Gold and Purple lines, new buses, new stops, and other transit improvements. SCAG will continue to support transit primarily through the Regional Transit Technical Advisory Committee. Activities include monitoring and implementing Federal Transit Administration rule-making; assessing causes of transit ridership decline in the region; participating in regional, state, and federal transit studies and forums; researching pilot programs to incorporate new technology and mobility innovations into the delivery of transit services; and monitoring and reporting on regional transit system performance.	Actions Identified: Yes Funding in the RTP/SCS Project List: Yes. While SCAG has dedicated funding to transit, about 51 percent of transit funding, or \$163.5 billion, is planned for expenditure after the 2035 target year. CARB staff is concerned that back loading these investments does not support the target. SCAG Program Funding Available: Yes SCAG has existing resources to provide funding, research and technical assistance.
Improved Bike Infrastructure	Strategy contributes an unknown amount to the total - 14.2% reduction from all on-model strategies. Specific	This strategy includes investments in bike infrastructure to encourage mode shift. SCAG has planned expenditure of \$17.7 billion in the project list for capital active transportation including Class I, Class II, Class III, and Class IV bike facilities, bike signage, bicycle parking, and other improvements. SCAG will host workshops and web-based planning tools for local governments to encourage active transportation	Actions Identified: Yes Funding in the RTP/SCS Project List: Yes. While SCAG has dedicated funding to active transportation, about 54 percent of the active transportation funding or \$9.5 billion is planned for

use. SCAG also provides support and guidance expenditure after the 2035 proportion not provided. to local agencies in the delivery of projects as target year. CARB staff is part of the California Active Transportation concerned that back loading Program. SCAG will also continue to manage the these investments does not Regional Active Transportation Program, support the target. including providing technical assistance to SCAG Program Funding project sponsors, managing planning and Available: Yes. SCAG has program grants, tracking project delivery, and existing resources to provide preparing program amendments, as necessary. funding, research, outreach, SCAG will provide leadership and input at the and technical assistance. state and regional level to ensure California's Active Transportation Program future funding cycles align with regional planning goals. Through continued collaboration with the California Transportation Commission, Caltrans and the Southern California regional transportation planning aAgencies, SCAG will also work to improve the application and allocation procedures for funding. Additionally, SCAG's Go Human campaign and planning resources, like the Regional High Injury Network³⁶ encourage safety and biking and walking in the region

³⁶ Regional High Injury Network identifies stretches of roadways where the highest concentrations of collisions occur on the transportation network, including bicycle and pedestrian injuries and fatalities. This tool can help target resources where they are needed most. More information can be found at http://maps.scag.ca.gov/hin/index.html.

Average	-0.64%	This strategy assumes increases in average	Actions Identified: Somewhat
Vehicle		vehicle ridership at 21 strategically identified jobs	While SCAG has identified
Ridership for		centers through additional TDM measures, which	actions, it is unclear how the 21
Job Centers		would increases vehicle occupancy to 1.5 starting	jobs centers and the private
		in 2035, mainly in Los Angeles and Orange	sector employers within them
		Counties. SCAG has planned expenditure of	will participate at the assumed
		\$7.3 billion in the project list for TDM strategies	levels and how this strategy is
		to incentivize drivers to reduce driving and	different from, and beyond,
		encourage other modes. SCAG has stated this	SCAG's TDM strategy.
		strategy will predominately be funded through	Funding in the DTD/CCC
		new sources of funds from mileage-based user	Funding in the RTP/SCS
		fees and local pricing strategies. Implementation	Project List: Yes
		of this strategy is supported by	SCAG Program Funding
		recommendations in SCAG's TDM Strategic Plan,	Available: Somewhat. SCAG
		including the development of regional TDM	did not identify a specific
		performance metrics and data	amount of funding available
		collection/reporting standards, and support for	from the pricing strategies, but
		the development of Transportation Management	SCAG has existing resources
		Agencies/Organizations (TMAs/TMOs), which	to provide funding, research
		offer alternatives to driving alone and encourage	and technical assistance.
		TDM strategy implementation. Performance	However, funding from pricing
		monitoring and reporting with respect to TDM	strategies is extremely
		implementation and outcomes is an ongoing	uncertain because of the need
		challenge. The TDM Strategic Plan recommends	for legislative changes and
		action steps for improving performance	local buy-in.
		measurement in the SCAG region, including the	_
		development of a regional clearinghouse for	
		TDM data and the development of formalized	
		metrics and regional data standards, such as	

		those set in Rule 2202 ³⁷ . TDM programs and incentives would vary by location reflecting the local context and be driven in part by private sector involvement and provision of direct incentives through the TMA/TMO. Identification of context-sensitive TDM strategies would be facilitated through regional training and planning support that could be provided by SCAG in coordination with local jurisdictions, and through partnerships with non-profit and private sector organizations. The development of TMAs/TMOs may also facilitate implementation tracking through improved monitoring and reporting.	
Parking Deregulation in Transit Priority Areas	-0.43%	This strategy supports local jurisdictions eliminating parking minimums in Transit Priority Areas between 2025 through 2045. SCAG assumes that with this strategy 39% households (76,190 multi-family residential households) will have zero vehicles in 2035 and will be zero-VMT households. SCAG has stated this strategy will predominately be funded through new sources of funds from mileage-based user fees and local pricing strategies. SCAG has stated that support will occur through grant programs to local	Actions Identified: Yes. While SCAG has identified actions, CARB staff is concerned that the assumption of zero-vehicle households are zero-VMT households is not supported by empirical data. Furthermore, communities may not implement this strategy

³⁷ South Coast AQMD requires compliance with Rule 2202, which is designed to reduce mobile source emissions from employee commutes through a menu of emission reduction strategies, such as TDM. More information can be found at http://www.aqmd.gov/home/programs/business/r2202-forms-guidelines.

		jurisdictions that allow for the development and adoption of parking deregulation strategies/ordinances that are informed by community feedback. Through SCAG's grant programs in the past, innovative parking strategies along these lines have been formulated and evaluated by the City of Long Beach and the City of Los Angeles. The City of Santa Monica has adopted parking deregulation policies in 2017 with the adoption of its Downtown Community Plan.	since they might receive pushback over loss of parking. Funding in the RTP/SCS Project List: N/A SCAG Program Funding Available: Somewhat. SCAG did not identify a specific amount of funding available from the pricing strategies, but SCAG has provided funding in the past for supportive research and technical assistance. However, future funding from pricing strategies is extremely uncertain because of the need for legislative changes and local buy-in.
Co-Working	-0.14%	This strategy assumes 40 regional co-working centers will be created and located in strategically identified areas starting in 2025. SCAG assumes that existing long-range commuters (i.e., longer than 100 miles) who do not participate in an existing telecommute program, will have an opportunity to co-work for two days a week. SCAG has stated this strategy will predominately be funded through new sources of funds from mileage-based user fees and local pricing strategies. SCAG intends to sponsor 40 co-working centers across the region.	Actions Identified: Yes. While SCAG has identified actions, CARB staff is concerned that SCAG did not include an existing participation rate based on local data Furthermore, communities may not implement this strategy at the assumed locations or at the assumed level

		In collaboration with local partners and private-sector co-working space providers, this would involve promoting the establishment of co-working sites in these key areas. In addition to technical support for city-led proposals and efforts to identify opportunities for establishing sites in the 40 locations, SCAG will provide financial incentives to known co-working site providers, in addition to connectivity improvements such as 5G and additional co-working services/amenities in public spaces such as libraries, which can also function as co-working sites. The new program would be modeled off SCAG's existing Future Communities Pilot Program, which also combines multiple funding sources and evaluates city-led proposals based on potential VMT savings. Implementation would be coupled with monitoring to track the extent of trip substitution arising from the use of co-working centers.	Funding in the RTP/SCS Project List: N/A SCAG Program Funding Available: Somewhat. SCAG did not identify specific amount of funding available from the pricing strategies, but SCAG is developing a new program to support this strategy. However, future funding from pricing strategies is extremely uncertain because of the need for legislative changes and local buy-in.
Improve Pedestrian Infrastructure	-0.10%	This strategy supports the installation of pedestrian facilities to support safe conditions for walking. SCAG has planned expenditure of \$17.7 billion in the project list for capital active transportation projects, a portion of which includes pedestrian infrastructure such as	Actions Identified: Yes Funding in the RTP/SCS Project List: Yes. While SCAG has dedicated funding to active transportation, about 54 percent of active transportation funding or \$9.5 billion is planned for expenditure after the 2035 target year. CARB staff is

sidewalks, bulb-outs³⁸, ADA ramps³⁹, etc. SCAG will hold workshops and web-based planning tools for local governments to encourage active transportation use. SCAG also provides support and guidance to local agencies in the delivery of projects as part of the California Active Transportation Program. SCAG will also continue to manage the Regional Active Transportation Program, including providing technical assistance to project sponsors, managing planning and program grants, tracking project delivery, and preparing program amendments, as necessary. SCAG will provide leadership and input at the state and regional level to ensure future California's Active Transportation Program funding cycles align with regional planning goals. Through continued collaboration with the California Transportation Commission, Caltrans and the Southern California regional transportation planning agencies, SCAG will also work to improve the application and allocation procedures. Additionally, SCAG's Go Human campaign and planning resources, like the

concerned that back loading these investments does not support the target.

SCAG Program Funding Available: Yes. SCAG has existing resources to provide funding, research, outreach, and technical assistance.

³⁸ Bulb-outs also known as curb-extensions are traffic-calming measures that widen the sidewalk for a short distance typically at intersections or mid-block. These reduce pedestrian crossing distances and improve visibility.

³⁹ ADA ramps are curb ramps that meet the American with Disability Act requirements.

		Regional High Injury Network, encourage safety and walking and biking in the region.	
Safe Routes to School	-0.20%	The Safe Routes to School (SRTS) strategy is an approach to reduce the number of single-occupant vehicle trips to schools and to shorten school commute trips. The SRTS strategy includes a combination of both infrastructure investments, as well as programs that encourage kids to bike and walk to school instead of being driven. SCAG has planned expenditure of \$193 billion in the project list for infrastructure to schools and community education and safety training programs. SCAG funds and manages the Go Human advertising campaigns to encourage the public to walk and bicycle more and the demonstration of new infrastructure to get communities excited about changing their streets. Through continuing Office of Traffic Safety (OTS) grant funding, SCAG will direct investments that will include state and federal grants for SRTS plans and programs at the local level. SCAG recently completed a call for applications for community-based mini-grants, and has confirmed funding to conduct another program during the next cycle. Additional OTS funding will be committed to other locally based programs that further implementation of SRTS strategies at the local level.	Actions Identified: Yes Funding in the RTP/SCS Project List: Yes SCAG Program Funding Available: Yes. SCAG has established programs and funding. CARB encourages SCAG to more closely track the development of SRTS plans and programs and how these result in mode shift.

Multimodal	-0.40%	This strategy involves the conversion of auto	Actions Identified: Yes
Dedicated Lanes		traffic lanes to dedicated lanes for transit. SCAG assumes these lanes will be in place based on the Enhanced Transit Network in the City of Los	Funding in the RTP/SCS Project List: No
		Angeles Mobility Plan 2035, which is an element of Los Angeles' General Plan. SCAG has stated this strategy will predominately be funded through new sources of funds from mileage-based user fees and local pricing strategies. The City of Los Angeles has made commitments to improve transit corridor performance in February 2020 through the Mayor's Executive Directive 25, which calls for a network of bus infrastructure improvements and priority infrastructure, including bus-only lanes. Additionally the City of Los Angeles continues to support LA Metro with NextGen implementation. NextGen is LA Metro's plan to redesign its bus network to better meet the needs of current and future riders. The LA Metro Board in January 2020 approved \$1 billion in transit-supportive capital infrastructure to improve speed and reliability, including dedicated bus lanes. City of Los Angeles and LA Metro staff have formed a Bus Speed Engineering Working Group to identify a priority list of bus-supportive infrastructure projects. As a result, bus lanes on 5th and 6th Streets in Downtown Los Angeles are currently under development with anticipated implementation by the end of calendar year 2020.	SCAG Program Funding Available: Somewhat. While the City of Los Angeles has taken important steps to support implementation of this strategy, these dedicated lanes are conceptual and have not gone through public and environmental review or the design and engineering process and are not currently in the project list. While local funding may be available, other funding sources have not yet been secured. CARB staff is concerned that funding will come from pricing strategies, which is extremely uncertain. because of the need for legislative changes and local buy-in. CARB staff advises SCAG to only include these projects when they have gone through the appropriate review process, have secured funding to be included in the RTP project list, and can be

	reflected in the travel demand
	model.
	1

In addition to CARB staff's evaluation of the strategies and supporting actions, CARB staff evaluated the extent to which capacity-increasing projects that induce travel and therefore increase VMT/GHG emissions were present. CARB staff found that the 2020 SCS includes hundreds of millions of dollars in funding for roadway capacity expansion projects that are counter to region's adopted SCS land use and housing strategy. These include local roadway capacity projects and new mixed-flow lanes on highway segments in San Bernardino County, in the Lancaster/Palmdale area near the Los Angeles/Kern County line, and in Riverside County.

Figure 3. shows a sample of major highway projects⁴⁰ in the region overlaid on SCAG's priority and constraint areas. This figure was prepared by SCAG at CARB's request and combines information across different figures shown in the 2020 SCS and shows that there are major highway projects planned to occur where growth is not envisioned in the plan. Capacity expansion projects, especially those that are counter to the long-term vision for accommodating new growth, increase VMT and work against achieving the State's climate and air quality goals.⁴¹

⁴⁰ A sample means some of the major highway projects listed in the 2020 RTP/SCS project list. SCAG selected and depicted these sample projects in the 2020 RTP/SCS.

⁴¹ See CARB's Policy Brief: Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions. Available at: https://ww3.arb.ca.gov/cc/sb375/policies/hwycapacity/highway_capacity_brief.pdf.

Sample Major Highway Projects
and Priority Growth Areas & Growth Constraints

Ventura
County

Ventura
County

Ventura
County

Planned Hov Connectors
Planned Hov Connector
Planned Hov Connector
Planned Hov Lanes
Planned Hov Lanes
Planned Hov Lanes
Planned Hov Lanes
Planned Hov Connector
Planned Hov Connector Conversion
Planned Ho

Figure 3. Sample of Major Highway Projects Overlaid on Priority Growth Areas and Growth Constraints in SCAG

Source: SCAG

As part of its SCS submittal, SCAG conducted an analysis of the anticipated long-term effects on VMT due to the roadway capacity expansion projects within the SCS by applying off-model adjustments using the Induced Travel Calculator developed by UC Davis.⁴² This analysis included interstate freeways, other freeways, expressways and arterial roads, but excluded toll roads/lanes. Based on this analysis, SCAG estimated that altogether these types of roadway projects would increase the region's GHG

⁴² UC Davis, Induced Travel Calculator. Available at: https://ncst.ucdavis.edu/research-product/induced-travel-calculator.

emissions by 0.56 percent in 2035, or about 2.96 million VMT per day. ⁴³ SCAG included these forecasted VMT increases as part of its overall 2020 SCS emissions estimate and determined that it will still be able to meet its SB 375 GHG reduction target, when implemented. CARB staff reviewed SCAG's approach to capturing the short-and long-term VMT/GHG impacts of its 2020 SCS roadway capacity expansion projects and found them to be reasonable in the context of aggregate impacts on SCS performance. However, for the next SCS, SCAG should evaluate and discuss the VMT impacts of individual capacity projects in comparison with the aggregate analysis used for the SCS. Results of this effort could be used to further refine how SCAG assesses the VMT impacts of capacity projects on its SCS. Future regional target setting for 2035 should consider whether a more aggressive target is appropriate if the 19 percent target is achievable even with such massive increases in VMT over that period.

While CARB staff's analysis supports a conclusion that SCAG's 2020 SCS would meet the target, when implemented, CARB staff has significant concerns that SCAG will not be able to implement the transportation strategies in the 2020 SCS to achieve its GHG reduction and planned outcome benefits. SCAG's SCS backloads billions of dollars in funding for transit and active transportation projects to the 2031 to 2035 and 2036 to 2045 timeframes (see discussion in "Investment Analysis" section of this report). CARB staff is especially concerned with the region's ability to fund and deliver the transit and active transportation projects that are needed to support the 2020 SCS planned outcomes. Support for transit and active transportation projects is important given the fact that the region wants to overcome recent declines in transit ridership and increase transit ridership in the region by 24 percent and double bike and pedestrian lane miles compared to its 2016 level. Delays or removals of transit and active transportation projects will prevent SCAG from meeting its regional targets.

CARB staff is also concerned that SCAG's 2020 SCS is estimated to only just achieve the GHG emission reduction targets, while many of the strategies identified have a high risk of not being implemented. The inclusion of roadway capacity-increasing projects that increase VMT and GHGs could further jeopardize the region's target attainment. SCAG will need to be vigilant about monitoring implementation and deployment levels of

⁴³ Through induced travel, or increases in travel due to changes in residence and workplace locations, whereas changes in the number of trips and trip distances (destination changes); shifts in travel modes, the time-of-day travel occurs, and routes are all captured as part of SCAG's ABM.

strategies, including how projects are prioritized, through 2035 to ensure planned reductions and SB 375 goals are achieved.

Local and Regional Pricing Strategy Commitments

SCAG has included four pricing strategies in the 2020 SCS. These strategies include congestion pricing, job center parking, mileage-based user fees/TNC user fees, and express lanes pricing. These strategies seek to put a price on driving in the region in the following ways:

- Charging a fee to operate vehicles in designated areas, roads, or highway corridors.
- Charging a fee to park in job centers.
- Charging a fee based on auto ownership and mileage driven on the region's road network.
- Charging TNC users a fee based on mileage of their TNC trip.
- Charging a fee based on use of express toll lanes.

These strategies are projected to decrease driving and congestion, increase transit, walking, and biking, and improve the road/highway condition. These strategies also generate revenue through fees for the transportation system, including other transportation and new mobility strategies in the SCS. SCAG estimates these strategies will contribute to approximately 14.2 percent⁴⁴ of its total per capita GHG emission reductions.

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⁴⁴ Pricing strategies are aggregated with other on-model strategies. Only a portion of the reduction would come from pricing strategies.

SCS Planned Outcomes

These strategies translate into assumptions about changes to the cost of transportation options, specifically, the cost to drivers for use of the roadway network in the region between 2016 and 2035⁴⁵. Specifically, the plan assumes:

- Starting in 2021, decreased congestion and increased transit, walking, and biking through a region-wide TNC user fee of 5 cents per mile. This is part of the mileage-based user fee.
- Starting in 2024, decreased congestion and roadway travel with dynamic express lanes that charge rate of \$0 to \$2.65 dollars per mile for passenger vehicles utilizing express lanes. An increase in the number of express toll lanes from 414 lane miles today to 1,370 lane miles by 2035, a 231 percent increase. The planned express lanes throughout the region are shown in Figure 4 and would operate in Los Angeles, Orange, Riverside, and San Bernardino counties starting in 2024.
- Starting, in 2030, decreased congestion and increased transit, walking, and biking through a congestion pricing fee of \$4 dollars⁴⁶ per entry in parts of Los Angeles County between Downtown Los Angeles and West Los Angeles starting as shown in Figure 5.
- Starting in 2025, decreased driving and increased transit, walking and biking by increasing parking pricing by 50 percent in 16 strategic job centers as shown in Table 6.

⁴⁵ This subsection includes information based on the data table and compares transportation indicators from the 2016 base year to 2035. Fee information and timeframe assumptions were taken from the data table and the 2020 RTP/SCS Chapter 4: Paying Our Way Forward and the Transportation Finance Technical Report.

⁴⁶ This bullet relies of data from SCAG's Model Sensitivity Test report, page 21.

• Starting in 2030, decreased overall roadway travel demand and increased transit, walking, and biking, with a new region-wide per-mile fee for drivers of 1.5 cents per mile⁴⁷.

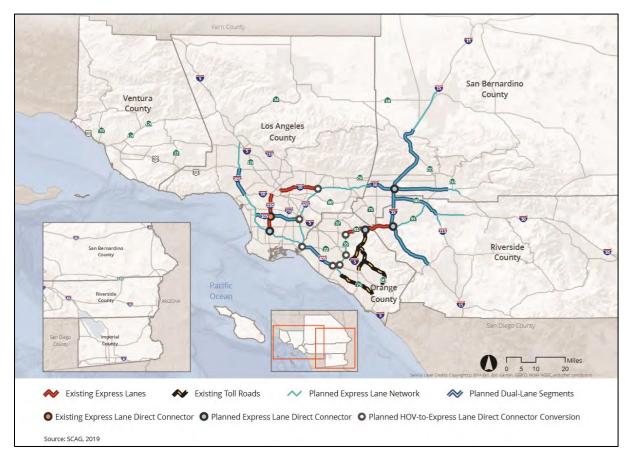


Figure 4. Planned Regional Express Lane Network in SCAG

Source: SCAG, 2020 RTP/SCS

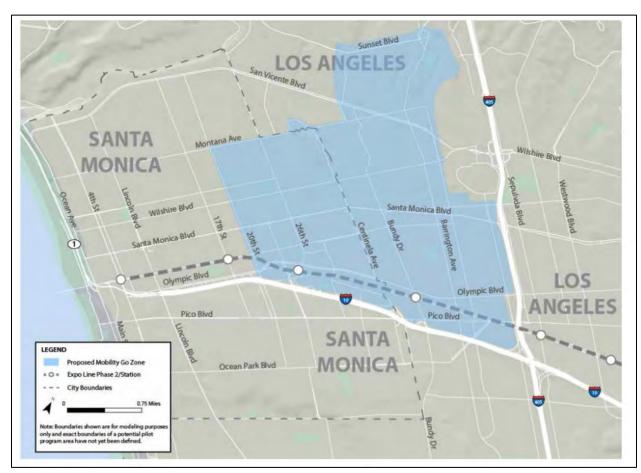
⁴⁷ The mileage-based user fee consists of three components, which are reflected in the Transportation Finance Technical Report (in Table 2, New Revenue Sources & Innovative Financing Strategies, in Nominal Dollars, Billions): \$0.025 per mile is to replace gas taxes from 2030 (and therefore not included as an SCS strategy); \$0.015 per mile as regional VMT fee from 2030; and \$0.05 per mile as TNC user fee. In the activity-based modeling 1% (i.e., \$0.005) of TNC user fee is applied to all VMT in the region in order to capture the proportional TNC population.

Table 6. Assumed Strategic Job Center Parking Pricing Locations

Downtown Los	Irvine-Spectrum	Loma Linda	North Hollywood		
Angeles					
West Los Angeles	Anaheim-Fullerton	San Fernando	Newport-Mesa		
		Valley			
Pasadena	Long Beach	Torrance-Carson	Thousand Oaks-		
			Newbury		
SNA-Irvine	Glendale-Burbank	LAX	Sherman Oaks		

Source: SCAG Submittal to CARB

Figure 5. Congestion Pricing Boundaries (Go Zone)



Source: SCAG, Mobility GO Zone & Pricing Feasibility Study

Supporting Actions

Per the 2019 Evaluation Guidelines, CARB staff checked for evidence that appropriate funding, other incentives, technical assistance, or other key actions were present to support the assumed local and regional pricing strategies in the SCS. In particular, CARB staff looked for alignment against the project list adopted with the 2020 SCS to see whether the actions are planned and funded within the target timeframe. CARB staff also considered whether SCAG identified other region-specific funding or programs to support implementation of its pricing strategies. In addition, CARB staff looked for whether and how SCAG considered equity, which is a key implementation concern for pricing strategies.

CARB staff found that the 2020 SCS local and regional pricing assumptions are supported by some region-specific funding and planning program actions, as well as through some direct investments in the project list adopted with the 2020 SCS. In particular, the 2020 SCS project list includes some express lane corridor projects for funding by 2035 that SCAG assumed when quantifying the SCS's GHG benefits in 2035. The SCS also identifies some initial supporting actions to further support its pricing strategies. One action is to work with Caltrans and other local partners to identify options for governance and administration of revenues from facility-based pricing. Another action is to work with regional partners to develop pilot programs and pursue funding for piloting roadway pricing mechanisms, such as facility-based pricing (e.g., congestion pricing) and mileage-based fees, in partnership with the State, federal, and local agencies, and private sector organizations. SCAG also recently applied, in partnership with SACOG and SANDAG, for a Caltrans planning grant to design a pricing pilot.

Table 7 shows CARB staff's summary of SCAG's 2020 SCS local and regional pricing strategy commitments and associated supporting action and investments.

Table 7. SCAG's 2020 SCS Local and Regional Pricing Strategy Commitments and Supporting Actions

SCAG's SCS Strategies	Estimated GHG Emissions Reduction in 2035	SCS Supporting Actions and Investments	CARB Staff's Analysis
Congestion Pricing	Strategy contributes an unknown amount to the total - 14.2% reduction from all on-model strategies. Specific proportion not provided.	This strategy assumes a local road charge program of \$4 dollar entry fee starting in 2030 in parts of Los Angeles County between Downtown Los Angeles and West Los Angeles. SCAG assumes \$77.8 billion will be generated from this program. In 2019, SCAG prepared a Mobility Go Zone and Pricing Feasibility Study ⁴⁸ to understand how cordon congestion pricing could be structured. SCAG continues to collaborate with local jurisdictions and LA Metro, community-based organizations (CBOs), business, and other key stakeholders on potential congestion pricing pilot projects to address key implementation factors, including equity. SCAG applied as an applicant for a Caltrans Sustainable Transportation Planning grant with SACOG and SANDAG to pilot roadway pricing mechanisms, however this bid was not successful.	Actions Identified: Yes. SCAG has made some initial steps to plan and analyze congestion pricing. However, CARB staff is concerned that this program will not be implemented within the identified timeframe because this strategy requires state enabling legislation and local support. Funding in the RTP/SCS Project List: No SCAG Program Funding Available: Somewhat. SCAG can provide funding, research and technical assistance, however, CARB is concerned

 $^{{}^{48}\,}More\ information\ can\ be\ found\ at\ \underline{https://www.scag.ca.gov/Documents/MobilityGoZone\ Report\ FINAL.pdf}.$

			that if this strategy is not implemented, SCAG's funding gap may not be filled and the implementation of other RTP/SCS strategies may be at risk. Additionally, more work needs to be done around program development and implementation, specifically around fee collection, revenue allocation, and equity considerations.
Job Center Parking	Strategy contributes an unknown amount to the total - 14.2% reduction from all on-model strategies. Specific proportion not provided.	This strategy assumes a 50 percent increase in parking pricing in 16 regional jobs centers. SCAG assumes \$77.8 billion will be generated from the local road charge program, a portion of which will come from the job center parking pricing. SCAG assumes increases in parking costs starting in 2025. SCAG will work with local jurisdictions in evaluating opportunities to implement parking pricing strategies for their job centers, and it has already initiated a data collection effort to better understand parking costs and utilization rates	Actions Identified: Yes. CARB staff is concerned that this program will not be implemented within the identified timeframe because this strategy requires local and private support and buyin from stakeholders and the public regarding parking pricing, which makes it unclear whether implementation would reach assumed levels. Funding in the RTP/SCS Project List: N/A

			SCAG Program Funding Available: Somewhat. SCAG has funded and completed some research and coordination with local jurisdictions, but it is unclear how much of these efforts have resulted in changes to parking pricing.
Mileage- Based User Fee/TNC User Fee	Strategy contributes an unknown amount to the total - 14.2% reduction from all on model strategies. Specific proportion not provided.	This strategy assumes fees on driving and includes a mileage based-user fee and a TNC user fee region-wide. For funding purposes, SCAG assumed a 4 cent mileage-based use fee, which includes a 2.5 cents per mile will be in place to replace the gas tax and a 1.5 cent fee per mile starting in 2030. The mileage base user fee is projected to generate \$42.7 billion. SCAG also assumes a TNC user fee at about 5 cents per mile starting in 2021. SCAG assumes this program would generate \$4.7 billion. SCAG, in collaboration with stakeholders, will pursue actions related to demonstrations and eventual full deployment of a mileage-based user fee system through research and evaluation of implementation cost and administrative methods for fee collection and revenue allocation. SCAG will work to engage communities to better understand equity concerns and explore opportunities for appropriate mitigations including exemptions and credits, as applicable. SCAG is an	Actions Identified: Yes. CARB staff is concerned that this program will not be implemented within the identified timeframe because this strategy requires congressional and state enabling legislation and local action. Funding in the RTP/SCS Project List: N/A SCAG Program Funding Available: Somewhat. SCAG has funded and completed research and has coordinated with stakeholders. CARB staff is concerned that if this strategy is not implemented, SCAG's funding gap may not be filled and the

		active member of the Mileage-Based User Fee Alliance (MBUFA). As a member of MBUFA, SCAG has participated in and hosted meetings and shared findings from research studies. SCAG completed a legislatively-mandated live pilot demonstration in 2017 and has continued to support and coordinate with Caltrans on other efforts to explore the feasibility of road charges through a pay-at-the-pump demonstration program. LA Metro is also currently exploring a TNC fee.	implementation of other RTP/SCS strategies may be at risk. Additionally, more work needs to be done around program development and implementation, specifically around fee collection, and revenue allocation, and equity considerations.
Express Lane Pricing	Strategy contributes an unknown amount to the total - 14.2% reduction from all on-model strategies. Specific proportion not provided.	This strategy includes investment in express lanes where drivers pay a toll to drive in these lanes. SCAG has planned expenditure of \$13.4 billion to high-occupancy vehicles/express lanes in the project list. SCAG assumes express lanes will generate \$32.7 billion in revenue. The project list builds on the implementation of the I-10 and I-110 Express Lanes in Los Angeles County and the recent extension of the SR-91 Express Lanes between Orange and Riverside counties. Implementation efforts underway include planned express lanes on I-105 in Los Angeles County, I-15 in Riverside County, I-15 and I-10 in San Bernardino County, and I-405 in Orange County and Los Angeles County. SCAG anticipates continued work with the region's county transportation commissions and Caltrans to further the regional express lane network with an update of SCAG's Regional Concept of Operations (ConOps).	Actions Identified: Yes Funding in the RTP/SCS Project List: Yes SCAG Program Funding Available: Yes, SCAG can provide funding, research and technical assistance.

SCAG is currently in the process of reconvening its Regional Express Lanes Working Group to oversee updates to the Regional ConOps.	

In addition to its evaluation of the strategies and supporting actions, CARB staff's also looked for whether and how SCAG considered equity when developing its pricing strategies. CARB staff found that SCAG continues to collaborate with local jurisdictions and LA Metro, CBOs, business, and other key stakeholders on potential congestion pricing pilot projects to address key implementation factors, including equity. This included hosting a series of listening sessions to understand the concerns of environmental justice communities and to inform recommendations for an equity-focused outreach strategy.

While CARB staff's analysis supports a conclusion that SCAG's 2020 SCS would meet the target, when implemented, CARB staff has significant concerns that SCAG will not be able to implement the local pricing strategies in the 2020 SCS to achieve its GHG reduction and planned outcome benefits. CARB staff acknowledges the significant leadership and partnership work needed to realize the 2020 SCS pricing strategies. CARB staff are concerned that the strategy deployment assumptions for these strategies rely on programs and partnerships outside of SCAG's control, including local jurisdictions and private companies that do not have existing authority, ordinances, or programs in place to impose fees and parking pricing. Supporting actions that more squarely address these implementation steps need to be identified and implemented to achieve the emission reductions assumed in the 2020 SCS. SCAG will need to demonstrate further progress to implement these strategies by its next plan cycle for SCAG to continue receiving the full amount of GHG emission reductions assumed.

Electric Vehicle and New Mobility Strategy Commitments

SCAG has included five strategies related to electric vehicles (EV) and new mobility services, which include EV charging infrastructure, EV incentive programs, transit/TNC partnerships, bike share and micromobility, and car share. These strategies seek to accelerate the penetration of EVs in the region by providing infrastructure and incentives to help drivers switch to using EVs, supporting first-last mile partnerships to transit, and supporting shared fleets. The strategies are intended to support SCAG's goal of leveraging new transportation technologies and data-driven solutions to result in more efficient travel. These strategies will result in a total of 2.5 percent reduction in per capita GHG emissions.

SCS Planned Outcomes

These strategies translate into assumptions about the availability of EV-supportive infrastructure and incentives, transit/TNC partnerships, and new mobility fleets that will serve the region between 2016 and 2035⁴⁹. Specifically, the plan assumes:

- 58,423 new EV charging connectors between 2020 to 2035 for a total of 68,571 region-wide to support electric vehicles in SCAG.
- Funding for subsidies and rebates for 100,000 purchases of new EVs between 2030 to 2035.
- Deployment of a transit/TNC partnership program around all Los Angeles Metro Rail and Bus Rapid Transit (BRT) stations in Los Angeles County between 2030 to 2035.
- Deployment of 167,176 bikes and scooters around all Transit Priority Areas and transit stations between 2020 to 2035.
- 150,000 residents participate in car share programs throughout all Neighborhood Mobility Areas⁵⁰ in 2035.

Supporting Actions

Per the 2019 Evaluation Guidelines, CARB staff checked for evidence that appropriate funding, other incentives, technical assistance, or other key actions were present to support the assumed availability of EV-supportive infrastructure, EVs, and other new mobility services in the SCS. CARB staff looked for alignment against the project list adopted with the 2020 SCS to see whether the actions are planned and funded within the target timeframe. CARB staff also considered whether SCAG identified other

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⁴⁹ This subsection includes information-based assumptions from SCAG's Technical Methodology, Strategies Table 2, Off-Model Calculations, and Off-Model Trip and Emissions Data documentation. ⁵⁰ Neighborhood Mobility Areas are areas with a high number of intersections, low observed travel speed, high mix of uses and high accessibility to "everyday" destinations. These are areas where complete streets and sustainability policies support and encourage replacing or reducing automobile use with other modes.

region-specific funding or technical assistance programs to support implementation of its EV and new mobility strategies.

CARB staff found that SCAG'S 2020 SCS EV and new mobility strategy assumptions are supported by some region-specific funding and planning program actions, as well as through some direct investments in the project list adopted with the 2020 SCS. In particular, the 2020 SCS project list includes EV infrastructure installation projects that are expected to be completed by 2035. In addition, SCAG's 2020 SCS carries over actions and programs from the 2016 SCS in support of EV charging, infrastructure and innovative education programs to support its new mobility strategies. These include the SCAG Electric Vehicle Program⁵¹ and Department of Energy-designated Clean Cities Coalition⁵² to accelerate the deployment of EV charging infrastructure. SCAG has and will continue to host events and create programming to help inform stakeholders in the region about new mobility.

Table 8 shows CARB staff's summary of SCAG's 2020 SCS EV and new mobility strategy commitments and associated supporting actions and investments.

⁵¹ More information at: http://sustain.scaq.ca.gov/Pages/AFV.aspx.

⁵² More information at: http://cleancities.scag.ca.gov/Pages/default.aspx.

Table 8. SCAG's 2020 SCS EV and New Mobility Strategy Commitments and Supporting Actions

SCAG's SCS Strategies	Estimated GHG Emissions Reduction in 2035	SCS Supporting Actions and Investments	CARB Staff's Analysis	
Electric Vehicle Charging Infrastructure	-1.16%	This strategy supports increasing the number of EV charging stations to encourage adoption of EVs. SCAG assumes 58,423 new charging connectors will be implemented between 2020 to 2035 for a total of 68,571 region-wide to EVs. SCAG assumes that 100% of EVs in the region will have access to a charger and drive 13 electric miles a day. The project list includes \$300 million for a Regional PEV Charger Program to provide charging infrastructure. In addition, SCAG has allocated \$584,803 for its EV Readiness Program, which includes \$400,000 to conduct an Electric Vehicle Charging Station Study. SCAG is working with local jurisdictions to accelerate the deployment of EV charging infrastructure through its Electric Vehicle Program ⁵³ and the Department of Energy-designated Clean Cities Coalition. SCAG will continue to host events	Actions Identified: Yes. however, CARB staff found SCAG's assumptions that 100% of the EVs in the region will have access to a charger and will drive 13 miles on electricity a day to be aggressive. SCAG provided limited EV infrastructure location information and travel behavior data in the SCS, and CARB staff could not verify these assumptions. CARB staff recommends that SCAG collect local EV usage data and provide necessary policy commitments to support	

⁵³ The EV Readiness Program seeks to prepare the Southern California region for EVs through plans, tools, and technical assistance. More information is available at https://scag.ca.gov/programs/Pages/RegionalElectric.aspx.

		T	<u></u>
		and create programming to help inform stakeholders in the region about zero-emission vehicles and their supporting infrastructure. SCAG previously conducted a survey of all jurisdictions in the region to assess compliance with AB 1236 ⁵⁴ , a bill that requires jurisdictions to streamline permitting for public charging stations. SCAG also created a Plug-In Electric Vehicle online mapping tool to help support charging siting decisions. SCAG plans to continue updating the tool. SCAG is currently funding a project that would create an electric vehicle charging station site suitability analysis for the region and create tailored plans and outreach to help 18 large and small jurisdictions in the region prepare for more charging. The results from the site suitability analysis are intended to be hosted on the Plug-In Electric Vehicle online mapping tool so they will be accessible to the public. The project is anticipated to start in Fall 2020.	these assumptions, or refine the existing assumption to be more conservative. Funding in the RTP/SCS Project List: Yes SCAG Program Funding Available: Yes. SCAG has allocated funding for its EV Readiness Program and Electric Vehicle Charging Station Study. SCAG also continues to invest in local EV charging tools to support siting decisions.
Electric Vehicle Incentives	-0.60%	This strategy seeks to facilitate the purchase of EVs by offering purchase incentives. SCAG assumes 100,000 new EV purchases between 2030 to 2035 from this strategy region-wide. SCAG assumes that 100% of the new EVs purchased will be used everyday when calculating the eVMT reduction,	Actions Identified: Yes Funding in the RTP/SCS Project List: Yes

 $^{^{54}}$ Assembly Bill 1236 (Chiu, Chapter 598, Statutes of 2015).

whereas the travel survey indicates that only 65% of vehicles are used per day in the SCAG region. The project lists allocates \$2 billion for a PEV Rebate Program. In addition, SCAG has allocated \$584,803 for its EV Readiness Program, which seeks to increase rapid deployment of electric vehicles in the region. SCAG has stated this strategy will predominately be funded through new sources of funds from mileage-based user fees and local pricing strategies. SCAG has stated that this strategy is not yet fully developed. SCAG stated that they will work with local partners to identify revenue streams to provide local EV purchase incentives. SCAG is currently in the initial scoping stages to identify appropriate public and private partners as well as to initiate a needs assessment and opportunities analysis.

SCAG Program Funding Available: Somewhat

CARB is concerned that funding from pricing strategies is extremely uncertain and SCAG's assumptions may overestimate the GHG reductions from this strategy since it assumes 100% of EVs will be used on a daily basis, which is not supported by the data. This assumption may overestimate the eVMT and GHG reductions. CARB recommends SCAG collect and utilize local data on EV uptake and usage to inform its assumptions. Furthermore, SCAG should provide details around regional incentive programs, including who implements the programs, the rebate amounts, and who can receive these rebates/incentives. This is especially important when CARB staff evaluate the plan to ensure that the SCS

			strategy is surplus to State actions and incentives.
Transit/TNC Partnership Program	-0.04%	This strategy would subsidize transportation network company (TNC) rides as a first last mile strategy within a 2-mile radius around all Metro rail stations in Los Angeles County. The project list identifies funding for a TNC partnership with Lyft for \$1.75 million for a first/last mile program for select transit stations with a 2019 completion year. SCAG has stated this strategy will predominately be funded through new sources of funds from mileage-based user fees and local pricing strategies. SCAG will continue to analyze the costs and benefits of subsidized pooled TNC trips within targeted areas. SCAG will address barriers to safe and efficient pick-up and drop-off strategies through its curbside management studies. If warranted, SCAG will develop funding for full program implementation as part of the next Connect SoCal cycle. SCAG participated with SANDAG, MTC, and the County of San Francisco on a statewide TNC data collection effort funded by a Caltrans grant. Data collected through this project will enable MPOs and planning	Actions Identified: Yes Funding in the RTP/SCS Project List: No The only Transit/ TNC partnership project on the project list appears to have already been completed. SCAG Program Funding Available: Somewhat CARB is concerned that funding from pricing strategies is extremely uncertain because of the need for legislative changes and local buy-in. While there are currently some first-last mile partnerships programs at specific transit stations in the region, such as Blue LA ⁵⁵ , which CARB is a partner on,

⁵⁵ Blue LA is an electric vehicle car-share program that provides vehicles at some transit stations and other locations in Los Angeles. More information is available at https://www.bluela.com/about-bluela.

		agencies to effectively model travel behavior and explore policies to guide these emerging modes.	there is no such program with TNCs that covers all the LA Metro Stations. SCAG needs to develop more specific actions around partnership activities and explain how these are distinct from efforts supported by CARB funding.
Bike Share & Micromobility	-0.30%	This strategy supports docked and dock-less bike sharing and e-scooters for short trips and first-last mile connections. SCAG assumes deployment of 167,176 bikes and scooters around all Transit Priority Areas and transit stations between 2020 to 2035. The project list allocates \$9.86 million to bike share, including education and program implementation, providing bicycles, and bike share stations/kiosks. Furthermore, \$153 million is identified in the project list for complete streets, new mobility, and curbspace management initiatives. SCAG has stated this strategy will predominately be funded through new sources of funds from mileage-based user fees and local pricing strategies. SCAG will promote research and analysis of best practices and proposed policies that address barriers to safe deployment of shared micromobility in the target areas. SCAG will leverage increased active transportation infrastructure such as protected bike lines to facilitate greater usage of micromobility. SCAG has completed a study of docked publicly run bike share systems, and will continue to analyze	Actions Identified: Yes. However, several communities within the SCAG region prohibit bike share and micromobility options within their jurisdictions. CARB staff recommend that SCAG develop a program or provide incentives to local jurisdictions and bike share and micromobility companies to encourage deployment around transit priority areas. Funding in the RTP/SCS Project List: Yes, however CARB recommends that SCAG clearly state if funding is going to bike share and micromobility projects, instead of using the broader term of new mobility as this could encompass other

		deployment of dockless shared bikes, e-bikes, and e-scooters.	transportation options not related to this strategy.
			SCAG Program Funding Available: Somewhat. SCAG has previously funded research, but has stated that the strategy will predominately be funded with pricing strategy revenues, as well as relies on private companies for deployment, which are both extremely uncertain.
Car Share	-0.44	This strategy supports car share, which allows for short-term rental of a vehicle. SCAG assumes 150,000 residents will participate in the car share programs throughout Neighborhood Mobility Areas by 2035. SCAG has stated this strategy will predominately be funded through new sources of funds from mileage-based user fees and local pricing strategies. SCAG will research and share best practices as part of its shared mobility policy development to support the program.	Actions Identified: Yes Funding in the RTP/SCS Project List: No SCAG Program Funding Available: Somewhat. SCAG will fund research, but has stated that the strategy will predominately be funded with pricing strategy revenues, as well as rely on private company deployment, which are both extremely uncertain.

While CARB staff's analysis supports a conclusion that SCAG's 2020 SCS would meet the target, when implemented, CARB staff has significant concerns that SCAG will not be able to implement the EV and new mobility strategies in the 2020 SCS to achieve its GHG reduction and planned outcome benefits. CARB staff found that the supporting actions for these strategies primarily rely on revenues from the mileage-based user fee and local pricing strategies to support the implementation of these new mobility strategies, as stated in the "Local and Regional Pricing Strategy Commitments" section above. CARB considers this risky because if these pricing strategies are not implemented then revenue will not be available to support these new mobility strategies.

Further, CARB staff found that the deployment assumptions within the 2020 SCS rely on programs and partnerships outside of SCAG's control, including reliance on new mobility providers, local jurisdictions, and private companies that often have no established programs in place. In addition, SCAG itself has stated that additional research, funding, or program development may be necessary for implementation of the EV incentives and transit/TNC partnerships strategies. This is concerning given the dynamic nature of these new mobility strategies and the degree to which these strategies are forecast to contribute to target achievement. SCAG will need to be vigilant about implementing these strategies though 2035 and making adjustments as necessary to ensure planned reductions and SB 375 goals are achieved.

Looking across all four policy analysis categories, CARB staff's analysis found that SCAG's 2020 SCS includes evidence of policy commitments for its strategies, that when implemented would meet the target. However, areas of concern for CARB staff are that many strategies still require funding sources, legislative authority, and program development to be implemented.

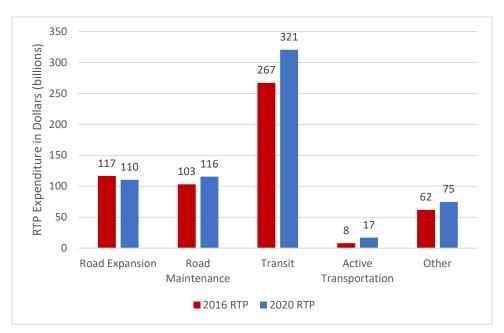
Investment Analysis

CARB staff evaluated whether the 2020 investments support the expected GHG emission reductions, by looking for evidence within the project list adopted with the 2020 SCS for commitments to funding SCS-consistent projects by 2035. CARB staff also qualitatively assessed the risk of delay to delivering projects that advance SCS goals based on assumed available funding sources.

Based on CARB staff's review of SCAG's project list, CARB staff found that the 2020 SCS included a number of projects in the project list for funding that would advance implementation of the SCS, as discussed in the "Policy Analysis" section of this report. For example, SCAG is increasing funding for transit and active transportation modes.

A comparison between the 2016 and 2020 SCS investments by mode are shown in Figure 6 and Figure 7. Total spending increased by nearly 13 percent, to approximately \$639 billion compared to approximately \$556 billion in the 2016 SCS. Of the total budget, approximately 35 percent is dedicated to road expansion, operations, and maintenance, 50 percent is for capital, operations and maintenance for transit, 3 percent is dedicated to active transportation, and the remaining 12 percent is for debt service obligations, transportation system management, other investments such as incentives, EV chargers, etc. Approximately 13 percent (\$316 billion) is dedicated to operations and maintenance, which increased from \$275.5 billion in the 2016 SCS. The budget for transit (capital projects and operation and maintenance) has increased 17 percent to \$320.6 billion from \$267.1 billion between the 2020 and 2016 SCSs respectively. Lastly, the bicycle and pedestrian improvements budgets increased 54 percent to \$17.7 billion dollars from \$8.1 billion in the last SCS.

Figure 6. Investment by Mode in SCAG's 2020 SCS Compared to the 2016 SCS (Total Dollars)



Source: SCAG 2016 RTP/SCS and 2020 RTP/SCS Expenditures Table 8

60% 48% 50% RTP Expenditure 50% 30% Percentage of 21% 19% 18% 20% 11% 12% 10% 3% 0% **Road Expansion** Transit Other Maintenance Transportation ■ 2016 RTP ■ 2020 RTP

Figure 7. Investments by Mode in SCAG's 2020 SCS Compared to the 2016 SCS (Percent of Total Investment)

Source: SCAG 2016 RTP/SCS and 2020 RTP/SCS Expenditures Table 8

The increase in planned expenditure for transit, bike and pedestrian improvements is aligned with SCAG's assumptions around increased non-SOV mode share, increased transit ridership, and forecasted declines in VMT and GHG emissions. However, CARB staff is concerned with the risk of delivering SCS-supportive projects on the project list by 2035. As shown in Table 9, more than half of the plan's investments for transit/passenger rail and active transportation projects (which make up a portion of the "Other" expenditure category) are back loaded to after the SCS target year of 2035 (i.e., post 2035). Planned expenditures for transit/passenger rail and active transportation projects prior to 2035 (i.e., 2031-2035) are not necessarily associated with any firm funding sources, as they are anticipated to rely in part on revenue from the pricing strategies.

Table 9. SCAG SCS Investment Breakdown by Expenditure Category and Fiscal Year^{56,57}

Expenditure Category	FY 2021- 2025 (B\$)	FY 2021- 2025 (%)	FY 2026- 2030 (B\$)	FY 2026- 2030 (%)	FY 2031 -2035 (B\$)	FY 2031- 2035 (%)	FY 2036- 2045 (B\$)	FY 2036 - 2045 (%)	Total (B\$)
Local Highway	\$11.9	17%	\$11.8	17%	\$13.3	20%	\$31.2	46%	\$68.2
State Highway	\$12.1	13%	\$15.1	16%	\$17.3	19%	\$47.3	52%	\$91.8
Transit/Passenger Rail	\$38.0	12%	\$48.0	15%	\$71.1	22%	\$163.5	51%	\$320.6
Other	\$15.3	10%	\$21.3	13%	\$31.6	20%	\$90.1	57%	\$158.3

Source: SCAG

The 2020 SCS does include new revenue assumptions from its new roadway user fee strategies. Of the new revenue assumed⁵⁸, \$42.7 billion from 2030 to 2045 is from the mileage-based user fee strategy, which includes a TNC user fee that would separately generate \$4.7 billion in revenue from 2021to 2045. The congestion pricing strategy would generate \$77.8 billion from 2030 to 2045. Investment of these funds is not yet programmed toward specific projects, but SCAG anticipates these to support some of the SCS transportation and new mobility strategies⁵⁹. While commitment of these

⁵⁶ Notes: \$ amounts in billions. Local highway includes: arterials, and regionally significant local streets and roads Operation and Maintenance (O&M). State highways includes: High Occupancy Vehicle/Express Lanes, Mixed-Flow and Interchange Improvements, and State Highways (O&M), Transit/Passenger Rail includes: Transit, Passenger Rail, Transit (O&M), and Passenger Rail (O&M). Other includes: Goods Movement, TSM, Active Transportation, TDM, Other (Capital), and Debt Service.

⁵⁷ For financial analysis purposes, SCAG does not include pre-2020 projects, recognizing that the projects are complete. However, the Financially Constrained Project List, includes some pre-2020 projects, simply reflecting the programming of these projects in the current FTIP. These projects have already been obligated. Nevertheless, sponsoring agencies often keep the projects programmed during final contract close out.

⁵⁸ This section refers to investment information provided in SCAG's 2020 RTP/SCS Transportation Finance Technical Report.

⁵⁹ SCAG, Off-Model Trip and Emissions Data documentation.

potential funds toward SCS-supportive projects is helpful, CARB staff remains concerned that if the SCS pricing strategies are delayed or not implemented, transit and active transportation projects envisioned to be constructed between 2031 and 2035 will not be delivered on time or at all.

In addition, SCAG includes revenue assumptions around the Cap-and-Trade Program auction proceeds. Specifically, SCAG assumes the region will get \$2.2 billion from Cap-and-Trade proceeds⁶⁰. This forecast is based on current funding levels reported by the State Controller for the Low Carbon Transit Operations Program and award lists as reported by Caltrans. Given the uncertainty about future allowance prices, SCAG assumes annual growth to be flat and ends after 2030. CARB staff is concerned with these assumptions, as these dollars would be applied to support SCS implementation but are also not firm funding amounts, as program dollars are competitive and total amounts available vary by time period. SCS project funding could be further impacted based on changes to available transportation revenues due to the COVID-19 pandemic.

On the whole, CARB staff finds that the 2020 RTP/SCS project investments support the implementation of the 2020 SCS strategies and achievement of the SCS's estimated GHG reduction benefits. However, CARB staff have identified considerable risk to delivery of SCS-supportive projects on the project list by 2035, as they are not associated with any firm funding, particularly due to reliance on pricing strategies.

Plan Adjustment Analysis

The Plan Adjustment Analysis evaluates whether and what measures are being taken, as necessary, to correct course to meet an MPO's target if the region is falling behind on implementation of its SCS strategies. CARB staff reviewed how the implementation of SCAG's SCS performed to date using observed land use and transportation system data⁶¹. CARB staff found that SCAG is not on track to achieve its previous 2016 SCS planned outcomes for 2020 and 2035. Observed land use and travel data for the region shows declines in transit ridership and significant unrealized new development within infill areas in the region, which are inconsistent with the trends and values assumed in the 2016 SCS to meet the region's GHG reduction targets.

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⁶⁰ SCAG, 2020 RTP/SCS Transportation Finance Technical Report.

⁶¹ See "Tracking Implementation" section of Appendix C: MPO Reporting.

Given this finding, CARB staff looked for evidence that SCAG's 2020 SCS considered these challenges and either changed its SCS strategies, or put additional measures in place to accelerate implementation of its SCS strategies in order to stay on track to meet its GHG reduction target⁶².

CARB staff's review of the 2020 SCS found that SCAG builds upon and expands land use and transportation strategies established over several planning cycles. SCAG also included several new strategies in the plan such as the transit/TNC partnership program, co-working, average vehicle ridership at job centers, parking deregulation in transit priority areas, new transit capital projects, TNC user fees, and congestion pricing. These new strategies are intended to help SCAG close the gap in order to meet its GHG reduction goals⁶³.

While preparing the 2020 SCS, SCAG reassessed strategies and benefits claimed in the last plan. SCAG removed the off-model strategy Neighborhood Electric Vehicles that was included in the 2016 RTP/SCS due to low market penetration and lack of implementation and incentives at the regional level⁶⁴. SCAG also no longer anticipates GHG reduction from general TNC activity in the region based on new information about TNC trips⁶⁵, which suggested TNCs may not necessarily reduce VMT. SCAG only assumes reductions associated with TNCs through user fees and transit/TNC partnerships. The sections below describe other adjustments SCAG made to its assumptions, models, and strategies.

Key Assumption Changes

SCAG adjusted its 2035 baseline due to changes in e-commerce⁶⁶ and telemedicine⁶⁷, which reflects fewer light-duty vehicle trips. Under e-commerce, car trips may be replaced with heavy vehicle trips, while telemedicine is forecasted to replace certain types of medical trips. SCAG claims a combined 0.35 percent reduction of GHG

⁶² See "Incremental Progress" section of Appendix C: MPO Reporting for SCAG's assessment of how changes to its SCS strategies between the 2016 SCS and 2020 SCS contributed to achievement of its 2035 target.

⁶³ SCAG, 2020 RTP/SCS, Chapter 0 Making Connections, page 4.

⁶⁴ Technical Methodology to Estimate Greenhouse Gas Emissions for Connect SoCal (2020-2045 Regional Transportation Plan/Sustainable Communities Strategy)
Southern California Association of Governments

⁶⁵ SCAG SCS Submittal Overview document.

⁶⁶ E-commerce refers to the buying and selling of goods or services using the internet.

⁶⁷ Telemedicine refers to the use of telecommunication technology for the use of virtual doctor's visits.

emissions from these activities by 2035. This is comparable to the region-wide bike share and micromobility strategy, which is envisioned to achieve a 0.30 percent reduction of GHG emissions. These baseline adjustments result in GHG emission reductions from non-SCS strategies.

Model Changes

SCAG developed and maintained a traditional four-step travel demand forecasting model for its first-and second-round RTP/SCSs. Due to the limitations in the model sensitivity to policies, SCAG introduced its newly developed ABM for the 2020 RTP/SCS. This enhanced SCAG's travel demand model sensitivities to land use and transportation policies, including newly introduced transportation services such as bus rapid transit and high-speed rail. The ABM was calibrated and validated to 2016 travel conditions using multiple data sources including traffic counts from Highway Performance Monitoring System (HPMS) and speed data from the Performance Measurement System (PeMS). The modeled results are consistent with those data sources and concluded by the model peer-review committee to meet current state of practice comparing to peer MPOs⁶⁸.

CARB staff observed the following policy changes and adjustments between SCAG's 2020 SCS and 2016 SCS.

Land Use and Development

- To overcome previous challenges, address community feedback, and accelerate its efforts to meet its target, SCAG has expanded its priority growth areas and added new constrained areas, to help catalyze infill development.
- SCAG included a new policy to support the creation of EIFDs to pave the way for economic development and reduce the cost of housing construction in transitoriented locations.

Transportation

SCAG introduced five new transportation strategies compared to the 2016 SCS, which include job center parking, co-working, average vehicle ridership for job centers,

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⁶⁸ SCAG, 2016 Regional Travel Demand Model and Model Validation. April 2020.

multimodal dedicated lanes, and parking deregulation in transit priority areas. SCAG also updated its assumptions for transportation strategies from the 2016 SCS as follows:

- Adjusted its transit assumptions between the 2016 SCS and the 2020 SCS for the 2035 target year. Total transit operational miles assumptions increased from 715,412 to 765,171 (7 percent) in 2035.
- Increased active transportation, bike and pedestrian lane mile assumptions for the 2035 target year from 11,500 to 18,150 (58 percent increase) between the 2016 SCS and 2020 SCS.

Roadway Pricing

• SCAG introduced two new pricing assumptions compared to the 2016 SCS, which include congestion pricing and the TNC user fees that are intended to both help address long-term transportation funding sustainability concerns, while also helping to support achievement of VMT reduction. As part of this SCAG is working with Caltrans and other local partners to identify options for governance and administration of revenues from congestion-based pricing, in coordination with ongoing studies. SCAG also continues to collaborate with local jurisdictions and LA Metro, community-based organizations (CBOs), business, and other key stakeholders on potential congestion pricing pilot projects to address key implementation factors, including equity. SCAG also updated its assumptions around mileage-based user fees and express lanes, which were already part of the 2016 SCS. Specifically, in the 2016 SCS, the mileage user fee was assumed to be 2.8 cents per mile whereas in the 2020 SCS it assumed to be 2.0 cents per mile⁶⁹, which includes the new TNC user fee.

New Mobility Policies

SCAG has adopted three new strategies compared to the 2016 SCS, which include new EV incentives, bike share and micromobility, and transit/TNC partnerships. SCAG has also adopted new actions in support of incorporating these new mobility options into the region, including:

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⁶⁹ The 2.0 cents per mile includes 1.5 cents per mile as a regional VMT fee and 0.5 cents per mile for a TNC user fee.

- Work with local partners to identify revenue streams to provide local EV purchase incentives.
- Promote research, and analysis of best practices and proposed policies that
 address barriers to safe deployment of shared micromobility in the target areas.
 SCAG will leverage increased active transportation infrastructure such as
 protected bike lines to facilitate more usage of micromobility. SCAG has
 completed a study of docked publicly run bike share systems, and will continue
 to analyze deployment of dockless shared bikes, e-bikes, and e-scooters.
- Continue to analyze the costs and benefits of subsidized, pooled TNC trips
 within targeted areas. SCAG will address barriers to safe and efficient pick up
 and drop off strategies through its curbside management studies. If warranted,
 SCAG will develop funding for a full program implementation as part of the next
 Connect SoCal cycle.

CARB staff finds that the 2020 SCS shows evidence of changes and adjustments made that are intended to help meet the region's more aggressive targets and are based on lessons learned from the previous SCS.

CARB's Determination

ACCEPT

(WITH SIGNIFICANT CONCERNS REGARDING IMPLEMENTATION)

Based on a review of all available evidence and in consideration of CARB's 2019 Evaluation Guidelines, CARB staff accepts SCAG's determination that its 2020 SCS would meet the target of a 19 percent reduction by 2035, compared to 2005 levels, when fully implemented.

CARB staff commends SCAG and its member jurisdictions for the innovative thinking and leadership shown in adopting new pathways for the region to address smart growth and increase mobility choices in its 2020 SCS. Furthermore, the region's addition of pricing mechanisms in the 2020 SCS, through express lanes, congestion pricing, and mileage-based/TNC user fees demonstrates leadership on strategies that can help provide mobility benefits to residents and achieve the region's GHG target. CARB staff's policy evaluation of the 2020 SCS concludes that the plan includes: sufficiently supportive indicator trends; near-term policy support actions; active transportation, transit, and other SCS-supportive project investments; and adjustments in response to observed implementation challenges that when fully implemented, will lead the Southern California region to achieve its 2035 GHG reduction target.

CARB staff, however, continues to have serious concerns with the 2020 SCS regarding SCAG's approach to its 2020 target determination and whether SCAG and its local members are putting in place the actions necessary to fully implement the region's SCS strategies by 2035. Specific to the 2020 target determination, SCAG made a determination as to whether its 2020 SCS meets the 8 percent GHG reduction target by 2020 compared with 2005 levels based on modeled 2020 forecast values, which it submitted to CARB as evidence for its determination. While SCAG appropriately provided a determination to CARB, its reliance on modeled evidence without consideration of observed data, as called for in CARB's SCS evaluation guidelines, was inappropriate. Statute requires MPOs to show how they will meet the CARB-set targets for years 2020 and 2035. The overarching intent of SB 375 was to enact the magnitude of change that would lead to actual GHG reductions from passenger vehicles and light trucks in line with the targets set by CARB. Failing to adequately evaluate and determine whether the strategies would meet the 2020 target could hinder this goal by allowing backsliding on GHG reductions achieved or back loading of strategies to meet the 2035 target, both of which threaten the ability of the region to meet the targets.

This would be counter to the intent of SB 375 and frustrate California's ability to meet its climate commitments, which depend on local land use and transportation actions to reduce transportation GHG emissions. For these reasons, SCAG and every MPO should submit a determination as to whether it will meet the 2020 target in every SCS. As with the 2035 target, for the 2020 target determination, SCAG would review the modeling data and identify measures and strategies utilized to meet the 2020 target. Consistent with the 2019 Evaluation Guidelines, SCAG would also compare available observed data with performance indicators in accordance with the Tracking Implementation reporting component to understand whether the region is moving in a direction consistent with the planned outcomes from the SCS to meet the 2020 target. If the region is not on track to meet the target, SCAG would then need to identify policy and investment interventions to get the region on track to meet the 2020 target and identify when the target would be met, consistent with the Plan Adjustment section of the 2019 Evaluation Guidelines.

While SCAG's plan forecasts bold changes to the region's infill, transit and roadway network management by 2035, the implementation actions identified present concerns about whether they can or will be implemented as described. Many of the SCAG's key actions rely on others to implement them and there are no existing commitments to do so. For example, the average vehicle ridership for job centers, parking deregulation in transit priority areas, co-working, and job center parking strategies require local or private support and buy-in to implement. Additionally, many of the funding sources identified to support the SCS strategies, key actions, and projects, rely on legislative authority for implementing its congestion pricing and mileage-based user fee strategies that may or may not be forthcoming. Furthermore, transit and active transportation projects that will support GHG emission reductions are back loaded to occur around or after 2035, suggesting they will not be implemented in time to meet the 2035 target.

To support successful implementation of the SCS and achievement of SB 375's goals, and to continue fully supporting the GHG benefits claimed in the 2020 SCS, SCAG and its local members will need to undertake additional actions to deliver and monitor its SCS strategies, as well as quickly adjust its strategies for any lost opportunities that need to be replaced or mitigated. To address these concerns, CARB staff has the following recommendations and requests SCAG set up regular monitoring of the implementation actions associated with its SCS strategies in consultation with CARB and other relevant agencies.

Recommendations

<u>Deprogram Capacity Expansion Projects and Prioritize Funding for</u>
 <u>Transportation Projects that Advance SCS Implementation and Goals</u>

SCAG should develop a more rigorous vetting process for the project list, including developing a project analysis tool for local agencies to use when submitting projects for consideration in the RTP project list. Specifically, the analysis tool should consider how the proposed transportation projects fit in with the SCS's identified priority growth areas and constrained areas, as well as SCS strategy deployment assumptions. Projects that are well-aligned with the SCS should be prioritized over projects that are not well-aligned, and SCAG should work with its members to deprogram capacity expansion projects, especially those that are counter to the region's adopted SCS land use and housing strategy, and will increase VMT.

SCAG should prioritize projects that will support growth in the region's priority growth areas (which include job centers, high-quality transit areas, and neighborhood mobility areas) that foster lower VMT when seeking funding through the Solutions for Congested Corridors Program (SCCP) and Trade Corridor Enhancement Program (TCEP), under SB 1.

To help maintain the years of regional collaboration that informed SCAG's SCS and both the region's and the State's ability to meet their respective climate and air quality targets, future local sales tax measures in the region should limit funding for roadway capacity expansion projects that are not well-aligned with the region's adopted SCS land use and housing strategy. Local sales tax measures comprise approximately 57 percent of the Southern California region's projected local funding. These measures list specific projects, locking them in for years or decades. Often, these measures do not fully fund their listed projects, and go on to capture a region's otherwise-flexible State and federal funds. Within the SCAG region, some of these measures have been supportive of SB 375 goals, while other projects have not. Prioritizing projects that decrease VMT is more important than ever to achieve the region's GHG reductions targets and SB 375's goals. Going forward, investments should focus on transit, active transportation, transportation electrification, and increasing mobility options that discourage solo driving and reduce VMT.

Monitor Implementation of the Adopted SCS Strategies, Actions, and Transportation Project List

SCAG continues to include carry-over strategies from its previous 2012 and 2016 SCSs, however, it is unclear how successful these strategies have been. SCAG should track and report on the implementation of all strategies, including off-model strategies, and provide data-supported metrics to better assess them. For example, SCAG mentioned to CARB staff that there are challenges around data collection around Safe Routes to School and that while many agencies currently operate Safe Routes to School programs, there is no centralized database for California or the SCAG region. CARB staff encourages SCAG to pursue a regional central database to track program development. Tracking of these strategies like this will help inform SCAG, its member agencies, and the public on what strategies are performing well, what strategies should be adjusted, or if strategies should be removed. This will also help inform what types of projects and investments the region should consider making in order to achieve the SB 375 GHG emission reduction targets.

SCAG will need to be vigilant about monitoring the balance of transportation projects through 2035 to ensure planned reductions are achieved. Delays or removals of transit and active transportation projects will prevent SCAG from meeting its GHG emission reduction target. Amendments to the project list should be accompanied by recalculation and discussion of whether and how SCS target achievement is maintained.

• Accelerating Infill to Further SCS Implementation and Goals

SCAG's SCS provides important growth assumptions regarding regional growth constraints to preserve natural and working lands, and limit development in potentially risky locations such as at the wildland urban interface. However, these growth constraints are not yet based on local zoning restrictions. Jurisdictions should align planning and local policies and actions that support development/redevelopment for growth with the goals of the SCS and RHNA. Examples include actions to update general and specific plans, zoning for higher density, conservation protections of natural and working lands, zoning for development away from high-risk locations such as those that are vulnerable to fire, flood, or sea level rise areas, and site inventory and feasibility studies for infill potential.

In the next SCS, SCAG's Open Space and Natural Lands Mitigation Program should be fully developed to support growth constraint assumptions in the model. Furthermore, SCAG should provide CARB staff with development by SCAG's place types, not just by priority growth areas, to allow better comparison of planned and projected development in the region.

State and Regional Partnership on Pricing Pilot Options

SCAG will need to engage in close collaboration with State partners at Caltrans and CalSTA, local partners, and private companies to ensure successful implementation of the pricing mechanisms identified in the 2020 SCS. Given that SCAG's pilot project grant application was not funded this round, SCAG needs to work with both Caltrans and CalSTA on identifying alternative joint actions for advancing pilot work in the next four years. Furthermore, SCAG needs to work with local jurisdictions across the region to rapidly implement TNC user fees in order to meet the assumed 2021 implementation timeframe. CARB expects SCAG to identify further progress on implementation of these strategies in its next SCS in order to continue receiving credit for the full GHG emission reductions assumed in this 2020 SCS.

• Improve GHG Benefit Estimates for 2020 SCS New Strategies

SCAG should use assumptions supported by evidence through local data for all strategies. Strategy development should consider the existing level of participation and implementation status, and be tracked for future implementation. SCAG should be more specific in the next SCS about what its strategies are, how its strategies are distinct from one another, and how its policy commitments align with its quantification assumptions and plan outcomes. CARB staff expects SCAG to provide more details on how supporting actions are consistent with and reflected through strategy deployment assumptions in the next SCS to continue to fully support the GHG benefits claimed by SCAG. For more information, refer to the "Policy Analysis" section.

Provide All Trend Analysis Metrics

SCAG's SCS submittal lacks data on transit seat utilization as well as 2005 data on average vehicle trip length, daily transit ridership, and average travel time by mode, which are part of the eight trends that CARB staff analyzes as part of the trend analysis. This information is necessary to demonstrate the growth in public

transit ridership, mode shift and support transit, and active transportation strategies in the SCS. Providing more meaningful performance indicators like these may require SCAG to backcast the 2005 performance indicators and estimate the missing indicators using its new activity-based travel demand model. CARB requests that these metrics be included in SCAG's next SCS.

• Improve Modeling and Data

SCAG's activity-based travel demand model (ABM) is relatively new and therefore requires continuous improvements as new data emerge. CARB staff recommends that SCAG improve the sensitivity of the model to household income and pricing strategies. In addition, SCAG should conduct the sensitivity analysis to modeled strategies such as work-from-home, cordon pricing, transportation demand management, and mileage-based user fee. Specifically, CARB staff recommends that the model incorporate TNCs and autonomous vehicles as part of the mode choice model of the ABM.

In terms of off-model strategies, SCAG may have overestimated the GHG emission reduction benefits due to conflicting and inaccurate assumptions. For example, SCAG assumes that on average 65 percent of household vehicles are used in a typical day as part of travel demand modeling, however, when estimating benefits for electric vehicle (EV) incentives program, it assumes that 100 percent of the new EVs will be used for calculating the electric vehicle miles traveled (eVMT). Similarly, SCAG has also assumed zero-vehicle households will have zero-VMT for quantifying off-model strategies. These assumptions may have overestimated the benefits from some of the off-model strategies. CARB staff recommends that SCAG make its assumptions consistent across both modeling and off-model quantifications, and support them with local data. In addition, SCAG should provide the detailed VMT and GHG reductions for individual strategies and document its estimation process, assumptions, and current participation rate for each off-model strategy.

In the current SCS, SCAG has incorporated two baseline adjustments (i.e., telemedicine and e-commerce) to demonstrate its achievement of the 2035 target. However, as indicated above, several key assumptions related to both baseline adjustments are not well-supported by local data. Therefore, CARB staff recommends that SCAG also collect local data prior to including any baseline GHG and VMT adjustments, such as through before and after travel surveys for things such as telemedicine and e-commerce or due to COVID-related impacts.

CARB staff will only consider baseline adjustments that are well-supported by local, regional, or state travel survey data.

• Analyze Induced Travel Demand

Induced travel is a phenomenon that is caused by roadway expansion that increases VMT when drivers reroute from congested roads to longer, uncongested roads, shift from alternative modes to driving, or make more frequent trips. Road expansion projects can also lead to long-term induced travel in the region. Long-term effects may also occur if households and businesses move to more distant locations or if development patterns become more dispersed in response to the capacity increase. Induced travel is important to analyze as it can affect VMT and GHG emissions. SCAG has included several road expansion projects in its 2020 SCS. Currently SCAG is using an elasticitybased approach to assess the long-term effect of induced travel. While this approach can estimate the magnitude of VMT change, it cannot identify the geographic areas of induced travel or synergistic effects of induced travel with other strategies, and thus may not be directly helpful to future planning and mitigation actions. CARB staff recommends that SCAG continue to explore methods that can analyze the long-term induced travel demands of road expansion more thoroughly in future SCSs, using an integrated land use and travel demand model that captures change in transportation investments or neighborhood changes (residential and employment locations). Further, this will improve the capability to analyze the impact of land use policies such as smart growth strategies, transit-oriented development, and bike/pedestrian-friendly developments on travel demand.

Appendix A: SCAG's 2020 SCS Strategy Table

This is a summary table based on SCAG's submittal that compares the key land use and transportation strategies between the 2016 and 2020 SCSs. This table also illustrates how GHG emissions were estimated for each strategy.

Category: 2020 SCS Strategy Name	New/Carryove r Strategy from 2016 SCS	Analysis Type	Estimated GHG Emission Reduction in 2035
Land Use & Housing: Infill Development & Increased Density Near Transit Infrastructure and Shorter Trips Through Jobs/Housing Balance and Complete Communities	Congestion Pricing (New), Mileage-Based User Fee/ TNC User Fee (New) All Other Strategies (Carryover)	On-Model	-14.2%
Transportation: Transportation Demand Management, New Transit Capital Projects			
Local & Regional Pricing: Congestion Pricing, Mileage-Based User Fee/ TNC User Fee, Express Lane Pricing			

Category: SCS Strategy	New/Carryove r Strategy from 2016 SCS	Analysis Type	Estimated GHG Emission Reduction in 2035
Transportation: Average Vehicle Ridership for Job Centers	New	Off-Model	-0.64%
Transportation: Parking Deregulation in Transit Priority Areas	New	Off-Model	-0.43%
Transportation: Co- Working	New	Off-Model	-0.14%
Transportation: Improved Pedestrian Infrastructure	Carryover	Off-Model	-0.10%
Transportation: Safe Routes to School	Carryover	Off-Model	-0.20%
Transportation: Multimodal Dedicated Lanes	New	Off-Model	-0.40%
New Mobility: Electric Vehicle Charging Infrastructure	Carryover	Off-Model	-1.16%
New Mobility: Electric Vehicle Incentives	New	Off-Model	-0.60%

New Mobility: Transit/TNC Partnership Program	New	Off-Model	-0.04%
New Mobility: Bike Share & Micromobility	New	Off-Model	-0.30%
New Mobility: Car Share	Carryover	Off-Model	-0.44%
Telemedicine ⁷⁰	New	Baseline Adjustment*	-0.15%
On-line Shopping/E- Commerce ⁷¹	New	Baseline Adjustment*	-0.20%
Total Reduction			19%

 ⁷⁰ SCAG is claiming GHG reductions from Telemedicine, which is a baseline adjustment.
 ⁷¹ SCAG is claiming GHG reductions from On-Line Shopping/ E-Commerce, which is a baseline adjustment.

Appendix B: Data Table

Modeling Parameters	2005 (c)	2016 Base	2020	2020 Plan	2035	2035	2045	2045	Data Sources
		Year (BY)	Baseline (BL)	(PL)	Baseline (BL)	Plan (PL)	Baseline (BL)	Plan (PL)	
Socioeconomic and			•						
Demographic Data	1		l	1	1	1	1	1	T
Modeled Population	17,498,000	18,832,000	19,518,000	19,518,000	21,445,000	21,443,000	22,506,000	22,504,000	Travel Demand Model Input
Modeled Residents	17,161,000	18,512,000	19,194,000	19,194,000	21,115,000	21,109,000	22,172,000	22,164,000	Travel Demand Model Input
Vehicle Operating Costs (2011\$/mile)	17.4500	16.7037	19.8945	19.8945	22.9429	24.4929	23.5147	25.0647	Travel Demand Model Input
Average Toll Price (\$/mile)	N/A(e)	\$0.540 to \$6.440 fixed tolls; \$0.240 to \$0.384 per- mile tolls	\$0.540 to \$12.112 fixed tolls; \$0.000 to \$2.651 per- mile tolls; \$3.407 fixed cordon tolls	\$0.540 to \$12.112 fixed tolls; \$0.000 to \$0.384 per- mile tolls	\$0.540 to \$12.112 fixed tolls; \$0.000 to \$2.651 per- mile tolls; \$3.407 fixed cordon tolls	Travel Demand Model Input			
Average median Household Income (\$/year) (\$2011)	\$52,712	\$57,079	\$57,963	\$57,963	\$57,650	\$57,555	\$56,609	\$57,269	Travel Demand Model Input
Total Number of Households	5,650,000	6,012,000	6,334,000	6,333,000	7,174,000	7,170,000	7,639,000	7,633,000	Travel Demand Model Input
Total Number of Jobs Land Use Data	7,771,000	8,389,000	8,696,000	8,695,000	9,567,000	9,566,000	10,050,000	10,049,000	Travel Demand Model Input

Modeling Parameters	2005 (c)	2016 Base Year (BY)	2020 Baseline (BL)	2020 Plan (PL)	2035 Baseline (BL)	2035 Plan (PL)	2045 Baseline (BL)	2045 Plan (PL)	Data Sources
Total Developed Acres	1,695,000	2,375,000	N/A	N/A	N/A	N/A	2,772,000	2,654,000	Travel Demand Model Input/ GIS
Total Housing Units	5,650,000	6,531,000	6,892,000	6,894,000	7,828,000	7,830,000	8,346,000	8,346,000	Travel Demand Model Input
Total Single-Family Housing Units (du)	3,090,000	3,601,000	3,808,000	3,680,000	4,353,000	3,994,000	4,654,000	4,150,000	Travel Demand Model Input
Share of Single-Family Housing Units (%)	N/A	55.1%	55.3%	53.4%	55.6%	51.0%	55.8%	49.7%	Calculated (Total single- family units/ total housing units)
Total Multi-Family Housing Units (du)	2,560,000	2,930,000	3,084,000	3,214,000	3,475,000	3,836,000	3,692,000	4,197,000	Travel Demand Model Input
Share of Multi-Family Housing Units (%)	N/A	44.9%	44.7%	46.6%	44.4%	49.0%	44.2%	50.3%	Calculated: (Total multi- family units/ total housing units)
Total Housing Units Within ½-Mile of a High-Quality Transit Station	N/A	2,102,606	2,229,822	2,243,518	2,654,445	2,838,525	2,825,188	3,336,191	Travel Demand Model Input/GIS
Total Jobs Within ½- Mile of a High Quality Transit Station	N/A	3,556,044	3,698,996	3,727,315	4,159,169	4,590,854	4,330,974	5,247,264	Travel Demand Model Input
Transportation Network Data	,	•	•	,	•	•		<u>, </u>	
Freeway and General Purpose Lanes –Mixed	10,795	11,148	11,194	11,194	11,319	11,558	11,336	11,676	Travel Demand Model Input

Modeling Parameters	2005 (c)	2016 Base Year (BY)	2020 Baseline (BL)	2020 Plan (PL)	2035 Baseline (BL)	2035 Plan (PL)	2045 Baseline (BL)	2045 Plan (PL)	Data Sources
Flow, auxiliary, etc., (lane miles)									
Freeway Toll Lanes (lanes miles)	N/A	414	493	493	754	1,370	754	1,464	Travel Demand Model Input
Freeway HOV Lanes (lane miles)	N/A	936	933	933	966	749	966	866	Travel Demand Model Input
Arterial/Expressway (lane miles)	N/A	36,495	36,813	36,813	36,968	38,861	37,049	39,848	Travel Demand Model Input
Collector (lane miles)	N/A	22,464	22,495	22,501	22,565	23,598	22,569	24,060	Travel Demand Model Input
Average Transit Headway (minutes)	N/A	70.5	70.1	70.1	67.9	65.8	67.9	64.8	Travel Demand Model Input
Total Transit Revenue (Operation) miles	N/A	615,067	625,984	625,987	663,664	765,171	663,673	841,099	Travel Demand Model Input
Transit Total Daily Vehicles Service Hours	N/A	47,556	48,163	48,163	50,563	53,978	50,564	59,485	Travel Demand Model Input
Bike and Pedestrian Lane (Class I, II, & IV) miles	N/A	7,992	8,973	10,107	12,762	18,150	15,288	23,512	Travel Demand Model Input
Plan Performance Indicators					,				
Household Vehicle Ownership	1.97	1.90	1.93	1.91	1.91	1.88	1.91	1.86	Travel Demand Model Output
Average Trip Length (miles/day):	<u>, </u>	·			•		·		
Drive Alone	11.4	12.1	11.9	11.9	11.5	11.7	11.3	11.5	Travel Demand Model Output

Modeling Parameters	2005 (c)	2016 Base Year (BY)	2020 Baseline (BL)	2020 Plan (PL)	2035 Baseline (BL)	2035 Plan (PL)	2045 Baseline (BL)	2045 Plan (PL)	Data Sources
Shared Ride	N/A	7.6	7.4	7.4	7.4	7.3	7.3	7.2	Travel Demand Model Output
Public Transit	N/A	7.3	7.5	7.6	8.2	8.8	8.2	8.9	Travel Demand Model Output
Bike	N/A	1.7	1.7	1.7	1.8	1.8	1.8	1.9	Travel Demand Model Output
Walk	1.1	1.2	1.2	1.2	1.2	1.3	1.2	1.3	Travel Demand Model Output
Average Travel Time by Trip Purpose (minutes)									,
Commute Trip	N/A	32.3	31.9	31.7	31.8	30.4	32.1	30.3	Travel Demand Model Output
Non-Commute Trip	N/A	13.3	13.1	13.1	13.2	13.2	13.4	13.3	Travel Demand Model Output
Average Travel Time by Mode (minutes):							1		, ·
Drive Alone	19.3	20.0	19.6	19.5	19.1	17.9	19.1	17.1	Travel Demand Model Output
Shared Ride	N/A	13.0	12.8	12.7	12.8	12.2	13.0	12.2	Travel Demand Model Output
Public Transit	N/A	39.1	40.1	40.4	43.4	45.4	44.0	46.3	Travel Demand Model Output
Bike	N/A	8.5	8.6	8.7	8.9	9.1	9.1	9.4	Travel Demand Model Output
Walk	22.7	24.8	24.8	24.9	24.9	25.1	25.0	25.1	Travel Demand Model Output

Modeling Parameters		2016 Base Year (BY)	2020 Baseline (BL)	2020 Plan (PL)	2035 Baseline (BL)	2035 Plan (PL)	2045 Baseline (BL)	2045 Plan (PL)	Data Sources
Average Travel Time	N/A	16.8	16.6	16.6	16.9	17.2	17.1	17.5	Travel Demand Model
for Low-income									Output
Populations (minutes)									
(Household income <\$28,000 in 2011\$									
Mode Share (%)		•	•					•	
Drive Alone	46.5%	36.0%	36.8%	36.6%	36.8%	35.8%	37.0%	35.4%	Travel Demand Model Output
Shared Ride	41.9%	51.7%	50.9%	50.8%	50.2%	49.5%	50.1%	49.2%	Travel Demand Model Output
Public Transit	2.3%	3.2%	3.3%	3.4%	3.8%	4.7%	3.6%	4.8%	Travel Demand Model Output
Bike	0.9%	1.3%	1.3%	1.4%	1.5%	1.8%	1.6%	2.1%	Travel Demand Model Output
Walk	8.4%	7.8%	7.7%	7.9%	7.7%	8.3%	7.7%	8.6%	Travel Demand Model Output
Transit Ridership (Average daily boardings)	N/A	2,074,697	2,312,950	2,356,182	3,156,267	4,469,295	3,030,909	5,070,390	Travel Demand Model Output
Total VMT per weekday (all vehicle classes: LM + HDT+Others) (miles)	N/A	462,912,495	468,587,665	465,543,311	507,300,450	489,908,219	539,097,782	514,683,804	Travel Demand Model Output
Total SB375VMT per weekday for passenger vehicles	399,661,000	426,710,974	430,202,438	427,182,651	459,381,311	418,738,693	480,763,666	431,393,513	Travel Demand Model Output

Modeling Parameters	2005 (c)	2016 Base Year (BY)	2020 Baseline (BL)	2020 Plan (PL)	2035 Baseline (BL)	2035 Plan (PL)	2045 Baseline (BL)	2045 Plan (PL)	Data Sources
(CARB vehicle classes LDA, LDT1, LDT2, and MDV) (miles) (a)									
Total LM VMT per weekday for passenger vehicles (ARB vehicle classes of LDA, LDT1, LDT2, MCY and MDV) (miles)	N/A	428,985,427	432,588,134	429,553,186	461,959,567	444,644,860	483,459,311	459,428,299	Travel Demand Model Output
Total II (Internal) LM VMT per weekday for passenger vehicles (miles)	365,374,000	394,027,371	394,684,677	391,639,899	414,401,050	399,312,344	426,791,054	406,309,573	Travel Demand Model Output
Total IX/XI LM VMT per weekday for passenger vehicles (miles)	31,269,000	31,997,613	34,818,112	34,827,285	43,929,775	41,745,530	52,602,986	49,093,189	Travel Demand Model Output
Total XX LM VMT per weekday for passenger vehicles (miles)	3,018,000	2,960,442	3,085,345	3,086,002	3,628,742	3,586,986	4,065,271	4,025,537	Travel Demand Model Output
SB 375 VMT per capita (a),(b)	23.29	23.05	22.41	22.26	21.76	19.84	21.68	19.46	Calculated: Total SB375VMT / Modeled residents
GHG Emissions Data Total CO2 emissions per weekday	N/A	235,512	217,290	216,180	175,955	170,792	189,230	181,569	EMFAC Model Output

Modeling Parameters	2005 (c)	2016 Base Year (BY)	2020 Baseline (BL)	2020 Plan (PL)	2035 Baseline (BL)	2035 Plan (PL)	2045 Baseline (BL)	2045 Plan (PL)	Data Sources
(all vehicle class: LM + HDT+Others, w/ all measures)) (tons/day)									
Total SB375 CO2 emissions per weekday for passenger vehicles (CARB vehicle classes LDA, LDT1, LDT2, and MDV) (tons/day) (a)	204,040	205,049	205,567	204,251	219,862	198,099	231,494	204,416	EMFAC Model Output
Total LM CO2 emissions per weekday for passenger vehicles (ARB vehicle classes LDA, LDT1, LDT2, MCY and MDV w/ all measures) (tons)	N/A	188,447	167,828	166,753	115,868	111,014	114,848	108,150	EMFAC Model Output
Total II (Internal) LM CO2 emissions per weekday for passenger vehicles w/ all measures (tons)	187,090	173,090	153,123	152,035	103,939	99,696	101,386	95,646	EMFAC Model Output
Total IX/XI trip LM CO2 emissions per weekday	16,010	14,056	13,508	13,520	11,018	10,423	12,496	11,557	EMFAC Model Output

Modeling Parameters	2005 (c)	2016 Base Year (BY)	2020 Baseline (BL)	2020 Plan (PL)	2035 Baseline (BL)	2035 Plan (PL)	2045 Baseline (BL)	2045 Plan (PL)	Data Sources
for passenger vehicles									
w/ all measures (tons)	4.550	1.000	4.407	4.400	040	007	0//	0.40	EMEACAN LLC
Total XX trip LM CO2	1,550	1,300	1,197	1,198	910	896	966	948	EMFAC Model Output
emissions per									
weekday									
for passenger vehicles									
w/ all measures (tons)	22.7004	22.4522	04 4004	24 2022	20.0252	10.7/04	20.0014	10 4454	C
SB 375 CO2 per capita	23.7801	22.1532	21.4201	21.2833	20.8252	18.7694	20.8814	18.4454	Calculated: Total SB375
(lbs./day) (a),(b)									CO2 /Modeled residents * 2000 lbs./ton
ENAFAC A discontinuo and	N/A	N/A	2.21%	2.21%	1.95%	1.95%	N/A	N/A	
EMFAC Adjustment Factor	N/A	IN/A	2.21%	2.21%	1.95%	1.95%	IN/A	IN/A	CARB Methodology for Estimating CO2
Factor									Adjustment
Off-Model CO2									, rajadament
Emissions Reductions									
(%)									
Tele-Medicine and E-	N/A	N/A	N/A	N/A	N/A	-0.35%	N/A	-0.38%	MPO Estimated
Commerce									
Electric Vehicle	N/A	N/A	N/A	N/A	N/A	-1.76%	N/A	-1.87%	MPO Estimated
Strategies (e.g.									
charging stations,									
incentive)									
Emerging Technology	N/A	N/A	N/A	N/A	N/A	-0.78%	N/A	-0.77%	MPO Estimated
(e.g. car share)									
Job Center and	N/A	N/A	N/A	N/A	N/A	-1.21%	N/A	-1.12%	MPO Estimated
Commute Strategies									
(e.g. co-working)									

Modeling Parameters	2005 (c)	2016 Base Year (BY)	2020 Baseline (BL)	2020 Plan (PL)	2035 Baseline	2035 Plan	2045 Baseline	2045 Plan	Data Sources
		1001 (51)		(1 -)	(BL)	(PL)	(BL)	(PL)	
Alternative Mode	N/A	N/A	N/A	N/A	N/A	-0.70%	N/A	-0.74%	MPO Estimated
Strategies (e.g. Safe									
Routes to School,									
dedicated Transit									
Lanes)									
Induced Demand	N/A	N/A	N/A	N/A	N/A	0.56%	N/A	0.55%	
Investment (billions) (d)	,						<u> </u>		
Total RTP Expenditure (\$)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Roads & Highway Capacity Expansion (\$)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Roads & Highway Operations and Maintenance (\$)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Transit & Passenger Rail Capital Projects (\$)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Transit & Passenger Rail Operations and Maintenance (\$)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Active Transportation Capital Projects (\$)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Other Capital Projects (including TSM, ITS, TDM, etc.) (\$),	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	
Debt Service (\$)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	

⁽a) SB375 VMT and CO2 excluded Motorcycle VMT, X-X VMT and Included Off-models (if applicable).

⁽b) ARB formula for SB 375 VMT per capita and CO2 per capita: (II + IX/XI passenger VMT) / population is inapplicable.

⁽c) 2005 is based on trip based travel demand model and definition of work trip and other parameters may be different from Activity based travel demand model.

- (d) SCAG did not provide investment information in the data table provided to CARB. Instead, SCAG referred CARB to the 2020 RTP/SCS Transportation Finance Technical Report. The investment information in this table reflects information found in that report https://www.connectsocal.org/Documents/Adopted/0903fConnectSoCal Transportation-Finance.pdf
- (e) N/A means not available.

Appendix C: MPO Reporting Components

This section will focus on discussing the three reporting components of the 2019 Evaluation Guidelines: tracking implementation, incremental progress, and equity. The three reporting components are included to identify the effectiveness of prior SCS implementation and increase overall transparency of the SCS for the public and other stakeholders. These reporting components will demonstrate the efforts put forward by MPOs and the progress made towards meeting their SB 375 GHG targets.

Tracking Implementation

The purpose of this section is to report on the progress the SCAG region has made implementing its SCS. Specifically, staff compared observed data for transportation, housing, and land use performance metrics to plan performance to determine whether the region is on track to meet its targets. Performance metrics used in this analysis were chosen based on the availability of observed data and plan performance indicators provided by SCAG and represent a snapshot of where the region is currently. Metric trends that are not heading in the right direction relative to expected plan outcomes are areas that CARB staff look at in the Plan Adjustment analysis, to understand whether the current SCS modifies or adds strategies or actions to get the region on track with expected plan outcomes.

Regional Average Household Vehicle Ownership

CARB staff analyzed the trend in household vehicle ownership for SCAG from 2005 to 2019. This indicator reports the average number of private vehicles owned by each household in SCAG (i.e. the total number of household vehicles divided by the number of households). Total county-level, privately-owned vehicle and household data for 2005 to 2016 were obtained from the American Community Survey (ACS) reports⁷² and Department of Finance⁷³ respectively. Figure 8 shows historical SCAG average household vehicle ownership from 2005 to 2019 in comparison to SCAG's 2035 forecasted household vehicle ownership from its travel demand model (See Appendix B: Data Table). While average household vehicle ownership increased by 5.1 percent in SCAG from 2005 to 2019, there was a decline between 2005 and 2012, with a subsequent rebound. The 2035 forecasted SCS household vehicle ownership is 4 percent below the observed 2019 household vehicle ownership, and the trend in observed data is heading in the wrong direction relative to expected plan outcome for 2035.

⁷² U.S. Census Bureau, American Community Survey, 2005 – 2019 <u>ACS 1-year Estimates</u>. Available at: https://www.census.gov/programs-surveys/acs.

⁷³ Department of Finance, Demographics. Available at: http://www.dof.ca.gov/Forecasting/Demographics/.

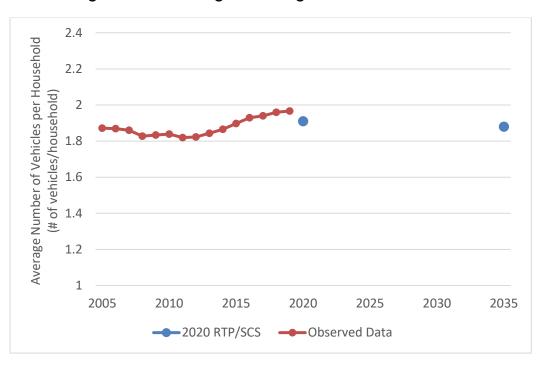


Figure 8. SCAG Region Average Household Vehicles

Annual Transit Ridership

CARB staff used the National Transit Database (NTD)⁷⁴ published monthly transit boarding numbers (unlinked trips) reported by local transit agencies to determine the historical monthly and annual boarding numbers in the SCAG region. This dataset cover 2005 to 2019.

Figure 9 shows observed annual transit ridership in SCAG in comparison to 2035 plan performance. The observed data are generally flat from 2005 to 2013 and then decrease through 2019, while SCAG's RTP/SCS forecasted transit ridership in 2035 is more than twice the observed 2019 value. The trend between 2013 and 2019 is heading in the wrong direction relative to the expected plan outcomes.

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⁷⁴ National Transit Database, NTD data. Available at: https://www.transit.dot.gov/ntd/ntd-data.

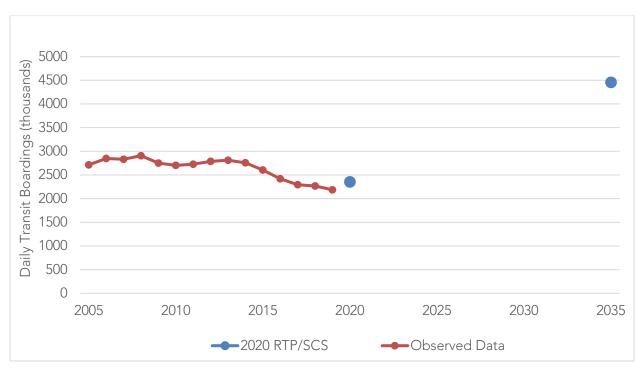


Figure 9. SCAG Region Annual Transit Ridership

Daily Transit Service Hours

The National Transit Database (NTD) publishes monthly boarding numbers (unlinked trips) reported by local transit agencies. CARB staff calculated the monthly and annual revenue hours in SCAG region based on this NTD dataset from 2005 to 2019⁷⁵. Total transit revenue hours in SCAG were then adjusted to daily transit revenue hours.

Observed NTD transit revenue hours increases from 2005 to 2019 as shown in Figure 10. However, SCAG's 2020 SCS forecasts transit revenue hours to be less than the observed data, since it only covers fixed-route transit services and it does not include demand response services. According to NTD, demand response service accounted for about 25 percent of the regional transit service hours in 2016.

⁷⁵ National Transit Database (NTD). Available at: https://www.transit.dot.gov/ntd/ntd-data.

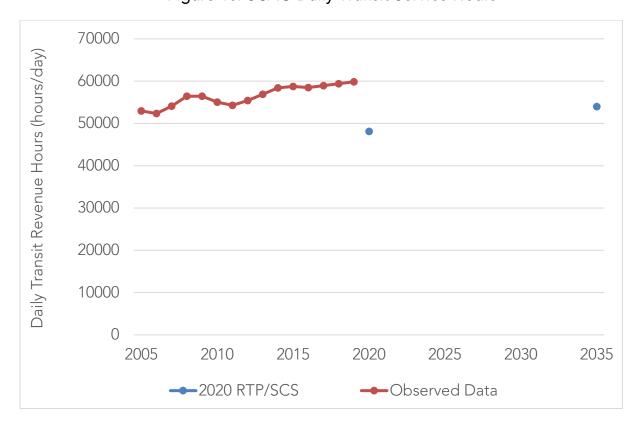


Figure 10. SCAG Daily Transit Service Hours

Commute Trip Travel Time

CARB staff analyzed commute trip travel times from 2010 to 2018 using data from the American Community Survey⁷⁶ data. A population-weighted approach was used to calculate total travel times by county and then aggregated to the SCAG region.

Figure 11 shows historical commute time in comparison to SCAG's 2020 RTP/SCS average commute time. SCAG's 2020 RTP/SCS forecasts a 1.3-minute reduction in commute time from 2020 to 2035, while the observed data increase from 2010 to 2018, away from the expected plan outcome for 2035.

⁷⁶ U.S. Census Bureau, American Community Survey. Available at: https://data.census.gov/cedsci/table?q=ACSST1Y2019.S0801&g=0400000US06.050000&tid=ACSST5Y2018.S0801&htdePreview=true.

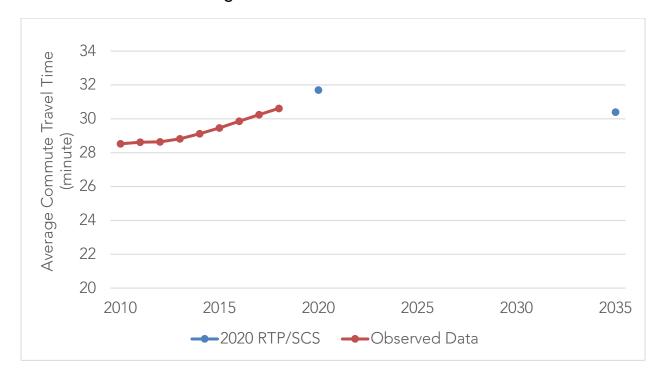


Figure 11. SCAG Commute Time

New Homes Built by Type

CARB staff analyzed the rate of new homes being built by type in the SCAG region from 2005 to 2019 using the California DOF datasets including E-5 (for years 2011 to 2019) and E-8 (for years 2005 to 2010)⁷⁷:

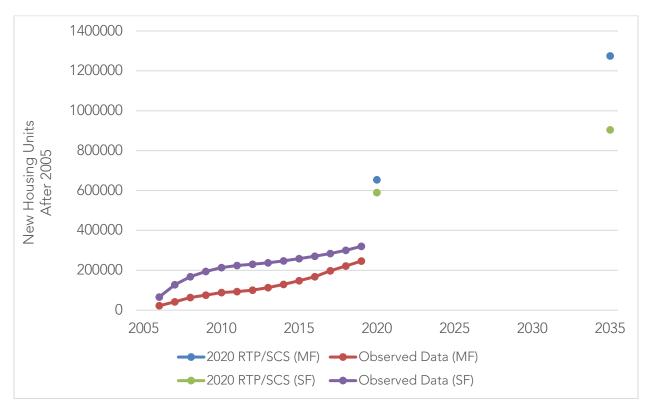
Figure 12 shows the historical number of new single-family and multi-family housing units in the SCAG region. Since 2005, there have been 589,338 new single-family and 653,850 new multi-family housing units built in the region. During this period, single-family housing has represented a greater share of the new housing units built and that share has stayed relatively constant. In 2019, 320,147 new single-family housing units and 246,249 new multi-family housing units were built. The 2020 SCAG RTP/SCS forecasts 903,877 new single-family housing units and 1,275,295 multi-family housing units to be built in 2035, with multi-family housing units representing a much greater

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⁷⁷ California Department of Finance, rate of new homes being built by type. Available at: http://www.dof.ca.gov/Forecasting/Demographics/Estimates/.

share of housing than single-family housing units. While the total number of observed housing units is increasing consistent with the plan, the share of single-family is heading in the wrong direction relative to the expected plan outcomes.

Figure 12 New Single- and Multi-Family Housing Units Built in the SCAG Region



In summary, CARB staff compared the observed data for regional average household vehicle ownership, annual transit ridership, daily transit service hours, commute trip travel time, and new homes built by type with the projected plan performance indicators provided by SCAG. Based on the analysis none of the observed data are heading in the right direction, toward the expected plan outcomes. Therefore, CARB staff concluded that SCAG is not on track to meet its GHG target.

Incremental Progress

CARB staff reviewed the incremental progress of SCAG's 2020 SCS compared to its 2016 SCS in place in October 2018, in accordance with Board direction and the 2019 Evaluation Guidelines.⁷⁸ As background, during the 2018 regional GHG target update process, some of the MPOs reported to CARB that, due to external factors, even greater effort would be required to achieve the same level of per capita GHG emission reduction reported in the current SCSs. According to the MPOs, simply staying on course to achieve the previously demonstrated regional SB 375 GHG emission reduction targets would be a stretch of current resources, let alone achieving the more aggressive targets adopted by the Board in 2018. At that time, SCAG determined that the 2016 SCS would achieve approximately 4 to 5 percent less reductions than when it was adopted in 2016 simply due to changes in exogenous assumptions (e.g. auto operating cost)⁷⁹. In other words, if during the target setting process SCAG had updated its 2016 SCS with exogenous assumptions current at the time, it would only achieve 13 to 14 percent per capita GHG reduction in 2035, well below the plan performance (and target) of 18 percent. SCAG's data indicated that in order to meet the new target of 19 percent, it would need to include another 5 to 6 percent GHG reductions in new and/or enhanced SCS strategies (i.e. incremental progress) in its 2020 SCS.

To determine whether SCAG is achieving the level of incremental progress consistent with what it reported during the target setting process, CARB staff intended to rely on analysis provided by SCAG consistent with methods put forward in the updated SCS Program and Evaluation Guidelines. That methodology called for a comparison of the 2016 SCS to the 2020 SCS under varying assumptions, controlling for as many exogenous factors as possible. For a variety of reasons, SCAG staff were not able to provide CARB with the information and data to conduct the incremental progress analysis envisioned. SCAG developed the 2020 SCS using a brand new modeling platform⁸⁰, and this shift from a trip-based model to an activity-based model made it

⁷⁸ Board Resolution 18-12 (March 22, 2018). Available at: https://ww2.arb.ca.gov/sites/default/files/2020-06/SB375 Final Target Staff Report %202018 Resolution 18-12.pdf.

⁷⁹ California Air Resources Board. Final Staff Report Proposed Update to the SB 375 Greenhouse Gas Emission Reduction Targets: Appendix B. MPO Scenario and Data Submittals. October 2017. Available at: https://www.arb.ca.gov/cc/sb375/appendix b mpo scenario and data submittals october 2017.pdf ⁸⁰ SCAG, 2016 Regional Travel Demand Model and Model Validation. April 2020.

more difficult for them to conduct the analysis CARB requested. For this reason, CARB staff evaluated incremental progress for SCAG's 2020 SCS by comparing strategy assumptions between the 2016 and 2020 SCSs. While this type of analysis does not allow CARB to determine whether the magnitude of incremental progress is consistent with what SCAG reported during the target setting process, it still provides insights into whether SCAG is including new and or enhanced strategies.

Table 10 below provides a list of strategies included in the 2016 and 2018 SCSs, and the assumptions for those strategies. There are a number of new or enhanced strategies around transportation, pricing, new mobility, and land use. For example, bus and rail service miles increased by 32 percent and 5 percent respectively between the 2016 and the 2020 SCSs, along with a slight decrease in freeway lane miles. SCAG also included new pricing strategies in its 2020 SCS that were not in the 2016 SCS, including cordon pricing and TNC fees. In addition, SCAG added a number of new off-model strategies, including parking deregulation in transit priority areas, co-working, multimodal dedicated lanes, bike share/micromobility, transit/TNC partnerships, and EV incentives.

While incremental progress is not used for CARB's SCS determination, CARB expects MPOs to achieve incremental progress due to its SCS land use and transportation strategy commitments from its second SCS to its third SCS consistent with information shared during the GHG emission reduction target setting process. Information SCAG submitted during the 2018 target setting process indicated they would achieve 5 to 6 percent incremental progress as part of the 2020 SCS. While the information presented suggests that the 2020 SCS includes additional and enhanced strategies relative to the 2016 SCS, it is not sufficient to determine whether the magnitude of those new/enhanced strategies is consistent with the information SCAG shared during the 2018 target setting process.

Insufficient information to determine whether SCAG's incremental progress is consistent with the information it shared during the 2018 target setting process.

Table 10. SCAG's Incremental Progress

	Strategy A	ssumptions	Change Supportive of
SCS Strategies	2016 SCS	2020 SCS	New/Enhanced Strategies
Transportation			
Freeway (Lane Miles)	11,716	11,558	Supportive
Bus (Transit Service Miles)	599,602	627,485	Supportive
Rail (Transit Service Miles)	104,310	137,686	Supportive
Pricing			
Cordon Pricing ⁸¹ (\$/entry)		4.0082	Supportive
Express Lane Pricing ⁸³ (\$/mile)	084-2.65	0-2.6585	
Mileage User Fee (\$/mile)	0.028	0.020%	
Job Center Parking (\$/hour)		50% of base fare ⁸⁷	Supportive

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⁸¹ Cordon pricing, also known as congestion pricing, is reflected in the activity-based modeling to reduce VMT and is explicitly accounted as a revenue source in the Transportation Finance Technical Report (in Table 2, New Revenue Sources & Innovative Financing Strategies, in Nominal Dollars, Billions).

⁸² SCAG Model Sensitivity Test Report, page 21.

⁸³ Express lane pricing is reflected in the activity-based modeling to reduce VMT and accounted as an existing revenue source in the Transportation Finance Technical Report (in Table 3.1 Core & Reasonably Available Revenue Projections—Local Core Revenue Sources, in Nominal Dollars, Billions).

⁸⁴ Pricing varies by time of day, and some periods may not be priced at all (i.e. zero price).

⁸⁵ SCAG, Connect SoCal SCS Submittal Tables, Table 1 SCS Data.

⁸⁶ The mileage user fee consists of three components, which are reflected in the Transportation Finance Technical Report (in Table 2, New Revenue Sources & Innovative Financing Strategies, in Nominal Dollars, Billions): \$0.025 per mile is to replace gas taxes from 2030 (and therefore not included as an SCS strategy); \$0.015 per mile as regional VMT fee from 2030; and \$0.05 per mile as TNC user fee. In the activity-based modeling 1% (i.e., \$0.005) of TNC user fee is applied to all VMT in the region in order to capture the proportional TNC population.

⁸⁷ Job center parking price is reflected in the activity-based modeling to reduce VMT and is accounted as a revenue source in the Transportation Finance Technical Report.

Work from Home/Telecommute (% of workers)	10%	0%	
Transportation Demand Management		1.5%	Supportive
	Improved Pedestrian/bike Infrastructure,	Improved Pedestrian Infrastructure,	
	Safe Routes to School, Electric Vehicle Charging Infrastructure,	Safe Routes to School, Electric Vehicle Charging Infrastructure,	
	Car Share	Car Share	
Off-model Strategies		Average Vehicle Ridership for Job Centers, Parking Deregulation in Transit Priority Areas, Co-Working, Multimodal Dedicated Lanes, Electric Vehicle Incentives, Transit/TNC Partnership Program, Bike Share & Micromobility	Supportive
Land Use and Demographics	Transit Priority Areas, High Quality Transit Areas and Livable Corridors	Transit Priority Areas, High Quality Transit Areas, Livable Corridors	Supportive

|--|

Equity

MPOs may report to CARB a summary of how they conducted equity analyses as part of the development of their SCSs in accordance with the California Transportation Commission's 2017 Regional Transportation Plan Guidelines for Metropolitan Planning Organizations.⁸⁸ The Environmental Justice (EJ) Technical Report⁸⁹ of SCAG 2020 SCS documented SCAG's equity analysis. CARB staff reviewed this EJ Technical Report and prepared this section to summarize SCAG's 2020 SCS equity work, including identified communities of concern, equity performance measures, equity analysis, and public participation efforts.

Identifying Vulnerable Communities

SCAG's 2020 SCS states that its EJ Technical Report not only meets legal requirements, but goes beyond them in considering other population characteristics such as children, elderly populations, vehicle-less households, individuals without a high school diploma, and areas designated as disadvantaged by Senate Bill (SB) 535 (DeLeon). SCAG staff conducted extensive outreach to EJ stakeholders and the general public during the EJ Working Group meetings, targeted EJ outreach, and Connect SoCal Public Workshops to gather feedback. For both the outreach and analysis process, EJ communities were identified to include all low-income and minority populations. SCAG also analyzed other demographic categories as shown in Figure 13, Figure 13. Secured as income by quintiles as shown in Figure 14. Figure 15Figure 15shows all the EJ communities identified in the SCAG region, which include EJ Areas, SB 535 Disadvantaged Communities, and Communities of Concern. Based on these criteria, key characteristics of the region's EJ analysis areas include.

⁸⁸ California Transportation Commission. 2017 Regional Transportation Plan Guidelines for Metropolitan Planning Organizations. January 2017. Available at:

http://www.dot.ca.gov/hq/tpp/offices/orip/rtp/docs/2017RTPGuidelinesforMPOs.pdf.

SCAG, 2020 RTP/SCS, Environmental Justice Technical Report: Available at: https://www.connectsocal.org/Documents/Adopted/fConnectSoCal Environmental-Justice.pdf.
 SCAG, 2020 RTP/SCS, Environmental Justice Technical Report, page 4.

⁹¹ The poverty classification is a federally established income guideline used to define persons who are economically disadvantaged as outlined by the U.S. Department of Health & Human Services guidelines. ⁹² Executive Order 12898, U.S Department of Transportation, and Federal Highway Administration Orders on EJ define "minority" as persons belonging to any of the following groups, as well as "other" categories that are based on the self-identification of individuals in the Census: African American, Hispanic, Asian/Pacific Islander, and Native American and Alaskan Native.

⁹³ This section includes summary information from SCAG's Environmental Justice Technical Report.

- In 2016, about 69 percent of the population in the SCAG region belonged to a racial or ethnic group other than White, non-Hispanic, while about 15 percent of the population was in poverty.
- Since 2000, the share of households living in poverty has increased from about 13 percent to about 15 percent in the SCAG region.
- About 62 percent of the region's population (about 12 million people) live in an EJ area.
- About 34 percent of the region's population (about 6 million people) live in a disadvantaged community.
- About 21 percent of the region's population (4 million people) live in a community of concern.

Since 2000, the share of households without a vehicle has gone down, from about 10 percent to about 7 percent. Meanwhile, the share of households with more than three vehicles has increased from about 18 percent to about 24 percent.

Figure 13. Demographic Categories Analyzed by SCAG

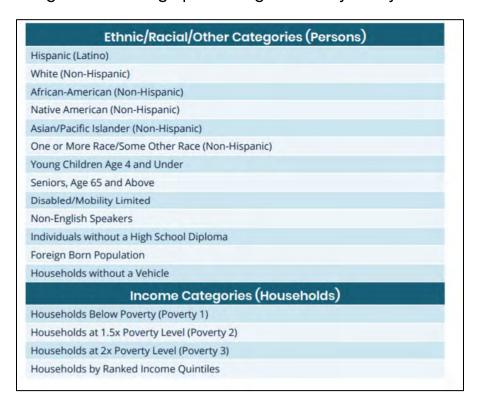


Figure 14. Income Distribution by Quintiles Analyzed by SCAG

Income Quintiles	Income Range
Quintile 1	\$0 to \$28,000
Quintile 2	\$28,001 to \$52,000
Quintile 3	\$52,001 to \$82,000
Quintile 4	\$82,001 to \$128,000
Quintile 5	\$128,000 and Higher

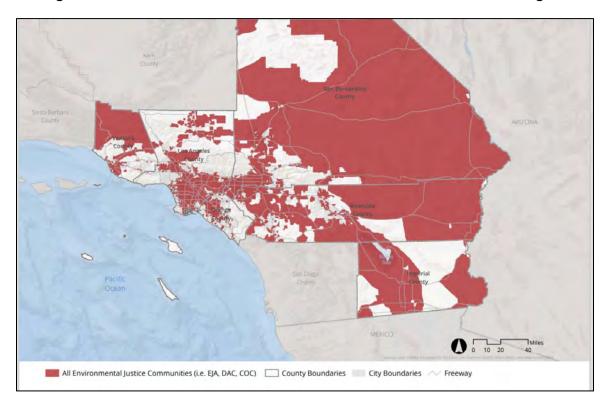


Figure 15. All Environmental Justice Communities in the SCAG Region

Equity Performance Measures

SCAGs EJ analysis attempted to determine if the SCS has a disproportionate negative impact on the low-income population and/or minority populations in identified communities in the region and if there are any disparate impacts specifically based on race, color, national origin, etc. SCAG's EJ analysis identified 18 performance indicators to understand the RTP/SCS impacts on environmental justice areas, disadvantaged communities, and communities of concern, including:

- 1. Jobs-Housing Imbalance
- 2. Neighborhood Change and Displacement
- 3. Accessibility to Employment Services
- 4. Accessibility to Parks and Educational Facilities
- 5. Active Transportation Hazards
- 6. Climate Adaptation
- 7. Public Health Analysis
- 8. Aviation Noise Impacts
- 9. Roadway Noise Impact

- 10. Emissions Impacts Analysis (PM2.5 & CO):
- 11. Emissions Impacts Along Freeways
- 12. Travel Time & Travel Distance Savings
- 13. Rail Related Impacts
- 14. Share of Transportation System Usage
- 15. Connect SoCal Revenue Sources in Terms of Tax Burdens
- 16. Connect SoCal Investments vs. Benefits:
- 17. Geographic Distribution of Transportation Investments
- 18. Impacts from Funding Through Mileage-Based User Fees

In this document, CARB focused on the effect of the SCS on land use equity, access, and public health⁹⁴.

Land Use Equity Performance Measures

SCAG acknowledged that neighborhood gentrification and displacement resulting from transportation investments on a region-wide basis is challenging and that attention should be given on a project-by-project basis to carefully understand local neighborhood dynamics and ensure equitable access to the benefits of improved infrastructure.

To understand where the region currently is and to understand where to monitor, SCAG conducted a historical jobs-housing imbalance analysis as well as an analysis on neighborhood change and displacement. The jobs-housing imbalance analysis looked at median commute distance of low wage workers as well as jobs-housing fit between available housing types and the income level of residents. To assess neighborhood change, SCAG looked at criteria around gentrification, including; increase in college educated, increase in non-Hispanic white, increase in median household income, and increase in median gross rent. SCAG analyzed displacement by looking at data on moving and migration flows.

The trends for both jobs-housing imbalance and change and displacement in the region appear to be somewhat improving. The commute distance grew in all six counties between 2002 and 2016, while it slightly decreased between 2012 and 2016.

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⁹⁴ For more information on the other performance indicators see SCAG's Environmental Justice Technical Report.

From 2010 to 2016, the ratio of jobs to housing increased from 1.10 to 1.19, but the ratio of low wage jobs to affordable rental units decreased from 0.94 to 0.89 during the period.

SCAG's analysis of neighborhood change across the region identified 40 census tracts⁹⁵ that have been persistently changing across recent decades. However, these tracts are not disproportionately located in EJ areas, Disadvantaged Communities, or Communities of Concern.

Accessibility Performance Measures

SCAG assessed accessibility impacts from the RTP/SCS to important destinations such as employment, shopping, parks and schools for the region's EJ population. For both transit and auto accessibility performance measures, SCAG used a 30 minute benchmark for travel time to the destinations by automobile, and 45 minutes of travel time to destinations by transit during the evening peak period.

Based on these performance measures, SCAG found that the share of the region's total employment and shopping destinations that are accessible to each EJ group within 30 minutes of travel by auto, or 45 minutes on transit and accessibility will improve. SCAG's EJ analysis, suggests that the overall accessibility to parks and natural lands will improve because of the RTP/SCS, both for the region as a whole and for the EJ population. SCAG also acknowledges that its results show local parks and other natural lands are less accessible by public transportation than by automobile, especially to National Forests. However, with the implementation of the RTP/SCS, accessibility to local parks and other natural lands will increase more for public transit modes than for automobiles at all levels of analysis 97.

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⁹⁶ SCAG, 2020 RTP/SCS, Environmental Justice Technical Report: Table 25 (pages 81-86) and Table 29 (pages 93, 94).

⁹⁷ SCAG, 2020 RTP/SCS, Environmental Justice Technical Report: Figures 11-16 (pages 87-88).

Health and Environment Performance Measures

SCAG's EJ analysis also looked at human health and environmental effects measures living and working within 500 feet of major roadways as an indicator of risk of exposure to toxic air contaminants from proximity to major roadways from the RTP/SCS.

SCAG's EJ analysis projected that by 2045, approximately 5 percent of the region's population will live within 500 feet of freeways and high traffic roads and 9 percent of the population will work within it.

The results showed that most EJ population groups show higher concentrations in areas near freeways and high-traffic roads than is seen in the greater region, except for seniors over age 65, African Americans, and those identifying as "Other Race." Based on the analysis, SCAG projects that the share of most EJ population groups in areas adjacent to freeways and high traffic roads will increase in 2045.

The SCS documented that concerns were raised by environmental groups, the health community, housing groups, and air quality regulation agencies about incompatible land uses, including sensitive receptors such as hospitals, senior/daycare centers, and housing near freeways and busy roadways. According to SCAG⁹⁹, the land use strategies in the SCS call for redirecting future growth into high-quality transit areas (HQTAs) and as a result, part of this growth will occur in areas where high-quality transit areas overlap with areas within a distance of 500 feet from freeways and high-traffic roads. Neighborhoods where HQTAs overlap with areas within 500 feet of freeways and high-traffic roads accommodate about 3 percent of all regional households and about 5 percent of regional employment by 2045. 100

Public Outreach and Engagement

SCAG held 28 public workshops for the SCS along with other activities¹⁰¹. Workshops were held in all of the region's six counties. Feedback and comments from the

⁹⁸ SCAG, 2020 RTP/SCS, Environmental Justice Technical Report, page 138.

⁹⁹ SCAG, 2020 RTP/SCS, Environmental Justice Technical Report, page 138.

¹⁰⁰ SCAG, 2020 RTP/SCS, Environmental Justice Technical Report, page 141.

¹⁰¹ SCAG, 2020 RTP/SCS, Public Participation and Consultation. Available at: https://www.connectsocal.org/Documents/Adopted/fConnectSoCal_Public-Participation-Consultation.pdf.

workshops were incorporated into the technical analysis. In addition, an online survey was conducted that reduced barriers of having to attend in person to participate.

In 2018, SCAG also convened an EJ Working Group (EJWG) to vet ideas and receive feedback on its EJ analysis, in addition to other workgroups on the RTP/SCS. SCAG held five EJWG meetings to discuss development of Connect SoCal, its EJ technical analysis, and gather input from EJ stakeholders.

In addition, SCAG developed "Community Partner Toolkits" as an outreach resource. The toolkits contained workshop fliers in various languages, adaptable sample letters, email blasts and social media posts—and were distributed by SCAG staff and the outreach team to elected officials, community based organizations and other grassroots organizations to create awareness about Connect SoCal.



AGENDA ITEM 3

REPORT

Southern California Association of Governments
Remote Participation Only

January 7, 2021

To: Transportation Committee (TC)

EXECUTIVE DIRECTOR'S APPROVAL

Kome Aprise

From: Scott Strelecki, Senior Regional Planner,

(213) 236-1893, strelecki@scag.ca.gov

Subject: California Transportation Commission Adoption of Senate Bill

(SB) 1 Competitive Programs

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:

Senate Bill (SB) 1 – the Road Repair and Accountability Act of 2017 – invests over \$5 billion annually to fix California's roads, bridges and freeways and puts more dollars toward transit and safety. Eligibility for several SB 1 programs, including Trade Corridor Enhancement Program (TCEP) and Solutions for Congested Corridors Program (SCCP), requires that the region's Sustainable Communities Strategy (SCS) meets the region's greenhouse gas emissions reduction targets, as determined by the State Air Resources Board. The Regional Council fully adopted Connect SoCal, the 2020-2045 Regional Transportation Plan/Sustainable Communities Strategy, on September 3, 2020, ensuring this threshold requirement was met for eligible applicants in the SCAG region. SCAG also plays a critical role in serving the region as a liaison through collaboration and partnerships across all agency initiatives. SCAG has expanded upon this role supporting the region by working closely with agency members and partners to compete for SB 1 competitive program funds.

The 2020 SB 1 cycle for the TCEP, SCCP, and Local Partnership Competitive Program (LPCP) totaled approximately \$2.07 billion in competitive funds, available collectively throughout the state. As part of SCAG's coordinated efforts, the region submitted 29 projects, with 18 being recommended by California Transportation Commission (CTC) staff and adopted at the December 2, 2020 CTC Commission Meeting. The SCAG region funding total was just below \$1 billion, or 48% of all three program funds, which will be allocated over the next three fiscal years.



BACKGROUND:

Senate Bill (SB) 1 – the Road Repair and Accountability Act – was signed into law by Governor Brown on April 28, 2017 and invests over \$5 billion annually to fix California's transportation system through investing in roads, bridges, freeways and puts more dollars toward transit and safety. The Trade Corridor Enhancement Program (TCEP) provides approximately \$300 million annually in state funding and approximately \$515 million in National Highway Freight Program funds, assuming the federal program continues under the next federal transportation act. This funding is provided for infrastructure improvements on federally designated Trade Corridors of National and Regional Significance, on the Primary Freight network, and along other corridors. The Solutions for Congested Corridors Program (SCCP) provides \$250 million annually for projects aimed at reducing congestion in highly traveled and congested corridors by implementing comprehensive corridor plans including specific transportation performance improvements. The 2020 Local Partnership Competitive Program (LPCP) includes three years of funding, totaling \$216 million.

SCAG is focused on serving and acting as a liaison among city and county elected officials, urban planners and community organizations as the designated metropolitan planning organization (MPO) for the six-county Southern California region. SCAG plays a critical role in partnering and working with various agencies towards building consensus and preparing for numerous funding opportunities and initiatives. This relates to direct programs managed by SCAG such as the Sustainable Communities Program (SCP), other passthrough projects and programs, as well as external grants and other project and program funding opportunities.

SCAG has continued to play a central role in the overall process for SB 1 programs through working directly with key member and partner agencies, and their project teams. This has included convening and representing the region through the development of various SB 1 program guidelines, as well as direct program processes throughout application steps.

As the region's MPO, SCAG is responsible as part of the TCEP to compile project nominations and confirm consistency of the project nominations with SCAG's Regional Transportation Plan/Sustainable Communities Strategy and Regional Freight Plan. As part of the application process and through program cycles, SCAG regularly provides collaboration, coordination and support for SB 1 programs; including reviewing documents, eligibility, coordination, and final compilation. SCAG tracks the nominated projects for FTIP purposes to ensure the eligibility and consistency of information for a successful application. SCAG also supports member and partner agency project nominations by coordinating with California Transportation Commission (CTC) on multiple items to ensure transparency across the region.

The 2020 cycle for these programs totaled approximately \$2.07 billion, which was available collectively throughout the entire state. As part of SCAG's coordinated efforts, the region submitted 29 projects, with 18 being recommended by CTC staff for the TCEP, SCCP, and LPCP. The SCAG



region funding total was just below \$1 billion, or 48% of all program funds per the CTC's staff recommendations and will be allocated over the next three fiscal years.

The following projects were recently approved at the CTC's December 2, 2020 Commission Meeting.

TCEP

County	Project Title	Funding Amount
Los Angeles	57/60 Interchange & Other Improvements	\$217.9 million
Los Angeles	I-605/SR-91 & Cherry Ave. Improvements	\$118 million
Los Angeles	Fourth Track Rail Expansion in POLB	\$8 million
Riverside	McKinley Street Grade Separation	\$10.3 million
Orange	SR-55 Improvements	\$115 million
San Bernardino	I-10 Truck Climbing Lane	\$24.1 million
Imperial	Calexico East POE Bridge Widening	\$7.5 million
Los Angeles	Fenix Terminal Rail Expansion in POLA	\$19.2 million
San Bernardino	I-15 Lanes San Bernardino	\$118.7 million
Los Angeles	SR-47 Interchange Improvements	\$13.4 million
Riverside	SR-71/91 Interchange Connector	\$58.1 million
Total		\$710.2 million

SCCP

County	Project Title	Funding Amount
San Bernardino	West Valley Connector Bus Rapid Transit	\$65 million
Los Angeles	I-105 Express Lanes	\$150 million
Total		\$215 million

LPCP

County	Project Title	Funding Amount
Los Angeles	NextGen Bus Speed & Reliability Improvements	\$25 million
Los Angeles	Market Street Complete Street in the City of Long	\$2.8 million
	Beach	
Orange	SR-55 Improvement	\$25 million
Riverside	Limonite Avenue Gap Closure	\$9.5 million
Los Angeles	I-210 Sound Wall Improvements	\$5.5 million
Total		\$67.8 million

FISCAL IMPACT:

Work associated with this item is included in the FY 2020-21 Overall Work Program (OWP) budget under project number 21-130.0162.18, Goods Movement Planning.



AGENDA ITEM 4

REPORT

Southern California Association of Governments
Remote Participation Only
January 7, 2021

To: Transportation Committee (TC)

EXECUTIVE DIRECTOR'S APPROVAL

Kome Aprise

From: Courtney Aguirre, Program Manager

(213) 236-1990, Aguirre@scag.ca.gov

Subject: Regional Safety Targets 2021

RECOMMENDED ACTION:

Recommend that the Regional Council adopt the 2021 regional safety targets and the supporting Regional Safety Policy Resolution.

STRATEGIC PLAN:

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

EXECUTIVE SUMMARY:

The Federal Highway Administration (FHWA) issued a Final Rule, effective April 14, 2016, to establish performance measures for state departments of transportation (DOTs) to carry out the Highway Safety Improvement Program (HSIP) as required by the Moving Ahead for Progress in the 21st Century Act (MAP-21). The Final Rule calls for state DOTs, working with Metropolitan Planning Organizations (MPOs), to establish targets for reducing the numbers and rates of transportation fatalities and serious injuries. The California Department of Transportation (Caltrans) established statewide safety targets in August 2020 for the calendar year 2021. SCAG has until February 28, 2021 to establish regional safety targets.

SCAG staff recommend adopting SCAG-specific targets consistent with our approach in prior years, which would have the region reach the goal of Towards Zero Deaths by 2050, if not sooner. The adopting resolution also reaffirms SCAG's commitment to providing regional leadership and comprehensive efforts to strive to achieve these targets through implementation of safety strategies in Connect SoCal and a Regional Safety Policy to guide the work with a focus on data-driven decision-making, equity, and partnerships with local and state agencies.

BACKGROUND:

Safety Performance Management Measures Final Rule

The Federal Highway Administration (FHWA) issued the National Performance Management Measures: Safety Performance Management Measures Final Rule, effective April 14, 2016, to establish performance measures for state departments of transportation (DOTs) to carry out the





Highway Safety Improvement Program (HSIP). State DOTs and Metropolitan Planning Organizations (MPOs) are expected to use the information and data generated as a result of the regulations to inform their transportation planning and programming decision-making and link investments to performance outcomes. FHWA expects that the performance measures will help state DOTs and MPOs make investment decisions that will result in the greatest possible reduction in fatalities and serious injuries. The Final Rule is aligned with California Department of Transportation (Caltrans) support of Toward Zero Deaths (TZD), which has also been adopted by many state DOTs and municipalities.

The Final Rule calls for state DOTs, working with MPOs, to assess fatalities and serious injuries on all public roads, regardless of ownership or functional classification. Specifically, the Final Rule establishes the following five performance measures for five-year rolling averages for:

- Number of Fatalities;
- Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT);
- Number of Serious Injuries;
- Rate of Serious Injuries per 100 million VMT; and
- Number of Non-motorized Fatalities and Non-motorized Serious Injuries.

The Final Rule also establishes the process for DOTs and MPOs to establish and report their safety targets, and the process that FHWA will use to assess whether state DOTs have met or made significant progress toward meeting their safety targets.

Caltrans is required to establish statewide targets on an annual basis, beginning in August 2020 for calendar year 2021 targets. SCAG is required to establish targets for the same five safety performance measures up to 180 days after Caltrans establishes the statewide targets (i.e., end of February each year). Calendar year 2021 is the fourth year for which safety targets are being established pursuant to the requirements under MAP-21. SCAG has the option to agree to support the statewide targets, establish numerical targets specific to the SCAG region, or use a combination of both. In the prior three years of target setting, SCAG supported the statewide targets and adopted SCAG-specific targets based on Caltrans' target setting methodology. SCAG must provide regular updates on its progress towards achieving these targets, including within Connect SoCal, the Regional Transportation Plan/Sustainable Communities Strategy, and the Federal Transportation Improvement Program.

FHWA considers whether Caltrans has met or made significant progress toward meeting its safety targets when at least four of the five targets are met or the outcome for the performance measure is better than the baseline performance the year prior to the target year. The met or made significant progress determination only applies to state DOT targets, not MPOs. In April 2020, FHWA notified Caltrans that California had not met or made significant progress towards its 2018 safety



targets. In response to this determination, California must obligate HSIP funds in the amount apportioned for the prior year only for HSIP projects (Caltrans was already doing this). Caltrans was also required to submit an HSIP Implementation Plan to FHWA by October 1, 2020. The purpose of the HSIP Implementation Plan is to identify tangible actions for California to take in Federal Fiscal Year 2021 to make progress toward achieving the targets. SCAG anticipates that because California has not met its targets, greater coordination between Caltrans and MPO safety activities will likely have to occur going forward.

TARGET SETTING APPROACHES

There are two main approaches to target setting, vision-based target setting and evidence-based target setting. When developing aspirational, vision-based targets, agencies use the term "target" to refer to a long-term vision for future performance, their ultimate goal. Many transportation agencies have established vision-based targets for zero fatalities (e.g., Vision Zero or TZD) and for progress towards a vision (e.g., reduce fatalities by one-half within 20 years). Evidence-based targets take a more narrow approach to target setting — focused specifically on what can be achieved within the context of a set of investments, policies, and strategies defined within an implementation plan and subject to a shorter timeframe (e.g., five to ten years). While these two approaches are distinct, they are not necessarily in conflict. A vision-based target is useful for galvanizing support around a planning effort and for ensuring successful strategies are considered and/or implemented while keeping the focus on a clear goal. Evidence-based targets promote accountability. Being able to demonstrate the benefits of different levels of investment in safety can help strengthen understanding of the implications of investment decisions. Many agencies choose to adopt interim hard targets based on a broader vision (e.g., TZD).

STATEWIDE SAFETY TARGETS

Caltrans used a vision-based approach to establish the calendar year 2018, 2019, and 2020 statewide safety targets. Since 2018, the statewide targets have been supportive of TZD, a core objective of California's Strategic Highway Safety Plan (SHSP), the statewide transportation safety plan, which provides a framework for reducing fatalities and serious injuries on all public roads, utilizing a TZD safe systems approach. By way of background, Towards Zero Deaths (also known as Safe Systems) is an approach that is based on the understanding that even one traffic-related fatality is unacceptable. In the United States, the Toward Zero Deaths National Strategy was launched in 2014, adopting the zero-focused imperative along with a strong commitment to a safety culture. The principles underpinning the approach include:

- 1. People make mistakes which can lead to crashes; however, no one should die or be seriously injured on the road as a result of these mistakes;
- 2. The human body has a limited physical ability to tolerate crash forces;
- 3. Road safety is a shared responsibility amongst everyone, including those that design, build, operate and use the road system; and



4. All parts of the road system must be strengthened in combination to multiply the protective effects and if one part fails, the others will still protect people.

At the center of the system is people – people that are fragile and will at times make mistakes that can lead to collisions. With that understanding, the road system needs to put layers of protection in the form of safe roads, vehicles, speeds, and people (safe road users) around the fallible and vulnerable human in order to prevent fatalities and serious injuries.

The State's approach to this year's target setting is a departure from prior years, in that Caltrans is no longer forecasting that it will reach zero fatalities in a future year (previously, 2030, then 2050). Instead, Caltrans is using a trend line approach that extrapolates the existing changes in fatalities and serious injuries into the future and assumes impacts of external factors and safety improvements (e.g., development and implementation of Local Road Safety Plans and distribution of Office of Traffic Safety grants). Note: Caltrans does not currently use a safety model for target setting, and it is challenging to deduce forecasted impacts of investments on safety. For fatalities, the statewide target assumes a reduction of 2.9 percent (vs. 3.03 percent in 2020) and for serious injuries, it assumes a reduction of 1.3 percent (vs. 1.5 percent in 2020). The statewide targets for calendar year 2021, all of which reflect five-year rolling averages, are as follows:

Number of Fatalities: 3,624.8

Rate of Fatalities per 100 million VMT: 1.044

Number of Serious Injuries: 15,419.4

Rate of Serious Injuries per 100 million VMT: 4.423

• Number of Non-motorized Fatalities and Non-motorized Serious Injuries: 4,340.8

For additional details regarding the State's target setting methodology, please review Attachment 1: Safety Performance Management Targets for 2021.

REGIONAL SAFETY TARGETS

Target Setting Evaluation

In order to evaluate potential targets, SCAG staff took the following steps: (1) estimate the existing trends to determine where we are now, (2) determine what external factors will impact the target in order to forecast future trends, and (3) estimate targets based on forecasted fatality reductions from safety plans. SCAG's efforts related to each of these steps is detailed below.

(1) Regional Existing Conditions

SCAG staff analyzed the region's roadway collision data, patterns, and trends. In summary, on average, 1,600 people are killed, 6,300 were seriously injured, and 136,300 are injured in traffic collisions in Southern California every year. The region experienced a period of annual declines in traffic-related fatalities and serious injuries until 2012 when they began to steadily rise, and they



have now risen to their previous peaks. Collisions not only impact drivers, but disproportionately impact people who walk and bike. Low income and communities of color are also negatively impacted; a significant portion of SCAG's High Injury Network, about 66 percent, exists in Disadvantaged Communities.

(2) Influence of External Factors

Collisions and collision severity are impacted by many factors, some of which are not under the direct control of transportation agencies, such as vehicle safety features, weather, and the state of the economy. Some research suggests that in California, 70 percent of the collision variation can be taken into account from only considering the unemployment rate and per capital Gross Domestic Product (GDP) growth for California for the years 1998 to 2015.¹ Other external factors to consider include: continued population growth; demographic changes (e.g., increasing share of older adults, Millennial transport preferences); the changing mode mix on the roadways; mobility innovations; changing drug laws; and the availability of funding for safety-related projects and programs, among others.

The pandemic is the most significant external factor in calendar year 2020 and likely will be in 2021 as well. Throughout the pandemic, people are still relying on cars, buses, rail lines, bicycles, and feet to get around. The pandemic has impacted exposure (i.e., the level of activity on the roads) and operations, which can change road conditions and trigger behavioral responses. At the national level, the National Highway Transportation Safety Administration's (NHTSA's) October 2020 report noted that the rate of traffic fatalities is up (1.25 vs. 1.06 deaths/100 million VMT), while traffic volumes are down by nearly 17 percent. In California, UC Berkeley's SafeTREC has found similar circumstances, with rates of fatal and serious crash rates increasing by 14.6 percent (per 100 million VMT). As we enter calendar year 2021, we are not yet certain of the pandemic's impact on transportation safety, considering potential mode changes (e.g., shifting away from transit), the impact of telework, and other factors.

(3) Estimating Targets based on Forecasted Fatality Reductions from Safety Plans

Though there are clearly many external factors, SCAG recognizes that there are many actions agencies can take to influence the numbers and rates of fatalities and serious injuries, including lowering traffic speeds, engineering roadways better, conducting targeted education and engagement, and ongoing evaluation. Also, we are undoubtedly in a better position to take actions that can have impact when we have a firm handle on our existing conditions. In November 2020, SCAG secured technical assistance from FHWA to develop a data-driven safety target setting methodology and safety planning models. SCAG anticipates the safety models will consider a variety of inputs, including land uses, population growth, VMT growth, roadway types, and the density of intersections. In the absence of these safety models and considering past Transportation

¹ National Cooperative Highway Research Project 17-67, "Identification of Factors Contributing to the Decline of Fatalities in the United States"



Committee feedback to achieve Toward Zero Deaths by 2050, if not sooner, SCAG is recommending reaching a target line of zero fatalities by 2050 as it did in 2020. Fatalities, serious injuries, and non-motorized fatalities and serious injuries need to be reduced by 3.5 percent annually to reach the goal of zero by 2050. The decrease in fatalities, serious injuries and non-motorized fatalities and serious injuries is applied from the year 2018. The percentage decreases are carried forward for the future years. The targets for calendar year 2021, all of which reflect five-year rolling averages are detailed in the table below, including a comparison of the targets when the 2021 and 2020 State methodology are applied.

Table 1: Regional Targets

Measure	SCAG Targets	Caltrans Targets	SCAG Targets	Caltrans Targets	SCAG Targets Applying the 2021 State method	SCAG Targets Applying the 2020 State method	Caltrans Targets
	2019	2019	2020	2020	2021	2021	2021
Number of Fatalities	1,467	3,445.4	1,607	3,518	1,622.1	1,608.9	3,624.8
Rate of Fatalities per 100 MVMT	0.89	0.995	0.96	1.023	1.32	1.31	1.044
Number of Serious Injuries	5,552	12,688.1	5,735.61	13,740.4 0	6,672.23	6,490.1	15,419.4
Rate of Serious Injuries per 100 MVMT	3.366	3.661	3.42	3.994	5.45	5.30	4.423
Total Number of Non - motorized	2,133	3,949.8	1,915.98	4,147.4	2,211.95	2,162.59	4,340.8

REGIONAL SAFETY STRATEGY

Federal and state evaluation of the achievement of the safety targets is scheduled to occur in 2022. To achieve the region's safety targets, significant effort is needed. SCAG recognizes that there are numerous actions that can be taken to reduce traffic fatalities and serious injuries, and that as an



MPO, SCAG can work to motivate and facilitate action across the region. Over the course of the past several years and as a significant policy element in Connect SoCal, SCAG has developed a regional safety strategy that includes safety policy and planning; data collection and analysis; and support of local level efforts. These components are described below.

Safety Policy and Planning

- **Develop the regionwide safety framework:** As a part of the long-range plan, Connect SoCal, SCAG develops a Transportation Safety Technical Report which includes a safety framework for the region, including strategies local jurisdictions can implement to improve transportation safety in their communities.
- Support and collaborate on California's Strategic Highway Steering (SHSP) Committee: SCAG serves on the SHSP Steering Committee, which establishes the strategies and processes to implement California's statewide transportation safety framework.
- Co-lead the SHSP Bicycle Challenge Area Team: SCAG co-leads the Bicycle Challenge Area team, which involves collaborating with agencies across the state to implement actions to reduce bicyclist fatalities and serious injuries. SCAG also currently leads the subgroup that is focused on developing statewide guidance on High Injury Networks, which could eventually help with local jurisdiction speed setting.
- **Support safety legislation:** As documented in SCAG's legislative platform, SCAG supports legislation that implements the recommendations of the State's Zero Traffic Fatalities Task Force, which would provide jurisdictions with greater local control to combat rising traffic-related fatalities and serious injuries. SCAG is currently working with Assemblymember Friedman's office on legislation (AB 43) that would advance the Task Force recommendations.

Data Collection and Analysis

- **Establish annual safety targets:** Federal guidance requires SCAG to adopt regional targets for road safety on an annual basis. SCAG has adopted three rounds of regional safety targets to date, starting in 2018.
- **Macro level safety modeling:** As noted earlier, in November 2020 SCAG secured technical assistance from FHWA to develop a data-driven safety target setting methodology and safety planning models. The modeling work is anticipated to be completed before the end of Fiscal Year 2021.
- **Maintain the Regional High Injury Network:** To motivate reductions in serious injuries and fatalities, SCAG developed a High Injury Network (HIN) to help local jurisdictions focus improvements on where they are most needed.
- Analyze, interpret, and share regional data: SCAG is currently working on developing an Equity Framework that will include a variety of equity indicators, including those relating to transportation safety such as rates of collisions by mode stratified by race/ethnicity and other demographic factors. SCAG staff anticipate sharing updates on this work at the



January and March meetings of the Special Committee on Equity and Social Justice and at future policy committee meetings.

Supporting Local Safety Efforts

- Leading and Collaborating on Safety Education Campaigns: To heighten awareness of the region's transportation safety challenges and opportunities, and to reduce collisions resulting in serious injuries or fatalities, SCAG launched the Go Human campaign in 2015. Go Human is a community outreach and advertising campaign with the goals of reducing traffic collisions and encouraging people to walk and bike more in the SCAG region. Go Human is a collaboration between SCAG and the County Transportation Commissions and Public Health Departments in the region. The campaign provides advertising and educational resources to partners and implements temporary safety demonstration projects to showcase innovative transportation designs and help cities reenvision their streets as safer, more accessible places for walking and biking. Other strategies have included distribution of mini-grants to local partners to implement safety engagement activities, safety workshops and symposiums, among others. In 2021, Go Human will host its third mini grant program, a Community Ambassador Safety Cohort Program and will continue developing co-branded safety materials. To date, Go Human has achieved more than 1.3 billion impressions through its safety advertising efforts and has secured 56 Pledges committing to safety strategies from jurisdictions across the region.
- **Safety planning technical assistance:** Starting in 2018, SCAG began offering technical assistance to local jurisdictions interested in developing safety plans through its Sustainable Communities Program. Resulting safety plans are intended help further the region's efforts to reduce fatalities and serious injuries and achieve regional safety targets.
- Convening policymakers and practitioners: On at least a quarterly basis, SCAG convenes local jurisdictions and agencies to achieve better coordination and uplift best practices via its Transportation Safety and Active Transportation Working Groups and Go Human Steering Committee. Starting in 2019 and continuing in 2020, SCAG will be holding a series of peer exchanges for transportation safety policymakers and practitioners. The purpose of the peer exchanges is to encourage stakeholders in the region to develop safety plans and implement safety strategies to reduce fatalities and serious injuries, especially for vulnerable populations (e.g., bicyclists, pedestrians, older adults, and youth).

RECOMMENDATION

SCAG staff recommend adopting SCAG-specific targets based on Caltrans' prior target setting methodology that was supportive of achieving Toward Zero Deaths (See Attachment 2). This means that SCAG will work towards achieving annual reductions of 3.5 percent in fatalities and serious injuries until 2050 (aligning with the horizon year of Connect SoCal, 2045), at which time the region is anticipated to experience zero traffic-related fatalities. Because targets will be updated annually, SCAG will have the opportunity to revisit and update its targets each calendar year.



The adopting resolution also reaffirms SCAG's regional leadership role and commitment to advance activities outlined in Connect SoCal and the Regional Safety Strategy, as reflected above, and endorsement of a Regional Safety Policy to guide this work that:

- Endorses TZD as part of a comprehensive effort to strive to achieve zero transportationrelated fatalities and serious injuries in the SCAG region by 2050, if not sooner;
- Motivates data driven approaches, including High Injury Networks and safety modeling, to inform safety policy and planning and the strategic use of available funds and resources;
- Promotes equity in regional safety policies and plans by considering and analyzing impacts on Disadvantaged Communities, Communities of Concern, and Environmental Justice Areas, and protecting vulnerable roadway users, such as pedestrians and bicyclists, older adults and youth;
- Engages regional stakeholders in transportation safety policy and plan development, implementation, and evaluation, with the goal of achieving alignment with TZD;
- Provides leadership at the state and regional levels to promote safety, including supporting work on statewide efforts (e.g., SHSP) and legislation that furthers TZD.

FISCAL IMPACT:

Funding for staff work on this issue is included in the OWP (21-310.4883.01: Transportation Safety).

ATTACHMENT(S):

- 1. Safety Performance Management Targets for 2021
- 2. Safety Performance Management Targets for 2020
- 3. Draft 2021 Safety Targets and Regional Safety Policy Resolution
- 4. PowerPoint Presentation Regional Safety Targets 2021

Safety Performance Management Targets for 2021

The California Department of Transportation (Caltrans), in cooperation with the Office of Traffic Safety (OTS), is required to set five annual Safety Performance Management Targets (SPMTs) for all public roads in the State of California by August 31 of each year. This is pursuant to the Moving Ahead for Progress in the 21st Century Act (MAP-21, P.L. 112-141). The Safety Performance Management Final Rule adds Part 490 to Title 23 of the Code of Federal Regulations to implement the performance management requirements in 23 U.S.C. 150.

Caltrans set SPMTs for the 2021 calendar year by August 31, 2020. Caltrans and OTS have adopted targets consistent with the California Strategic Highway Safety Plan (SHSP) as follows:

TABLE 1. PERFORMANCE MEASURE AND TARGET BASED ON 5-YEAR AVERAGE

Performance Measure	Data Source	5-Yr. Average Target for 2021	Annual Reduction 2018 to 2021
Number of Fatalities	FARS	3,624.8	2.9%
Rate of Fatalities (per 100M VMT)	FARS & HPMS	1.044	2.9%
Number of Serious Injuries	SWITRS	15,419.4	1.3%
Rate of Serious Injuries (per 100M VMT)	SWITRS & HPMS	4.423	1.3%
Number of Non-Motorized Fatalities and Serious Injuries	FARS & SWITRS	4,340.8	2.9% for Fatalities and 1.3% for Serious Injuries

Note: The targets highlighted in gray are set in coordination with OTS.

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose to achieve a significant reduction in fatalities and serious injuries on all public roads. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads and focuses on performance. The HSIP regulation under 23 CFR 924 establishes the Federal Highway Administration's (FHWA) HSIP policy, as well as program structure, planning, implementation, evaluation and reporting requirements for states to successfully administer the HSIP. The overarching highway safety plan for the State of California is the Strategic Highway Safety Plan (SHSP). In January 2020, California updated its SHSP, which is "a statewide, coordinated traffic safety plan that provides a comprehensive framework for reducing roadway fatalities and serious injuries on California's public roads" (SHSP, 2020-2024, page 5). It further states that the "SHSP is a multi-disciplinary effort involving Federal, Tribal, State, and local representatives from the 5 Es of safety who dedicate countless hours to improve safety and partnerships across disciplines" (SHSP, 2020-2024, page 38).In support of a data-driven and strategic approach, the HSIP Final Rule contains major policy changes related to:

- the HSIP report content and schedule,
- the SHSP update cycle, and

• the subset of the Model Inventory of Roadway Elements (MIRE), also known as the MIRE Fundamental Data Elements (FDE).

The Safety Performance Measures (PM) Final Rule supports the data-driven performance focus of the HSIP. The Safety PM Final Rule establishes five performance measures to carry out the HSIP: the five-year averages for:

- Number of Fatalities,
- Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT),
- Number of Serious Injuries,
- Rate of Serious Injuries per 100 million VMT, and
- Number of Non-motorized Fatalities and Non-motorized Serious Injuries.

These safety performance measures are applicable to all public roads regardless of ownership or functional classification. The Safety PM Final Rule also establishes a common national definition for serious injuries.

States must establish statewide targets for each of the safety PMs. States also have the option to establish any number of urbanized area targets and one non-urbanized area target for any, or all, of the measures. Targets are established annually. For three PMs (number of fatalities, rate of fatalities and number of serious injuries), targets must be identical to the targets established for the National Highway Traffic Safety Administration (NHTSA) Highway Safety Grants program that is administered by OTS. The State Departments of Transportation (DOTs) must also coordinate with their Metropolitan Planning Organizations (MPOs) in their states on establishment of targets, to the maximum extent practicable. States will report targets to the FHWA in the HSIP report due in August of each year.

Each MPO will establish targets for the same five safety performance measures for all public roads in the MPO's planning area within 180 days after the state establishes each target. The targets will be established in coordination with the state, to the maximum extent practicable. The MPO can either agree to support the State DOT target or establish a numerical target specific to the MPO planning area. MPOs' targets are reported to the State DOT, which must be able to provide the targets to FHWA, upon request.

A state is considered to have met or made significant progress toward meeting its safety targets when at least four of the five targets are met or the outcome for the PM is better than the baseline performance the year prior to the target being set. Optional urbanized area or non-urbanized area targets will not be evaluated. Each year that the FHWA determines a state has not met or made significant progress toward meeting its performance targets, the state will be required to use obligation authority equal to the baseline year HSIP apportionment for safety projects. States must also develop a HSIP Implementation Plan.

Target Selection Methodology

There are three steps to setting safety performance targets, which are:

- estimating the existing trends to determine where the state is,
- determining what external factors will impact the target in order to forecast future trends, and
- estimating targets based on forecasted fatality reductions from safety plans.

Since safety targets are applicable to all public roads in the California, regional and local jurisdictions should be collaboratively involved in the safety target setting process. In line with this, on July 20, 2020, a virtual workshop was held to discuss the 2021 SPMTs with the MPOs and other vested stakeholders. During this workshop, three possible scenarios for setting the 2021 targets were discussed. They included: (1) an aspirational trend such as reaching zero fatalities by 2050; (2) a target based on estimated impacts from completed activities and projects; and (3) a trend line, which extrapolates the existing changes in fatalities and serious injuries into the future.

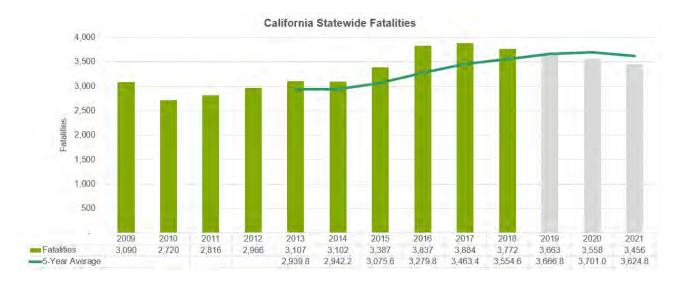
The current approach is the third scenario that uses a trend line. The trend line approach extrapolates the existing changes in fatalities and serious injuries into the future and is a data-driven process that estimates the impacts of external factors and safety improvements based on collision history.

The Number of Fatalities

For 2021, the target for fatalities is the five-year average of **3,624.8** with 3,456 fatalities projected for the same year. NHTSA Fatality Analysis Reporting System (FARS) data was used through 2017 and the adjusted provisional number of 3,772 obtained from California Highway Patrol (CHP) FARS was used for 2018 as it was believed to be a more accurate number for 2018. Even though traffic fatalities have generally increased from 2010 to 2017 in California as shown in Figure 1, there was a 2.9% reduction in fatalities from 3,884 in 2017 to 3,772 in 2018. The target for 2021 fatalities is based on continuing this trend line for fatalities of an annual reduction of 2.9% from 2018 through 2021. This includes a decrease in actual annual fatalities from 3,772 in 2018 to 3,456 in 2021. In **Figure 1**, the dark green bars for 2009 through 2018 denote the existing fatality data and the gray bars for 2019 through 2021 represent the trend line reduction.

Through assistance with the HSIP, many California agencies have or are developing Local Roadway Safety Plans that put a focus on reducing fatal and serious injury collisions throughout their respective jurisdictions. This coupled with an increase (over 25 percent) in the number of OTS grants from the prior year, will assist California in continuing the downward this downward trend in fatalities.

FIGURE 1 – CALIFORNIA STATEWIDE FATALITIES



The Number of Serious Injuries

The 2021 target for serious injuries is the five-year average of **15,419.4** with 15,411 serious injuries projected for the same year. Statewide Integrated Traffic Records System (SWITRS) data was available for serious injuries through 2018. The definition of serious injuries was changed to include suspected serious injuries and was implemented in mid-2017. The first full year of suspected serious injuries resulted in an increase of 21% from the last full year using the old definition. The trend line for serious injuries was based on the 1.3% reduction from 7,725 serious injuries for the first half of 2018 to 7,623 for the first half of 2019. The target for 2021 serious injuries is based on continuing this trend line for serious injuries of an annual reduction of 1.3% of serious injuries from 2019 through 2021. This is represented by a decrease in serious injuries from 16,039 in 2018 to 15,411 in 2021. In **Figure 2**, the dark green bars for 2009 through 2018 denote the existing serious injury data and the gray bars for 2019 through 2021 represent the trend line reduction.

Through assistance with the HSIP, many California agencies have or are developing Local Roadway Safety Plans that put a focus on reducing fatalities and serious injuries throughout their agency. This coupled with the increase (over 25%) in the number of OTS grants from the prior year, will assist California in continuing the downward trend in serious injuries.



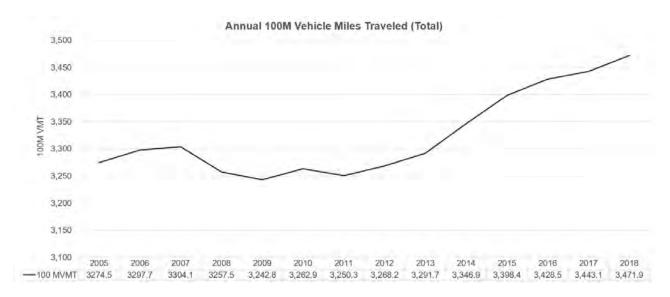
FIGURE 2 – CALIFORNIA STATEWIDE SERIOUS INJURIES

Annual Fatality Rate (per 100M VMT)

Statewide traffic volumes are reported in one hundred million vehicle miles traveled (100M VMT).

For the purposes of safety performance target setting, VMT data used was from the Highway Performance Monitoring System through 2018. As shown in Figure 3, traffic volumes have been steadily increasing since 2011. 2019 VMT was projected to have a 0.9 percent increase over 2018 and then remain flat through 2021 due to the uncertainties of the impacts of COVID-19.

FIGURE 3 – ANNUAL STATEWIDE TRAFFIC VOLUMES



For 2021, the target for fatality rate is the five-year average of **1.043** with an annual rate of 0.99 for the same year. This represents an annual reduction from a rate of 1.09 for 2018 to 0.99 in 2021. For the fatality rate calculation, the fatality data and reduction of fatalities of 2.9% from 2018 through 2021 from the number of fatalities performance measure was used. In **Figure 4**, the dark green bars for 2009 through 2018 denote the existing fatality rate data and the gray bars for 2019 through 2021 represent the trend line reduction.

FIGURE 4 – CALIFORNIA STATEWIDE FATALITY RATE



The Rate of Serious Injury

The serious injury rate is the number of serious injuries divided by 100M VMT. For 2021, the target for serious injury rate is the five-year average of **4.423** with an annual rate of 4.40 for the same year. This includes a reduction of the annual serious injury rate from 4.62 in 2018 to 4.40 in 2021. For the serious injury rate calculation, the serious injury data and reduction of serious injuries of 1.3% from 2019 through 2021 from the number of serious injuries performance measure was used. The VMT data used was from the Highway Performance Monitoring System through 2018 and 2019 VMT was projected to have a 0.9 percent increase over 2018 and then remain flat through 2021 (as is the case in calculating the fatality rate). In **Figure 5**, the dark green bars for 2009 through 2018 denote

the existing serious injury rate data and the gray bars for 2019 through 2021 represent the trend line reduction.

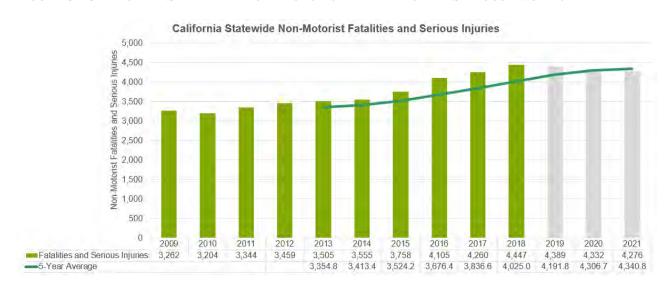
FIGURE 5 - CALIFORNIA STATEWIDE SERIOUS INJURY RATE



The Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries (Bicycles and Pedestrians)

In **Figure 6**, the darker green bars for 2009 through 2018 show the number of fatalities from FARS and serious injuries from SWITRS for pedestrians and bicyclists combined. The gray bars for 2019 through 2021 depict the decreasing number of fatalities and serious injuries. For 2021, the target for non-motorized fatalities and serious injuries is the five-year average of **4,340.8** with an annual frequency of 4,276 for the same year. This includes a reduction in the annual frequency from 4,447 in 2018 to 4,276 in 2021. This reduction is based on applying the 2.9% reduction for fatalities and 1.3% reduction for serious injuries discussed previously.

FIGURE 6 - CALIFORNIA STATEWIDE NON-MOTORIST FATALITIES AND SERIOUS INJURIES



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https://dot.ca.gov/programs/federal-liaison.

Safety Performance Management Targets for 2020

The California Department of Transportation (Caltrans), in cooperation with the Office of Traffic Safety (OTS), is required to set five annual Safety Performance Management Targets (SPMTs) for all public roads in the State of California by August 31 of each year. This is pursuant to the Moving Ahead for Progress in the 21st Century Act (MAP-21, P.L. 112-141). The Safety Performance Management Final Rule adds Part 490 to Title 23 of the Code of Federal Regulations to implement the performance management requirements in 23 U.S.C. 150.

Caltrans set SPMTs for the 2020 calendar year by August 31, 2019. Caltrans and OTS have adopted aspirational goals consistent with the California Strategic Highway Safety Plan (SHSP) as follows:

TABLE 1. PERFORMANCE MEASURE AND TARGET BASED ON 5-YEAR ROLLING AVERAGE

Performance Measure	Data Source	5-Yr. Rolling Average	Percent Reduction	
		Target for 2020	for 2020	
Number of Fatalities	FARS	3518.0	3.03%	
Rate of Fatalities (per 100M	FARS & HPMS	1.023	3.03%	
VMT)				
Number of Serious Injuries	SWITRS	13,740.4	1.5%	
Rate of Serious Injuries (per	SWITRS &	3.994	1.5%	
100M VMT)	HPMS			
Number of Non-Motorized	FARS &	4147.4	3.03% for Fatalities	
Fatalities and Non-Motorized	SWITRS		and 1.5% for Serious	
Severe Injuries			Injuries	

Note: The targets highlighted in gray are set in coordination with OTS.

The Highway Safety Improvement Program (HSIP) is a core Federal-aid program with the purpose to achieve a significant reduction in fatalities and serious injuries on all public roads. The HSIP requires a data-driven, strategic approach to improving highway safety on all public roads and focuses on performance. The HSIP regulation under 23 CFR 924 establishes the Federal Highway Administration's (FHWA) HSIP policy, as well as program structure, planning, implementation, evaluation and reporting requirements for States to successfully administer the HSIP. The overarching highway safety plan for the State of California is the Strategic Highway Safety Plan (SHSP). In September 2015, California updated its SHSP, which is "a statewide coordinated safety plan that provides a comprehensive framework for reducing highway fatalities and severe injuries on all public roads" (SHSP, 5). It further states that the "SHSP is a multi-disciplinary effort involving Federal, State, and local representatives from the 4Es of safety [i.e. engineering, education, enforcement, and emergency services]" (SHSP, 2015-2019, 34). In support of a datadriven and strategic approach, the HSIP Final Rule contains major policy changes related to: (1) the HSIP report content and schedule, (2) the Strategic Highway Safety Plan (SHSP) update cycle, and (3) the subset of the model inventory of roadway elements (MIRE), also known as the MIRE fundamental data elements (FDE).

The Safety Performance Measures (PM) Final Rule supports the data-driven performance focus of the HSIP. The Safety PM Final Rule establishes five performance measures to carry out the HSIP: the five-year rolling averages for: (1) Number of Fatalities, (2) Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT), (3) Number of Serious Injuries, (4) Rate of Serious Injuries per 100 million VMT, and (5) Number of Non-motorized Fatalities and Non-motorized Serious Injuries. These safety performance measures are applicable to all public roads regardless of ownership or functional classification. The Safety PM Final Rule also establishes a common national definition for serious injuries.

States must establish statewide targets for each of the safety performance measures. States also have the option to establish any number of urbanized area targets and one non-urbanized area target for any, or all, of the measures. Targets are established annually. For three performance measures (number of fatalities, rate of fatalities and number of serious injuries), targets must be identical to the targets established for the National Highway Traffic Safety Administration (NHTSA) Highway Safety Grants program that is administered by OTS. The State Departments of Transportation (DOTs) must also coordinate with their Metropolitan Planning Organizations (MPOs) in their States on establishment of targets, to the maximum extent practicable. States will report targets to the FHWA in the HSIP report due in August of each year.

Each MPO will establish targets for the same five safety performance measures for all public roads in the MPO's planning area within 180 days after the State establishes each target. The targets will be established in coordination with the State, to the maximum extent practicable. The MPO can either agree to support the State DOT target or establish a numerical target specific to the MPO planning area. MPOs' targets are reported to the State DOT, which must be able to provide the targets to FHWA, upon request.

A State is considered to have met, or made significant progress toward meeting, its safety targets when at least four of the five targets are met or the outcome for the performance measure is better than the baseline performance the year prior to the target year. Optional urbanized area or non-urbanized area targets will not be evaluated. Each year that FHWA determines a State has not met or made significant progress toward meeting its performance targets, the State will be required to use obligation authority equal to the baseline year HSIP apportionment only for safety projects. States must also develop a HSIP Implementation Plan.

Target Selection Methodology

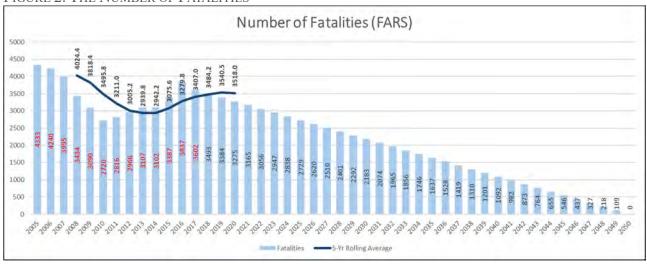
There are three steps to setting safety performance targets, which are: (1) estimating the existing trends to determine where we are now, (2) determining what external factors will impact the target in order to forecast future trends, and (3) estimating targets based on forecasted fatality reductions from safety plans. In line with these steps, on May 8, 2019, a webinar and telephone conference was held to discuss the 2020 Safety Performance Management Targets with the MPOs and other vested stakeholders. During this workshop four possible scenarios for setting the 2020 Targets were presented. They included: (1) a trend line, which extrapolates the existing changes in fatalities and serious Injuries into the future; (2) a flat line scenario, which assumes that there is no change in the future from the current numbers; (3) a match to the Strategic Highway Safety Plan's goal of -3% for fatalities and -1.5% for serious injuries; (4) a target line of reaching zero fatalities by 2050.

After receiving feedback from the MPOs from the webinar and telephone conference on May 8, 2019, the consensus was to select the fourth scenario, which uses a target line of reaching zero fatalities by 2050. This scenario is similar to the goals adopted by several States in the nation of Toward Zero Deaths TZD by 2050 (with 2016 numbers as the baseline numbers). The next update of the SHSP will be by 2020 and the TZD goals in this future safety plan will be incorporated in the 2021 SPMTs. The rationale for selecting safety targets based on a comprehensive statewide safety plan is to set "empirically derived targets based on quantitative modeling of potential strategies. With this approach, targets are based on empirical evidence of the selected interventions' previous effectiveness combined with best estimates of future effectiveness, using a model linking inputs and outcomes" (Performance Management Practices and Methodologies for Setting Safety Performance Targets, Federal Highway Administration, 2011). Since safety performance targets pertain to all public roads, in a practical sense for this to work, local jurisdictions need to develop individual performance measures based on the particular needs of the locality and also target the appropriate strategies. If regional implementation is adopted, this denotes a bottoms-up approach where targets are rolled up from the State and local jurisdictions based on safety effectiveness, supported by research, and are more realistic and achievable, which in turn helps secure political support (Joint Transportation Research Centre of the Organization for Economic Cooperation and Development and International Transport Forum, Towards Zero: Ambitious Road Safety Targets and the Safe System Approach, 2008).

The Number of Fatalities

For 2020, the target for fatalities based on the five-year rolling average is **3518.0** with 3275 fatalities projected for the same year. While referring to Figure 2, the blue bars with red text reflect the data that was available in FARS at the time of the target setting process. For the 2020 targets, the last year that data was available in FARS was the 2017 data. The Number of Fatalities 2020 target is set with a target line to decrease fatalities to zero by the end of December 2049. This is denoted by the blue bars with black text that begin in year 2018. The dark blue line represents the 5-year rolling average from the annual fatality numbers.

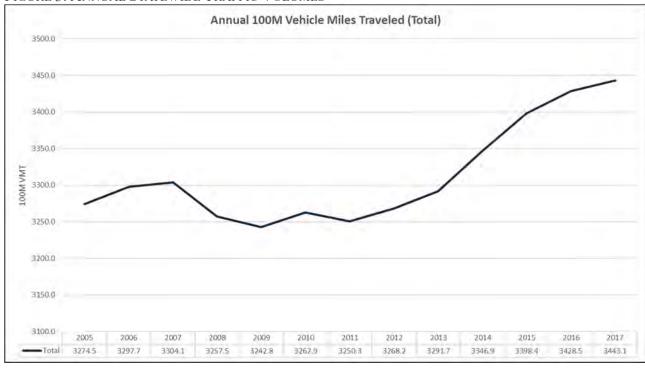
FIGURE 2. THE NUMBER OF FATALITIES



Annual Fatality Rate (per 100M VMT)

Statewide traffic volumes are reported in one hundred million vehicle miles traveled (100M VMT). While referring to Figure 3, traffic volumes have been steadily increasing since 2011. For the purposes of safety performance target setting, a 1 percent increase in VMT is forecasted from year-to-year for the years from 2017 to 2020.

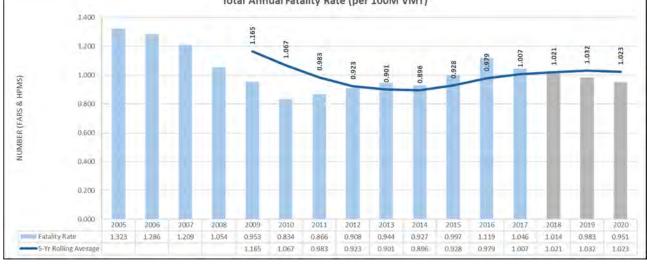
FIGURE 3. ANNUAL STATEWIDE TRAFFIC VOLUMES



The fatality rate is calculated by dividing the number of fatalities by 100M VMT. The same assumptions are relevant for the calculation of the number of fatalities and they are (refer to Figure 4):

- The blue bars denote the current data that is available in FARS (as of June 2019 when the OTS presented their targets to NHTSA);
- The gray bars show a toward zero death target by the of December 2049 from 2017 to 2020.





The dark blue line represents the five-year rolling average from annual fatality rates that reflect the 2015-2019 SHSP goal, which is **1.023** per 100M VMT. The fatality rate for 2020 is 0.951.

The Number of Serious Injuries

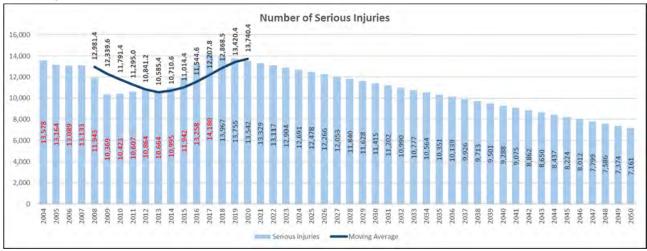
The serious injury data for the State of California resides in the Statewide Integrated Traffic Records System (SWITRS). The definition of serious injury corresponds to "A" in the KABCO Scale and the corresponding value in the SWITRS database is coded as "2". This is explained in Table 2 (below).

TABLE 2. A COMPARISON BETWEEN KABCO AND SWITRS SERIOUS INJURY DEFINITIONS

KABCO Definition (FHWA)	SWITRS Definition (CHP)
K: Fatal Serious Injury	1: Fatal
A: Serious Injury	2: Injury (Severe)
B: Minor Injury	3: Injury (Other Visible)
C: Possible Injury	4: Injury (Complaint of Pain)
O: Property Damage Only	5: Property Damage Only

Referring to Figure 5 below, the blue bars with red text denotes the current data that is available in SWITRS (as of June, 2019). The blue bars with black text shows the number of serious injuries that decrease 1.5% from 2017-2050. The target year for serious injury numbers is 13,542. The dark blue line represents a five-year rolling average and for 2020 it is 13,740.4.

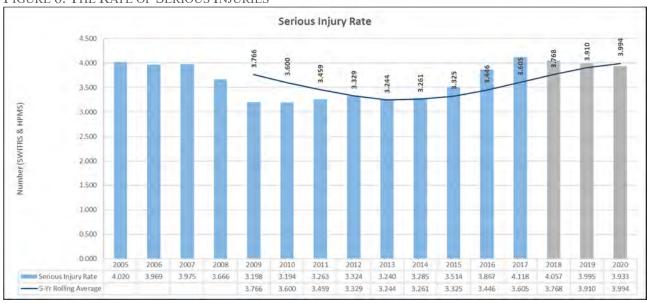
FIGURE 5. THE NUMBER OF SERIOUS INJURIES



The Rate of Serious Injury

The serious injury rate is the number of serious injuries divided by 100M VMT. While referring to Figure 6 (below), the blue bars denote the current data that is available in SWITRS and HPMS. The serious injury rate in 2020 is 3.933. The dark blue line represents a five-year rolling average of serious injuries. This concept is incorporated in the SHSP. This is a "vision" based or "aspirational" target. The 2020 target for the serious injury rate is **3.994**. The Average Annual Daily Traffic (AADT) volumes are increased 1 percent per year from the 2016 levels for the years from 2017 to 2020 (as is the case in calculating the fatality rate).

FIGURE 6. THE RATE OF SERIOUS INJURIES



The Number of Non-Motorized Fatalities and Non-Motorized Serious Injuries (Bicycles and Pedestrians)

While referring to Figure 7 (below), the darker blue bars show the number of fatalities for pedestrians and bicyclists combined. In 2017, the number of combined pedestrian bicycle fatalities is 982 as of June, 2019. The lighter blue bars with red text denote the current data that is available in SWITRS for the number of serious injuries for pedestrians and bicyclists combined. In 2017, the number of combined serious injuries for bicycles and pedestrians is 3,273. The dark blue bars depict the decreasing number of fatalities to zero by the end of December 2049. The dark blue line represents the five-year rolling average for non-motorized fatalities and serious injuries, which for the target year of 2020 is 4147.4.

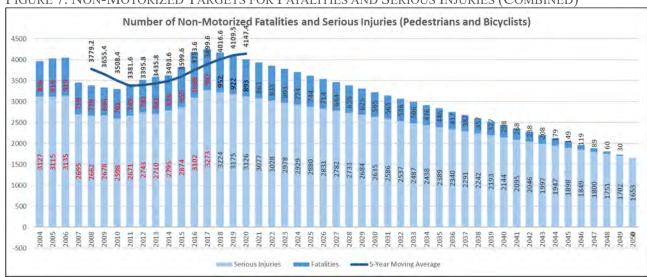


Figure 7. Non-Motorized Targets for Fatalities and Serious Injuries (Combined)

Summary

For a breakdown of the five SPMTs, refer to Table 1. Appendix A also details the outreach efforts done by Caltrans, OTS, and the FHWA to the MPO's, counties, and local agencies in order to coordinate and communicate the SMPTs. Further information with regards to the webinars listed in Appendix A is accessible at: http://www.dot.ca.gov/trafficops/shsp/. Here data is provided from Caltrans, OTS, and the FHWA. For example, traffic volumes from HPMS are broken down by county for 10 years. In addition, the webinars have been recorded and can be accessed from this website.

APPENDIX A: Safety Performance Management Target Setting Outreach Efforts

Background:

Safety Performance Management (Safety PM) is part of the overall Transportation Performance Management (TPM) program, which the Federal Highway Administration (FHWA) defines as a strategic approach that uses system *information* to make investment and policy decision to achieve national performance goals. The Safety PM Final Rule supports the Highway Safety Improvement Program (HSIP), as it establishes safety performance measure requirements for the purpose of carrying out the HSIP and to assess fatalities and serious injuries on all public roads.

The Safety PM Final Rule establishes five performance measures as the five-year rolling averages to include:

- 1. Number of Fatalities
- 2. Rate of Fatalities per 100 million Vehicle Miles Traveled (VMT)
- 3. Number of Serious Injuries
- 4. Rate of Serious Injuries per 100 million VMT
- 5. Number of Non-motorized Fatalities and Non-motorized Serious Injuries

The Safety PM Final Rule also establishes the process for State Departments of Transportation (DOTs) and Metropolitan Planning Organizations (MPOs) to establish and report their safety targets, and the process that the FHWA will use to assess whether State DOTs have met or made significant progress toward meeting their safety targets.

Important Dates/Deadlines:

The overall State targets required by FHWA are due on August 31st, annually, while the MPOs set their targets six months after the State sets its targets. Three of the five safety targets must be coordinated with the Highway Safety Plan administered by the Office of Traffic Safety (OTS), which must submit their targets to NHTSA by June 30th of each year.

Performance Targets must also be included in updates to Long-Range Statewide Transportation Plans (LRSTP), metropolitan transportation plans (MTP), state transportation improvement programs (STIP) and transportation improvement programs (TIP) after May 27, 2019.

Engagement Timeline:

• May 8, 2019 – A workshop took place by webinar and phone conference to discuss the 2020 Safety Performance Management Targets with the MPOs and other vested stakeholders. During this workshop four possible scenarios for setting the 2020 Targets were presented. They included: (1) a trend line, which extrapolates the existing changes in fatalities and serious injuries into the future; (2) a flat line scenario, which assumes that there is no change in the future from the current numbers; (3) a match to the Strategic Highway Safety Plan's goal of -3% for fatalities and -1.5% for serious injuries; (4) a target line of reaching zero fatalities by 2050. After receiving feedback from the MPOs from the webinar and phone conference, the consensus was to select the fourth scenario.

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

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Transportation
Cheryl Viegas-Walker, El Centro

DRAFT

A RESOLUTION OF THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS APPROVING THE 2021 SAFETY TARGETS AND REGIONAL SAFETY POLICY

WHEREAS, SCAG is the largest Metropolitan Planning Organization (MPO) in the United States covering six counties (Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura), and serving 19 million people pursuant to 23 USC § 134 et seq. and 49 USC § 5303 et seq.; and

WHEREAS, SCAG is responsible for bringing Southern California's diverse residents and local partners together with unifying regional plans, policies, and programs that result in more healthy, livable, sustainable, and economically resilient communities; and

WHEREAS, improving mobility, accessibility, reliability, and transportation safety has been a goal included in SCAG's long-range plans, including *Connect SoCal*, for decades; and

WHEREAS, transportation safety is a serious issue in the region, where on average 1,600 people are killed, 6,300 are seriously injured, and 136,300 are injured in traffic collisions every year; and

WHEREAS, transportation safety is an equity issue because low income and communities of color are disproportionately impacted; 66 percent of SCAG's High Injury Network exists in Disadvantaged Communities; and

WHEREAS, the Moving Ahead for Progress in the 21st Century (MAP-21) Act requires MPOs to establish annual safety targets; and in 2018, 2019, and 2020, SCAG adopted Toward Zero Deaths-supportive regional safety targets; and

WHEREAS, 23 U.S. Code §450 requires the Regional Transportation plan to include a system performance report, including progress achieved by the MPO in meeting safety performance targets, and requires that the Transportation Improvement Program (TIP), once implemented, is designed to make progress toward achieving the safety performance target; and

WHEREAS, Toward Zero Deaths (TZD) provides a framework for reducing fatalities and serious injuries on all public roads, utilizing a safe systems approach that is based on the understanding that even one traffic-related fatality is unacceptable, and that the road system needs to put layers of protection in the form of safe roads, vehicles, speeds, and people (safe road users) around the fallible and vulnerable human in order to prevent fatalities and serious injuries; and

WHEREAS, SCAG recognizes that it can to help in motivating and facilitating action to reduce fatalities and serious injuries, and it seeks to continue to lead or join aligned TZD efforts; and

NOW, THEREFORE, BE IT RESOLVED by the Regional Council of the Southern California Association of Governments, that SCAG hereby adopts a calendar year 2021 safety target of 3.5 percent annual reductions in fatalities and serious injuries to reach the goal of zero by 2050, if not sooner; and

BE IT FURTHER RESOLVED THAT:

- 1. SCAG adopts a Regional Safety Policy to commit to working with partner agencies to encourage and support actions towards the elimination of transportation-related fatalities and serious injuries by 2050, if not sooner, in Southern California; and
- 2. SCAG endorses Toward Zero Deaths as a comprehensive and holistic approach to achieving this goal; and
- 3. SCAG affirms its commitment to motivating data driven approaches, including High Injury Networks and safety modeling, to inform safety policy and planning and the strategic use of available funds and resources; promoting equity in regional safety policies and plans by considering and analyzing impacts on Disadvantaged Communities, Communities of Concern, and Environmental Justice Areas, and protecting vulnerable roadway users, such as pedestrians and bicyclists, older adults and youth; engaging regional stakeholders in transportation safety policy and plan development, implementation, and evaluation, with the goal of achieving alignment with TZD; and providing leadership at the state and regional levels to promote safety, including supporting work on statewide efforts (e.g., SHSP) and legislation that furthers TZD; and
- 4. SCAG encourages partner agencies to consider adopting and developing TZD policies and plans for their respective jurisdictions.

PASSED, APPROVED AND ADOPTED by the Regional Council of the Southern California Association of Governments at its regular meeting this XX day of XXX, 2021.

[SIGNATURES ON FOLLOWING PAGE]

Rex Richardson President, SCAG	
Councilmember, Long Beach	
Attested by:	
Kome Ajise	
Executive Director	
Approved as to Form:	
Ruben Duran	
Board Counsel	

Regional Safety Targets 2021

Transportation Committee

Courtney Aguirre
January 7, 2021
www.scag.ca.gov



Existing Conditions

In a typical year in Southern California, traffic collisions result in:

- 1,600 people killed
- 6,300 seriously injured (e.g., broken bones, concussions, etc.)
- 136,300 are injured (e.g., bruising)

The top contributing factor of all collisions is unsafe speed.



Safety Performance Management Final Rule

SCAG

- Effective April 14, 2016
- Statutory authority under MAP-21 (49 USC 490)
- Establishes 5 safety performance measures
 - Number of Fatalities (victims)
 - Rate of Fatalities (victims) per 100 million VMT
 - Number of Serious Injuries (victims)
 - Rate of Serious Injuries (victims) per 100 million VMT
 - Number of Non-motorized Fatalities and Non-motorized Serious Injuries (victims)
- 5-Year Rolling Averages

MPO Targets

- Must establish safety targets within 180 days after the State establishes targets (Feb. 28, 2021)
- Can support State targets, establish numerical targets specific to the region, or use a combination of both
- MPO reporting progress to the State includes reporting in RTP/SCS and FTIP



Trends: Fatalities





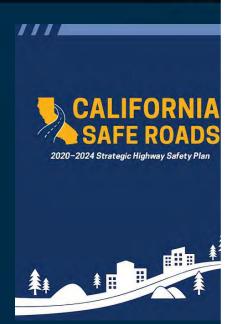
Trends: Non-Motorized Fatalities & Serious Injuries



■ SCAG ■ SCAG Rolling Avg

Statewide Objective: Toward Zero Deaths

- Toward Zero Deaths or a Safe Systems approach
- Principles underpinning approach:
 - The human body has a limited physical ability to tolerate crash forces.
 - Road safety is a shared responsibility amongst everyone, including those that design, build, operate and use the road system.
 - All parts of the road system must be strengthened in combination to multiply the protective effects and if one part fails, the others will still protect people.



Past Target Setting Methodologies

Year	State Method	SCAG Method		
2018	Toward Zero Deaths by 2030 7.69% reduction in fatalities 1.5% reduction in serious injuries 10% reduction in bike/ped fatalities/serious injuries	Same as State		
2019	Toward Zero Deaths by 2030 3% reduction fatalities 1.5% reduction serious injuries 3% and 1.5% reduction in bike/ped fatalities/serious injuries	Same as State		
2020	Toward Zero Deaths by 2050 3.03% reduction in fatalities 1.5% for reduction for serious injuries 3.03% and 1.5% reduction in bike/ped fatalities/serious injuries	Same as State		
2021	Trend Line Approach 2.9% reduction in fatalities 1.3% reduction in serious injuries 2.9% and 1.3% reduction in bike/ped fatalities/serious injuries	Towards Zero Deaths by 2050 3.5% reduction in fatalities 3.5% reduction in serious injuries 3.5% reduction in bike/ped fatalities/serious injuries		

Safety Targets for 2021

Measure	Single Yr SCAG Region	Baseline 5-Year Rolling average SCAG Region	SCAG Targets TZD	SCAG Targets TZD	SCAG Targets State method 2.9 F and 1.3 SI	SCAG Targets TZD method from last cycle (3.5 F and 3.5 SI)	Caltrans Targets
	<u>2019</u>	<u>2019</u>	<u>2019</u>	<u>2020</u>	<u>2021</u>	<u>2021</u>	<u>2021</u>
Number of Fatalities	1529	1611.2	1467	1607	1622.1	1608.9	3624.8
Rate of Fatalities per 100 MVMT	1.25	1.33	0.89	0.96	1.32	1.31	1.044
Number of Serious Injuries	7138	5068	5552	5735.61	6672.23	6490.1	15,419.40
Rate of Serious Injuries per 100 MVMT	5.83	5.19	3.366	3.42	5.45	5.30	4.423
Total Number of Non - motorized	2357	2143	2133	1915.98	2211.95	2162.59	4340.8

SCAG's Role in Transportation Safety

- Safety Policy and Planning
 - · Support and collaborate on SHSP Steering Committee
 - Safety component of the RTP/SCS
 - Transportation Safety Regional Existing Conditions Report
 - Annual safety targets (TZD)
 - Report on progress towards achieving safety targets in FTIP and RTP/SCS
 - Supporting safety legislation (AB 43)
 - Convening jurisdictions and agencies to achieve better coordination (Transportation Safety Working Group)



SCAG's Role in Transportation Safety

- Data Collection and Analysis
 - Regional High Injury Network
 - Macro level safety modeling (Nov. 2020- secured FHWA technical support)
 - Gathering data such as roadway network, traffic volumes, and VMT
 - Analyzing, interpreting and sharing regional data



SCAG's Role in Transportation Safety

- Funding Safety-Related Efforts
 - SCAG Sustainable Communities Planning Grants
 - Supporting ATP funded projects
- Encouraging Best Practices
 - Toolbox Tuesdays (High Injury Network Training)
 - Regional Safety Workshops & Peer Exchanges
- Leading and Collaborating on Safety Education Campaigns
 - Go Human



Regional Safety Policy

- Endorses Toward Zero Deaths (Safe Systems) as part of a comprehensive effort to strive to achieve zero fatalities and serious injuries.
- Motivates data driven approaches to inform safety policy and planning and the strategic use of available funds and resources.
- Promotes equity in regional safety policies and plans by considering and analyzing impacts on high need areas and protecting vulnerable road users.
- Engages regional stakeholders in transportation safety policy and plan development, implementation, and evaluation.
- Provides leadership at the state and regional levels to promote safety, including supporting work on statewide efforts (e.g., SHSP) and legislation that furthers TZD (e.g., AB 43).

Recommended Action

- Recommend that the Regional Council:
 - Adopt SCAG's calendar year 2021 transportation safety targets, which are supportive of Toward Zero Deaths, specifically, the region will reduce fatalities by 3.5 percent and serious injuries by 3.5 percent on an annual basis and achieve a goal of Towards Zero Deaths by 2050.
 - Reaffirm SCAG's regional leadership role and commitment to advancing activities outlined in Connect SoCal and the Regional Safety Strategy.

Next Steps

- Seek Regional Council adoption of 2021 safety targets (February)
- Submit 2021 safety targets to Caltrans by February 28, 2021
- Continue to work with FHWA on safety target methodology and safety models
- March onwards:
 - Work with stakeholders to implement Connect SoCal's safety strategies and actions (e.g., encourage applications for SCAG's SCP, California's HSIP, LRSP, ATP, etc.)
 - Monitor progress and set updated targets each year

Comments? Questions?

Further Questions? Please contact: Courtney Aguirre, aguirre@scag.ca.gov



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AGENDA ITEM 5

REPORT

Southern California Association of Governments
Remote Participation Only
January 7, 2021

To: Transportation Committee (TC)

EXECUTIVE DIRECTOR'S APPROVAL

Kome Aprise

From: Stephen Fox, Senior Regional Planner,

(213) 236-1855, fox@scag.ca.gov

Subject: California High-Speed Rail Los Angeles to Anaheim Section

RECOMMENDED ACTION:

Information Only - No Action Required

STRATEGIC PLAN:

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

EXECUTIVE SUMMARY:

The California High-Speed Rail Authority (CHSRA) is currently preparing a draft Environmental Impact Report/Environmental Impact Statement (EIR/EIS) for the Los Angeles to Anaheim project section scheduled for completion in June 2021, and issued a Revised Notice of Preparation/Notice of Intent (NOP/NOI) in August 2020 to incorporate additional scoping for significant new freight rail and goods movement facilities that would be required in Colton and Barstow in order to construct and operate the high-speed trains (HST). These projects were not included when the project was initially scoped in 2007. A receive and file staff report on this issue was given to the SCAG Transportation Committee (TC) and Regional Council (RC) in November 2020. Based on that report, TC and RC members requested that representatives from CHSRA and Burlington Northern Santa Fe Railway come before the TC for a more detailed and in-depth discussion on the proposed new freight rail and goods movement facilities and their potential impacts.

BACKGROUND:

CHSRA is currently constructing or in the environmental review process for the various project sections for Phase 1 of the HST from downtown San Francisco to Anaheim. Civil construction work is underway in the San Joaquin Valley along a 119-mile segment between the cities of Madera and Shafter north of Bakersfield which began in 2015. Full environmental clearance of the entire Phase 1 section from San Francisco to Anaheim must also be completed by December 2022 under the federal requirements. The Phase 1 sections in the SCAG region are described below.

Bakersfield to Palmdale

This segment will run from Bakersfield to Palmdale via the "Bakersfield Gap" generally along the



Union Pacific freight single track through the Tehachapi Mountains. Currently, the planned Palmdale HST station is located about 900 feet south of the existing Palmdale Transportation Center that serves Metrolink and Antelope Valley Transit Authority. The Draft EIR/EIS document was released in February 2020 and the public review period ended in April 2020.

Palmdale to Hollywood Burbank Airport

This section will run from Palmdale to Hollywood Burbank Airport. This segment is 38 miles long and the state-preferred alternative adopted in 2018 roughly follows SR 14, and is completely underground within the Santa Clarita City limits. The Draft EIR/EIS document is expected to be released in May 2021.

Hollywood Burbank Airport to Los Angeles

This section will run from Hollywood Burbank Airport to L.A. Union Station. The state preferred alternative is approximately 14 miles long and will operate on the existing Los Angeles-San Diego-San Luis Obispo (LOSSAN) Corridor. The Draft EIR/EIS was released in May 2020 and the public review period ended in August 2020.

Los Angeles to Anaheim

This section will run from L.A. Union Station to the Anaheim Regional Transportation Intermodal Center (ARTIC). The state-preferred alternative is approximately 30 miles in length and will operate on the existing LOSSAN Corridor. The Draft EIR/EIS document is expected to be released in June 2021.

In August 2020, CHSRA issued a Revised NOI under the National Environmental Policy Act (NEPA) and a Revised NOP under the California Environmental Quality Act (CEQA) for the EIR/EIS for the Los Angeles to Anaheim Project Section. The purpose was to initiate additional scoping to solicit input on new freight rail and goods movement facilities that would be required in Colton and Barstow in order to build and operate the HST. These facilities were not identified and included when the project was initially scoped in 2007. These freight rail and goods movement facilities are large in scale with potentially significant environmental impacts within the SCAG region, notably in San Bernardino County.

New Facilities

CHSRA is proposing to build additional high-speed electrified tracks in order to operate the HST along the LOSSAN Corridor between Los Angeles Union Station and Anaheim. This corridor would be shared with existing and future passenger and freight rail services (e.g., Amtrak, Metrolink and Burlington Northern Santa Fe Railroad [BNSF]). In order to meet future freight and passenger service levels, coupled with the operation of the HST, CHSRA is proposing to evaluate new freight rail and intermodal facilities outside of the LOSSAN Corridor located in San Bernardino County.





These facilities include a completely new intermodal yard in the City of Colton and new railroad staging tracks in the City of Barstow.

Barstow Facility: The Barstow facility, referred to as the Lenwood facility, would be required as a new freight train staging facility outside and east of the LOSSAN Corridor, which is owned by BNSF between downtown Los Angeles and Fullerton and is one of its major main lines in the SCAG region. The Lenwood facility would allow freight trains to be staged or held outside and east of the LOSSAN Corridor in the High Desert to permit adequate service windows for normal operation and maintenance in the corridor. It would consist of the following main elements: staging tracks, staging track leads, circulation and roadway modifications, and utility modifications. The Lenwood project site would generally be located along the six existing BNSF main line tracks and south and west of State Route 58 within the city of Barstow and unincorporated San Bernardino County.

<u>Colton Facility</u>: The Colton facility would be required to accommodate future freight train volumes (an average of 10 freight trains per day) that could not be accommodated in the LOSSAN Corridor due to future volumes of HST and other passenger and freight trains. It would be an entirely new intermodal rail yard and consist of the following main elements: intermodal rail yard, railroad lead tracks, circulation and roadway modifications, and utility modifications. The Colton project is in the southwest part of San Bernardino County, mostly within an unincorporated area while the remainder is primarily in the cities of Colton and Grand Terrace. The proposed location is generally south of Interstate 10 and the Union Pacific Railroad rail lines and north of the Santa Ana River and west of Colton Crossing.

<u>Environmental Effects</u>: The proposed new rail facilities could potentially have significant environmental effects in the Inland Empire, including on air quality, noise, traffic congestion, visual impacts, and environmental justice.

Communication to CHSRA

SCAG sent two joint letters to CHSRA from the executive directors of the San Bernardino County Transportation Authority, SCAG and the South Coast Air Quality Management District in June and September of this year. These letters asked for more and better collaboration and communication between CHSRA, SCAG and its affected partner agencies for the Los Angeles to Anaheim segment and these new facilities. The letters also expressed concern regarding the potential air quality impacts from the new intermodal yard, the need to incorporate project specific mitigation measures and the potential challenges associated with various air quality conformity determinations, as this realignment of goods movement in the SCAG region was not modeled in SCAG's 2020 Connect SoCal Regional Transportation Plan and Sustainable Communities Strategy.

Other SCAG partner agencies, including the Riverside County Transportation Commission and Southern California Regional Rail Authority, have also submitted comment letters to CHSRA in





response to the revised NOP/NOI scoping period. Major themes of these letters include the need for better early coordination by CHSRA and the need for a rigorous and thorough environmental analysis concerning the potential negative effects of the two facilities.

NEXT STEPS:

SCAG staff will continue to work with rail partner agencies in coordinating and reviewing the analysis performed on these new rail and intermodal facilities through the CHSRA environmental process and provide regular updates to TC and RC.

FISCAL IMPACT:

Staff work related to this project is included in the FY 2020-21 Overall Work Program (OWP) under Project 140.0121.02 (Regional High-Speed Transport).

ATTACHMENT(S):

- 1. SCAG, SBCTA and SCAQMD Joint Letter to CHSRA June 4, 2020
- 2. SCAG, SBCTA and SCAQMD Joint Letter to CHSRA September 3, 2020







June 4, 2020

Mr. Brian Kelly **Chief Executive Officer** California High Speed Rail Authority 925 L Street, Ste. 1425 Sacramento, CA 95814

Dear Brian:

It is our understanding that the CHSRA is getting ready to release a CEQA/NEPA document for the Los Angeles-Anaheim segment, and that this proposed project includes plans to move freight rail capacity out of Hobart Railyard to Colton.

While we understand the need to plan for the best alignment for the high speed rail system, and recognize that this might mean realignment of existing rail infrastructure, such planning should also consider local and regional implications. First, this plan concept for freight capacity realignment is not included in our Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The realignment would also likely result in local_truck traffic and air_quality_impacts in conformity budgets and air quality attainment plans given both locations are in the same air district.

While the HSR project as a whole is expected to provide greenhouse gas benefits to the State, the proposed freight has the potential to impact San Bernardino County inordinately, and these environmental impacts must be disclosed, analyzed, and mitigated to the extent feasible.

This letter is to ask for more collaboration on CHSRA's plans for this segment. We want to work with you to find a way forward to minimize the likely impacts listed. We will certainly make further comments on the CEQA/NEPA document and we hope our teams could work together in the development of the EIR/EIS for the segment.

Thank you for the consideration.

Sincerely,

KOME AJISE

Kome Ajise

Executive Director

Southern California Association of Governments WAYNE NASTRI **Executive Officer**

South Coast Air Quality

Management District

RAY WOLFE Executive Director

San Bernardino County

Transportation Authority



September 3, 2020



Mr. Brian Kelly (<u>Brian.Kelly@hsr.ca.gov</u>) Chief Executive Officer California High Speed Rail Authority 925 L Street, Ste. 1425 Sacramento, CA 95814



Dear Brian,

Thank you for your July 24, 2020 response to our letter requesting additional collaboration between CHSRA and South Coast AQMD, SCAG, and SBCTA regarding the Los Angeles-Anaheim segment of the high speed rail project. We appreciate your commitment to work with us, and note that staff have had several productive briefings on the LA-Anaheim project segment. We believe continued early and open dialogue on a project of this magnitude will be important as you move forward, especially given the magnitude of the potential air quality impacts in San Bernardino County and the aggressive schedule your team is working towards.

In that spirit, we wanted to share with you some of our early concerns based on the information we have been provided thus far. The four primary issues are 1) the potential air quality impacts from the new freight railyard in Colton, 2) the need to incorporate project specific mitigation measures, 3) the potential challenges associated with various conformity determinations, and 4) the need to establish an information sharing process between the agencies and interested stakeholders. Each of these issues are discussed in more detail in the attachment to this letter.

We recognize that the environmental documentation should present all these details, and we look forward to participating in that formal review process. However, it is our experience that early consultation and sharing of more detailed technical information enhances and streamlines the overall review process and timeline, particularly for projects with



tight schedules. We reiterate our request to engage up front on CHSRA's plans for the Los Angeles-Anaheim segment.

Thank you for your consideration.



Sincerely,



Kome Ajise

KOME AJISE Executive Director

Southern California Association of Governments WAYNE NASTRI

Executive Officer

South Coast Air Quality Management District RAY WOLFE Executive Director

San Bernardino County Transportation Authority

Air Quality Impacts

It is our understanding that one component of the LA-Anaheim project is a new BNSF intermodal freight rail yard located at the former Cal Portland Cement Company plant in unincorporated San Bernardino County near the city of Colton. The community living immediately adjacent to this site is already classified by the state Office of Environmental Health Hazard Assessment as being in the worst 95th percentile in the state using the CalEnviroScreen 3.0 tool. These already environmentally burdened nearby census tracts also include populations with much higher proportions of Hispanic and/or Black residents than the South Coast AQMD as a whole (see table below).

Area	Hispanic	Black	White	CalEnviroScreen 3.0 Score
Tract 6071004004	71%	3%	21%	95-100%
Tract 6071007108	46%	26%	18%	95-100%
Tract 6071012500	88%	3%	7%	95-100%
Tract 6071006601	83%	2%	13%	95-100%
Tract 6071003612	68%	12%	12%	80-85%
South Coast AQMD	47%	7%	30%	N/A

Freight rail yards have many sources of emissions that impact the air regionally and locally. These include onsite equipment (e.g., cargo handling equipment and switcher locomotives) and other mobile sources that travel to and from the site (e.g., on-road trucks and long haul locomotives). Based on the limited information we received during the briefing, it is our understanding that onsite cargo handling equipment will be zero emissions. However even if all onsite equipment is zero emissions, an intermodal facility like this will attract a significant number of on-road trucks and generate new locomotive activity as trains are built every day. The emissions from these activities will dwarf those saved from using zero emission cargo handling equipment. It is our

understanding that there are currently no project components that will address the local impacts from on-road trucks or locomotives.¹

Further, the project team expressed that they anticipate that this project has the potential to reduce regional emissions, mainly due to lower truck traffic going to rail yards near downtown LA and going to this new rail yard instead. This is projected to occur because some BNSF trackage would be used for high speed rail, and the new rail yard would be designed to make up for this reduction in throughput from the Hobart yard. While this may be a potential outcome in the long term, the timing of project implementation should be addressed. As expressed to us during the briefing, the new freight rail yard would open as early as 2026, however the high speed rail project would not operate potentially until 2040. This project therefore would appear to increase the total capacity of BNSF's system in the short term, and the resulting regional emissions from this scenario are unclear. Given the significant challenges our region faces meeting federal air quality standards in milestone years of 2023, 2031, and 2037, better understanding these shorter term impacts are of paramount importance.

Finally, from what we know today, a new railyard would likely have significant air quality impacts, locally and potentially regionally. Our understanding is that the only reason that this freight rail yard is being included as a component of the HSR project is that it would mitigate for lost trackage for BNSF. We would like to understand more about whether the freight railyard component of the project could move forward absent construction of HSR. We appreciate that these two projects are being considered collectively in the environmental analysis, however if the rail yard can move forward independently from HSR, then the air quality impacts for that component of the project should be presented separately and mitigated accordingly.

Need for Project Mitigation

If our limited understanding of this project is correct, there are potentially significant air quality issues that must be addressed. We appreciate that the project team has initiated discussions with our staff about providing funding for mitigation. However, any mitigation that the project team is hoping that South Coast AQMD can accomplish on its

¹ While zero emissions cargo handling equipment is welcome, note that recent emissions inventory information from 2017 provided by the railroads to South Coast AQMD indicates that the vast majority of onsite emissions are not from cargo handling equipment at southern California rail yards. Offsite emissions would also not be addressed by onsite cargo handling equipment mitigation.

behalf should only be considered after all feasible measures have been considered as part of the project itself.² South Coast AQMD should only be looked to as an implementer of another project's mitigation as a last resort after all feasible steps have been taken within the project itself. Before any further consideration of making South Coast AQMD responsible for mitigating HSR's air quality impacts, we recommend that time be dedicated to identifying what can be done within the project itself to reduce/avoid air quality impacts.

Conformity

It is not fully clear at this stage, but it would appear that this project may need a conformity determination on three fronts. First, it is our understanding that the project must be included in a conforming regional transportation plan from SCAG. Second, the project may need to meet project-level transportation conformity requirements. Finally, the project must show that it meets general conformity tests. Each of these determinations require significant technical analysis. South Coast AQMD staff traditionally works with SCAG and EPA in a secondary role on the two transportation conformity tests, and we look forward to our involvement in those processes for this project. South Coast AQMD staff takes a lead role in regards to general conformity. The timing is beneficial for the project's general conformity analysis given that we are just now beginning our 2022 Air Quality Management Plan effort. However, given the significant challenges our region faces in meeting national ambient air quality standards on time, it is not clear what portion, if any, of the region's emissions budget can be dedicated to general conformity in the upcoming plan. We do not anticipate that the relatively simple first-come first-served set aside process from previous AQMPs will be sufficient for the 2022 AQMP. Given that there are three HSR sections in South Coast AQMD (i.e., Palmdale-Burbank, Burbank-LA, LA-Anaheim), we recommend working on general conformity for all three projects collectively, especially as emissions impacts may overlap in time.

Need for Additional Details and Engagement

Each of the issues identified above will require substantial technical analysis and modeling. As that work is undertaken, we encourage HSR to communicate early with our staff to work through any methodological details as they arise. While this can

² For example, if there are air quality impacts from locomotives and trucks, then the project should identify mitigation to lessen impacts from those sources.

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initially take time, in our experience this additional upfront work can facilitate and streamline the review process.

In addition to the technical modeling analysis for this project, we would appreciate getting a better understanding of the whole of the HSR program in our region. For example, it appears that the Burbank-LA portion of the project will require relocation of a portion of Metrolink's maintenance activities to somewhere in the Inland Empire. Along with the relocation of freight activities to the Inland Empire from the LA-Anaheim project, we would appreciate hearing if there are other project components that will result in impacts from any of the HSR project sections that aren't associated directly with the construction of the high speed rail line itself.

Finally, during the July 1 briefing, my staff strongly encouraged the HSR project team to reach out specifically to local and environmental community groups to discuss this project. At the request of the project team, we provided you with a list of contacts for key organizations. Since that time, we have had initial conversations with many of these groups, and they have raised significant questions about air quality and environmental justice issues associated with this project. We are unable to answer these questions as we know that you all are still actively working on analyzing impacts. However, given the limited information about this project, and the significant concerns being raised, we would again encourage you to reach out to these groups. These groups provide unique perspectives about their own communities and valuable information to better inform projects as you consider the best way to move forward



AGENDA ITEM 6 REPORT

Southern California Association of Governments Remote Participation Only January 7, 2021

To: Transportation Committee (TC)

EXECUTIVE DIRECTOR'S APPROVAL

Kome Aprise

From: Pablo Gutierrez, Program Manager,

(213) 236-1929, gutierre@scag.ca.gov

Subject: Update on Comments Received for Draft 2021 Federal

Transportation Improvement Program (FTIP)

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:

SCAG is responsible for developing and maintaining the Federal Transportation Improvement Program (FTIP) in cooperation with the State (Caltrans), the county transportation commissions (CTCs), and public transit operators. SCAG in cooperation with its stakeholders has developed the Draft 2021 FTIP.

Staff presented the Draft 2021 FTIP to the Transportation Committee (TC) at the November 5, 2020 meeting for recommendation to the Regional Council to release the Draft 2021 FTIP for a thirty (30) day public review and comment period beginning on November 6, 2020. Per request of the Transportation Committee, staff is reporting back on the public comments received during the public review. A total of 26 comments were received; 9 general, 12 project specific, and 5 related to funding/financial plan. Multiple comments were submitted by SCAG's Caltrans Liaison responsible for reviewing SCAG's FTIP and FTIP Amendments. Based on our initial review and analysis of the comments, we do not anticipate significant changes to the Final 2021 FTIP and all technical changes will be accommodated via Amendment #1 of the 2021 FTIP. SCAG staff is currently working closely with the CTCs in the SCAG region and SCAG Legal staff to address the comments. Staff will report back to the Transportation Committee and the Energy and Environment Committee at the February 4, 2021 meetings to present a final summary of comments and responses and to recommend approval of the proposed final 2021 FTIP including the associated transportation conformity analysis at the March 4, 2021 Regional Council meeting.

OUR MISSION



BACKGROUND:

SCAG is the federally designated Metropolitan Planning Organization (MPO) for the six (6) county region of Southern California and the designated Regional Transportation Planning Agency (RTPA) per state law. As such, it is responsible for developing and maintaining the FTIP in cooperation with the State (Caltrans), the CTCs in the SCAG region, and public transit operators. The FTIP is developed through a "bottom up" approach.

On November 5, 2021, the Regional Council released the 2021 FTIP for a 30-day public review and comment period of November 6, 2020 through December 7, 2020. Staff was requested to provide information on the public comments received on the Draft 2021 FTIP. A Draft/Comment response matrix for the Draft 2021 FTIP is attached to this staff report.

SCAG received 26 comments: 9 general, 12 project specific, and 5 related to funding/financial plan. The comments were for the most part technical in nature and nothing that affects conformity. Multiple comments were submitted by SCAG's Caltrans Headquarters Liaison responsible for reviewing SCAG's FTIP and FTIP Amendments. Based on our initial review and analysis of the comments, we do not anticipate significant changes to the Final 2021 FTIP. SCAG staff is currently working closely with the CTCs in the SCAG region and SCAG Legal staff to address the comments. Staff will report back to the Transportation Committee and the Energy and Environment Committee at the February 4, 2021 meetings to present a final summary of comments and responses and recommend approval of the proposed final 2021 FTIP including the associated transportation conformity analysis at the March 4, 2021 Regional Council meeting.

The Draft 2021 FTIP is accessible at: http://ftip.scag.ca.gov/Pages/2021/draft.aspx or www.scag.ca.gov.

FISCAL IMPACT:

None. Work associated with this item is included in the current FY 20-21 Overall Work Program (030.0146.02: Federal Transportation Improvement Program and 010.0170.01: RTP Support, Development, and Implementation)

ATTACHMENT(S):

Comment		Comment		Affiliation	Method	Comment	Resmonee	Acknowledgment of Receipt
1 D 21-01	General	11/17/2020	Name Craig Durfree		Voicemail	RECORDED PHONE MESSAGE - CRAIG DURFEY CRAIG DURFEY: Yes - Pablo, my name is Craig Durfey, D-U-R-F-E-Y, Craig A. Durfey. My cell is 714-321-8238. My email is cadurfey@gmail.com. I'm looking at the draft of the 2021 Federal Transportation Improvement Program, Executive Summary Volume I of the three, November 2020. I'm reading it, and there's some serious flaws in it. And I'm - I've been nine years on this - of (unintelligible) transportation, and I won't go into it. I'd like to see these referenced at my website at socialemotionalpaws, socialemotionalpaws (unintelligible) Transportation Sections, you'll see. But yes, this has got some real issues here. We're projecting money out, but we're not really assessing what the cities are capable of doing, once you provide the funds to build the infrastructure, and especially with COVID-19. (unintelligible) recognizing the VNT with park space - there's two documents on my blog. And so basically, then, if Safe Route to School, you're only getting less than 1% investment, which is really where - (unintelligible) reduce the fatalities that Federal Highway Administration require by 2022, to bring a Vision Zero, or individually, about \$10,000 grant by Caltrans, to achieve reduction. Without the education beginning of life, it is a complex, moving animal	While Connect SoCal reflects a comprehensive active transportation investment strategy for the region, please note, the FTIP is a programming document that identifies near-term investments in the region. It is not a complete picture of all the active transportation type	11/09/2020 via a call back to Mr. Durfey

Comment		Comment						Acknowledgm
ID	Category	Date	Name	Affiliation	Method	Comment	Response	of Receipt
21-02	General	11/18/2020	Laura Smith	Private Citizen	Voicemail	RECORDED PHONE MESSAGE - LAURA SMITH LAURA SMITH: Yeah, Pablo. My name is Laura Smith. I left a previous message, but I wanted to leave another one. It wasn't very clear. I was calling again. I wanted to leave a comment on the Open Comment period that runs to December 7th, on the FTIP Draft that runs through December 7th. I am concerned about - listed here for the TCA, it shows their 241 extension running through to the 5 still. And they have said they're formally closing that extension. That is supposed to be a done deal now. The South County Traffic Relief Effort is closed, they are (unintelligible) that, and yet you have this listed here. And that is my comment, and I do need to include that in the Comment Section, and I want it to be listed, and yet, I do not show where we can email our comments. So I need you to inform me where I can do that, and I definitely need you to call me back. My phone number is 949-292-7411. I do work, so if I don't answer, if you can please leave me the email address so I can email my comments, because I do want them to be included in the FTIP 2021, because this is important, because this was put in error, unless the TCA is lying to us. But in their March 2020 TCA meeting, they formally have closed this project. And so I do want to let you know that, and my comments do need to be included into this FTIP 2021 Transportation Improvement Program. Okay. Thank you very much. Bye.	The FTIP is based on project submittals from local and regional agencies. SCAG cannot unilaterally delete or change projects that are contained in the FTIP unless inconsistent with the RTP. The FTC South Project is depicted in the 2021 FTIP as a study only project with funding programmed for preliminary project definition efforts. There are no right of way or construction funds programed for this study. The project has been deleted from the currently approved 2019 FTIP via Amendment #19-29 and will be deleted in 2021 FTIP via Amendment #21-01 as submitted by Orange County Transportation Commission (OCTA).	11/18/2020 via a back to Ms. Smit
21-03	General	11/30/2020	Abhijit Bagde	Caltrans	Email	Technical Appendix Volume II of III, Section IV, Attachment E, Expedited Project Selection Procedures: Please remove Highway Maintenance (HM) Program from the list as this program has been discontinued.	Comment Noted. The text on Highway Maintenancey (HM) Program has been removed from Technical Appendix Volume II of III, Section IV, Attachment E, Expedited Project Selection Procedures.	11/30/2020
21-04	General	11/30/2020	Abhijit Bagde	Caltrans	Email	Technical Appendix Volume II of III, Section IV, Attachment F, Amendment Approval procedures: Please correct the year in the paragraph "Additionally,March 4, 2021".	Comment Noted. The text has been revised.	11/30/2020
21-05	General	11/30/2020	Abhijit Bagde	Caltrans	Email	Technical Appendix Volume II of III, Section VII, Performance Measures: Thank you for providing comprehensive analysis on SCAG's efforts in achieving performance measures targets. Please refer to the information discussed at the November 17, 2020 CFPG meeting. Please complete and include the template (in excel) along with the final 2021 FTIP.	Comment noted. The Performance Measures matrix will be completed as requested with the applicable performance measure target information using the template provided and will be proveded as a separate Excel document to Caltrans.	11/30/2020

Comment		Comment						Acknowledgm
ID	Category	Date	Name	Affiliation	Method	Comment	Response	of Receipt
21-06	General	11/30/2020	Abhijit Bagde	Caltrans	Email	Please clarify if public involvement activities and time established for public review and comment for the FTIP satisfy the Program of Projects (POP) requirements of the FTA 5307 Program.	Comment Noted. SCAG's Section 5307 Program of Projects (POP) is posted on the FTIP website (https://scag.ca.gov/fta-program-projects) and updated with each amendment. https://scag.ca.gov/sites/main/files/file-attachments/19-29_public_notice.pdf?1606266188	11/30/2020
21-07	General	11/30/2020	Abhijit Bagde	Caltrans	Email	Technical Appendix, Volume III of III, Part A/Part 2 of 3: What is the purpose of projects included under "100% Prior Years" section.	Comment Noted. This is to highlight major projects that are included in the FTIP as informational given that all the funding is showing in Prior Years and projects are still moving forward to completion.	11/30/2020
21-08	Financial Summary	11/30/2020	Abhijit Bagde	Caltrans	Email	SHOPP: Funding programmed is not consistent with the SHOPP Report sent to SCAG on June 11, 2020. Please clarify. Also, funding for the SHOPP grouped project listings may be updated prior to adoption by SCAG's Commission. Let me know when you need the latest SHOPP project report generated from CTIPS.	Comment Noted. SHOPP Projects will be updated via Amendment #21-01 per latest SHOPP listings provided by Caltrans on 12/8/20.	11/30/2020
21-09	Financial Summary	11/30/2020	Abhijit Bagde	Caltrans	Email	State Minor Program: Projects for this program are selected annually. Please clarify why revenue and programming information is included for FY 2022/23 and FY 2023/24.	Comment noted. Per agency, State Minor Program funding was programmed in FY's 2022/23 and 2023/24 on project FTIP ID# RIV110122 for informational purposes only. The project will be revised in Amendment #21-01 to remove funding from FY's 2022/23 and 2023/24.	11/30/2020
21-10	Financial Summary	11/30/2020	Abhijit Bagde	Caltrans	Email	CMAQ and STBGP Apportionments: Notate in the footnote information regarding borrowing/loaning per FY.	Comment Noted. Footnote has been added to the Financial Plan regarding CMAQ/STBG loans.	11/30/2020
21-11	Financial Summary	11/30/2020	Abhijit Bagde	Caltrans	Email	Update Highway Bridge Program (HBP) information per information transmitted on November 9, 2020.	Comment Noted. HBP programming updates will be reflected under A21-01 per latest HBP listings transmitted to SCAG and County Transportation Commissions on November 9, 2020	11/30/2020

Comment		Comment						Acknowledgm
ID	Category	Date	Name	Affiliation	Method	Comment	Response	of Receipt
21-12	Financial Summary	11/30/2020	Abhijit Bagde	Caltrans	Email	FTA 5310 Program: Projects for this program are selected annually. Please clarify why revenue and programming information is included for FYs 2022 - 2024.	Comment Noted. Per agencies using FTA 5310 funds, "while it's true that the statewide 5310 apportionments are programmed on an annual basis, Caltrans has provided regions with the options of either allowing Caltrans to program the 5310 large urban apportionment, or doing it themselves. Counties in the SCAG region have elected to do their own program. There is no FTA prohibition against designated recipients approving multi-year programs rather than on an annual basis. Therefor, regions that have elected to manage their own 5310 apportionments, funds can be programmed in multiple years.	11/30/2020
21-13	Project Listings	11/30/2020	Abhijit Bagde	Caltrans	Email	Update Highway Bridge Program (HBP) funding for all HBP Grouped Projects per information transmitted on November 9, 2020.	Comment Noted. HBP Projects will be updated under A21-01 per latest HBP listings transmitted on November 9, 2020	11/30/2020
21-14	Project Listings	11/30/2020	Abhijit Bagde	Caltrans	Email	IMP100101, ORA040607, SBD59303: Verify planning studies (non- transportation capital) are included in the Overall Work Program. Planning studies do not need to be listed in the FTIP.	Comment Noted. Per SBCTA - SBD59303 is a STIP Funded Project. The CTC included in the FTIP b/c it's a STIP project and is used for allocation. Per OCTA - ORA040607 is a STIP PPM and the CTC included in the FTIP b/c it's a STIP project and is used for allocation. Per ICTC - IMP100101 - is a STIP PPM and the CTC included in the FTIP b/c it's a STIP project and is used for allocation. The projects are submitted by the County Transportation Commissions via the bottoms up approach in accordance with AB1246.	11/30/2020
21-15	Project Listings	11/30/2020	Abhijit Bagde	Caltrans	Email	SHOPP Grouped Projects: See Comment No. 1 (Comment ID 7) under Financial Summary above.	Comment Noted. Latest SHOPP funding will be updated via the SHOPP projects in Amendment #21-01 which will be submitted for approval concurrently with 2021 FTIP.	11/30/2020
21-16	Project Listings	11/30/2020	Abhijit Bagde	Caltrans	Email	RIV190901: Please update the programming per updated 2020 SHOPP as shown below in Amendment No. 1.	Comment Noted. Per RCTC - Staff has worked with the Caltrans SHOPP/FTIP manager at district 8 to update this project through 19-27 and the change is also being reflected through 21-01 as well.	11/30/2020
21-17	Project Listings	11/30/2020	Abhijit Bagde	Caltrans	Email	VEN131202: Total project cost shall include cost of all the phases.	Comment Noted. Per VCTC - The estimated total project cost is \$150 million for this project. In FTIP with ENG Phase for PA&ED Only. CTC will update the Total Project Cost field in A21-01.	11/30/2020

Comment		Comment						Acknowledgm
ID	Category	Date	Name	Affiliation	Method	Comment	Response	of Receipt
21-18	Project Listings	11/30/2020	Abhijit Bagde	Caltrans	Email		Comment Noted. Per OCTA - City Segment is a STIP Project that is only funded through PS&E. We don't have a Total Project Cost or construction cost right now	11/30/2020
21-19	Project Listings	11/30/2020	Abhijit Bagde	Caltrans	Email	ORA191501: Clarify if toll credits are used in lieu of match funds.	Comment Noted. Transit Development Credits amount and FY match is listed in the project description for CMAQ funding.	11/30/2020
21-20	Project Listings	11/30/2020	Abhijit Bagde	Caltrans	Email	LAE0732: Provide detailed description of the project scope.	Comment Noted. Lead Agency has decided to not to move forward with the project and will delete it in A21-01.	11/30/2020
21-21	Project Listings	11/30/2020	Abhijit Bagde	Caltrans	Email	LAOG1118: Update the funding per 2020 STIP as shown below.	Comment Noted. 2020 STIP programming is matching Final Approved Orange Book. LA Metro will update the Programming from FY-20/21 to FY-21/22 under A21-01.	11/30/2020
21-22	Project Listings	11/30/2020	Abhijit Bagde	Caltrans	Email	Various SB1 funding programs: When uploading projects from various SB1 funding programs in CTIPS please map these fund types with the CTIPS fund type shown below.	Comment Noted. All SB1 funding programs are mapped correctly in CTIPs.	11/30/2020
21-23	Project Listings	11/30/2020	Abhijit Bagde	Caltrans	Email		Comment Noted. Per OCTA - This project is currently only funded through PS&E We don't have a Total Project Cost or construction cost right now.	11/30/2020
21-24	Project Listings	11/30/2020	Abhijit Bagde	Caltrans	Email	IMPL519: This SHOPP grouped project is listed under the Local Highway Section for the Imperial County.	Comment Noted. ICTC will update the System from Local to State in Amendment A21-01.	11/30/2020
21-25	General	12/2/2020	Martha Masters	Riverside County Transportation Commission	Public Comment at Hearing #2	MARTHA MASTERS: Great. Thank you. My name is Martha Masters, with the Riverside County Transportation Commission, and on behalf of RCTC, I wanted to thank SCAG staff. Through this very complex and lengthy process, you guys have been very helpful. Thank you for your guidance. Thank you for your patience. And I'm so glad we're, we're here now, and really appreciate your help. Thank you.	Comment Noted	12/2/2020

Affiliation Method Comment Response of Receip Good afternoon. I write to submit comments for the 2021 Federal Transportation Plan. I am highly dismayed to see the below two projects included for the 2021 FIPP - the Transportation Commission and business and submisses
be voted on. Michelle