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MEETING OF THE

EMERGING TECHNOLOGIES COMMITTEE

*Members of the Public are Welcome to Attend
In-Person & Remotely*
Thursday, April 27, 2023
10:00 a.m. - 12:00 p.m.

To Attend In-Person:
**SCAG Main Office – Policy B Meeting Room
900 Wilshire Blvd., Ste. 1700
Los Angeles, CA 90017**

To Participate on Your Computer:
https://scag.zoom.us/j/941139378

To Participate by Phone:
**Call-in Number: 1-669-900-6833
Meeting ID: 941 139 378**

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 in order to participate in this meeting. SCAG is also committed to helping people with limited proficiency in the English language access the agency's essential public information and services. You can request such assistance by calling (213) 630-1420. 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 B Meeting Room on the 17th floor starting at 10:00 a.m.

To Attend by Computer: Click the following link: https://scag.zoom.us/j/941139378. 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: 941 139 378**, 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.

1. **In Writing:** Written comments can be emailed to: ePublicComment@scag.ca.gov. Written comments received **by 5pm on Wednesday, April 26, 2023**, 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, April 26, 2023, 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.

2. **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.

3. **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.

OUR MISSION
To foster innovative regional solutions that improve the lives of Southern Californians through inclusive collaboration, visionary planning, regional advocacy, information sharing, and promoting best practices.

OUR VISION
Southern California's Catalyst for a Brighter Future

OUR CORE VALUES
Be Open | Lead by Example | Make an Impact | Be Courageous

TELECONFERENCE AVAILABLE AT THESE ADDITIONAL LOCATIONS

Margaret Finlay 2221 Rim Road Duarte, CA 91008	**Curt Hagman** District Supervisor Office 14010 City Center Drive Chino Hills, CA 91709
Jan C. Harnik City of Palm Desert - City Hall 73510 Fred Waring Drive Palm Desert, CA 92260	**Dan Kalmick** City of Huntington Beach - City Hall 2000 Main Street 4th Floor, CR#2 Huntington Beach, CA 92648
Steve Manos City of Lake Elsinore - City Hall 130 S Main Street Conference Room B Lake Elsinore, CA 92530	**Carol Moore** City of Laguna Woods - City Hall 24264 El Toro Road Laguna Woods, CA 92637
Frank J. Navarro City of Colton - City Hall 650 N. La Cadena Drive Colton, CA 92324	**Deborah Robertson** Rialto Civic Center 150 South Palm Ave Rialto, CA 92376
Alan D. Wapner OIAA Administrative Offices 1923 East Avion Street Ontario, CA 91761	

ETC - Emerging Technologies Committee
Members – April 2023

1. **Sup. Curt Hagman**
   Chair, San Bernardino County

2. **Hon. Drew Boyles**
   El Segundo, RC District 40

3. **Ms. Leslie Lindahl**
   Government Relations, Ex-Officio Non-Voting Member

4. **Hon. Margaret Clark**
   Rosemead, RC District 32

5. **Hon. Keith Eich**
   La Cañada Flintridge, RC District 36

6. **Hon. Margaret Finlay**
   Duarte, RC District 35

7. **Hon. Jan C. Harnik**
   RCTC Representative

8. **Hon. Dan Kalmick**
   Huntington Beach, OCCOG

9. **Hon. Steve Manos**
   Lake Elsinore, RC District 63

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

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

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

13. **Ms. Pam O'Connor**
    CA Road Charge TAC, Ex-Officio Non-Voting Member

14. **Sup. Luis Plancarte**
    Imperial County

15. **Hon. Deborah Robertson**
    Rialto, RC District 8

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16. Hon. Alan Wapner
SBCTA Representative

17. Hon. Acquanetta Warren
Fontana, SBCTA

18. Hon. Edward Wilson
Signal Hill, GCCOG

19. Hon. Frank Zerunyan
Rolling Hills Estates, SBCCOG

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EMERGING TECHNOLOGIES COMMITTEE AGENDA

Southern California Association of Governments
900 Wilshire Boulevard, Suite 1700 - Policy B Meeting Room
Los Angeles, CA 90017
Thursday, April 27, 2023
10:00 AM

The Emerging Technologies Committee may consider and act upon any of the items listed on the agenda regardless of whether they are listed as information or action items.

CALL TO ORDER AND PLEDGE OF ALLEGIANCE
(The Honorable Curt Hagman, 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

CONSENT CALENDAR

Approval Items

1. Minutes of the Meeting – February 23, 2023   PPG. 6

INFORMATION ITEM

2. Technology and Equity Speakers   60 Min.   PPG. 11
(Marisa Laderach, Senior Regional Planner (SCAG), Tierra Bills, UCLA Assistant Professor, Kevin DeGood, Infrastructure Policy Director at American Progress)

3. Emerging Technology Guiding Principles   30 Min.
(Javier Silver, Associate Regional Planner)   PPG. 15

FUTURE AGENDA ITEMS

ANNOUNCEMENTS

ADJOURNMENT

EMERGING TECHNOLOGIES COMMITTEE (ETC)
MINUTES OF THE MEETING
THURSDAY, FEBRUARY 23, 2023

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

The Emerging Technologies Committee (ETC) of the Southern California Association of Governments (SCAG) held its regular meeting telephonically and electronically given public health directives limiting public gatherings due to the threat of COVID-19 and in compliance with the Governor's recent Executive Order N-29-20. A quorum was present. The meeting was called to order by Chair Hon. Curt Hagman, San Bernardino County. A quorum was present.

Members Present:

Hon.	Drew Boyles	District 40
Hon.	Margaret Clark	SGVCOG
Hon.	Keith Eich	District 36
Hon.	Margaret E. Finlay	District 35
Hon.	Curt Hagman **(Chair)**	San Bernardino County
Hon.	Dan Kalmick	Hunington Beach, OCCOG
Ms.	Leslie Lindahl	Ex-Officio Member
Hon.	Steve Manos	District 63
Mr.	Paul Marquez, Caltrans District 7	Ex-Officio Non-Voting Member
Hon.	Frank Navarro	District 6
Ms.	Pam O'Connor	Ex-Officio Member
Hon.	Alan Wapner	SBCTA
Hon.	Acquanetta Warren	City of Fontana

Members Not Present:

Hon.	Jan Harnik	RCTC
Hon.	Carol Moore	OCCOG
Hon.	Luis Plancarte	Imperial County
Hon.	Deborah Robertson	District 8
Hon.	Edward H.J. Wilson	GCCOG
Hon.	Frank Zerunyan	SBCCOG

CALL TO ORDER & PLEDGE OF ALLEGIANCE

Hon. Curt Hagman, San Bernardino County, called the meeting to order at 10:00 a.m. and led the Pledge of Allegiance.

PUBLIC COMMENT

Chair Hagman opened the Public Comment Period. Seeing no public comment speakers, Chair Hagman closed the Public Comment Period.

CONSENT CALENDAR

Chair Hagman opened the Public Comment Period. Seeing no public comment speakers, Chair Hagman closed the Public Comment Period.

Approval Items

1. Minutes of ETC Meeting – October 27, 2022

2. ETC 2023 Calendar of Meetings

3. Emerging Technologies Guiding Principles

A MOTION was made (Finlay) to approve the Consent Calendar. The motion was SECONDED (Manos) and passed by the following votes:

AYES: BOYLES, CLARK, EICH, FINLAY, HAGMAN, KALMICK, MANOS, NAVARRO, WAPNER, WARREN (10)

NOES: None (0)

ABSTAIN: None (0)

INFORMATION/DISCUSSION ITEMS

4. Clean Transportation Technology Policy

Chair Hagman opened the Public Comment Period. Seeing no public comment speakers, Chair Hagman closed the Public Comment Period.

Alison Linder, SCAG staff, reported on SCAG's Clean Transportation Technology Policy. Ms. Linder stated that a long-time agency priority is to mitigate the impacts of the transportation system on regional air quality. As clean transportation technologies have improved and proliferated over time, and as the problems of climate change have intensified, the vision of a zero-emission

transportation system has advanced as part of regional and state policy. Additionally, Connect SoCal 2020 identified a holistic and coordinated approach for de-carbonizing or electrifying passenger vehicles, transit, and goods movement vehicles.

For Connect SoCal 2024, this vision will be furthered by identifying regional progress and providing resources and strategies to accelerate clean transportation. The resolution formalizes SCAG's Clean Transportation Technology Policy with a long-term view of supporting the development, commercialization and deployment of a zero-emission transportation system to: improve air quality, lower health risks to all residents in the region, reduce greenhouse gas emissions to meet federal, state, and regional targets, and to promote economic development, resilience and equity. It also defines SCAG's long held position on technology neutrality, supporting further innovation in this area and allowing operators to select and invest in the best fit technology for their needs.

She also noted that in 2018 mobile sources were responsible for nearly 85% of NOx emissions and 29% of PM2.5 regionally. State goals were reviewed including 100% zero-emissions passenger vehicle sales by 2035. New funding sources supporting these goals were reviewed including IIJA programs. It was noted SCAG's efforts center around research, evaluation and plan development. She reviewed the Clean Transportation Technology Policy terms and objectives as well as the recommendation to the Regional Council.

Hon. Curt Hagman, San Bernardino County, asked about the actions that are anticipated once the resolution is passed and forwarded to the Regional Council. Dr. Linder responded that the resolution serves to formalize the agency's activities underway in this area and gives strength to the issue as its importance has increased in recent years.

Hon. Margaret Clark, District 32, asked if some of the wording could be modified so it provides greater latitude of action at the jurisdictional level. Dr. Linder responded that modifications could be made and reviewed the specific wording highlighted.

A MOTION was made (Warren) to recommend that the Regional Council (RC) adopt the Clean Transportation Technology Policy Resolution with the requested wording modification. The motion was SECONDED (Finlay) and passed by the following votes:

AYES: BOYLES, CLARK, EICH, FINLAY, HAGMAN, KALMICK, MANOS, NAVARRO, WAPNER, WARREN (10)

NOES: None (0)

ABSTAIN: None (0)

5. Connected Autonomous Vehicles and Data Privacy

Chair Hagman opened the Public Comment Period. Seeing no public comment speakers, Chair Hagman closed the Public Comment Period.

Hal Lennox, Vice President Government Affairs, Wejo, provided a report on Connected Autonomous Vehicles (CAVs) data. Mr. Lennox stated Wejo was a global leader in connected vehicle data which represents an opportunity to better manage mobility and other transportation issues. He noted Wejo partners with global auto manufacturers to create smart mobility intelligence. The company organizes billions of data points from connected cars to generate meaningful insight into transportation system performance and aggregate driver activity down to the lane level. Information is not obtained about the driver or their origin or destination. Wejo receives unidentified data which it utilizes to inform mobility.

Mr. Lennox stated today's vehicles contain approximately 90 sensors which provide an array of information. The applications for this data collection include safety such as monitoring road network performance, vehicle speeds from crash prone areas and congestion trends for effective traffic control measures. The information can also enhance resiliency by understanding where to direct traffic and which roadways to navigate to reduce gridlock. Further, it can benefit environmental goals through informing best locations for EV charging stations as well as understanding EV driver behavior. He reviewed the benefits for policy makers including managing roadway safety and efficiency, improve infrastructure planning, enable performance reviewed of infrastructure investments and respond to natural disasters. Transportation system analysis can be assembled in less than an hour where it previously has taken months or years. Mr. Lennox reviewed the privacy elements noting state laws which govern these activities. He noted technical and other measures to ensure data privacy including encryption.

Hon. Margaret Clark, District 32, Rosemead, expressed concern about the security of autonomous vehicles and their vulnerability to hackers.

Timothy Papandreou, Emerging Transport Advisors, reported on CAV trends. He noted his company works mostly with governments, startups and corporations and emphasized that automated technology can include passenger and delivery activities as well as repetitive tasks. Automation changes the relationship between the driver and vehicle as the computer drives the vehicle. He reviewed the different applications using automation including drone deliveries and some tasks-oriented vehicles such as those used in agriculture. The elements needed for autonomous vehicles were reviewed including artificial intelligence, machine learning and high-density maps. Additional elements include a vision and radar system.

Andrew Glass Hastings, Executive Director, Open Mobility Foundation continued the presentation. He noted the challenge of autonomous vehicles and emphasized the importance of digital technology in mobility. The Open Mobility Foundation's vision is to explore digital infrastructure's use in managing public space, data standards and other aspects for the public good and to support policy making. OMF is a city led organization and board members are transportation executives from the public and private sectors seeking to explore improved mobility by providing accurate and timely data to support planning and objectives. Their activities include micromobility, passenger services, car share and delivery robots. Goals include supporting cities to transition to digital infrastructure's use for urban aviation, maritime, EV charging and autonomous vehicles. Cities can join OMF for free.

FUTURE AGENDA ITEMS

Hon. Dan Kalmick, OCCOG, requested an item on right to repair.

Hon. Frank Navarro, Colton, District 6, requested an agenda item on hydrogen fuel.

ADJOURNMENT

Hon. Curt Hagman, San Bernardino County, adjourned the meeting of the Emerging Technologies Committee at 12:00 p.m.

[MINUTES ARE UNOFFICIAL UNTIL APPROVED BY THE EMERGING TECHNOLOGY COMMITTEE]
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Southern California Association of Governments
April 27, 2023

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

To: Emerging Technologies Committee (ETC)

From: Marisa Laderach, Senior Regional Planner
(213) 236-1927, laderach@scag.ca.gov

Subject: Technology & Equity Speaker Panel

RECOMMENDED ACTION:
Information Only – No Action Required

STRATEGIC PLAN:
This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians. 2: Advance Southern California's policy interests and planning priorities through regional, statewide, and national engagement and advocacy. 4: Provide innovative information and value-added services to enhance member agencies'   planning   and operations and promote regional collaboration. 6: Deploy strategic communications to further agency priorities and foster public understanding of long-range regional planning.

EXECUTIVE SUMMARY:
As technology advances, it continues to play an increasingly crucial role in the transportation ecosystem. However, it is vital to consider the potential impacts of these emerging technologies on equity and quality of life for Southern California residents. If left unchecked, the implementation of mobility technologies could further disadvantage under-resourced neighborhoods and worsen existing equity issues.[1] As technology leaders in the region, it is our responsibility to ensure that these technologies are integrated in a way that is respectful of equity and uplifts all communities.

Staff has organized a panel-style presentation for the Emerging Technologies Committee featuring two experts in the field of equity and emerging/mobility technologies. Tierra S. Bills, an Assistant Professor of Public Policy and Civil and Environmental Engineering at the University of California, Los Angeles, and Kevin De Good, Director of Infrastructure Policy at American Progress, will be sharing their insights and expertise.

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[1] https://www.sciencedirect.com/science/article/pii/S2590198221002268

BACKGROUND:

The impact of emerging technologies on equity can be both positive and negative. Fields such as artificial intelligence, automation, and telecommunication can create greater access to information, resources, and opportunities, and bridge gaps across economic, social, and geographical divides. However, these same technologies can exacerbate existing inequalities if their benefits are not distributed fairly, or be outright exploitative in the worst cases[2]. For example, the digital divide, job displacement, and widening skill gaps may further marginalize disadvantaged communities. These inequities, when combined with limited accessibility, modal choices, or transit service, can have a ripple effect across the transportation network with accumulating impacts. Therefore, it is critical for policymakers, industry leaders, and stakeholders to collaborate to ensure that the development and implementation of emerging mobility technologies promote equity and inclusiveness for all.

As the field of innovative and emerging technologies evolves, research shows that numerous agencies and communities are working to understand their equitable impacts[3]. This topic is of significant concern and importance across the region and the country, with agencies such as SCAG committing to addressing inequities, particularly in transportation and quality of life, and reaffirming its commitment to advancing justice, equity, diversity and inclusion in Southern California[4]. However, ensuring that equity is comprehensively addressed throughout the SCAG region requires coordination between local jurisdictions, transportation agencies and regulatory bodies. SCAG's role is to educate on the topic, facilitate learning opportunities, and create space for collaborative communication among leaders and policymakers. SCAG's recently concluded special Regional Council Subcommittee on Racial Equity and Regional Planning identified a number of recommendations to identify opportunities to advance racial equity through policies and strategies in Connect SoCal. Building on this work, and to provide the Emerging Technologies Committee members with a more comprehensive understanding of the relationship between equity and emerging technologies, staff has invited two experts in the field.

SPEAKER BIOS:

Tierra S. Bills, Assistant Professor of Public Policy and Civil and Environmental Engineering, UCLA
Dr. Bills specializes in the measurement of transportation planning and system outcomes, and travel demand modeling, with a special emphasis on transportation equity. She brings a unique and innovative perspective to the challenge of transportation inequity, aimed at impacting transportation science, practice, and quality of life for disadvantaged communities.

Dr. Bills has worked in the transportation equity domain since 2009 and her current work builds off this long track record, including her master's research, dissertation work, study and training as a Research Scientist at IBM Research, Michigan Society Fellowship research, and previous work as an

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[2] https://www.pewresearch.org/internet/2019/10/28/5-leading-concerns-about-the-future-of-digital-life/
[3] https://trid.trb.org/view/1631891
[4] https://scag.ca.gov/sites/main/files/file-attachments/rcresolution206232.pdf?1604640361

Assistant Professor at Wayne State University. Dr. Bills is engaged in ongoing work on the representation of disadvantaged groups in households travel surveys. These surveys are traditionally used to estimate and validate travel demand models, and Dr. Bills' work is the first step toward developing travel models capable of reflecting the preferences and behaviors of disadvantaged travelers and fine-grain transportation equity outcomes.

Dr. Bills also works to advance accessibility measurement for transportation project evaluation and develops strategies for ranking alternative transportation plans using equity-based criteria. Her research aims to create transportation systems that serve all members of society, regardless of their socio-economic status, and her work has the potential to contribute to more equitable transportation policies and practices.

Kevin DeGood, Director of Infrastructure Policy at American Progress
Kevin DeGood focuses on how highway, transit, aviation, and maritime policy affect America's global competitiveness, access to opportunity for diverse communities, and environmental sustainability.

Before joining American Progress, Mr. DeGood served as the deputy policy director at Transportation for America, where he conducted research, provided legislative analysis, and advanced T4 campaign priorities with congressional leaders. Additionally, he served as the director of legislative affairs for Simon and Company, Inc., a federal affairs firm that specializes in representing municipal governments and transit authorities.

Kevin DeGood holds a Master of Public Policy from the University of Southern California and a Bachelor of Arts from the University of North Carolina at Chapel Hill. He is the author of Thinking Outside the Farebox: Creative Approaches to Financing Transit Projects.

DISCUSSION:
These presentations will be followed by an open discussion where ETC members can ask questions and the panelists can collaboratively answer. SCAG staff will be providing a separate presentation to the Committee, also at its April 27, 2023 meeting, on a separate item regarding draft Guiding Principles for Emerging Technology for inclusion in Connect SoCal 2024, the Regional Transportation Plan and Sustainable Communities Strategy. Several of these draft principles explicitly or implicitly incorporate equity in their definition.

Moving forward, when engaging with new and emerging technologies and innovations, staff will continue to engage in policy discussions with the Regional Council and Policy Committees and consider questions such as the following.

1. How can we ensure equitable access to emerging technologies across various socio-economic groups?
2. In what ways can emerging technologies be used to specifically address and alleviate existing inequalities? Similarly, in what ways can technologies exacerbate existing inequalities?
3. What role should governments and policymakers play in ensuring that the benefits of emerging technologies are distributed fairly?
4. What ethical considerations should be integrated to ensure inclusiveness, particularly when designing pilots/studies and deploying emerging technologies?
5. How can public and private partnerships be leveraged to promote equitable access to opportunities created by emerging technologies?
6. How can we measure the impact of emerging technologies on equity, and what indicators should be prioritized for monitoring progress?
7. Are there any examples of successful initiatives or policies in California that have led to positive outcomes/improved equity in the adoption of emerging technologies?
8. How can industry leaders collaborate with educational institutions to advance technologies and address the widening skill gaps in the workforce?

FISCAL IMPACT:

No fiscal impact.

		EXECUTIVE DIRECTOR'S APPROVAL
To:	Emerging Technologies Committee (ETC)	
From:	Javier Silva, Assistant Regional Planner (213) 630-1508, silva@scag.ca.gov	*Kome Ajise*
Subject:	Guiding Principles for Emerging Technology	

RECOMMENDED ACTION:
Informational Only - No Action Required

STRATEGIC PLAN:
This item supports the following Strategic Plan Goal 1: Produce innovative solutions that improve the quality of life for Southern Californians. 2: Advance Southern California's policy interests and planning priorities through regional, statewide, and national engagement and advocacy.

EXECUTIVE SUMMARY:
As mobility technology continues to accelerate, local agencies and leaders across the SCAG region will increasingly face the challenge of making informed decisions regarding emerging technologies. The lack of adequate information regarding the impacts of new technologies on communities may pose significant challenges. To assist in this decision-making process, SCAG staff has developed a set of Guiding Principles for Emerging Technology to help staff and local leaders evaluate emerging mobility technologies. These principles can serve as an objective framework, to be adapted as needed by local jurisdictions. The principles represent an approach to emerging technology that will be integrated into the 2024 Regional Transportation Plan/Sustainable Communities Strategies ("2024 RTP/SCS," "Connect SoCal 2024" or "Plan") upon Plan adoption by the Regional Council. Connect SoCal 2024 will serve as a comprehensive blueprint for the region's transportation needs, including the development and deployment of emerging technologies. Upon adoption of the Plan, these guiding principles will also serve as a framework for SCAG to guide policy discussion surrounding emerging mobility technologies.

CONTEXT WITHIN CONNECT SOCAL 2020 AND 2024
During the development of the 2020 Regional Transportation Plan/Sustainable Communities Strategies ("Connect SoCal 2020" or "2020 Plan"), SCAG staff identified San Francisco's Emerging Mobility Guiding Principles[1] as a reference of guiding principles, and recommended SCAG develop

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[1] San Francisco County Transportation Authority Emerging Mobility Guiding Principles:

its own set of principles. Additionally, the Connect SoCal 2020 Emerging Technology Technical Report recommended a set of policies organized around land use, street design, pricing, and system management regarding emerging technologies. The policies were designed to enhance current and future Connect SoCal plans and serve as a model for local jurisdictions and agencies to support the implementation of the 2020 Plan.

For Connect SoCal 2024, SCAG established three Policy Subcommittees to provide guidance on strategies and priorities. One of these subcommittees, the Next Generation Infrastructure (NGI) Subcommittee, produced recommendations regarding the future of mobility and its policy implications. These recommendations were submitted within a white paper[2] to the Joint Policy Subcommittee on March 2, 2023. The recommendations applicable to the topic of Emerging Technology are:

- Ensure that deployment of new technologies support people's needs and address larger shared goals like advancing equitable access and reducing traffic fatalities and serious injuries.
- Plan and manage the transportation system more like an investor, including asserting a role in the management of the transportation digital realm.

Additionally, within its white paper, the Racial Equity and Regional Planning Subcommittee produced a recommendation with relevance to the collection of data, which is critical for making informed decisions about emerging technologies.

- Incorporate equity centered best practices in data collection to ensure that data assessments reflect community needs, disaggregate data by race/ethnicity and other important demographic factors, ground truth data, widely distribute data to impacted stakeholders, and incorporate community perspective in data-informed decision making.

The development of these Guiding Principles aligns with both Connect SoCal 2020 efforts and recommendations by the Policy Subcommittees for the Connect SoCal 2024 update.

GUIDING PRINCIPLES BACKGROUND
To develop SCAG's set of guiding principles, Staff evaluated guiding principles and policies from cities and agencies around the Country as a reference. One of the examples used was San Francisco's Mobility Guiding Principles, which were developed by the San Francisco County Transportation Authority (SFCTA) in partnership with the San Francisco Municipal Transportation Agency (SFMTA). The principles focused on collaboration, safety, transit, congestion, sustainability, and equitable access.

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https://www.sfcta.org/policies/emerging-mobility#panel-guiding-principles
[2] NGI Subcommittee White Paper: https://scag.iqm2.com/Citizens/FileOpen.aspx?Type=14&ID=2397&Inline=True

Additionally, staff utilized the Shared Mobility Principles for Livable Cities[3] and Pittsburg's Shared + Autonomous Mobility Principles[4] as an example. Both principles place emphasis on the prioritization of equity within the transportation world.

Staff shared with the Emerging Technologies Committee (ETC) a receive and file staff report on February 23, 2023[5] regarding the reference materials discussed in this section.

DRAFT GUIDING PRINCIPLES FOR EMERGING TECHNOLOGY

1. **Equity:** Technology should eliminate barriers that may exist based on factors such as race, income, gender, age, language barriers, disability, or geography to ensure people can live a healthy and prosperous life[6].
2. **Accessibility:** Infrastructure and technologies should be designed to provide equal access to mobility, employment and economic opportunity, education, health, and other quality of life opportunities.

3. **Safety:** Technology should be developed with safety as a high priority and strive to reduce the number of fatalities and serious injuries occurring on our mobility networks[7].

4. **Sustainability:** Technology should reduce the environmental impact of the transportation network over its entire life cycle, and support the transition to zero-emission mobility.

5. **Integration:** Technology should connect seamlessly into existing mobility infrastructure, such as roads, bridges, and public transit, to create a cohesive, interoperable network. This includes considering the impacts of proposed technology on modal choices, emergency vehicle response times, and transit performance.

6. **Adaptivity:** Technology should be efficient and responsive to ensure that it remains up-to-date and effective to meet the evolving needs of users and stakeholders.

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[3] Shared Mobility Principles: https://www.sharedmobilityprinciples.org/

[4] Pittsburgh Shared + Autonomous Mobility Principles: https://apps.pittsburghpa.gov/redtail/images/5172_Pittsburgh_Shared_and_Autonomous_Mobility_Principles_03_01_19.pdf

[5] Staff Report: https://scag.ca.gov/sites/main/files/file-attachments/etc-022323-fullagn.pdf?1676597450,#page=16

[6] Based on SCAG's Special Committee on Equity and Social Justice's definition of racial equity. https://scag.ca.gov/our-work-inclusion-diversity-equity-and-awareness#:~:text=%E2%80%9CAs%20central%20to%20SCAG's%20work,participate%20fully%20in%20civic%20life.%E2%80%9D

[7] Based on SCAG's 2023 Transportation Safety Priorities. https://scag.ca.gov/sites/main/files/file-attachments/rc020223fullpacket.pdf?1674781193,#page=18

7. **Data privacy and security:** Technology should ensure the privacy and security of user data while incorporating equity centered best practices during data collection and integrating any requirements from applicable data specifications[8].

8. **Transparency and Accountability:** Technologies providers should share relevant data with local jurisdictions for the public and local agencies to effectively evaluate the services' benefits and impacts on communities.

9. **Resilience:** Technology should increase the ability of the SCAG region's transportation systems to anticipate and effectively respond to changing conditions, acute shocks, and chronic stressors[9].

10. **Workforce Development investments:** Recognizing that technology has the capacity to facilitate economic growth, investments in technology should improve workforce development opportunities where these technologies are deployed.

PREVIOUS PRESENTATIONS AND STAKEHOLDER REVIEW

On March 9, 2023, SCAG staff presented to SCAG's Equity Working Group on principles 1 and 2, equity and accessibility. Additionally, the principles underwent internal vetting by SCAG staff and was presented to executive SCAG planning staff. The principles were shared with SCAG's Regional Transit Technical Advisory Committee (RTTAC)[10] and County Transportation Commission's (CTC) Planning Directors to receive feedback. Additionally, SCAG staff reviewed feedback received on the draft principles with the CTC Planning Directors on April 18, 2023.

COMMENTS RECEIVED AND STAFF RESPONSE

SCAG staff have received several comments during the review process. The principles were edited to meet the needs of received comments, therefore comments may reflect previous iterations of the principles.

1. Equity and Accessibility principles: Consider including gender and age.
   a. Staff Response: SCAG staff incorporated language into principles.
2. Equity and Accessibility principles: Consider including language referencing and/or acknowledging the digital divide.
   a. Staff Response: SCAG staff incorporated language into principles.

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[8] Based on SCAG's Racial Equity and Regional Planning Subcommittee's recommendation regarding data. https://scag.ca.gov/sites/main/files/file-attachments/jpc030223fullpacket.pdf?1677214791,#page=34
[9] Based on SCAG's Resilience and Conservation Subcommittee's definition of Resilience. https://scag.ca.gov/sites/main/files/file-attachments/jpc030223fullpacket.pdf?1677214791,#page=79
[10] RTTAC is made up of representatives from the Region's transit operators.

3. Safety Principle: "Traffic fatalities" seems to focus on vehicular fatalities occurring on roadways, and should consider bus/rail dedicated corridors as well. Consider the removal of the word "traffic" and revise to "fatalities and serious injuries occurring on our mobility networks".
   a. Staff Response: SCAG staff incorporated suggestion into the language of the principle.
4. Data Privacy and Security principle: Consider providing more detail regarding "equity-centered" best practices.
   a. Staff Response: SCAG staff provided detail regarding "equity-centered" best practices in this staff report. Principle's footnote also cites SCAG's Racial Equity and Regional Planning Subcommittee's recommendation which contains details about "equity-centered" best practices.
5. Efficiency Principle: Clarify the definition of efficiency. With respect to planning, "efficiency" is associated with improving operations and throughput. However, the intent for this principle is unclear. Consider revising the description to correlate with "Resilience" or "Flexibility", to accommodate the future proofing of technology.
   a. Staff Response: Upon review, SCAG staff replaced the term "efficiency" with "adaptivity".
6. Resilience: While the intent of this principle is to state that technology would assist with climate change/adaptation issues, it is unclear as to how this would look in practice.
   a. Staff Response: In practice, the principle seeks to ensure that technologies can aid the transportation system in responding to changing conditions. For example, it's important that electric vehicle (EV) charging stations can operate under inclement weather conditions.
7. Resilience: Clarify the phrase "Creating multiple opportunities for…" Unclear if this principle is suggesting the system needs redundancies to avoid failures.
   a. Staff Response: Upon review, SCAG staff removed this portion of language from the principle as it is not intended to prescribe a specific approach.

NEXT STEPS

The Guiding Principles for Emerging Technology will be presented to the Transportation Committee on June 1st as part of a series of Connect SoCal 2024 information items. Staff will also work on integrating these principles into the Connect SoCal 2024 documents, which will be formally adopted with the approval of the Plan by the Regional Council in April 2024.

With Plan adoption, the principles will serve as a guide for policy discussions regarding emerging technologies within SCAG's programs and as a template for SCAG and its partner agencies. However, it is important to note that these principles should be considered as a starting point for agencies and viewed as building blocks that can be adapted to fit the unique needs of each agency.

FISCAL IMPACT:

None.

ATTACHMENT(S):

1. PowerPoint Presentation - Guiding Principles for Emerging Technology Slides

SCAG Emerging Technologies Committee: Guiding Principles for Emerging Technology

April 27, 2023
Javier Silva, Associate Regional Planner

WWW.SCAG.CA.GOV

GUIDING PRINCIPLES FOR EMERGING TECHNOLOGY

An Overview and Introduction

Overview

What are *Guiding Principles*?

- Guiding principles are a comprehensive set of considerations that leaders and stakeholders should consider when engaging with new technologies

Why are the *Guiding Principles* important?

- Technology is a major disruptor, SCAG as regional MPO can advocate for best practices and provide resources

Why is SCAG writing these *Principles*?

- Some cities, counties, and local agencies have a demonstrated need for guidance on how to interact with new technologies and implement accordingly

Context

Connect SoCal 2020

- SCAG staff recommended SCAG develop its own set of guiding principles for emerging technology.

Connect SoCal 2024

- Next Generation Infrastructure (NGI) Subcommittee produced recommendations regarding the future of mobility and its policy implications.
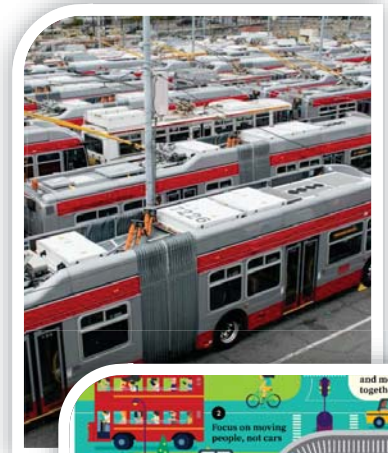
Development

Examples

- SCAG Staff evaluated guiding principles and policies from cities and agencies around the Country as a reference.

Review

- SCAG Staff shared principles with internal and external working groups to develop principles.

TECHNOLOGY GUIDING PRINCIPLES

Draft Principles for Consideration

1. **Equity**
2. **Accessibility**
3. **Safety**
4. **Sustainability**
5. **Integration**
6. **Adaptive**
7. **Data Privacy and Security**
8. **Transparency and Accountability**
9. **Resilience**
10. **Workforce Development Investments**

Draft Principles for Consideration

1. **Equity***: Technology should eliminate barriers that may exist based on factors such as race, income, gender, age, language barriers, disability, or geography to ensure people can live a healthy and prosperous life.*

2. **Accessibility:** *Infrastructure and technologies should be designed to provide equal access to mobility, employment and economic opportunity, education, health and other quality of life opportunities.*

3. **Safety:** *Technology should be developed with safety as a high priority and strive to reduce the number of fatalities and serious injuries occurring on our mobility networks.*

4. **Sustainability:** *Technology should reduce the environmental impact of the transportation network over its entire life cycle and support the transition to zero-emission mobility.*

5. **Integration:** *Technology should connect seamlessly into existing mobility infrastructure, such as roads, bridges, and public transit, to create a cohesive, interoperable network. This includes considering the impacts of proposed technology on modal choices, emergency vehicle response times, and transit performance.*
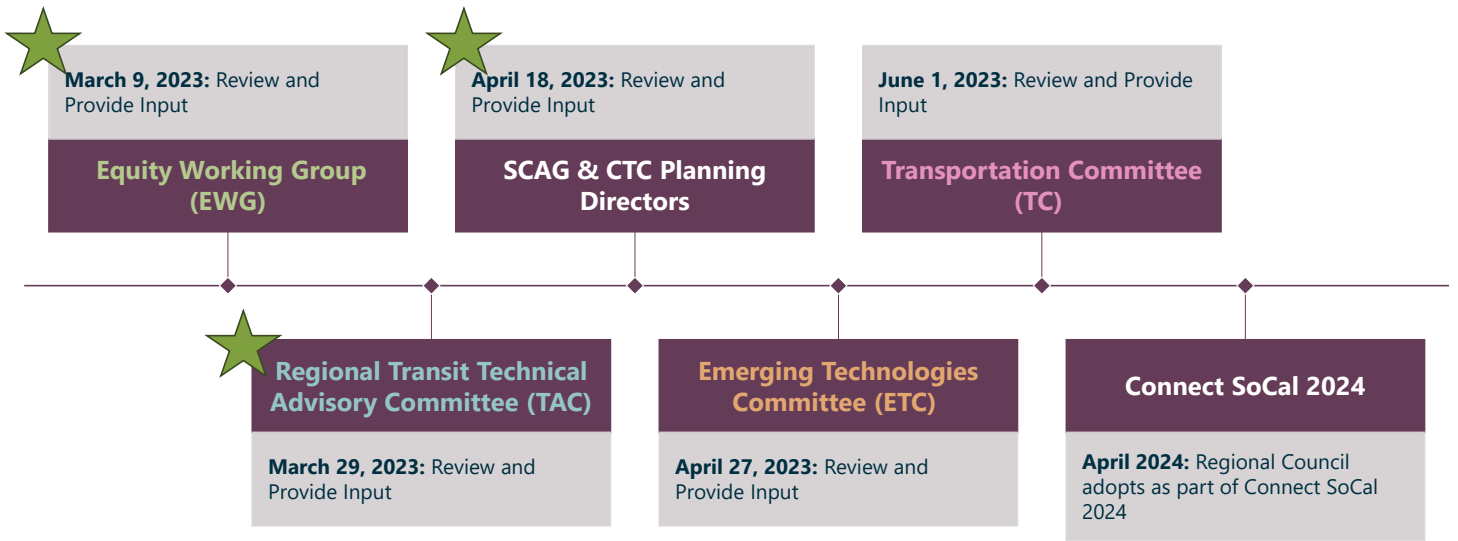
Draft Principles for Consideration

6. **Adaptability**: *Technology should be efficient and responsive to ensure that it remains up-to-date and effective to meet the evolving needs of users and stakeholders.*

7. **Data Privacy and Security**: *Technology should ensure the privacy and security of user data while incorporating equity centered best practices during data collection and integrating any requirements from applicable data specifications*

8. **Transparency and Accountability**: *Technologies providers should share relevant data with local jurisdictions in order for the public and local agencies to effectively evaluate the services' benefits and impacts on communities.*

9. **Resilience**: *Technology should increase the ability of the SCAG region's transportation systems to anticipate and effectively respond to changing conditions, acute shocks, and chronic stressors.*

10. **Workforce Development**: *Recognizing that technology has the capacity to facilitate economic growth, investments in technology should improve workforce development opportunities where these technologies are deployed.*

GUIDING PRINCIPLES TIMELINE

Anticipated Next Steps and Critical Milestones

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Next Steps and Critical Milestones

March 9, 2023: Review and Provide Input

Equity Working Group (EWG)

April 18, 2023: Review and Provide Input

SCAG & CTC Planning Directors

June 1, 2023: Review and Provide Input

Transportation Committee (TC)

Regional Transit Technical Advisory Committee (TAC)

March 29, 2023: Review and Provide Input

Emerging Technologies Committee (ETC)

April 27, 2023: Review and Provide Input

Connect SoCal 2024

April 2024: Regional Council adopts as part of Connect SoCal 2024

THANK YOU!

For any questions, please contact Javier Silva at silva@scag.ca.gov

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