



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

REGIONAL COUNCIL OFFICERS

President
Cindy Allen, Long Beach

First Vice President
Ray Marquez, Chino Hills

Second Vice President
Jenny Crosswhite, Santa Paula

Immediate Past President
Curt Hagman
County of San Bernardino

COMMITTEE CHAIRS

Executive/Administration
Cindy Allen, Long Beach

Community, Economic, &
Human Development
David J. Shapiro, Calabasas

Energy & Environment
Rick Denison, Yucca Valley

Transportation
Mike T. Judge, Ventura County
Transportation Commission

MEETING OF THE

**ENERGY AND
ENVIRONMENT
COMMITTEE**

***Members of the Public are Welcome to Attend
In-Person & Remotely***

***Thursday, March 5, 2026
9:30 a.m. – 11:15 a.m.***

To Attend In-Person:

**SCAG Main Office – Policy A Meeting Room
900 Wilshire Blvd., Ste. 1700
Los Angeles, CA 90017**

To Watch or View Only:

<https://scag.ca.gov/scag-tv-livestream>

To Attend and Participate on Your Computer:

<https://scag.zoom.us/j/81703196837>

To Attend and Participate by Phone:

**Call-in Number: 1-669-900-6833
Meeting ID: 817 0319 6837**

PUBLIC ADVISORY

If members of the public wish to review the attachments or have any questions on any of the agenda items, please contact Maggie Aguilar at (213) 630-1420 or via email at aguilarm@scag.ca.gov. Agendas & Minutes are also available at: www.scag.ca.gov/committees.

SCAG, in accordance with the Americans with Disabilities Act (ADA), will accommodate persons who require a modification of accommodation to participate in this meeting. SCAG is also committed to helping people with limited proficiency in the English language access the agency's essential public information and services. You can request such assistance by calling (213) 236-1895. We request at least 72 hours (three days) notice to provide reasonable accommodations and will make every effort to arrange for assistance as soon as possible.



Instructions for Attending the Meeting

To Attend In-Person and Provide Verbal Comments: Go to the SCAG Main Office located at 900 Wilshire Blvd., Ste. 1700, Los Angeles, CA 90017 or any of the remote locations noticed in the agenda. The meeting will take place in the Policy A Meeting Room on the 17th floor starting at 9:30 a.m.

To Attend by Computer: Click the following link: <https://scag.zoom.us/j/81703196837>. If Zoom is not already installed on your computer, click “Download & Run Zoom” on the launch page and press “Run” when prompted by your browser. If Zoom has previously been installed on your computer, please allow a few moments for the application to launch automatically. Select “Join Audio via Computer.” The virtual conference room will open. If you receive a message reading, “Please wait for the host to start this meeting,” simply remain in the room until the meeting begins.

To Attend by Phone: Call (669) 900-6833 to access the conference room. Given high call volumes recently experienced by Zoom, please continue dialing until you connect successfully. Enter the **Meeting ID:** 817 0319 6837, followed by #. Indicate that you are a participant by pressing # to continue. You will hear audio of the meeting in progress. Remain on the line if the meeting has not yet started.

Instructions for Participating and Public Comments

Members of the public can participate in the meeting via written or verbal comments.

In Writing: Written comments can be emailed to: ePublicComment@scag.ca.gov. Written comments received by **5pm on Wednesday, March 4, 2026** will be transmitted to members of the legislative body and posted on SCAG’s website prior to the meeting. You are **not** required to submit public comments in writing or in advance of the meeting; this option is offered as a convenience should you desire not to provide comments in real time as described below. Written comments received after 5pm on Wednesday, March 4, 2026, will be announced and included as part of the official record of the meeting. Any writings or documents provided to a majority of this committee regarding any item on this agenda (other than writings legally exempt from public disclosure) are available at the Office of the Clerk, at 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 or by phone at (213) 630-1420, or email to aguilarm@scag.ca.gov.

Remotely: If participating in real time via Zoom or phone, please wait for the presiding officer to call the item for which you wish to speak and use the “raise hand” function on your computer or *9 by phone and wait for SCAG staff to announce your name/phone number.

In-Person: If participating in-person, you are invited but not required, to fill out and present a Public Comment Card to the Clerk of the Board or other SCAG staff prior to speaking. It is helpful to indicate whether you wish to speak during the Public Comment Period (Matters Not on the Agenda) and/or on an item listed on the agenda.

General Information for Public Comments

Verbal comments can be presented in real time during the meeting. Members of the public are allowed a total of 3 minutes for verbal comments. The presiding officer retains discretion to adjust time limits as necessary to ensure efficient and orderly conduct of the meeting, including equally reducing the time of all comments.

For purpose of providing public comment for items listed on the Consent Calendar, please indicate that you wish to speak when the Consent Calendar is called. Items listed on the Consent Calendar will be acted on with one motion and there will be no separate discussion of these items unless a member of the legislative body so requests, in which event, the item will be considered separately.

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



ENERGY AND ENVIRONMENT COMMITTEE AGENDA

TELECONFERENCE AVAILABLE AT THESE ADDITIONAL LOCATIONS*

<p>Ana Beltran America's Best Value Inn Lobby 351 W. Main Street Westmorland, CA 92281</p>	<p>Art Bishop Town of Apple Valley - Town Hall 14955 Dale Evans Pkwy Conference Room A Apple Valley, CA 92307</p>	<p>Daniel Brotman City of Glendale - City Hall 613 E Broadway, Ste 200 Glendale, CA 91206</p>
<p>Robert D. Copeland City of Signal Hill - City Hall 2175 Cherry Avenue Signal Hill, CA 90755</p>	<p>Ned E. Davis City of Westlake Village - City Hall 31200 Oak Crest Drive Westlake Village, CA 91361</p>	<p>Carmen Hernandez City of Barstow - City Hall 220 E. Mountain View Barstow, CA 92311</p>
<p>Shari L. Horne City of Laguna Woods - City Hall 24264 El Toro Road Laguna Woods, CA 92637</p>	<p>Britt Huff City of Rolling Hills Estates - City Hall 4045 Palos Verdes Drive North Rolling Hills Estates CA, 90274</p>	<p>Brian Johsz 5615 Gableview Court Chino Hills, CA 91709</p>
<p>Steven Leash Cahuilla Band of Indians 52701 Hwy 371 Anza, CA 92539</p>	<p>Elaine Litster City of Simi Valley - City Hall 2929 Tapo Canyon Road Simi Valley, CA 93063</p>	<p>Jeannette Sanchez-Palacios Ventura City Hall Anacapa Conference Room 501 Poli Street Ventura, CA 93001</p>
<p>Patty Senecal City of Seal Beach - City Hall 211 8th Street Seal Beach, CA 90740</p>	<p>Jennifer Stark City of Claremont - City Hall 207 Harvard Avenue 2nd Floor/ Citrus Room Claremont, CA 91711</p>	<p>Ali Taj 11856 E. 187th Street Artesia, CA 90701</p>
<p>Tamala Takahashi City of Burbank - City Hall 275 East Olive Avenue 2nd Floor, Council Office Burbank, CA 91502</p>	<p>Connor Traut 7661 Silver Street Buena Park, CA 90620</p>	<p>Stephanie Virgen City of Coachella - City Hall 1515 Sixth Street Coachella, CA 92236</p>
<p>Dale Welty City of Canyon Lake - City Hall 31526 Railroad Canyon Road Canyon Lake, CA 92584</p>		

* Under the teleconferencing rules of the Brown Act, members of the body may remotely participate at any location specified above.

EEC - Energy and Environment Committee
Members –March 2026

- 1. Hon. Rick Denison**
EEC Chair, Yucca Valley, RC District 11
- 2. Hon. Daniel Ramos**
EEC Vice Chair, Adelanto, RC District 65
- 3. Hon. Ana Beltran**
Westmorland, ICTC
- 4. Hon. Arthur Bishop**
Apple Valley, SBCTA
- 5. Hon. Daniel Brotman**
Glendale, AVCJPA
- 6. Sup. Martha Cardenas-Singh**
Imperial County
- 7. Hon. Margaret Clark**
Rosemead, RC District 32
- 8. Hon. Robert Copeland**
Signal Hill, GCCOG
- 9. Hon. Jenny Crosswhite**
Santa Paula, RC District 47
- 10. Hon. Ned Davis**
Westlake Village, LVMCOG
- 11. Hon. Carmen Hernandez**
Barstow, SBCTA
- 12. Hon. Shari Horne**
Laguna Woods, OCCOG
- 13. Hon. Britt Huff**
Rolling Hills Estates, SBCCOG
- 14. Hon. Brian Johsz**
Chino Hills, SBCTA
- 15. Hon. Joe Kalmick**
Seal Beach, RC District 20
- 16. Hon. Steven Leash**
Cahuilla Band of Indians

-
- 17. Hon. Elaine Litster**
Simi Valley, VCOG

 - 18. Hon. Patricia Lock Dawson**
Riverside, RC District 68

 - 19. Sup. Vianey Lopez**
Ventura County

 - 20. Hon. Yasmine-Imani McMorris**
Culver City, WCCOG

 - 21. Hon. Cory Moss**
Industry, Pres. Appt. (Member at Large)

 - 22. Hon. Jeannette Sanchez-Palacios**
Ventura, VCOG

 - 23. Hon. Suely Saro**
Long Beach, RC District 29

 - 24. Hon. Patty Senecal**
Seal Beach, OCCOG

 - 25. Hon. Jennifer Stark**
Claremont, SGVCOG

 - 26. Hon. Ali Taj**
Artesia, GCCOG

 - 27. Hon. Tamala Takahashi**
Burbank, SFVCOG

 - 28. Hon. Connor Traut**
Buena Park, OCCOG

 - 29. Hon. Stephanie Virgen**
Coachella, CVAG

 - 30. Hon. Dale Welty**
Canyon Lake, WRCOG



ENERGY AND ENVIRONMENT COMMITTEE AGENDA

Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700 - Policy A Meeting Room
Los Angeles, CA 90017
Thursday, March 5, 2026
9:30 AM

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

CALL TO ORDER AND PLEDGE OF ALLEGIANCE *(The Honorable Rick Denison, Chair)*

PUBLIC COMMENT PERIOD (Matters Not on the Agenda)

This is the time for public comments on any matter of interest within SCAG’s jurisdiction that is **not** listed on the agenda. For items listed on the agenda, public comments will be received when that item is considered. Although the committee may briefly respond to statements or questions, under state law, matters presented under this item cannot be discussed or acted upon at this time.

REVIEW AND PRIORITIZE AGENDA ITEMS

ACTION ITEM

- 1. Election of Chair and Vice Chair 10 Mins.
(Jeffery Elder, Chief Counsel, SCAG)

CONSENT CALENDAR

Approval Items

- 2. Minutes of the Meeting – February 5, 2026 PPG. 8

Receive and File

- 3. EEC Outlook and Future Agenda Items PPG. 14
- 4. REAP 2.0 Program Update PPG. 18
- 5. Innovative Clean Transit Regional Assessment Study Update PPG. 22

INFORMATION ITEMS

- 6. Connect SoCal 2050: Vision, Goals, and Policy Review 15 Mins. PPG. 32
(Leslie A. Cayton, Associate Regional Planner, SCAG)
- 7. Release of SCAG’s Regional Resilience Toolkit 20 Mins. PPG. 39
(Sebastian Shetty, Associate Regional Planner, SCAG)



ENERGY AND ENVIRONMENT COMMITTEE AGENDA

8. LA County Heat Action Plan 20 Mins. PPG. 48
(Ali Frazzini, Policy Director, LA County Chief Sustainability Office)

9. Green Schoolyard Retrofits for Resilience 20 Mins. PPG. 57
(Claire Robinson, Executive Director, Amigos de Los Rios)

CHAIR'S REPORT

(The Honorable Rick Denison, Chair)

STAFF REPORT

(Ivette Macias, Government Affairs Officer, SCAG)

ANNOUNCEMENTS

ADJOURNMENT



Southern California Association of Governments
March 5, 2026

**MINUTES OF THE MEETING
ENERGY AND ENVIRONMENT COMMITTEE
THURSDAY, FEBRUARY 5, 2026**

THE FOLLOWING MINUTES ARE A SUMMARY OF ACTIONS TAKEN BY THE ENERGY AND ENVIRONMENT COMMITTEE (EEC). A DIGITAL RECORDING OF THE ACTUAL MEETING IS AVAILABLE AT: <http://scag.iqm2.com/Citizens/>.

The Energy and Environment Committee (EEC) of the Southern California Association of Governments (SCAG) held its regular meeting both in person and virtually (telephonically and electronically). A quorum was present.

Members Present

Hon. Rick Denison (Chair)	<i>Yucca Valley</i>	District 11
Hon. Daniel Ramos (Vice Chair)	<i>Adelanto</i>	District 65
Hon. Ana Beltran	<i>Westmoreland</i>	ICTC
Hon. Art Bishop	<i>Town of Apple Valley</i>	SBCTA
Hon. Margaret Clark	<i>Rosemead</i>	SGVCOG
Hon. Jenny Crosswhite	<i>Santa Paula</i>	District 47
Hon. Ned Davis	<i>Westlake Village</i>	LVMCOG
Hon. Carmen Hernandez	<i>Barstow</i>	SBCTA
Hon. Britt Huff	<i>Rolling Hills Estates</i>	SBCCOG
Hon. Joe Kalmick	<i>Seal Beach</i>	District 20
Hon. Steven Leash	<i>Cahuilla Band of Indians</i>	
Hon. Elaine Litster	<i>Simi Valley</i>	VCOG
Hon. Patricia Lock Dawson	<i>Riverside</i>	District 68
Hon. Vianey Lopez		Ventura County
Hon. Yasmine-Imani McMorris	<i>Culver City</i>	WCCOG
Hon. Suely Saro	<i>Long Beach</i>	District 29
Hon. Patty Senecal	<i>Seal Beach</i>	OCCOG
Hon. Jennifer Stark	<i>Claremont</i>	SGVCOG
Hon. Ali Taj	<i>Artesia</i>	Pres. Appt
Hon. Tamala Takahashi	<i>Burbank</i>	SFVCOG
Hon. Connor Traut	<i>Buena Park</i>	OCCOG
Hon. Stephanie Virgen	<i>Coachella</i>	CVAG
Hon. Dale Welty	<i>Canyon Lake</i>	WRCOG



Members Not Present

Hon. Daniel Brotman	<i>Glendale</i>	District 42
Hon. Martha Cardenas-Singh		Imperial County
Hon. Robert Copeland	<i>Signal Hill</i>	GCCOG
Hon. Shari Horne	<i>Laguna Woods</i>	OCCOG
Hon. Brian Johsz	<i>Chino Hills</i>	SBCTA
Hon. Cory Moss	<i>City of Industry</i>	Pres. Appt
Hon. Jeannette Sanchez-Palacios	<i>Ventura</i>	VCOG

CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Chair Denison called the meeting to order at 9:33 a.m. Regional Council Member, Joe Kalmick, Seal Beach, District 20, led the Pledge of Allegiance. Staff confirmed a quorum was present.

PUBLIC COMMENT PERIOD

Chair Denison opened the public comment period and noted that this was the time for members of the public to offer comment on matters that are within SCAG’s jurisdiction but are not listed on the agenda.

Chair Denison asked if any comments were received after the deadline. SCAG staff acknowledged there were no public comments received after the 5:00 p.m. deadline on February 4, 2025.

Seeing no public comment, Chair Denison closed the public comment period for matters not listed on the agenda.

REVIEW AND PRIORITIZE AGENDA ITEMS

There were no requests to prioritize agenda items.

CONSENT CALENDAR

1. Minutes of the Meeting – November 6, 2025

Receive and File

2. Energy and Environment Committee Outlook and Future Agenda Items

There were no Public Comments on the Consent Calendar.

A MOTION was made (Lock Dawson) to approve the Consent Calendar. Motion was SECONDED (Crosswhite) and passed by the following votes:

AYES: Bishop, Clark, Crosswhite, Davis, Denison, Hernandez, Huff, Kalmick, Leash, Litster, Lock Dawson, Lopez, McMorris, Ramos, Senecal, Stark, Takahashi, Traut, and Welty (19)

NOES: None (0)

ABSTAIN: None (0)

INFORMATION ITEMS

3. Connect SoCal 2050: Process Preview

There were no public comments on item 3.

Camille Guiriba, Senior Regional Planner, provided a brief overview of the Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). She stated that RTP/SCS must: (1) be updated every 4 years to maintain eligibility for Federal funding; (2) long-range: 20+ years into the future; (3) be financially constrained; (4) have demonstrated transportation conformity; (5) achieved GHG reduction targets; and (6) be developed in consultation with key stakeholders and the public. She provided a summary of requirements and key challenges. Finally, she discussed preliminary milestones and next steps.

The comprehensive staff report was included in the agenda packet and posted on the SCAG website. The meeting video is also available on the SCAG website.

4. Innovative Clean Transit Regional Assessment Study Update

There were no public comments on item 4.

Priscilla Freduah-Agyemang, Senior Regional Planner, introduced Fang Yan, Director of Clean Transportation and Energy, ICF.

Ms. Yan provided background on the Innovative Clean Transit regulation and stated that the study was guided by CARB's Innovative Clean Transit Regulation, which was adopted in 2018. The regulation set a path for all California transit agencies to transition to a fully zero-emission bus by 2040 and that the regulation established a phased schedule for ZEB purchases. She reviewed the project primary

objectives and stated that the regional assessment aimed to provide SCAG with a clear roadmap to support a coordinated and efficient transition to zero-emission bus fleets across the region. She discussed the targeted outreach and responses received from transit agencies. She reviewed the project research which included rollout plans, different types of infrastructures, existing policies, funding programs and workforce training. Lastly, she reviewed next steps.

The comprehensive staff report was included in the agenda packet and posted on the SCAG website. The meeting video is also available on the SCAG website.

5. Nature-based Stormwater and Flooding Strategies

There were no public comments on item 5.

Conor Mossavi, Civil Engineering Associate, LADWP Watershed Management Group provided a brief overview of Los Angeles's water supply sources and the challenges each faced. He discussed the history with stormwater and the stormwater capture master plan. He indicated that the plan goals were to quantify stormwater capture potential, identify projects, programs, and policies, prioritize water supply criteria, develop costs/benefits, define timeline and milestones, and develop partnerships. He discussed centralized and distributed projects while offering cost benefit information. Lastly, he presented an example of a project cross section.

The comprehensive staff report was included in the agenda packet and posted on the SCAG website. The meeting video is also available on the SCAG website.

CHAIR'S REPORT

Chair Denison stated that SCAG recently released county-specific reports for a deeper look at economic conditions across Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura counties. He stated that each report highlighted local trends, key indicators, and emerging issues to help policymakers, planners, and stakeholders better understand county-level economic dynamics and plan for the year ahead. He announced that the SCAG Student Showcase was open for Submissions and competition finalists would receive opportunities to demonstrate their expertise to a large network of skilled practitioners and future colleagues. Winners also receive cash prizes.

STAFF REPORT

Ivette Macias, Senior Government Affairs Officer, announced that the March Energy and Environment Committee meeting would hold elections for the 2026-27 Chair and Vice Chair positions. The term of office for the newly elected Chair and Vice Chair will commence upon



the adjournment of the General Assembly Business Meeting on May 7, 2026.

ANNOUNCEMENT

There were no announcements.

ADJOURNMENT

There being no further business, Chair Denison adjourned the Energy and Environment Committee meeting at 11:16 a.m.

[MINUTES ARE UNOFFICIAL UNTIL APPROVED BY THE EEC]

//

ENERGY AND ENVIRONMENT COMMITTEE ATTENDANCE REPORT

2025-2026

MEMBERS	Representing	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	April	May	Jun	Total Mtgs Attended To Date
Beltran, Ana	Westmoreland, ICTC	1			0		0			1					2
Bishop, Art	Apple Valley, SBCTA	1			0		1			1					3
Brotman, Daniel	Glendale, RC District 42				1		0			0					1
Cardenas-Singh, Martha	Imperial County				1		1			0					2
Clark, Margaret	Rosemead, RC District 32	1			1		1			1					4
Copeland, Robert	Signal Hill, GCCOG	0			0		1			0					1
Crosswhite, Jenny	Santa Paula, RC District 47	1			1		1			1					4
Davis, Ned	Westlake Village, LVMOG	1			1		1			1					4
Denison, Rick	Yucca Valley, RC District 11	1	D		1		1	D		1					4
Hernandez, Carmen	Barstow, SBCTA	1	A		1		1	A		1					4
Horne, Shari	Laguna Woods, OCCOG	1	R		1		1	R		0					3
Huff, Britt	Rolling Hills Estates, SCBCOG	1	K		0		1	K		1					3
Johsz, Brian	Chino Hills, SBCTA	1			0		1			0					2
Kalmick, Joe	Seal Beach, RC District 20	1			1		1			1					4
Leash, Steven	Cahuilla Band of Indians	0			0		0			1					1
Litster, Elaine	Simi Valley, VCOG	1			1		0			1					3
Lock Dawson, Patricia	Riverside, District 68	0			0		0			1					1
Lopez, Vianey	Ventura County	1			1		1			1					4
McMorrin, Yasmine-Imani	Culver City, WCCOG	1			1		1			1					4
Moss, Cory	City of Industry, Pres. Apt	0			0		1			0					1
Ramos, Daniel	Adelanto, SBCTA	1			1		1			1					4
Sanchez-Palacios, Jeanette	Ventura, VCOG	0			0		0			0					0
Saro, Suely	Long Beach, RC District 29	0			0		1			1					2
Senecal, Patty	Seal Beach, OCCOG	1			0		0			1					2
Stark, Jennifer	Claremont, SGVCOG	1			1		1			1					4
Taj, Ali	Artesia, Pres. Apt	1			0		1			1					3
Takahashi, Tamala	Burbank, SFVCOG	1			1		1			1					4
Traut, Connor	Buena Park, OCCOG	1			1		1			1					4
Virgen, Stephanie	Coachella, CVAG	0			1		1			1					3
Welty, Dale	Canyon Lake, WRCOG	1			1		1			1					4



Southern California Association of Governments
March 5, 2026

To: EEC - Energy and Environment Committee
From: Ryan Wolfe, Manager for Sustainable and Resilient Development
213-630-1527, wolfe@scag.ca.gov
Subject: EEC Outlook and Future Agenda Items

**EXECUTIVE DIRECTOR'S
APPROVAL**

RECOMMENDED ACTION:

Information Only – No Action Required

STRATEGIC PRIORITIES:

This item supports the following Strategic Priority 1: Establish and implement a regional vision for a sustainable future. 3: Spur innovation and action through leadership in research, analysis and information sharing. 5: Secure and optimize diverse funding sources to support regional priorities. 2: Be a cohesive and influential voice for the region.

EXECUTIVE SUMMARY:

In April 2024, SCAG’s Regional Council adopted the 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy, Connect SoCal 2024. Following adoption of Connect SoCal 2024, staff developed a 12-month EEC Outlook to carry forward the policy priorities and Implementation Strategies of Connect SoCal 2024. For FY2026, the EEC Outlook reflects outcomes of the 2025 Executive Administration Committee (EAC) Retreat and discussions with the EEC Chair and Vice Chair. The Committee Outlook and Future Agenda Items will be updated monthly as a receive and file item and can be pulled by the Chair for discussion at the request of members for input and modifications.

BACKGROUND:

The work of the Southern California Association of Governments (SCAG) and the leadership from the agency’s Policy Committees and Regional Council is driven by SCAG’s legally mandated duties as a Metropolitan Planning Organization (MPO) for Southern California, the long-range Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), Connect SoCal 2024 as well as, the agency Strategic Plan approved by the Executive Administrative Committee on May 1, 2024.

Energy and Environment (EEC) Committee Outlook and Framework

The Policy Committees help to further the implementation of Connect SoCal by advising on policy, research or resource programs. The Policy Committees will also be informed and advise on broader regional leadership items as needed.

In addition, as appropriate within the scope of each Policy Committee, the 2026 Presidential Priorities are incorporated in the Outlook.

- Clean Transportation Technology
- Housing Production
- Regional planning in support of the 2028 Olympic & Paralympic Games

The topics and panels covered may change based on speaker availability, progress on the targeted programs, and other requests from the Committee Chair and Vice Chair as well as members. To request future agenda items, Policy Committee members may request that the agenda item be pulled for discussion, or they may send a request directly to the Chair or committee staff for consideration and reporting out at the next meeting. Agenda items that are recommended by Policy Committee members will be discussed with the Chair and Vice Chair to assess relevance to the EEC Policy Committee and the considerations noted above.

FISCAL IMPACT:

None

ATTACHMENT(S):

1. March 2026 EEC Agenda Outlook

Energy and Environment Committee

The Energy & Environment Committee (EEC) shall study and provide policy recommendations to the Regional Council relative to challenges and opportunities, programs and other matters, which pertain to the regional issues of energy and the environment. EEC shall also be responsible for reviewing and providing policy recommendations to the Regional Council on matters pertaining to environmental compliance.

EEC Committee Agenda Outlook for FY2026

Anticipated major actions and information items. Does not include all Receive/File and Program Updates

Date	Agenda Items
Sept	<ul style="list-style-type: none"> Natural and Agricultural Lands Study Overview Ecosystem Services Connect SoCal: Subregional SCS Strategy Framework Innovative Clean Transit Study*
Oct	No Meetings
Nov	<ul style="list-style-type: none"> Panel: Planning for Extreme Heat Connect SoCal Implementation Strategies
Dec	Joint Policy Committee Meeting: Economic Update
Jan	No Meetings
Feb	<ul style="list-style-type: none"> Vehicle to Grid Technologies* Moved to June Nature-Based Strategies: Flooding Innovative Clean Transit Update Connect SoCal: Vision and Goals Review

*Presidential Priorities

*Clean Transportation Technology

EEC Committee Agenda Outlook for FY2026

Anticipated major actions and information items. Does not include all Receive/File and Program Updates

Date	Agenda Items
Mar	<ul style="list-style-type: none"> • Regional Resilience Toolkit Overview • Connect SoCal 2050: Vision, Goals, and Policies Review • LA County Heat Action Plan • Green Schoolyard Retrofits for Resilience • Integrating Resilience into Capital Improvement Plans-Will be rescheduled • Resilient Utility Infrastructure-Will be rescheduled
Apr	Joint Policy Committee Meeting: Connect SoCal Policy Framework
May	General Assembly
Jun	<ul style="list-style-type: none"> • Climate finance tools • Vehicle-to-Grid Technologies* • Artificial Intelligence/Data Centers: The Water Energy Nexus

*Presidential Priorities

•Clean Transportation Technology



To: EAC - Executive Administration Committee
CEHD – Community, Economic, and Human Development Committee
EEC – Energy and Environment Committee
TC – Transportation Committee
RC – Regional Council

**EXECUTIVE DIRECTOR'S
APPROVAL**

Kome Ajise

From: Elizabeth Carvajal, Deputy Director (Land Use)
213-236-1801, carvajal@scag.ca.gov

Subject: REAP 2.0 Program Update

RECOMMENDED ACTION FOR EAC, CEHD, EEC, TC, AND RC:

Receive and File

STRATEGIC PRIORITIES:

This item supports the following Strategic Priority 1: Establish and implement a regional vision for a sustainable future. 5: Secure and optimize diverse funding sources to support regional priorities.

EXECUTIVE SUMMARY:

SCAG's REAP 2.0 program invests in innovative finance, land use, and transportation strategies to realize the vision of Connect SoCal. SCAG has been working with grantees to make steady progress in delivering the \$231.5M REAP 2.0 program, including refining the final project list with grantees. This report summarizes the program status.

BACKGROUND:

The REAP 2.0 program was established as part of the 2021 California Comeback Plan under AB 140. REAP 2.0 builds on the success of Regional Early Action Planning Grant Program of 2019 (REAP 1.0) and expands the program focus by integrating housing and climate goals, and allows for broader planning and implementation investments, including infrastructure investments supporting infill development to facilitate housing supply, choice, and affordability. The program tackles key barriers to meeting regional housing needs and state policy goals—such as limited land availability, financing gaps, and insufficient infrastructure—through targeted funding and technical assistance.

REAP 2.0 Program Progress Updates

At the time of this report, all but one MOU are executed with the remaining MOU expected to be executed by late spring. Currently, the REAP 2.0 Program include 86 projects totaling approximately \$178.4M in suballocations, with an additional approximately \$20M expected to be allocated as part

of the second Notice of Funding Availability for Lasting Affordability Program which will be considered for approval by the CEHD and Regional Council at their March 2026 meetings.

Status of Current Programs

The REAP 2.0 program currently includes 86 projects totaling approximately \$178.4M. A status update by program area is provided below.

Sustainable Communities Program – Civic Engagement, Equity and Environmental Justice (SCP CEEEJ)

The Sustainable Communities Program - Civic Engagement, Equity and Environmental Justice (SCP CEEEJ) grant prioritizes housing planning that aims to close the racial equity gap and include partnerships with community-based organizations. The CEEEJ program currently includes five REAP 2.0 funded Housing and Land Use Strategies projects totaling approximately \$2M. All grantees have executed MOUs with SCAG and work is underway.

In the last quarter, SCP CEEEJ project teams made progress on technical analyses and held public workshops / advisory committee meetings to engage local stakeholders on technical findings and inform development of final deliverables.

Sub-Regional Partnership Program 2.0

The Sub-Regional Partnership Program 2.0 (SRP 2.0) Program includes approximately \$24.5M in funding to sub-regional partners for eligible activities supporting member jurisdictions with implementing housing element work plans and strategies for increasing affordable housing. This program is anticipated to include 20 projects with SCAG's subregional partners.

Transportation Partnership Programs

The Transportation Partnership Programs include \$80M for the Regional Pilot Initiatives Program and the County Transportation Commission (CTC) Partnership Program. The CTC Partnership Program connects infill housing to daily services and increases travel options that support multimodal communities to shift travel modes. This program funds 30 transformative planning and implementation projects that expand access, increase mobility, and bring jobs and housing closer together to achieve a more sustainable growth pattern across the region. Staff continue to work collaboratively with the CTCs to monitor project scopes, timelines, and budgets.

A project highlight from the last quarter is the ongoing construction of the Calexico Intermodal Transportation Center. ICTC received multiple state and federal funding grants to implement the project, including \$1 million for right-of-way acquisition from REAP 2.0. SCAG staff toured the ongoing construction in January 2026. Scheduled for completion in Spring 2026, the project will improve transit and transportation access in Calexico's downtown core.

Programs to Accelerate Transformative Housing (PATH)

The PATH Program includes three separate calls for projects; each is described in greater detail below.

Housing Infill on Public and Private Lands

The Housing Infill on Public and Private Lands (HIPP) Pilot Program includes \$6.7M to 9 projects to scale up development of available land and implementing large corridor-wide or area-wide infill housing policies and initiatives. All MOUs are executed with work underway. In the last quarter, HIPP project teams made progress on technical analyses and held workshops to engage public on technical findings and inform development of final deliverables.

Notice of Funding Available for Lasting Affordability

The Notice of Funds Available for Lasting Affordability (NOFA) includes approximately \$41.2M to 13 projects in support of innovative housing finance, trust funds, catalyst funds, and new permanent funding sources. All MOUs are executed. As noted above, SCAG released a second Notice of Funding Availability for Lasting Affordability with up to \$20M available and the ability to award additional funding-making the total allocation for this program \$61.2M. The call will prioritize new grantees and focus on existing catalyst and housing trust funds that are ready to receive funding. In addition, staff recommend creating a contingency list of projects that can receive funding, should additional REAP 2.0 funding become available. This list of initially awarded projects is on the CEHD and Regional Council agendas at their March 2026 meetings.

To date, \$13.9M has been deployed by three regional housing trusts into local affordable housing lending programs and progress has been made to establish three new regional housing trusts.

Regional Utilities Supporting Housing

The Regional Utilities Supporting Housing (RUSH) program includes approximately \$24M for nine projects that focus on investments in utility infrastructure planning and capital improvements that will support jurisdictions in basic utility infrastructure needed for housing: water, wastewater, stormwater management and electricity.

All projects have executed MOUs at this point and are working to advance the projects. Five of the nine are capital projects. This includes Palm Desert and Soboba that will provide stormwater drainage improvements, LADWP that is constructing electric utility improvements to support affordable housing developments, San Bernardino County that is building a sewer extension, and Calipatria that is upgrading a water pump station. Each of these projects will support the delivery of new housing units in the region. Similarly, the four additional RUSH planning projects will focus on laying the utility planning foundation necessary for subsequent utility improvements that are needed for future housing growth.

Milestones for upcoming quarter

The County Transportation Commission (CTC) Partnership Program anticipates several milestones in the next quarter. Active SGV, a subgrantee of LA Metro and the San Gabriel Valley Council of Governments is expected to launch their Go-SGV E-Bike share lending library. Additionally, LA Metro intends to award the Metro Bike Share expansion contract to deploy hundreds of new bike share bikes throughout Los Angeles.

In the coming quarter, the Lasting Affordability Program expects additional regional housing trusts to deploy an additional \$8.8M to local affordable housing lending programs.

The Sustainable Communities Program - Civic Engagement, Equity and Environmental Justice (SCP CEEEJ) grant program anticipates the City of Lancaster's Transit Oriented Development Zones Update to wrap up in the next quarter, making it the first Housing and Land Use project in the program to be completed. The remaining four projects will continue technical planning work, engagement activities, and preparing for board and council presentations as they move toward plan completion and adoption prior to the December 2026 expenditure deadline.

RUSH projects will continue to move forward in the next quarter. Four of the nine projects are projected to be completed by the end of FY 26 with the remainder to be completed prior to the December 2026 expenditure deadline.

NEXT STEPS

Staff will take the second NOFA for the Lasting Affordability Program funding recommendations before the CEHD and Regional Council for consideration and continue to provide regular updates to the Regional Council and Policy Committees on the REAP 2.0 program, with an anticipated next update in fall 2026.

FISCAL IMPACT:

Work associated with this item is included in the FY 25-26 Overall Work Program No. 305 – Regional Early Action Planning (REAP) Grants Program – REAP 2.0.



Southern California Association of Governments
March 5, 2026

To: EEC - Energy and Environment Committee
TC - Transportation Committee
From: Priscilla Freduah-Agyemang, Senior Regional Planner
213-236-1073, agyemang@scag.ca.gov
Subject: Innovative Clean Transit Regional Assessment Study Update

**EXECUTIVE DIRECTOR'S
APPROVAL**

RECOMMENDED ACTION:

Receive and File

STRATEGIC PRIORITIES:

This item supports the following Strategic Priority 1: Establish and implement a regional vision for a sustainable future. 3: Spur innovation and action through leadership in research, analysis and information sharing.

EXECUTIVE SUMMARY:

In December 2018, the California Air Resource Board (CARB) adopted the Innovative Clean Transit (ICT) (Cal. Code Regs. Tit. 13 § 2023.1) regulation, which requires all public transit agencies to gradually transition to 100-percent zero-emission bus (ZEB) fleets by 2040. The regulation requires transit agencies to publish ZEB Rollout Plans and has purchase requirements for transit agencies of different sizes by year. To support the region in meeting the transition deadline, SCAG kicked off the Innovative Clean Transit Regional Assessment Study in summer 2025. The Study is intended to ensure transit agencies in the region are supported in their efforts to transition to ZEBs by the 2040 deadline. The Study is assessing the efforts of the region’s transit operators to develop and implement the ZEB Rollout Plans and evaluating the readiness of the region to transition to zero-emission transit fleets. This staff report provides an update on the Study’s progress to date, including updates on stakeholder engagement, key findings from the best practices, and an assessment of and research on readiness, opportunities, and challenges.

BACKGROUND:

The six-county SCAG region boasts an extensive transit network spanning 33,485 miles of local, express, and bus rapid transit (BRT) routes. As outlined in SCAG’s long-range plan, Connect SoCal 2024, this network is a cornerstone of the region’s mobility ecosystem, providing essential access and connectivity for residents and visitors. Transit also plays a critical role in improving air quality and addressing climate change. According to the California Air Resources Board (CARB), transportation is responsible for approximately 37 percent of the state’s greenhouse gas (GHG) emissions, with

passenger vehicles contributing 26 percent. Expanding frequent, reliable, accessible, and affordable transit service is key to increasing ridership and reducing emissions. Recognizing the need to achieve reduced emissions, the SCAG Regional Council adopted Resolution No. 23-654-5 in April 2023, establishing the Clean Transportation Technology Policy. This policy supports the development, commercialization, and deployment of a zero-emission transportation system while maintaining technology neutrality, allowing operators to invest in the technologies best suited to their operational needs. SCAG's commitment aligns with the State's efforts to motivate additional emissions reductions via the Innovative Clean Transit regulation, which the California Air Resources Board (CARB) adopted in December 2018. The regulation requires all public transit agencies to gradually transition to 100-percent zero-emission bus (ZEB) fleets by 2040. It requires transit agencies to publish ZEB Rollout Plans and has purchase requirements for transit agencies of different sizes by year.

INNOVATIVE CLEAN TRANSIT REGIONAL ASSESSMENT STUDY

SCAG's Innovative Clean Transit Regional Assessment Study (Study) is meant to support the region in its efforts to transition to ZEBs by 2040 by assessing the efforts of the region's transit operators to develop and implement ZEB Rollout Plans, evaluating the readiness of the region to transition to zero-emission transit fleets and the ongoing efforts aimed at transitioning to clean transit solutions throughout the region. More information on the Study is available on the SCAG [website](#). This staff report offers an update on stakeholder engagement activities and summarizes key findings related to best practices, readiness, challenges, and opportunities identified through research by the project team.

STAKEHOLDER ENGAGEMENT

This winter, the project team provided updates on the Study background as well as preliminary findings related to best practices, readiness, challenges and opportunities, and research to the Regional Transit Technical Advisory Committee (RTTAC). The project team received feedback on areas the Study should continue to focus on, especially related to addressing key challenges through this work and other potential SCAG support. Also, in addition to the feedback received from targeted surveys and one-on-one interviews with the transit agencies, the project team reached out again to the bus manufacturers and public utility providers to gain insight into the current landscape and understand the challenges faced in the ZEB market. Feedback from the survey and this targeted outreach, including the one-on-one interviews, will help shape the implementation action plan, the toolkit, and the final report.

PRELIMINARY FINDINGS – BEST PRACTICES

The project team conducted a comprehensive assessment of the best practices that transit agencies in California and across the U.S. have used to plan, deploy, operate, and maintain ZEB fleet and infrastructure.

Regulatory Alignment

A successful transition to ZEBs depends on aligned federal, state, regional, and local policies. Federal Clean Air Act standards and heavy-duty emission rules establish the nationwide framework that drives cleaner transit technologies. States then translate these goals into mandates and incentive programs. In California, this effort is led by the California Air Resources Board with the ICT regulation. There exists similar ZEB commitments in New York, Massachusetts, Hawaii, and Washington. Local and regional agencies implement these requirements through climate plans, utility coordination, capital planning, and technical assistance. In the SCAG region, Connect SoCal, the Clean Cities & Communities coalitions, and South Coast Air Quality Management District (SCAQMD) incentives help agencies integrate ZEB deployment into broader mobility and air quality strategies.

Planning

Coordinated planning documents serve as guides for ZEB transitions. They include CARB's mandated ZEB Rollout Plans, Federal Transit Administration (FTA) required Zero-Emission Fleet Transition Plans (ZEFTPs), Short-Range Transit Plans, Capital Improvement Programs, Climate Action Plans, and long-range Fleet Electrification Master Plans. These plans define near- and long-term ZEB goals, sequence vehicle procurement with infrastructure readiness, align capital budgeting with regulatory mandates, and integrate fleet electrification into broader climate, air quality, and land use objectives. They also formalize coordination with key partners, such as utilities, metropolitan planning organizations (MPOs), original equipment manufacturers (OEMs), state agencies, and local governments, ensuring that ZEB deployment is technically feasible, financially supported, and compliant with federal programs such as FTA Low-No, state policies like California's ICT rule, and regional climate strategies.

Technology Selection

Transit agencies that base technology on real operating data, such as block lengths, grades, dwell times, climate, and load, are most successful. Research highlights multiple agencies whose evaluations show battery electric buses (BEBs) performing best on short, low-speed, long-dwell service, while fuel cell electric buses (FCEBs) excel on longer, higher-duty routes requiring rapid refueling. Deployment risks are reduced through platform standardization and multi-OEM trials, as practiced by New York Metropolitan Transportation Authority (MTA) and Alameda-Contra Costa Transit District (AC Transit) in the Bay Area. Transit agencies typically make the following considerations:

- **Match technology to duty cycle.** The technologies cannot follow a “one-size-fits-all” approach. AC Transit, for instance, assigns fuel cell electric buses (FCEBs) to longer, hillier transbay and trunk routes where quick refueling preserves pullouts and recovery time, while battery electric buses (BEBs) operate on shorter urban blocks with reliable layovers for top ups.
- **Choose proven, scalable platforms.** ZEB deployment risks can be mitigated by testing multiple OEMs, standardizing specifications, and locking in parts and service support.

- **Evaluate total cost of ownership (TCO).** Transit agencies should use local utility tariffs and fuel prices, not national averages, when modeling TCO.

Infrastructure

Best practices emphasize matching infrastructure design to operations, including charger placement aligned to pull-out patterns, appropriate use of depot versus opportunity charging, and hydrogen station types that integrate into existing yard flows. Comparative evaluations, such as Foothill Transit’s overhead fast charging versus depot plug-in set-ups, demonstrate that infrastructure choices directly affect fleet availability, energy efficiency, and schedule flexibility. There are currently four primary chargers that are used for BEBs. Their specifications are summarized in Table 1.

Table 1: Charging Specifications by Type

Parameters	Depot Plug-In	Depot Overhead	On-Route Overhead	On-Route Wireless
Power Range	50 – 350 kW (typical 150kW)	150 – 450 kW	300 – 600 kW (typical 450 kW)	150– 300 kW
Charging Time	3-6 h for 300–450 kWh or 100-250 miles	1.5 – 3 h for 400–500 kWh or 150 to 300 miles	5 – 10 min per layover adds 20–40 mi range	5 – 10 min per layover adds 5-10 mi range
Infrastructure Footprint	Medium	Small	Small	Very small
	one pedestal per bus, parking stall access; required ~25–35 ft cable length	overhead gantries or cross-rails shared among multiple bus bays; minimal ground space	Compact fixed mast or shelter at terminals	Underground coil & flush pad
Charging Connector Standards	SAE J3068 CCS Combo 1/2	SAE J3105	SAE J3105	SAE J2954/2 TIR
Bus Compatibility & Requirements	All BEBs include at least one CCS/J3068 charge port	Must be equipped with roof charging rails or bus mounted arm; factory installed interface	Must have roof rails or pantograph hardware; require thermal management and high-voltage pack rated for continuous >400 kW.	Must have underfloor receiver coil, wireless power controller (WPC), and EMI shielding; usually factory integrated, retrofit costly.
Key Characteristics	Standard across transit fleets; Manual plug-in connection; Lowest CAPEX	Automated connection; Sequential charging for high throughput depots Medium CAPEX	Allows mid route charging; Smaller batteries, higher uptime; High CAPEX	Fully automated charging; Minimal maintenance and wear

Source: ICF Research

While hydrogen fueling stations share a common set of core components, their specific design varies based on how hydrogen is produced, delivered, stored, cooled, and dispensed. A typical transit scale FCEB fueling station includes the following key elements:

- **Hydrogen Storage Tanks:** High-pressure vessels used to safely store compressed hydrogen gas on-site prior to dispensing. Transit applications typically use gaseous storage at 350 bar (5,000 psi) for heavy-duty vehicles.
- **Hydrogen Compressor:** Compressors raise the pressure of hydrogen to the levels required for storage and fast fueling. For FCEBs, compressors are usually sized to support 350 bar fast fill protocols, enabling efficient transfer of hydrogen to on-site storage and ultimately into the bus at the correct pressure.
- **Hydrogen Cooling Unit:** Hydrogen must be cooled during fast fueling to maintain temperatures within SAE J2601 fueling protocol limits. Stations serving heavy-duty fleets may use larger or more advanced cooling equipment, depending on storage configuration, fueling rate, and vehicle system requirements.
- **Hydrogen Fuel Dispenser:** Similar in function to a gasoline or diesel pump, the dispenser is the user interface for fueling FCEBs. Dispensers may be placed on a dedicated hydrogen fueling island or co-located with other fleet fuel infrastructure, depending on site design and safety requirements.

Public Private Partnerships

Public-private partnerships (PPP) are a common strategy used by many developers to build charging infrastructure, involving a private partner who finances initial capital costs with private debt and equity in exchange for returns on investment over time. This involves a partnership between a government entity and a private sector company, where the latter takes the lead in designing, financing, constructing, and operating the charging infrastructure. The government entity provides funding, land, and other resources, while the private partner is responsible for financing and operating the charging infrastructure. In the context of ZEB infrastructure, PPP models allow transit agencies to leverage private capital, technical expertise, and operational efficiencies to the sharing of capital costs and risks, as well as accelerated deployment of charging and refueling facilities, microgrids, and other supporting systems.

Operations and Maintenance

Research identified three core operational and maintenance practices:

- **Instrumentation and monitoring from day one**, including telematics and charger log integration, as done by AC Transit and New York MTA.
- **Coordinated operations and maintenance workflows**, where shared diagnostics improve reliability; King County Metro’s joint dispatch–maintenance energy checks are cited as an example.
- **Resilience planning**, such as SunLine’s onsite hydrogen production, Foothill Transit’s microgrid-supported charging, and Seattle City Light’s outage priority circuits for Metro facilities.

Workforce Development

ZEB deployment requires new staff competencies in high-voltage systems, chargers, hydrogen safety, diagnostics, and energy-aware driving. Programs like AC Transit’s ZEB University and SunLine’s West Coast Center of Excellence are highlighted as national models. [American Public Transportation Association \(APTA\)’s Zero-Emission Bus Maintenance Recommended Practice](#) provides a standardized national curriculum framework.

Costs and Funding Strategies

ZEB costs include both capital and operations and maintenance (O&M), as summarized in Table 2. Capital costs are significantly higher than diesel buses: BEBs typically range from about \$650,000 to \$1,350,000 per bus, compared with \$125,000 to \$800,000 for diesel. These higher costs reflect limited production scale, specialized components, and ongoing technology development.

Table 2. Cost Comparison for BEB, FCEB, and Conventional Transit Buses (Internal Combustion Engine – ICE)

Bus Type	Technology Type	Average Capital Cost	Average Fuel Cost (regardless of bus type)	Average Maintenance Cost (regardless of bus type)
Cutaways	ICE	\$125,000	ICE (CNG): \$1.30/DGE BEB: \$0.13/kWh FCEB: \$7.79/kg	ICE(CNG): \$0.85/mile BEB: \$0.43/mile FCEB: \$0.43/mile
	BEB	\$650,000		
	FCEB	No Information		
Standard	ICE	\$550,000		
	BEB	\$890,000		
	FCEB	\$1,520,000		
Articulated	ICE	\$800,000		
	BEB	\$1,350,000		
	FCEB	No Information		

Source: NLR, 2022

Transit agencies operate within a diverse and layered funding landscape that includes federal, state, regional, local, and utility programs, each with different levels of competitiveness, frequency, and eligible expenditures, as summarized in Table 3. The largest and most widely used funding sources are the recurring federal programs through FTA, particularly the Low-No Program and the Bus and Bus Facilities Program. These programs consistently provide the most significant competitive capital funding for ZEB procurement, depot construction, and major facility upgrades.

Table 3. Summary of Major Funding Programs

Source	Administrator	Program Name	Type	What It Funds
Federal	Federal Transit Administration (FTA)	Low-No Program	Recurring, competitive	Zero-Emission Bus (ZEB) bus purchases, charging and fueling infrastructure, facility construction or leasing

	FTA	Bus and Bus Facilities	Recurring, competitive	Bus replacement or procurement, ZEB facility upgrades
	Internal Revenue Service (IRS)	Inflation Reduction Act (IRA) Section 30C Infrastructure Credit	Ongoing through June 2026, tax credit	EVSE and hydrogen fueling equipment, 30 percent tax credit, direct pay eligible
	US Department of Transportation (USDOT)	Better Utilizing Investments to Leverage Development (BUILD)	Recurring, competitive	Major capital projects with regional benefit, including transit depots
State	California Air Resources Board (CARB)	Hybrid and Zero-Emission Truck and Bus Voucher Incentive Program (HVIP)	Ongoing, first come first serve	Point-of-sale ZEB bus vouchers, funding windows open and close
	CARB	Low Carbon Fuel Standard (LCFS)	Ongoing, market based	Credits from electricity or hydrogen used to support operations
	California Energy Commission (CEC)	Energy Infrastructure Incentives for Zero-Emission (EnergyIIZE) Commercial Vehicles	Recurring, first come first serve with competitive set-aside lanes	Electric Vehicle Supply Equipment (EVSE), make-ready, hydrogen fueling; Transit Set-Aside available
	California Department of Transportation (Caltrans)	Low Carbon Transit Operations Program (LCTOP)	Recurring, formula-based	ZEB operations, bus purchases, Cap-and-Trade funded
	California State Transportation Agency (CalSTA)	Transit and Intercity Rail Capital Program (TIRCP)	Recurring, competitive	Large-scale ZEB procurements, major charging and fueling facilities
Regional / Local	South Coast Air Quality Management District (SCAQMD)	Invest Clean Program	Recurring, competitive	Charging infrastructure projects
	SCAQMD	Carl Moyer Program	Recurring, competitive	ZEB bus purchases and infrastructure
	LA Metro	Zero-Emission Transit Capital Program	One-time, competitive	ZEB procurement, charging infrastructure, facility upgrades
Utilities	Southern California Edison (SCE)	Charge Ready Transport	Ongoing, non-competitive	Utility-side make-ready, including design, trenching, transformers
	Los Angeles Department of Water and Power (LADWP)	Fleet Electrification Programs	Ongoing, non-competitive	Make-ready work and EVSE rebates

READINESS, CHALLENGES AND OPPORTUNITIES

The project team also researched challenges and opportunities to assess the readiness of transit agencies in the region and overall future of ZEB deployments.

Key Challenges to ZEB Deployment

ZEB Rollout Planning Limitations

ZEB Rollout Plans have been submitted to meet ICT regulation requirements, but levels of detail vary widely. They often have different analytical and “how-to” implementation details.

- **Various depth and quality across agencies.** Plans range from detailed, phased roadmaps with defined milestones to high-level narratives.
- **Analytical gaps.** Some plans provide a solid starting point with clear directions, deeper and targeted analysis, but others do not provide the level of detail needed to understand where the agency is heading towards.
- **Workforce, equity, and resilience acknowledged but thin on implementation:** Many agencies already recognize workforce transition, equity outcomes, and resiliency needs as core priorities, but the report offers limited guidance on how to operationalize these commitments.

Technological and Operational Barriers

Bus technology and infrastructure constraints in the operational stage (not pilot stage with technology uncertainty) are now the primary factors setting the pace of ZEB rollout. The industry has largely moved beyond pilots, but transit agencies report that the real-world ZEB performance and day-to-day operating conditions still drive the most consequential rollout decisions. The realities shape fleet sizing, technology pathways, facility design, and service planning.

Policy, Regulatory and Institutional Challenges

ZEB deployment is not only constrained by planning or technology alone, but transit agencies must also navigate a complex implementation environment shaped by policy and compliance requirements, local permitting processes, utility upgrade timelines, and varying institutional capacity. The following challenges frequently determine the pace and feasibility of ZEB transition:

- **Policy complexity:** While ICT itself does not overlap with Advanced Clean Trucks (ACT) or Advanced Clean Fleets (ACF) regulations, ZEB deployment still depends in part on broader heavy-duty (HD) ZEV market signals shaped by related ZEV regulations.
- **Local permitting:** Permitting has emerged as a recurring barrier to ZEB deployment because timelines and requirements vary widely by jurisdiction, and many authorities having jurisdiction have limited prior experience with large scale depot charging, and hydrogen facilities.
- **Utility coordination:** Utility coordination is often a major bottleneck. Both charging and hydrogen stations depend on utility studies and upgrades with long and uncertain timelines.
- **Institutional capacity:** Resource constraints, especially for small and rural agencies, pose a major challenge to ZEB implementation.

Cost and Funding Gaps

Cost and funding caps create one of the immediate barriers to scaling ZEBs. Transit agencies face high upfront capital needs, uncertain operating costs, and a competitive, shifting funding landscape that requires timely, stacked applications to keep projects moving.

Key Themes and Best Practices in Advancing Zero-Emission Bus (ZEB) Deployment Emission Bus (ZEB) Deployment

Recent research, agency interviews, and national best practices highlight several themes shaping ZEB implementation across the region:

- **Integration of ZEB planning with core agency documents:** Agencies with more mature ZEB programs increasingly use their ZEB Rollout Plans as organizing frameworks that align with Short Range Transit Plans (SRTPs), Capital Improvement Programs (CIPs), Climate Action or Sustainability Plans, and fleet master plans.
- **ZEB plans treated as living documents:** Because technology, costs, and operational realities evolve rapidly, many agencies are moving toward annual or biennial updates to their ZEB plans and maintaining alignment with California Air Resources Board (CARB) reporting tools.
- **Growing interest in regional coordination:** Agencies consistently identify value in standing coordination structures that support information sharing, peer learning, and alignment on technical and operational issues sharing, peer learning, and alignment on technical and operational issues.
- **Navigating a complex funding landscape:** The funding environment for ZEB deployment is fast-moving and competitive. Agencies increasingly rely on shared intelligence, cross-agency collaboration, and centralized tracking to stay current on opportunities moving and competitive. Agencies increasingly rely on shared intelligence, cross-agency collaboration, and centralized tracking to stay current on opportunities.
- **Use of practical toolkits to reduce soft costs:** Agencies benefit from standardized templates, scopes of work, procurement language, and implementation tools that reduce duplicative effort and streamline project development.
- **Collaboration on shared implementation challenges:** Peer agencies are exploring joint approaches to utility coordination, procurement, and shared infrastructure models, recognizing that many challenges are common across the region.
- **Connections to zero-emission truck (ZET) initiatives:** Agencies are beginning to leverage synergies with statewide zero-emission truck programs, including co-located infrastructure, shared workforce training, and coordinated planning for high-voltage and hydrogen systems.

Readiness

Overall, the SCAG region shows strong policy alignment with ICT requirements and early deployment momentum, but transit agency readiness varies across key areas, such as planning, vehicle procurement and infrastructure, as well as funding and workforce capacity.

- **Regulatory and Planning Readiness:** California's ICT regulation requires all transit agencies to transition to 100% ZEB fleets by 2040, with phased purchase requirements beginning in 2023 for large agencies and 2026 for small agencies. While some transit agencies have submitted Rollout Plans, the level of operational detail often reflects capacity and available resources. Larger agencies typically have more in-house expertise, data tools, and technical support than the small agencies.

- **Bus Deployment and Infrastructure Readiness:** Across the SCAG region, transit agencies are broadly policy aligned and increasingly active in ZEB deployment, while charging and hydrogen infrastructure scale-up drives the pace for full fleet transition.
- **Funding Readiness:** The existing conditions research and the Transit Transformation Task Force Final Report emphasize that funding programs are central to the transition. The scale of required investment is substantial, especially as agencies move toward full fleet conversion.
- **Institutional and Workforce Readiness:** While most agencies recognize the need to build internal capacity, the institutional and workforce readiness varies significantly by agency size and resources

NEXT STEPS

This analysis and prior research findings are informing development of the implementation action plan and the toolkit for zero-emission deployment across the region that the project team is currently working on. SCAG staff will continue to share Study updates with the Transportation Committee, the Energy and Environment Committee, and the Regional Transit Technical Advisory Committee. SCAG staff anticipates the Study will be completed by summer 2026.

FISCAL IMPACT:

None



Southern California Association of Governments
March 5, 2026

To: CEHD - Community, Economic, and Human Development Committee
EEC - Energy and Environment Committee
TC - Transportation Committee
From: Camille Guiriba, Senior Regional Planner (PS)
213-236-1809, guiriba@scag.ca.gov
Subject: Connect SoCal 2050: Vision, Goals, and Policies Review

**EXECUTIVE DIRECTOR'S
APPROVAL**

RECOMMENDED ACTION FOR CEHD, TC, AND CEHD:

Information Only – No Action Required

STRATEGIC PRIORITIES:

This item supports the following Strategic Priority 1: Establish and implement a regional vision for a sustainable future.

EXECUTIVE SUMMARY:

Every four years, SCAG must prepare and adopt a Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS). In April 2024, SCAG’s Regional Council approved the most recent RTP/SCS, Connect SoCal 2024. The next RTP/SCS, Connect SoCal 2050, is being prepared for adoption by the Regional Council by Spring 2028. The purpose of this staff report is to revisit the regional vision, goals, and policy areas as adopted in Connect SoCal 2024 prior to sharing early policy development work on Connect SoCal 2050 to be presented at the April 2026 Joint Policy Committee.

BACKGROUND:

As required by federal and state law, SCAG prepares a long-range Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) every four years which provides a vision for integrating land use and transportation for increased mobility and more sustainable development. SCAG’s next RTP/SCS, Connect SoCal 2050 will build from the previous plan (Connect SoCal 2024) adopted by the SCAG Regional Council in April 2024. This will include updates of fundamental data from local jurisdictions and transportation agencies and refinement of strategies and investments based on input from stakeholders and leadership by SCAG’s Policy Committees and Regional Council.

As described at the February 2026 Policy Committee meetings, SCAG is now entering into the “Data Collection and Policy Development” phase of plan development. Throughout 2026, staff will be continuing with research to better understand regional trends. This phase also includes steps to

understand the existing conditions and planning occurring at the local jurisdiction level through the Local Data Exchange (LDX) process and through engagement with County Transportation Commissions on the Project List later this year. Over the course of the next year and a half, SCAG staff will seek direction from our policy makers, through the Policy Committees, on the priorities and strategies for Connect SoCal 2050 to augment and help better align plans and investments across the region.

Revisiting Connect SoCal 2024

In July 2023, the Regional Council adopted a Policy Development Framework which documented the policy priorities for plan development in Connect SoCal 2024. It represented a refinement of policies that carried over several planning cycles to promote multimodal transportation investments and local development that align with the regional growth vision. The policy direction was represented in a new structure with the following elements:

- The **Vision and Goals** articulate where we want to be in the future.
- **Regional Planning Policies** provide guidance for integrating land use and transportation planning to realize the vision of Connect SoCal. They are intended to serve a resource for County Transportation Commissions (CTCs) and local jurisdictions, who can refer to specific policies to demonstrate alignment with the RTP/SCS when seeking resources from state or federal programs.
- **Implementations Strategies** articulate priorities for SCAG efforts in fulfilling or going beyond the Regional Planning Policies. These are areas where SCAG leads, partners or supports other responsible parties.

This work was guided by collaboration among the Policy Committees, special subject-matter subcommittees, working groups, and stakeholder engagement throughout plan development.

Vision and Goals

SCAG's vision for Southern California in the year 2050 is "A Healthy, Prosperous, Accessible and Connected Region for a More Resilient and Equitable Future." The following goals organized by four main pillars help the SCAG region achieve this vision:

- **Mobility:** Build and maintain an integrated multimodal transportation network
- **Communities:** Develop, connect and sustain livable and thriving communities
- **Environment:** Create a healthy region for the people of today and tomorrow
- **Economy:** Support a sustainable, efficient and productive regional economic environment that provides opportunities for all people in the region

Regional Planning Policies

While where we want to go may not have changed dramatically in the past two years, what it takes to get there may look different. This can be due to changes in local, state, federal regulations, changes to funding availability, technology and other shifting trends. As SCAG staff collect data on the region over the next year, these findings will help shape conversations with stakeholders and SCAG’s leadership about how policies and strategies may need to shift to tackle the key emerging issues for Connect SoCal 2050.

The table below shows the Regional Planning Policy areas represented under each goal pillar for Connect SoCal 2024 to guide decision-making towards achieving the Vision and Goals.

Connect SoCal 2024 Regional Planning Policy Areas			
Mobility	Communities	Environment	Economy
System Preservation and Resilience	Priority Development Areas	Sustainable Development	Goods Movement
Complete Streets	Housing the Region*	Air Quality	Broadband*
Transit and Multimodal Integration	15-Minute Communities*	Clean Transportation	Universal Basic Mobility*
Transportation Demand Management	Equitable Engagement and Decision-Making*	Natural and Agricultural Lands Preservation	Workforce Development*
Transportation System Management		Climate Resilience*	Tourism
Technology Integration*			
Safety			
Funding the System / User Fees			

**New policy area that was added in Connect SoCal 2024*

New and Upcoming

SCAG’s work on Connect SoCal 2050 will be ramping up in 2026. Here are new elements and upcoming items to expect in the coming months as part of the “Data Collection and Policy Development” phase:

- Connect SoCal Futures: New as part of this RTP/SCS cycle, SCAG is undertaking a planning exercise to broaden the lens through which regional transportation and land use strategies are considered in the region. This initiative will explore distinct, plausible Futures that reflect varying social, technological, economic, environmental, and political dynamics. The findings from this exercise will help prioritize policy strategies that are robust across multiple Futures.

By adding an uncertainty lens to the typical planning and modeling processes, Connect SoCal Futures will help SCAG identify blind spots and future-proof Connect SoCal 2050.

- Draft Policy Development Framework: SCAG will prepare a Policy Development Framework for the Connect SoCal 2050 cycle. This will outline the approach to reviewing and updating the policy elements of the RTP/SCS, how we will identify emerging issues to focus on this cycle and the plan development leadership that will inform the policy updates.
 - As part of the plan development leadership component of the framework staff is proposing the creation of a special RTP/SCS subcommittee. The purpose of the subcommittee is to provide overarching policy making support and guidance to items related to RTP/SCS development (goals, regional planning policies and strategies, public outreach, performance measures). Subject specific items (e.g. transit and rail, housing, etc.) will still route to appropriate Policy Committees.
- Local Data Exchange (LDX): In April, SCAG will launch the LDX process and begin one-on-one meetings with local jurisdictions. LDX's bottom-up approach ensures that local jurisdictions are actively involved in the development of SCAG's regional plans and that local data are accurate.

NEXT STEPS:

During the Joint Policy Committee meeting in April 2026, staff will set the stage for policy discussions for Connect SoCal 2050 by providing insight into the state of the region, sharing how demographic trends are expected to impact regional growth, and introducing a draft Policy Development Framework.

FISCAL IMPACT:

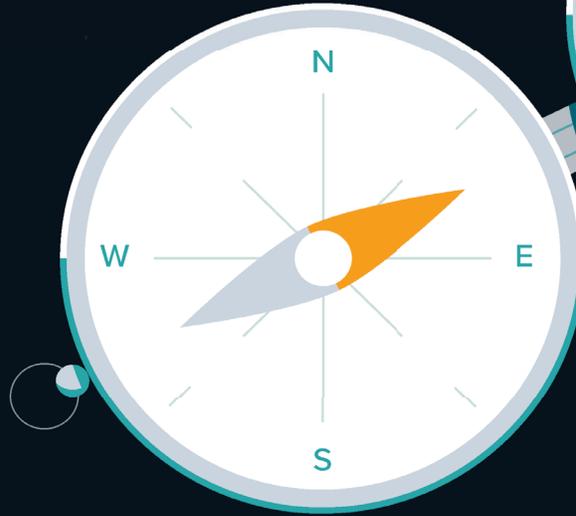
None.

ATTACHMENT(S):

1. PowerPoint Presentation – Connect SoCal Policy Review

Connect SoCal 2050: Vision, Goals, and Policies Review

March 5, 2026



The Southern California Association
of Governments' 2024–2050
Regional Transportation Plan/
Sustainable Communities Strategy

1

Connect SoCal 2024 Key Policy Elements

Vision and Goals

What we want the region to be by 2050

Regional Planning Policies

Provide guidance for integrating land use and transportation

Implementation Strategies

Guide where SCAG will lead, partner or support plan implementation

Connect SoCal Vision and Goals



“A Healthy, Prosperous, Accessible and Connected Region for a More Resilient and Equitable Future”



MOBILITY

Build and maintain a robust transportation network



ENVIRONMENT

Create a **healthy** region for the people of today and tomorrow



COMMUNITIES

Develop, connect and sustain **livable and thriving** communities



ECONOMY

Support a sustainable, efficient and productive regional environment that provides **opportunities for all**

Policy Areas



MOBILITY

- System Preservation and Resilience
- Complete Streets
- Transit and Multimodal Integration
- Transportation Demand Management
- Transportation System Management
- **Technology Integration***
- Safety
- Funding the System/ User Fees

COMMUNITIES

- Priority Development Areas
- **Housing the Region***
- **15-Minute Communities***
- **Equitable Engagement and Decision-Making***

ENVIRONMENT

- Sustainable Development
- Air Quality
- Clean Transportation
- Natural and Agricultural Lands Preservation
- **Climate Resilience***

ECONOMY

- Goods Movement
- **Broadband***
- **Universal Basic Mobility***
- **Workforce Development***
- Tourism

* New policy area for Connect SoCal 2024

New and Upcoming



- **Connect SoCal Futures:** Considering uncertainty and evaluating which policies and strategies are robust across plausible futures.
What could happen and how can we prepare for it?
- **Draft Policy Development Framework:** Outlining the approach to reviewing and updating the policy elements.
Introducing RTP/SCS Subcommittee
- **Local Data Exchange (LDX) Launch:** Ensuring that local jurisdictions are involved in the development of SCAG's regional plans, and that data are accurate.

THANK YOU!

For more information, contact:

Camille Guiriba, guiriba@scag.ca.gov





Southern California Association of Governments
March 5, 2026

To: EEC - Energy and Environment Committee
From: Sebastian Shetty, Associate Regional Planner
213-630-1533, shetty@scag.ca.gov
Subject: Release of SCAG's Regional Resilience Toolkit

**EXECUTIVE DIRECTOR'S
APPROVAL**

RECOMMENDED ACTION:

Information Only - No Action Required

STRATEGIC PRIORITIES:

This item supports the following Strategic Priority 1: Establish and implement a regional vision for a sustainable future. 2: Be a cohesive and influential voice for the region. 3: Spur innovation and action through leadership in research, analysis and information sharing.

EXECUTIVE SUMMARY:

The Regional Resilience Toolkit has been released and is now available to the public on SCAG's website. The Toolkit provides resources and information to support local jurisdiction efforts to proactively build resilience and reduce existing and future risks and vulnerabilities to disasters, climate change, and other resilience challenges. It features technical guidance, case studies, funding resources, and practical tools to help jurisdictions integrate resilience into local planning and implementation efforts. SCAG will host a Toolbox Tuesday webinar on April 21, 2026, to provide an in-depth review of its resources and how to use them.

BACKGROUND:

Southern California faces a growing set of risks that threaten public health, safety, infrastructure, and the economy. Many of these hazards, such as wildfires, extreme heat, flooding, and drought, are increasing in frequency and severity due to climate change, placing increased pressure on local and regional governments to plan for and invest in projects, programs, and strategies that increase resilience to these challenges.

The Regional Resilience Toolkit is a resource to support local jurisdictions as they confront these challenges now and in the future. It plays an important role in advancing the implementation of Connect SoCal 2024 and its vision of a more sustainable and resilient region.

What the Toolkit Provides

The Toolkit is designed to serve as both a high-level framework and a hands-on guide, be actionable and scalable across jurisdictions of all sizes, and be broadly accessible to people with a wide variety of technical expertise and backgrounds. It provides information to educate and inform users on resilience challenges, as well as practical tools and actionable guidance that can be tailored to a wide range of local contexts.

The tools and guidance provided in the Toolkit can both assist with the development of standalone resilience plans and programs and support the integration of resilience into existing planning and policy domains, such as general plans, land use planning more broadly, safety elements, hazard mitigation plans, climate action plans, and capital improvement programs.

The Toolkit helps jurisdictions:

- Understand the role of resilience in supporting long-term community health, safety, and prosperity
- Identify and assess the shocks and stressors most relevant to their communities
- Integrate resilience across a spectrum of planning efforts, from general plans to hazard mitigation plans
- Develop or build standalone resilience or climate action plans, with guidance for jurisdictions with varying levels of staffing capacity and resource availability
- Understand and evaluate funding and financing tools, including guidance on how to layer local, state, federal, and private resources to support both planning and implementation
- Formulate strategies and approaches to engage residents and stakeholders in meaningful conversations about risk and resilience
- Monitor progress over time and adjust strategies as conditions evolve

To ground these strategies in real-world examples, the Toolkit includes a series of case studies highlighting innovative resilience planning efforts from across SCAG's six-county region. These examples span a variety of geographies and address diverse hazard types, showcasing approaches that can inform efforts to increase resilience throughout the region.

SCAG will host a Toolbox Tuesday webinar on April 21, 2026, to walk users through the toolkit's information and resources. As a complement to the Toolkit, SCAG is also developing a series of concise, actionable planning guides that will help jurisdictions integrate resilience into specific types of plans, such as General Plans, Hazard Mitigation Plans, and Capital Improvement Plans.

SCAG will subsequently work to disseminate these resilience planning resources in its role as a convener through opportunities such as forums, conferences, and direct engagement with jurisdictions throughout the region.



FISCAL IMPACT:

065.4858.01 Regional Resiliency Analysis (FY 26 SB1)

ATTACHMENT(S):

1. PowerPoint Presentation – Regional Resilience Toolkit



Regional Resilience Toolkit

March 5, 2026

WWW.SCAG.CA.GOV

Introduction

Agenda

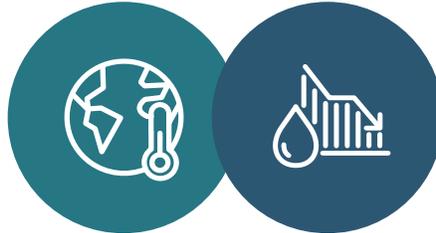
- Why plan for resilience?
- Goals and objectives
- Toolkit framework
- How jurisdictions can use the Toolkit

Planning ahead helps jurisdictions reduce risk, protect residents, and recover more quickly.

Why plan for resilience?

RECOVER FROM SHOCKS

Wildfires, Flooding, Mudslides, Extreme Heat, Earthquakes, Pandemic & Public Health Crises



ADDRESS STRESSORS

Housing Affordability Crisis, Aging Infrastructure, Economic Inequality, Water Scarcity, Public Health Disparities

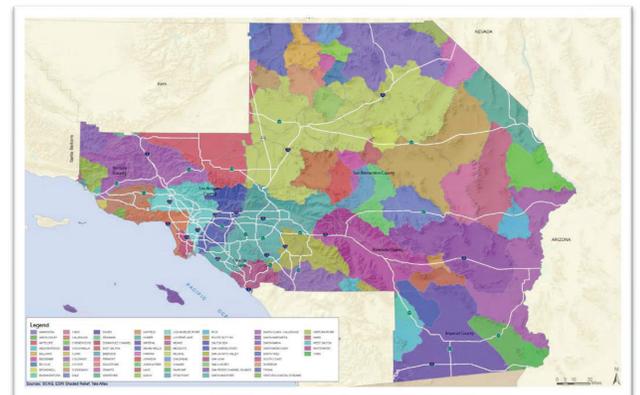
"Every \$1 invested in resilience saves \$13 in damages and indirect consequences" - *U.S Chamber of Commerce*

SCAG plays several important roles to support and enhance regional resilience

Shared Challenges, Shared Responsibility.

SCAG plays several important roles to support and enhance regional resilience, including:

-  Developing and disseminating recommended policies to local jurisdictions to enhance resilience
-  Providing resources to support resilience efforts including data, tools, funding, technical guidance, best practices, and research
-  Convening jurisdictions, agencies, and other stakeholders to collaborate, share knowledge, and advance regional resilience goals



Goals & Objectives of the Toolkit



Understand the benefits of local and regional resilience planning.



Plan for resilience at a range of scales, from integrating resilience into existing plans and programs to developing a standalone plan.



Clearly outline key steps to resilience planning

A practical guide for cities, counties, and agencies to build community resilience, step by step.

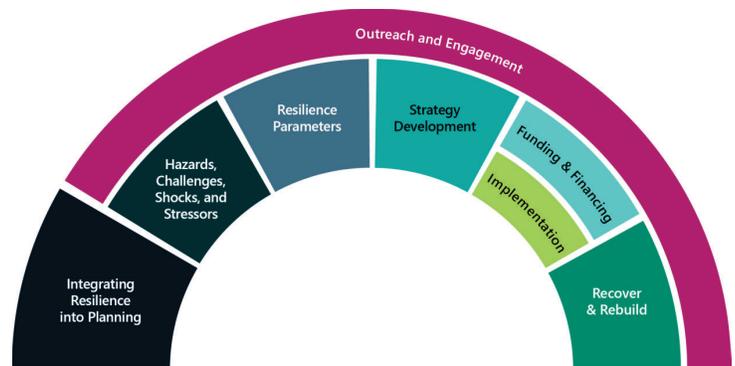
Key Framework of the Toolkit

PURPOSE & AUDIENCE

- Flexible & scalable
- Local & regional focus
- For agency staff

HOW TO USE THE TOOLKIT

- Start anywhere - flexible entry points
- Use as a step-by-step guide or to fill specific gaps
- Includes tools, templates, case examples, and resources
- Supports compliance with state mandates & grant requirements



Effective resilience starts with understanding a community's unique risk profile – across shocks and stressors.

Understanding Local and Regional Risks

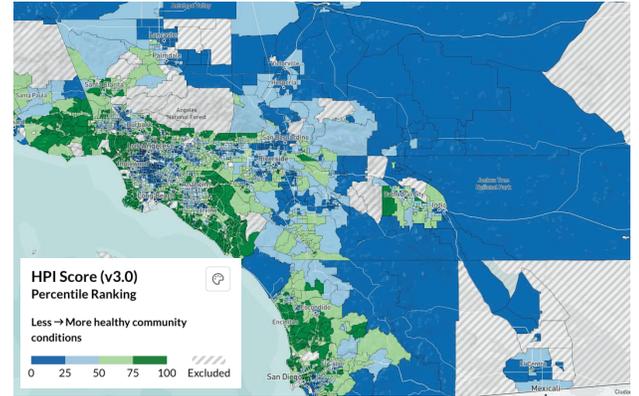
SHOCKS AND STRESSORS



- Identify local shocks
- Recognize chronic stressors
- Understand how shocks & stressors interact to amplify risk

VULNERABILITY & EXPOSURE

- Analyze who is most at risk
- Assess critical infrastructure exposure
- Prioritize vulnerable populations and assets



DEFINE RESILIENCE PLANNING PARAMETERS

- Define resilience goals and planning framework
- Identify how resilience fits into existing plans and programs
- Align local priorities with regional coordination

REGIONAL AND LOCAL INTEGRATION

- Combine regional-scale data with local knowledge
- Coordinate across jurisdictions on shared risks
- Inform local actions with a regional resilience perspective

Resilience planning is most effective when it reflects community needs, priorities, and lived experience.

Community and Stakeholder Engagement



IDENTIFY & PRIORITIZE STAKEHOLDERS

- Identify community partners, agencies, and regional stakeholders
- Focus on vulnerable and disproportionately impacted communities
- Understand local priorities, risks, and lived experiences

Engagement helps ensure resilience planning reflects real community needs.



DESIGN AN ENGAGEMENT PROCESS

- Integrate engagement throughout planning and implementation
- Use inclusive and accessible outreach approaches
- Coordinate across departments and jurisdictions

Ongoing engagement strengthens collaboration and supports better decision-making.



INFORM STRATEGIES & RECOVERY

- Use community input to shape resilience strategies
- Align actions with local priorities and capacities
- Support equitable recovery planning and implementation

Engagement improves outcomes before, during, and after disruptions.

From Plan to Action - Choosing the Right Strategies



Framing the challenge

Exploring Solutions

Focusing Action

Identify a Menu of Strategies:

Identify actions that address priority risks and align with local goals and capacity.

Evaluate and Prioritize Strategies

Assess actions based on feasibility, impact, cost, and co-benefits.

Tailored, Not One-Size-Fits-All:

Develop relevant strategies that reflect local priorities.

Select priority actions:

Prioritize strategies with the greatest resilience benefits.

Consider Co-Benefits:

Advance resilience while supporting health, equity, and economic outcomes.

Fund, Implement, and Monitor

Identify funding and integrate actions into plans and projects.

Coordinate implementation:

Define roles, timelines, and partnerships to move strategies into implementation.

Track Progress and Adjust:

Monitor implementation and refine strategies over time.

Continuous improvement:

Update approaches as conditions and priorities change.

Resources

- ✓ General resilience planning resources
- ✓ Example plans and opportunities to incorporate resilience
- ✓ Tools for characterizing shocks and stressors
- ✓ Illustrative case studies from across the SCAG region
- ✓ Resources for engaging with vulnerable and impacted communities
- ✓ Example strategies



Tools to Support Social Resilience Trust for Public Land Provides maps to support open space development and park planning.	Healthy Places Index Policy Guides The HPI Policy Action Guides provide evidence-backed policies across the topics of social, transportation, economics, housing, and more. For each HPI indicator, it provides policies, evidence, and links to tool and resources.
Resilience Before Disaster: The Need to Build Equitable, Community-Driven Social Infrastructure by the Asia-Pacific Environment Network (APEN), SEIU California, and BlueGreen Alliance focuses on resilience hubs and resilience at home as a framework for supporting the resilience for California's most vulnerable communities.	The Transformative Climate Communities (TCC) Program The TCC Program evaluation reports, developed by the UCLA Luskin Center for Innovation, provide progress reports, lessons learned, and case studies on TCC implementation projects, which serve as models for comprehensive community-led action, including efforts to build social resilience.

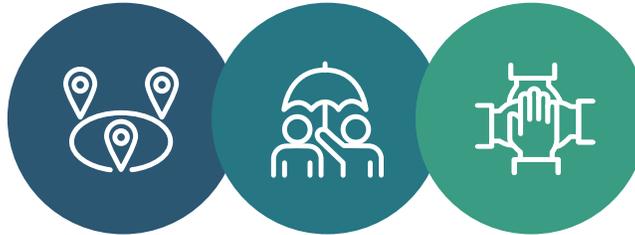
Plan Type	Resilience Components	Advantages and Benefits	Disadvantages and Challenges
PLANS FOR RESILIENCE INTEGRATION			
General Plan	Safety element (or LHMIP) required to include climate adaptation by SB 378 (2015); integration of LHMIP into safety element incentivized by AB 2540 (2006). Safety element also required to include climate adaptation and resilience at each update of the housing element or the LHMIP at least every 8 years. Consider exposure to hazards in zoning code updates and land use plans.	Can comprehensively enhance resilience by incorporating into each general plan element, such as housing, land use, circulation, etc. Individual elements can be updated on their own. Carries force of law. Establishes public process.	Not all elements are updated regularly. General plan update processes can take 2-3 years. Requires political will. Limited funding for planning and implementation, especially for smaller jurisdictions.
Community Plans, Specific Plans, and Master Plans	Translate and implement general plan policies at the neighborhood level. Ensure investments in development areas do not perpetuate vulnerabilities. Incorporate resilience strategies into specific design, features, plans, and guidelines (e.g., green infrastructure).	Reduce infrastructure and community vulnerability to hazards. Locally focused; reflect community-specific shocks, stressors, and priorities/solutions.	Limited funding available beyond developer impact fees. Potentially long update cycle.
Agency Budget	Fund resilience-related programs, projects, policies, and staff. Create dedicated resilience funds. Build resilience into decision making and life-cycle processes.	Requires justification and thorough outlining of resilience projects, which increases transparency and provides a clear path for implementation. Updated annually. Enables implementation.	Limited financial resources and competing priorities. May require policy or procedural changes to budget rules.
Capital Improvement Plan (CIP)	Fund specific resilience-related projects or incorporate resilience elements into existing planned projects. Embed resilience objectives into the overall goals of the CIP. Leverage funding opportunities for resilient infrastructure.	Ensures infrastructure investments are resilient. Updated annually, providing opportunity to prioritize new projects on a yearly basis.	May require data, tools, and technical expertise. Regulatory or policy barriers that hinder the integration of resilience measures. Limited funding resources and competing priorities.

What can Local Jurisdictions do with this Toolkit?

No city or county is resilient alone - resilience is a shared, regional effort.

Strength in Regional Coordination

Disasters cross jurisdictional boundaries - air, water, infrastructure, housing markets are all regional systems.



Building a Resilient Future, Together

Resilience planning is ongoing and iterative - this Toolkit is a starting point, not an endpoint.

SCAG as a Partner & Resource

SCAG offers technical support, data, and funding alignment to help local governments advance resilience.



THANK YOU + QUESTIONS

For questions, please contact:

Sebastian Shetty, Associate Regional Planner
shetty@scag.ca.gov



Southern California Association of Governments
March 5, 2026

To: EEC - Energy and Environment Committee
From: Ryan Wolfe, Manager for Sustainable and Resilient Development
213-630-1527, wolfe@scag.ca.gov
Subject: LA County Heat Action Plan

**EXECUTIVE DIRECTOR'S
APPROVAL**

RECOMMENDED ACTION:

Information Only – No Action Required

STRATEGIC PRIORITIES:

This item supports the following Strategic Priority 1: Establish and implement a regional vision for a sustainable future. 3: Spur innovation and action through leadership in research, analysis and information sharing.

EXECUTIVE SUMMARY:

Connect SoCal 2024 emphasizes the importance of responding to the increasing risks posed by extreme weather across Southern California and identifies climate adaptation and public health protection as core regional priorities. Extreme heat is the deadliest climate hazard in the region, with health impacts disproportionately borne by vulnerable populations, including renters in older or undercooled housing, outdoor workers, and communities experiencing historic underinvestment.

Los Angeles County has just completed its first comprehensive, multisector Heat Action Plan (CHAP), that includes goals, strategies, and actions to reduce heat exposure, expand cooling access, and advance long-term climate resilience. The LA County CHAP is a leading example of how a strategic planning approach can identify implementable strategies to advance extreme heat adaptation and provide broader resilience and quality of life co-benefits.

BACKGROUND:

The Los Angeles County Heat Action Plan (CHAP), released in February 2026, is the County’s first holistic planning framework focused solely on responding to the rising risks of extreme heat. It provides a structured, coordinated pathway to reduce heat-related illness, protect infrastructure, strengthen emergency response, and enhance long-term climate resilience across the County.

Rising temperatures, warmer nights, and more frequent, longer-duration heat waves are reshaping daily life and increasing strain on transportation, energy systems, housing, and public health. Inland and valley communities are experiencing some of the most severe warming trends, while even

traditionally cooler coastal areas have faced record-setting temperatures. Extreme heat has driven sustained increases in emergency department visits, utility burdens, and infrastructure degradation.

The CHAP is intended not only as a County implementation guide but also as a model that cities, school districts, and other agencies can use to inform and guide their own efforts. This approach aligns with SCAG's regional priorities by supporting climate adaptation, transportation system resilience, public health, and equitable access to cooling resources, and by offering tools that local jurisdictions can integrate into their own planning efforts.

PLAN VISION, GOALS AND KEY OBJECTIVES

The CHAP envisions a future where residents are protected from the dangers of extreme heat, where communities have safe streets, shaded public spaces, and heat-resilient homes, and where infrastructure and public systems remain reliable during increasingly severe heat events.

Goal 1: Cool Outdoor Spaces

Extreme heat and the urban heat island effect reduce the safety, accessibility, and comfort of outdoor spaces across the region. This goal focuses on creating cooler community environments by redesigning high-heat corridors and expanding natural and built shade.

Goal 2: Create Heat-Resilient Indoor Spaces

Indoor heat exposure is a growing health risk, particularly for renters and those living in older or unconditioned housing stock. This goal focuses on making homes, workplaces, schools, and publicly accessible buildings safer during heat events.

Goal 3: Expand Heat Safety Communications and Programs

As extreme heat events intensify, effective public communication and accessible cooling opportunities are essential to reducing heat-related health outcomes. This goal focuses on expanding the County's emergency response, outreach, and collaboration with community partners.

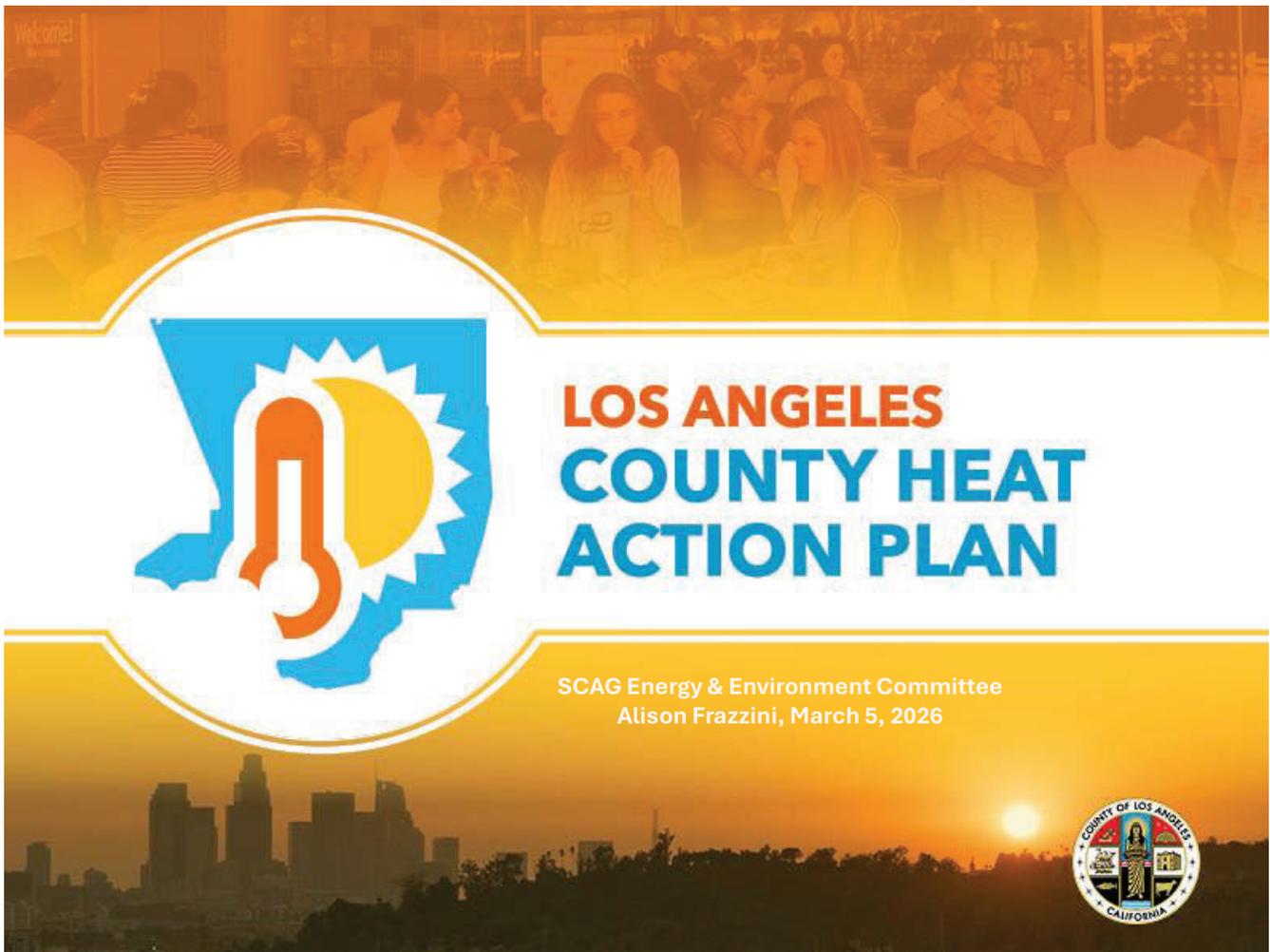
Presenter Bio: Ali Frazzini is a policy director in the LA County Chief Sustainability Office, where she promotes resilience and health equity through the OurCounty sustainability plan and related projects. She previously served as Director of Take Care New York at the New York City Health Department, where she oversaw community engagement and capacity-building for the city's health equity agenda. She received her Master's degree in Public Health Nutrition from the University of North Carolina and her undergraduate degree in Linguistics from Yale University.

FISCAL IMPACT:

None

ATTACHMENT(S):

1. PowerPoint Presentation - CHAP_SCAG March 2026
-



Why This Plan, Why Now

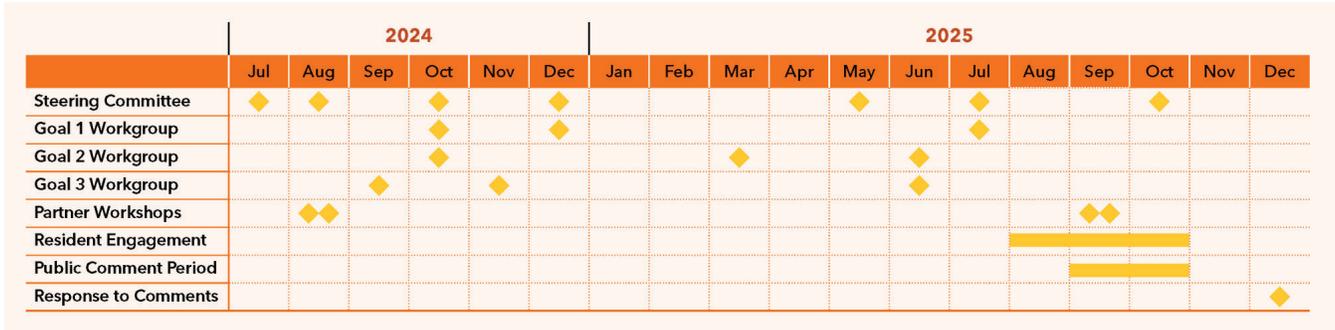
- The climate is changing: more frequent heatwaves, rising average temperatures
- Heat exposure impacts health, safety, productivity, and overall well-being – and deepens existing inequities
- Heat also strains infrastructure and ecosystems
- Without action, health and economic costs will continue to rise

The Broad Impacts of Extreme Heat

Health Impacts	Cognitive & Educational Impacts	Occupational Impacts	Social Impacts	Economic Impacts
<ul style="list-style-type: none"> • Heat stroke (can be fatal) • Asthma, and heart strain • Mental health stress • Preterm birth and low birth weight 	<ul style="list-style-type: none"> • Reduced focus and test performance • Learning loss in overheated classrooms 	<ul style="list-style-type: none"> • Heat-related injuries • Lower productivity • Outdoor worker exposure 	<ul style="list-style-type: none"> • Less outdoor activity • Fewer safe play spaces • Reduced community gatherings 	<ul style="list-style-type: none"> • Infrastructure damage • Higher utility costs • Healthcare system strain

Plan Development

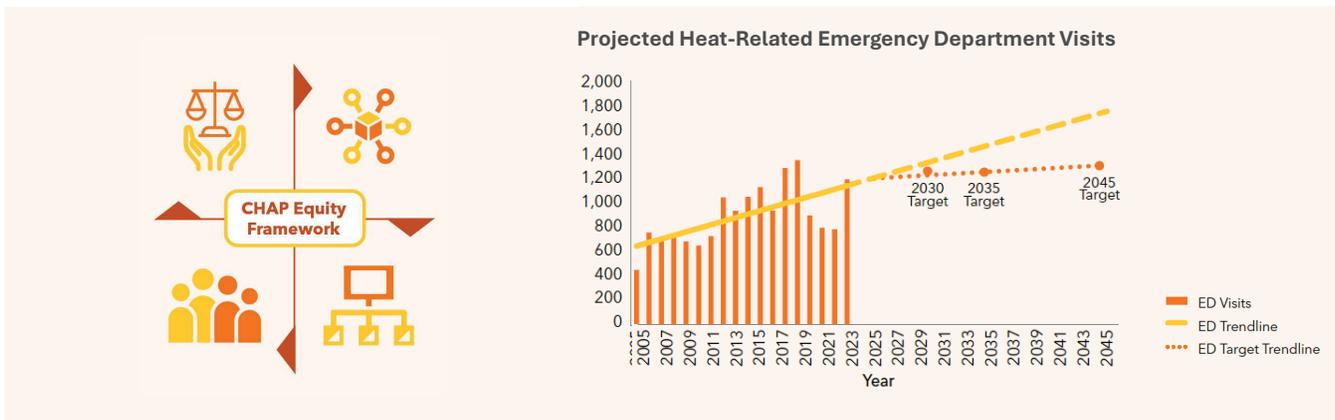
- Inclusive process with multiple formats and methods of engagement
- Deep involvement from community and technical experts



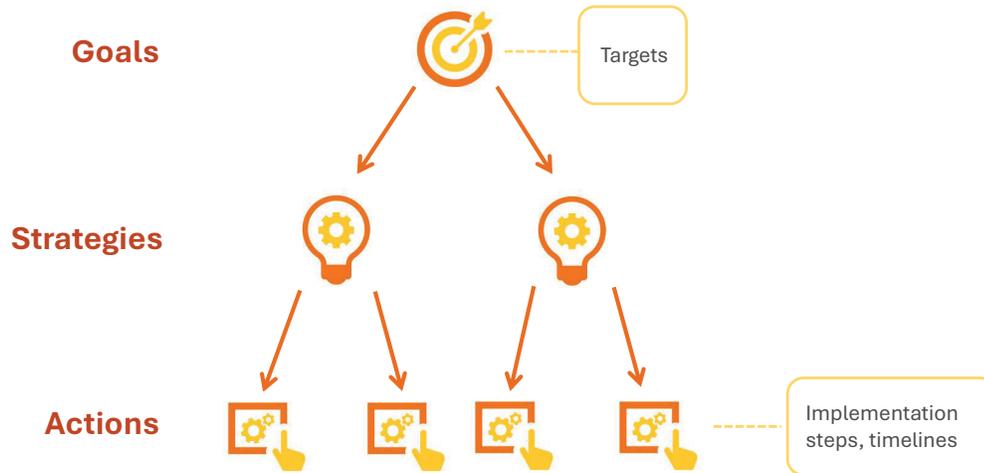
Framework of the Plan

Guiding Principles

Equity-Driven, Action-Oriented, Integrative, Collaborative, Adaptive



Framework of the Plan



Goal 1: Cool Outdoor Spaces

Goal Statement

GOAL 1 Create cooler, more livable outdoor environments through strategic shade, green infrastructure, and heat-reducing surfaces that protect residents and ecosystems while fostering vibrant community spaces.

Strategy 1.1	Improve shade equity in the public right-of-way to reduce overexposure to heat and promote vibrant street life.
Strategy 1.2	Alleviate chronic heat burden in highly paved urban areas through urban greening, design, and smart surfaces.
Strategy 1.3	Integrate cooling features into outdoor recreational and gathering spaces.
Strategy 1.4	Ensure that County assets, especially trees and vegetation that provide cooling benefits in public corridors and gathering spaces, can thrive long-term in the face of rising temperatures.



2045 Target: All transit stops have functional shade at 3pm



Goal 2: Create Heat-Resilient Indoor Spaces

Goal Statement

GOAL 2 Promote safe, efficient design and operations for the buildings where County residents live, work, and learn.

Strategy 2.1	Protect renters and heat-vulnerable residents from excessive levels of heat in the home and congregate facilities.
Strategy 2.2	Maximize the adoption and use of passive cooling strategies and energy-efficient operations in both public and private buildings.
Strategy 2.3	In coordination with utilities, promote electricity affordability, clean energy access, and energy resilience.

2045 Target: No increase in sleep disruption due to heat



Goal 3: Expand Heat Safety Communications and Programs

Goal Statement

GOAL 3 Build robust community networks and emergency management operations that promote heat safety and connect vulnerable people to cooling resources.

Strategy 3.1	Improve access to, and utilization of, cooling locations during extreme heat.
Strategy 3.2	Build the capacity of community organizations and other implementation partners to support resident and worker heat safety.
Strategy 3.3	Increase public awareness of heat risk and personal strategies for staying cool and safe.
Strategy 3.4	Improve the capacity of the health system to mitigate, prepare for, and respond to heat risk.

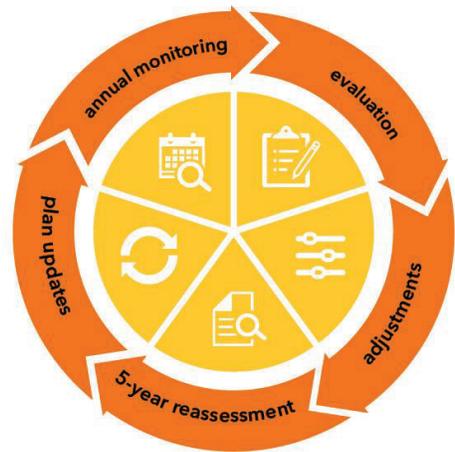
2045 Target: 30% increase in cooling locations



Adoption

The CHAP was adopted by the County Board of Supervisors on February 3, 2026. It will guide sustained, coordinated action:

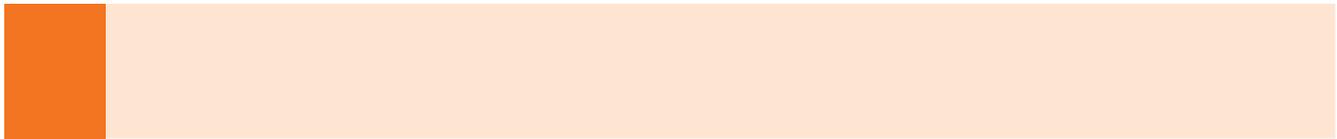
- **County departments** can use the plan to align capital investments, policies, and programs shared heat resilience goals
- **Cities and other public agencies** can reference the CHAP as a model for local action, make use of CHAP data and resources, and identify opportunities for collaboration
- **Community-based organizations** can use the plan and data to identify advocacy priorities, develop grant proposals, and hold government partners accountable
- **Funders** can use the CHAP to identify high-impact investment opportunities, and coordinate investments to maximize collective impact



Implementation

- Resources to support city action:
 - Data Viewer
 - Users' Guide for Data Viewer
 - City Implementation Pathways Framework
 - County deliverables
- County next steps:
 - Coordination on state funding opportunities
 - Preparation for 2026 heat season
 - Partnerships to support heat resilience for mega-events





Thank You

<https://cso.lacounty.gov/ourcounty-plan/cso-current-initiatives/county-heat-action-plan/>





Southern California Association of Governments
March 5, 2026

To: EEC - Energy and Environment Committee

**EXECUTIVE DIRECTOR'S
APPROVAL**

From: Ryan Wolfe, Manager for Sustainable and Resilient Development
213-630-1527, wolfe@scag.ca.gov

Subject: Green Schoolyard Retrofits for Resilience

RECOMMENDED ACTION:

Information Only – No Action Required

STRATEGIC PRIORITIES:

This item supports the following Strategic Priority 3: Spur innovation and action through leadership in research, analysis and information sharing.

EXECUTIVE SUMMARY:

Green infrastructure is a cornerstone of community resilience, supporting climate adaptation, improved public health, and long-term environmental sustainability—key priorities emphasized in Connect SoCal 2024. To be successful, resilience plans such as climate action, climate adaptation, and heat action plans must have clear and implementable strategies that have tangible and meaningful benefits in communities. Schoolyard retrofits that replace pavement with trees, vegetation, permeable surfaces, and stormwater-absorbing landscapes directly are key examples of projects that implement resilience plans and achieve multiple benefits. Amigos de los Rios, an Altadena based nonprofit, will present on their extensive work advancing green schoolyard retrofits that provide substantial benefits to students and the broader community.

BACKGROUND:

Retrofitting paved schoolyards with trees, vegetation, permeable surfaces, and stormwater-absorbing landscapes directly advances resilience by reducing extreme heat exposure, improving air quality, and enhancing neighborhood livability. Research shows that many California schoolyards experience dangerous surface temperatures exceeding 140°F, posing health risks to students and exacerbating urban heat-island effects. Converting asphalt into green, shaded spaces has been demonstrated to cool campuses, absorb stormwater, and reduce flooding risk, making school sites valuable assets for community-wide climate resilience initiatives.

Amigos de Los Rios has led green schoolyard transformations at over 16 schools across Southern California. Claire Robinson, the Managing Director, will provide an overview of these projects, their

benefits, and the partnerships involved. She has been with the organization since its founding in 2003. The organization has a number of other initiatives focused on creating and improving green and living infrastructure in Los Angeles, including advancing an interconnected loop of parks and greenways along urban waterways across Los Angeles County.

FISCAL IMPACT:

None