



SOUTHERN CALIFORNIA  
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## REGULAR MEETING

# TRANSPORTATION COMMITTEE

### REGIONAL COUNCIL OFFICERS

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First Vice President  
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Community, Economic &  
Human Development  
Rex Richardson, Long Beach

Energy & Environment  
Carmen Ramirez, Oxnard

Transportation  
Curt Hagman, San Bernardino County

***Thursday, December 7, 2017***  
***10:00 a.m. – 12:00 p.m.***

**SCAG Main Office**  
**818 W. 7th Street, 12th Floor**  
**Board Room**  
**Los Angeles, CA 90017**  
**(213) 236-1800**

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Tess Rey-Chaput at (213) 236-1908 or via email at [REY@scag.ca.gov](mailto:REY@scag.ca.gov).

Agendas & Minutes for the Transportation Committee are available at: <http://www.scag.ca.gov/committees/Pages/default.aspx>

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## Transportation Committee Members – December 2017

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### Members

### Representing

<b>Chair*</b>	1. <b>Sup. Curt Hagman</b>		<b>San Bernardino County</b>
<b>Vice-Chair*</b>	2. <b>Hon. Randon Lane</b>	<i>Murrieta</i>	<b>District 5</b>
*	3. Hon. Sean Ashton	<i>Downey</i>	District 25
*	4. Hon. Rusty Bailey	<i>Riverside</i>	District 68
*	5. Hon. Glen Becerra	<i>Simi Valley</i>	District 46
*	6. Hon. Ben Benoit	<i>Wildomar</i>	Air District Representative
	7. Hon. Will Berg, Jr.	<i>Port Hueneme</i>	VCOG
	8. Hon. Russell Betts	<i>Desert Hot Springs</i>	CVAG
	9. Hon. Austin Bishop	<i>Palmdale</i>	North L.A. County
*	10. Hon. Art Brown	<i>Buena Park</i>	District 21
*	11. Hon. Joe Buscaino	<i>Los Angeles</i>	District 62
	12. Hon. Ross Chun	<i>Aliso Viejo</i>	OCCOG
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*	16. Hon. James Gazeley	<i>Lomita</i>	District 39
*	17. Hon. Jeffrey Giba	<i>Moreno Valley</i>	District 69
*	18. Hon. Lena Gonzalez	<i>Long Beach</i>	District 30
	19. Hon. Jack Hadjinian	<i>Montebello</i>	SGVCOG
*	20. Sup. Janice Hahn		Los Angeles County
*	21. Hon. Jan Harnik	<i>Palm Desert</i>	RCTC
	22. Hon. Dave Harrington	<i>Aliso Viejo</i>	OCCOG
*	23. Hon. Carol Herrera	<i>Diamond Bar</i>	District 37
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*	25. Hon. Jose Huizar	<i>Los Angeles</i>	District 61
*	26. Hon. Jim Hyatt	<i>Calimesa</i>	District 3
*	27. Hon. Mike T. Judge	<i>Simi Valley</i>	VCTC
	28. Hon. Trish Kelley	<i>Mission Viejo</i>	OCCOG
	29. Hon. Linda Krupa	<i>Hemet</i>	WRCOG
	30. Hon. James C. Ledford	<i>Palmdale</i>	North L. A. County
*	31. Hon. Clint Lorimore	<i>Eastvale</i>	District 4



## Transportation Committee Members – December 2017

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### Members

### Representing

* 32. Hon. Ray Marquez	<i>Chino Hills</i>	District 10
* 33. Hon. Steve Manos	<i>Lake Elsinore</i>	District 63
34. Hon. Larry McCallon	<i>Highland</i>	SBCTA
* 35. Hon. Marsha McLean	<i>Santa Clarita</i>	District 67
* 36. Hon. Dan Medina	<i>Gardena</i>	District 28
* 37. Hon. Barbara Messina	<i>Alhambra</i>	District 34
* 38. Hon. L. Dennis Michael	<i>Rancho Cucamonga</i>	District 9
* 39. Hon. Fred Minagar	<i>Laguna Niguel</i>	District 12
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* 41. Hon. Kris Murray	<i>Anaheim</i>	District 19
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51. Hon. Crystal Ruiz	<i>San Jacinto</i>	WRCOG
* 52. Hon. Ali Saleh	<i>Bell</i>	District 27
53. Hon. Damon Sandoval	<i>Morongo Band of Mission Indians</i>	Tribal Government Regional Planning Board
54. Hon. Jesus Silva	<i>Fullerton</i>	Member-at-Large
* 55. Hon. Marty Simonoff	<i>Brea</i>	District 22
56. Hon. Zareh Sinanyan	<i>Glendale</i>	SFVCOG
* 57. Hon. Jose Luis Solache	<i>Lynwood</i>	District 26
* 58. Hon. Barb Stanton	<i>Town of Apple Valley</i>	District 65
59. Hon. Cynthia Sternquist	<i>Temple City</i>	SGVCOG
60. Hon. Jess Talamantes	<i>Burbank</i>	SFVCOG
61. Hon. Brent Tercero	<i>Pico Rivera</i>	GCCOG



**Transportation Committee**  
***Members – December 2017***

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**Members**

**Representing**

* 62. Hon. Cheryl Viegas-Walker	<i>El Centro</i>	District 1
* 63. Hon. Alan Wapner	<i>Ontario</i>	SBCTA
64. Hon. Alicia Weintraub	<i>Calabasas</i>	LVMCOG
* 65. Hon. Michael Wilson	<i>Indio</i>	District 66
66. Ms. Nieves Castro	<i>Caltrans, District 7</i>	Ex-Officio Member

\* Regional Council Member

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# TRANSPORTATION COMMITTEE

## AGENDA

### DECEMBER 7, 2017

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

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

*(The Honorable Curt Hagman, Chair)*

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

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

##### **ACTION/DISCUSSION ITEMS**

	<b><u>Time</u></b>	<b><u>Page No.</u></b>
1. <u>Calendar Year 2018 Transportation Safety Targets</u> <i>(Courtney Aguirre, SCAG Staff)</i>	<b>Attachment 15 mins.</b>	<b>1</b>

**Recommended Action:** Recommend that the Regional Council adopt SCAG's calendar year 2018 transportation safety targets, which are supportive of the adopted statewide safety targets.

2. <u>Draft 2018 California State Rail Plan Update and SCAG Comment Letter</u> <i>(Philip Law, SCAG Staff)</i>	<b>Attachment 20 mins.</b>	<b>25</b>
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**Recommended Action:** Review and provide input on staff comments on the Draft 2018 California State Rail Plan (CSRP), and authorize the Executive Director to submit a comment letter to the Caltrans Division of Rail and Mass Transportation (DRMT) by the December 11, 2017 deadline.

#### **CONSENT CALENDAR**

##### **Approval Item**

3. <u>Minutes of the November 2, 2017 Meeting</u>	<b>Attachment</b>	<b>35</b>
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# TRANSPORTATION COMMITTEE

## AGENDA

### DECEMBER 7, 2017

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	<u>Time</u>	<u>Page No.</u>
<b><u>Receive and File</u></b>		
4. <u>State of California 2017 Climate Change Scoping Plan</u>	Attachment	41
5. <u>2018 Schedule of Regional Council and Policy Committees</u>	Attachment	46

#### **INFORMATION ITEMS**

6. <u>SCAG Region Transit Ridership Trends Study</u> <i>(Brian Taylor, Professor of Urban Planning, UCLA Luskin School of Public Affairs, and Director of the UCLA Institute of Transportation Studies)</i>	Attachment	30 mins.	47
7. <u>California Transportation Asset Management Plan</u> <i>(Michael Johnson, State Transportation Asset Engineer, Caltrans)</i>	Attachment	20 mins.	49
8. <u>Trade Corridor Enhancement Program</u> <i>(Annie Nam, SCAG Staff)</i>	Attachment	5 mins.	68

#### **CHAIR'S REPORT**

*(The Honorable Curt Hagman, Chair)*

#### **METROLINK REPORT**

*(The Honorable Art Brown, SCAG Representative to Metrolink)*

#### **STAFF REPORT**

*(Courtney Aguirre, SCAG Staff)*

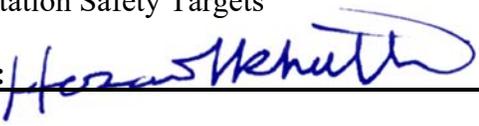
#### **FUTURE AGENDA ITEM/S**

#### **ADJOURNMENT**

*The next regular meeting of the Transportation Committee (TC) is scheduled for Thursday, February 1, 2018 at the Wilshire Grand Center, 900 Wilshire Boulevard, 17<sup>th</sup> Floor, Los Angeles, CA 90017.*



**DATE:** December 7, 2017  
**TO:** Transportation Committee (TC)  
**FROM:** Naresh Amatya, Manager of Transportation, (213) 236-1885, [amatya@scag.ca.gov](mailto:amatya@scag.ca.gov)  
**SUBJECT:** Calendar Year 2018 Transportation Safety Targets

**EXECUTIVE DIRECTOR'S APPROVAL:** 

**RECOMMENDED ACTION:**  
Recommend that the Regional Council adopt SCAG's calendar year 2018 transportation safety targets, which are supportive of the adopted statewide safety targets.

**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 vision-based statewide safety targets in August 2017. SCAG has until February 27, 2018 to establish regional safety targets. SCAG has the option to agree to support the statewide targets, establish numerical targets specific to the region, or use a combination of both. SCAG staff recommend supporting the statewide targets and adopting SCAG-specific targets based on Caltrans' target setting methodology. This recommendation would allow SCAG to more accurately monitor its performance in relation to the State's targets going forward. Because targets will be updated annually, SCAG will have the opportunity to revisit and update its targets each calendar year.*

**STRATEGIC PLAN:**  
This item supports SCAG's Strategic Plan, Goal 1: Improve Regional Decision Making by Providing Leadership and Consensus Building on Key Plans and Policies; Objective: a) Create and facilitate a collaborative and cooperative environment to produce forward thinking regional plans.

**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) will be expected to use the information and data generated as a result of the new regulations to inform their transportation planning and programming decision-making and link investments to performance outcomes. In particular, FHWA expects that the new 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) (similar to Vision Zero), which has also been adopted by many State DOTs and municipalities (e.g., Los Angeles).

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 August 2017 for calendar year 2018 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., February 27 each year). 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. SCAG must provide regular updates on its progress towards achieving these targets, including within the Regional Transportation Plan/Sustainable Communities Strategy and the Federal Transportation Improvement Program.

FHWA will consider 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. However, as part of oversight of the planning process, FHWA will review how MPOs such as SCAG are addressing their targets or assisting the state in addressing its targets during Transportation Management Area (TMA) Certification Reviews, when FHWA reviews the Transportation Improvement Programs (TIPs) and State Transportation Improvement Programs (STIPs). FHWA will also review how MPO targets are achieved during the Federal Planning Finding associated with the approval of the STIP. If California does not meet its targets, a State Implementation Plan will have to be developed to meet its targets, and whatever flexibility there is in using HSIP funds will be gone. Also, if California is not meeting the requirements, greater coordination of Caltrans and MPO safety activities will likely have to occur.

## Target Setting Approaches

There are two main types of 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 are setting vision-based

targets for zero fatalities (e.g., Vision Zero or TZD) and for progress towards this 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).

## Caltrans' Statewide Safety Targets

Caltrans used a vision-based approach to establish the calendar year 2018 statewide safety targets. For the fatality and serious injury targets, the methodology the State used was to identify existing trends through 2016, forecast performance for 2017, and then estimate annual targets for 2018 using annual vision-based goals. The number and rate of fatalities targets reflect the State's TZD goal for zero traffic fatalities by 2030. The number and rate of serious injuries targets correspond to the targets identified within the current Strategic Highway Safety Plan (SHSP), a 1.5 percent annual reduction. The non-motorized safety target corresponds to the State's Strategic Management Plan vision-based goal of 10 percent annual reductions in non-motorized fatalities and serious injuries. The statewide targets for calendar year 2018, all of which reflect five-year rolling averages, are as follows:

- Number of Fatalities: 3,590.8
- Rate of Fatalities per 100 million VMT: 1.029
- Number of Serious Injuries: 12,823.4
- Rate of Serious Injuries per 100 million VMT: 3.831
- Number of Non-motorized Fatalities and Non-motorized Serious Injuries: 4,271.1

For additional details regarding the State's target setting methodology, please review **Attachment 1: Safety Performance Management Targets for 2018**.

## Regional Safety Targets

SCAG staff solicited feedback from SCAG's Technical Working Group, Active Transportation Working Group, and CEO Sustainability Working Group regarding target setting approaches. Many expressed support for adopting an overarching vision-based goal or target (e.g., TZD) supported by near-term evidence-based targets. This feedback is consistent with safety target setting literature, which reports that the most commonly documented safety target setting approach is to establish a top-down visionary target and track success using interim, hard targets. Still, other stakeholders recommended that SCAG support the statewide targets, recognizing the limits of SCAG's ability to forecast future trends and considering the agency's ability to motivate reductions when compared to a county transportation commission or local jurisdiction.

## *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 developed an existing conditions report that analyzed the region's roadway collision data, patterns, and trends. In summary, on average, 1,500 people are killed, 5,200 are seriously injured, and 136,000 are injured in traffic collisions in Southern California each year. These collisions are happening in every community in the region, from El Centro in Imperial County to Malibu in Los Angeles County. They are happening to people from all walks of life, to those who drive and disproportionately, to those who walk and bike. SCAG experienced a period of annual declines in traffic-related fatalities and serious injuries until 2012 when they began to steadily rise, though they have not risen to their previous peaks. The existing conditions report and corresponding county fact sheets can be reviewed online here:

<http://www.scag.ca.gov/programs/Pages/Safety.aspx>.

### (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.<sup>1</sup> 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.

### (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 engineering our roadways better, conducting targeted education and enforcement, 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. SCAG's 2016 Regional Transportation Plan/Sustainable Communities Strategy (2016 RTP/SCS) prioritizes ensuring the safety and mobility of the region's residents, including drivers and passengers, transit riders, pedestrians, and bicyclists. The Plan's Safety and Security Appendix provides a framework, largely grounded in the State's Strategic Highway Safety Plan that can help member agencies interested in pursuing safety initiatives and strategies at the local level. Though a solid resource, for the 2020 RTP/SCS, SCAG proposes working more closely with local jurisdictions to develop a more detailed regional safety plan.

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

# REPORT

At this time, SCAG does not have modeling software that can forecast collisions and safety numbers. However, SCAG staff are interested in exploring whether such a model is available or can be developed that takes into account a variety of inputs including proposed transportation projects, land uses, population growth, VMT growth, roadway types, and the density of intersections, for example. In the absence of modeling, SCAG staff used a linear regression methodology (also known as a “line of best fit”) to project future fatality and serious injury numbers and rates if the trends were to continue. More specifically, SCAG staff developed simple trend lines based on 2001-2016 data and five-year rolling averages from 2005 to 2016. SCAG staff also reviewed the average percentage declines from 2001 to 2016 for annual and five-year rolling averages. Finally, SCAG staff applied the State’s methodology to the region. As reflected in the table below, the trend line projections were considerably more ambitious than the targets resulting from applying the State’s methodology.

Forecasted Reductions						
Measure	Baseline 5-Year Rolling Average	2001-2016 Linear Trend Projection Annual Numbers (Not 5-Year Rolling)		2005-2016 5-Year Rolling Average Linear Trend Projection		State Methodology Applied (5-Year Rolling Average)
	2016	Average Annual % Change (Past 16 Years of Data)	2018 Prediction	Average Annual % Change (Past 16 Years of Data)	2018 Prediction	2018 Prediction
Number of Fatalities	1403	-0.04%	1213	-1.97%	1121	<b>1601</b>
Rate of Fatalities per 100M VMT	0.88	-0.99%	0.73	-2.50%	0.70	<b>0.97</b>
Number of Serious Injuries	5044	0.12%	4612	-1.35%	4358	<b>5752</b>
Rate of Serious Injuries per 100M VMT	3.162	-0.83%	2.79	-1.87%	2.72	<b>3.5</b>
Total Number of Nonmotorized	2046.4	8%	1995.8	-0.30%	1849.9	<b>2068.2</b>
* In all cases, referring to victims, not collisions						

### Target Setting Recommendation

As previously mentioned, SCAG has the option to agree to support the statewide targets, establish numerical targets specific to our region, or use a combination of both. Based on the issues outlined earlier—that is, the considerable influence of external factors such as the economy, SCAG’s need to work more with stakeholders to develop a more detailed regional safety plan, and SCAG’s current inability to accurately forecast safety numbers using a model—SCAG staff recommend supporting the overall statewide targets and adopting SCAG-specific targets based on Caltrans’ target setting methodology (noted in the table above). This recommendation allows SCAG to establish numerical targets specific to the region that are consistent with and supportive of the statewide targets, and it allows SCAG to more accurately monitor its performance in relation to the State’s targets going forward. Because targets will be updated annually, SCAG will have the opportunity to revisit and update its targets each calendar year.



# REPORT

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## Timeline and Next Steps

SCAG has until February 27, 2018 to finalize its regional targets. Once the regional targets are established, SCAG anticipates working with stakeholders to develop a regional safety plan that could be incorporated into the 2020 RTP/SCS.

## **FISCAL IMPACT:**

Funding for staff work on this issue is included in the FY17/18 Overall Work Program (010.00170.08: Transportation Security Planning).

## **ATTACHMENTS:**

1. Safety Performance Management Targets for 2018
2. PowerPoint Presentation: Calendar Year 2018 Transportation Safety Targets

## Safety Performance Management Targets for 2018

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 by August 31, 2017 for the 2018 calendar 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 and OTS have adopted aspirational goals consistent with the Strategic Highway Safety Plan (SHSP) and Caltrans' Strategic Management Plan (SMP), as follows:

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

Performance Target	Data Source	5- Yr. Rolling Average (2018)	Percent Reduction (2018)
Number of Fatalities	FARS	3590.8	-7.69%
Rate of Fatalities (per 100M VMT)	FARS & HPMS	1.029	-7.69%
Number of Serious Injuries	SWITRS	12,823.4	-1.5%
Rate of Serious Injuries (per 100M VMT)	SWITRS & HPMS	3.831	-1.5%
Number of Non-Motorized Fatalities and Non-Motorized Severe Injuries	FARS & SWITRS	4271.1	-10%

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 that 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 data-driven and strategic approach, the HSIP Final Rule contains three 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.

The Safety 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 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 will be established annually, beginning in August 2017 for calendar year 2018. For common 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 Transit Safety Administration (NHTSA) Highway Safety Grants program that is administered by OTS. The State Department of Transportation (DOT) must also coordinate with the Metropolitan Planning Organizations (MPO) in the State 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.

MPOs will establish targets for the same five safety performance measures for all public roads in the MPO 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.

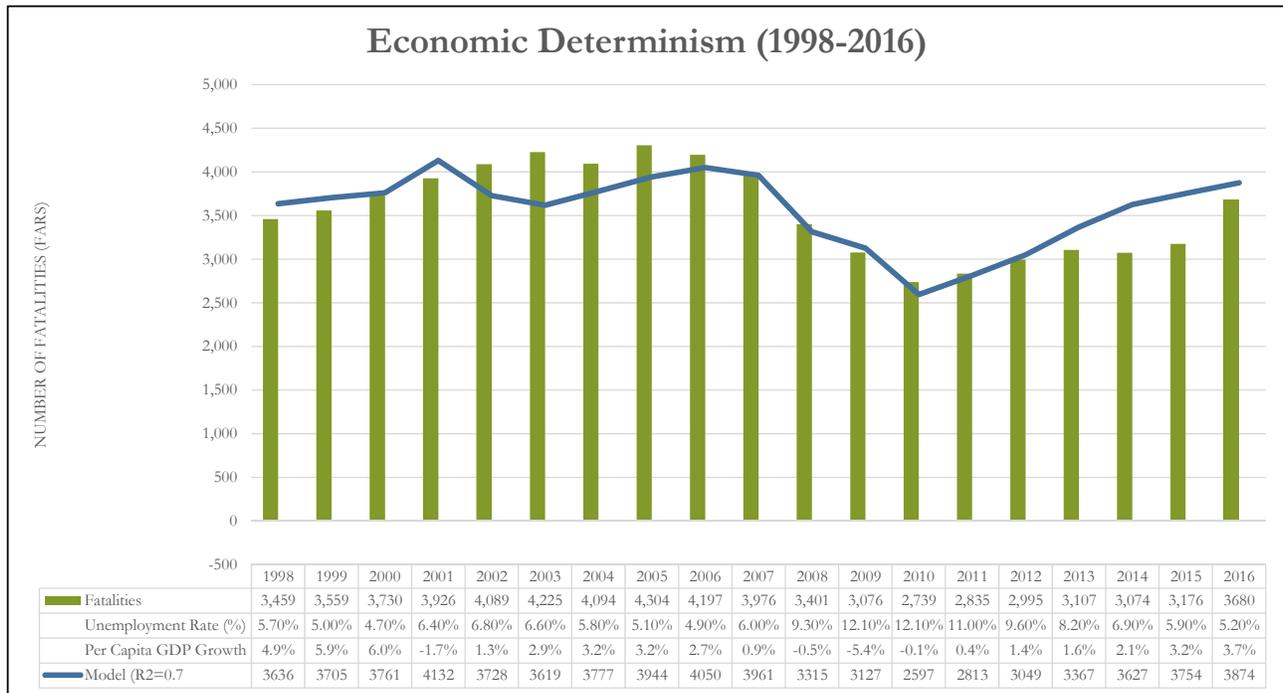
A State is considered to have met or made significant progress toward meeting its safety targets when at least four of the five targets are met or the outcome for the performance measure is better than the baseline performance the year prior to the target year. Optional urbanized area or non-urbanized 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) to estimate targets based on forecasted fatality reductions from safety plans. The need to forecast future collision trends is prescribed by the fact that safety performance targets are set a year in advance where at least two years of collision data is unknown. For example, in the case of setting the first target in 2018, the total numbers of collisions are not known for the years 2017 and 2018 (and possibly the current year).

In order to answer the question of what external factors will impact the targets, there is an active National Cooperative Highway Research Project (NCHRP) 17-67 titled, “Identification of Factors Contributing to the Decline of Fatalities in the United States.” This study has preliminarily determined that economic factors contribute up to 85 percent of the variation of collisions on yearly basis. This study has found that the main factors are: the percent of unemployment for 16-24 year olds, Gross Domestic Product (GDP) per capita, median income, and beer consumption. In the case of California, seventy percent of the variation can be taken into account from only considering the unemployment rate and per capital GDP growth for California for the years 1998 to 2015.

FIGURE 1: THE INFLUENCE OF ECONOMIC FACTORS ON THE NUMBER OF FATALITIES IN CALIFORNIA



Therefore, to accurately forecast future collision trends for fatalities, serious injuries, and property damage only collision types, the difficult task of forecasting the economy with political and economic uncertainties would need to be completed.

In forecasting the number of fatalities, a more straightforward approach is to use the National Safety Council's (NSC) Motor Vehicle Estimates for the current year and then to extrapolate these values for an additional two years. For example in 2016, California ended up 13 percent higher as compared to 2015 and 19 percent higher as compared to 2014 for the number of fatalities. If this methodology is followed, then collisions are in corresponding fashion extrapolated to also increase 13 percent until 2018 (which is the first safety performance target reporting period). The advantage of using this methodology is that it is simple and it considers actual collision trends that are close in time to the target year. **Therefore, the recommendation is to use NSC estimates to forecast future trends due to the difficulty of forecasting economic trends for the number of fatalities.** If the five-year rolling average is taken from the years 2014 to 2018, this establishes the baseline values from which progress is measured.

The rationale for using current trends to extrapolate to the near future is that in the face of uncertainties the best indicator is what is happening in the present. Therefore, in a likewise fashion, the current trends for serious injuries are extrapolated from current trends. For instance, if the number of serious injuries are increasing nine percent in the current year, then this number is used to forecast numbers for an additional two years (for the purposes of setting targets). Unlike the number of fatalities, there are no official estimates (such as the NSC) to forecast serious injuries.

With regards to forecasting fatality and serious injury reductions from safety plans, the ideal 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 to 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).

At the other end of the spectrum, a target is set by edict from agency leadership, elected officials, or other policy making bodies. The advantage of this approach is it is less time and money intensive and it is unequivocal and well understood. The drawback is that having an aspirational or vision based target is only symbolic if they have no realistic safety program to ensure success and do not define actions and goals of all of the responsible agencies (FHWA, 25, 2011).

As a part of this document, targets have been set through a consensus-based planning process within the context of a performance-based allocation of resources. Moreover, it is "felt strongly that Toward Zero Death (TZD) should be the ultimate aspirational goal for the plan, and that realistic and achievable steps should be set for California to move closer to zero deaths" (SHSP, 14). In a corresponding fashion, the rate of fatalities and serious injuries based on vehicle miles traveled will reflect the TZD goals.

Furthermore, the SHSP recommends that “the regional approach could be an excellent way to address the Executives Leadership’s overarching regional, local, and tribal government policy priorities and could be managed concurrently with the overall statewide effort where Challenge Area Teams continue to meet and work on issues of statewide concern” (SHSP, 38). This approach would be consistent with empirically derived targets as described in the ideal scenario. Nevertheless, the SHSP also states that, “a regional approach to implementation has not been formally adopted by the SHSP Executive Leadership and is currently under advisement and review” (SHSP, 38). As a result, the SHSP as currently structured is somewhere in the middle between and bottoms-up regional approach and a top-down aspirational or vision based approach. As currently devised, the SHSP provides a comprehensive umbrella document with fifteen challenge areas that reflect the main topic areas in roadway safety.

The 2018 SPMT engagement process started approximately one year after the 2015-2019 SHSP was published. The 2018 SPMT engagement process revealed a general consensus among California stakeholders, many of which participated in the development of the SHSP, to maintain the aspirational direction outlined in the SHSP a year earlier.

***The Number of Fatalities***

In 2018, the target for fatalities based on the five-year rolling average is **3590.8** with 3838 fatalities that are projected for the same year. The five-year rolling average includes four years of increasing fatalities and one year of decreasing fatalities. This is best explained while referring to Figure 2. The dark green bars denote the current data available in FARS (as of June 22, 2017), while the light green bar depicts the “NSC Motor Vehicle Fatality Estimates” for 2016. The gray bar in 2017 shows a thirteen percent increase in fatalities from 2016 to 2017, which is based on the most recent trends from 2015 to 2016, which is based on the NSC data. From 2017 to the 2030, the fatalities decrease at a rate of 7.69 percent based on the Toward Zero Death concept by 2030. For example, if the number of fatalities in 2018 of 4158 is multiplied by 0.9231 (or  $1.000 - 0.0769 = 0.9231$ ), this equals 3838 fatalities in 2018. The line in red depicts the five-year rolling average, which takes the average on a year-to-year basis the previous five years of data.

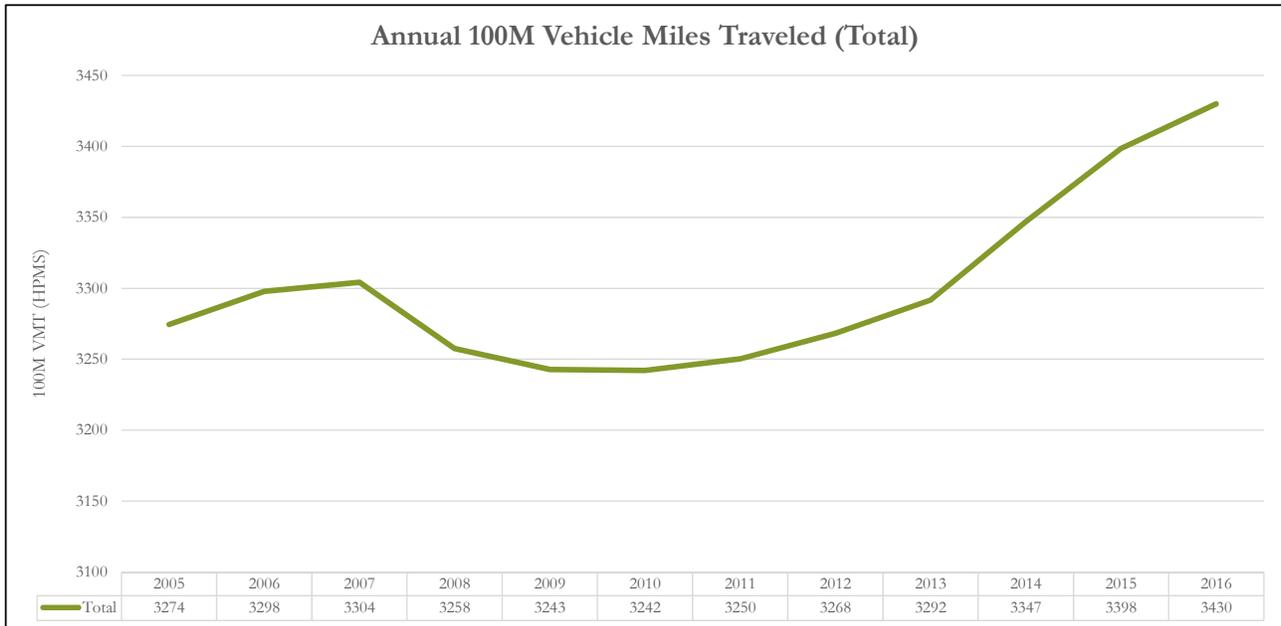
FIGURE 2: THE NUMBER OF FATALITIES



**Annual Fatality Rate (per 100M VMT)**

Before discussing fatality rates, a few words must be mentioned about statewide traffic volumes, which 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 2 percent increase in VMT is forecasted from year-to-year for the years from 2015 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 bars in dark green denote the current data that is available in FARS (as of June 22, 2017 when the OTS presents their targets to NHTSA);
- The light green bar depicts the “NSC Motor Vehicle Fatality Estimates” for 2016; and
- The gray bars show a year-to-year increase of +13% from 2016 to 2017 (which is based on the change of fatalities from 2015 to 2016)

FIGURE 4. THE FATALITY RATE



The red line represents the five-year rolling average from annual fatality numbers that reflect the TZD aspirational goal. This is a “vision” based target, based on a year-to-year decrease of 7.69% from 2017 and onwards (which is divided by the traffic volumes). The 5-year rolling average set at 2018 is 1.029 per 100M VMT. As stated, The Average Annual Daily Traffic (AADT) volumes are increased 2 percent per year from 2014 levels for the years from 2015 to 2020. In summary, the target, which is based on the five-year rolling average (set at 2018), is **1.029** per 100M VMT.

***The Number of Serious Injuries***

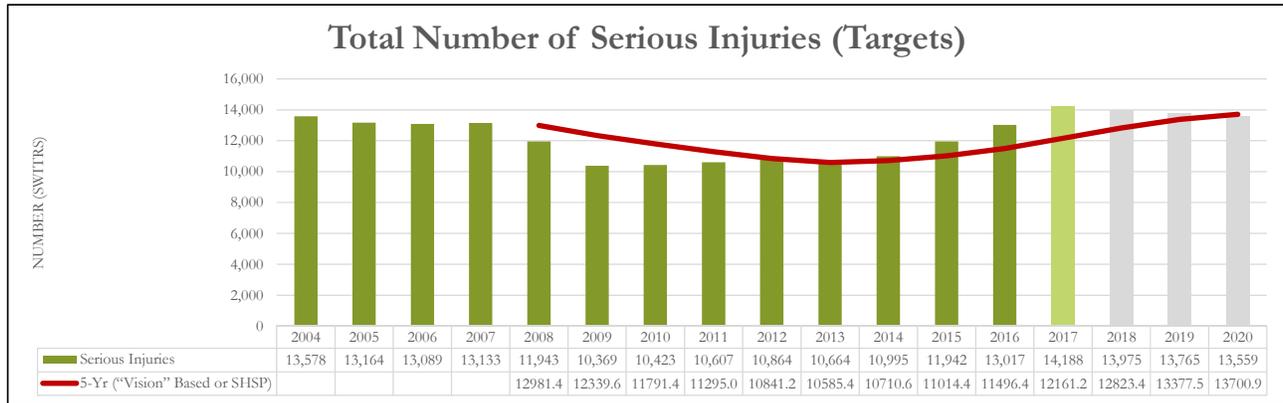
The serious injury data for the State of California resides in the Statewide Integrated Traffic Records System (SWITRS). The definition of serious injury corresponds to “A” in the KABCO Scale and the corresponding value in the SWITRS database is coded as “2”. This is explained in Table 2 (below).

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 bars in dark green denotes the current data that is available in SWITRS (as of June 22, 2017). The light green bar depicts the forecasted values for 2017, which is based on an increase of +9% (the change from 2015 to 2016 for serious injuries). The gray bars show the number of serious injuries when decreased at a rate of -1.5% per year starting in the year 2018. The target year for serious injury numbers is 13,975. The red line represents a five-year rolling average from a decrease in serious injuries of -1.5% per year starting in 2017. This target is incorporated in the SHSP. This is a “vision” based or “aspirational” target. The five-year rolling average target for 2018 is **12,823.4**.

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 bars in dark green denote the current data that is available in SWITRS and HPMS. The light green bar shows the 2017 value, which incorporates an increase of +9% for serious injuries. The gray bar charts denote an annualized decrease of 1.5% for serious injuries from 2017. The serious injury rate in 2018 is 4.176. The red line represents a five-year rolling average or serious injuries that decreases 1.5 percent per year from 2017. This concept is incorporated in the SHSP. This is a “vision” based or “aspirational” target. The 2018 target for the serious injury rate is **3.831**. The Average Annual Daily Traffic (AADT) volumes are increased 2 percent per year from 2014 levels for the years from 2015 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)**

Concerning the number of fatalities and serious injuries for non-motorists, the strategy is to be more aggressive than the SHSP by mandating performance measures that are consistent with Caltrans’ 2015-2020 SMP. As part of Goal 1 in the SMP, which deals with Safety and Health, the strategic objective is to reduce fatalities and serious injuries by adopting a “Toward Zero Deaths” practice. **Therefore, the target for bicyclists and pedestrians fatalities and serious injuries is a 10 percent reduction per calendar year.** In the SHSP there are challenge areas for both pedestrians and bicycling along with strategies in the implementation plan to reduce fatalities and severe injuries.

While referring to Figure 7 (below), the orange bars show the number of fatalities for pedestrians and bicyclists combined. The number of fatalities is held constant from 2016 to 2017 at 985. The bar chart in green denotes the current data that is available in SWITRS for the number of serious injuries for pedestrians and bicyclists combined. The gray bars depict the forecasts for future years that are based on a year-to-year increase from 2016 to 2017 of 0.00%. That is, the number of serious injuries is held constant at 3500 from 2016 to 2017. The red line represents a five-year rolling average for serious injuries that decrease 10% per year from 2017 to 2020 for both fatalities and serious injuries. This is a “vision” based or “aspirational” target. The final target for 2018 is **4271.1**.

FIGURE 7. NON-MOTORIZED TARGETS FOR FATALITIES AND SERIOUS INJURIES (COMBINE)



**Summary**

For a breakdown of the five Safety Performance Targets, please refer to Table 1 on page 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 safety performance targets. Further information with regards to the four 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, all the four webinars have been recorded and can be accessed from this website. In addition, Appendix B provides a reporting template for the MPOs to document the 2018 Safety Performance Targets to the State six months after the August 31, 2017 deadline to the FHWA for the State targets.

## **APPENDIX A: Safety Performance 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 31<sup>st</sup>, 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 30<sup>th</sup> 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, 2018.

### **Engagement Timeline:**

- **November 28, 2016** – An all day workshop was held in Caltrans' Boardroom to discuss, in a theoretical sense, what is behind safety performance targets. The MPOs, local and regional agencies, and the Tribal Governments were invited. The FHWA co-presented the workshop and answered frequently asked questions about the target setting process and what the possible consequences are for the State and MPOs if safety performance targets are not met. Caltrans presented the latest fatality and serious injury data for the State. The data was also broken down by the challenge areas in the Strategic Highway Safety Plan. A prerequisite webinar was also developed by the FHWA to provide background information to the participants before the workshop. The OTS also presented at the workshop.
- **December 12, 2016** – This workshop was held at the Holiday Inn in Downtown Sacramento, California. Like the workshop in November, the participants included the MPOs, local and regional agencies and the Tribal Governments. The FHWA co-presented the workshop to provide further guidance on the final rules adopted for Safety Performance Management. The OTS also presented since three of the five state performance targets must be coordinated with OTS. Caltrans presented the latest trend data for fatalities and serious injuries and possible strategies for target setting. After

the Caltrans presentation, the participants broke into groups to discuss the targets and preferences for where to set the targets from a regional perspective.

- **February 8, 2017** – This workshop was held in Fontana, California at the District 8 Traffic Management Center. The objective of this workshop was to demonstrate how to access and analyze safety data to set safety performance targets for an MPO. Santa Barbara County Association of Governments (SBCAG) was the example used for the demonstration. The FHWA presented information on how to access HPMS, while the California Highway Patrol (CHP) made a presentation on how to access SWITRS data. Caltrans demonstrated how the data could be analyzed and OTS presented on what countermeasures could be funded through their grant program.
- **June 22, 2017** – The final workshop presented the State safety targets with an explanation of the underlying assumptions in establishing the targets. In addition, an overview of the Office of Traffic Safety’s Behavioral and Education funding opportunities were presented.

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# Transportation Safety Regional Targets

Transportation Committee

December 7, 2017



## Safety Performance Management Final Rule

- 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. 27, 2018)
- Can support State targets, establish numerical targets specific to the region, or use a combination of both
- MPO reporting progress to the State still TBD, but will include reporting in RTP/SCS and FTIP

## Safety Target Evaluation

A State DOT is determined to have met or made significant progress toward meeting its targets when at least four of the five established performance targets...

a) are met

-- or --

b) the outcome for a performance measure is less than the five-year rolling average data for the performance measure for the year prior to the establishment of the State's target

## Safety Target Evaluation

- Requirements if State did not meet or make significant progress toward meeting targets:
  - Use obligation authority equal to the HSIP apportionment for the prior year only for highway safety improvement projects, and
  - Submit an HSIP Implementation Plan
- States notified of target achievement by the end of March following the year data becomes available (March 2020 for CY 2018)

## California's Safety Targets

- Vision-based, consistent with TZD, SHSP, and SMP
  - Number of Fatalities: 3,590.8 (-7.69% Reduction)
  - Rate of Fatalities: 1.029 (-7.69% Reduction)
  - Number of Serious Injuries: 12,823.4 (-1.5% Reduction)
  - Rate of Serious Injuries: 3.831 (-1.5% Reduction)
  - Number of Non-Motorized Fatalities and Serious Injuries: 4,271.1 (-10% Reduction)

## Stakeholder Feedback

- Support for aspirational or vision-based target setting
- Support for evidence-based targets that support a vision-based overarching target
- Support for the state's targets (Towards Zero Deaths or vision-based)

## Target Setting Evaluation: External Factors

- State of the economy can have a dramatic impact
- Continued population growth
- Changing demographics (e.g., older adults, Millennials)
- Change in the mode mix on roadways
- Effect of the region's active transportation initiatives
- Availability of funding
- Capacity of MPO to motivate reductions compared to implementing agencies (e.g., county transportation commissions and local jurisdictions)

## Regional Targets - Forecasts

- A simple trend line based on data from 2001-2016 data
- A simple trend line projection based on 5-year rolling averages from 2005 to 2016
- The average percentage decline from 2001 to 2016 (for annual and 5-year rolling averages)
- Applying the state's methodology to the region

## Regional Targets - Forecasts

### Forecasted Reductions

Measure	Baseline 5-Year Rolling Average	2001-2016 Linear Trend Projection Annual Numbers (Not 5-Year Rolling)		2005-2016 5-Year Rolling Average Linear Trend Projection		State Methodology Applied (5-Year Rolling Average)
	2016	Average Annual % Change (Past 16 Years of Data)	2018 Prediction	Average Annual % Change (Past 16 Years of Data)	2018 Prediction	2018 Prediction
Number of Fatalities	1403	-0.04%	1213	-1.97%	1121	<b>1601</b>
Rate of Fatalities per 100M VMT	0.88	-0.99%	0.73	-2.50%	0.70	<b>0.97</b>
Number of Serious Injuries	5044	0.12%	4612	-1.35%	4358	<b>5752</b>
Rate of Serious Injuries per 100M	3.162	-0.83%	2.79	-1.87%	2.72	<b>3.5</b>
Total Number of Nonmotorized	2046.4	8%	1995.8	-0.30%	1849.9	<b>2068</b>
* In all cases, referring to victims, not collisions						

## Regional Targets - Recommendation

- Options:
  - Support state targets
  - Establish numerical targets specific to SCAG
  - Or a combination
- Recommendations:
  - Support state targets
  - Adopt numerical targets consistent with the state methodology

## Next Steps

- February: RC adopts regional targets
- February onwards: Work with stakeholders to develop regional safety plan for 2020 RTP/SCS
- February 2019, 2020, etc. – monitor progress and set updated targets each year

Thank You  
Further Questions? Please contact:  
Courtney Aguirre, [aguirre@scag.ca.gov](mailto:aguirre@scag.ca.gov)



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**DATE:** December 7, 2017  
**TO:** Transportation Committee (TC)  
**FROM:** Steve Fox, Senior Regional Planner, 213-236-1855, fox@scag.ca.gov  
**SUBJECT:** Draft 2018 California State Rail Plan Update and SCAG Comment Letter

**EXECUTIVE DIRECTOR'S APPROVAL:** 

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**RECOMMENDED ACTION:**

Review and provide input on staff comments on the Draft 2018 California State Rail Plan (CSRP), and authorize the Executive Director to submit a comment letter to the Caltrans Division of Rail and Mass Transportation (DRMT) by the December 11, 2017 deadline.

**EXECUTIVE SUMMARY:**

*The Caltrans DRMT released its Draft 2018 CSRP on October 11, 2017. The CSRP is a long-range document that sets priorities and implementation strategies for improving the state's passenger and freight rail networks. Staff will present comments for TC review. The public comment period closes on December 11, 2017.*

**STRATEGIC PLAN:**

This item supports SCAG's Strategic Plan, Goal 1: Improve Regional Decision Making by Providing Leadership and Consensus Building on Key Plans and Policies; Objective: a) Create and facilitate a collaborative and cooperative environment to produce forward thinking regional plans.

**BACKGROUND:**

Caltrans DRMT prepares the CSRP every four years. The Draft CSRP lays out a statewide 2040 vision for a robust level of rail service that supports state goals established in the California Transportation Plan. The CSRP vision statement is, "California has a premier, customer-focused, integrated rail system that successfully moves people and products while enhancing economic growth and quality of life."

The Draft CSRP reviews the current passenger rail environment and outlines a short- (2022), medium- (2027), and long-term (2040) vision for operations, marketing, capital improvements, service expansions and new services. The Draft CSRP also includes a freight investment strategy that identifies opportunities for investments that are mutually beneficial for both passenger travel and goods movement, including in shared corridors. It presents a flexible, corridor-level framework for developing the passenger rail system and is intended to serve as the basis for coordinated State-led service implementation planning to achieve the 2040 vision. The Draft CSRP does not prescribe specific projects, and instead provides a path for implementation and a common understanding of how the State's rail network should develop to meet State goals.



# REPORT

The Draft CSRP, Executive Summary and other supporting documentation, are available at <http://www.dot.ca.gov/californiarail/>.

Staff has the following comments to the Draft CSRP. They are:

- Implement Service in New Markets. The Draft CSRP discusses implementing new passenger rail service in unserved markets. Most prominent of these in the SCAG region is rail service between Los Angeles and the Coachella Valley. This corridor is currently only served by the Amtrak Sunset Limited, but only three days a week arriving in Palm Springs after midnight. Daily service would provide an alternative to the heavily congested San Bernardino Freeway (I-10). SCAG encourages Caltrans DRMT to continue supporting local efforts to plan for and implement rail service to the Coachella Valley, including identification of funding sources for capital and operations investments.
- Emphasize Regional Connectivity and Seamless Travel. The SCAG region is poised to invest substantially in new rail services, including urban rail, commuter rail, and high-speed rail, and in increasing service levels on existing corridors. While these different types of rail services operate in distinct travel markets, the proper coordination of their schedules can attract crossover passengers, thereby increasing the region's rail and transit ridership. Interagency fare arrangements, code sharing, and smart fare media could also help make rail travel truly seamless for travelers. This coordination could significantly relieve capacity constraints of the existing air and highway transportation system as demand for intercity travel in California grows. SCAG encourages Caltrans DRMT to more clearly identify steps and actions to support regional connectivity and a seamless travel experience.
- California High-Speed Train (CA HST). The Draft CSRP assumes full build-out of the CA HST Phase 2, to Sacramento and San Diego, by 2040. While SCAG understands that the Draft CSRP is an unconstrained visioning document, this assumption is inconsistent with SCAG's adopted and financially constrained 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). The Draft CSRP also assumes half-hourly peak intercity train service by 2040, which is also inconsistent with SCAG's 2016 RTP/SCS. The CSRP should demonstrate funding availability for these assumptions before these investments can be considered for inclusion in a financially constrained RTP/SCS.
- Expedite the CA HST Blended System. The CA HST is now under construction in the San Joaquin Valley, and is scheduled to reach Los Angeles and Anaheim in 2029. The state legislature has approved over \$500 million in Prop 1A funding for blended investments to the existing passenger rail system in our region. The Southern California HSR MOU identifies projects ready to start construction once the required matching funds are identified. SCAG advocates for the expedited implementation of these early investments by the California High-Speed Rail Authority in the region's existing rail system in preparation for future CA HST service in Southern California. SCAG encourages Caltrans DRMT to highlight this need in the final CSRP.
- Improve Connectivity to the Region's Airports. There is currently very limited rail connectivity to Southern California airports, and other airports statewide. Investment should be made to connect

rail service to our airports to compete economically with other metropolitan areas in the nation that provide much better rail access. SCAG's 2016 RTP/SCS includes a plan for regional airport ground access. Caltrans DRMT should consider and incorporate strategies in the CSRP to improve air-rail connectivity where appropriate and feasible.

- Identification of Critical Mainline Freight Rail Enhancements. The Draft CSRP discusses freight rail infrastructure projects that are critical to goods movement in the state. In Southern California, there are various types of mainline rail improvements (e.g., rail-to-rail grade separations, double or triple tracking, new signal systems, universal crossovers, new sidings, etc.) that would benefit both freight rail and passenger rail service depending on their location. Two projects of regional significance that should be included in the Draft CSRP are 1) improvements to the BNSF Cajon Subdivision that include installing a third main track and a fourth main track on specific segments, and 2) improvements to the BNSF San Bernardino Subdivision including a third main track, as well as a fourth main track along the Hobart to Fullerton segment. These two projects are included in SCAG's 2016 RTP/SCS and eligible for funding through the Trade Corridor Enhancement Account (TCEF) per guidelines adopted by the California Transportation Commission.
- Port Area Rail Infrastructure Improvements. The Ports of Los Angeles and Long Beach (San Pedro Bay Ports) are the key trade gateway for international freight moving to all parts of the U.S. In 2014, approximately 26.9 percent of the San Pedro Bay Ports' 15 million containers were shipped by rail "intact" (direct intermodal), meaning the cargo was moved by rail in marine containers without being transloaded or deconsolidated first. With continued investments in on-dock infrastructure as proposed, on-dock rail is estimated to account for the movement of approximately 35 percent of all San Pedro Bay Ports' twenty-foot equivalent units (TEUs) by 2035. The San Pedro Bay Ports have proposed nearly \$2 billion in rail improvements within the harbor area that will help address this increase. These projects are designed to support increased on-dock rail service, reduce railroad delay associated with train meets and passes, and reduce conflicts with highway traffic. By allowing more on-dock rail, truck traffic between the San Pedro Bay Ports and distant rail yards can be reduced. Use of on-dock rail eliminates truck vehicle miles of travel (VMT) and associated emissions by allowing trains to be loaded and unloaded inside marine terminals. However, the ability to accommodate the growth of on-dock rail capacity will be limited by factors such as shipper/steamship line logistics (transloading, transportation costs, etc.), railroad operations (equipment availability, the need to generate destination-specific unit trains, train schedules and steamship line contracts/arrangements) and terminal operation and congestion. SCAG recommends the inclusion and some discussion of the importance of investment in on-dock rail capacity and current initiatives by the San Pedro Bay Ports to accommodate anticipated cargo growth in the freight segment of the CSRP.
- Locomotive Engine Standards. Locomotive engine standards fall under the jurisdiction of the U.S. Environmental Protection Agency (EPA). The California Air Resources Board (CARB) and South Coast Air Quality Management District (SCAQMD) policy bodies generally promote and advocate for stricter standards than the EPA, and in lieu of these standards, pursue other approaches such as voluntary commitments or incentives. SCAG is generally supportive of stricter federal standards to create a level playing field. Since the Draft CSRP has tables showing engine turnover with different scenarios, SCAG recommends the inclusion of a scenario with accelerated federal

# REPORT

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standards. Similarly, federal locomotive engine regulations could also be reviewed, as the Draft CSRP only discusses the state policy.

The Draft 2018 CSRP was released on October 11, 2017 and the public comment period closes on December 11, 2017. Open houses were held in our region on November 14 in San Bernardino and November 15 in Los Angeles.

## **NEXT STEPS:**

Staff will finalize comments based upon direction from the TC, and submit them to Caltrans DRMT by the December 11, 2017 deadline.

## **FISCAL IMPACT:**

Staff work related to this project is included in the current OWP under Work Element No. 18-140.SCG00121-02 Regional High Speed Rail Transport Program.

## **ATTACHMENTS:**

1. 2018 California State Rail Plan Fact Sheet
2. PowerPoint Presentation: Transportation Safety Regional Targets

2018

# CALIFORNIA STATE RAIL PLAN

2018 california state  
rail plan



factsheet



## WHAT IS THE 2018 CALIFORNIA STATE RAIL PLAN?

The Rail Plan establishes a long-term vision for **prioritizing state investment** in an **efficient, effective passenger and freight rail system**, which supports the goals and policies of the California Transportation Plan 2040. The Rail Plan identifies **service goals, capital costs, and a phased strategy** for achieving the Vision. This ambitious plan identifies a coordinated, statewide passenger rail network that will get Californians where they want to go, when they want to go, and enhance the movement of goods by rail to support California's industries and the economy.

**PASSENGER RAIL:** Rail Plan investments will open the door for travelers to **glide past traffic** on reliable trains and buses in dedicated lanes; **transfer quickly and easily** with timed transfers; and to plan an entire, door-to-door trip, even on different trains, using a **single ticket**.

**FREIGHT RAIL:** The Rail Plan establishes state priorities for freight: improving **trade corridors, yards and terminals, and access** for businesses; and enhancing the competitiveness of California's ports and intermodal transfer facilities.

## IMPLEMENTATION HIGHLIGHTS

### The Short-Term Plan (2022)

- » Caltrain electrification
- » Committed rail improvements/extensions
- » More bus connections to fill gaps
- » Elimination of existing rail freight bottlenecks
- » Statewide service planning – connect train routes

### The Ten Year Plan (2027)

- » High Speed Rail – Central Valley to Silicon Valley
- » More frequencies using available capacity
- » Timed connections between services
- » Fully operational integrated ticketing
- » Rail freight – shared passenger lines, trade corridors

### The Vision (2040)

- » High Speed Rail – Anaheim to San Francisco by 2029
- » High Speed Rail connections – Sacramento, Inland Empire, San Diego
- » New regional rail system connections
- » Regular frequencies & fast services



## contact us

For more information, or to view the Rail Plan and submit comments, please visit our website at [www.CaliforniaStateRailPlan.com/comments.html](http://www.CaliforniaStateRailPlan.com/comments.html) or email [RailPlan@dot.ca.gov](mailto:RailPlan@dot.ca.gov).

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2018 california state  
rail plan



## statewide map

### Rail Plan Vision:

*California has a premier, customer-focused, integrated rail system that successfully moves people and products while enhancing economic growth and quality of life.*



# Draft 2018 California State Rail Plan Update and SCAG Comment Letter

Transportation Committee

December 7, 2017

Steve Fox  
Senior Regional Planner



## Draft 2018 California State Rail Plan (CSRP)

- Caltrans Division of Rail and Mass Transportation (DRMT) prepares the CSRP every four years.
- 2040 vision for a robust level of rail service that supports state goals established in the California Transportation Plan.
- Outlines a short- (2022), medium- (2027), and long-term (2040) vision for operations, marketing, capital improvements, service expansions and new services.
- Includes a freight investment strategy that identifies opportunities for investments that are mutually beneficial for both passenger travel and goods movement, including in shared corridors.

## Draft 2018 California State Rail Plan (CSRP)

- Envisions robust level of rail service by 2040 with up to 30-minute service between major cities.
- Emphasizes connectivity between different types of rail service and transit.
- Express bus service plays a role.
- Draft released October 11, 2017 for a 60-day review.



## SCAG Comments – Passenger Rail

- Implement Service in New Markets
- Emphasize Regional Connectivity and Seamless Travel
- California High-Speed Train (CA HST)



## SCAG Comments – Passenger Rail

- Expedite the CA HST Blended System
- Improve Connectivity to the Region's Airports



## SCAG Comments – Freight Rail

- Identification of Critical Mainline Freight Rail Enhancements
- Port Area Rail Infrastructure Improvements
- Locomotive Engine Standards



## Next Steps

- Finalize comments based upon direction from the TC.
- Submit to Caltrans DRMT by the December 11, 2017 deadline.

# Thank You

Steve Fox

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



Transportation Committee Meeting  
of the  
Southern California Association of Governments  
November 2, 2017

*Minutes*

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

The Transportation Committee (TC) met at SCAG's office in downtown Los Angeles. The meeting was called to order by Chair Curt Hagman, San Bernardino County. A quorum was present.

**Members Present:**

Hon. Sean Ashton, Downey	District 25
Hon. Will Berg, Port Hueneme	VCOG
Hon. Russell Betts, Desert Hot Springs	CVAG
Hon. Art Brown, Buena Park	District 21
Hon. Ross Chun, Aliso Viejo	OCTA
Hon. Jim Clarke, Culver City	WCCOG
Hon. James Gazeley, Lomita	District 39
Hon. Jeffrey, Giba, Moreno Valley	District 69
Hon. Jack Hadjinian, Montebello	SGVCOG
Hon. Curt Hagman ( <b>Chair</b> )	San Bernardino County
Hon. Carol Herrera, Diamond Bar	District 37
Hon. Mike T. Judge, Simi Valley	VCTC
Hon. Trish Kelley, Mission Viejo	OCCOG
Hon. Randon Lane, Murrieta ( <b>Vice Chair</b> )	District 5
Hon. Clint Lorimore, Eastvale	District 4
Hon. Steve Manos, Lake Elsinore	District 63
Hon. Ray Marquez, Chino Hills	District 10
Hon. Marsha McLean, Santa Clarita	District 67
Hon. Dan Medina, Gardena	District 28
Hon. Barbara Messina, Alhambra	District 34
Hon. Fred Minagar, Laguna Niguel	District 12
Hon. Carol Moore, Laguna Woods	OCCOG
Hon. Kris Murray, Anaheim	District 19
Hon. Frank Navarro, Colton	District 6
Hon. Sam Pedroza, Claremont	District 38
Hon. Greg Pettis, Cathedral City	District 2
Hon. Charles Puckett, Tustin	District 17
Hon. Teresa Real Sebastian, Monterey Park	SGVCOG
Hon. Crystal Ruiz, San Jacinto	WRCOG
Hon. Ali Saleh, Bell	GCCOG
Hon. Cynthia Sternquist, Temple City	SGVCOG
Hon. Jess Talamantes	SFVCOG
Hon. Cheryl Viegas-Walker, El Centro	District 1
Hon. Alan Wapner, Ontario	SBCTA/SBCOG
Hon. Alicia Weintraub, Calabasas	LVMCOG
Hon. Michael Wilson, Indio	District 66
Ms. Nieves Castro	Caltrans District 7

## **Members Not Present:**

Hon. Rusty Bailey, Riverside	District 68
Hon. Glen Becerra, Simi Valley	District 46
Hon. Ben Benoit, Wildomar	South Coast AQMD
Hon. Austin Bishop, Palmdale	North L.A. County
Hon. Joe Buscaino, Los Angeles	District 62
Hon. Jonathan Curtis, La Cañada-Flintridge	District 36
Hon. Gonzalez, Lena, Long Beach	District 30
Hon. Janice Hahn	Los Angeles County
Hon. Jan Harnik, Palm Desert	RCTC
Hon. Dave Harrington, Aliso Viejo	OCCOG
Hon. Steven Hofbauer, Palmdale	District 43
Hon. Jose Huizar, Los Angeles	District 61
Hon. Jim Hyatt, Calimesa	District 3
Hon. Linda Krupa, Hemet	WRCOG
Hon. James C. Ledford	Palmdale
Hon. Larry McCallon	Highland
Hon. L. Dennis Michael	District 9
Hon. Richard D. Murphy, Los Alamitos	OCTA
Hon. Shawn Nelson	Orange County
Hon. Pam O'Connor, Santa Monica	District 41
Hon. Dwight Robinson, Lake Forest	OCCOG
Hon. Damon Sandoval	Morongo Band of Mission Indians
Hon. Jesus Silva, Fullerton	
Hon. Marty Simonoff, Brea	District 22
Hon. Zareh Sinanyan, Glendale	SFVCOG
Hon. José Luis Solache, Lynwood	District 26
Hon. Barb Stanton, Apple Valley	SBCTA/SBCOG
Hon. Brent Tercero, Pico Rivera	GCCOG

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

Hon. Curt Hagman, San Bernardino County, called the meeting to order at 10:13 a.m. Hon. Alan Wapner, Ontario, led the pledge of allegiance.

## **PUBLIC COMMENT**

No members of the public requested to comment.

## **CONSENT CALENDAR**

1. Minutes of the October 5, 2017 Meeting

### **Receive and File**

2. ARB Final Staff Recommendations on SB 375 Regional GHG Target for the 2020 Regional Transportation Plan/Sustainable Communities Strategy (2020 RTP/SCS) and Beyond
3. Status Update on Implementation of 2016 South Coast Air Quality Management Plan (AQMP)
4. Notice of Funding Availability (NOFA): Infill Infrastructure Grant (IIG)
5. SB 1 Sustainable Communities Planning Grant Program – Formula Funds

6. 2018 Schedule of Regional Council and Policy Committees

A MOTION was made (Brown) and SECONDED (Wilson) to approve Consent Calendar items 1 – 6. The Motion passed by the following votes:

AYES: Ashton, Berg, Betts, Brown, Chun, Clarke, Gazeley, Giba, Hadjinian, Hagman, Herrera, Judge, Kelley, Lane, Lorimore, Manos, Marquez, McLean, Medina, Messina, Minagar, Moore, Murray, Navarro, Pedroza, Pettis, Puckett, Ruiz, Saleh, Sternquist, Talamantes, Viegas-Walker, Wapner, Weintraub, Wilson (35)

NOES: None (0)

ABSTAIN: Real Sebastian (1)

After the vote, Hon Real Sebastian, Monterey Park, noted for the record that her abstention was intended for Consent Item No. 1 (Approval of the Minutes) and that she approved Consent Items No. 2 to 6.

**INFORMATION ITEMS**

7. Mobility Innovations: Encouraging and Facilitating Research, Pilots, and Demonstrations in the SCAG Region

Marco Anderson, SCAG staff, stated that mobility innovations referred to a broad range of near- and long-term transportation technologies, including electric vehicles, car sharing, transportation network companies such as Lyft and Uber, and connected automated vehicles (CAV). He noted that in May 2017, SCAG entered into an agreement with the state’s major Metropolitan Planning Organizations to establish the Future Mobility Research Program to combine resources, streamline consulting contracts, and to investigate the impacts of shared mobility, ride sourcing, and CAVs on modeling and the development of regional transportation plans. He noted that it was important that the public and private sectors work together in deploying CAVs in the region to incentivize the benefits while avoiding negative aspects such as increased vehicle miles traveled, congestion, and greenhouse gas emissions. He shared that CAVs may be uniquely suited for low speed operation and that the SCAG region was well suited to support the technology.

Steven Gota, Deputy Executive Officer, Los Angeles County Metropolitan Transportation Authority (Metro), shared information regarding the Coalition for Transportation Technology. He stated the coalition was a group of public agencies that sought to advance the discussion of transportation innovations by building partnerships and lines of communication from those partners vital to the process. He referenced partners such as Los Angeles Metro, Los Angeles Department of Transportation, Caltrans, and SCAG. He reviewed the coalition’s history, charter, and structure. Mr. Gota noted key objectives included identifying funding and bringing together key industry partners.

Judy Kruger, Director, Advanced Transportation and Aerospace, Los Angeles Economic Development Corporation (LAEDC) reported on the e4 Mobility Alliance. Ms. Kruger noted the Alliance’s areas of focus included connected autonomous vehicles, logistics and goods movement, fleet and transit vehicles, smart grid and charging infrastructure and alternative fuels. She shared that key objectives included promoting Southern California’s participation in the advancement of transportation technology and ensuring an increased share of local, state, and federal funding for advanced transportation including demonstrations and pilots.

Hon. Alicia Weintraub, Calabasas, asked what cities could do to be involved in the advancement of transportation technology. Mr. Anderson responded that it was useful to identify a specific mobility challenge that a city was facing that a demonstration project could solve. He urged interested cities to participate in the coalitions and to consider infrastructure development that could promote connected autonomous vehicle penetration and other innovative technologies.

Hon Curt Hagman, San Bernardino County, stated that as cities look to the future of smart technology they can consider infrastructure choices such as signal coordination and fiber networks. He also recommended the Southern California Logistics Airport in Victorville as a potential test site for connected autonomous vehicle development.

8. Bus Rapid Transit and Changing Neighborhoods in Los Angeles

Anne Brown, PhD Candidate, Department of Urban Planning, UCLA, reported on her current research which examines Bus Rapid Transit (BRT) and its effects on accelerating gentrification on Metro's Orange Line. Ms. Brown stated that while the study was focused on the Orange Line, it investigated larger questions of neighborhood change around transit and gentrification's effect on local residents who are transit dependent. She stated that the study's goal was to examine whether neighborhoods closer to Orange Line stations experienced change compared to those farther from it, and also, to determine whether some neighborhoods were more likely to experience displacement. She stated that findings from the research could help policy makers who could act in advance to protect local transit dependent residents and others as gentrification progressed. She noted that gentrification could be a slow process where steadily changing conditions caused lower income families to move out and then higher income families to move in.

Ms. Brown stated her approach was to examine areas one-half mile, two, and five miles around each Orange Line station. She investigated variables such as median household income, median home value, median rent, and education levels. Ms. Brown noted that areas within one-half mile of an Orange Line station did experience a greater level of change in these variables than those within two or five miles as well as those in the greater Los Angeles area. She stated both median home prices and median rents increased in those areas closest to the Orange Line. Additionally, she noted that the racial composition of the neighborhoods did not see significant change. Ms. Brown stated that the Orange Line analysis could be instructive to future policy makers regarding the effects of gentrification on bus rapid transit routes, and the study highlighted the importance of planning for affordable housing near transit stations. She stated that policies such as just cause eviction control, community housing plans, and others could be used to preserve affordable housing around transit corridors so that existing residents were not displaced.

Hon. Steve Manos, Lake Elsinore, asked if data was collected on residents who moved out of the neighborhoods and was it possible they experienced upward mobility. Ms. Brown responded that the data was not collected, and that in light rail studies, typically displacement, which could be a slow process, did accompany this type of gentrification.

9. Update on Clean Freight Technologies

Matt Miyasato, Deputy Executive Officer, South Coast Air Quality Management District, reported on Clean Freight Technologies. Mr. Miyasato stated the district contained 44% of the state's population and received 40% of the nation's containerized goods, and the

movement of those goods could produce unhealthful impacts for residents. He noted the greatest environmental impacts came from mobile sources such as heavy duty diesel trucks, marine vessels, locomotives, automobiles, and light duty trucks. He also reviewed upcoming technology, such as ultra-low emission heavy-duty natural gas engines, which produce significantly less harmful NOx emissions.

Mr. Miyasato noted that different truck technologies could be used for specific purposes in the supply chain, for example, for deliveries under 10 miles, battery electric, plug-in hybrid or a catenary system would be most beneficial. He stated that for distances greater than 10 miles, fuel cell, near-zero natural gas, and plug-in hybrid could provide a delivery system with reduced emissions. He noted the move toward these technologies would be achieved through both regulatory direction and market incentives toward their continued development.

Hon. Kris Murray, Anaheim, asked how to address idling trains near residential communities as it presented a significant problem in her district. Mr. Miyasato responded that local regulation of locomotives was difficult as the Environmental Protection Agency (US EPA) had jurisdiction over rail engines. Ms. Murray suggested that SCAG consider this as part of its federal legislative initiative.

### **CHAIR'S REPORT**

No chair's report provided.

### **METROLINK REPORT**

Hon. Art Brown, Buena Park, reported that at the October 13<sup>th</sup> Metrolink Board meeting it was noted that actual yearly revenues to expenses resulted in a \$13 million surplus. He stated that this money would be available to the county transportation commissions to be used at their discretion. He stated that the first Tier 4 locomotives began revenue service on October 12<sup>th</sup> on the San Bernardino Line, and that the Southern California Regional Rail Authority (SCRRA) had signed a lease with the Wilshire Grand. He stated that SCRRA was scheduled to move into the building in spring 2018. He reported that Metrolink's 25<sup>th</sup> anniversary event was held on October 27<sup>th</sup> at Union Station and there were various festivities, and Los Angeles Mayor Eric Garcetti spoke, along with other dignitaries.

### **STAFF REPORT**

No staff report provided.

### **FUTURE AGENDA ITEMS**

Hon. Russell Betts, Desert Hot Springs, requested an item on idling trains.

### **ADJOURNMENT**

Hon. Randon Lane, Murrieta, adjourned the meeting at 11:58 a.m.

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



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Courtney Aguirre, Senior Regional Planner  
Transportation Planning

**Transportation Committee Attendance Report  
2017**

Member (including Ex-Officio) Last Name, First Name	Representing	X = County Represented						X = Attended				= No Meeting		NM = New Member						
		IC	LA	OC	RC	SB	VC	Jan	Feb	Mar	April	GA May	June	July	Aug	Sept	Oct	Nov	Dec	
1	Ashton, Sean*	Downey		X					X	X	X	X			X	X		X	X	X
2	Bailey, Rusty*	Riverside, WRCOG				X			X	X	X			X			X	X		
3	Becerra, Glen*	Simi Valley					X				X					X			X	
4	Benoit, Ben*	South Coast AQMD				X			X	X	X	X			X	X			X	
5	Berg, Will	VCOG, Port Hueneme													X	X		X	X	X
6	Betts, Russell	CVAG				X			X		X				X	X		X	X	X
7	Bishop, Austin	County																		
8	Brown, Art*	Buena Park			X					X	X	X			X	X		X	X	X
9	Buscaino, Joe*	Los Angeles		X									X			X				
10	Castro, Nieves	Caltrans District 7																		
11	Chun, Ross	Aliso Viejo, OCTA			X											NM		X	X	X
12	Clarke, Jim	Culver City, WCCOG		X					X	X	X	X			X	X		X	X	X
13	Curtis, Jonathan*	La Cañada Flintridge		X							X				X	X		X		
14	Gazeley, James*	Lomita		X					X	X	X	X			X	X		X	X	X
15	Giba, Jeffrey*	Moreno Valley				X			X	X	X	X			X	X		X	X	X
16	Gonzalez, Lena*	Long Beach		X																
17	Hadjinian, Jack	Montebello, SGVCOG		X											X	X		X	X	X
18	Hagman, Curt* (Chair)	San Bernardino County					X		X		X	X			X	X		X	X	X
19	Hahn, Janice*	Los Angeles County		X							NM									
20	Harnik, Jan*	Palm Desert, RCTC				X			X	X	X				X			X		
21	Harrington, Dave	Aliso Viejo, OCCOG			X															
22	Herrera, Carol*	Diamond Bar		X					X	X		X			X	X		X		X
23	Hofbauer, Steven*	County		X					X	X	X	X			X					
24	Huizar, Jose*	Los Angeles		X																
25	Hyatt, Jim*	Calimesa				X			X	X	X	X			X	X		X	X	
26	Judge, Mike*	Simi Valley, VCTC						X			NM	X			X	X		X	X	X
27	Kalley, Trish	Mission Viejo, OCCOG			X										NM	X		X	X	X
28	Krupa, Linda	Hemet, WRCOG				X				X	X	X				X			X	
29	Lane, Randon* (Vice Chair)	Murrieta				X			X	X	X	X			X	X		X	X	X
30	Ledford, James C.	County		X																
31	Lorimore, Clint*	Eastvale				X			X	X	X	X			X	X		X		X
32	Manos, Steve*	Lake Elsinore				X										NM		X	X	X
33	Marquez, Ray*	Chino Hills					X		X		X	X				X		X	X	X
34	McCallon, Larry	Highland					X								X	X		X	X	
35	McLean, Marsha*	Santa Clarita		X					X	X	X	X			X	X		X	X	X
36	Medina, Dan*	Gardena		X					X	X	X	X			X	X		X	X	X
37	Messina, Barbara*	Alhambra		X					X		X	X			X	X		X	X	X
38	L. Dennis Michael	Rancho Cucamonga					X			X		X				X		X	X	
39	Minagar, Fred*	Laguna Niguel			X				X	X	X	X			X	X		X	X	X
40	Moore, Carol	Laguna Woods, OCCOG			X				X	X	X	X			X	X		X	X	X
41	Murphy, Richard	Los Alamitos/OCTA			X					X					X	X			X	
42	Murray, Kris*	Anaheim			X				X	X	X					X		X	X	X
43	Navarro, Frank*	Colton					X		X	X	X	X			X	X		X	X	X
44	Nelson, Shawn*	County of Orange			X						NM									
45	O'Connor, Pam*	Santa Monica		X					X			X				X				
46	Pedroza, Sam*	Claremont		X					X	X	X	X			X	X		X		X
47	Pettis, Greg*	Cathedral City				X										NM			X	X
48	Puckett, Charles	Tustin																X	X	X
49	Real Sebastian, Teresa	Monterey Park/SGVCOG		X					X		X	X			X	X		X		X
50	Robinson, Dwight	Lake Forest, OCCOG			X															
51	Ruiz, Crystal	WRCOG/San Jacinto				X						NM			X	X		X	X	X
52	Saleh, Ali*	City of Bell, GCCOG		X						X	X	X				X		X	X	X
53	Sandoval, Damon	Morongo Band of Mission Indians																		
54	Silva, Jesus	Fullerton			X													NM	X	
55	Simonoff, Marty*	Brea			X				X	X	X	X			X	X		X	X	
56	Sinanyan, Zareh	Glendale		X																
57	Solache, José Luis*	Lynwood		X														X		
58	Stanton, Barb	Apple Valley					X			X	X									
59	Sternquist, Cynthia	Temple City		X					X	X	X	X				X		X	X	X
60	Talamantes, Jess			X							X	X			X			X	X	X
61	Tercero, Brent	Pico Rivera		X					X			X								
62	Viegas-Walker, Cheryl*	El Centro		X					X	X	X	X			X	X			X	X
63	Wapner, Alan*	SBCTA/SBCOG					X		X	X		X			X	X		X	X	X
64	Weintraub, Alicia	Calabasas/LVMCOG		X						X	X				X			X		X
65	Wilson, Michael*	Indio, CVAG				X				X		X						X		X
		<b>Totals</b>	<b>1</b>	<b>24</b>	<b>12</b>	<b>12</b>	<b>7</b>	<b>2</b>												

\* Regional Council Member

**DATE:** December 7, 2017

**TO:** Energy and Environment Committee (EEC)  
Community, Economic and Human Development (CEHD) Committee  
Transportation Committee (TC)  
Regional Council (RC)

**FROM:** Ping Chang, Acting Manager, Compliance & Performance Monitoring, 213-236-1839,  
[chang@scag.ca.gov](mailto:chang@scag.ca.gov)

**SUBJECT:** State of California 2017 Climate Change Scoping Plan

**EXECUTIVE DIRECTOR'S APPROVAL:** 

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

**RECOMMENDED ACTION FOR CEHD, TC & RC:**  
Receive and File

**EXECUTIVE SUMMARY:**

*On October 27, 2017, the California Air Resources Board (ARB) released a Revised Draft of the 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target. The Revised Draft lays out the State's approach to address climate change and potential economic sectors-based solutions to achieve the 2030 statewide greenhouse (GHG) target of 40 percent below the 1990 levels as set forth in Senate Bill (SB) 32. While the SB 375 numerical target update component is a separate process, the Revised Draft includes on-going and proposed transportation/land use measures as well as potential additional actions for considerations. Other revisions from its previous (January 2017) Draft include, among others, considerations from recent cap-and-trade legislation, estimates of public health and related economic benefits, and establishing target of avoided emissions from the natural and working land sector. In addition, ARB recommends that local governments evaluate and adopt robust and quantitative locally-appropriate goals that align with the statewide per capita targets and the State's sustainable development objectives and develop plans to achieve the local goals. At the time of preparing this staff report, all the Appendices (from A to I) are yet to be released. The 2017 Climate Change Scoping Plan is scheduled for ARB Board consideration at its December 14-15, 2017 meeting in Sacramento.*

*The Revised Draft has been posted at: <https://www.arb.ca.gov/cc/scopingplan/revised2017spu.pdf>*

**STRATEGIC PLAN:**

This item supports SCAG's Strategic Plan Goal 1: Improve Regional Decision Making by Providing Leadership and Consensus Building on Key Plans and Policies.

**BACKGROUND:**

State legislation Assembly Bill (AB) 32, which took effect in 2006, requires California to reduce its GHG emissions to 1990 levels by 2020 and continue reductions in GHG emissions beyond 2020. Full



implementation of AB 32 will help mitigate risks associated with climate change, while improving energy efficiency, expanding the use of renewable energy resources, cleaner transportation, conserving natural and working lands, and reducing waste and water. SB 32, passed in 2016, codified the Governor's Executive Order B-30-15 which required GHG emissions be reduced by at least 40 percent below 1990 levels by 2030. Assembly Bill (AB) 197, which passed at the same time as SB 32, requires ARB to prioritize measures resulting in direct emission reductions and consider social costs of GHG reductions when adopting post-2020 regulations to reduce GHG emissions.

ARB is required to develop a Scoping Plan pursuant to AB 32, and to update the Scoping Plan at least every five years. The initial AB 32 Scoping Plan was approved in 2008. Based on a sector-by-sector approach, the initial (2008) Scoping Plan was the first economy-wide climate change plan that pioneered the concept of a market-based program supplemented with complementary measures. Built upon the paradigm for climate mitigation and management strategies from the initial Scoping Plan, the First Update to the Climate Change Scoping Plan approved in May 2014 set the groundwork to reach the State's long-term climate goals as set forth in Executive Orders S-3-05 and B-16-2012. This First Update to the Climate Change Scoping Plan highlighted the State's progress towards meeting the near-term 2020 GHG emission reduction goals as defined in the initial Scoping Plan. ARB's current effort on the Scoping Plan is to reflect SB 32's 2030 target (at least 40 percent below 1990 levels by 2030).

## **OVERVIEW OF THE 2017 CLIMATE CHANGE SCOPING PLAN**

On January 20, 2017, the California Air Resources Board (ARB) released the first draft of the Proposed 2030 Target Scoping Plan Update (Draft Scoping Plan). The Scoping Plan is a roadmap that lays out vision, goals, and strategies that the State will take to continue working towards achieving the State's short and long-term GHG reduction goals. The 2030 Target Scoping Plan is expected to shape climate change-related priorities and funding opportunities for the next few years. More importantly, the update will help provide a path forward towards a vision for a more sustainable California in 2050 (80 percent below 1990 levels by 2050).

The Draft Scoping Plan includes sector-based measures to help maximize GHG reductions across all areas. This sector-based approach to climate strategies is consistent with the sector-focused public workshops that ARB has held to inform the 2030 Target Scoping Plan development. It also helps maximize synergies among the sectors and realize co-benefits. The Draft Scoping Plan includes six (6) key sectors: (1) energy; (2) industry; (3) transportation sustainability (including land use vision and vibrant communities and landscapes); (4) natural and working lands (including agricultural lands); (5) waste management; and (6) water (e.g., the fossil fueled-based energy that is used to pump, treat, heat, and/or convey water).

The ARB Board-approved 2020 GHG emissions limit is 431 million metric tons of carbon dioxide equivalent (MMTCO<sub>2e</sub>). This is an aggregated and statewide GHG emission limit, rather than sector- or facility-specific. The 2030 GHG emissions limit is 40 percent below 431 MMTCO<sub>2e</sub> or 260 MMTCO<sub>2e</sub>. Achieving the 2030 limit will require more aggressive statewide GHG reductions at an accelerated annual pace.

To meet GHG emissions trajectories, various strategies are discussed in the Draft Scoping Plan which includes the continuation or updates to policies, strategies, and programs that were established in prior Scoping Plans to reach the 2020 GHG emissions limit, and includes policies that are known commitments. Examples of policies, strategies, and programs include SB 375 GHG targets and land use policies; Mobile

Source Strategy; Cap-and-Trade Program; Low Carbon Fuel Standard; Renewable Portfolio Standard; Advanced Clean Cars Program; ZEV Program; Sustainable Freight Strategy; and Short-lived Climate Pollutant Strategy. According to ARB, even with the known commitments, the State is falling short of the 2030 target. Hence, new measures to further reduce GHG emissions are needed to help fill the gap.

## Key Revisions from the January 2017 Draft

This Revised Draft Scoping Plan released on October 27, 2017 includes the following changes since the January 2017 Draft:

- Summary of new legislation
  - Particularly the companion bills of the Cap-and-Trade legislation: AB 398 and AB 617 (discussed at October 12, 2017 workshop)
  - AB 398 provides direction on a post-2020 Cap-and-Trade Program and the recent Scoping Plan Update.
  - AB 617 focuses on reducing exposure to criteria and toxic pollutants in California's most burdened communities through, e.g., expanding community level air monitoring; local air district developed-community emissions reductions plans; and expediting equipment retrofitting at large industrial sources.
- Framing for the path forward beyond 2030
  - Two potential paths are outlined: the first is making consistent progress between 2020 and 2050; and another is begin with the 2030 target and then makes progress toward the 2015 level (i.e., 80% below the 1990 level).
- Updates to the Scoping Plan Scenario to reflect AB 398, in particular the role of the Cap-and-Trade Program (Discussed at October 12, 2017 workshop)
  - The comprehensive analysis of all five scenarios indicate that the Scoping Plan Scenario (2030 GHG Target including continuing the Cap and-Trade Program) is the best choice to achieve State's climate and clean air goals.
  - The Scoping Plan Scenario was modified from the January 2017 Draft to reflect AB 398, including removal of the 20 percent refinery measure.
- Updates to the emissions modeling to reflect the updated Scoping Plan Scenario (Discussed at October 12, 2017 workshop and updated since the workshop)
  - In addition to removing the refinery measure, the electricity sector updates also reflect the Renewable Portfolio Standards (RPS) compliance.
- Estimates of public health and related economic benefits (Discussed at March 28, 2017 workshop)
  - Including public health benefits (i.e., avoided premature mortality/hospitalizations/ER visits) and monetization of those benefits from changes in emissions of diesel particulate matter and NOx.
- Minor updates to AB 197 analyses (Discussed at October 12, 2017 workshop)
- Deferment of extensive discussion and AB 197 analyses on alternative scenarios to an appendix—similar to past Scoping Plans

- AB 197 (E. Garcia, Chapter 250, Statutes of 2016) requires the following for each potential reduction measure evaluated in any Scoping Plan update:
  - o The range of projected GHG emissions reductions that result from the measure.
  - o The range of projected air pollution reductions that result from the measure.
  - o The cost-effectiveness, including avoided social costs, of the measure.
- Updates to reflect current status of the Federal Clean Power Plan
  - Although the federal Clean Power Plan is being challenged in legal and administrative processes, its requirements reflect U.S. EPA's statutory obligation to regulate greenhouse gases from the power sector. Thus it, and other federal programs, are a key consideration for Scoping Plan development.
- Uncertainty discussion for the Scoping Plan Scenario
  - Each of the assumptions used in the emission modeling of the Scoping Plan Scenario has some uncertainty, which is also reflected in the results. Thus, while the results presented in the Scoping Plan may seem precise due to the need for precision in model inputs, these results are estimates, and the use of ranges in some of the results is meant to capture that uncertainty.
- SB 375 Target Update (Discussed at October 12, 2017 workshop)
  - It should be noted that there is a *separate* process for ARB to set the regional GHG target as discussed in the SCAG staff recommendation to the Regional Council on November 2, 2017.
  - Including on-going and proposed measures as related to Vibrant Communities and Landscape/VMT reduction goals, vehicle technology and clean fuels.
  - Acknowledging the gap between what the SB 375 targets can provide and what is needed to meet the state's 2030 and 2050 goals needs to be addressed through additional State-level VMT reduction measures such as those outlined in Appendix C. Those additional measures should be developed through a transparent and inclusive interagency policy development process to evaluate and identify implementation pathways for additional policies to reduce VMT and promote sustainable communities.
- Numerical target for avoided emissions from the natural working lands sector (Discussed at October 12 and 13, 2017 workshop)
  - Including objectives of net zero or negative GHG emissions and to minimize, where appropriate, net GHG and black carbon emissions
  - Including preliminary intervention-based goal for sequestering and avoiding emissions by at least 15-20 MMT CO<sub>2e</sub> by 2030 through existing pathways and new incentives

## Recommended Local Plan-Level GHG Emissions Reduction Goals

The Revised Draft Scoping Plan includes recommended statewide GHG emissions reduction targets of no more than six (6) metric tons CO<sub>2e</sub> per capita by 2030 and no more than two (2) metric tons CO<sub>2e</sub> per capita by 2050. These targets are intended to achieve the 2030 statewide target under SB 32 (40% below 1990 level) and the 2050 statewide goal (80% below the 1990 level). Those limits are also consistent with the Paris Agreement which sets out a global action plan to put the world on track to avoid dangerous climate change by limiting global warming to below 2<sup>0</sup>C.

Local governments are uniquely positioned to influence the future of the built environment and its associated GHG emissions. For example, land use decisions affect GHG emissions associated with transportation, water use, energy consumption, conversion of natural and working lands, among others. ARB recommends that local governments evaluate and adopt robust and quantitative locally-appropriate goals that align with the statewide per capita targets and the State's sustainable development objectives and develop plans to achieve the local goals. Local governments can start by developing a community-wide GHG emissions target consistent with the accepted protocols as outlines in OPR's General Plan Guidelines Chapter 8: Climate Change. Sufficiently detailed and adequately supported GHG reduction plans (e.g., Climate Action Plans) could also provide local governments with a valuable tool for streamlining project-level GHG analysis.

Finally, staff provided a briefing to the Technical Working Group (TWG) on the Revised Draft Scoping Plan at its November 16, 2017 meeting. Staff will continue to keep the TWG, Policy Committees and Regional Council informed on Scoping Plan-related development.

**NEXT STEP:**

The 2017 Climate Change Scoping Plan is scheduled for ARB Board consideration at its December 14-15, 2017 meeting in Sacramento. For more information on the Scoping Plan Update, please visit:

<https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>

**FISCAL IMPACT:**

Work associated with this item is included in the Fiscal Year 17/18 Overall Work Program (080.SCG00153.04: Regional Assessment).

**ATTACHMENT:**

None

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**2018 REGULAR MEETING SCHEDULE OF THE  
REGIONAL COUNCIL AND POLICY COMMITTEES**  
(APPROVED BY THE REGIONAL COUNCIL 9-7-17)

**ALL REGULAR MEETINGS ARE SCHEDULED ON THE 1<sup>ST</sup> THURSDAY OF EACH MONTH.**

**LOCATION: SCAG HEADQUARTERS OFFICE, WILSHIRE GRAND CENTER  
900 WILSHIRE BOULEVARD, 17<sup>TH</sup> FLOOR, LOS ANGELES, CA 90017**

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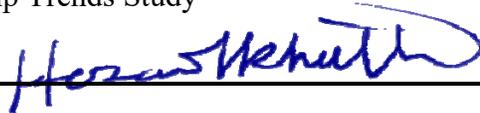
Transportation  
Curt Hagman, San Bernardino County

<b>Executive/ Administration Committee (EAC)</b>	<b>Community, Economic and Human Development Committee (CEHD)</b>	<b>Energy and Environment Committee (EEC)</b>	<b>Transportation Committee (TC)</b>	<b>Regional Council (RC)</b>
<b>Board Room 9AM – 10AM</b>	<b>Policy Room B 10AM – 12PM</b>	<b>Policy Room A 10AM – 12PM</b>	<b>Board Room 10AM – 12PM</b>	<b>Board Room 12:15PM – 2PM</b>
<b>January 4, 2018 (DARK)</b>				
February 1, 2018				
March 1, 2018				
April 5, 2018				
<b>May 3 - 4, 2018</b> <b>SCAG 2018 REGIONAL CONFERENCE AND GENERAL ASSEMBLY</b> <b>RENAISSANCE RESORT AND SPA, 44400 INDIAN WELLS LANE, INDIAN WELLS, CA 92210</b>				
June 7, 2018				
July 5, 2018				
<b>August 2, 2018 (DARK)</b>				
September 6, 2018 [Note: League of CA Cities Annual Conference, Long Beach, CA; Sep. 9 – 12]				
October 4, 2018				
November 1, 2018				
December 6, 2018				
<b>[NOTE: SCAG 9<sup>TH</sup> ANNUAL ECONOMIC SUMMIT, IN LIEU OF THE REGULARLY SCHEDULED MEETINGS]</b>				

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**DATE:** December 7, 2017  
**TO:** Transportation Committee (TC)  
**FROM:** Philip Law, Transit/Rail Manager, 213-236-1841, law@scag.ca.gov  
**SUBJECT:** SCAG Region Transit Ridership Trends Study

**EXECUTIVE DIRECTOR'S APPROVAL:**



**RECOMMENDED ACTION:**

For Information Only - No Action Required.

**EXECUTIVE SUMMARY:**

*SCAG staff are working with the University of California, Los Angeles (UCLA) Institute of Transportation Studies and Department of Urban Planning to examine the recent declines in transit ridership affecting almost all of the transit operators in the six counties of the SCAG region. Professor Brian Taylor will present results of the research performed to date.*

**STRATEGIC PLAN:**

This item supports SCAG's Strategic Plan, Goal 1: Improve Regional Decision Making by Providing Leadership and Consensus Building on Key Plans and Policies; Objective: a) Create and facilitate a collaborative and cooperative environment to produce forward thinking regional plans.

**BACKGROUND:**

In June 2017, Assistant Professor Mike Manville of UCLA presented to the TC regarding research performed to date on the potential factors affecting transit ridership decline in the SCAG region. As the research study nears completion, Professor Brian Taylor will provide an update on additional findings. A final study report is anticipated by the end of 2017.

As previously reported, SCAG region transit operators began to experience significant and sustained declines in transit ridership beginning in about 2013/2014. While by far the greatest declines were in bus ridership, both Metro Rail and Metrolink also experienced some decreases. (It should be noted that this trend of transit ridership loss is also being experienced at the state and national levels.)

SCAG staff regularly monitors transit system performance in coordination with the region's transit operators on the Regional Transit Technical Advisory Committee (RTTAC). These discussions with the RTTAC prompted an analysis in summer 2016 by SCAG staff, using available data from the National Transit Database, U.S. Census/American Community Survey, CA Employment Development Department, and the CA Department of Motor Vehicles, to identify potential causes. While no single issue appeared to be the root cause, a number of recent trends were identified, including changes in the nature of the regional economy after the recession, falling gas prices, an increase in driver licenses and vehicle registrations, and a reduction of net immigration in the region.

# REPORT

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At the same time, operators including Los Angeles Metro and the Orange County Transportation Authority (OCTA), the two largest transit providers in the region, took steps to counter-act the ridership trend. In October 2016, OCTA implemented extensive changes to its bus system (called OC Bus 360) to improve efficiency and effectiveness. Through its Regional Ridership Improvement Task Force, Metro is currently coordinating with the municipal operators in Los Angeles County to develop a Ridership Growth Action Plan.

Subsequent to its analysis, in late 2016 SCAG staff sought the assistance of researchers at the UCLA Institute of Transportation Studies and the Department of Urban Planning to conduct a more detailed analysis of the potential underlying causes of the recent ridership losses. This research effort involves examining changes in transit supply, demand, and finance in the region, changes in the population of likely transit users, and changes in rider demographics. By shedding some light on potential causes, the study will help SCAG and the region's transit operators identify effective strategies and solutions. The study is expected to conclude in fall 2017.

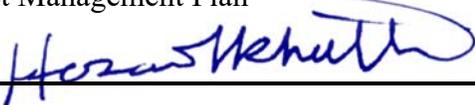
**FISCAL IMPACT:**

Funding for this study is included in FY17/18 Overall Work Program (015.SCG00159.02: Mileage-based User Fee – Ground)

**ATTACHMENT:**

[Copies of the PowerPoint presentation will be distributed at the December 7, 2017 TC meeting]

**DATE:** December 7, 2017  
**TO:** Transportation Committee (TC)  
**FROM:** Naresh Amatya, Manager of Transportation, (213) 236-1885, [amatya@scag.ca.gov](mailto:amatya@scag.ca.gov)  
**SUBJECT:** California Transportation Asset Management Plan

**EXECUTIVE DIRECTOR'S APPROVAL:** 

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**RECOMMENDED ACTION:**  
For Information Only – No Action Required.

**EXECUTIVE SUMMARY:**  
*Michael Johnson, State Transportation Asset Engineer, California Department of Transportation (Caltrans), will provide an overview of the recently released Draft California Transportation Asset Management Plan (TAMP), which describes the vision for how good asset management will help to deliver broad transportation goals and fundamental objectives supported by information on current asset conditions, the desired conditions in the future, and the likely conditions given future funding scenarios. Caltrans is required to prepare a TAMP per state and federal requirements.*

**STRATEGIC PLAN:**  
This item supports SCAG's Strategic Plan, Goal 1: Improve Regional Decision Making by Providing Leadership and Consensus Building on Key Plans and Policies; Objective: a) Create and facilitate a collaborative and cooperative environment to produce forward thinking regional plans.

**BACKGROUND:**  
Caltrans and its transportation partner agencies are responsible for supporting safe and efficient travel on California's transportation network. Maintenance and preservation of transportation infrastructure is a critical aspect of this responsibility. Bridges, pavement, and other infrastructure assets require ongoing investment to sustain a state of good repair. California law (Senate Bill 486) requires that Caltrans develop an asset management plan for the State Highway System, as determined by the California Transportation Commission. Federal regulations (23 CFR 515) require an asset management plan for pavements and bridges on the National Highway System, including those owned by Caltrans and other federal, state, and local agencies. The TAMP is intended to meet both sets of requirements.

Caltrans, working with its partner agencies, developed a coordinated plan to maintain California's highway infrastructure assets today and into the future. The California TAMP documents current system conditions, establishes condition targets, quantifies the gaps in condition, evaluates risks that could impact the system condition or reliability, documents life cycle planning strategies, defines available transportation funding, evaluates funding scenarios relative to established targets, and identifies areas of potential improvement in the management of transportation assets. This fall Caltrans solicited feedback on the Draft California TAMP. SCAG staff has reviewed the Draft California TAMP and submitted a



# REPORT

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formal comment letter requesting that Caltrans provide further clarification regarding TAMP's development process, MAP-21/FAST-Act requirements, and revenues and financial projections (Attachment 2). The plan is expected to be completed by April 2018 and will be submitted to the Federal Highway Administration (FHWA) for approval. The California TAMP will be a living document and as such, it will be regularly reviewed and updated, using performance outcomes and drawing from the 10-year project plan coming from the State Highway System Management Plan. The Draft California TAMP can be accessed via the following link: [http://www.dot.ca.gov/assetmgmt/documents/Draft\\_TAMP.pdf](http://www.dot.ca.gov/assetmgmt/documents/Draft_TAMP.pdf).

**FISCAL IMPACT:**

Funding for staff work on this issue is included in FY17/18 Overall Work Program (010.02106.02: System Preservation)

**ATTACHMENTS:**

1. PowerPoint Presentation: Draft California Transportation Asset Management Plan
2. SCAG Comment Letter on the Draft California TAMP



# Asset Management – SCAG Focus

Michael B. Johnson P.E.

Caltrans - State Asset Management Engineer

## What is Asset Management?

- An asset management plan is a **strategic plan** for managing an organization's infrastructure and other assets **to deliver an agreed standard of service**.
- Typically, an asset management plan will **cover more than a single asset, taking a system approach** -especially where a number of assets are co-dependent and are required to work together to deliver an agreed standard of service.



# Components of Asset Management

- Inventory Definition
- Condition/Performance Assessment
- Performance Measure Development
- Target Setting
- Gap Analysis
- Investment Strategies
- Deterioration modeling
- Life Cycle Cost Analysis
- Risk Management
- Improvement Plan
- Internal/External Stakeholder Engagement



November 14-16, 2017

Planning for Performance

Slide 3

## Why Asset Management?

### Legislative Drivers

- MAP-21/ FAST Act requires a risk based asset management
- MAP-21/ FAST Performance Management (PM 2)
- California Law (SB486) requires a robust asset management plan

### Benefits of Asset Management

- Having the information available to make good decisions
- Provides a strategic framework for consistent decision making
- Demonstrating asset need with quantitative information is compelling
- Minimize long term costs of ownership through Life-Cycle Planning
- Accountability for public funds

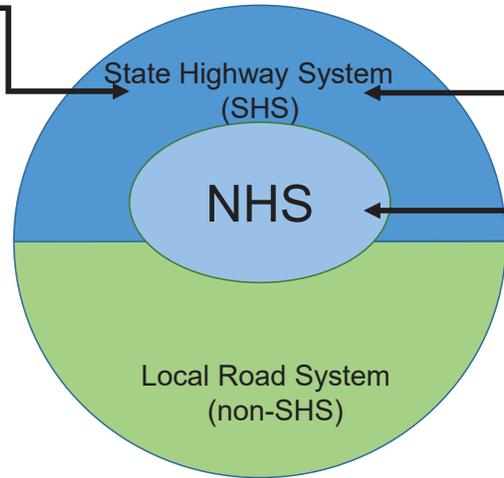
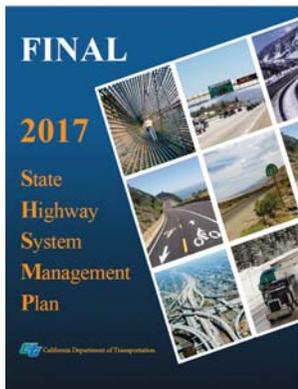


November 14-16, 2017

Planning for Performance

Slide 4

# California Asset Management Plan



November 14-16, 2017

Planning for Performance

Slide 5

## National Highway System (NHS)



**NATIONAL HIGHWAY SYSTEM**  
 — STATE HIGHWAY NHS  
 — LOCAL NHS



**LOS ANGELES AREA NHS**  
 — STATE HIGHWAY NHS  
 — LOCAL NHS



# Pavement and Bridge (PM2) Performance Measures



## Measuring Pavement Condition

- Pavement Roughness - International Roughness Index (IRI)
- Distresses



Cracking – All Pavements



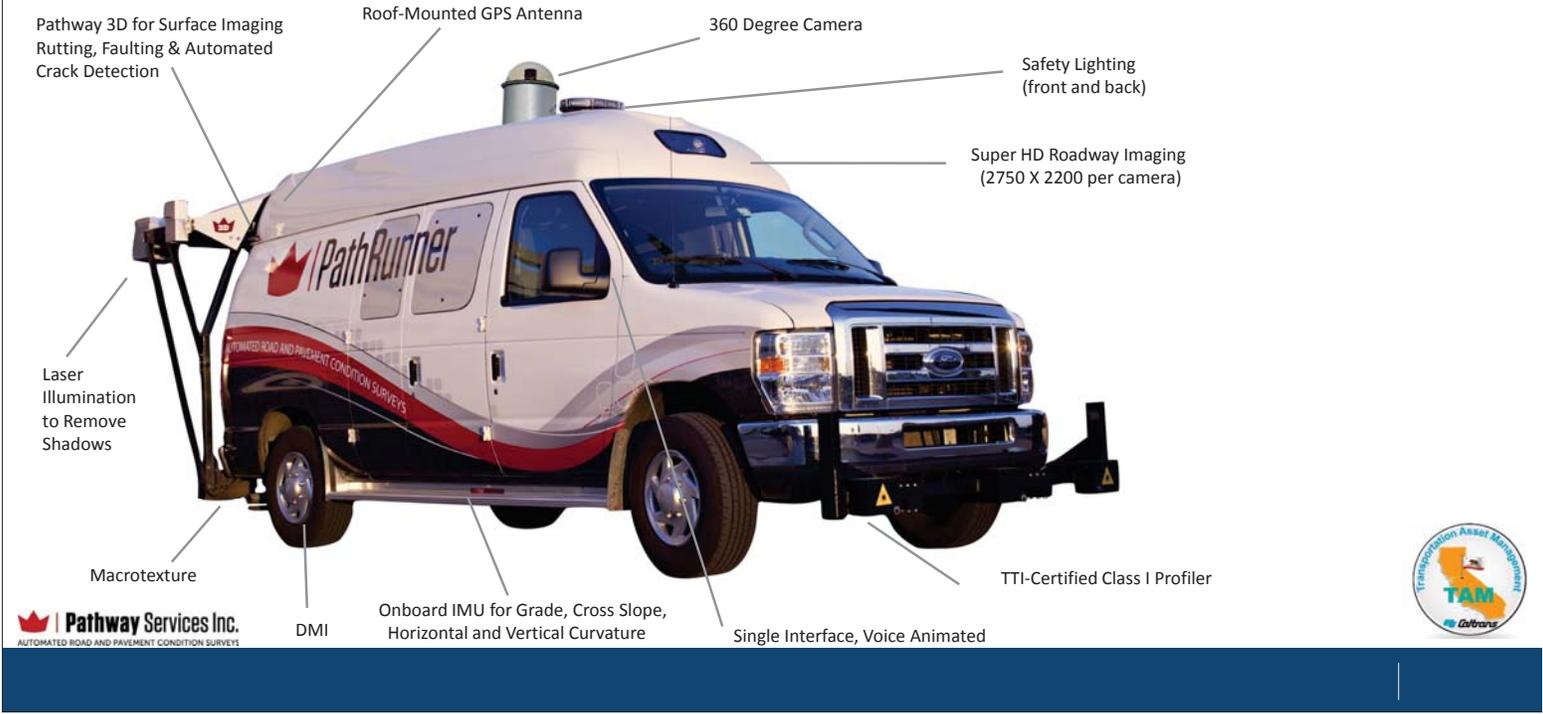
Rutting – Asphalt Pavements



Faulting – Concrete Pavements



# Pavement Data Collection



# MAP-21 Pavement Performance Measures

Performance parameter	Good	Fair	Poor
IRI (in/mi)	<95	95-170	>170
Cracking (percent)	<5	5-10 (CRCP <sup>1</sup> ) 5-15 (JPCP <sup>2</sup> ) 5-20 (AP <sup>3</sup> )	>10 (CRCP <sup>1</sup> ) >15 (JPCP <sup>2</sup> ) >20 (AP <sup>3</sup> )
Rutting <sup>4</sup> (inch)	<0.2	0.2-0.4	>0.4
Faulting <sup>5</sup> (inch)	<0.10	0.10-0.15	>0.15

- Notes:
1. Continuously reinforced concrete pavement
  2. Jointed plain concrete pavement
  3. Asphalt pavement
  4. Rutting is applicable to asphalt pavement only
  5. Faulting is applicable to jointed plain concrete pavement only

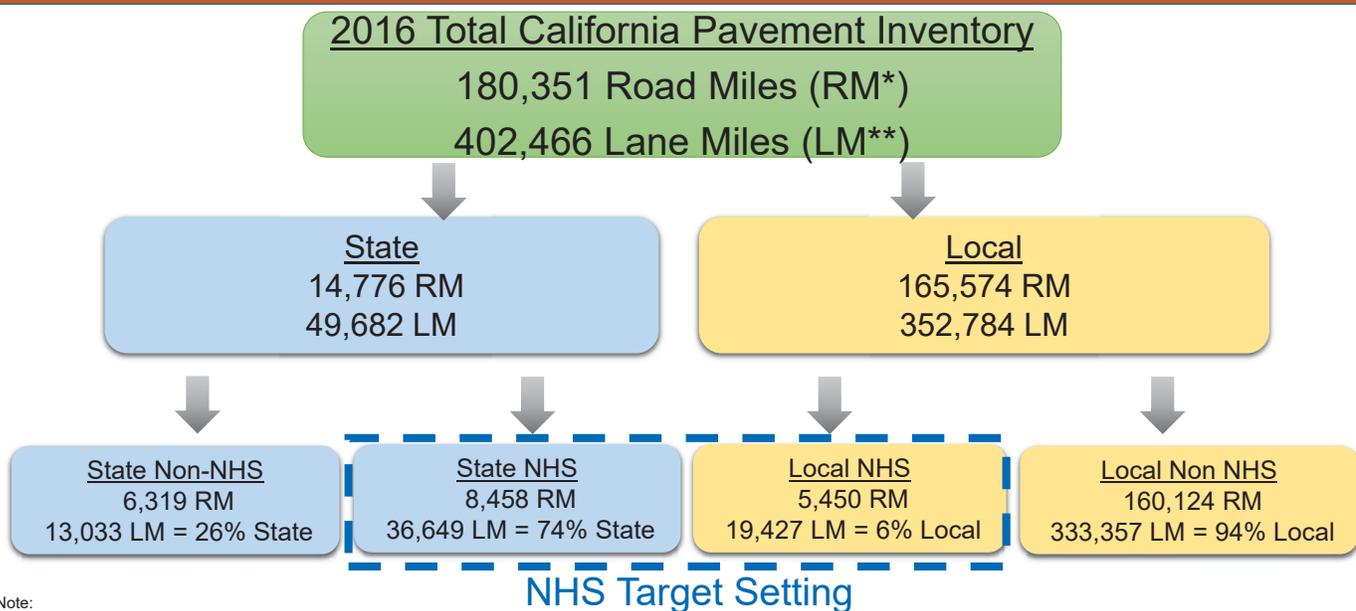
# Pavement Condition Measures

## ➤ How to Measure:

- **GOOD:** ALL metrics “good”
- **POOR:** TWO metrics “poor” for asphalt pavements OR : ONE metric “poor” for continuously reinforced concrete pavements
- **FAIR:** All other combinations



# California Pavement Inventory

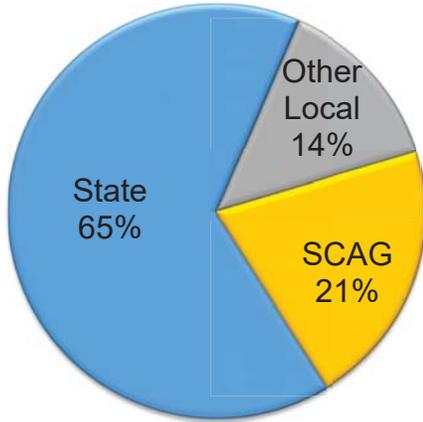


Note:  
 \*Road Miles (RM) is center lane miles  
 \*\* Lane Miles (LM) represents the measures for the NHS  
 Source: 2016 HPMS Data



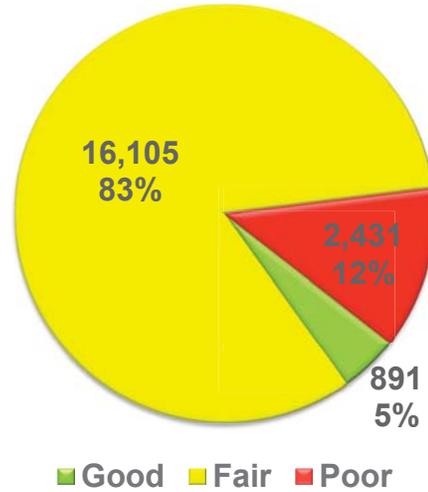
# NHS Pavement Inventory & Condition

## Lane Miles (LM)



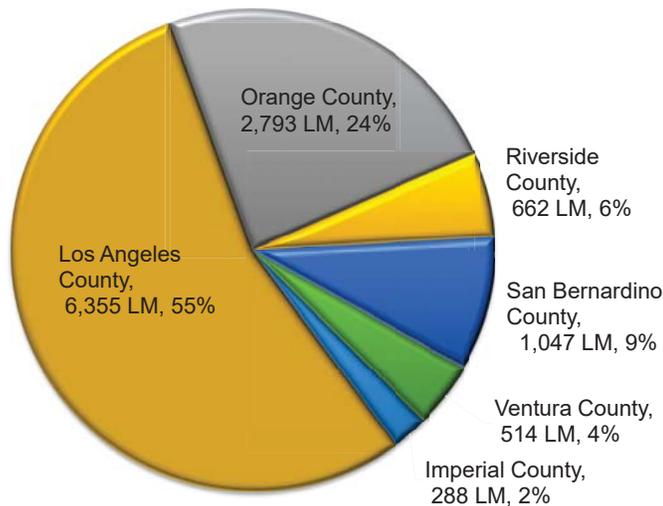
60% of Total Local NHS Pavement in SCAG Region

## Local & SCAG Pavement



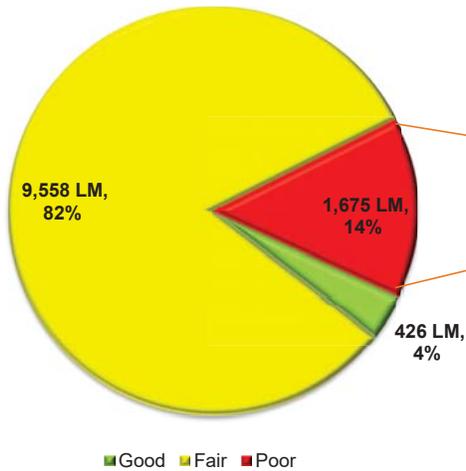
# SCAG NHS Pavement

## SCAG NHS Lane Miles (LM) by County

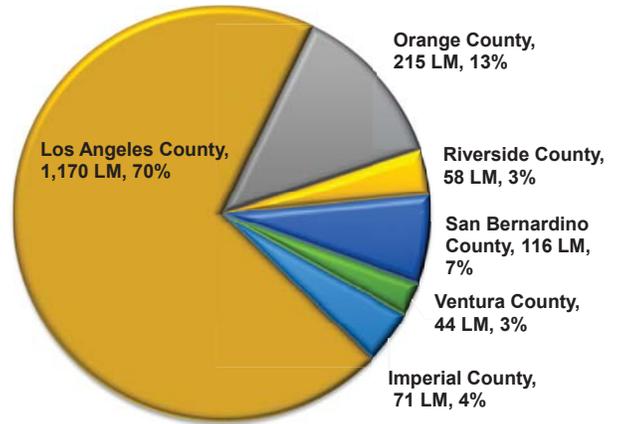


# SCAG Pavement Performance

SCAG NHS Pavement Condition

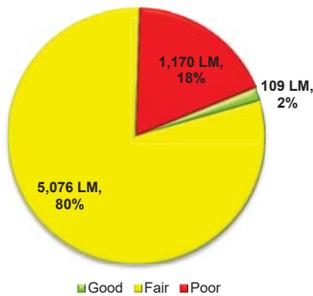


SCAG NHS Poor Lane Miles (LM) by County

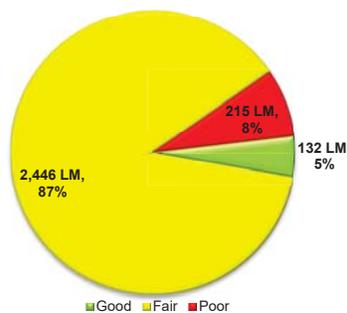


# SCAG Local NHS Pavement Performance

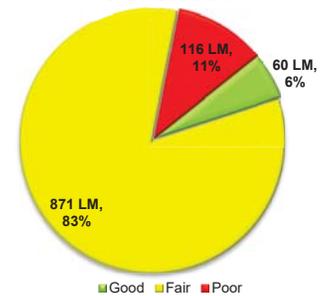
Los Angeles County Condition



Orange County Condition



San Bernardino County Condition



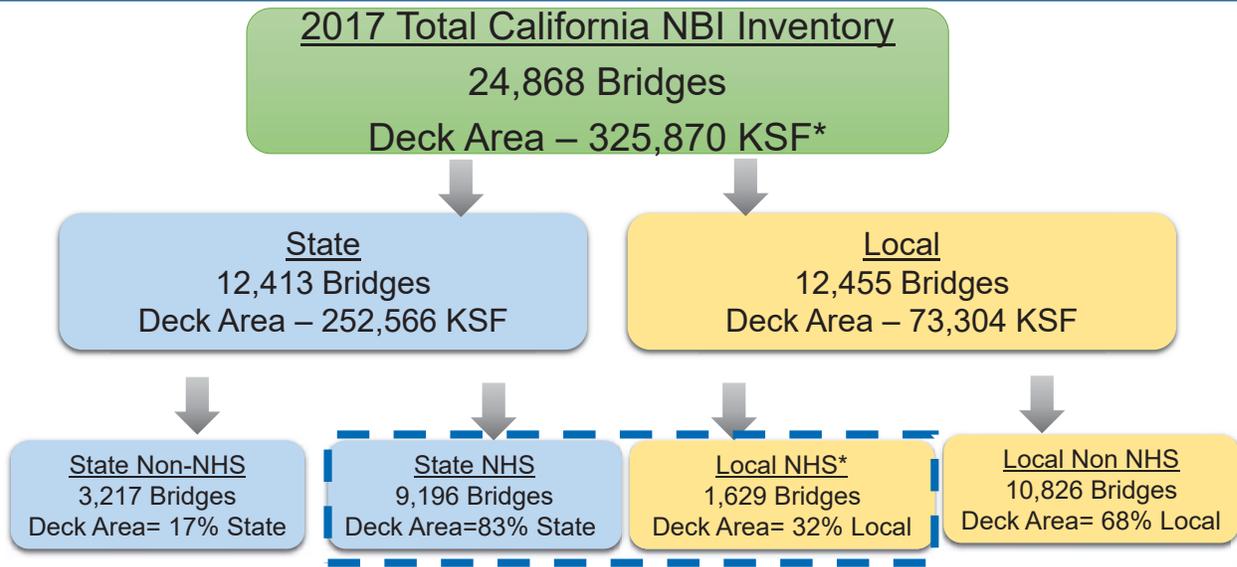
Los Angeles County	Good	Fair	Poor
IRI	1.9%	23.7%	74.4%
Cracking	50.7%	27.7%	21.6%
Rutting	83.3%	15.7%	1.0%
Faulting	64.2%	24.6%	11.2%

Orange County	Good	Fair	Poor
IRI	4.0%	45.4%	50.5%
Cracking	65.5%	25.2%	9.2%
Rutting	78.6%	20.5%	0.9%

San Bernardino County	Good	Fair	Poor
IRI	7.8%	47.4%	44.7%
Cracking	50.0%	34.4%	15.6%
Rutting	81.0%	18.1%	0.9%



# California Bridge Inventory



Source: National Bridge Inventory (NBI) bridges

Note: NHS Targets are required on NBI bridges, non-NBI bridges excluded

Note: There are over 250 Local Agency owners of NHS bridges of which 87% own less than 10 bridges

\*Deck area in thousand square feet (KSF)



## Bridge Condition Introduction

- Bridges are inspected typically every 2 years
- Caltrans performs bridge inspections in California for most local agency owned bridges (Except LA County)
- Culverts that span more than 20 feet are considered bridges
- Conditions are assessed on all major components of the bridge using AASHTO and FHWA criteria
- A zero (low) to 9 (high) scale is used to assess condition of each major component



# Current Bridge Condition

## All 2017 California NHS Bridges

Lowest NBI Condition Rating	Asset Classification	Bridges	Deck Area (1000 SF)	% of Total deck Area
9	Good	7,706	155,858	64%
8				
7				
6	Fair	2,681	67,209	31%
5				
4	Poor	438	11,218	5%
3				
2				
1				
0				



## Performance Measures

- NBI Bridge Condition Ratings Determined during Bridge Inspections
- Uses the Lowest of the 3 Condition Ratings or Culvert Rating
- Weighted by Deck Area

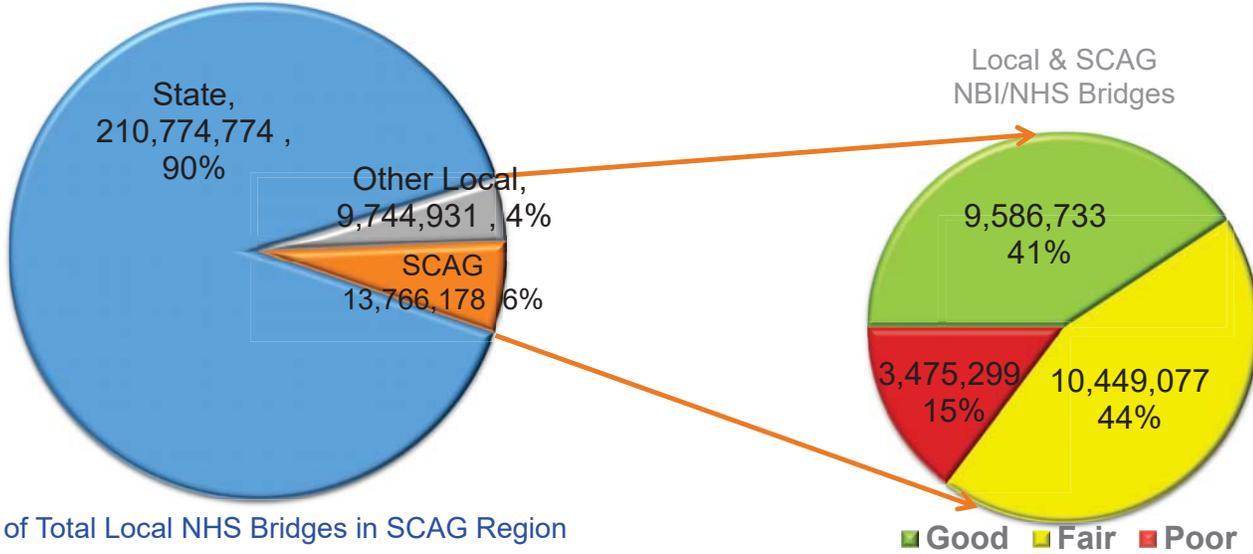
*Example:*

$$\frac{\sum^{\text{GOOD}} [\text{Deck Area}]_{\text{Bridge } g}}{\sum^{\text{TOTAL}} [\text{Deck Area}]_{\text{Bridge } t}}$$



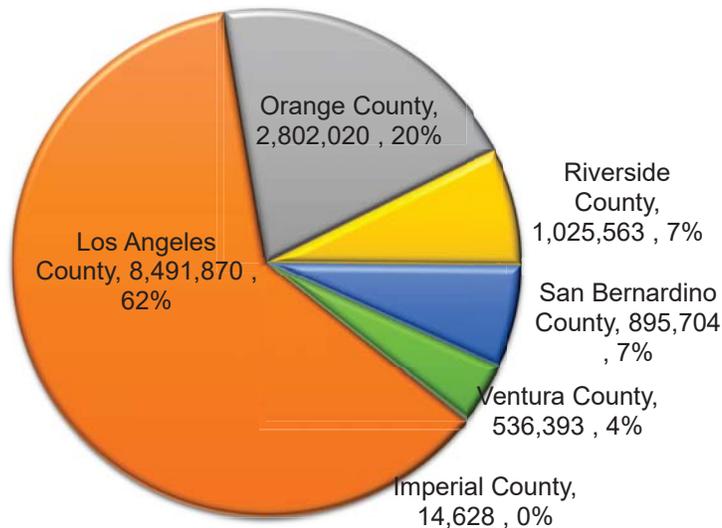
# NHS Bridge Inventory & Condition

## Deck Area (SF)



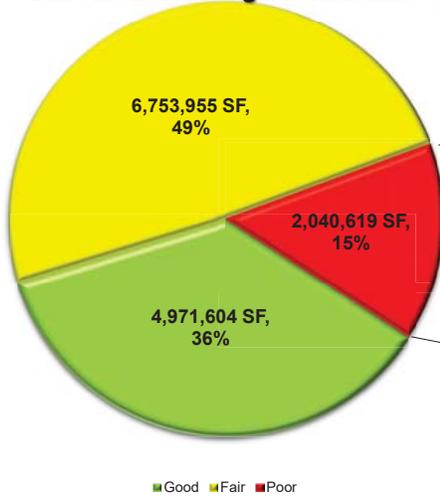
# SCAG NHS Bridge Inventory

## SCAG 963 NHS Bridges 13,766,178 Deck Area (SF)

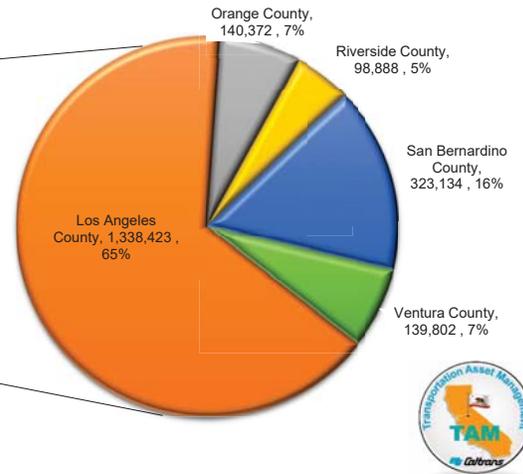


# SCAG NHS Bridge Condition

**SCAG NHS Bridge Condition**

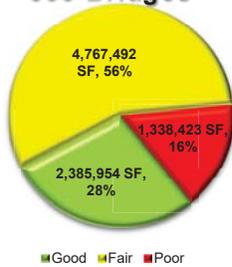


**SCAG NHS Bridge Poor Deck Area(SF)**

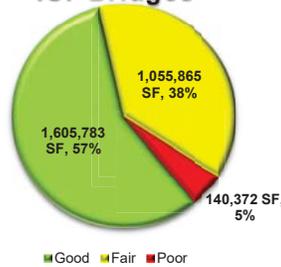


# SCAG Local NHS Bridges

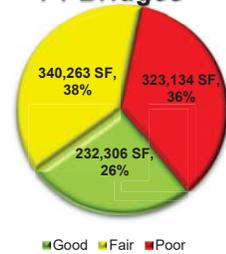
**Los Angeles County  
588 Bridges**



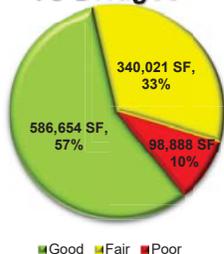
**Orange County  
187 Bridges**



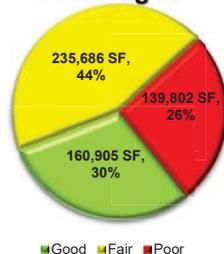
**San Bernardino County  
74 Bridges**



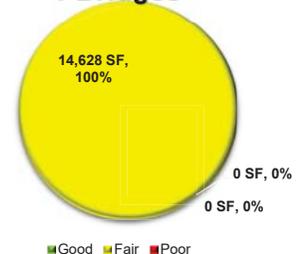
**Riverside County  
75 Bridges**



**Ventura County  
35 Bridges**



**Imperial County  
4 Bridges**



# TAMP & Target Setting

- The TAMP Requires the implementation of **Performance Management** which requires performance targets to be set using the National Measures (PM2)
- PM2 Targets for pavement are set based on current conditions, needs assessment, financial estimates
- PM2 Targets for bridges set based on current conditions, performance cost curves, financial estimates
- MPO's can adopt the state targets or set their own



## Asset Management Plan Gap Summary

- California Local NHS Pavement Targets

Scope	Good	Fair	Poor
Local NHS Target	7%	84%	9%
SCAG	4%	82%	14%

- California Local NHS Bridge Targets

Scope	Good	Fair	Poor
Local NHS Target	83.5%	15%	1.5%
SCAG	36%	49%	15%





Thank You

Asset Management Web – [www.dot.ca.gov/assetmgmt](http://www.dot.ca.gov/assetmgmt)



November 24, 2017

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Mr. Michael Johnson  
California Department of Transportation  
Division of Transportation Asset Management  
1120 N Street, MS 49  
Sacramento, CA 95814

Subject: Draft California Transportation Asset Management Plan

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Dear Mr. Johnson:

Thank you for the opportunity to comment on the Draft California Transportation Asset Management Plan (TAMP). The Southern California Association of Governments (SCAG) appreciates the State's leadership in preparing the California TAMP in response to recent legislative initiatives. SCAG recognizes the challenges associated with developing a statewide TAMP and understands the importance of an asset management plan as a means to strategically direct much needed funds towards maintaining and preserving our regions infrastructure.

We have completed our review of the Draft California TAMP and have several comments requesting that Caltrans provide further clarification regarding the TAMP's development process, MAP-21/FAST-Act requirements, and revenues and financial projections. A list of our comments and recommendations is included in the attached table.

SCAG looks forward to our continued involvement in the State's process towards finalizing the California TAMP. Should you have any questions, please contact Daniel Tran, Senior Regional Planner, at 213-236-1883 or [tran@scag.ca.gov](mailto:tran@scag.ca.gov).

Sincerely,

Kome Ajise  
Director of Planning

Enclosure: Draft TAMP Comments - SCAG

Draft TAMP Comments - SCAG

#	Section	Page #	Comment
1	General	--	TAMP clearly relies heavily on SB 1 funding. In light of the SB 1 recall efforts, it might be helpful to explicitly highlight the potential consequences to the TAMP outcomes should the SB 1 recall effort be successful.
2	General	--	Federal Guidelines for Performance Measures allow for MPOs to chose their own targets within 180 days of state setting their targets. Although the initial TAMP does not include 2 and 4-year targets, what will the process be to coordinate with MPO's to establish 2 and 4-year targets as part of the final TAMP due June 2019? In addition, if MPOs were to establish targets that are different from the ones set by the state DOT, how would those MPO targets be coordinated and incorporated into the TAMP? An explanation of how this provision might work in California would be helpful.
3	General	--	Would it be possible to provide us with the analysis for the 10-year targets for NHS pavement and bridges specific to our region and by county?
4	Executive Summary	3	Regarding the figure under the California TAMP Scope. It would be helpful to list which local NHS assets (as represented by the inner circle of the graphic) are included within the TAMP. The paragraph to the right of the figure could be supplemented to include this information.
5	Chapter 2 - Asset Inventory and Conditions	2-9	SCAG understands that the federal rules call for collection and reporting based on International Roughness Index (IRI). However, much of data collected and available in California, specially on local roads, are based on Pavement Condition Index (PCI). It would be helpful to provide a brief explanation in the TAMP as to how this is being reconciled to comply with the federal rules.
6	Chapter 3 - Asset Performance Targets	3-2, 3-3	It would be helpful to briefly describe the potential repercussions or potential consequences of not meeting the targets.
7	Chapter 3 - Asset Performance Targets	3-4	Table 3.4, it would be helpful to include an additional column for baseline conditions. This would make it easier to assess the changes between baseline and the 10 year target.
8	Chapter 4 - Life Cycle Planning	4-3	It would be helpful to include a more robust description of what, how, when and who collects pavement condition data. This would allow MPOs to understand and anticipate pavement data sharing by Caltrans and assess additional data needs, if any, for planning at the MPO levels.

Draft TAMP Comments - SCAG

#	Section	Page #	Comment
9	Chapter 4 - Life Cycle Planning	4-4	Under the Modeling Approach discussion, it is unclear whether local NHS is included as part of the PaveM deterioration model. If not, it should be noted within the narrative how non-interstate NHS is accounted for as part of the modeling approach.
10	Chapter 5 - Performance Scenarios	5-8	Table 5-6, under the "Target Funding Scenario" the TMS annual funding of \$211 million results in 90% good/10% poor rating. However, in Table 5-4 under the "Expected Funding Scenario" the TMS annual funding of \$195 million results in the same 90% good/10% poor rating. Please confirm, the 8% difference in annual funding results in no change to the performance?
11	Chapter 6 - Revenues and Financial Projections	6-6	The local funding sources list could be consolidated. For example, development impact fees, traffic impact fees, and transportation mitigation fees should be a single bullet.
12	Chapter 8 - Risk Management	8-17	Table 8-2, under item #14 regarding ITS elements. There is also the need to incorporate ITS elements into roadway planning to address connected vehicles, to maximize the benefits of this technology. Comment applies to Table 8-5 also.
13	Chapter 8 - Risk Management	8-17	Table 8-2, one risk factor that was not considered is the economic impact as related to increased congestion and reduced freight mobility by not maintaining our infrastructure assets (i.e., ITS, bridge, and pavement). Please consider incorporating impacts to the economy as a potential risk factor.
14	Chapter 9 - TAMP Process Improvements	9-1	Within the TAMP complete streets is called upon as a specific strategy, therefore a complete assessment of sidewalk conditions and/or other facilities primarily used by other modes beyond auto (i.e., bike lanes, trails) as a primary asset would be helpful towards understanding and fulfilling complete streets strategies. As part of future TAMPs will any of the nine supplementary asset classes (i.e., sidewalk) be incorporated as a primary asset class?
15	Chapter 9 - TAMP Process Improvements, Data Sharing	9-2	This section can be further supplemented to consider providing MPOs and local agencies with current and on-going data sources as related to NHS pavement and bridge conditions. In addition, if NHS information can be broken down not only at an MPO level, but by county that would be helpful. Lastly, mapping of NHS pavement and bridge conditions by MPO and county and providing maps to MPOs and local agencies would be another improvement for future TAMPs.

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**DATE:** December 7, 2017

**TO:** Transportation Committee (TC)

**FROM:** Annie Nam; Manager, Goods Movement and Transportation Finance, (213) 236-1827, [Nam@scag.ca.gov](mailto:Nam@scag.ca.gov)

**SUBJECT:** Trade Corridor Enhancement Program

**EXECUTIVE DIRECTOR'S APPROVAL:**



**RECOMMENDED ACTION:**

For Information Only – No Action Required.

**EXECUTIVE SUMMARY:**

*On October 18, 2017, the California Transportation Commission (CTC) approved guidelines for the 2018 Trade Corridor Enhancement Program. The guidelines identify \$1.3 billion available statewide over a three-year period to fund corridor-based freight projects nominated by local agencies and the state. Applications must be received by the CTC no later than January 30, 2018.*

**STRATEGIC PLAN:**

This item supports SCAG's Strategic Plan Goal 1, Improve Regional Decision Making by Providing Leadership and Consensus Building on Key Plans and Policies, a) create and facilitate a collaborative and cooperative environment to produce forward thinking regional plans.

**BACKGROUND:**

The Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1) established the Trade Corridor Enhancement Account to fund corridor-based freight projects nominated by local agencies and the State. Implementing legislation was enacted with the approval of SB 103, which directs the California Transportation Commission (CTC) to allocate the Trade Corridor Enhancement Account funds and the federal National Highway Freight Program funds to infrastructure improvements along corridors that have a high volume of freight movement. Additionally, Assembly Bill (AB) 133 provided a Traffic Congestion Relief Fund loan repayment to be used for trade corridor improvements. The CTC is responsible for programming and allocating these state and federal funds administered through the Trade Corridor Enhancement Program.

In October 2017, the CTC adopted Final Guidelines that describe the policy, standards, criteria, and procedures for the development, adoption, and management of the Trade Corridor Enhancement Program. As noted in the guidelines, project applications for the 2018 Trade Corridor Enhancement Program are due to the CTC by Tuesday, January 30, 2018.

The guidelines specify that SCAG (in its role as a Metropolitan Planning Organization) is responsible for compiling project nominations from eligible agencies in Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties and confirming consistency with the 2016 Regional Transportation Plan / Sustainable Communities Strategy. As such, the attached 2018 TCEP nomination form for the SCAG region provides further guidance on the application process.

# REPORT

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**FISCAL IMPACT:**

Work associated with this item is included in the Fiscal Year 2017-18 Overall Work Program under Project No. 18-130.00162.18 for Goods Movement Planning.

**ATTACHMENT:**

SCAG 2018 TCEP Project Nomination Form

## SB 1 – Trade Corridor Enhancement Program 2018 SCAG Region Call for Projects

The Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1) established the Trade Corridor Enhancement Account to fund corridor-based freight projects nominated by local agencies and the state. Implementing legislation was enacted with the approval of SB 103, which directs the California Transportation Commission (CTC) to allocate the Trade Corridor Enhancement Account funds and the federal National Highway Freight Program funds to infrastructure improvements along corridors that have a high volume of freight movement. Additionally, Assembly Bill (AB) 133 provided a Traffic Congestion Relief Fund loan repayment to be used for trade corridor improvements. The CTC is responsible for programming and allocating these state and federal funds administered through the Trade Corridor Enhancement Program.

In October 2017, the CTC adopted [Final Guidelines](#) that describe the policy, standards, criteria, and procedures for the development, adoption, and management of the Trade Corridor Enhancement Program. As noted in the guidelines, project applications for the 2018 Trade Corridor Enhancement Program are due to the **CTC by Tuesday, January 30, 2018**. Project applicants are responsible for ensuring that two hard copies of the application package (bound) and one electronic copy are delivered to the CTC by the deadline.

In addition, the guidelines specify that SCAG (in its role as a Metropolitan Planning Organization) is responsible for compiling project nominations from eligible agencies in Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties and confirming consistency with the 2016 RTP/SCS and regional freight plan. To expedite SCAG's compilation and consistency verification, please fill out as completely as possible and return the attached **TCEP Project Summary by Tuesday, December 12, 2017**. This information will help to validate basic project eligibility. SCAG will also use the information provided to create a cloud-based folder for uploading the electronic application (and any supporting materials).

To meet the application submittal deadline, SCAG is requesting that a near final electronic copy of all applications be uploaded to the SCAG-created project-specific cloud-based folder **by 5:00 PM Friday, January 12, 2018**. Please note that all final applications should be submitted directly to the CTC (two hard bound copies and one electronic file) by **5:00 PM Tuesday, January 30, 2018**. Please also upload final electronic file applications to the SCAG-created project-specific cloud-based folder for our records. Failure to meet these deadlines may jeopardize an application's eligibility.



## SB 1 – Trade Corridor Enhancement Program 2018 SCAG Region Call for Projects

### Summary of Deadlines:

- |                   |  |
|-------------------|--|
| December 12, 2017 | Project applicants submit TCEP Project Summary to SCAG (template below)  |
| January 2, 2018   | SCAG creates project-specific cloud-based folders and shares links with project sponsors   |
| January 12, 2018  | Project applicants upload near final application to project-specific cloud-based folder  |
| January 30, 2018  | Project applicant submit project applications <u>directly to the CTC</u> (two hard bound copies and one electronic file); project applicant to also furnish SCAG with copy by uploading final application to SCAG-created cloud-based folders (for our records); SCAG submits list of projects with consistency verification to the CTC. |



**SB 1 – Trade Corridor Enhancement Program  
2018 SCAG Region Call for Projects**

**TCEP Project Nomination Form  
(Due on December 12, 2017)**

Project title:	
Brief project description:	
Lead agency name:	
Contact person name:	
Contact person email address:	
Contact person phone number:	
If project is a joint nomination, list all partner agencies:	
Project priority (if agency is submitting multiple applications):	
Is project included in SCAG’s adopted <a href="#">2016 RTP/SCS</a> ? Cite reference(s) including ID and page number(s).	
Is project included in SCAG’s <a href="#">2017 FTIP</a> ? Cite reference(s) including ID and page number(s).	
Previously incurred project cost:	\$
Future eligible project cost:	\$
Total project cost (this should be the sum of the previous two rows):	\$
Trade Corridor Enhancement Program request:	\$
Total matching funds:	\$
What is the source of matching funds?	



**SB 1 – Trade Corridor Enhancement Program  
2018 SCAG Region Call for Projects**

*Note: the following set of questions should be addressed comprehensively as a part of the final application to the California Transportation Commission (CTC) per the adopted TCEP guidelines. For this nomination form, SCAG is requesting an initial assessment of how the proposed project meets the CTC's screening criteria.*

Does the project meet Section 12 guidelines on type of project? Please explain.	
Does project significantly contribute to the freight system's economic activity or vitality; relieves congestion on the freight system; improves the safety, security, or resilience of the freight system; improves or preserves the freight system infrastructure; implements technology or innovation to improve the freight system or reduce or avoid its negative impacts; or reduces or avoids adverse community and/or environmental impacts of the freight system?	
Is the project located on the Primary Highway Freight System or a designated Critical Rural Freight Corridor or Critical Urban Freight Corridor?	
Does project have the purpose or intent to increase the state's overall capacity to facilitate the transportation of coal in bulk, pursuant to Government Code Section 14525.3?	
Does the project provide infrastructure improvements on federally designated Trade Corridors of National and Regional Significance, on the Primary Highway Freight System, as identified in the California Freight Mobility Plan, and/or along other corridors that have a high volume of freight movement as determined by the California Transportation Commission?	



**SB 1 – Trade Corridor Enhancement Program  
2018 SCAG Region Call for Projects**

<p>Does the project support the goals of the National Highway Freight Program, the California Freight Mobility Plan, and the guiding principles in the California Sustainable Freight Action Plan?</p>	
<p>Does project contribute to corridor or air basin emission reduction of greenhouse gases, diesel particulates (PM 10 and PM 2.5), carbon monoxide, nitrogen oxides, and other pollutants?</p>	
<p>Does project demonstrate that negative environmental/community impacts will be avoided or mitigated?</p>	
<p>Will project stimulate economic activity, enhance trade value, and preserve/create jobs?</p>	

