INNOVATING FOR A BETTER TOMORROW

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

HYBRID (IN-PERSON & REMOTE PARTICIPATION) *

ENERGY AND ENVIRONMENT COMMITTEE

In-Person & Remote Participation*
Thursday, February 2, 2023
9:30 a.m. – 11:30 a.m.

Members of the Public are Welcome to Attend and Participate In-Person:
SCAG Main Office – Policy A Meeting Room
900 Wilshire Blvd., Ste. 1700
Los Angeles, CA 90017

To Attend and Participate on Your Computer:
https://scag.zoom.us/j/317727062

To Attend and Participate by Phone:
Call-in Number: 1-669-900-6833
Meeting ID: 317 727 062

PUBLIC ADVISORY

Given the declared state of emergency (pursuant to State of Emergency Proclamation dated March 4, 2020) and local public health directives imposing and recommending social distancing measures due to the threat of COVID-19, and pursuant to Government Code Section 54953(e)(1)(A), the meeting will be conducted in a hybrid manner (both in-person and remotely by telephonic and video conference).

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

SCAG is providing multiple options to attend the meeting:

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

To Attend on Your Computer

1. Click the following link: https://scag.zoom.us/j/317727062
1. 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.
2. Select "Join Audio via Computer."
3. 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

1. Call **(669) 900-6833** to access the conference room. Given high call volumes recently experienced by Zoom, please continue dialing until you connect successfully.
2. Enter the **Meeting ID: 317 727 062**, followed by **#**.
3. Indicate that you are a participant by pressing **#** to continue.
4. You will hear audio of the meeting in progress. Remain on the line if the meeting has not yet started.

Instructions for Participating and Public Comments

You may participate and submit public comments in three (3) ways:

1. **<u>In Writing</u>: Submit written comments via email to: EECPublicComment@scag.ca.gov by 5pm on Wednesday, February 1, 2023.** 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. All written comments received after 5pm on Wednesday, February 1, 2023 will be announced and included as part of the official record of the meeting.

2. **<u>Remotely</u>:** If participating in real time via Zoom or phone, during the Public Comment Period (Matters Not on the Agenda) or at the time the item on the agenda for which you wish to speak is called, use the "raise hand" function on your computer or *9 by phone and wait for SCAG staff to announce your name/phone number. Limit oral comments to 3 minutes, or as otherwise directed by the presiding officer.

3. **<u>In-Person</u>:** 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 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. Limit oral comments to 3 minutes, or as otherwise directed by the presiding officer.

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.

EEC - Energy and Environment Committee

Members – February 2023

1. **Hon. Deborah Robertson**
   EEC Chair, Rialto, RC District 8

2. **Sup. Luis Plancarte**
   EEC Vice Chair, Imperial County

3. **Hon. Damon L. Alexander**
   San Bernardino, SBCTA

4. **Hon. Cindy Allen**
   Long Beach, RC District 30

5. **Hon. Ana Beltran**
   Westmorland, ICTC

6. **Hon. Daniel Brotman**
   Glendale, AVCJPA

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

8. **Hon. Robert Copeland**
   Signal Hill, GCCOG

9. **Hon. Maria Davila**
   South Gate, GCCOG

10. **Hon. Ned Davis**
    Westlake Village, LVMCOG

11. **Hon. Rick Denison**
    Yucca Valley, SBCTA

12. **Hon. Julian Gold**
    Beverly Hills, WSCCOG

13. **Hon. Shari Horne**
    Laguna Woods, OCCOG

14. **Hon. Britt Huff**
    Rolling Hills Estates, SBCCOG

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

16. **Hon. Joe Kalmick**
    Seal Beach, RC District 20

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

18. **Hon. Vianey Lopez**
    Ventura County

19. **Hon. Cynthia Moran**
    Chino Hills, SBCTA

20. **Hon. Oscar Ortiz**
    Indio, RC District 66

21. **Hon. Randall Putz**
    Big Bear Lake, RC District 11

22. **Hon. Jennifer Stark**
    Claremont, SGVCOG

23. **Hon. Tamala Takahashi**
    Burbank, SFVCOG

24. **Hon. Connor Traut**
    Buena Park, OCCOG

25. **Hon. Dale Welty**
    Canyon Lake, WRCOG

26. **Hon. Edward Wilson**
    Signal Hill, GCCOG

ENERGY AND ENVIRONMENT COMMITTEE AGENDA

Southern California Association of Governments
Hybrid (In-Person and Remote Participation)
900 Wilshire Boulevard, Suite 1700 - Policy A Meeting Room
Los Angeles, CA 90017
Thursday, February 2, 2023
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 Deborah Robertson, Chair)

PUBLIC COMMENT PERIOD (Matters Not on the Agenda)
This is the time for persons to comment on any matter pertinent to SCAG's jurisdiction that is ***not*** listed on the agenda. 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. Public comment for items listed on the agenda will be taken separately as further described below.

General information for all public comments: Members of the public have the option to participate in the meeting via written or verbal comments. Members of the public are encouraged, but not required, to submit written comments by sending an email to: EECPublicComment@scag.ca.gov by 5pm on Wednesday, February 1, 2023. Such comments will be transmitted to members of the legislative body and posted on SCAG's website prior to the meeting. Any writings or documents provided to a majority of the Energy and Environment Committee regarding any item on this agenda (other than writings legally exempt from public disclosure) are available at the Office of the Clerk, located at 900 Wilshire Blvd., Suite 1700, Los Angeles, CA 90017 during normal business hours and/or by contacting the office by phone, (213) 630-1420, or email to aguilarm@scag.ca.gov. Written comments received after 5pm on Wednesday, February 1, 2023, will be announced and included as part of the official record of the meeting. Members of the public wishing to verbally address the Energy and Environment Committee in real time during the meeting will be allowed up to a total of 3 minutes to speak on items on the agenda, with the presiding officer retaining discretion to adjust time limits as necessary to ensure efficient and orderly conduct of the meeting. The presiding officer has the discretion to equally reduce the time limit of all speakers based upon the number of comments received. Members of the public may verbally address the Energy and Environment Committee during the meeting. 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 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. Limit oral comments to 3 minutes, or as otherwise directed by the presiding officer. If you are attending remotely and desire to speak on an item listed on the agenda, please wait for the chair to call the item and then indicate your interest in offering public comment by either using the "raise hand" function on your computer or pressing *9 on your telephone. For purpose of providing public comment for items listed on the Consent Calendar (if there is a Consent Calendar), please indicate that you wish to speak when the Consent Calendar is called; items listed on the Consent Calendar will be acted upon 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.

REVIEW AND PRIORITIZE AGENDA ITEMS

CONSENT CALENDAR

Approval Items

1. Minutes of the Meeting – January 5, 2023 PPG. 7

Receive and File

2. Energy and Environment Committee Outlook and Future Agenda Items PPG. 16

3. Status Update on Air Quality Planning and Transportation Conformity Challenges in SCAG Region PPG. 22

INFORMATION ITEMS

4. Brownfields Expert Panel 60 Mins. PPG. 37

(Kim Clark, Planning Supervisor, SCAG)

5. Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act: Climate Resilience Funding Opportunities 20 Mins. PPG. 39

(Leslie Pollner, Holland & Knight)

6. Connect SoCal 2024: Draft SCS Technical Methodology 15 Mins. PPG. 109

(Camille Guiriba, Senior Regional Planner, SCAG)

7. Connect SoCal 2024 Program Environmental Impact Report (State Clearinghouse No.: 2022100337): Status Update on Notice of Preparation Comments 10 Mins. PPG. 117

(Karen Calderon, Senior Regional Planner, SCAG)

CHAIR'S REPORT

(The Honorable Deborah Robertson, Chair)

STAFF REPORT

(Rachel Wagner, Regional Affairs Officer, SCAG Staff)

ANNOUNCEMENTS

ADJOURNMENT

Southern California Association of Governments
February 2, 2023

MINUTES OF THE MEETING
ENERGY AND ENVIRONMENT COMMITTEE
THURSDAY, JANUARY 5, 2023

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), given the declared state of emergency (pursuant to State of Emergency Proclamation dated March 4, 2020) and local public health directives imposing and recommending social distancing measures due to the threat of COVID-19, and pursuant to Government Code Section 54953(e)(1)(A). A quorum was present.

Members Present

Hon. Deborah Robertson, Rialto (Chair)	**District 8**
Sup. Luis Plancarte (Vice Chair)	**Imperial County**
Hon. Cindy Allen, Long Beach	District 30
Hon. Daniel Brotman, Glendale	AVCJPA
Hon. Margaret Clark, Rosemead	SGVCOG
Hon. Robert Copeland, Signal Hill	GCCOG
Hon. Maria Davila, South Gate	GCCOG
Hon. Rick Denison, Yucca Valley	SBCTA
Hon. Julian Gold, Beverly Hills	WSCCOG
Hon. Shari Horne, Laguna Woods	OCCOG
Hon. Britt Huff, Rolling Hills Estates	SBCCOG
Hon. Dan Kalmick, Huntington Beach	OCCOG
Hon. Joe Kalmick, Seal Beach	District 20
Hon. Elaine Litster, Simi Valley	VCOG
Hon. Vianey Lopez,	Ventura County
Hon. Oscar Ortiz, Indio	CVAG
Hon. Randall Putz, Big Bear Lake	District 11
Hon. Connor Traut, Buena Park	OCCOG
Hon. Dale Welty, Canyon Lake	WRCOG

Hon. Edward H.J. Wilson, Signal Hill	GCCOG

Members Not Present

Hon. Ana Beltran, Westmoreland	ICTC
Hon. Ned Davis, Westlake Village	LVMCOG
Hon. Cynthia Moran, Chino Hills	SBCTA

CALL TO ORDER AND PLEDGE OF ALLEGIANCE

Chair Deborah Robertson called the meeting to order at 9:33 a.m. Rick Denison, Yucca Valley, SBCTA, led the Pledge of Allegiance. Staff confirmed a quorum was present.

PUBLIC COMMENT PERIOD

Chair Deborah Robertson opened the public comment period and provided detailed instructions on how to provide public comments. She noted that this was the time for members of the public to offer comment for matters that are within SCAG's jurisdiction but are not listed on the agenda.

She reminded the public to submit comments via email to EECPublicComment@scag.ca.gov. She noted that public comments received via email after 5pm on Wednesday, January 4, 2023, would be announced and included as part of the official record of the meeting.

SCAG staff confirmed 19 written comments had been received before the 5:00 p.m. deadline on January 4, 2023, and had been transmitted to members.

Seeing no additional public comment, Chair Robertson 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.

STAFF REPORT

Rachel Wagner, Regional Affairs Officer, provided an update regarding the Joint Policy Committee meeting in March to discuss the Connect SoCal 2024 Subcommittees. She stated each subcommittee met three times since September and that the Resilience & Conservation and Racial Equity & Regional Planning meetings would conclude in January. She stated the Next Generation

Infrastructure subcommittee would conclude with a final meeting in February. She stated the culmination of the subcommittee's discussions would be a white paper and draft recommendations. She stated these recommendations would address emerging issues within Connect SoCal 2024 which would be shared at the Joint Policy Committee meeting in March 2023. Ms. Wagner also provided an update on elections, asking members to keep an eye out for election notices as they worked with SCAG's subregional organizations (COGs) to fill vacancies on the Regional Council and Policy Committees created by the November 2022 General Election. Furthermore, she shared SCAG was co-sponsoring and/or attending the following events and members were invited:

- South Coast Air Quality Management District (SCAQMD) Clean Air Awards, Friday, January 6, 2023 at 11:30 a.m.; and
- State of the Port of Los Angeles, on Thursday, January 19, 2023 at 11:30 a.m.

Lastly, she called attention to Item 3 on the Consent Calendar. She stated each month, staff would update this item as needed to reflect the anticipated outlook for the Committee, which was subject to change. She stated Sarah Jepson, SCAG Planning Director would provide the overview for that item.

Sarah Jepson, Planning Director at SCAG addressed the committee regarding Item No. 3 on the Consent Calendar. She stated this item was an outlook of the agenda items they anticipated bringing forth to the committee throughout the year. She stated this had been developed with both the Chair and Vice Chair to ensure they were addressing the business and major policy priorities. She went through the presentation, describing the structure and content of the items in the 3 columns on the slides.

Policy Committee Member Oscar Ortiz, Indio, CVAG, stated since they were talking about lithium batteries and how those can be renewable in the future, he wanted to include a discussion on hydrogen power and how it could be used as an alternative to battery storage. He stated he wanted them to look at all options when looking at energy storage.

Ms. Jepson shared the Emerging Technology Committee was discussing these issues. She stated they were working on a clean transportation technology policy and would make sure that item was brought forward as an information item to EEC.

Policy Committee Member Julian Gold, Beverly Hills, WSCCOG stated he wanted to weigh in on member Ortiz's comments. He stated he was the Chair of the Board on Clean Power Alliance, and thought the issue around energy storage, unfortunately was an issue that was greater than just them. He stated if they were really going to entertain that as a significant conversation it would need to involve investor-owned utilities. He stated the issues were important, but they needed to know it was beyond their scope, and in order to engage in that conversation they needed large stakeholder conversations if they wanted to effectuate change that would make a difference for their residents.

CONSENT CALENDAR

Approval Items

1. Minutes of the Meeting – November 3, 2022

Receive and File

2. Regional Energy and Environment Committee Outlook and Future Agenda Items
3. Final 2022 Air Quality Management Plan (AQMP)
4. CARB Final 2022 Scoping Plan
5. SCAG's Draft Digital Action Plan
6. SCAG Climate Action Resolution Quarterly Update - 2nd Annual Update

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

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

AYES:	Allen, Brotman, Clark, Copeland, Davila, Denison, Gold, Horne, Huff, D. Kalmick, J. Kalmick, Litster, Lopez, Ortiz, Plancarte, Putz, Robertson, Traut, and Welty (19)
NOES:	None (0)
ABSTAINS:	None (0)

INFORMATION ITEMS

8. Draft Regional Advance Mitigation Planning (RAMP) White Paper

India Brookover, Senior Regional Planner, introduced Elizabeth O'Donoghue, Director of the Sustainable and Resilient Communities Strategy in The Nature Conservancy (TNC) Climate Program.

Elizabeth O'Donoghue, provided a presentation to the committee on the findings of the draft RAMP

White Paper. She discussed the purpose of the White Paper, RAMP Framework, models and approach, ways to support existing programs, agency and stakeholder roles and key questions and information gaps.

Chair Robertson opened the Public Comment Period for Item 8.

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

ACTION ITEMS

9. Draft Regional Advance Mitigation Planning (RAMP) Policy Framework

Chair Robertson opened the Public Comment Period for Item 9.

The following members of the public provided comments in support of Item No. 9 and requested a seat for environmental representatives on the proposed advisory committee:

- Melanie Schlotterbeck, Friends of Harbors, Beaches and Parks
- Jack Eidt, Co-Founder of SoCal 350
- Richard Lambros, Southern California Leadership Council
- Chris Wilson, Los Angeles County Business Federation
- Carlos Rodriguez, BI Southern California
- Dan Silver, Endangered Habitats League in Los Angeles
- Connor Medina, Government Affairs Manager, Orange County Business Council
- Robin Smith, Conservation Practitioner with the Diamond Bar Preservation Foundation
- Jennifer Hernandez
- Luis Portillo, President and CEO of the San Gabriel Economic Partnership
- Claire Schlotterbeck, Executive Director of non-profit Hills for Everyone
- Elizabeth Reid Weinscoat, Center for Biological Diversity
- Michael Lewis, Senior Vice President of the Construction Industry Coalition on Air
- Moises Cisneros, Co-Lead for the 30x30 Inland Deserts Working Group

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

Policy Committee Member Britt Huff, Rolling Hills Estates, SBCCOG, expressed her appreciation from the response from the public stating it was encouraging to see the level of support and the interest expressed in being part of the Greenprint committee.

Kimberly Clark, Planning Supervisor, presented Item No. 9. She discussed Draft RAMP Policy Framework regional goals like facilitating infrastructure, expediting project delivery, improving predictability for project funding and examining potential environmental impacts in early stages of project development. Additionally, Ms. Clark discussed SCAG's role in supporting RAMPs such as being a resource for local partners and focusing policy on the transportation sector and related infrastructure. She also stated SCAG's role was to identify ways to support implementing agencies establish or supplement regional conservation and mitigation banks. Ms. Clark also discussed the timeline for the next steps.

Policy Committee Member Clark stated she was in favor of putting an environmental technical person on the committee. She asked if the committee was required to have unanimous consent on everything.

SCAG staff member Clark clarified the committee would not be a voting body, rather they would advise SCAG on decision making.

Policy Committee Member Clark stated she wanted to make a motion to approve staff's report [and include] that an elected official could be [on the TAC] instead of staff and that a member of the environmental community with RAMP experience be added to the committee. Her motion was seconded by Policy Committee Member Daniel Brotman, Glendale, AVCJPA.

Sarah Jepson stated she wanted to make sure before they moved forward with the vote that staff was clear on what they were voting on. She then re-stated what was in the policy framework along with the adjustments they understood they wanted made. She stated she would be reading from page 137 of the packet which was page 9 of the policy framework. She read the following: "The technical advisory committee will be comprised of at least one ~~staff~~ [she stated they would strike out the word "staff" this way they could have an elected official or a staff member selected] representative from: each county transportation commission in the SCAG region, Caltrans, each county government in the SCAG region, the City of Los Angeles, and two city governments within each county in the SCAG region. This technical advisory committee shall be open to the public and seek input from the development community, non-governmental conservation groups, regional conservation agencies, researchers, and other stakeholders." She stated the revision that had been made was the strikeout of the word staff. She asked if there were any other changes before, they moved forward with the vote.

Policy Committee Member Clark clarified that her motion also included the addition of a member of the environmental community with RAMP experience to the committee.

A MOTION was made (Clark) to recommend that the Energy & Environment Committee (EEC) recommend that the Regional Council approve the RAMP Policy Framework and RAMP White Paper and that the technical advisory committee be comprised of at least one representative (could be elected official or staff member) from each county transportation commission in the SCAG region, Caltrans, each county government in the SCAG region, the City of Los Angeles, and two city governments within each county in the SCAG region. Additionally, the committee would also include a member of the environmental community with RAMP experience. Motion was SECONDED (Brotman) and passed by the following votes:

AYES: Allen, Brotman, Clark, Copeland, Davila, Denison, Gold, Horne, Huff, D. Kalmick, J. Kalmick, Litster, Lopez, Ortiz, Plancarte, Putz, Robertson, Traut, and Welty (19)

NOES: None (0)

ABSTAINS: None (0)

10. Release of Transportation Conformity Analysis of Draft Connect SoCal 2020 Amendment #3 and 2023 Federal Transportation Improvement Program Consistency Amendment #23-03 for Public Review and Comment

Chair Robertson opened the Public Comment Period for Item 10.

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

Lijin Sun, Principal Planner, presented Item No. 10. She stated the entire SCAG region was under the transportation conformity lockdown. She stated staff had provided a comprehensive status update at the July 2022 EEC meeting on the conformity lockdown, multi-agency efforts to resolve it and staff proactive amendments to the RTP and FTIP to reduce its impacts. She stated significant impact had been made, such that the conformity lockdown was expected to be fully lifted and resolved in April 2023. She reported that to reduce this impact, SCAG staff had proactively initiated the development of a Connect SoCal Amendment #3 and 2023 FTIP Consistency Amendment #23-03. She stated these items needed to demonstrate conformity, and staff had confirmed it conformed to the regulation requirements. Furthermore, she explained the next step in the process was public review and that SCAGs Transportation Committee was considering recommending approval to the Regional Council of the release of the amendment documents for 30-day public review and comment period. She stated staff at EEC was seeking the committee’s recommendation that the Regional Council on the same day approve the release of the transportation conformity analysis as part of the amendments for the 30-day comment period.

A MOTION was made (Plancarte) to recommend that the Regional Council (RC) authorize the Executive Director to release the transportation conformity analysis of the draft Connect SoCal 2020 Amendment #3 and 2023 Federal Transportation Improvement Program Consistency Amendment #23-03 for public review and comment. Motion was SECONDED (Litster) and passed by the following votes:

AYES: Allen, Brotman, Clark, Davila, Denison, Horne, Huff, D. Kalmick, J. Kalmick, Litster, Lopez, Ortiz, Plancarte, Putz, Robertson, Traut, Welty and Wilson (18)

NOES: None (0)

ABSTAINS: None (0)

CHAIR'S REPORT

Chair Robertson reported the deadline for the 2023 Sustainability Awards Call for Nominations was Tuesday, January 10, and encouraged members to look into that. She stated the winners of the SCAG Sustainability Awards would be presented at the 2023 Regional Conference and General Assembly at the JW Marriott Resort & Spa in Palm Desert on May 4-5, 2023. She also reminded members that SCAG was working closely with our subregional organization (COGs) to fill vacancies on the Regional Council and Policy Committees. She stated if they or their colleagues were interested in serving, to please reach out to SCAG or subregional staff. Chair Robertson also acknowledged new committee members:

- Ventura County Supervisor, Vianey Lopez
- City of Canyon Lake, Dale Welty
- City of Claremont, Jennifer Stark

She thanked them for being on board and welcomed them to the committee. Lastly, she asked they consider moving the Chair's Report to the beginning of the agenda.

ANNOUNCEMENTS

There were no announcements.

ADJOURNMENT

There being no further business, Chair Robertson adjourned the Energy and Environment Committee meeting at 11:40 a.m.

[MINUTES ARE UNOFFICIAL UNTIL APPROVED BY THE EEC]

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ENERGY AND ENVIRONMENT COMMITTEE ATTENDANCE REPORT

2022-23

MEMBERS	Representing	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	April	May	Total Mtgs Attended To Date
Allen, Cindy	Long Beach, District 30	1	1		1	1	1		1					**6**
Beltran, Ana	Westmoreland, ICTC	0	0		0	1	1		0					**2**
Brotman, Daniel	Glendale, AVCJPA	1	1		0	1	1		1					**5**
Clark, Margaret	Rosemead, SGVCOG	1	1		1	1	1		1					**6**
Copeland, Robert	Signal Hill, GCCOG	1	1		1	1	1		1					**6**
Davila, Maria	South Gate, GCCOG	0	0	**D**	0			**D**	1					**1**
Davis, Ned	Westlake Village, LVMCOG	1	0		0		1		0					**2**
Denison, Rick	Yucca Valley, SCBTA	1	0		0	1			1					**3**
Gold, Julian	Beverly Hills, WSCCOG	1	1		0	1	1		1					**5**
Horne, Shari	Laguna Woods, OCCOG	1	1		1	1	1		1					**6**
Huff, Britt	Rolling Hills Estates, SCBCOG	1	1	**A**	1	1	1	**A**	1					**6**
Kalmick, Dan	Huntington Beach, OCCOG	1	1		1	1	1		1					**6**
Kalmick, Joe	Seal Beach, District 20	1	1		1	1	1		1					**6**
Litster, Elaine	Simi Valley, VCOG	0	1		1	1			1					**4**
Lopez, Vianey	Ventura County								1					**1**
Moran, Cynthia	Chino Hills, SBCTA	1	0	**R**	1	1	1	**R**	0					**4**
Ortiz, Oscar	Indio, CVAG	0	0		0	1	1		1					**3**
Plancarte, Luis	Imperial County	1	1		1	1	1		1					**6**
Putz, Randall	Big Bear Lake, District 11	1	0		1	1			1					**4**
Robertson, Deborah	Rialto, RC District 8	1	1	**K**	1	1	1	**K**	1					**6**
Stark, Jennifer	Claremont, SGVCOG								0					**0**
Traut, Connor	Buena Park, OCCOG	1	1		1	1	1		1					**6**
Welty, Dale	Canyon Lake, WRCOG								1					**1**
Wilson, Edward H.J.	Signal Hill, GCCOG	0	0		0	1	1		1					**3**

Southern California Association of Governments

February 2, 2023

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

To: Energy and Environment Committee (EEC)

From: Sarah Jepson, Chief Planning Officer
213-236-1955, jepson@scag.ca.gov

Subject: Energy and Environment Committee Outlook and Future Agenda Items

RECOMMENDED ACTION:
Receive and File

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

EXECUTIVE SUMMARY:

The draft Policy Development Framework ("Framework") for Connect SoCal 2024 was presented to the Energy and Environment Committee on April 7, 2022. Following the Regional Council adoption of the Framework on June 2, 2022, staff developed a 12-month look ahead for the EEC, to realize the goals and discussions committed to in the Framework and develop consensus around the policy priorities that will become final recommendations in Connect SoCal 2024. The look-ahead was also provided to the Executive Administration Committee (EAC) at the 2022 EAC Retreat and additional items were added in consultation with the EEC Chair and Vice-Chair to facilitate the implementation of Connect SoCal 2020 and provide updates to keep the committee apprised of federal and state policies and programs related to the committee's work.

The attached revised look ahead for the EEC provides updated information for the remainder of FY 2023. It was revised to reflect additional input provided by the EEC during the January 5, 2023 meeting. This includes an item added to the February agenda focused on the new federal funding programs available through the Infrastructure Investment and Jobs Act and the Inflation Reduction Act to support water, energy and climate resilience projects. In addition, an item will be added to the July agenda focused on clean energy and energy storage. The look-ahead will be updated monthly as a receive & file item, reflecting agenda items covered and any modifications needed.

BACKGROUND:

What is Connect SoCal 2024?

SCAG prepares a long-range RTP/SCS every four years which provides a vision for integrating land use and transportation for increased mobility and more sustainable growth.

SCAG's next RTP/SCS, Connect SoCal 2024, will incorporate important updates of fundamental data as well as enhanced strategies and investments based on, and intended to strengthen, the plan adopted by the SCAG Regional Council in 2020. The pillars of Connect SoCal—the *Core Vision* and *Key Connections*—are anticipated to continue into the next plan. The *Core Vision* centers on maintaining and better managing the transportation network we have for moving people and goods, while expanding mobility choices by locating housing, jobs and transit closer together and increasing investment in transit and complete streets. The *Key Connections* augment the *Core Vision* of the plan to address trends and emerging challenges. These *Key Connections* lie at the intersection of land use, transportation and innovation to accelerate progress on regional planning goals. For this plan development cycle, SCAG staff will focus on process improvements and data updates and refinements. However, in developing Connect SoCal, SCAG must continue to monitor and reexamine trends and emerging issues in order to put forth a plan that addresses the region's evolving needs, challenges and opportunities. Thus the plan will be augmented with consideration of emerging issues, to be discussed through three Policy Subcommittees in Winter 2022.

Connect SoCal 2024: Status Update

Staff is continuing with research to better understand the trends and existing conditions in the region. This phase also includes steps to understand the existing conditions and planning occurring at the local jurisdiction level through the Local Data Exchange process and engagement with County Transportation Commissions on the Project List later this year. Over the course of the next year and in the first half of 2023, SCAG staff will be seeking direction from our policy makers, through the relevant Policy Committees and three special Policy Subcommittees, on the priorities and strategies for Connect SoCal 2024 to augment and help better align plans and investments across the region.

Phases of Connect SoCal 2024 Development

Policy Development Framework for Connect SoCal 2024

In July 2021, the Executive Administration Committee convened for a strategic planning session. One action identified during that session was to create a Policy Development Framework for Connect SoCal 2024, in particular as a strategy to engage SCAG's Policy Committees in the data, emerging issues and policy recommendations that will be presented in the plan. The draft Policy

Development Framework ("Framework") for Connect SoCal 2024 was presented to the Energy and Environment Policy Committee (EEC) on April 7, 2022 and was adopted by the Regional Council at the June 2, 2022 meeting. In furtherance of the adopted Policy Development Framework, staff developed "look aheads" for each of the three Policy committees (EEC, CEHD, and TC) organized around three areas: Connect SoCal, Local Assistance Program and Regional Updates.

EEC COMMITTEE 12-MONTH LOOK AHEAD AND FRAMEWORK

Building on the Policy Framework and the commitment to creating more transparency and engagement in the policy development process, staff developed a 12-month look ahead for the Energy and Environment (EEC) Policy Committee to provide a framework and approach to the committee's agenda from July 2022 through July 2023, and to present an overview of future topics.

The framework organizes content into three programmatic areas:

1. ***Connect SoCal:*** Items within this area will center on the plan development process for 2024 and discussion of key policy issues and emerging trends for the 2024 Sustainable Communities Strategy portion of Connect SoCal. Presentations will offer best practices, lessons learned and emerging trends in key policy areas centered on fulfilling the agencies environmental requirements and meeting the region's sustainability goals with a focus on resource conservation and environmental justice. To this end, the committee received a series of presentations in 2022 on the state of water, energy, air quality, natural lands and environmental challenges to provide the planning context to inform land-use strategies, environmental analysis, and mitigation measures to be considered in Spring 2023.

2. ***Local Assistance Program:*** In this programmatic area, staff provided informational and action items related to programs that provide assistance to regional and local partners. Currently, the main programs that will be highlighted through the EEC committee are: the Sustainable Communities Program Call for Projects to support Civic Engagement, Equity and Environmental Justice Projects; and the development of a Regional Advance Mitigation Planning White Paper and Policy Framework to align the future Greenprint tool with policy objectives. The committee will also receive periodic updates on the overall status of REAP 2 and funds available to local partners to support Connect SoCal implementation.

3. ***Regional Updates:*** This programmatic area will focus on federal and state policies and programs, and research and analysis of regional issues that can inform better planning and decision-making around environmental issues. This will include updates and review of the regional implications of the California Air Resource Board's Draft 2022 Scoping Plan, which assesses progress toward the statutory 2030 target to reduce greenhouse gas emissions, while laying out a path to achieving carbon neutrality no later than 2045.

The look ahead is tracked to when the draft 2024 Connect SoCal will be published. Staff will ensure that the various policy and strategy recommendations in Connect SoCal 2024 will be reviewed and discussed by SCAG's policy committees by July 2023, as the draft plan will be seeking feedback through broader public participation channels beyond that date. This look ahead is a draft and topics and panels 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.

The EEC Agenda Outlook for FY 2023 is included as Attachment 1.

FISCAL IMPACT:

Work associated with this item is included in the FY 22-23 Overall Work Program (310.4874.01: Connect SoCal Development).

ATTACHMENT(S):

1. EEC Policy Committee Outlook 02_23 Update

EAC Strategic Work Plan Committee Outlooks--February 2023 Update

EEC Committee Agenda Outlook for FY 2023

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

Date	Connect SoCal	Local Assistance Program	Regional Update
July to Sept	ü Draft Goals and Performance Measures ü Equity Analysis Update—Performance Measures ü Transportation Conformity Challenges ü Planning Context: Water Resilience ü Green Region Resource Areas • ~~Regional Resilience Framework~~ (Moved to Subcommittee) ü Connect SoCal 2024 PEIR: CEQA Documentation Initiation • Final 2022 Air Quality Management Plan Appendix IV-C RTP/SCS and Transportation Control Measures (Moved to January: Receive and File) ü Transportation Conformity Analyses of Proposed Final 2023 FTIP, Proposed Final 2020 Connect SoCal Amendment #2	• ~~Sustainable Communities Program: Civic Engagement, Equity, and EJ Projects: Approve Final Guidelines~~ (Moved to January)	• ~~Scoping Plan~~ (Moved to February) • ~~SB 150 Report~~ (Moved to February) ü Climate Emergency Resolution Quarterly Update ü Racial Equity Baseline Conditions Report: 2022 ü EEC 12-month lookahead
Oct to Dec	ü Planning Context: Energy ü Planning Context: Natural & Working Lands ü Li Battery Recycling Group Report Overview • ~~Planning Context: Brownfields~~ (Moved to February) ü Request to Release Connect SoCal 2024 PEIR Notice of Preparation ü Local Data Exchange (LDX) Update • ~~Transportation Conformity Analyses of Draft 2023 FTIP Modeling Amendment and Draft 2020 Connect SoCal Amendment #3~~ (Moved to January)	• ~~Regional Advance Mitigation Planning White Paper and Policy Framework~~ (Moved to January)	ü Climate Emergency Resolution Quarterly Update

EAC Strategic Work Plan Committee Outlooks--February 2023 Update

EEC Committee Agenda Outlook* for FY 2023

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

Date	Connect SoCal	Local Assistance Program	Regional Update
Jan	• Transportation Conformity Analyses of Draft 2023 FTIP Modeling Amendment and Draft 2020 Connect SoCal Amendment #3 • ~~Planning Context: Climate Adaptation & Resilience~~ (Moved to Subcommittee report back March JPC) • ~~Strategies for Clean Transportation Technologies~~ (Policy to be recommended by ETC report back April)	• Regional Advance Mitigation Planning White Paper and Policy Framework • Sustainable Communities Program: Civic Engagement, Equity, and Environmental Justice Projects: Approve Final Guidelines	• Climate Emergency Resolution Quarterly Update • Final 2022 Air Quality Management Plan Appendix IV-C RTP/SCS and Transportation Control Measures (Presentation at RC) • Scoping Plan
Feb	• Planning Context: Brownfields • Sustainable Communities Strategy Technical Methodology Submittal to CARB	• REAP 2.0 Program Development Progress Report • **IIJA & IRA: Climate Resilience Funding (New)**	
March (JPC)	• Joint Policy Committee (No Regular Committees): Connect SoCal 2024 Subcommittee Recommendations (Action)		
April	• Equity Analysis Update • PEIR Mitigation Measures • PEIR Alternatives Update	• REAP 2.0 Program Development Progress Report • Electric Vehicle Planning Study: Final Report	• Water Resolution Update • Sustainable Development and Water—Drought Tolerant Landscaping; Ground Water Infiltration
June	• Forecasted Development Pattern-Input Assessment and Recommendations • Strategies for Land-Use: Natural and Farmland Conservation (Carbon Sequestration Speaker) • Strategies Climate Adaptation and Resilience		
July	• Strategies for Land-Use: Housing Support Infrastructure (Water & Energy) • Connect SoCal 2024 Policy Framework	• **Clean Energy/Storage (NEW)**	

Other Items To Be Scheduled:

- Sustainable Communities Program: Civic Engagement, Equity, and EJ Projects: Approve Projects

Attachment: EEC Policy Committee Outlook 02_23 Update [Revision 2] (Energy and Environment

Southern California Association of Governments
February 2, 2023

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

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

From: Lijin Sun, Principal Planner
213-236-1804, sunl@scag.ca.gov

Subject: Status Update on Air Quality Planning and Transportation Conformity Challenges in SCAG Region

RECOMMENDED ACTION FOR CEHD, EEC, TC, AND RC:
Receive and File

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

EXECUTIVE SUMMARY:

At the July 2022 Energy and Environment Committee (EEC) meeting, SCAG staff provided a comprehensive update on the causes and implications of the region-wide transportation conformity lockdown, multi-agency efforts to resolve it, and staff's proactive amendments to the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) and the Federal Transportation Improvement Program (FTIP) to reduce impacts of the conformity lockdown. This staff report will provide a status update on major activities and significant progress made since the July 2022 EEC staff report including the next steps. The transportation conformity lockdown is expected to be lifted after the U.S. Environmental Protection Agency (EPA) approves updated Coachella Valley ozone conformity budgets anticipated around April 2023.

As a separate issue and at the November 2022 EEC meeting, SCAG staff provided a comprehensive update on federal Clean Air Act (CAA) highway sanction clocks in the SCAG region due to EPA's disapprovals of air quality state implementation plans (SIPs) prepared by local air districts and the California Air Resources Board (ARB). This staff report will provide a status update on additional active and anticipated highway sanction clocks in the SCAG region, major activities by impacted air districts to address their respective SIP disapprovals, and SCAG staff's proactive efforts to tackle the highway sanction clocks. Staff will continue to closely monitor the progress of local SIP issues, take any necessary actions including interagency consultation to turn off these highway sanction clocks, and report back to the EEC, the Transportation Committee (TC), and/or the Regional Council (RC) as appropriate.

BACKGROUND:

I. Transportation Conformity Lockdown

1. *Causes of Transportation Conformity Lockdown*

SCAG develops RTP/SCS every four years, FTIP every two years, and their amendments from time to time. Pursuant to the federal CAA, RTP/SCS, FTIP, and their amendments are required to demonstrate transportation conformity. Specifically, transportation conformity means that the regional transportation plans, programs, and projects will not cause new violations of the national air quality standards, worsen the existing violations, or delay the timely attainment of the standards.

Under the EPA's Transportation Conformity Regulations, RTP/SCS, FTIP, and their amendments must pass five required conformity tests: consistency with the adopted Connect SoCal 2020 as amended, regional emissions analysis, timely implementation of transportation control measures, financial constraint, and interagency consultation and public involvement.

As part of the conformity determination, SCAG is required to use the state emission model (EMFAC) developed by ARB and approved by EPA to calculate regional emissions from SCAG's RTP/SCS or FTIP; In addition, regional emissions from RTP/SCS or FTIP are required to not exceed the applicable motor vehicle emissions budgets established by ARB and found adequate or approved by EPA.

ARB updates EMFAC model about every three years to reflect the latest planning assumptions and adopted air quality regulations. Due to significant technical changes in the EPA's then-recently approved EMFAC2017, regional emissions increased significantly in many nonattainment areas within the SCAG region even though the underlying travel activity projections remain the same. As a result, the entire SCAG region is currently under the transportation conformity lockdown. The conformity lockdown is impacting over $26 billion worth of transportation projects, including critical transit projects because SCAG cannot add new projects or amend current projects under the lockdown.

2. *Major Activities and Progress to Fully Resolve Transportation Conformity Lockdown*

Since the July 2022 EEC meeting, significant progress has been made in two critical areas that are needed to fully resolve the conformity lockdown. On a separate and parallel track and in collaboration with the six County Transportation Commissions (CTCs), SCAG staff proactively initiated two rounds of amendments to RTP and FTIP to reduce impacts of the conformity lockdown. Consequential progress has been made in SCAG's RTP and FTIP amendments.

a. EMFAC2021

Pursuant to EPA's Transportation Conformity Regulations, conformity determination for SCAG's RTP/SCS, FTIP, and their amendments must be based on the latest emission model developed by ARB and approved by EPA. At SCAG's request, ARB and EPA had accelerated the development, submittal, and approval of the new emission model, EMFAC2021. On November 15, 2022, EPA approved EMFAC2021 and EPA's approval was effective immediately. As a result, EMFAC2021 can be used for regional transportation conformity analysis in California starting November 15, 2022. However, as previously reported, EMFAC2021 can significantly, but not fully, resolve the conformity lockdown.

b. Coachella Valley Air Plan with Updated Transportation Conformity Budgets

On the other essential action to fully resolve the conformity lockdown, the management, legal, and planning staff of the South Coast Air Quality Management District (South Coast AQMD), ARB, EPA, and SCAG have been working closely to identify and evaluate several approaches. Since the July 2022 update, the four agencies have identified that a Coachella Valley air plan with updated conformity budgets would most expeditiously resolve the conformity lockdown.

Critical efforts and multiple public processes are required of the South Coast AQMD, ARB, and EPA. In August 2022, the South Coast AQMD staff initiated its public process and development of the Coachella Valley air plan with updated transportation conformity budgets, published it for 30-day public review, and held a public consultation meeting before the South Coast AQMD Governing Board adopted it on November 4, 2022. Although the South Coast AQMD still needs to develop and submit to EPA other elements of the Coachella Valley air plan, in terms of the updated transportation conformity budgets, the South Coast AQMD has completed their process in November 2022.

On a separate and parallel track, ARB staff initiated their public process in August 2022, published their staff report on the Coachella Valley air plan in October 2022 for 30-day public review, and accelerated their review of the air plan submitted by the South Coast AQMD. On November 17, 2022, the Coachella Valley air plan with updated transportation conformity budgets was approved by ARB Board and subsequently submitted to EPA for final review and approval. ARB completed their public process in December 2022.

Significant process has been made in EPA's concurrent process. In October 2022, EPA initiated their process for the required consultation with tribes in Coachella Valley. In anticipation of the submittal from ARB, EPA staff has been conducting advance review to expedite the required EPA public process as appropriate. On December 21, 2022, EPA accelerated release of the updated transportation conformity budgets for the Coachella Valley air plan for 30-day public review.

Multiple actions are required of EPA to complete their public process. Upon completion of the public comment periods, EPA staff will respond to any comments received, complete their adequacy review process, inform ARB in writing of EPA's adequacy finding of the updated Coachella Valley transportation conformity budgets, and publish a Federal Register notice to inform the public of EPA's finding. Due to the multiple actions in EPA's public process, the effective date of the updated transportation conformity budgets, which is required to fully resolve the conformity lockdown, is currently anticipated in mid-April 2023 as reported at the respective EEC, TC, and RC meetings on January 5, 2023. However, it is possible and even likely that the mid-April 2023 timeframe could be bumped up in time for the RC adoption of Connect SoCal Amendment No. 3 and the 2023 FTIP Consistency Amendment #23-03 at its meeting on April 6, 2023, as a result of EPA's accelerated release of the updated conformity budgets for public review.

c. SCAG Staff's Proactive Efforts to Reduce Impacts of the Transportation Conformity Lockdown

In addition to the efforts to resolve the conformity lockdown, SCAG staff has been taking proactive actions to minimize its impacts. In collaboration with the six CTCs in SCAG region, SCAG staff proactively initiated in June 2021 a concurrent Connect SoCal 2020 (2020 RTP/SCS) Amendment #2 and the 2023 FTIP to allow urgent new transportation projects and changes to existing transportation projects to avoid conformity lockdown.

On October 6, 2022, the RC approved the Connect SoCal 2020 Amendment #2 and the 2023 FTIP including the associated transportation conformity determinations as recommended by the EEC. On December 16, 2022, SCAG received federal approval of the conformity determinations for the Connect SoCal 2020 Amendment #2 and the 2023 FTIP. The accelerated development and approval of the 2023 FTIP and the Connect SoCal Consistency Amendment #2 allow nearly $36 billion worth of important transportation projects to avoid the impact of the transportation conformity lockdown.

To further reduce impacts of the conformity lockdown and in collaboration with the six CTCs in the SCAG region, SCAG staff proactively initiated in March 2022 the development of one additional round of amendments to Connect SoCal 2020 and 2023 FTIP. Connect SoCal 2020 Amendment #3 and 2023 FTIP Consistency Amendment #23-03 are to process additional urgent new transportation projects and changes to existing transportation projects, totaling over $26 billion, that could not be included in the accelerated Connect SoCal 2020 Consistency Amendment #2 and the 2023 FTIP.

At their respective meetings on January 5, 2023, the TC recommended and then the RC approved the release of the draft Connect SoCal Amendment No. 3 and the 2023 FTIP Consistency Amendment for a 30-day public review and comment period. On the same day, the EEC recommended and then the RC approved the release of the associated transportation conformity analysis as part of the draft amendments for the same 30-day public review and comment period.

Upon completion of the required public review, SCAG staff will respond to any public comments and finalize draft amendments in time for the TC and the EEC to recommend RC adoption in the April/May 2023 timeframe as soon as the conformity lockdown is lifted. It is important to note that the RC may not adopt RTP and FTIP amendments before EPA's final approval of updated conformity budgets.

Staff will continue to work closely with EPA staff and proactively identify and take any necessary actions to ensure EPA's timely approval of the updated Coachella conformity budgets. Staff also plans to request expedited federal review and approval around May 2023 to allow important transportation projects to move forward with implementation as soon as possible.

II. Federal Clean Air Act Highway Sanction Clocks in the SCAG Region

1. *Background*

Pursuant to federal CAA, local air districts and the ARB are responsible for preparing air quality SIPs in California to fulfill air quality planning requirements to attain applicable national ambient air quality standards established by EPA. A SIP deficiency (e.g., SIP disapproval or finding of failure to submit a required SIP) and, if finalized by EPA, will trigger a CAA mandated 24-month highway sanction clock automatically upon effectiveness of the EPA action. Further, if the SIP deficiency is not corrected within the 24 months, the CAA mandated highway sanction would be imposed in the impacted area.

A highway sanction is prohibition on federal approval highway projects or award of any grants in the sanctioned area unless projects or grants are for improvement in safety. It is also important to note that a highway sanction could be imposed even the underlying SIP disapproval is not transportation related. For example, the 2012 Imperial County Highway Sanctions in the SCAG region were triggered by EPA's disapproval of a rule of the Imperial County Air Pollution Control District that is not directly related to any transportation plan, program, or project.

A highway sanction clock will be turned off and a highway sanction will not be imposed if the EPA determines that a subsequent SIP submission corrects the identified deficiencies before the highway sanction imposition deadline.

At the November 2022 EEC meeting, SCAG staff provided a summary of then six active highway sanction clocks that were trigged in October 2022 after the EPA finalized disapprovals of air quality SIPs concerning local rules of four local air districts in the SCAG region, and staff's efforts to prevent imposition of highway sanctions.

2. *Status Update of Highway Sanction Clocks in the SCAG Region and Progress to Date*

Since the November 2022 EEC update, additional information about anticipated and active highway sanction clocks has become available. Efforts have been made by impacted local air districts to correct underlying deficiencies identified in the respective SIP disapprovals. In addition, EPA has proposed an additional SIP disapproval concerning various local rules of one local air district that is already impacted by three active highway sanction clocks.

As of mid-January 2023, there are seven active and two anticipated highway sanction clocks impacting four out of five air districts within the SCAG region. Table 1 is an update on active highway sanction clocks and progress to date to turn off the clocks and prevent imposition of highway sanctions. Table 2 is an update on anticipated highway sanction clocks.

Table 1: Update on Active Highway Sanction Clocks within the SCAG Region

Highway Sanction Clocks	Impacted Area	Start Date of Highway Sanction Clock	Impacted Air District	Cause of Highway Sanction Clock and Link to Federal Register Notice	State Date of Highway Sanction if Imposed	Progress to Date
1	Western Mojave Desert Ozone Nonattainment Area (Mojave Desert AQMD portion)	10/12/2021	MDAQMD	Limited disapproval of District Rule 1160 https://www.govinfo.gov/content/pkg/FR-2021-09-10/pdf/2021-19435.pdf	10/12/2023	Amended Rule 1160 is scheduled for MDAQMD Board adoption in Jan 2023, is expected to fully address deficiencies, and will be submitted for EPA approval upon MDAQMD adoption.
2	South Coast Air Quality Management District (SCAQMD) Jurisdiction	10/24/2022	SCAQMD	Limited disapproval of District Rule 1118 https://www.govinfo.gov/content/pkg/FR-2022-09-22/pdf/2022-20137.pdf	10/24/2024	Amended Rule 1118 was adopted by SCAQMD Board on 1/6/2023, is expected to fully address deficiencies, and would be submitted for EPA approval.
3	Western Mojave Desert Ozone Nonattainment Area	10/31/2022	Antelope Valley AQMD (AVAQMD); MDAQMD	Disapproval District Rules 315 https://www.govinfo.gov/content/pkg/FR-2022-09-29/pdf/2022-20858.pdf	10/31/2024	Districts staff has been working closely with EPA to develop draft amendments to fully address deficiencies since Oct 2022. Amended Rules will need to be adopted by respective Board before submittals for EPA approvals.
4	SCAQMD	10/31/2022	SCAQMD	Disapproval of Reasonably	10/31/2024	SCAQMD staff has initiated

Highway Sanction Clocks	Impacted Area	Start Date of Highway Sanction Clock	Impacted Air District	Cause of Highway Sanction Clock and Link to Federal Register Notice	State Date of Highway Sanction if Imposed	Progress to Date
	Jurisdiction			Available Control Technology (RACT) demonstration for District Rules 463 and 1178 https://www.govinfo.gov/content/pkg/FR-2022-09-30/pdf/2022-20870.pdf		separate public processes to amend Rules 436 and 1178. Amended Rules will need to be adopted by SCAQMD Board anticipated in fall 2023 before submittals for EPA approvals.
5	Ventura County Ozone Nonattainment Area	10/31/2022	Ventura County Air Pollution Control District (VCAPCD)	Disapproval of Reasonably Available Control Technology (RACT) demonstration for District Rules 71.1 and 71.2 https://www.govinfo.gov/content/pkg/FR-2022-09-30/pdf/2022-20870.pdf	10/31/2024	VCAPCD staff has been working closely with EPA to develop draft amendments to fully address deficiencies since Oct 2022. Amended Rules will need to be adopted by VCAPCD Board before submittal for EPA approval.
6	Western Mojave Desert Ozone Nonattainment Area	10/31/2022	AVAQMD; MDAQMD	Failure to submit required 2008 8-hour ozone standard contingency measures SIP https://www.govinfo.gov/content/pkg/FR-2022-09-29/pdf/2022-20874.pdf	10/31/2024	EPA staff is developing guidance. Once available, Districts staff will develop revised contingency measures based on EPA guidance, in conjunction with ARB.
7	Coachella Valley Ozone Nonattainment Area	10/31/2022	SCAQMD	Failure to submit required 2008 8-hour ozone standard contingency measures SIP https://www.govinfo.gov/content/pkg/FR-2022-09-29/pdf/2022-20874.pdf	10/31/2024	EPA staff is developing guidance. Once available, SCAQMD staff will develop revised contingency measures based on EPA guidance, in conjunction with ARB.

Table 2: Update on Anticipated Highway Sanction Clocks within the SCAG Region

Highway Sanction Clocks	Impacted Area	Start Date of Highway Sanction Clock	Impacted Air District	Cause of Highway Sanction Clock and Link to Federal Register Notice	State Date of Highway Sanction if Imposed	Progress to Date
1	SCAQMD Jurisdiction	Effective date of final partial disapproval of District Rules 1106, 1106.1, and 1107	SCAQMD	Proposed Partial disapproval of District Rules 1106, 1106.1, and 1107 https://www.govinfo.gov/content/pkg/FR-2022-08-22/pdf/2022-17935.pdf	24 months from start date of highway sanction clock	Amended Rules 1106, 1106.1 and 1107 were adopted by SCAQMD Board on 1/6/2023, are expected to fully address deficiencies, and would be submitted for EPA approval.
2	Western Mojave Desert	Effective date of final	MDAQMD	Proposed Limited disapproval of District	24 months from start	MDAQMD staff has been working closely with EPA to

Highway Sanction Clocks	Impacted Area	Start Date of Highway Sanction Clock	Impacted Air District	Cause of Highway Sanction Clock and Link to Federal Register Notice	State Date of Highway Sanction if Imposed	Progress to Date
	Ozone Nonattainment Area	limited disapproval of District Rules 1301, 1302, 1303, 1304, and 1305		Rules 1301, 1302, 1303, 1304, and 1305 concerning the District's New Source Review program https://www.govinfo.gov/content/pkg/FR-2022-11-25/pdf/2022-25382.pdf	date of highway sanction clock	address underlying deficiencies and has also indicated a potential intent to sue EPA if disapproval is finalized as proposed.

3. *Staff's Efforts to Address Highway Sanction Clocks to Prevent Imposition of Highway Sanctions in the SCAG Region*

Highway sanction has serious consequences. It could impact many important transportation projects including critical transit projects. A highway sanction was imposed in Imperial County ten years ago in 2012 due to similar reasons. SCAG staff at all levels takes these EPA actions and the highway sanction clocks very seriously and will engage as needed with management, legal, and planning staff of the impacted air districts and EPA to identify paths forward to turn off highway sanction clocks to prevent imposition of highway sanctions.

Because these highway sanction clocks are concerning SIPs developed by local air districts, corrective actions by impacted air districts and subsequent approvals by EPA are required to turn off these highway sanction clocks. SCAG staff has been meeting and will continue to meet as necessary with staff of impacted air districts to discuss and track progress of their efforts and timelines to correct SIP deficiencies.

In addition, at SCAG staff's request, staff representatives of the impacted air districts have been reporting and will continue to report on their efforts to address the underlying issues at SCAG's monthly Transportation Conformity Working Group meetings.

Finally, SCAG conformity and FTIP staff has been performing internal evaluation and informal interagency consultation on impacts of highway sanction and will provide periodic updates to the EEC, the TC, and/or the RC as appropriate.

FISCAL IMPACT:

Work associated with this item is included in the current FY 2022-23 Overall Work Program (23-025.0164.01: Air Quality Planning and Conformity).

ATTACHMENT(S):

1. PowerPoint Presentation - Status Update on Air Quality Planning and Transportation Conformity Challenges in the SCAG Region

SCAG

Status Update on Air Quality Planning and Regional Transportation Conformity Challenges in the SCAG Region

Energy and Environment Committee

February 2, 2023

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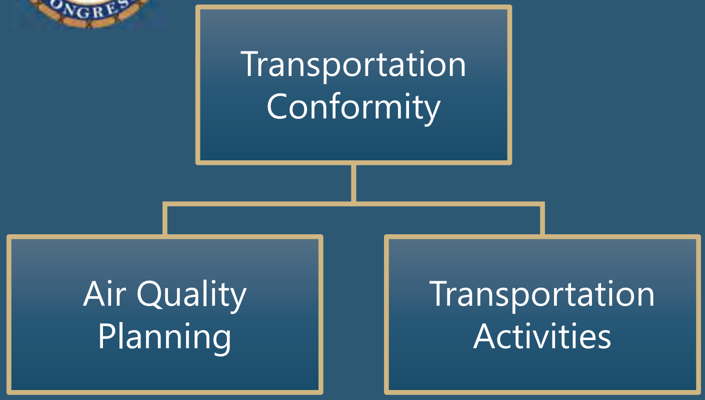
TRANSPORTATION CONFORMITY LOCKDOWN

Background - Transportation Conformity

Federal Clean Air Act



Transportation Conformity

Air Quality Planning

Transportation Activities

CONNECT SoCal

SUBREGIONAL SUSTAINABLE COMMUNITIES STRATEGY FRAMEWORK AND GUIDELINES

SCAG

2023 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM

DRAFT AMENDMENT #3

INCLUDING THE 2023 FEDERAL TRANSPORTATION IMPROVEMENT PROGRAM CONSISTENCY AMENDMENT #23-03

JANUARY 5, 2023

Background - Transportation Conformity Lockdown

- Due to significant technical change in ARB's previous emission model (EMFAC2017)
- In effect region-wide since August 2021
- Serious impacts on regional transportation plan, program, and projects
- Multi-agency efforts at all levels to resolve the conformity lockdown

Attachment: PowerPoint Presentation - Status Update on Air Quality Planning and Transportation Conformity Challenges in the SCAG Region

Significant Progress & Next Step in Two Critical Areas to Resolve Conformity Lockdown

- Area 1: US EPA approved ARB's new emission model (EMFAC2021)
- Area 2-1: SCAQMD developed, adopted, and submitted to ARB Coachella Valley Air Plan with updated conformity budgets
- Area 2-2: ARB approved and submitted to US EPA Coachella Valley Air Plan with updated conformity budgets
- Area 2-3: US EPA accelerated release of updated conformity budgets for public review
- Next Step: US EPA approval of updated conformity budgets

Significant Progress & Next Steps in SCAG's Proactive Efforts to Reduce Impacts of Conformity Lockdown

- Accelerated development, adoption by RC, and federal final approval of 2023 FTIP & Connect SoCal 2020 Amendment #2 to avoid impact of conformity lockdown on $36 billion worth of transportation projects
- Proactive development and RC authorized release of Connect SoCal 2020 Amendment #3 & 2023 FTIP Consistency Amendment #23-03 to allow $26 billion worth of additional transportation projects to move toward implementation as soon as lockdown is lifted
- Next Steps: (1) RC adoption of the Connect SoCal and FTIP Amendments pending US EPA approval of updated Coachella conformity budgets; (2) Federal approval of the Connect SoCal 2020 and FTIP Amendments

HIGHWAY SANCTION CLOCKS IN THE SCAG REGION

Background - Highway Sanction Clocks and Highway Sanctions

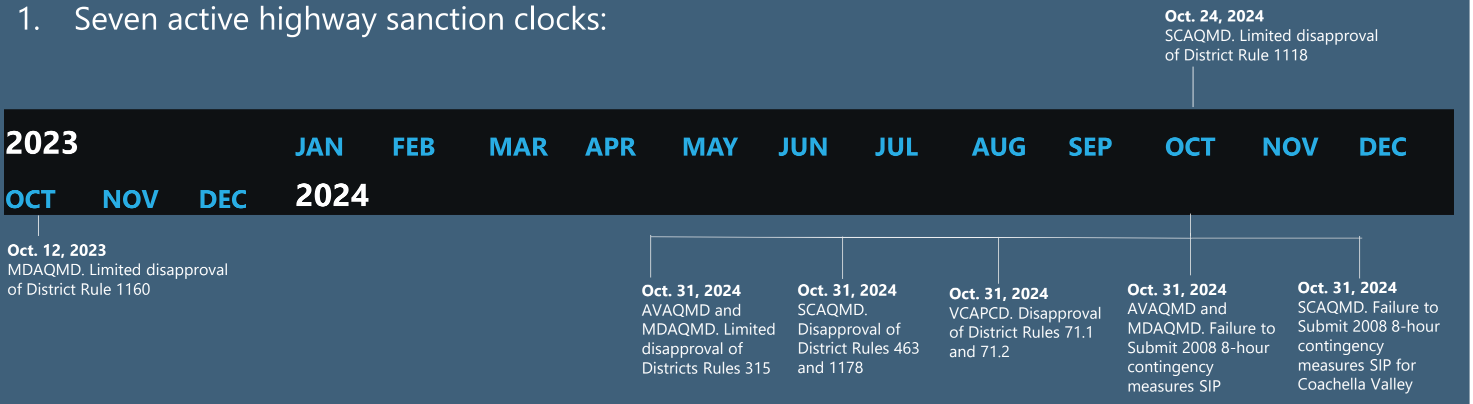
- Mandated by federal Clean Air Act upon US EPA's disapproval of or finding of failure to submit a required air quality state implementation plan (SIP) prepared by local air districts and ARB
- 24-month highway sanction clock automatically triggered upon effective date of US EPA final action
- Impacted local air district or ARB must correct deficiencies in a subsequent SIP submission and receive US EPA approval to turn off highway sanction clock or lift sanction
- Highway sanction will be imposed if highway sanction clock not turned off within 24 months
- Highway sanction impacts highway capacity projects, and thus economy and jobs

Status Update

- One new active and two new anticipated highway sanction clocks since November 2022 update
- Total seven active and two anticipated highway sanction clocks in the SCAG region (as of mid-Jan 2023)
- Impacting four out of five air districts in SCAG region
- Involved 14 local districts rules and two required SIPs

Start Dates of Highway Sanctions If Imposed

1. Seven active highway sanction clocks:



Oct. 12, 2023
MDAQMD. Limited disapproval of District Rule 1160

Oct. 24, 2024
SCAQMD. Limited disapproval of District Rule 1118

Oct. 31, 2024
AVAQMD and MDAQMD. Limited disapproval of Districts Rules 315

Oct. 31, 2024
SCAQMD. Disapproval of District Rules 463 and 1178

Oct. 31, 2024
VCAPCD. Disapproval of District Rules 71.1 and 71.2

Oct. 31, 2024
AVAQMD and MDAQMD. Failure to Submit 2008 8-hour contingency measures SIP

Oct. 31, 2024
SCAQMD. Failure to Submit 2008 8-hour contingency measures SIP for Coachella Valley

2. Two anticipated highway sanction clocks: Start dates will be 24 months from effective dates of EPA's final SIP disapprovals

Attachment: PowerPoint Presentation - Status Update on Air Quality Planning and Transportation Conformity Challenges in the SCAG Region

Major Efforts to Address Highway Sanction Clocks

SCAG staff has been meeting with staff of impacted local air districts

Staff of impacted local air districts have been providing ongoing status updates at monthly SCAG Transportation Conformity Working Group (TCWG) meetings

Some impacted local air districts have been amending involved local rules to address identified deficiencies

SCAG staff has been providing status updates and performing internal evaluation and informal interagency consultation on potential impacts of highway sanctions

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SCAG

THANK YOU!

For more information, please visit:

https://scag.ca.gov/air-quality-planning-program

https://scag.ca.gov/transportation-conformity

Attachment: PowerPoint Presentation - Status Update on Air Quality Planning and Transportation Conformity Challenges in the SCAG Region

AGENDA ITEM 4

REPORT

Southern California Association of Governments
February 2, 2023

To: Energy and Environment Committee (EEC)

From: Kimberly Clark, Planning Supervisor
(213) 236-1844, clark@scag.ca.gov

Subject: Brownfields Expert Panel

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

RECOMMENDED ACTION:
Information Only - No Action Required

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

EXECUTIVE SUMMARY:
Brownfields are often found on polluting land uses such as industrial facilities, are often located along commercial corridors, in industrial areas, or within underinvested communities. Brownfield sites can offer a significant opportunity for redevelopment and new housing, however remediation and cleanup efforts can be one of the most significant challenges to realizing redevelopment goals. Navigating technical and financial aspects of cleanup, as well as agency approvals increases the costs of redevelopment and require technical knowledge and expertise as well as staff resources and upfront funding. Further, in the absence of intentional planning efforts, the underlying zoning might not permit for residential uses by-right on these sites.

BACKGROUND:
Brownfield opportunity sites are found in a variety of community contexts. Local and community-based organizations are often highly invested in seeing the change and enhancement of abandoned sites, such as brownfields, but these groups often do not have the capacity or technical resources to initiate or participate in the brownfields redevelopment process. Redevelopment of brownfields, especially in underinvested areas should be viewed as opportunities to engage local community stakeholders and provide community benefits.

Creating new residential development on these sites may require design guidelines to respond to the surrounding urban fabric (for example, to buffer residents from nuisance factors such as traffic and noise or to create appropriate scale and massing of new development that respects and enhances the existing urban fabric). Regulatory frameworks or programs that provide additional development incentives to offset costs from site cleanup efforts can make redevelopment opportunities more financially viable and attractive for private capital. SCAG is convening a panel of experts to dive into these issues further:

- Maryam Tasnif-Abbasi is the Brownfield Development Manager for CalEPA's Department of Toxic Substances (DTSC) Control in Southern California and has been with DTSC since 2005. During that time, she has worked to facilitate community revitalization by providing regulatory support for the redevelopment of underutilized brownfield properties. Prior to DTSC, she was a Senior Project Manager at the Bechtel Corporation for twelve years, working with both military and private sector clients. Through Bechtel, she spent five years as a Regional Project Manager for the Chevron Environmental Management Company, responsible for the Ventura and Santa Barbara County portfolios, and special projects.

- Ignacio Dayrit - A five-time Phoenix Awardee for brownfields reuse, Ignacio leads the Center for Creative Land Recycling (CCLR) technical assistance program. Ignacio spent 20 years with the City of Emeryville (California) Redevelopment Agency, leading the city's Brownfield Program. He has over 35 years of experience in public sector development including: affordable housing, economic development, infrastructure, climate change, stakeholder participation, public financing, project development planning and outreach. With CCLR, a national nonprofit technical assistance provider, he has assisted cities, tribes and states obtain more than $150 million in state and Federal grants over the past 10 years, including, in the LA area, the cities of Los Angeles, Anaheim, Brea, Southgate, Carson, and Cudahy, and several more. CCLR has also assisted COGs like ABAG, Oregon Metro, and Northern Arizona COG. Ignacio teaches sustainability, livability and resilience at Golden Gate University, and is a member of the California Association for Local Economic Development (CALED).

- David Kyobe – David is an Associate Planner at SCAG and served as Project Manager for the development of the "Other to Residential Toolkit" (https://scag.ca.gov/otr). The Other-to-Residential Toolkit provides an actionable guide to envisioning the reuse and conversion of underutilized sites in the SCAG region that fall within the retail commercial, brownfield, gas stations, and underutilized golf course typologies. The Toolkit contains direction for how to identify opportunities and barriers for residential conversion, offers best practices and implementable actions, and provides the steps required to begin and complete the conversion process.

FISCAL IMPACT:
None.

AGENDA ITEM 5

REPORT

Southern California Association of Governments
February 2, 2023

To: Energy and Environment Committee (EEC)

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

From: Sarah Jepson, Chief Planning Officer
213-236-1955, jepson@scag.ca.gov

Subject: Infrastructure Investment and Jobs Act (IIJA) and Inflation Reduction Act: Climate Resilience Funding Opportunities

RECOMMENDED ACTION:
Information Only – No Action Required

STRATEGIC PLAN:
This item supports the following Strategic Plan Goal 2: Advance Southern California's policy interests and planning priorities through regional, statewide, and national engagement and advocacy. 7: Secure funding to support agency priorities to effectively and efficiently deliver work products.

EXECUTIVE SUMMARY:
President Biden signed two major pieces of legislation, the Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA), during the first half of his four-year term, making historic investments in climate, transportation, water, energy, and various other issues. Leslie Pollner, Senior Policy Advisor at Holland & Knight (H&K), will provide a presentation breaking down both bills to highlight the various opportunities for local governments to secure grant funding for energy efficiency, water, and climate resilience.

BACKGROUND:

Bipartisan Infrastructure Law

On November 15, 2021, President Biden signed the Bipartisan Infrastructure Law (BIL), following passage in the U.S. Senate, which invests in the nation's infrastructure, including funding for roads and bridges, rail, transit, ports, airports, electric grid, water systems, and broadband, among other priorities. The BIL includes several authorizing bills, including the Surface Transportation Reauthorization Act of 2021 (S.1931), Surface Transportation Investment Act (S. 2016), Drinking Water and Wastewater Infrastructure Act (S. 914) and the Energy Infrastructure Act (S. 2377), among others. The BIL will allocate an estimated $1.2 trillion in total funding over ten years, including $550 billion in new spending during the law's first five years, divided between improving the surface-transportation network ($284 billion) and society's core infrastructure ($266 billion). Some highlights of the spending include:

- Roads, Bridges, & major projects: $110B
- Passenger and Freight Rail: $66B
- Public Transit: $39.2B
- Broadband: $65B
- Ports and Waterways: $16.6B
- Water Infrastructure: $55B
- Power and Grid: $65B
- Resiliency: $47.2B
- Electric Vehicle Charging: $7.5B
- Addressing Legacy Pollution: $21B
- Western Water Infrastructure: $8.3B

Inflation Reduction Act

President Joe Biden signed the Inflation Reduction Act of 2022 (IRA) into law on Aug. 16, 2022, following its passage along party lines in the U.S. Senate and House of Representatives. The goal of the IRA is to reduce the deficit and while making significant investments in healthcare, domestic energy production and manufacturing, and climate change. The IRA, representing the largest climate investment in U.S. history, would raise approximately $740 billion over ten years, spend more than $430 billion to reduce carbon emissions by 40% by 2030, and extend subsidies for health insurance under the Affordable Care Act. The remaining funds would go toward reducing the federal deficit. The IRA provides nearly $369 billion in direct investment to ensure energy security, reduce carbon emissions, increase energy innovation and support environmental justice objectives with direct support for underserved communities. The funding will allow for the deployment of low-carbon energy technologies while ensuring the president's objective to create good-paying jobs, and on-shoring domestic manufacturing are met. The law also creates a 10-year runway for many energy tax incentives and fundamentally revises the tax code to create a technology-neutral approach to incentivize the deployment of low-carbon technologies. Various provisions are also included to support conventional energy development in the United States. Some highlights of the investments and tax credits in the IRA include:

- Greenhouse Gas Reduction Fund - $27 billion
- Clean Heavy-Duty Vehicles - $1 billion
- Grants to Reduce Air Pollution at Ports - $3 billion
- Climate Pollution Reduction Grants - $5 billion
- Environmental & Climate Justice Block Grants - $3 billion
- Neighborhood Access & Equity Grant Program (like Reconnecting Communities) - $3 billion
- Improving Energy & Water Efficiency/Climate Resilience of Affordable Housing - $1 billion

- Carbon Sequestration Tax Credit
- Clean Hydrogen Tax Credit
- Alternative Fuel Refueling Property Credit
- Clean Vehicles Tax Credit
- Qualified Commercial Clean Vehicles Tax Credit

FISCAL IMPACT:

Work associated with the Infrastructure Investment & Jobs Act (IIJA) & Inflation Reduction Act: Climate Resilience Funding Opportunities report is contained in the Indirect Cost budget, Legislation 810-0120.10.

ATTACHMENT(S):

1. Inflation Reduction Act Summary
2. Infrastructure Investment and Jobs Act Summary

Holland & Knight

Attachment: Inflation Reduction Act Summary (Infrastructure Investment & Jobs Act (IIJA) & Inflation Reduction Act: Climate Resilience

The Inflation Reduction Act:
Summary of Budget Reconciliation Legislation

By Nicole M. Elliott, Beth A. Viola, Hannah Coulter, Isabel Lane, Joshua D. Odintz, Miranda Franco, Christopher Armstrong, Ethan Jorgensen-Earp, Reese Goldsmith, Kathleen Nicholas, Kayla Gebeck Carroll, Camryn Towle

President Joe Biden signed the Inflation Reduction Act of 2022 (IRA) into law on Aug. 16, 2022, following its passage along party lines in the U.S. Senate and House of Representatives. This comprehensive legislation is the result of many months of negotiations among Democrats to advance some of President Joe Biden's highest policy priorities. The IRA will reduce the deficit and makes major investments in healthcare, domestic energy production and manufacturing, and climate change.

After decades of failed attempts, the IRA includes a first-time provision that would allow the U.S. Department of Health and Human Services to negotiate prices of certain prescription drugs in Medicare and Medicaid. In addition, savings would be generated by requiring drug manufacturers to pay a rebate for drugs whose prices increase faster than inflation under Medicare, and would create several reforms in the Medicare drug program, also known as Part D, including a cap on out-of-pocket drug spending for seniors beginning in 2025. It also extends by three years the expanded and enhanced Affordable Care Act tax credit ahead of planned premium increases set to take effect in 2023.

With regard to energy and climate change, the IRA provides unprecedented amounts of funding – nearly $369 billion in direct investment to ensure energy security, reduce carbon emissions, increase energy innovation and support environmental justice objectives with direct support for underserved communities. It will allow for the deployment of low carbon energy technologies while ensuring the president's objective to create good-paying jobs and on-shoring domestic manufacturing are met – all while reducing emissions by approximately 40 percent by 2030. For the first time, this legislation not only creates a 10-year runway for many energy tax incentives, it also fundamentally revises the tax code to create a technology-neutral approach to incentivize the deployment of low carbon technologies. Finally, there are a number of provisions included to support conventional energy development in the United States.

The IRA raises revenue with a few, but significant, changes to the tax code. This includes an alternative minimum tax on corporations, an excise tax on stock-buy backs, reinstating the Superfund tax on petroleum and oil, and increasing funding to the Internal Revenue Service. Unlike previous iterations of the bill, the IRA does not contain sweeping tax provisions aimed at increasing taxes on individuals.

The bill passed the Senate, 51-50, on Aug. 7, with Vice President Kamala Harris casting the tie-breaking vote, before passing the House, 220-207, on Aug. 12. With the law now enacted, federal agencies will move quickly to implement the bill's directives, a process which will require significant resources. The federal agencies have significant authority and will be responsible for the success of the IRA; implementation will include the promulgation of many new rules and decisions on how to deploy funding.

Holland & Knight's Public Policy & Regulation Group, along with other attorneys in relevant practices, stand ready to assist clients in understanding this new law, and with navigating and engaging the agencies through implementation.

The following provides an in-depth summary of the IRA, including:

- **Tax Revenue Raisers**
    - Corporate Alternative Minimum Tax
    - Excise Tax on Stock Buy Backs
    - Changes to Net Operating Loss Limitations for Individuals
    - Internal Revenue Service Enforcement Funding

- **Healthcare**
    - Affordable Care Act Tax Credits
    - Medicare Drug Pricing Negotiation
    - Inflation Rebates
    - Part D Benefit Changes and Other Notable Health Provisions

- **Energy and Climate Tax Incentives**
    - Energy Generation
    - Energy Manufacturing
    - Carbon Sequestration
    - Clean Fuels
    - Clean Vehicles
    - Energy Efficiency
    - Superfund

- **Climate, Energy and Environment Investments**
    - U.S. Department of Agriculture
    - U.S. Environmental Protection Agency
    - U.S. Department of Energy
    - U.S. Department of Interior
    - U.S. Department of Transportation
    - General Services Administration
    - U.S. Department of Commerce
    - U.S. Postal Service
    - U.S. Department of Housing and Urban Development
    - U.S. Department of Homeland Security
    - U.S. Department of Defense
    - Federal Permitting Improvement Steering Council
    - Federal Energy Regulatory Commission
    - White House Council on Environmental Quality
    - Government Accountability Office
    - Office of Management and Budget

Tax Revenue Raisers

Corporate Alternative Minimum Tax:

The IRA will impose a 15 percent alternative minimum tax on book income on applicable corporations, which includes U.S.-headquartered corporations with global financial statement revenue in excess of $1 billion over a three-year average. To be subject to the tax, foreign-headquartered groups must also have domestic financial statement revenue in excess of $100 million over a three-year average. An applicable corporation makes a series of adjustments to its applicable financial statement to arrive at the income subject to the minimum tax. For example, adjustments are made to address defined benefit pensions and taxes. Also, adjustments are made to include effectively connected income and the group's share of Subpart F and global intangible low-taxed income (GILTI). Adjustments are also made to eliminate timing differences from accelerated depreciation and amortization of qualified wireless spectrum. The minimum tax applies to taxable years beginning after Dec. 31, 2022.

Excise Tax on Stock Buy Backs:

The IRA will impose a 1 percent excise tax on the fair market value of stock repurchased by a publicly traded corporation. The provision provides for several exceptions to the excise tax, including where: 1) the repurchased stock is acquired pursuant to a tax-free reorganization where the shareholder does not recognize gain or loss; 2) the repurchased stock is contributed to an employer sponsored retirement plan; 3) the stock is repurchased by a regulated investment company or real estate investment trust; or 4) the stock is repurchased by a dealer in securities. The provision is effective for stock repurchased after Dec. 31, 2022.

Changes to Net Operating Loss Limitations for Individuals:

As a last-minute amendment from Sen. Mark Warner (D-Va.), the IRA would extend the current limitation on individuals for excess business losses arising from an active business (e.g., from a partnership). The limitation is generally $250,000 per individual (indexed to inflation). Current law is extended from Jan. 1, 2027 to Jan. 1, 2029.

Internal Revenue Service Enforcement Funding:

The IRA will increase IRS funding in the following amounts, to be available through fiscal year 2031:

- $3.2 billion for Taxpayer Services
- $45.6 billion for Enforcement
- $25.3 billion for Operations Support, and
- $4.8 billion for Business Systems Modernization

It is expected that this additional funding will raise significant revenue.

Healthcare

The IRA extends for three additional years the expanded premium tax subsidies first enacted in the American Rescue Plan Act (ARPA), allowing for expanded and more affordable coverage on Affordable Care Act (ACA) Marketplace plans. The IRA also includes significant drug pricing reforms, including Medicare drug price negotiation, Medicare inflationary rebates and Medicare Part D benefit redesign. Notably, there are many areas where Congress delegated decisions to the Secretary of the U.S. Department of Health and Human Services (HHS) and thus will require further clarification through the regulatory process. The drug pricing provisions are also likely to be subject to legal challenges.

ACA Premium Tax Credits

The Affordable Care Act (ACA) created subsidies to offset the cost of health insurance, capping how people signing up on the ACA Marketplaces pay at a certain percent of their income. These subsidies work on a sliding scale. Under the original law, people whose incomes are at or just above the federal poverty level (FPL) received the most generous subsidies, and no subsidies were provided for those above 400 percent of poverty. However, the American Rescue Plan Act (ARPA) expanded the premium tax credits for a two-year period, making them more generous for lower-income beneficiaries and also extending them beyond the 400 percent FPL cut-off by capping beneficiary premiums at no more than 8.5 percent of an individual's income for a silver plan. The ARPA tax credits were originally set to expire on Jan. 1, 2023. Under the IRA, these credits will now be extended for another three years.

Medicare Drug Pricing Negotiation

The legislation allows the Medicare program to set the price of certain high-expenditure prescription drugs. Negotiation is limited to the single-source drugs with the highest-spend in Part B or Part D for 1) U.S. Food and Drug Administration (FDA)-approved drugs for which at least seven years have elapsed from approval and for which there is no generic on the market and 2) FDA-licensed biologics for which at least 11 years have elapsed since licensure and for which there is no biosimilar on the market. Small biotech drugs (until 2028), orphan drugs, low-spend Medicare drugs and plasma-derived products are excluded from price negotiation.

Drugs subject to the new negotiated price requirement will be initially selected in 2023, and the prices set will be applied beginning in 2026. Drugs must be selected by the Centers for Medicare & Medicaid Services (CMS) and an agreement must be reached with the manufacturer two years before the new price will apply.

Specifically, the bill directs HHS to negotiate prices for:

- 2026 (only Part D drugs eligible for negotiation): 10 drugs based on Part D spending
- 2027 (only Part D drugs eligible for negotiation): 15 drugs based on Part D spending
- 2028 (first year both Part B and D drugs are eligible for negotiation): 15 drugs based on combined Part B and Part D spending
- 2029 and beyond: 20 drugs based on combined Part B and Part D spending

The IRA spells out a detailed timeline involving an exchange of information between HHS and the manufacturer of a selected drug over the negotiation period. For instance, once Medicare gives a manufacturer a "written initial offer" and concise justification (based on several factors outlined in the IRA, including but not limited to research and development costs and distribution costs) for the proposed price, a drugmaker would have 30 days to either accept the proposal or make a counteroffer that is justified based on those same factors.

Once the negotiated price is set, the manufacturer would be required to offer the drug at the maximum fair price (MFP) with respect to Medicare beneficiaries. The MFP represents the ceiling on a drug's negotiated Part B or Part D price. It cannot exceed certain specified percentages of a drug's non-federal average manufacturer price (non-FAMP) or an amount reflecting an average market price and determined by the number of years since a drug's FDA approval.

The bill also allows for a delay in the negotiation of no more than two years for certain drugs where there is a "high likelihood … that a biosimilar biologic product" of the reference biologic product will be

both "licensed and marketed" within the next two years. To avoid efforts to game this provision (for instance, being licensed but not marketed), if the biosimilar does not come to the market during the two-year period, the originator biologic manufacturer would be required to pay a rebate for the maximum fair price (MFP) amount and the biologic would be included in the selected drug list for the next applicable price period. In cases where these negotiated drug prices are lower than the 340B prices, manufacturers would be obligated to make the MFP available to covered entities, but in a non-duplicated amount to the ceiling price.

The IRA also includes enforcement provisions. Manufacturers will be subject to significant civil monetary penalties (CMPs) up to 10 times the difference between the MFP and the price charged for failing to offer the MFP with respect to a Medicare beneficiary, violating the terms of an agreement or knowingly providing false information. Additionally, manufacturers can be assessed an escalating excise tax beginning at 65 percent of the drug's prior year's total sales, increasing to 95 percent once the manufacturer is out of compliance for more than 270 days. Alternatively, the manufacturer may withdraw its products from Medicare instead of engaging in negotiations.

Inflation Rebates

Under the IRA, single-source Part B drugs and all Part D drugs, excluding certain low-spend drugs, would be required to pay a rebate on a unit of a drug paid under Part B or D where the price of the drug increases faster than inflation. The original intent was to apply this penalty to drugs under Medicare as well as private health insurance, but because of budgetary rules, the Senate parliamentarian determined that it could only be applied to Medicare. A manufacturer that does not pay a rebate would be subject to a civil monetary penalty (CMP) in an amount at least equal to 125 percent of the rebate amount.

According to an analysis by the Kaiser Family Foundation (KFF), these inflation-based rebates could apply to many drugs. The Foundation's analysis determined that, in 2019 and 2020, half of all Medicare-covered prescriptions saw price increases that outpaced inflation.

For Part B drugs, the rebate will be calculated as the total number of Medicare Part B units of the drug in the rebate quarter (excluding 340B units and packaged units); multiplied by the amount (if any) by which the rebate quarter Part B payment rate exceeds the inflation-adjusted benchmark quarter Part B payment rate. Part B drugs currently approved would have Q3 of 2021 as their payment amount benchmark quarter, while drugs approved after Dec. 1, 2020, would have the third full quarter after their approval as a benchmark quarter.

For Part D drugs, the rebate will be calculated as the total number of Medicare Part D units of the drug in the rebate year (excluding 340B units beginning in 2026); multiplied by the amount (if any) by which the volume-weighted average annualized average manufacturer price (AMP) for the rebate year exceeds the inflation-adjusted volume-weighted average annualized AMP for the benchmark year. The benchmark year for currently approved Part D drugs is 2021. Part D drugs approved after Oct. 1, 2021, will use the first calendar year following approval as their benchmark year.

A manufacturer subject to a rebate would receive a rebate invoice within six months of the end of the rebate quarter. The Secretary may choose to delay sending invoices for calendar quarters in 2023 and 2024 to not later than Sept. 25, 2025. A manufacturer would be required to pay the rebate within 30 days of invoice receipt.

Part D Benefit Changes and Other Notable Health Provisions

Out-of-Pocket Cap: While Medicare Part D has limits on patient copays, it does not have an explicit out-of-pocket cap for Medicare beneficiaries. When a beneficiary has incurred out-of-pocket costs and discounts slightly in excess of $7,000, they reach what is known as the "catastrophic phase" of the benefit, where they pay 5 percent of the cost of their drugs (while Medicare covers 80 percent and plans cover the remaining 15 percent). The IRA eliminates this 5 percent cost-sharing in the catastrophic phase (effective in 2024) and caps total patient out-of-pocket costs in Part D at $2,000 (effective in 2025).

Insulin Caps: The bill caps out-of-pocket costs for insulin copays under Medicare. Specifically, cost-sharing for Part D plans will be capped at $35 for approved insulin products during plan years 2023 through 2025, after which it will be the lesser of $35, 25 percent of the established maximum fair price or 25 percent of the negotiated price. There will be temporary subsidies for January-March 2023 for any cost-sharing over this amount and special limitations for insulin furnished under durable medical equipment. Senate budget procedural rules blocked the application of this price cap to private health insurance.

Pharmacy Benefit Manager Rebate Rule Further Delayed: The IRA further delays the implementation of a November 2020 HHS final rule that would have eliminated the safe harbor for Part D drug rebates and replaced it with a new one for point-of-sale discounts. The rule's implementation was previously delayed until Jan. 1, 2026, and this legislation further extends that delay to Jan. 1, 2032. Notably, the Congressional Budget Office (CBO) indicated that delaying the rebate rule saves money.

Enhanced Payments for Biosimilars: To incentivize the uptake of biosimilars, the IRA temporarily increases the Medicare Part B add-on payment for certain biosimilars from 6 percent to 8 percent of the reference product's average sales price (ASP) from Oct. 1, 2022, through the end of 2027. Additionally, for new biosimilars furnished on or after July 1, 2024, the IRA changes the initial period payment rate to be the lesser of the biosimilar's wholesale acquisition cost (WAC) plus 3 percent or 106 percent of the reference product's ASP**.**

Maximum Monthly Cap on Cost-Sharing Payments Under Prescription Drug Plans and Medicare Advantage Prescription Drug (MA-PD) Plans: The IRA creates a maximum monthly cap on cost-sharing payments beginning in 2025 and directs Prescription Drug Plan sponsors and Medicare Advantage organizations offering plans to provide beneficiaries with the option to pay copays in monthly installments.

Cap on Premiums/"Premium Stabilization": Under the IRA, Part D plans will have a cap on the amount that they can increase premiums from year to year – 6 percent through 2029. In 2030 and subsequent years, CMS will recalculate base premiums using the original Part D premium formula.

Low-Income Subsidy (LIS) Eligibility: The IRA expands eligibility for low-income subsidies under Part D of the Medicare Program from 135 percent of the federal poverty line (FPL) to 150 percent of the FPL beginning Jan. 1, 2024.

Vaccine Cost-Sharing: The IRA establishes a program to eliminate cost-sharing for Medicare Part D beneficiaries for vaccines recommended by the Centers for Disease Control and Prevention's (CDC) Advisory Committee on Immunization Practices beginning in 2023.

Improving Access to Adult Vaccines Under Medicaid and CHIP: The IRA requires coverage of certain adult vaccinations under Medicaid and eliminates some cost-sharing. It also increases the Federal Medical Assistance Percentage (FMAP) by 1 percent for adult vaccines and their administration. Finally, the IRA requires the coverage of approved, recommended adult vaccines and their administration under Children's Health Insurance Program (CHIP) for individuals age 19 and older and eliminates cost-sharing.

Energy and Climate Tax Incentives

The IRA will rely heavily on the tax code to advance the deployment of clean energy technologies and to combat climate change. It will restore, modify and expand several tax credits and other incentives, while also creating new credits. The Joint Committee on Taxation estimates that in total, the provisions in Subtitle D – Energy Security of the IRA will cost approximately $68 billion over the next 10 years. Below is a summary of Subtitle D.

Many of these provisions provide two credit values: a lower base credit and a bonus rate. The bonus rate is equal to five times the base amount, and is available only when requirements related to prevailing wage and apprenticeship are met. Under certain provisions, the IRA also further incentivizes the use of domestic content and placement in identified communities, e.g., energy communities or low-income communities.

Another unique feature of the IRA is that it permits taxpayers, in particular situations, to elect a direct pay option in lieu of a tax credit, or the option to monetize the credits by transferring them to another entity.

Key Concepts: Bonus Credit	
Prevailing Wage	Under the prevailing wage requirements, a taxpayer must ensure that any laborers and mechanics are paid prevailing wages during the construction of a project and, during the relevant credit period, for the alteration and repair of such project. The IRA provides correction procedures and directs the Secretary of the Treasury to provide further guidance.
Apprenticeship	Under the apprenticeship requirements, a taxpayer must ensure that no less than the applicable percentage of total labor hours for the construction of the project are performed by qualified apprentices. The IRA provides correction procedures and directs the Secretary of the Treasury to provide further guidance.
Domestic Content	The taxpayer must certify that any steel, iron or manufactured product which is part of a facility was produced in the United States. For this purpose, manufactured products will be considered manufactured in the United States if the "adjusted percentage" of the total cost of the components of such product are mined, produced or manufactured in the United States.

Energy Community	Energy communities are defined to include: 1) brownfield sites; 2) a metropolitan or non-metropolitan area which (a) has direct employment or local tax revenues over an established percentage related to the extraction, processing, transport or storage of coal, oil or natural gas (b) has an unemployment rate at or above the national average; or 3) a census tract or any adjoining tract in which a coal mine closed after Dec. 31, 1999, or a coal fired electric power plant was retired after Dec. 31, 2009.
Low-Income	Applicable for solar and wind facilities, low-income communities are defined by 26 U.S.C.§ 45D(e) or on Indian land. Low- income residential building project are those projects participating in certain federal housing assistance programs, while low-income economic benefit projects are those where at least 50 percent of the financial benefits of the electricity produced must be provided to households with income either (a) less than 200 percent of the poverty line, or (b) less than 80 percent of area median gross income.
Key Concepts: Credit Monetization	
Direct Pay	In certain limited circumstances a taxpayer can elect for direct payment of the tax credit. Importantly, direct payment is only available for an "applicable entity" which includes a tax-exempt entities, a state or political subdivision thereof, the Tennessee Valley Authority, an Indian Tribal Government or any Alaska Native Corporation. In certain cases direct pay is phased out if domestic content requirements are not ascertained. This limited direct pay option is available for tax credits found in Sections 30C, 45(a), 45Q, 45U, 45V 45W, 45X, 45Y, 45Z, 48, 48C and 48E. The limited ability to elect direct pay by only those applicable entities is broadened under certain provisions (specifically Section 45Q, Section 45X, and 45V) for the first five years, opening the option to elect direct pay to a broader array of taxpayers.
Transferability	In certain circumstances, a taxpayer can elect to transfer all or any part of a tax credit to an unrelated taxpayer in exchange for cash. The ability to transfer is available for tax credits found in Sections 30C, 45(a), 45Q, 45U, 45V, 45X, 45Y, 45Z, 48, 48C and 48E.

Energy Generation

Production Tax Credit (PTC) Extension – Section 45:

- The IRA will extend the renewable energy production tax credit (PTC) until the end of 2024, after which the PTC will transition to technology-neutral.
- This credit applies to the production of energy from solar, wind, geothermal, biomass and hydropower and other eligible projects.
- The phasedown currently in place for wind energy is removed as of Jan. 1, 2022, permitting onshore and offshore wind projects to take the full value of the PTC for 2022, 2023 and 2024.
- The base credit will be 0.3 cents per kWh, with a bonus credit of 1.5 cents per kWh (credit multiplied by five) if prevailing wage and apprenticeship requirements are met (with an exception to these requirements for small projects).
- Taxpayers will be eligible for a bonus 10 percent PTC if certain domestic content requirements are met (adjusted percentage of generally 40 percent for most projects and 20 percent for offshore wind), or if the project is located in an energy community. If eligible for both, taxpayers can benefit from both of these percentage increases.
- The IRA will make a limited direct pay option available and the credits can be transferred.

Investment Tax Credit (ITC) Extension – Section 48:

- The IRA will extend the investment tax credit (ITC) for solar energy property and most other ITC-eligible property until the end of 2024. (Geothermal credit will be extended until 2035.)
- Like the PTC, the ITC will transition to technology-neutral in 2025.
- The IRA will expand what is eligible for the ITC, including energy storage technology.
- The base credit will be 6 percent, with a bonus credit of 30 percent (base credit multiplied by five) if prevailing wage and apprenticeship requirements are met.
- Similar to the PTC, taxpayers will be eligible for an additional 10 percent ITC if certain domestic content requirements are met or if the project is located in an energy community.
- In addition, there will be a potential 10 percent bonus credit for solar and wind facilities located in low-income communities.
- Alternatively, there will be a potential 20 percent bonus credit for solar and wind facilities that are part of a qualified low-income residential building project or a low-income economic benefit project.
- The IRA will make a limited direct pay option available and the credits can be transferred.

2022 - 2024: *The IRA will extend, expand and modify the Section 45 PTC and the Section 48 ITC.*

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2025 - 2032: *The IRA will establish a technology-neutral PTC and ITC, i.e., the Clean Energy Production Credit (Section 45Y) and the Clean Energy Investment Tax Credit (Section 48E).*

Attachment: Inflation Reduction Act Summary (Infrastructure Investment & Jobs Act (IIJA) & Inflation Reduction Act: Climate Resilience

Technology-Neutral PTC and ITC – Section 45Y and 48E:

- Beginning in 2025, the traditional ITC and PTC will generally no longer apply. They will be replaced by new technology-neutral credits.
- Eligibility for these credits generally requires that the facility's greenhouse gas (GHG) emissions are no greater than zero.
- The 45Y base credit value is 0.3 cents per kWh with a bonus credit (credit multiplied by five) if prevailing wage and apprenticeship requirements are met.
- The 48E base credit value is 6 percent with a bonus credit (credit multiplied by five) if prevailing wage and apprenticeship requirements are met.
- These credits phase out in 2032, or when the Secretary of the Treasury determines that the annual GHG emissions are equal to or less than 25 percent of the emissions produced in 2022, whichever is earlier.
- There will be a potential 10 percent bonus credit for energy communities and when domestic content requirements are met.
- The applicable percentages to meet the domestic content requirements increase over time:
    - Generally, the adjusted percentage is 40 percent until 2025, 45 percent in 2025, 50 percent in 2026, and 55 percent after 2026.
    - The adjusted percentage for offshore wind facilities is 20 percent until 2025, 27.5 percent in 2025, 35 percent in 2026, 45 percent in 2027, and 55 percent after 2027.
- The IRA will make a limited direct pay option available and the credits are transferable.

Zero-Emission Nuclear Power PTC – Section 45U:

- The IRA will create a PTC for the production of electricity from a nuclear facility beginning in 2024. The credit expires after 2032.
- The base credit will be 0.3 cents per kWh, with a bonus credit of 1.5 cents per kWh (base credit multiplied by five) if the project meets prevailing and apprenticeship requirements.
- The credit is subject to reduction based on gross receipts of any electricity sold.
- The IRA will make a limited direct pay option available and the credit is transferable.

Energy Manufacturing

Advanced Energy Project Credit – Section 48C:

- The IRA will revise and extend the advanced energy project credit.
- This credit will be available for a wide range of renewable energy equipment, and will be focused on the manufacturing facilities related to the production of equipment.
- The advanced energy project credit will be an allocated tax credit, i.e., the IRA will set a maximum that can be allocated on a competitive basis.
- Specifically, the IRA will allocate $10 billion; of which at least $4 billion must be allocated to energy communities.
- The base credit will be 6 percent, with a bonus credit available (base credit multiplied by five) if prevailing wage and apprenticeship requirements are met.

Advanced Manufacturing Production Credit – Section 45X:

- The IRA will create a new production credit through 2032 for production of components related to clean energy such as solar photovoltaic (PV) cells, wind energy components and battery cells.
- This credit will be available for direct pay for the first five years under broad conditions and the credits are transferable.
- The credits will generally be subject to phase out beginning in 2029.
- The credit amount will vary depending on the applicable eligible component, as shown in the chart below.

Component	Credit Amount
Thin film PV cell	$0.04/watt
Crystalline PV cell	$0.04/watt
PV wafer	$12/square meter
Solar grade polysilicon	$3/kilogram
Polymeric backsheet	$0.40/square meter
Solar module	$0.07/watt
Wind energy component	Offshore wind vessel – 10 percent of vessel sales price All other – applicable amount (e.g., $0.02 in the case of a blade)/watt
Torque tube	$0.87/kilogram
Structural fastener	$2.28/kilogram
Inverter	Applicable amount (e.g., $0.25 for central inverter)/watt
Electrode active materials	10 percent cost of production
Battery cell	$35/kWh
Battery module	With limitations, $10 ($45 if module does not use battery cells)/kWh
Applicable critical mineral	10 percent cost of production

Carbon Sequestration

Carbon Sequestration Credit – Section 45Q:

- The IRA will extend the carbon sequestration credit for facilities that begin construction before 2033, and provides additional modifications, including an enhanced credit for direct air capture (DAC) and lowering the carbon capture threshold requirements at facilities.
- Like PTC and ITC, there will be a bonus credit when prevailing wage and apprenticeship requirements are met.
- Generally, the prevailing wage and apprenticeship requirements will be met if:

Attachment: Inflation Reduction Act Summary (Infrastructure Investment & Jobs Act (IIJA) & Inflation Reduction Act: Climate Resilience

  - for construction of a facility which begins 60 days after the Secretary of the Treasury publishes guidance, and any carbon capture equipment placed in service at such facility, such guidance is satisfied.
  - for construction of any carbon capture equipment which begins 60 days <u>after</u> the Secretary of the Treasury publishes guidance, which is installed at a facility, the construction which begins prior to that date, such guidance is satisfied with respect to the carbon capture equipment.
  - for construction of any carbon capture equipment which begins <u>prior</u> to the date that is 60 days after the Secretary of the Treasury publishes guidance, which is installed at a facility, the construction of which also begins prior to that date the requirements are deemed satisfied.

  As with the prevailing wage requirements found in other IRA energy credits, there exists the opportunity for taxpayers to remedy violations.
- The IRA will lower the annual thresholds of carbon a facility must capture to qualify:
  - 18,750 tons of carbon oxide for power plants
  - 12,500 tons of carbon oxide for industrial facilities, and
  - 1,000 tons of carbon oxide for DAC facilities.
- This credit will be available for direct pay for the first five years under broad conditions and the credits are transferable.
- The credit amounts per metric ton of carbon captured will be as follows:

	Base Credit (*Per metric ton of carbon*)	Bonus Credit (*Per metric ton of carbon*)
Carbon captured and used for enhanced oil recovery (EOR) or utilization	$12	$60
Carbon capture and sequestered	$17	$85
Direct air captured and used for EOR or utilization	$26	$130
Direct air captured and sequestered	$36	$180

Clean Fuels

Clean Hydrogen – Section 45V:

- The IRA will create a PTC and an ITC for clean hydrogen; taxpayers will have the option to elect.
- Clean hydrogen can be produced from different sources, including renewable electricity (green hydrogen) and natural gas reforming (blue hydrogen).
- To qualify, hydrogen must be produced through a process resulting in lifetime GHG emissions of no more than 4 kgs of CO2e per kg of hydrogen.
- The base credit amount will be 60 cents per kilogram of qualified clean hydrogen, multiplied by an emissions factor depending on the GHG emissions factor provided by the fuel.

- A bonus credit multiplier is offered if prevailing wage and apprenticeship requirements are met, wherein the applicable credit may be multiplied by five.
- Taxpayers will be able to elect to receive an ITC in lieu of the PTC for a base credit of up to 6 percent, or 30 percent if prevailing wage and apprenticeship requirements are met.
- This credit will be available for direct pay for the first five years under broad conditions and the credits are transferrable.
- No clean hydrogen credit will be allowed for a facility which is already qualifying for the carbon sequestration credit.

Sustainable Aviation Fuel – Section 40B:

- The IRA will add a new tax credit for the sale or mixture of sustainable aviation fuel (SAF) for a limited time: 2023 and 2024.
- The base credit will be $1.25 per gallon, with a supplemental credit amount of 1 cent per gallon for each percentage point by which the lifecycle GHG reduction percentage for the fuel exceeds 50 percent (with a maximum supplemental credit of 50 cents/gallon, totaling $1.75/gallon).
- Upon expiration, the credit will transition to the Clean Fuel Production Credit (new Section 45Z).

Biodiesel Renewable Fuels and Alternative Fuels – Various Sections:

- The IRA will extend the biodiesel, renewable diesel, alternative fuels, alternative fuels mixtures and second generation fuels tax credits through 2024.
- Beginning in 2025, these credit will transition to the Clean Fuel Production Credit (new Section 45Z).

Clean Fuel Production Credit – Section 45Z:

- Beginning on Dec. 31, 2024, existing fuel credits will transition to the Clean Fuel Production Credit.
- The credit will expire at the end of 2027.
- In order to receive the full credit the fuel must have a life-cycle emission level of less than 50 kilograms of CO2e per mmBTU.
- The base credit for transportation fuel will be 20 cents per gallon, while the SAF base credit will be 35 cents per gallon.
- The base credit is adjusted downward based on the emission factor of the fuel.
- The bonus credit is available (base credit multiplied by five) if production meets prevailing wage and apprenticeship requirements.

2022 - 2024: *IRA extends the biodiesel, renewable diesel, alternative fuels, alternative fuels mixtures, and second generation fuels tax credits*

→

2025 - 2027: *IRA establishes the Clean Fuel Production Credit (Section 45Z)*

Clean Vehicles

Alternative Fuel Refueling Property Credit – Section 30C:

- The IRA will extend and modify the tax credit available for alternative refueling property (i.e., electric vehicle charging), increasing the maximum credit available from $30,000 to $100,000 and allowing the credit to be calculated per single unit rather than per location.
- A credit will also be available to individuals.
- The IRA will extend the credit availability to 2032.
- The IRA will require the property to be placed in a qualified census tract, and will make a bonus credit available if wage and apprenticeship requirements are met.
- If the property is depreciable property, the base credit will be 6 percent; if the prevailing wage and apprenticeship requirements are met, the credit will be 30 percent.
- The IRA will make a limited direct pay option available and the credit is transferable.

Clean Vehicles Credit – Section 30D:

- The IRA will extend and modify the existing "New qualified plug-in electric drive motor vehicles" credit (Section 30D) with a Clean Vehicle Credit, which will be worth up to $7,500.
- The refundable $7,500 credit will have two $3,750 components:
  - Component 1 will be met when a certain percentage of the critical minerals in the battery are extracted or processed in the U.S., a country with a U.S. free trade agreement or recycled in North America.
  - Component 2 will be met when a certain percentage of the battery is manufactured or assembled in North America.
- Vehicles meeting one but not both requirements will be limited to a $3,750 credit.
- Credits will be disallowed for vehicles with retail prices above certain thresholds, and for taxpayers with modified adjusted gross income of more than $300,000 for taxpayers married filing jointly, $225,000 for head of household and $150,000 single taxpayers.
- The new credit will eliminate the current statutory limit of 200,000 vehicles per manufacturer.
- The credit will apply to vehicles placed in service after Dec. 31, 2022, and runs through 2032.
- The credit can be transferred to a dealer under certain conditions, lowering the purchase price.

Previously Owned Clean Vehicles – Section 25E:

- The IRA will provide a tax credit for previously owned clean vehicles that are at least 2 years old; purchased before Dec. 31, 2032; and equal to the lesser of $4,000 or 30 percent of the sale price.
- Similar to the credit for new vehicles, taxpayers above certain income thresholds will not qualify and price thresholds exist:
  - The credit will be limited to taxpayers earning less than $150,000 for those married filing jointly; $112,500 for a head of household and $75,000 for a single taxpayers.
  - The sale price cannot exceed $25,000.

Qualified Commercial Clean Vehicles – Section 45W:

- The IRA will create a new credit for qualified commercial clean vehicles.

- The credit will be equal to 15 percent of its cost (30 percent if the vehicle is not powered by gasoline or diesel), or the incremental (excess) cost for such vehicle as compared to one that relies solely on gasoline or diesel.
- The maximum credit will be $7,500 for vehicles with a gross weight rating of 14,000 pounds and $40,000 for all others.
- The credit will apply to any vehicles placed in service after Dec. 31, 2022, through 2032.
- The IRA will make a limited direct pay option available.

Energy Efficiency

Nonbusiness Energy Property Credit – Section 25C:

- Beginning in 2022, the IRA will modify, expand and extend the nonbusiness energy property credit through 2032 by increasing the credit from 10 percent to 30 percent.
- The lifetime cap on the credit is replaced with an $1,200 annual credit limitation, except in the case of heat pumps and biomass stoves, for which the credit may be up to $2,000. Additionally:
    - the credit for no one item of qualified residential energy property may exceed $600
    - the credit for all exterior windows and skylights, aggregated, may not exceed $600, and
    - the credit for any single exterior door may not exceed $250, and the credit for all exterior doors, aggregated, may not exceed $500
- Qualified energy property made eligible for the credit cover a range of products, including water heaters, heat pumps, central air conditioners, hot water boilers, biomass stoves, oil furnaces, air sealing materials and systems, costs of home energy audits, and electrical panels installed to enable qualified improvements, with specific efficiency requirements for each upgrade.
- Roofs are made ineligible for the credit.
- Reporting requirements are updated to mandate that manufacturers and taxpayers label and report, respectively, a product identification number associated with the property in order to access the credit.

Residential Clean Energy Credit – Section 25D:

- The IRA will extend through 2034 the Section 25D credit, which allows taxpayers to claim a credit for qualified residential energy efficient property purchases, while implementing a phaseout as outlined below:
    - through 2033, the credit is 30 percent
    - in 2033, the credit is 26 percent
    - in 2034, the credit is 22 percent
- Battery storage with capacity of at least 3 kWh is eligible for the credit.

Energy Efficient Commercial Buildings Deduction – Section 179D:

- Beginning in 2023, the IRA will modify, expand and extend the energy efficient commercial buildings deduction.

- The IRA will reduce the amount by which a building must increase its efficiency to qualify for the deduction from 50 percent to 25 percent, update the reference standard to ASHRAE 90.1-2007 and keep it current with any future ASHRAE updates, and eliminate the partial allowance of the 179D deduction.
- The base deduction will be 50 cents per square foot, and the deduction can be increased 2 cents for each percentage point increase in energy efficiency, up to $1 per square foot.
- The bonus deduction will be $2.50 per square foot (base credit multiplied by five) if prevailing wage and apprenticeship requirements are met, and the deduction can be increased 10 cents for each percentage point increase in energy efficiency, up to $5 per square foot.
- The cap on the deduction is reduced from a lifetime cap to a three-year cap.

New Energy Efficient Home Credit – Section 45L:

- The IRA will extend through 2032 and increase the value of the residential energy efficient property credits providing contractors with tax credits for housing units built or remodeled to reach energy-saving specifications for a variety of home types outlined in the chart below.
- A bonus credit is offered for multifamily homes if prevailing wage requirements are met during the construction of the units.

Home Type	Efficiency Standard	Base Credit	Bonus Credit
Single-Family	Energy Star Single-Family New Homes Program	$2,500	N/A
Manufactured Homes	Energy Star Manufactured Homes National Program	$2,500	N/A
Multifamily Homes	Energy Star Manufactured National and Regional Program	$500	$2,500
Multifamily Homes – Zero-Energy Ready	DOE Zero Energy Ready Home Program	$1,000	$5,000

Superfund

Reinstatement of Superfund Tax – Section 4611:

- The IRA will reinstate the Superfund tax on crude oil received at a U.S. refinery and petroleum products entered in to the U.S. for consumption, use or warehousing.
- The tax will be increased from historic levels from 9.7 cents to 16.4 cents per barrel.
- The tax will be effective in 2023 and will not sunset.

Climate, Energy and Environment Investments

In supplement to the tax incentives for clean energy, the IRA will make direct investments in programs across more than a dozen agencies, providing unprecedented resources to the U.S. Environmental Protection Agency (EPA), U.S. Department of Agriculture (USDA), U.S. Department of the Interior (DOI) and U.S. Department of Energy (DOE) and other agencies to improve air quality, invest in climate-smart and resilient infrastructure, and advance domestic energy and transportation technologies. The IRA will encourage an "all-of-the-above" approach to U.S. energy policy, pairing funding for renewable energy development with policies to protect oil and gas development intended to ensure energy security. In parallel, the IRA will make wide-ranging investments in energy efficiency across buildings, industry, and transportation to reduce emissions, and aimed at saving money for consumers and businesses.

Throughout the legislation, the IRA prioritizes and directly targets funding for environmental justice. Numerous programs include requirements for investments to be made in low-income communities, communities of color, and rural communities that are oftentimes disadvantaged and disproportionately exposed to toxic pollution.

Noteworthy trends at the agency level include:

- **Environmental Protection Agency (EPA):**
  - The IRA will put a price on methane emissions, marking the first time EPA will directly levy fees onto emitters to price in climate externalities associated with superpollutants. This fee is also tied to $1.5 billion in incentives for methane reduction technologies.
  - The IRA will give EPA broad discretion over the bill's largest single pot of money, the $27 billion Greenhouse Gas Reduction Fund, which will allow EPA to invest in clean energy technologies via green banking, offering federal financing for projects without the requirements associated with direct federal investment.
  - The IRA will offer state, local and tribal governments a wide range of grants and financial incentives to reduce air pollution, with an emphasis on reaching disadvantaged populations, environmental justice and fenceline communities.
  - The IRA applies across numerous EPA programs a specific definition of "greenhouse gas" that includes air pollutants, carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons and sulfur hexafluoride.

U.S. Department of Agriculture (USDA):

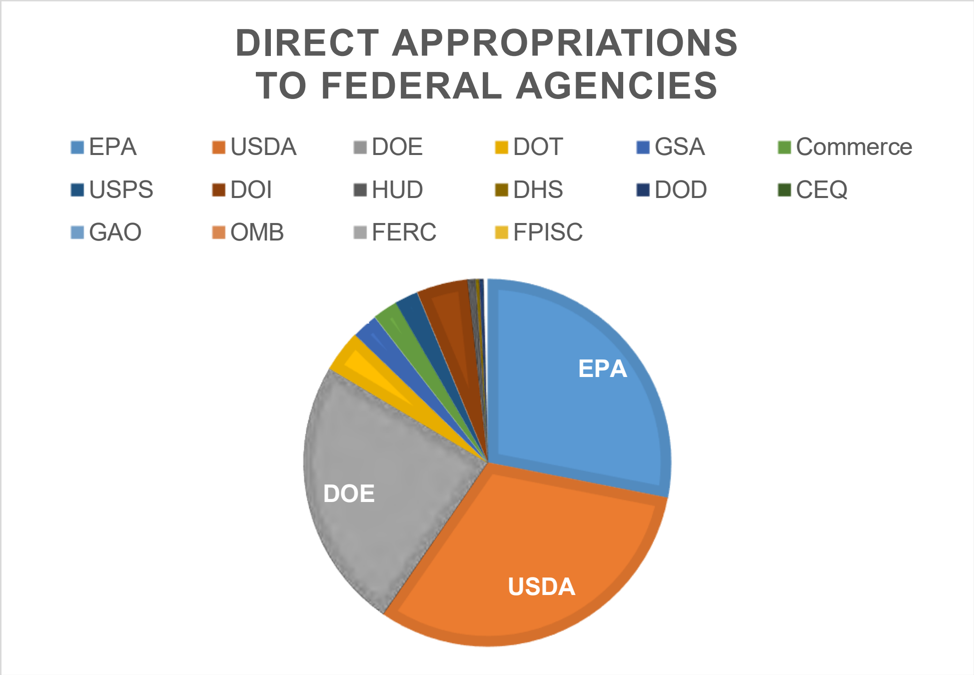
  - The IRA will invest significant and gradually increasing resources in conservation programs administered by the Natural Resources Conservation Service (NRCS), to the tune of $20 billion – the second-largest single pot of money in the bill.
  - Funding for forestry programs is divided fairly equally between hazardous fuels reduction to reduce wildfire risks and conservation activities, including efforts to support forests' potential for natural carbon sequestration.
  - The IRA will support climate-friendly development of rural communities through bolstered appropriations for a variety of popular programs, including nearly $10 billion to support rural cooperatives' access to renewable energy.

- **U.S. Department of Energy (DOE):**
    - Across DOE programs, the IRA bolsters domestic manufacturing, industrial emissions reductions, and energy infrastructure including transmission in addition to clean energy research, development and deployment initiatives.
    - Nearly $10 billion is allocated to building efficiency through DOE programs, with resources passing through to states, local governments, tribes, and directly back to homeowners in the form of residential efficiency rebates to lower household energy bills.
    - The IRA will increase commitment authority for many of DOE's loan programs, leveraging federal resources as a multiplier for clean energy financing.

- **U.S. Department of the Interior (DOI):**
    - The IRA's "all-of-the-above" strategy to U.S. energy development is reflected most notably in the DOI title: investment and opportunity for traditional and renewable energy development are paired together, including guaranteeing onshore and offshore leasing opportunities for both sectors.
    - The IRA will raise royalties on natural resource extraction, including establishing a new royalty for methane extraction, including venting and flaring.
    - During IRA negotiations, Sen. Catherine Cortez Masto (D-Nev.) advocated for increase funding for drought response and preparedness activities in Western states, resulting in a $4 billion boost in the final package considered by the Senate.

- **U.S. Department of Defense (DoD):**
    - The IRA builds on President Joe Biden's recent invocation of the Defense Production Act (DPA) to accelerate domestic manufacturing of clean energy technologies (solar; transformers and electric grid components; heat pumps; insulation; and electrolyers, fuel cells, and platinum group metals), providing an infusion of funding for DPA activities.

The graph below offers a holistic overview of direct IRA appropriations to federal agencies (beginning FY 2022).



Agency	Total Appropriation
USDA	$46.684 billion
EPA	$41.491 billion
DOE	$35.292 billion
DOI	$6.646 billion
DOT	$5.442 billion
GSA	$3.375 billion
DOC	$3.310 billion
USPS	$3.015 billion
HUD	$1 billion
DHS	$500 million
DoD	$500 million
FPISC	$350 million
FERC	$100 million
CEQ	$62.5 million
GAO	$25 million
OMB	$25 million
TOTAL	***$147.817 billion***

U.S. Department of Agriculture (USDA)

Conservation Programs

Additional Agricultural Conservation Investments ($20 billion)

- The IRA will provide $20 billion for Farm Bill conservation programs (authorized through the Commodity Credit Corporation (CCC)), extend the program authorizations through 2031, and stipulate funding be prioritized for projects that mitigate or address climate change, including reducing, capturing, avoiding, or sequestering certain GHG emissions:
  - **Environmental Quality Incentives Program (EQIP):** Funding increased: $250 million for FY 2023; $1.75 billion for FY 2024; $3 billion for FY 2025; $3.45 billion for FY 2026; stipulating:
    - the additional funding is exempted from the statutory requirement that at least 50 percent of payments target livestock production, including grazing management,
    - within the allocations, the requirement for on-farm conservation trial funding is increased from $25 million to $50 million annually, with prioritization afforded to proposals that utilize diet and feed management to reduce methane emissions from livestock, and
    - funds must go to agricultural practices that directly improve soil carbon or reduce nitrogen losses, or reduce, capture, avoid, or sequester carbon dioxide, methane or nitrous oxide emissions.
  - **Conservation Stewardship Program (CSP):** Funding increased: $250 million for FY 2023; $500 million for FY 2024; $1 billion for FY 2025; $1.5 billion for FY 2026, stipulating:
    - funds must go to either: agricultural practices that directly improve soil carbon or reduce nitrogen, or reduce, capture, avoid or sequester carbon dioxide, methane, or nitrous oxide emissions associated with agricultural production.
  - **Agricultural Conservation Easement Program (ACEP):** Funding increased: $100 million for FY 2023; $200 million for FY 2024; $500 million for FY 2025; $600 million for FY 2026 for easements or interests in land that will most reduce, capture, avoid or sequester carbon dioxide, methane or nitrous oxide emissions associated with eligible land.
  - **Regional Conservation Partnership Program (RCPP):** Funding increased: $250 million for FY 2023; $800 million for FY 2024, $1.5 billion for FY 2025, $2.4 billion for FY 2026 stipulating:
    - funds prioritized for partnerships that directly improve soil carbon or reduce nitrogen losses, or reduce, capture, avoid or sequester carbon dioxide, methane or nitrous oxide emissions for either agricultural producers or nonindustrial private forestland owners.
    - funds may be prioritized for projects that either leverage corporate supply chain sustainability commitments; or utilize models that pay for outcomes from targeting methane and NOx emissions.

  - clarifies that the statutory cap of not more than 15 alternative funding arrangements or grant agreements with one or more eligible partners each fiscal year does not apply to these funds.

Conservation Technical Assistance ($1.4 billion)

- The IRA will provide $1 billion to the Natural Resource Conservation Service (NRCS) to provide conservation technical assistance through Sept. 30, 2031,
- The IRA will provide $300 million for NRCS to carry out a program to quantify carbon sequestration and carbon dioxide, methane and nitrous oxide to inform the USDA Greenhouse Gas Inventory and Assessment Program, and
- The IRA will provide an additional $100 million to cover program administration expenses.

Rural Development and Agricultural Credit

Additional Funding for Electric Loans for Renewable Energy ($1 billion)

- The IRA will provide $1 billion in loan subsidy under Section 317 of the Rural Electrification Act with forgiveness authority up to 50 percent of loan amount, or greater, if granted a waiver from the Secretary, including for projects that store electricity in support of renewable energy production.

Rural Energy for American Program (REAP) ($2.22 billion)

- The IRA will provide $1.72 billion for the Rural Energy for America Program (REAP), including $820.25 million for FY 2022 and $180.28 million for FYs 2023 through 2027.
- The IRA will provide an additional $144.8 million for FY 2022 and $31.8 million for FYs 2023 through 2027 for underutilized renewable energy technologies and program technical assistance, including reducing the match requirement for these grants from 75 percent to 50 percent.

Biofuel Infrastructure and Agriculture Product Market ($500 million)

- The IRA will provide $500 million in FY 2022 for competitive grants for infrastructure improvements for blending, storing, supplying or distributing biofuels, including installation, retrofitting or upgrading fuel dispensers for higher ethanol and biodiesel blends (E15 or greater); or for construction and retrofitting home heating oil distribution centers to accommodate ethanol and biodiesel blends; the bill includes a 25 percent match requirement. The bill excepts transportation infrastructure not on location where fuels are blended, stored, supplied or distributed.

USDA Assistance for Rural Electric Cooperatives ($9.7 billion)

- The IRA will provide $9.7 billion for loans and grants to electric cooperatives to purchase renewable energy, renewable energy systems, zero-emission systems, and carbon capture and storage systems, to deploy such systems or make energy efficiency improvements to generation and transmission assets. USDA is directed to prioritize projects that achieve the greatest GHG emission reductions and that will otherwise aid disadvantaged rural communities. Individual awards capped at $970 million, and grants require a 75 percent cost share.

Farm Loan Immediate Relief for Borrowers with At-Risk Agricultural Operations ($3.1 billion)

- The IRA will provide $3.1 billion in FY 2022 for distressed borrowers of direct or guaranteed loans administered by the Farm Service Agency to provide relief to borrowers for agricultural operations are at financial risk.

USDA Assistance and Support for Underserved Farmers, Ranchers, Foresters ($2.859 billion)

- The IRA will provide $125 million for outreach, mediation, financial training, capacity building, cooperative development, agricultural credit training and other technical assistance to underserved farmers, ranchers or forest landowners, including veterans beginning farmers and ranchers, and those living in high poverty areas.
- $250 million in loans and grants to improve land access for underserved farmers, ranchers or forest landowners, including veterans, beginning farmers and ranchers, and those living in high poverty areas.
- $10 million to fund activities of one or more commissions to address racial equity issues within USDA
- $250 million to land-grant institutions including tribal land-grant colleges and Hispanic-serving institutions for research, education, extension and scholarships for programs that provide internships and pathways to agriculture sector or federal employment.
- $2.2 billion for financial assistance to farmers, ranchers or forest landowners determined to have experienced discrimination in farm lending programs, up to $500,000 per individual
- $24 million for administrative costs to implement this section

U.S. Forest Service (USFS)

National Forest System Restoration and Fuels Reduction Project ($2.15 billion)

- The IRA will provide $2.15 billion to the USFS, broken down as follows:
    - $1.8 billion for hazardous fuels reduction projects on USFS land within the wildland-urban interface
    - $200 million for vegetation management projects on USFS land in accordance with a water source management plan or a watershed production and restoration action plan
    - $100 million to improve efficiency and effectiveness of USFS NEPA review, and
    - $50 million for the USFS to complete an inventory of old-growth and mature forests within the NFS system, and for protection of those forests
- Funds cannot be used for projects in wilderness areas or wilderness study areas, that include construction of permanent roads or trails, that are inconsistent with land management plans, or are carried out on lands not under the USFS system.
- The IRA includes a cost-share waiver authority.

Competitive Grants for Non-Federal Forest Landowners ($550 million)

- The IRA will provide funds for grants under the Cooperative Forestry Assistance Act Section 13A, requiring at least a 20 percent cost share, as follows:
    - $150 million for underserved foresters to invest climate mitigation or forest resilience practices
    - $150 million for underserved foresters' participation in emerging private markets for climate mitigation and forest resilience
    - $100 million for small forest landowners (fewer than 2,500 acres) to participate in emerging private markets for climate mitigation and forest resilience
    - $50 million for states and other entities to pay private forestland owners to implement forest practices based on the best available science to provide measurable increases in carbon sequestration and storage beyond customary practices on comparable land, and
    - $100 million for grants under the wood innovation grant program under Section 8643 of the 2018 Farm Bill, including for the construction of facilities and hauling removed material to reduce hazardous fuels to locations where the material can be utilized. Grants are capped at $5 million and require a 50 percent cost share

State and Private Forestry Conservation Programs ($2.2 billion)

- The IRA will provide $700 million for the Forest Legacy Program to provide grants to states to acquire land and interests in land.
- The IRA will provide $1.5 billion for the Urban and Community Forestry Assistance program, providing multiyear grants to state agencies, local governments, tribes or nonprofits for tree planting.

U.S. Environmental Protection Agency (EPA)

Decarbonization and Emission Reduction Programs

Greenhouse Gas Reduction Fund ($27 billion)

- The IRA will provide $27 billion to establish a new Greenhouse Gas Reduction Fund to invest in nonprofit, state and local financing institutions designed to rapidly deploy low- and zero-emission technologies by leveraging investment from the private sector. Projects funded under this program must reduce air pollution by reduction or avoidance of GHGs.
- The IRA requires that least 40 percent of benefits flow to low-income and disadvantaged communities to deploy or benefit from zero-emission technologies, including distributed technologies on residential rooftops, and direct investments are prioritized for projects that would otherwise lack access to financing, and that can ensure continued operability by monetizing repayments and revenues for other financial assistance; investment also available for indirect investment supporting public, quasi-public and nonprofit entities that offer financing for projects, including community and low-income focused lenders and capital providers.

Clean Heavy-Duty Vehicles ($1 billion)

- The IRA will provide $1 billion to establish a program to make awards of grants and rebates to states, local governments and nonprofit school transportation associations to replace Class 6 and Class 7 heavy-duty vehicles with zero-emission vehicles.
- Funding could also be used to purchase, install, operate and maintain the infrastructure needed to charge, fuel or maintain zero-emission vehicles; for the workforce development and training to support the maintenance, charging, fueling and operation of the zero-emission vehicles; or to plan and provide technical assistance to support of zero-emission vehicle adoption and deployment.
- The bill requires that 40 percent of funding ($400 million) be directed to recipients proposing to replace eligible heavy-duty vehicles serving communities located in nonattainment areas (i.e., areas with high air pollution).

Grants to Reduce Air Pollution at Ports ($3 billion)

- The IRA will provide $3 billion to establish a program to award grants and rebates for the purchase and installation of zero-emission equipment and technology at ports, as well as the development of climate action plans at ports.
- Eligible funding recipients are a port authority; a state, regional, local or tribal agency with authority over a port authority; or an air pollution control agency. Private entities may apply in partnership with the aforementioned eligible recipients.
- The bill allocates 25 percent of the funding ($750,000) for investments made at ports in nonattainment areas.

Climate Pollution Reduction Grants ($5 billion)

- The IRA will provide $5 billion to carry out Clean Air Act (CAA) Section 137 as follows:
    - Section 137 provides $250 million for grants for the costs of developing plans to reduce GHG air pollution, and directs the EPA to make such a grant to at least one state, air pollution control agency, municipality, or Indian tribe in each state. Each plan must include programs, policies, measures and projects that will achieve GHG air pollution reduction.

  - Section 137 further provides $4.75 billion for the EPA to competitively award grants to implement GHG air pollution reduction plans. To apply for a grant, applicants must include information regarding the projected reduction of GHG air pollution reductions, including in low-income and disadvantaged communities in its plan.

Methane Emissions Reduction Program ($1.55 billion)

- The IRA will provide $1.55 billion in financial incentives (i.e., grants, rebates, contracts and loans) for industry to monitor and reduce methane emissions from petroleum and natural gas systems, mitigate legacy air pollution.
- Funding may also be used to provide support for communities for improving climate resiliency, improving and deploying industrial equipment and processes that reduce methane and other GHG emissions and waste, supporting innovation in reducing methane and other GHG and waste from petroleum and natural gas systems, permanently shutting in and plugging wells on non-federal land, and environmental restoration.

Methane Emissions Fee

- The IRA will create a fee, imposed and charged by EPA, for facilities that emit more than 25,000 metric tons of carbon dioxide annually.
- The fee will apply to facilities that support oil and gas production, including transmission, processing, storage or gathering facilities.
- The IRA will allow companies that comply with future federal methane rules to avoid paying the fee as long as the same levels of emissions reductions are reached.
- The fee ramps up over the next few years as follows:
  - $900 per ton of methane in 2024
  - $1,200 per ton of methane in 2025, and
  - $1,500 per ton of methane in 2026

Diesel Emissions Reduction Act Funding ($60 million)

- The IRA will provide $60 million for Diesel Emissions Reduction Act (DERA) grants to identify and reduce diesel emissions resulting from goods movements facilities (e.g., airports, railyards and distribution centers), and vehicles servicing goods movement facilities, in low-income and disadvantaged communities to address the health impacts of emissions on those communities.

Low-Emissions Electricity Program ($87 million)

- The IRA will provide $87 million to EPA to carry out CAA Section 135, via the following investments:
  - $17 million to educate consumers on GHG emissions that result from domestic electricity generation and use
  - $17 million to educate and provide technical assistance to low-income and disadvantaged communities on GHG emissions that result from domestic electricity generation and use
  - $17 million to educate and provide technical assistance to industry on GHG emissions that result from domestic electricity generation and use
  - $17 million to educate and provide technical assistance to state, tribal and local governments on GHG emissions that result from domestic electricity generation and use
  - $1 million to evaluate GHG emission reductions anticipated to occur over the next 10 years, as a result from the aforementioned education initiatives, and
  - $18 million be used to ensure the assessed reductions are achieved

Greenhouse Gas Corporate Reporting ($5 million)

- The IRA will provide $5 million to support enhanced standardization and transparency of corporate climate action commitments and plans, and progress toward meeting such commitments and implementing such plans.

Environmental Production Declaration Assistance ($250 million)

- The IRA will provide $250 million to establish and carry out an Environmental Product Declaration (EPD) Assistance program to support development and enhanced standardization and transparency of environmental product declaration for construction materials and products, including measurements of embodied GHG emissions of the material or products, by: providing grants and technical assistances to businesses that manufacture construction materials and products for developing and verifying environmental product declarations, and to states, tribes and nonprofits that support those businesses; and to assist in measuring, reporting and steadily reducing the quantity of embodied carbon of constructions materials and products.

Low-Embodied Carbon Labeling for Construction Materials ($100 million)

- The IRA will provide $100 million to EPA, in consultation with the U.S. Department of Transportation (DOT) Federal Highway Administration (FHWA) and the General Services Administration (GSA), to develop and carry out a program to identify and label, based on environmental product declarations, low-embodied carbon construction materials and products used for transportation projects.
- These products must have substantially lower levels of embodied GHG emissions associated with all relevant stages of production, use, and disposal, as compared to industry averages as determined by EPA, based on environmental product declarations or determinations by state agencies and verified by EPA.

Air Pollution Monitoring, Mitigation and Reduction

Environmental and Climate Justice Block Grants ($3 billion)

- The IRA will provide $3 billion to establish program to provide grants invest in community-led projects in disadvantaged communities and community capacity building centers to address disproportionate environmental and public health harms related to pollution and climate change.
- Eligible funding recipients will be community-based nonprofits or organizations, or a partnership between community-based nonprofit organizations and a tribe, a local government or an institution of higher education.
- Eligible activities include:
    - community-led air and other air pollution monitoring, prevention and remediation, investments in low- and zero-emission and resilient technologies, and workforce development that help reduce GHG emissions and other air pollutants
    - mitigating climate and health risks from urban heat islands, extreme heat, wood heater emissions and wildfire events
    - climate resiliency and adaptation
    - reducing indoor toxics and indoor air pollution, or
    - facilitating engagement of disadvantaged communities in state and federal public processes

Funding to Address Air Pollution ($280.5 million)

- The IRA will provide $280.5 million to EPA for grants to address air pollution, broken down as follows:
    - a. **Fenceline Air Monitoring and Screening Air Monitoring:** $117.5 million for grants to deploy, integrate, support and maintain fenceline air monitoring, screening air monitoring, national air toxics trend stations, and other air toxics and community monitoring.
    - b. **Multipollutant Monitoring Stations:** $50 million for grants to expand the national ambient air quality monitoring network with new multipollutant monitoring stations, and to replace, repair, operate and maintain existing monitors.
    - c. **Air Quality Sensors in Low-Income and Disadvantaged Communities:** $3 million for grants to carry out the activities described above (in (a) and (b)) to deploy, integrate and operate air quality sensors in low-income and disadvantaged communities.
    - d. **Emissions from Wood Heaters:** $15 million for grants for testing and other agency activities to address emissions from wood heaters.
    - e. **Methane Monitoring:** $20 million for grants for monitoring methane emissions.
    - f. **Clean Air Act Grants (CAA):** $25 million to EPA for grants to carry out Section 103 of the Clean Air Act (CAA), a national research and development program (R&D) grant program at EPA for air pollution control agencies, as well as Section 105 of the CAA, grants for support of air pollution planning and control programs.
    - g. **Other Activities (CAA):** $45 million for grants to carry out Sections 111 ("Standards of performance for new stationary sources"), 115 ("International air pollutants"), 165 ("Preconstruction requirements"), 177 ("New motor vehicle emission standards in nonattainment areas"), 202 ("Emissions standards for new motor vehicles or new motor vehicle engines"), 211 ("Regulation of fuels"), 213 ("Nonroad engines and vehicles"), and 231 ("Establishment of standards for aircraft emissions").
    - h. **Greenhouse Gas and Zero-Emission Standards for Mobile Sources:** $5 million for EPA to provide grants to states to adopt and implement low- and zero-emission standards for mobile sources.

Funding to Address Air Pollution at Schools ($40 million)

- The IRA will provide $37.5 million for grants to monitor and reduce air pollution schools in low-income and disadvantaged communities under CAA Sections 103 and 105, and provides $12.5 million for providing technical assistance to schools in low-income and disadvantaged communities under CAA Sections 103 and 105, including to address environmental issues; to develop school environmental quality plans (e.g., standards for school building, design, construction and renovation), and to identify and mitigate ongoing air pollution hazards.

Funding for the Renewable Fuels Standard, per Section 211(O) of the Clean Air Act ($15 million)

- The IRA will provide $5 million to EPA for administration of the Renewable Fuels Standard, under Section 211 of the Clean Air Act, with respect to:
    - o the development and establishment of tests and protocols regarding the environmental and public health effects of fuels and fuel additives
    - o internal and external data collection and analyses to regularly updated applicable regulations, guidance, and procedures for determining lifecycle GHG emissions of a fuel, and
    - o the review, analysis and evaluation of the impacts of all transportation fuels (including fuel lifecycle implications) on the general public and on low-income and disadvantaged communities

- This section also provides $10 million for new grants to industry to support investments in advanced biofuels.

Program Implementation and Enforcement

Funding for Implementation of the American Innovation and Manufacturing Act ($38.5 million)

- The IRA will provide $38.5 million to implement the American Innovation and Manufacturing Act of 2020, enacted in Division S of the "Consolidated Appropriations Act, 2021" (Public Law 116-260), which addresses the use and regulation of fluorinated compounds in products and manufacturing, including by requiring the EPA to establish specified production and consumption baselines for the phase-down of specified fluorinated compounds.
- Funding is broken down as follows:
  - $20 million to implement the American Innovation and Manufacturing Act
  - $3.5 million to deploy new implementation and compliance tools, and
  - $15 million for competitive grants for reclaim and innovative deconstruction technologies

Funding for Enforcement Technology and Public Information ($25 million)

- The IRA will provide $25 million, of which $18 million is to update EPA's Integrated Compliance Information System (ICIS) and other technology infrastructure, $3 million for grants to states, tribes and air pollution control agencies to update their systems, and $4 million to acquire and update inspection software used by EPA, states, tribes and air pollution control agencies.

EPA Efficient, Accurate and Timely Reviews ($40 million)

- The IRA will provide $40 million to develop reviews for permitting and approval processes to improve agency transparency, accountability and public engagement.
- Eligible activities include hiring and training personnel, developing programmatic documents, procuring technical or scientific services for reviews, developing environmental data or information systems, stakeholder or community engagement, purchasing new equipment, and developing geographic information systems and other analysis tools.

U.S. Department of Energy (DOE)

Funding and Financing Programs

Domestic Manufacturing Conversion Grant Program ($2 billion)

- The IRA will provide $2 billion for grants for the domestic production of efficient hybrid, plug-in electric hybrid, plug-in electric drive and hydrogen fuel cell electric vehicles.
- Grants will require at least a 50 percent cost-share with DOE.

Advanced Industrial Facilities Deployment Program ($5.912 billion)

- The IRA will provide $5.812 billion to create a new program within the Office of Clean Energy Demonstrations (OCED) to invest in projects aimed at reducing emissions from energy intensive industries. The program will provide financial assistance, on a competitive basis, for domestic, non-federal, non-power industrial or manufacturing facility, including producers or iron, steel, steel mill products, aluminum, cement, concrete, glass, pulp, paper, ceramics, chemicals and other energy-intensive processes to:
    - purchase, install or implement advanced industrial technology
    - retrofit, upgrade or operationalize improvements to install or implement advanced industrial technology
    - engineering studies and other work needed to prepare an eligible facility
- The IRA will require a 50 percent non-federal cost share.
- The IRA will direct DOE to prioritize projects with the greatest GHG reduction benefit, and greatest benefit to the largest number of people in the community. Program applicants will be required to include expected GHG emissions reductions associated with the project in their applications.
- The IRA will provide an additional $300 million DOE for administrative costs to carry out this new program.

Loan Programs Office (LPO) – Title 17 Funding ($3.6 billion)

- The IRA will provide $40 billion in additional commitment authority for eligible projects under the Title XVII through Sept. 30, 2026. This new commitment authority will be applied across existing eligible projects and the Infrastructure Investment and Jobs Act (IIJA) expansion of eligibility for Title XVII for projects that increase the domestic supply of critical minerals through production, processing, manufacturing, recycling or fabrication of mineral alternatives.
- The IRA will provide $3.6 billion in credit subsidy cost is provided through Sept. 30, 2026. The impact of this provision means that the credit subsidy cost due at close (or sometimes included in the interest rate) may now be covered by this funding. Three percent of the credit subsidy cost is reserved for administrative costs to help ease the current administrative backlog in the application pipeline.
- Additional provisions in this section clarify what constitutes a double benefit from the government except in the case of tax, federal land agreements, federal insurance, or projects using transmission facilities from a federal Power Marketing Administration or the Tennessee Valley Authority.

LPO Advanced Technology Vehicle Manufacturing (ATVM) ($3 billion)

- The IRA will provide $3 billion in additional credit subsidy cost to ensure applicant loan costs remain low.

- The IRA will provide an additional $25 million in administrative costs to ensure proper staffing of the applicant pipeline. Removes $25 billion in outstanding loans for the program, expanding the amounts available for lending under the program.

Energy Infrastructure Reinvestment Financing ($5 billion)

- The IRA will create a new program under LPO entitled, "Energy Infrastructure Reinvestment Financing," and provide $5 billion through Sept. 30, 2026 to be leveraged for up to $250 billion in commitment authority for loan guarantees (including refinancing) of eligible projects.
- Key provisions include:
    - The loan tenure must not exceed 30 years.
    - Eligible projects are projects that: 1) retool, repower, repurpose or replace energy infrastructure that has ceased operations; or 2) enable operating energy infrastructure to avoid, reduce, utilize or sequester air pollutants or anthropogenic emissions of GHG.
    - Energy infrastructure is defined as a facility, and associated equipment, used for 1) the generation or transmission of electric energy; or 2) the production, processing and delivery of fossil fuels, fuels derived from petroleum, or petrochemical feedstocks.
    - Energy infrastructure projects that provide environmental damage remediation will qualify and fossil fuel projects financed will be required to have emission control technologies.
    - Application requirements include 1) detailed project plans, 2) community engagement plans, and 3) if the applicant is an electric utility, the financial benefit of the program must be passed on to the customer or associated community.

Tribal Energy Loan Guarantee Program ($75 million)

- The IRA will increase the available commitment authority of the Tribal Energy Loan Guarantee Program from $2 billion to $20 billion and increases the percentage of an allowable guarantee from 90 percent to 100 percent.
- The IRA will provide an additional $75 million to administer the Tribal Energy Loan Guarantee Program.

Electric Transmission

Transmission Facility Financing ($2 billion)

- The IRA will provide $2 billion to DOE to provide direct loans to non-federal borrowers for the purpose of constructing new high-capacity transmission lines and for upgrading interties between the various interconnections.
- Direct loans terms are the lesser of 90 percent of the projected useful life of the transmission facility or 30 years, no more than 80 percent of the total project cost, and cannot be subordinate to other financing. Interest rates are determined by DOE, taking into consideration market yields on outstanding marketable obligations of the U.S. of comparable maturities.

Grants to Facilitate the Siting of Interstate Electricity Transmission Lines ($760 million)

- The IRA will provide $760 million to issue grants to siting authorities, including state, local or tribal governmental entities, for the purpose of:
    - studying and analyzing the impacts of covered transmission projects
    - examining up to three alternate transmission siting corridors

    - participating in regulatory proceedings
    - and for economic development activities for communities that may be affected by the construction and operation of a covered transmission project
- Transmission lines must be high-voltage interstate or offshore electricity transmission lines, proposed to be constructed and to operate at least 275 kilovolts (kV) of alternating or direct current (or 200 kV for offshore alternating or direct current), and must have indicated intent to apply for regulatory approval. To receive a grant, the siting authority must agree to reach a final decision on the application no later than two years after the grant is authorized. Cost share of 50 percent.

Interregional and Offshore Wind Electricity Transmission Planning, Modeling and Analysis ($100 million)

- The IRA will provide $100 million to perform transmission planning, modeling, and analyses regarding the development of interregional and offshore wind transmission projects and to convene stakeholders to address the development of such transmission projects. Topics of interest include:
    - clean energy integration into the electric grid, including the identification of renewable energy zones
    - the effects of changes in weather due to climate change on the reliability and resilience of the electric grid
    - cost allocation methodologies that facilitate the expansion of the bulk power system
    - the benefits of coordination between generator interconnection processes and transmission planning processes
    - the effect of increased electrification on the electric grid
    - power flow modeling
    - the benefits of increased interconnections or interties between or among the Western Interconnection, the Eastern Interconnection, the Electric Reliability Council of Texas, and other interconnections, as applicable
    - the co-optimization of transmission and generation, including variable energy resources, energy storage and demand-side management
    - the opportunities for use of non-transmission alternatives, energy storage and grid-enhancing technologies
    - economic development opportunities for communities arising from development of interregional electricity transmission and transmission of electricity that is generated by offshore wind
    - evaluation of existing rights-of-way and the need for additional transmission corridors; and a planned national transmission grid, which would include a networked transmission system to optimize the existing grid for interconnection of offshore wind farms

Energy Efficiency and Electrification: Residential

Home Energy Performance-Based, Whole House Rebates ($4.3 billion)

- The IRA will provide $4.3 billion to DOE to award state energy offices to develop and implement a HOMES program, offering rebates for whole-house energy savings retrofits.
- Rebate amounts are as follows:
    - Single family homes
        - Retrofits with savings of 20 percent to 35 percent: the lesser of $2,000 or 50 percent of the project cost
        - Retrofits with savings of more than 35 percent: the lesser of $4,000 or 50 percent of the project cost
        - Measured energy savings in home or home portfolios with energy savings of at least 15 percent: payment rate per kWh saved, equal to $2,000 for a 20 percent reduction for the state's average home, or 50 percent of the project cost
    - Multifamily building owners
        - Retrofits with savings of 20 percent to 35 percent: $2,000 per dwelling up to $200,000 per building
        - Retrofits with savings of more than 35 percent: $4,000 per dwelling up to $400,000
        - Measured energy savings in home or home portfolios with energy savings of at least 15 percent: payment rate per kWh saved, equal to $2,000 for a 20 percent reduction for the state's average home, or 50 percent of the project cost
    - Single-family homes occupied by low- or moderate-income households or multifamily buildings with at least 50 percent of dwellings occupied by low- or moderate-income households
        - Retrofits with savings of 20 percent to 35 percent: the lesser of $4,000 or 80 percent of the project cost
        - Retrofits with savings of more than 35 percent: the lesser of $8,000 or 80 percent of the project cost
        - Measured energy savings in home or home portfolios with energy savings of at least 15 percent: payment rate per kWh saved, equal to $4,000 for a 20 percent reduction for the state's average home, or 80 percent of the project cost.
- Recipients encouraged to provide rebates to low- or moderate-income households (household income of less than 80 percent of the median income of the area). Recipients may use up to 20 percent of grant amount for planning, administration, and technical assistance.

High Efficiency Electric Home Rebate Program ($4.5 billion)

- The IRA will provide $4.275 billion for grants to State Energy Offices and $225 million for tribes to create electrification rebate programs for homeowners and multifamily building owners.
- Rebate amounts may total up to $14,000 for new construction purchases, replacement of nonelectric appliances, or first-time purchase of the appliance.
    - Covers up to 100 percent of project cost for households below 80 percent of the area median income, and 50 percent of the project cost for households between 80 percent to 150 percent of the area median income.

    - Covers up to 100 percent of project cost for multifamily units where 50 percent of households are below 50 percent of the area median income, and 50 percent of the project cost for multifamily units where 50 percent of households are between 80 percent to 150 percent of the area median income.
    - Appliance upgrades
        - Up to $1,750 for a heat pump water heater
        - Up to $8,000 for a heat pump for space heating or cooling
        - Up to $840 for an electric stove, cooktop, range or oven; or for an electric heat pump clothes dryer
    - Non-Appliance Upgrades
        - Up to $4,000 for an electric load service center upgrade
        - Up to $1,600 for insulation, air sealing and ventilation
        - Up to $2,500 for electric wiring
    - Installation
        - Up to $500, commensurate with the scale of upgrades installed and project labor practices
  - Applications must include plans to: verify income eligibility; allow rebates at the point of sale that ensures income eligibility can be verified at the point of sale; and prevent duplication or "double-dipping."

State-Based Home Energy Efficiency Contractor Training Grants ($200 million)

- The IRA will provide $200 million to provide financial assistance to states to develop and implement programs to train and educate contracts on installation of home energy efficiency and electrification improvements. Funds may be used to reduce training costs for employees, to provide testing and certification, or to partner with nonprofits.

Building Efficiency and Resilience

Assistance of Latest and Zero Building Energy Code Adoption ($1 billion)

- The IRA will provide $1 billion total for support to state and local governments to adopt updated building codes, broken down as follows:
    - $330 million to DOE to support states and local communities to adopt updated building energy codes for residential and commercial buildings, or to implement a plan to achieve full compliance including training and enforcement programs. Under this title, residential buildings must meet or exceed the 2021 International Energy Conservation Code, or achieve equivalent or greater energy savings. Commercial buildings must meet or exceed the ANSI/ASHRAE/IES Standard 90.1-2019, or achieve equivalent or greater energy savings.
    - $670 million for DOE to support grants for states and local governments to adopt building codes that meet or exceed zero energy provisions in the 2021 International Energy Conservation Code or an equivalent stretch code, and implement a plan to achieve full compliance including training and enforcement.

Environmental Reviews

DOE Environmental Reviews ($115 million)

- The IRA will provide $115 million to hire and train personnel, develop programmatic environmental documents, procure technical or scientific services for environmental reviews, develop environmental data or information systems, engage in stakeholder and community engagement, purchase new equipment for environmental analysis to facilitate timely and efficient environmental reviews and authorizations.

Miscellaneous DOE Funding

National Laboratory Infrastructure ($2 billion)

- The IRA will provide funding to the Office of Science through FY 2027, broken down as follows:
    - $133.24 million for science lab infrastructure projects
    - $303.66 for high energy physics construction and major equipment
    - $280 million for fusion energy construction and major equipment
    - $217 million for nuclear physics construction and major equipment
    - $163.791 million for advanced scientific computing research facilities
    - $294.5 million for basic energy sciences projects, and
    - $157.813 million for isotope research and development facilities
- The IRA will provide $150 million through FY 2026 to each office: Fossil Energy and Carbon Management (FECM), Nuclear Energy and Energy Efficiency and Renewable Energy (EERE) for infrastructure and general plant projects.

High-Assay Low-Enriched Uranium Availability Program ($700 million)

- The IRA will provide funds through FY 2026 to carry out elements of the High-Assay Low-Enriched Uranium (HA-LEU) Availability program established in the Energy Policy Act of 2020 (42 USC 16281), which authorized DOE to establish and carry out of a program to support the availability of HA-LEU for civilian domestic research, development, demonstration and commercial use.
- The IRA will provide funding as follows:
    - $100 million to carry out licensing and regulatory programs in support of HA-LEU research and development with commercial entities, including transportation packaging design
    - $500 million for acquisition, stockpiling and stakeholder assessment
    - $100 million for support of civilian domestic R&D and commercial use of HA-LEU

DOE Oversight ($20 million)

- The IRA will provide $20 million to the DOE Office of Inspector General (OIG) for oversight of IRA programs.

U.S. Department of the Interior (DOI)

Fossil Fuel Resources

Offshore Oil and Gas

- The IRA will raise the minimum royalty from 12.5 percent to 16.66 percent (with a maximum royalty of 18.75 percent).

Lease Sales Under the 2017-2022 Outer Continental Shelf Leasing Program:

- The IRA will require DOI to reinstate lease sale 257 by accepting the highest valid bid within 30 days of the enactment of the Act
- The IRA will require the Interior Secretary to hold Lease Sale 258 by Dec. 31, 2022
- The IRA will require the Interior Secretary to hold Lease Sale 259 by March 31, 2023
- The IRA will require the Interior Secretary to hold Lease Sale 261 by Sept. 30, 2023

Mineral Leasing Act Modernization

- The IRA will raise the minimum royalty from 12.5 percent to 16.66 percent.
- The IRA will increase the oil and gas minimum bid from $2 per acre for a period of two years to $10 per acre during the 10-year period beginning on the date of enactment of the Inflation Reduction Act of 2022.
- The IRA will increase the fossil fuel rental rates from $1.50 per acre to $3 per acre per year during the two-year period beginning on the date the lease begins, $5 per acre per year for the following six-year period, and not less than $15 per acre per year thereafter.
- The IRA will authorize the Secretary to hold a new round of competitive bidding for any lease where no bid is accepted or received or the land for which a lease terminates, expires, is canceled or is relinquished.

Royalties on all Extracted Methane

- The IRA will establish royalties for gas produced from federal lands and on the Outer Continental Shelf, including gas consumed or lost by venting, flaring or negligent releases through equipment during upstream operations.
- Royalties will not apply when gas is vented or flared for less than 48 hours in an emergency situation; gas is used or consumed within the area of the lease, unit, or communitized area for the benefit of the lease, unit or communitized area; and gas that is unavoidably lost.

Ensuring Energy Security

- The IRA will prohibit wind or solar energy development on federal land for 10 years unless the following conditions are met:
    - an onshore oil and gas lease sale has been held in the 120 days prior to the issuance of the right-of-way, and
    - The acreage offered to lease for oil and gas development in the last year is at least 2 million acres or 50 percent of the acreage for which expressions of interest have been made, whichever is smaller

- The IRA will prohibit leasing for offshore wind development unless the following conditions are met:
  - an offshore oil and gas lease sale has been held in the last year, and
  - at least 60 million acres have been offered for offshore oil and gas development in the last year

Offshore Wind

- The IRA will authorize DOI to grant leases, easements and rights-of-way off the Atlantic, Gulf Coast and U.S. Territories Continental Shelves, directing a call for information and nominations for prosed wind lease sales for the latter by Sept. 30, 2025.

Public Lands

National Parks and Public Lands Conservation and Resilience ($250 million)

- The IRA will provide $250 million to carry out projects for the conservation, protection and resiliency of lands and resources administered by the National Park Service (NPS) and the Bureau of Land Management (BLM).

National Parks and Public Lands Conservation and Ecosystem Restoration ($250 million)

- The IRA will provide $250 million to carry out conservation, ecosystem and habitat restoration projects on lands administered by the NPS and BLM.

NPS Employees ($500 million)

- The IRA will provide $500 million to hire employees in units of the NPS.

NPS Deferred Maintenance

- The IRA will provide $200 million for priority deferred maintenance projects within the bounds of the NPS.

Drought Mitigation in the Reclamation States

- The IRA will provide $4 billion available through FY 2026 for drought mitigation in reclamation states, prioritized to the Colorado River Basin and other basins experiencing comparable long-term drought.
- Activities eligible for funding include: compensation for a reduction in water use; voluntary system conservation projects; and ecosystem and habitat restoration to address issues caused by drought

Drought Response and Preparedness

Bureau of Reclamation Domestic Water Supply Projects ($550 million)

- The IRA will provide $550 million to the Bureau of Reclamation for grants, contracts or financial assistance agreements for disadvantaged communities for the cost of planning, design or construction of water projects with the primary purpose of providing domestic water supplies to communities or households that do not have reliable access to water.

Canal Improvement Projects ($25 million)

- The IRA will provide $25 million for the design, study and implementation of projects, including pilot and demonstration projects, to cover water conveyance facilities with solar panels to generate renewable energy.

Bureau of Indian Affairs

Tribal Climate Resilience ($235 million)

- The IRA will provide $220 million for tribal climate resilience and adaptation programs.
- The IRA will provide $10 million for fish hatchery operations and maintenance programs at the Bureau of Indian Affairs.
- The IRA will provide $5 million for administrative costs.

Tribal Electrification Program ($150 million)

- The IRA will provide $150 million through FY 31 for the provision of electricity to unelectrified tribal homes through zero-emissions energy systems; transitioning electrified tribal homes to zero-emissions energy systems; and associated home repairs and retrofitting necessary to install the zero-emissions energy systems.

Native Hawaiian Climate Resilience ($25 million)

- The IRA will provide $25 million through FY 31 to carry out, through financial assistance, technical assistance, direct expenditure, grants, contracts or cooperative agreements, climate resilience and adaptation activities that serve the Native Hawaiian Community.

Emergency Drought Relief for Tribes ($12.5 million)

- The IRA will provide $12.5 million through FY 26 for near-term drought relief actions to mitigate drought impacts for Indian tribes that are impacted by the operation of a Bureau of Reclamation water project, including through direct financial assistance to address drinking water shortages and to mitigate the loss of tribal trust resources.

U.S. Fish and Wildlife Service (USFWS)

Funding to Address Climate Induced Weather Events ($125 million)

- The IRA will provide $121.25 million to the USFWS to make direct expenditures, award grants, and award contracts to rebuild and restore units of the National Wildlife Refuge System and state wildlife management areas, including by:
  - addressing the threat of invasive species
  - increasing the resiliency and capacity of habitats and infrastructure to withstand climate induced-weather events, or
  - reducing damage by climate-induced weather events
- The IRA will provide $3.75 million for USFWS to implement this program.

Endangered Species Act Recovery Plans ($125 million)

- The IRA will provide $12 million to the USFWS to develop and implement recovery plans under Section 4(f) of the Endangered Species Act of 1973.
- Section 4(f) of the Endangered Species Act requires the Secretary to develop and implement recovery plans for listed species. Recovery plans must include any site-specific management actions needed to achieve the species' conservation and survival, the estimated time and cost associated with those actions, and specific criteria for determining that the species has recovered and may be delisted.

Insular Affairs

Office of Insular Affairs Climate Change Technical Assistance ($15 million)

- The IRA will provide $15 million to provide technical assistance for climate change, planning, mitigation, adaptation and resilience to the United States Insular Areas; provides an additional $9 million for necessary administrative expenses.

U.S. Geological Survey (USGS)

USGS 3D Elevation Program ($23.5 million)

- The IRA will provide $23.5 million to produce, collect, disseminate, and use 3D elevation data.

Miscellaneous DOI Provisions

Environmental Reviews ($150 million)

- The IRA will provide $150 million to hire and train personnel, develop programmatic environmental documents, procure technical or scientific services for environmental reviews, develop environmental data or information systems, engage in stakeholder and community engagement, purchase new equipment for environmental analysis to facilitate timely and efficient environmental reviews and authorizations.

DOI Oversight ($10 million)

- The IRA will provide $10 million for oversight by the DOI Office of Inspector General (OIG) of IRA programs.

U.S. Department of Transportation (DOT)

Neighborhood Access and Equity Grant Program ($3 billion)

- The IRA will provide $3 billion to Federal Highway Administration (FHWA) to support neighborhood equity, safety and affordable transportation access with competitive grants to reconnect communities divided by existing infrastructure barriers, mitigate negative impacts of transportation facilities or construction projects on disadvantaged or underserved communities, and support equitable transportation planning and community engagement activities.
- Eligible funding recipients are a state, unit of local government or metropolitan planning organizations.

Low-Carbon Transportation Materials Grants ($2 billion)

- The IRA will provide $2 billion to FHWA to reimburse or provide incentives to state, local governments and metropolitan planning organizations for the use of low-embodied carbon construction materials and products in projects, and for the operations and administration FHWA.
- Reimbursement amounts equal to incrementally higher cost of using materials relative to the cost of using traditional materials; Incentive amount equal to 2 percent of the cost of using low-embodied carbon construction materials and products.

Alternative Fuel and Low-Emission Aviation Technology Program ($300 million)

- The IRA will provide $300 million establish a competitive grant program for projects that develop, demonstrate or apply low-emission aviation technologies or produce, transport, blend or store sustainable aviation fuels (SAF), including:
  - $244.53 million for production, transportation, blending, and storage of SAF
  - $46.53 million for low-emission aviation technologies, and
  - $6 million for administration and oversight
- Eligible entities include states or local governments, air carriers, airports, higher education institutions, research institutions, entities that produce, transport, blend or store SAF in the U.S., entities engaged RD&D of low-emission aviation technologies or nonprofits. Cost share is 25 percent for entities except small hub or nonhub airports, for whom the cost share is 10 percent.
- DOT must consider 1) the capacity for the entity to increase domestic production of SAF; 2) projected GHG emissions on a lifecycle basis; 3) job creation and supply chain partnership opportunity; and 4) for SAF, GHG emissions on a life-cycle basis including feedstock and fuel production as well as direct and indirect land use change (must demonstrate at least a 50 percent GHG reduction utilizing either GREET or ICAO models); and 5) benefits of ensuring a diversity of feedstocks for SAF, including the use of waste carbon oxides and direct air capture.
- Directs DOT to adopt a Life Cycle Analysis (LCA) model for GHG emissions within two years of bill enactment.

Environmental Review Implementation Funds ($100 million)

- The IRA will provide $100 million to facilitate the development and review of documents for the environmental review process for proposed projects for state, local governments and metropolitan planning organizations.

General Services Administration (GSA)

Assistance for Federal Buildings ($250 million)

- The IRA will provide $250 million to the Federal Buildings Fund to convert GSA facilities to high-performance green buildings.

Use of Low-Carbon Materials ($2.15 billion)

- The IRA will provide $2.15 billion to the Federal Buildings Fund to acquire and install low-embodied carbon materials and products for construction and alteration of buildings under jurisdiction, custody, and control of the GSA.

GSA Emerging Technologies ($975 million)

- The IRA will provide $975 million to the Federal Buildings Fund for emerging and sustainable technologies, and related sustainability and environmental programs.

U.S. Department of Commerce (DOC)

National Oceanic Atmospheric Administration (NOAA) Funding

Investing in Coastal Communities and Climate Resilience ($2.6 billion)

- The IRA will provide $2.6 billion for NOAA for conservation, restoration and protection of coastal and marine habitats and resources, including fisheries, to prepare for extreme storms and climate change effects, as well as for projects that support natural resources to sustain coastal and marine resource dependent communities. Funds may take the form of grants, cooperative agreements, or technical assistance to coastal states, District of Columbia, tribal governments, nonprofits, local governments and higher education institutes.

Facilities of the NOAA and National Marine Sanctuaries ($200 million)

- The IRA will provide $200 million for construction of new NOAA facilities, including piers, marine operations facilities and fisheries laboratories; provides $50 million to construct facilities to support the National Marine Sanctuary System.

NOAA Efficient and Effective Reviews ($20 million)

- The IRA will provide $20 million to accelerate and improve planning, permitting and approval process. May support hiring and training of personnel, purchase of technical and scientific services and new equipment, and improve agency transparency, accountability and public engagement.

Oceanic and Atmosphere Research and Forecasting for Weather and Climate ($200 million)

- The IRA will provide $190 million for NOAA to procure high-performance computing, data processing capacity, data management and storage assets.

Computing Capacity and Research for Weather, Oceans and Climate ($190 million)

- The IRA will provide $190 million for NOAA to procure high-performance computing, data processing capacity, data management and storage assets.

Acquisition of Hurricane Forecasting Aircraft ($100 million)

- The IRA will provide $100 million for NOAA to acquire hurricane hunter aircraft.

U.S. Postal Service (USPS)

USPS Clean Fleets ($3 billion)

- The IRA will provide $1.29 billion to purchase zero-emission delivery vehicles and $1.71 billion for related infrastructure, including design and installation at USPS facilities.

USPS OIG ($15 million)

- The IRA will provide $15 million to USPS Office of the Inspector General (OIG) to support oversight related to IRA implementation.

U.S. Department of Housing and Urban Development (HUD)

Improving Energy Efficiency or Water Efficiency or Climate Resilience of Affordable Housing ($1 billion)

- The IRA will provide $837.5 million to provide loans and grants to fund projects targeting affordable housing and improving energy or water efficiency, enhance indoor air quality or sustainability, implement the use of zero-emission electricity generation, low-emission building materials or processes, energy storage, or building electrification or to address climate resilience. Principal amount of direct loans supported by the program not to exceed $4 billion.
- Funding for related activities, including:
  - $60 million for implementation, including financial reporting, research and evaluation, and cross-program costs
  - $60 million for cooperative agreements administered by the Secretary, and
  - $42.5 million for energy and water benchmarking of eligible properties (regardless of whether they receive grants), and data analysis and evaluation at the property and portfolio level

U.S. Department of Homeland Security (DHS)

DHS Office of Chief Readiness Support Officer ($500 million)

- The IRA will provide $500 million to the DHS Office of the Chief Readiness Support Officer to carry out sustainability and environmental programs.

FEMA Building Materials Program

- The IRA will authorize the Federal Emergency Management Agency (FEMA) to allocate funds for purchasing low-carbon building materials and incentives for low-carbon and net-zero energy projects via disaster recovery programs.

U.S. Department of Defense (DoD)

Enhanced Use of the Defense Production Act of 1950 ($500 million)

- The IRA will provide $500 million to carry out programs authorized by the Defense Production Act (DPA) of 1950 for the accelerated domestic production of 1) solar; 2) transformers and electric grid components; 3) heat pumps; 4) insulation; and 5) electrolyzers, fuel cells, and platinum group metals.

Federal Permitting Improvement Steering Council (FPISC)

Federal Permitting Improvement Steering Council Environmental Review Improvement Fund Mandatory Funding ($350 million)

- The IRA will provide $350 million for FY 2023 to remain available through Sept. 30, 2031 for the Environmental Review Fund established under the Fixing America's Surface Transportation Act (FAST Act).

Federal Energy Regulatory Commission (FERC)

FERC Environmental Reviews ($100 million)

- The IRA will provide $100 million to hire and train personnel, develop programmatic environmental documents, procure technical or scientific services for environmental reviews, develop environmental data or information systems, engage in stakeholder and community engagement, purchase new equipment for environmental analysis to facilitate timely and efficient environmental reviews and authorizations.

White House Council on Environmental Quality (CEQ)

Environmental and Climate Data Collection (32.5 million)

- The IRA will provide $32.5 million to CEQ for the following activities:
    - to support and facilitate data collection efforts relating to disproportionate negative environmental harms and climate impacts, and cumulative impacts of pollution and temperature rise
    - to establish, expand and maintain efforts to track disproportionate burdens and cumulative impacts (including academic and workforce support for analytics and informatics infrastructure and data collection systems)
    - to support efforts to ensure that any mapping or screening tool is accessible to community-based organizations and community members

CEQ Efficient and Effective Environmental Reviews ($30 million)

- The IRA will provide $30 million to CEQ to carry out CEQ's functions and for the purposes of training personnel, developing programmatic environmental documents and developing tools, guidance and techniques to improve stakeholder and community engagement.

Government Accountability Office (GAO)

GAO Oversight ($25 million)

- The IRA will provide $25 million for oversight of the IRA, including the distribution and use of funds and whether economic, social and environmental impacts are equitable.

Office of Management and Budget (OMB)

OMB Oversight

- The IRA will provide $25 million for OMB to oversee implementation and to track labor, equity and environmental standards, and performance of the IRA.

Infrastructure Investment and Jobs Act: Summary of Bipartisan Infrastructure Legislation

August 10, 2021

Holland & Knight Alert

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On August 10, 2021, the U.S. Senate voted 69-30[1] to pass the Infrastructure Investment and Jobs Act (H.R. 3684), bipartisan legislation to invest in the nation's infrastructure, including funding for roads and bridges, rail, transit, ports, airports, electric grid, water systems, broadband, among other priorities. The legislation provides $944 billion in total spending over five years, totaling $550 billion in new spending. It represents a significant infusion of federal funding for U.S. public works across various industries.

Senate passage of the bipartisan infrastructure package follows months of negotiations between the White House and a bipartisan cohort of senators on the infrastructure component of President Joe Biden's original American Jobs Plan.

The legislation includes several authorizing bills, including the Surface Transportation Reauthorization Act of 2021 (S. 1931), Surface Transportation Investment Act (S. 2016), Drinking Water and Wastewater Infrastructure Act (S. 914) and the Energy Infrastructure Act (S. 2377), among others. In addition, the bill provides supplemental appropriations for many of these authorized programs, both existing and new.

The bill now moves for consideration in the U.S. House of Representatives.

The following Holland & Knight alert provides a summary of key provisions in the Infrastructure Investment and Jobs Act, including:

- Transportation Infrastructure
  - Highways
  - Rail/Safety/Freight
  - Public Transit
  - Airports
- Electric Vehicles
- Water Infrastructure
- Energy/Western Water Infrastructure
- Broadband Infrastructure
- Resiliency
  - Army Corps of Engineers
  - FEMA Funding
  - Cybersecurity
- Environmental Remediation
- Pay-Fors

Transportation Infrastructure

Highways

The legislation includes the Surface Transportation Reauthorization Act of 2021 (S. 1931) that the Senate Committee on Environment and Public Works voted unanimously to approve on May 26, 2021. This legislation authorizes the Federal-Aid Highway Program for five years (FY 2022-2026). Below summarizes changes to existing Federal Highway Administration (FHWA) programs and the new programs created.

Surface Transportation Block Grant Program: $72 billion

- Adds new eligibilities to the Surface Transportation Block Grant (STBG) Program, including electric vehicle charging infrastructure and vehicle-to-grid infrastructure, installation and deployment of intelligent transportation technologies, projects that facilitate intermodal connections between emerging transportation technologies, resilience features, cybersecurity protections, waterfront infrastructure projects and projects to enhance travel and tourism.

Transportation Alternatives Program: $7.2 billion

- Increases the amount of funding set aside within the STBG Program for the Transportation Alternatives Program (TAP); increases the minimum percentage of TAP funding that is sub-allocated on the basis of population from current 50 percent to 59 percent.

Congestion Mitigation and Air Quality Improvement Program: $13.2 billion

- Adds eligibility for Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds to be used on shared micromobility, including bike share and shared scooter systems, as well as for the purchase of medium- or heavy-duty zero emission vehicles and related charging equipment.

Railway-Highway Grade Crossings: $1.225 billion

- Continues to set aside $245 million of the Highway Safety Improvement Program (HSIP) funding for the Railway-Highway Crossings (Section 130) Program each year. Increases the federal share for projects funded under the Section 130 program from 90 percent to 100 percent, as well as clarifies that the replacement of functionally obsolete warning devices is an eligible expense.

National Highway Freight Program: $7.15 billion

- Increases the maximum number of highway miles a state may designate as critical rural freight corridors from 150 to 300 miles, and critical urban freight corridors from 75 to 150 miles.

Formula Carbon Reduction Program: $6.42 billion

- Establishes a new carbon reduction program to reduce transportation emissions.
- 65 percent of funding under this program would be sub-allocated by population.
- Eligible projects include:
  - traffic monitoring, management and control facility or program
  - public transportation
  - on-road and off-road trail facilities for pedestrians and bicyclists
  - advanced transportation and congestion management technologies
  - deployment of infrastructure-based intelligent transportation systems (ITS) capital improvements and the

installation of vehicle to infrastructure communications equipment
- replacing street lighting and traffic control devices with energy-efficient alternatives
- development of a carbon reduction strategy

Promoting Resilient Operations for Transformative, Efficient and Cost-saving Transportation (PROTECT) Grant Program: $7.3 billion in formula and $1.4 billion in competitive grants

- Establishes the PROTECT Grant Program, which would provide $7.3 billion in formula funding and $1.4 billion in competitive set-aside grants (over five years) for resilience improvements at the state and municipal levels.
- The PROTECT grants are intended to incentivize state and local communities as they seek to improve the resiliency of natural infrastructure such as wetlands, floodplains and aquatic ecosystems. Specifically, the grants would provide planning and resilience improvement funding to communities to help to assess vulnerabilities to current and future weather events or other natural disasters, and to enhance transportation assets such as ports and port infrastructure. In addition to evaluating vulnerabilities, resilience improvement grants can be utilized to relocate infrastructure out of the floodplain and restore aquatic ecosystems connected to a transportation improvement.

Transportation Infrastructure Finance and Innovation Act of 1998: $1.25 billion

- Adds eligibility for public infrastructure located near transportation facilities to promote transit-oriented development (TOD).
- Adds eligibility for airport-related projects.
- Adds new criteria to the streamlined application process for public agency borrowers to increase the likelihood that the U.S. Department of Transportation (DOT) Secretary will be able to move more projects through the process expeditiously.

Nationally Significant Freight and Highway Projects (INFRA): $8 billion

- Renames the Nationally Significant Freight and Highway Projects program (also known as the Infrastructure for Rebuilding America or INFRA grant program) to be the Nationally Significant Multimodal Freight and Highway Program.
- Raises the cap on multimodal (rail/port) projects from 10 percent to 30 percent of the grants for each year.

Congestion Relief Program: $250 million

- Establishes a congestion relief program to provide competitive grants to states, local governments and metropolitan planning organizations (MPO) for projects in large urbanized areas (more than 1 million people) to advance innovative, integrated and multimodal solutions to congestion relief in the most congested metropolitan areas of the United States.
- Grant awards shall be not less than $10 million. When selecting grants, the DOT Secretary shall give priority to eligible projects located in urbanized areas that are experiencing high degrees of recurrent congestion.
- The federal cost-share shall not exceed 80 percent of the total cost of a

Reducing Truck Emissions at Ports: $250 million

- Establishes a program to reduce idling and emissions at port facilities.
- Requires the DOT Secretary to:

  - Study how ports would benefit from electrification and to study emerging technologies that reduce emissions from idling trucks.
  - Coordinate and fund projects through competitive grants that reduce port-related emissions from idling trucks.
  - Submit a report to Congress detailing the status and effectiveness of the program.

Healthy Streets Program: $500 million

- Establishes the Healthy Streets program to provide grants to eligible entities to deploy cool pavements and porous pavements and to expand tree cover.
- The goals of the program are to mitigate urban heat islands, improve air quality and reduce the extent of impervious surfaces, storm water runoff and flood risks and heat impacts to infrastructure and road users.

Reconnecting Communities Pilot Program: $500 million

- Establishes the Community Connectivity Pilot program through which eligible entities may apply for: 1) planning funds to study the feasibility and impacts of removing, retrofitting or mitigating existing transportation facilities that create barriers to mobility, access or economic development and 2) construction funds to carry out a project to remove, retrofit or mitigate an eligible facility and, if appropriate, to replace it with a new
- An eligible facility includes a limited access highway, viaduct or any other principal arterial facility that creates a barrier to community connectivity, including barriers to mobility, access or economic development, due to high speeds, grade separations or other design factors.
- Planning grant awards may not exceed $2 million, and the federal cost share for a project may not exceed 80 percent. Capital construction grants must be at least $5 million, and the federal cost share for a project may not exceed 50 percent.

Highway Safety Improvement Program: $15.575 billion

- Allows flexibility for Highway Safety Improvement Program (HSIP) to be used for non-infrastructure activities and behavioral safety projects, such as educational campaigns about traffic safety and enforcement activities; and allows a state to spend up to 10 percent of its HSIP funding on such projects and Safe Routes to School non-infrastructure-related activities.
- Adds projects eligible for HSIP funding:
  - Grade separation projects.
  - Construction or installation of features, measures and road designs to calm traffic and reduce vehicle speeds.
  - Installation or upgrades of traffic control devices for pedestrians and bicyclists, including pedestrian hybrid beacons and the addition of bicycle movement phases to traffic signals.
  - Roadway improvements that provide separation between pedestrians and motor vehicles or between bicyclists and motor vehicles, including medians, pedestrian crossing islands, protected bike lanes and protected intersection features.

Transportation Access Pilot Program

- Establishes a Transportation Access Pilot program to develop or procure accessibility data and make it available to each eligible entity selected to participate in the pilot program to improve transportation planning.

- The pilot will measure the level of access by surface transportation mode to important destinations, which may include jobs, healthcare facilities, child care facilities, educational and workforce training facilities, housing, food sources, points within the supply chain for freight commodities, domestic and international markets and connections between surface transportation modes.
- The pilot will also assess the change in accessibility that would result from new transportation investments.

Stopping Threats on Pedestrians: $25 million

- Establishes a grant program to provide assistance to state departments of transportation and local government entities for bollard installation projects designed to prevent pedestrian injuries and acts of terrorism in areas used by large numbers of pedestrians.

Study of Impacts on Roads from Self-Driving Vehicles

- Directs the Transportation Secretary to initiate a study on the existing and future impacts of self-driving vehicles to transportation infrastructure, mobility, the environment and safety, including impacts on the Interstate System, urban roads, rural roads, corridors with heavy traffic congestion and transportation systems optimization.
- The study shall include specific recommendations for both rural and urban communities regarding the impacts of self-driving vehicles on existing transportation system capacity.

Update to Manual on Uniform Traffic Control Devices

- Directs the DOT to update the Manual on Uniform Traffic Control Devices and to continue to update the manual no less than every four years thereafter. The initial update shall include protection of vulnerable road users, the safe testing of automated vehicle technology and minimum retroreflectivity of traffic control devices and pavement markings. This section also adds electric vehicle charging stations to the section.

Bridge Grant Program: $3.265 billion

- Establishes a new competitive grant program to assist state, local, federal and tribal entities in rehabilitating or replacing bridges, including culverts.
- The minimum grant amount for a large project is not less than $50 million; the minimum grant amount for any other eligible project is $2.5 million.
- Grant amounts, in combination with other anticipated funds, should be of a size sufficient to enable the project to proceed through completion.
- The bridge program would include an application and evaluation process for large projects, after which the Transportation Secretary would submit an annual report to Congress on funding recommendations, based on project evaluations. Large projects will be funded with multi-year funding agreements similar to the Federal Transit Administration (FTA) Full Funding Grant Agreement (FFGA) program. At least 50 percent of program funds over five years must be used for large projects.

Rail/Safety/Freight

The bill includes the Surface Transportation Investment Act (S. 2016) that the Senate Committee on Commerce, Science, and Transportation passed on June 16, 2021. S. 2016 authorizes $78 billion over five years for rail, freight and safety programs.

Emerging Technology Research Pilot Program: $25 million

- Establishes a pilot program to conduct emerging technology research, specifically including advanced and additive manufacturing (3-D printing) technologies; and research into activities to reduce the impact of automated driving systems and advanced driver automation systems technologies on pavement and infrastructure performance and to improve transportation infrastructure design.

Research and Technology Development and Deployment

- Expands the objectives of the DOT Turner Fairbank Highway Research Center to support research on nonmarket ready technologies in consultation with public and private entities.
- Establishes an open challenge and research proposal pilot program that provides grants for proposals to research needs or challenges identified or determined to be important by the Transportation Secretary.
- Expands the Technology and Innovation Deployment Program by adding a focus on accelerated market readiness efforts, and increases funding for the program, including $100 million in new and innovative construction technologies for smarter, accelerated project delivery.
- Reauthorizes the Accelerated Implementation and Deployment of Pavement Technologies program.
- Modifies the Advanced Transportation Technologies and Innovative Mobility Deployment program to include intermodal connectivity and a rural set-aside of not less than 20 percent; and expands the eligibility under this program to include retrofitting dedicated short-range communications (DSRC) technology deployed as part of an existing pilot program to cellular vehicle-to-everything technology, as well as advanced transportation technologies.
- Authorizes a new Center of Excellence on New Mobility and Automated Vehicles to research the impact of highly automated vehicles and new mobility, such as docked and dockless bicycles and electric scooters.

Workforce Development, Training and Education

- Allows states greater flexibility to address surface transportation workforce development, training and education needs, including activities that address current workforce gaps, such as work on construction projects.
- Permits states to obligate funds for pre-apprenticeships, apprenticeships and career opportunities for on-the-job training and vocational school support.

National Motor Vehicle Per-Mile User Fee Pilot

- Directs the Transportation Secretary to establish a pilot program to demonstrate a national motor vehicle per-mile user fee. In carrying out the pilot program, the Secretary shall provide different methods that volunteer participants can choose from to track motor vehicle miles traveled and solicit volunteer participants from all 50 states, the District of Columbia and the Commonwealth of Puerto Rico.

Strategic Innovation for Revenue Collection

- Reauthorizes and renames the Surface Transportation System Funding Alternatives Program, to continue to test the feasibility of a road usage fee and other user-based alternative revenue mechanisms to help maintain the long-term solvency of the Highway Trust Fund, through pilot projects at the state, local and regional level. Expands eligible applicants from state DOTs, to include local governments and MPOs.

Advanced Research Projects Agency-Infrastructure

- Establishes the Advanced Research Projects Agency-Infrastructure (ARPA-I) to fund research and development on advanced transportation infrastructure technologies. ARPA-I would support novel, early stage research as well as advance conceptual research into testing and development.

National Infrastructure Project Assistance: $10 billion

- Establishes the National Infrastructure Project Assistance Program to provide single- or multiyear grants to projects generating national or regional economic, mobility or safety.
- Eligible projects include highway or bridge projects, freight intermodal or freight rail projects, railway-highway grade separation or elimination projects, intercity passenger rail projects and certain public transportation projects.

Local and Regional Project Assistance: $7.5 billion

- Authorizes and renames the RAISE/BUILD program.
- Limits the size of each grant to $25 million and provides an equal split between rural and urban areas.

National Culvert Removal, Replacement and Restoration Grant Program: $4 billion

- Creates a National Culvert Removal, Replacement and Restoration Program to provide grants to states, local governments and tribes to address anadromous fish passage as well as provide funding for certain freshwater impacts to marine fish and shellfish species.

Amtrak National Network: $12.65 billion

Amtrak Northeast Corridor Grants: $6.57 billion

Federal-State Partnership Intercity Passenger Rail: $7.5 billion

Federal Railroad Administration (FRA) Consolidated Rail Infrastructure and Safety Improvement (CRISI): $5 billion

FRA Railroad Crossing Elimination Program: $3 billion

- Authorizes a new competitive grant program for the elimination of hazards at railway-highway crossings.

FRA Restoration and Enhancement Grants: $250 million

Safe Streets and Roads for All Grant Program: $1 billion

- Establishes a grant program for MPOs, local governments and tribal governments to develop and carry out comprehensive safety plans to prevent death and injury on roads and streets, commonly known as "Vision Zero" or "Toward Zero Deaths" initiatives.

Public Transit

The Senate Committee on Banking, Housing, and Urban Affairs, that oversees the Federal Transit Administration (FTA), was the only transportation authorization committee in the Senate that had not drafted its portion of the surface transportation authorization bill. The transit section was drafted during the bipartisan infrastructure negotiations; and therefore, there are not many policy changes for transit versus previous transportation authorization bills.

- **Capital Investment Grants:** $15 billion
  - Increases the threshold for capital costs from $300 million to $400 million, and federal share from $100 million to $150 million for Small Starts.
  - Amends Core Capacity eligibility to use a 10- year timeframe versus 5 years to demonstrate capacity needs.
  - Establishes a process to allow multiple projects in a community to move forward simultaneously for immediate and future bundling of projects allowing sponsors to seek savings during the contracting process. This replaces

the "Program of Interrelated Projects" eligibility.

- **State of Good Repair Formula Grants:** $18.39 billion
- **Bus Formula Grants:** $3.161 billion
- **Bus Competitive:** $2.34 billion
  - **Low-No Buses:** $374.6 million
- **Urbanized Area Formula Grants:** $33.54 billion

DOT Supplemental Appropriations for FY 2022-2026

Division J, Title VIII — Transportation, Housing and Urban Development, and Related Agencies (THUD) provides additional appropriated money from the Treasury for FY 2022-FY 2026.

- **National Infrastructure Project Assistance (created in S. 2016):** $5 billion
  - This newly created program supports multimodal, multijurisdictional projects of national or regional significance.
- **Local and Regional Project Assistance (RAISE Grants):** $7.5 billion
  - This funding boosts funding for the RAISE (formerly BUILD grant program).
- **Strengthening Mobility and Revolutionizing Transportation Grant Program (created in S. 2016**): $500 million
- **Safe Streets for All (created in S. 2016):** $5 billion
  - The Safe Streets for All program was created by President Joe Biden to fund state and local "Vision Zero" plans to reduce crashes and fatalities, especially for cyclists and pedestrians.
- **National Culvert Removal, Replacement and Restoration Grant Program (created in S. 2016):** $1 billion
- **Bridge Replacement, Rehabilitation, Preservation, Protection and Construction Formula Program:** $27.5 billion
  - Federal share is 100 percent
  - 75 percent distributed "by the proportion that the total cost of replacing all bridges classified in poor condition in such State bears to the sum of the total cost to replace all bridges classified in poor condition in all States; and
  - 25 percent distributed by the proportion that the total cost of rehabilitating all bridges classified in fair condition in such State bears to the sum of the total cost to rehabilitate all bridges classified in fair condition in all States."
- **Reconnecting Communities Program (created in S. 1931):** $500 million
  - $100 million for planning grants
  - $400 million for capital construction grants
- **Construction of Ferry Boats and Ferry Terminal Facilities Program (existing):** $342 million
- **FRA CRISI:** $5 billion
- **FTA Capital Investment Grant Program:** $8 billion

  - 55 percent for New Starts
  - 20 percent for Core Capacity projects
  - 15 percent for Small Starts
  - 10 percent for Expedited Project Delivery projects

- **All Stations Accessibility Program:** $1.75 billion
  - Competitive grants to assist states and local governments in financing capital projects to upgrade the accessibility of legacy rail fixed guideway public transportation systems for persons with disabilities, including those who use wheelchairs.

- **FTA Transit Infrastructure Grants:** $10.25 billion
  - State of Good Repair: $4.75 billion
  - Low or No Emission: $5.25 billion
  - Formula grants for the enhanced mobility of seniors and individuals with disabilities: $250 million

- **FRA Federal-State Partnership Intercity Passenger Rail:** $36 billion
  - Not more than $24 billion for Northeast Corridor

- **Bridge Grant Program (created in S. 1931):** $9.235 billion
  - This new program provides competitive grants for bridges.
  - Federal share is 100 percent.

- **Railroad Crossing Elimination Competitive Grant Program (created in S. 2016):** $3 billion
- **Port Infrastructure Development Program:** $2.25 billion
- **Infrastructure for Rebuilding America (INFRA) Grant Program:** $3.2 billion
  - This funding supports an increase over baseline funding to the INFRA grant program, which supports highway and rail projects of regional and national economic significance.

- **Reduction of Truck Emissions at Port Facilities Program:** $150 million
- **Surface Transportation Private Activity Bonds:** $500 million
  - Increases the current cap on these bonds from $15 billion to $30 billion.

Airports

This legislation appropriates $25 billion over five years for airports.

- **Airport Infrastructure Grants:** $15 billion over five years/$3 billion annually
  - Funding can be used for any Passenger Facility Charge (PFC) eligible projects except debt service payments.
  - Local match mirrors Airport Improvement Program (AIP).
  - $2.48 billion annually for primary airports.

  - $500 million annual for general aviation and non-primary airports.
  - $20 million annually for competitive grants to construct, rehabilitate or relocate airport-owned contract towers. No local match. Federal Aviation Administration (FAA) will prioritize projects that enhance aviation safety and improve air traffic efficiency.

- **New Airport Terminal Competitive Grant Program:** $5 billion over five years/$1 billion annually
  - 55 percent of the grants are required to be distributed to large hub airports, 20 percent for small hubs, 15 percent for medium hubs and 10 percent for non-primary airports.
  - Eligible projects include terminal development projects and projects for relocating, reconstructing, repairing or improving air traffic control towers and on-airport rail projects.
  - 80 percent federal share for medium and large hubs and a 95 percent federal share for small airports.

- **FAA Facilities and Equipment:** $5 billion over five years/$1 billion annually
  - Eligible uses for these funds include replacing terminal and Air Traffic Control (ATC) facilities, fuel storage tank replacement, electrical power system support, and hazardous materials management and environmental cleanup.
  - $200 million reserved for airports that participate in the FAA Contract Tower Program to upgrade aging FAA-owned ATC facilities.

- **TIFIA**
  - Allows airports to access low-interest loans and loan guarantees under the TIFIA program for PFC-eligible projects.

Electric Vehicles (EVs)

President Joe Biden has committed to deploying a national network of 500,000 charging stations, in support of his broader commitment to reduce economy-wide emissions by 50 percent by 2030. The legislation invests $7.5 billion to initiate the build out of this network of chargers. The bill provides funding for deployment of EV chargers along highway corridors to facilitate long-distance travel and within communities.

Charging and Refueling Grant Program ($2.5 billion): Authorizes $2.5 billion over five years to establish a grant program at DOT for Alternative Fuel Corridors as proposed in the Senate Committee on Environment and Public Works surface transportation reauthorization bill (S. 1931). The grant program would include a set-aside for Community Grants, under the surface transportation reauthorization. The program is designed to strategically deploy publicly accessible alternative fuel vehicle charging infrastructure along designated alternative fuel corridors or in certain other locations that will be accessible to all drivers of alternative fuel vehicles.

- **Eligibility:** Eligible entities are state and local governments, MPOs and other public-sector entities.
- **Use of Funds:** Grants are to be used to contract with a private entity for acquisition and installation of publicly accessible alternative fuel vehicle charging and fueling infrastructure that is directly related to the charging or fueling of a vehicle. Eligible entities may use a portion of grant funds to provide a private entity operating assistance for the first five years of operations after infrastructure installation.
- **Community Grant Set-Aside:** 50 percent of the total program funds will be made available each fiscal year for Community Grants, to install charging infrastructure in locations on public roads, schools, parks, and in publicly accessible parking facilities. These grants will be prioritized for rural areas, low- and moderate income

neighborhoods and communities with low ratios of private parking or high ratios of multiunit dwellings.

- **Cost-Share:** The federal cost share for a project may not exceed 80 percent. Further, as a condition of contracting with an eligible entity, a private entity must agree to pay the non-federal share of project costs.

EV Charging Formula Program ($5 billion): To complement the $2.5 billion for the Charging and Refueling Grant program at DOT, the legislation appropriates $1 billion per year for five years ($5 billion total) to establish a National Electric Vehicle Formula Program at DOT to provide additional funding to states to deploy EV charging infrastructure.

- **Eligible Use of Funds:** 1) Acquisition and installation of EV infrastructure to serve as a catalyst for the deployment of such infrastructure and to connect it to a network to facilitate data collection, access and reliability; 2) operation and maintenance; and 3) data sharing about EV infrastructure.
  - Charging stations must be located along a designated Alternative Fuel Corridor.

- **Cost Share:** The federal cost-share for a project may not exceed 80 percent. Private entity may pay the non-federal share of the cost of the project.
- **State Proposals:** Directs DOT to establish a deadline for states to provide a plan describing how the state plans to use the funding. Requires DOT and the U.S. Department of Energy (DOE) to develop, in concert, guidance for states and localities to strategically deploy EV charging infrastructure.
- **Contract with Private Entity:** Grants may be used to contract with a private entity for acquisition and installation of publicly accessible alternative fuel vehicle charging and fueling infrastructure that is directly related to the charging or fueling of a vehicle.
- **Establishes Joint Office of Energy and Transportation:** Establishes a Joint Office of Energy and Transportation at DOT and DOE to coordinate work on EV infrastructure, which would include new installation and interoperability standards.

Clean School Bus Program ($5 billion): Appropriates $1 billion per year for five years ($5 billion total) to implement a school bus change out program at the EPA to reduce greenhouse gas (GHG) emissions and improve air quality.

- **Eligibility:** State and local governments, eligible contractors and nonprofit school transportation associations.
- **Funding breakdown:** 50 percent of the funds are for zero-emission and low-emission alternative fuels buses.
- **Funding prioritization:** Funds may be prioritized for rural or low-income communities and entities that have matching funds available. The U.S. Environmental Protection Agency Administrator is authorized to provide funds to cover up to 100 percent of the costs for the replacement of the buses

Electric or Low-Emitting Ferry Pilot Program: Appropriates $250 million over five years ($50 million per year) for a new DOT low-emission ferries and rural ferry systems grant program.

Water Infrastructure

The legislation includes the Senate Drinking Water and Wastewater Infrastructure Act (S. 914) passed by the Senate in April 29, 2021. The bill reauthorizes $35 billion in existing programs and creates new programs to support drinking water and wastewater infrastructure projects. A majority of this funding is allocated to the existing Drinking Water State Revolving Fund (SRF) and the Clean Water State Revolving Fund SRF, both administered by the U.S. Environmental Protection Agency (EPA).

- **Drinking Water SRF:** Authorizes funding through FY 2026 for the Drinking Water SRF, which provides capitalization grants to states for loans supporting water infrastructure projects. It would authorize: $2.4 billion for FY 2022; $2.75

billion for FY 2023; $3 billion for FY 2024; and $3.25 billion for each of FY 2025 and FY 2026.

- **Clean Water SRF:** Authorizes funding through FY 2026 for the Clean Water SRF, which provides capitalization grants to states for loans supporting water quality improvement projects. It would authorize: $2.4 billion for FY 2022; $2.75 billion for FY 2023; $3 billion for FY 2024; and $3.25 billion for each of FY 2025 and FY 2026.
- **Drinking Water Assistance for Small and Disadvantaged Communities:** Authorizes funding for the Assistance for Small and Disadvantaged Communities Drinking Water Grant Program, which helps public water systems in underserved and disadvantaged communities meet Safe Drinking Water Act requirements, in the amounts of: $70 million for FY 2022; $80 million for FY 2023; $100 million for FY 2024; $120 million for FY 2025 and $140 million for FY 2026.
- **Addressing Lead in Drinking Water:** Authorizes funding to address lead in school drinking water systems in the amounts of: $30 million for FY 2022; $35 million for FY 2023; $40 million for FY 2024; $45 million for FY 2025 and $50 million for FY 2026.
- **Resiliency and Sustainability Grants:** Authorizes $50 million annually for the Drinking Water System Infrastructure Resilience and Sustainability grant program and creates a corresponding $25 million per year Clean Water Infrastructure Resiliency and Sustainability Program, both of which would provide financing for resiliency projects, including conservation and supply augmentation projects.
- **Addressing Sanitary Sewer Overflows and Stormwater Reuse:** Authorizes funding for the Sanitary Sewer Overflow and Stormwater Reuse municipal grants at $280 million annually for FY 2022 through FY 2026, with requirements to allocate at least 25 percent of such funds toward systems serving rural or otherwise disadvantaged communities.
- **Reauthorization and/or Creation of Additional Grant and Loan Programs:** Authorizes and funds a number of other specific grant and loan programs, including:
  - $50 million annually through FY 2026 for the existing Water Infrastructure Finance and Innovation Act (WIFIA) loan program, which provides low-cost loans for a variety of water infrastructure projects.
  - $35 million annually through FY 2026 for technical assistance funding and emergency grants to public water systems, with an additional $15 million annually for technical assistance to small public water systems.
  - $20 million annually through FY 2026 to create the Wastewater Efficiency Grant Pilot Program for projects by publicly owned treatments works (POTWs) that seek to improve waste-to-energy systems, with individual grants capped at $4 million.
  - $25 million annually through FY 2026 to reauthorize an existing pilot program for alternative water source projects, including water potable reuse, wastewater and stormwater capture and treatment, and groundwater recharge projects.

- **Research into Water Infrastructure Technologies and Community Needs:** Requires EPA to study safe drinking water technologies and community needs in the year following bill enactment. Provides $75 million annually through FY 2026 for research, investigations, training and informational grants authorized under Section 104 of the Clean Water Act.
- **Information Sharing:**Requires EPA to facilitate sharing of information between stakeholders by creating a water data sharing pilot program and directing EPA to create a Water Reuse Interagency Working Group.
- **Low Income Water Assistance Pilot Program:** Directs EPA to launch a pilot grant program to address water affordability. The pilot program will award grants to eligible entities to develop and implement programs to assist qualifying households with maintaining access to drinking water and wastewater treatment. Assistance could

include discounted rates or direct financial support to households or debt relief to water system owners or operators.

EPA Water Infrastructure Supplemental Appropriations for FY 2022-2026

Division J, Title VI — Department of the Interior, Environment, and Related Agencies provides additional appropriated money from the Treasury for FY 2022-FY 2026.

- **Clean Water State Revolving Fund (SRF):** $11.713 billion
  - 49 percent of the funds shall be used by the state to provide subsidy with 100 percent forgiveness of principal or grants (or any combination of these).
- **Drinking Water SRF:** $11.73 billion
  - 49 percent of the funds shall be used by the state to provide subsidy with 100 percent forgiveness of principal or grants (or any combination of these).
- **Drinking Water SRF Lead Funding:** $11.73 billion
  - Lead service line placement projects and associated activities directly connected to the identification, planning, design and replacement of lead service lines.
  - 49 percent of the funds shall be used by the state to provide subsidy with 100 percent forgiveness of principal or grants (or any combination of these).
- **Per- and Polyfluoroalkyl Substances (PFAS) Contamination:** $10 billion
  - $1 billion through the Clean Water SRF
  - $4 billion through the Drinking Water SRF
  - $5 billion though the small and disadvantaged community grant program; and $3.5 billion for the Indian Health

Energy/Western Water Infrastructure

The legislation includes the Energy Infrastructure Act (S. 2377), sponsored by Senate Energy and Natural Resources Committee Chairman Joe Manchin (D-W.V.) that authorizes funding and programs across a host of fuel sources and technologies, as well as funding for Western Water infrastructure.

As a whole, the legislation includes funding to invest in the reliability and resilience of the electric grid and expand transmission capabilities, demonstrate critical energy technologies and build out domestic supply chains for clean energy technologies.

Grid Infrastructure and Resiliency

The bill contains numerous provisions aimed at hardening and enhancing the nation's electric grid infrastructure, spending approximately $65 billion in total. These programs include:

- **Preventing Outages and Enhancing the Resilience of the Electric Grid:** Provides $5 billion in grants to states and Indian tribes, grid operators, fuel suppliers and other eligible entities to supplement efforts to harden the electric grid against disruptive extreme weather events.
- **Electric Grid Reliability and Resilience Research, Development and Demonstration:** Provides $5 billion for a newly established "Program Upgrading Out Electric Grid Reliability and Resiliency." States, tribes and local

governments would collaborate with electric sector owners and operators to develop demonstration innovative projects aimed at hardening and enhancing grid resilience on a cost-share basis.

- **Transmission Facilitation Program:** Provides $2.5 billion to establish a revolving loan fund to facilitate the construction of new or replacement power transmission lines. The DOE may enter into contracts of up to 50 percent of planned capacity, which it may sell after determining the project has reached sufficient financial viability. The DOE may also enter into public-private partnerships for eligible projects.
- **Deployment of Technologies to Enhance Grid Flexibility:** Provides $3 billion for the Smart Grid Investment Matching Grant Program, adding eligibility for the deployment of technologies that would allow for increased flexibility in responding to natural disasters, fluctuating demand and other events necessitating a quick rebalance of the grid system.
- **State Energy Program:** Provides $500 million for the State Energy Program. State Energy Conservation Plans would be required to participate in activities supporting transmission and distribution planning, and allow such plans to include programs reducing carbon emissions in the transportation sector by 2050.

Energy Cybersecurity

The bill also includes a number of provisions aimed at promoting and incentivizing enhanced physical and cybersecurity of the electric grid. The bill would establish voluntary programs, provide grants to utilities to respond to threats and promote the use of advanced technologies. Specifically, these provisions include the following:

- **Enhancing Grid Security Through Public-Private Partnerships:** The Secretary of Energy, the Secretary of Homeland Security, and other stakeholders deemed appropriate, would establish a new program to promote the voluntary adoption of physical and cybersecurity support and best practices for the electric grid.
- **Energy Cyber Sense Program:** Establishes a voluntary program to test cybersecurity products and technologies intended for use in the bulk-power system.
- **Incentives for Advanced Cybersecurity Technology Investment:** Directs the Federal Energy Regulatory Commission (FERC) to promulgate a rule incentivizing investments in cybersecurity technologies and threat information sharing.
- **Rural and Municipal Utility Advanced Cybersecurity Grant and Technical Assistance Program:** Establishes a new Rural and Municipal Utility Advanced Cybersecurity Grant and Technical Assistance Program at DOE that would give grants to eligible entities to protect against, respond to and recover from threats. This new grant program is funded at $250 million.
- **Enhanced Grid Security:** Establishes a $250 million research and development (R&D) program for the energy sector to develop advanced cybersecurity applications and technologies. Also establishes a $50 million program aimed at enhancing emergency response and preservation of the grid.

Supply Chains for Clean Energy Technologies

The infrastructure bill supports the supply chain for clean energy technologies, echoing findings from the June 2021 Biden Administration supply chain report acknowledging the need to bolster the U.S. supply chains, specifically for large-capacity batteries and critical materials. Key provisions include:

- Provides $140 million for DOE to establish a rare earth demonstration facility that will include a full-scale integrated rare earth element extraction and separation facility and refinery.
- Supports critical minerals supply chains by giving agencies direction to evaluate and adhere to permitting timelines for critical mineral projects.

- Provides $3 billion to establish a Battery Material Processing Grant program to be administered by DOE's Office of Fossil Energy and Carbon Management (FECM).The eligibility for and structure of these grants are outlined in subsection 40207(b). Another $3 billion is included for Battery Manufacturing and Recycling Grants to be administered by DOE's Office of Energy Efficiency and Renewable Energy (EERE). The eligibility for and structure of these grants are outlined in subsection 40207(c).
- Provides $200 million for an electric drive vehicle battery recycling and second-life applications program to bolster the recycling supply chain.
- Provides $750 million for an advanced energy manufacturing and recycling grant program benefiting manufacturing firms with gross annual sales of $100 million or less, and with less than 500 employees.
- Provides $100 million for critical minerals mining and recycling research, with a $10 million cap on individual awards.

Fuels and Technology Infrastructure Investments

The bill supports the development of fuel and technology sources, including carbon capture, utilization and storage (CCUS) and hydrogen. Funding in support of these activities include:

CCUS

- Provides more than $310 million in grant funding for states, local governments and public utilities to procure or use products derived from captured carbon oxides.
- Provides $100 million for a front-end engineering and design program at the DOE for infrastructure to transport carbon dioxide necessary to the deployment of CCUS technologies.
- Creates a CO2 Infrastructure Finance and Innovation Act (CIFIA) program to provide low-interest loans to eligible entities for carbon dioxide transportation projects over $100 million. The program would also provide grants to pay part of the cost of initial excess capacity at a new facility. The CIFIA program is funded at $600 million per year for FY 2022 and FY 2023 and $300 million for FY 2024-2026.
- Provides $2.5 billion to expand the DOE's Carbon Storage Validation and Testing program to include a large-scale carbon storage commercialization program.
- Provides $75 million for the EPA to award grants to states to establish their own permitting programs.
- Provides $3.5 billion toward direct air capture projects to support the establishment of four regional hubs.

Hydrogen

- $8 billion to establish at least four regional clean hydrogen hubs that "demonstrate the production, processing, delivery, storage, and end-use of clean hydrogen."
- $500 million for advanced clean hydrogen manufacturing and recycling research and development.
- $1 billion toward R&D, demonstration, commercialization and deployment of clean hydrogen from electrolyzers.

Office of Clean Energy Demonstrations

Establishes a new Office of Clean Energy Demonstrations (OCED) within the DOE to oversee and manage demonstration projects funded by the Energy Division of this bill as well as the Energy Act of 2020. The OCED would support DOE's efforts to commercialize clean energy technologies, reduce costs and address barriers to widespread deployment. OCED is funded at $21.456 billion.

Efficiency and Building Infrastructure

The bill authorizes numerous programs to encourage and fund energy efficiency upgrades to various types of building infrastructure. These programs include:

- **Residential and Commercial:** Provides $250 million to establish the Energy Efficiency Revolving Loan Fund Capitalization Grant program under the State Energy Program for states to conduct commercial or residential energy audits or upgrades and retrofits. States are required to use the grants to leverage private capital to the greatest extent practicable. The bill also authorizes $40 million to states to train individuals to conduct commercial or residential energy audits.
- **Cost-Effective Codes Implementation for Efficiency and Resilience:** Provides $225 million toward a competitive grants program through DOE's Building Technologies Office for states or regional partnerships to implement updated building energy codes, including through training and data collection.
- **Building, Training and Assessment Centers; Career Skills Training:** Provides $10 million in grants to institutions of higher education to establish centers to train engineers and other qualified individuals in energy-efficient design and operations. An additional $10 million would go toward the federal cost share of nonprofit partnerships between public employers, industry and labor for career skills training programs.
- **Future of Industry Program and Industrial Research and Assessment Centers:** Provides $550 million to fund institutions of higher education-based centers that provide assessments of small- and medium-sized manufacturers to optimize their energy efficiency and environmental performance. These centers would also promote emerging technologies and R&D for alternative energy sources for energy-intensive industries.
- **Weatherization Assistance Program:** Provides $3.5 billion for the existing Weatherization Assistance Program (WAP), which reduces household energy use through installation of cost-effective energy savings programs.
- **Energy Efficiency and Conservation Block Grant:** Provides $550 million for the Energy Efficiency and Conservation Block Grant Program (EECBG), a block grant program to provide grants to state and local governments for energy efficiency and conservation projects. The legislation amends the program to allow EECBG funding to be used to finance energy efficiency and other clean energy investments, projects, loan programs and performance contracting programs.
- **AFFECT Grants:** Provides $250 million for the Assisting Federal Facilities with Energy Conservation Technologies (AFFECT) grant program, administered by the Federal Emergency Management Program (FEMP) to provide grants to federal agencies to leverage private capital to make energy and water efficiency upgrades to federal buildings.

Loan Programs

The DOE Loan Programs Office (LPO) has seen an increase in activity with the change of Administrations. LPO aims to reduce greenhouse gas emissions through investment in U.S. projects. The legislation provides for improved energy infrastructure investment through federally backed debt capital. Specifically, the legislation makes the following changes within LPO:

- Clarifies reasonable prospect of repayment criteria for both the Title XVII Innovative Energy Loan Guarantee (Title XVII) Program and the Advanced Technology Vehicle Manufacturing (ATVM) Program.
- Expands eligibility for the Title XVII Program to include projects that increase the domestic supply of critical minerals through production, processing, manufacturing, recycling or fabrication of mineral alternatives.
- Expands eligibility for the ATVM program to include medium- and heavy-duty vehicles, trains, aircraft, marine transportation and hyperloop technology.

Western Water Infrastructure

Authorizes and appropriates $8.3 billion for FY 2022-2026 for Bureau of Reclamation western water infrastructure:

- **Aging infrastructure:** $3.2 billion for rehabilitation and replacement activities; $100 million for reserved or transferred works that have suffered a critical failure and $100 million for dam rehabilitation, reconstruction or replacement.
- **Water Storage, Groundwater Storage and Conveyance Projects:** $1.15 billion in grants to plan and construct small surface water and groundwater storage projects, which includes $100 million for small water storage.
- **Water Recycling and Reuse Projects:** $1 billion, including $450 million for large water recycling projects.
- **Desalination:** $250 million
- **Rural Water Projects:** $1 billion
- **Dam Safety:** $500 million
- **Drought Contingency Plan:** $300 million, including $50 million for Upper Basin states
- **WaterSMART Water and Energy Efficiency Grants:** $400 million, including $100 million for natural or nature-based features
- **Cooperative Watershed Management Program:** $100 million
- **Aquatic Ecosystem Restoration Program:** $250 million
- **Multi-Benefit Watershed Projects:** $100 million
- **Colorado River Fish Species Recovery Programs:** $50 million

DOE Supplemental Appropriations for FY 2022-2026

Division J, Title III - Energy and Water Development and Related Agencies provides additional appropriated money from the Department of Energy (DOE) for five years, FY 2022-FY 2026, which funds a majority of the programs outlined above.[2] Funding is as follows:

- **Office of Energy Efficiency and Renewable Energy (EERE):** $16.264 billion
- **Office of Electricity:** $8.1 billion
- **Office of Clean Energy Demonstrations (OCED):** $21.456 billion
- **Nuclear Energy:** $6 billion
- **Office Fossil Energy Carbon Management:** $7.497 billion
- **Carbon Dioxide Transportation Infrastructure Finance and Innovation Program Account:** $2.1 billion
- **Energy Cybersecurity:** $550 million

Broadband Infrastructure

The infrastructure package provides a significant infusion of federal funding for broadband infrastructure, as the COVID-19 pandemic demonstrated the need for broadband investments to ensure that Americans have access to affordable, reliable internet. The legislation includes $65 billion in funding for broadband infrastructure and implements several programs for the following broadband initiatives:

Broadband Equity, Access and Deployment Program ($42.45 billion): The bill provides formula-based grants to states to competitively award grants for qualifying broadband infrastructure, mapping and adoption projects. The program would be administered by the National Telecommunications and Information Administration (NTIA), and funds would be available until expended. The U.S. Department of Commerce must provide a detailed spending plan to

Attachment: Infrastructure Investment and Jobs Act Summary (Infrastructure Investment & Jobs Act (IIJA) & Inflation Reduction Act: Climate

Congress 90 days after enactment.

States would receive a minimum of $100 million; the remaining funding would be allocated in accordance with a formula that considers the number of unserved and high-cost locations in the state, on a comparative basis. The funding includes a 10 percent set-aside for high-cost areas. All projects would have to meet a minimum download/upload build standard of 100/20 megabits per second. To increase affordability, all funding recipients have an obligation to offer a low-cost plan as a condition of receiving funding.

The bill requires local coordination on the part of the state. Specifically, the bill requires the state to submit a "5-year-action plan" as part of its proposal, which "shall be informed by collaboration with local and regional entities."

States may use funds to competitively award sub-grants for:

- Unserved service projects (defined as an area that lacks access or access to 25/3 speed and latency sufficient to support real-time, interactive applications) and underserved service projects (defined as an area that lacks access to 25/100 speed and a latency sufficient to support real-time, interactive applications).
- Connecting eligible community anchor institutions, which is defined as an entity such as a school, library, health clinic, health center, hospital or other medical provider; public safety entity; institution of higher education; public housing organization or community support organization that facilitates greater use of broadband service by vulnerable populations, including low-income individuals, unemployed individuals and aged individuals.
- Data collection, broadband mapping and planning.
- Installing broadband infrastructure or providing reduced-cost services within a multifamily residential building, with priority given to a building that has a "substantial share" of unserved households or in a designated poverty area.
- Broadband adoption.

Enabling Middle Mile Broadband Infrastructure ($1 billion): Establishes a grant program at NTIA for the construction, improvement or acquisition of middle-mile infrastructure, which is defined as "any infrastructure that does not connect directly to an end-user location, including an anchor institution." The bill directs NTIA to make grants on a competitive basis to eligible entities for the construction, improvement or acquisition of middle-mile infrastructure. Eligible entities include: telecommunication companies, technology companies, electric utilities and utility cooperatives. The grant program is authorized for five years, from FY 2022 through 2026.

- $1 billion is appropriated to remain available until September 30, 2026, for competitive grants. The Secretary of Commerce shall issue a Notice of Funding Opportunity (NOFO) not later than 180 days after the date of enactment of this bill. The Commerce Secretary shall make awards not later than 270 days after issuing the NOFO.

Digital Equity Act Competitive Grant Programs ($2.75 billion): The legislation includes the Digital Equity Act of 2021 (H.R. 1841, sponsored by Rep. Jerry McNerney (D-Calif.) / S. 2018, sponsored by Sen. Patty Murray (D-Wash.)), which creates two grant programs for promoting digital equity, support digital inclusion activities and building capacity at the state-level for increased broadband adoption.

The Commerce Secretary shall issue a NOFO not later than 180 days after the funds are made available, and the Secretary shall make awards not later than 270 days after issuing the NOFO.

- **State Digital Equity Capacity Grant Program:** Appropriates $60 million for planning grants to states to develop State Equity Plans; $240 million for FY 2022 and $300 million per year for FY 2023 to 2026, funding years to support implementation and digital inclusion initiatives. Makes distributions to states based on their populations, demographics, and availability and adoption of broadband.
- **Digital Equity Competitive Grant Program:** Appropriates $250 million per year for competitive grants to public and

Attachment: Infrastructure Investment and Jobs Act Summary (Infrastructure Investment & Jobs Act (IIJA) & Inflation Reduction Act: Climate nonprofit entities for a range of digital inclusion and broadband adoption activities.

Broadband Affordability:

- **Modifies Emergency Broadband Benefit and Makes Renamed Program Permanent ($14.2 billion):** Makes the Emergency Broadband Benefit program at the Federal Communications Commission (FCC)[3] permanent, renaming it to the Affordable Connectivity Program. The program provides a $30 per month voucher for low-income families to use toward any internet service plan of their choosing. It builds on the Emergency Broadband Benefit, making the benefit permanent and expanding eligibility to help more low-income households.
- **Consumer Broadband Labels:** Requires the display of "consumer broadband labels." Consumer broadband labels were proposed by the FCC in 2016 in an effort to help consumers better understand what they are receiving in terms of pricing, performance levels and data caps.
- **Digital Discrimination:** Requires the FCC to adopt rules within two years to address digital discrimination. It also directs the FCC to develop "model policies and best practices" for states and localities to prevent digital discrimination.

Resiliency

Resiliency: Army Corps of Engineers Funding

There is a total of $17 billion in supplemental appropriations "to remain available until expended" for the U.S. Army Corps of Engineers. Within 60 days of bill enactment, for each of the accounts below, the Army Corps is required to submit to Congress a "detailed spending plan" (similar to the annual appropriations Work Plans) with the projects/studies that will be funded with the appropriations.

Investigations: $150 million

- $30 million for Planning Assistance to the States (PAS)
- $75 million for studies
- $45 million for Flood Plain Management Services Program (FPMS)

Construction: $11.615 billion

- $1.5 billion for major rehabilitation, construction and related activities for rivers and harbors
- $200 million be for water-related environmental infrastructure assistance
- $2.5 billion for inland waterways projects
- $465 million for Continuing Authorities Program (CAP):
    - Section 14: Streambank and shoreline erosion protection of public works and nonprofit public services
    - Section 103: Beach erosion and hurricane and storm damage reduction
    - Section 107: Navigation improvements
    - Section 204: Beneficial uses of dredged material
    - Section 205: Flood control
    - Section 206: Aquatic ecosystem restoration
    - Section 1135: Project modifications for improvement of the environment

- $1.9 billion shall be for aquatic ecosystem restoration projects

- $2.55 billion for coastal storm risk management, hurricane and storm damage reduction projects, and related activities for states that have been impacted by federally declared disasters over the last six years
  - $200 million for shore protection projects
- $2.5 billion for inland flood risk management projects

Mississippi River: $808 million

Operation and Maintenance: $4 billion

Water Infrastructure Finance and Innovation Act (WIFIA): $75 million

- $64 million for the cost of direct loans and for the cost of guaranteed loans, for safety projects to maintain, upgrade and repair dams identified in the National Inventory of Dams with a primary owner type of state, local government, public utility or private.

Resiliency: Federal Emergency Management Agency (FEMA) Funding

Building Resilient Infrastructure and Communities (BRIC) Program: Provides $1 billion over five years ($200 million per year) for the Building Resilient Infrastructure and Communities (BRIC) Program, which supports pre-disaster and hazard mitigation activities undertaken by states, U.S. territories, Indian tribal governments and local communities.

FEMA Flood Mitigation Assistance Program: Provides $3.5 billion over five years ($700,000 million per year) for the Flood Mitigation Assistance program, which helps provide financial and technical assistance to states and communities to reduce the risk of flood damage to homes and businesses through buyouts, elevation and other activities.

Resiliency: Cybersecurity

As part of the broader aim to reinvigorate infrastructure resiliency, the legislation includes several cybersecurity-related initiatives as more American critical infrastructure migrates online.

State and Local Cybersecurity Grant Program ($1 billion): Establishes a grant program at the U.S. Department of Homeland Security (DHS) to provide funding to state and local governments to address cybersecurity risks and threats.

- **Cybersecurity Plans:** In order to submit an application for this grant, eligible entities must submit a cybersecurity plan that incorporates plans to protect against cybersecurity risks and threats, and describes plans to enhance cybersecurity.
- **Eligible Use of Funds:** Funding recipients can use funding to implement a Cybersecurity Plan; develop or revise a Cybersecurity Plan; pay expenses related to grant administration; and assist with activities that address imminent cybersecurity threats, on a flexible basis.

The bill appropriates $1 billion for the grant program, under Division J, Title V (Department of Homeland Security). Specifically, the bill appropriates $200 million for FY 2022, $400 million for FY 2023, $300 million for FY 2024 and $100 million for FY 2025.

This section includes language from the State and Local Cybersecurity Improvement Act (H.R. 3138), sponsored by Rep. Yvette Clarke (D-N.Y.), which passed the House on July 20, 2021.

Cyber Response and Recovery Fund ($100 million): Appropriates $100 million ($20 million per year for five years;

unused funds will remain available until expended with program ending on September 30, 2028) to establish the Cyber Response and Recovery Fund, a fund for federal, state, local and tribal entities as well as private entities to seek reimbursement and technical assistance following significant cyber incidents. The program would be administered by the Cybersecurity and Infrastructure Security Agency (CISA).

The legislation would authorize the National Cyber Director, in consultation with the Homeland Security Secretary, to declare a significant cybersecurity incident. It would define a significant cybersecurity incident as one that results in harm to national security interests, foreign relations, or the U.S. economy; or the public confidence, civil liberties or the public health and safety of the U.S.

This provision includes language from the Cyber Response and Recovery Act (S. 1316) sponsored by Senate Homeland Security and Governmental Affairs Chairman Gary Peters (D-Mich.) and ranking member Rob Portman (R-Ohio).

Office of the National Cyber Director ($21 million): Appropriates $21 million to fund the Office of the National Cyber Director through September 30, 2022, under Division J - Title IV (Financial Services and General Government)

The National Cyber Director was created by the FY 2021 National Defense Authorization Act (NDAA), and is intended to serve as a coordinating mechanism for cybersecurity policy between federal agencies, Congress and the White House. Despite the Office of the National Cyber Director being a marquee recommendation of the congressionally chartered Cyberspace Solarium Commission (CSC), Congress has not appropriated money for the National Cyber Director to date.

Environmental Remediation

- **Hazardous Substance Superfund Remediation Account ($3.5 billion)**: Provides $3.5 billion to the Superfund remedial account for five years, allowing U.S. Environmental Protection Agency (EPA) to continue to invest in the remediation of properties contaminated with legacy releases of hazardous substances, i.e., Superfund sites. It also waives the state cost-share requirements and encourages the EPA Administrator to consider the unique needs of tribal communities with Superfund sites, without changing the process for prioritizing Superfund clean-up sites.
- **Competitive Brownfields Grants ($1.2 billion)**: Provides $1.2 billion over five years to the EPA's Brownfields program.

Pay-Fors

- **Reinstatement of Superfund Tax: $14.45 billion.** The Superfund Tax, originally enacted in 1980 and expired in 1995, was an excise tax on the sale, use or import of 42 listed chemical or a taxable substance made from such listed chemical. The legislation reinstates fees on certain Superfund fees on chemicals for a period of 10 years, beginning on July 1, 2022, and sunsetting on December 31, 2031. The legislation adjusts the determination of taxable substances from a baseline of 50 percent to 20 percent to protect domestic manufacturers. It increases the rate on taxable substances where the importer does not furnish information to the U.S. Department of the Treasury Secretary at 10 percent.
- **Information Reporting Cryptocurrency: $27.97 billion.** The legislation imposes new IRS reporting requirements on brokers of cryptocurrency, defined as "any person who (for consideration) is responsible for regularly providing any service effectuating transfers of digital assets on behalf of another person." The BIFF also imposes penalties for the failure to report.
- **Early Termination of Employment Retention Credit: $8.22 billion.** The Employee Retention Credit (ERC) was first revitalized as a response to the COVID-19 pandemic in Coronavirus Aid, Relief, and Economic Security Act

(CARES Act) in March 2020. The refundable tax credit for employers impacted by the pandemic was set to expire at the end to 2021. The BIFF eliminates the credit for all employers except those classified as start-up recovery businesses early – it is now only available for wages paid through October 1, 2021.

- **Extension of Pension Interest Rate Stabilization: $2.87 billion.** Building off the provisions in the American Rescue Plan, BIFF further extends stabilization for an additional five years and modifies percentages of funding requirements.
- **Custom User Fees: Awaiting score**

Notes

[1] Nineteen Republican senators joined Senate Democrats in voting "yes" on the bill: Sens. Roy Blunt (R-Mo.), Richard Burr (R-N.C.), Shelley Moore Capito (R-W.Va.), Bill Cassidy (R-La.), Susan Collins (R-Maine), Kevin Cramer (D-N.D.), Mike Crapo (R-Idaho), Deb Fischer (R-Neb.), Lindsey Graham (R-S.C.), Chuck Grassley (R-Iowa), John Hoeven (D-N.D.), Mitch McConnell (R-Ky), Lisa Murkowski (R-Alaska), Rob Portman (R-Ohio), James Risch (R-Idaho), Mitt Romney (R-Utah), Dan Sullivan (R-Alaska), Thom Tillis (R-N.C.) and Roger Wicker (R-Miss.)

[2] For further details on appropriations in the Energy infrastructure division of this bill, contact either Partner Taite McDonald or Senior Policy Advisor Beth Viola.

[3] The Emergency Broadband Benefit Program was established by the Consolidated Appropriations Act, 2021 (P.L. 116-260). The program provides eligible households with discounts of up to $50 per month for broadband service, and up to $75 per month of the household is on tribal lands. It also provides a one-time discount of up to $100 on a computer or tablet for eligible households.

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Reese Goldsmith is a senior public affairs advisor in Holland & Knight's Washington, D.C., office and member of the firm's Public Policy & Regulation Group. Ms. Goldsmith has extensive knowledge of federal agencies' complex regulatory schemes to provide in-depth interpretations of policy stemming from the U.S. Department of Energy (DOE), U.S. Department of the Interior (DOI), U.S. Environmental Protection Agency (EPA) and the Office of Management and Budget (OMB). She also advocates on Capitol Hill, engaging committees that oversee energy, climate, sustainability and public lands.

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Leslie Pollner is co-leader of Holland & Knight's Local Government Group and a member of the firm's Public Policy & Regulation Group. Ms. Pollner focuses on several key industries, including transportation, economic development and housing. Her extensive experience in government at both the federal and local level allows her to help clients develop innovative solutions and advocacy strategies to achieve results.

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Kathleen Nicholas is a senior public affairs advisor in Holland & Knight's Washington, D.C., office and is a member of the Public Policy & Regulation Group. Ms. Nicholas has spent a decade working at the intersection of law, policy and politics with a focus on energy, advanced technology applications and congressional budgeting. She has experience developing and implementing multiple complex policy strategies for a wide range of clients, including publicly traded companies, trade associations and nonprofit organizations.

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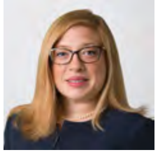

Meaghan A. Colligan is a Washington, D.C., environmental attorney and member of Holland & Knight's Public Policy & Regulation Group. She focuses her practice in the areas of environmental, land use, energy and municipal law.

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Southern California Association of Governments
February 2, 2023

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

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

From: Camille Guiriba, Senior Regional Planner
(213) 236-1809, guiriba@scag.ca.gov

Subject: Connect SoCal 2024: Draft SCS Technical Methodology

RECOMMENDED ACTION FOR EEC:
Information Only – No Action Required

RECOMMENDED ACTION FOR CEHD, TC AND RC:
Receive and File

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

EXECUTIVE SUMMARY:
As part of Connect SoCal 2024 development and prior to starting the formal public participation process, SCAG is required to submit to the California Air Resources Board (CARB) a draft Sustainable Communities Strategy (SCS) Technical Methodology which explains how SCAG will estimate greenhouse gas (GHG) emission reductions from strategies in the plan. SCAG is submitting an initial draft SCS Technical Methodology to CARB in February 2023 and will work with them to refine the document as needed in advance of the final submission with the Sustainable Communities Strategy after the adoption of Connect SoCal 2024 in April 2024.

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 2024, will incorporate important updates of fundamental data, enhanced strategies and investments based on, and intended to strengthen, the plan adopted by the SCAG Regional Council in 2020.

Pursuant to California Government Code Section § 65080(b)(2)(J)(i), prior to starting the formal public participation process required by Senate Bill (SB) 375, a Metropolitan Planning Organization (MPO) must develop and submit to the California Air Resources Board (CARB) the technical methodology it intends to use to estimate the greenhouse gas (GHG) emissions from its Sustainable Communities Strategy (SCS). Upon receipt of the technical methodology, CARB is required to respond to the MPO with timely written comments, including a specific description of any aspect of the technical methodology that it concludes will not yield accurate estimates of the GHG emissions and remedies. The MPO is encouraged to work with CARB until the state board concludes that the technical methodology operates accurately.

SUSTAINABLE COMMUNITIES STRATEGY DRAFT TECHNICAL METHODOLOGY:
Fulfilling the state requirement, SCAG is submitting a draft of its SCS Technical Methodology to CARB in February 2023 before initiating the SB 375 required formal public participation process in March 2023.

CARB requires a specific structure to the Technical Methodology that describes the following:

- How SCAG is addressing CARB's recommendations from the last SCS
- Existing Conditions
    - Notable Changes in Planning Context
    - Key Regional Issues Influencing RTP/SCS Policy Framework
- Population, Household, and Employment Growth Forecasts
- Modeling Background and Assumptions
- Approaches for quantifying GHG emission reductions for potential Connect SoCal strategies

The strategies from Connect SoCal 2020 are carrying forward into the new plan. As part of updating the SCS Technical Methodology, SCAG staff has been reviewing how we define the strategies and improving the approaches to quantify GHG reductions. GHG reductions for strategies are either calculated through one of two ways:

1) SCAG's activity-based model
2) off-model methodologies that are based on guidance from CARB or literature review of academic research.

The table below shows all strategies by the type of GHG reduction quantification approaches.

Modeled	Off-Model
• Congestion Pricing • Express Lane Pricing • Improved Bike Infrastructure • Infill development and increased density near transit infrastructure • Mileage-Based User Fee	• Improved Pedestrian Infrastructure • Mobility Hubs: o Car Share o Bike Share/Micromobility o Microtransit • Safe Routes to School

- New Transit Capital Projects
- Shorter trips through land use strategies such as job/housing balance
- Transportation Demand Management
- Job Center Parking Strategy
- Multimodal Dedicated Lanes*
- Parking Deregulation
- Electric Vehicle Charging Infrastructure
- Electric Vehicle Incentives
- Co-working at strategic locations
- Average Vehicle Ridership (AVR) for Job Centers

*previously off-model

As staff has been able to obtain more data and make the model more sophisticated, we have been able to bring the Multimodal Dedicated Lanes strategy, which was previously quantified off-model, into modeled analysis for this cycle.

Other changes of note to the Technical Methodology since the last cycle:

- The Mobility Hubs strategy merges three strategies (Car Share, Bike Share/Micromobility, and Microtransit) that were previously separate
- The Pedestrian Infrastructure now incorporates urban greening as a factor in reducing vehicle emissions.
- The Safe Routes to School strategy focuses on encouragement programs and no longer includes the engineering component of the program. This was done to prevent double counting of emission reductions by the Improved Bike and Pedestrian Infrastructure strategies.
- A new geography for Parking Deregulation strategy: The geography of this strategy has expanded from the previous RTP/SCS which focused on deregulation in TPAs. With the passage of Assembly Bill 2097 eliminating parking minimums within a half mile of public transit, SCAG has updated the geography of this strategy for it to reach other transit accessible areas in the region beyond the new law.
- New locations for co-working sites: staff is re-evaluating the potential locations of co-working sites beyond traditional job centers as previously identified.

PROCESS AND NEXT STEPS:

Staff presented and shared a draft of the Technical Methodology at the Technical Working Group and Regional Transit Technical Advisory Committee meetings in November.

SCAG is submitting the draft of the Technical Methodology to CARB this month (February 2023) in advance of the start of the formal public participation process. With public workshops planned to begin in March 2023, this marks the transition to the Outreach and Analysis phase of Connect SoCal plan development.

Following receipt of initial feedback from CARB on the SCS Technical Methodology, SCAG staff will continue to work with them to refine the document as needed and the GHG quantification methodologies. The final SCS Technical Methodology will be submitted with the SCS following adoption of Connect SoCal 2024 in April 2024.

The draft of the Technical Methodology is available on SCAG's Connect SoCal "Drafts & Documents" webpage at https://scag.ca.gov/drafts-documents.

FISCAL IMPACT:
Work associated with this item is included in the FY 22-23 Overall Work Program (310.4874.01: Connect SoCal Development).

ATTACHMENT(S):

1. PowerPoint Presentation - Draft Technical Methodology

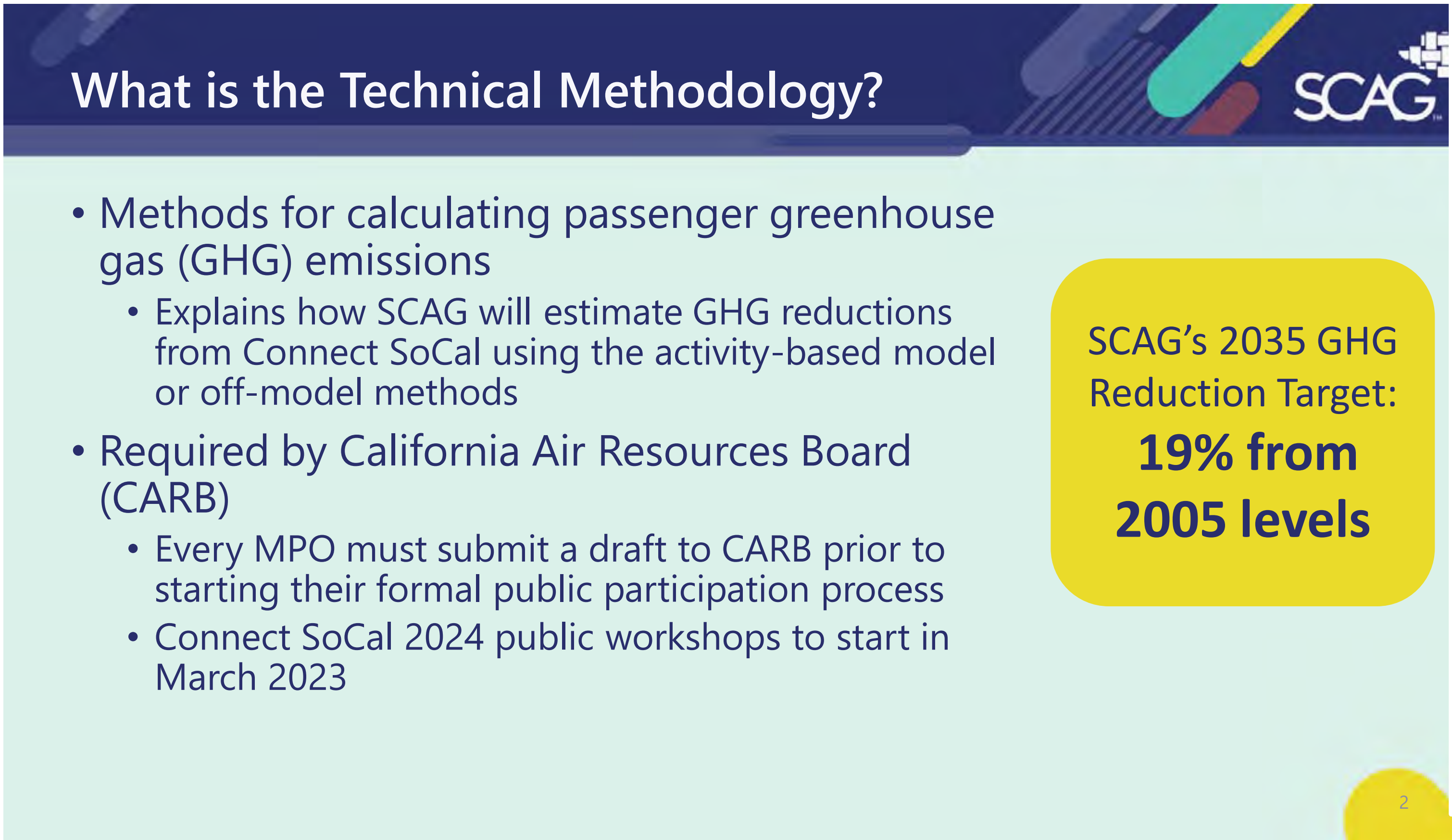
THE 2024 REGIONAL TRANSPORTATION PLAN/SUSTAINABLE COMMUNITIES STRATEGY
OF THE SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

CONNECT SoCal

Camille Guiriba, Senior Regional Planner

Draft Technical Methodology

February 2, 2023



What is the Technical Methodology?

- Methods for calculating passenger greenhouse gas (GHG) emissions
  - Explains how SCAG will estimate GHG reductions from Connect SoCal using the activity-based model or off-model methods
- Required by California Air Resources Board (CARB)
  - Every MPO must submit a draft to CARB prior to starting their formal public participation process
  - Connect SoCal 2024 public workshops to start in March 2023

SCAG's 2035 GHG Reduction Target:

19% from 2005 levels

What is in the Technical Methodology?

- Addressing CARB's Previous Recommendations on Connect SoCal 2020
- Existing Conditions
    - Changes in Planning Context
    - Key Regional Issues
- Population, Household, and Employment Growth Forecasts
- Modeling Background and Assumptions
- Approaches for quantifying GHG emission reductions for potential Connect SoCal strategies

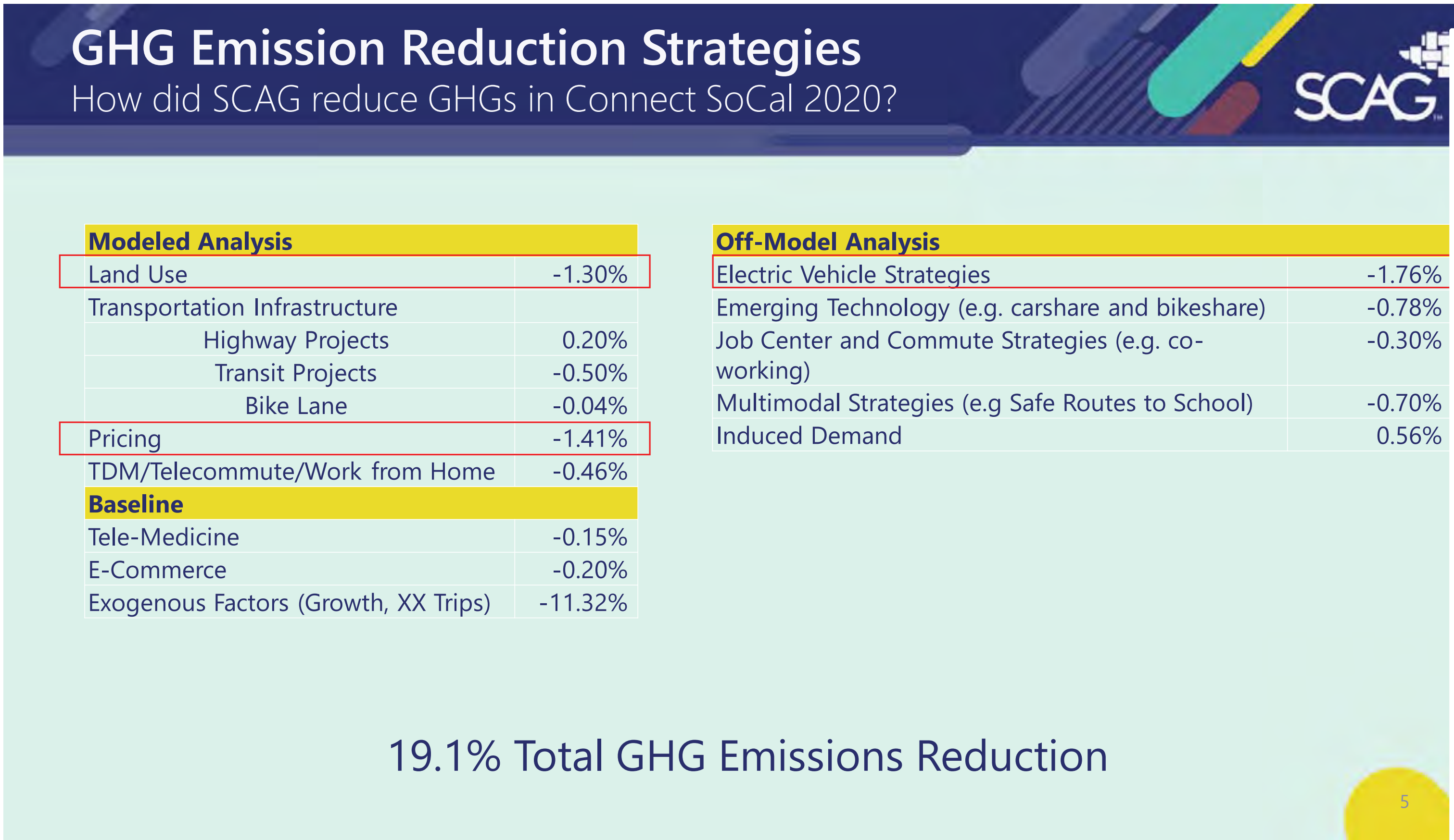
GHG Emission Reductions Strategies

How did SCAG reduce GHGs in Connect SoCal 2020?

Modeled Analysis	
Land Use	-1.30%
Transportation Infrastructure	
Highway Projects	0.20%
Transit Projects	-0.50%
Bike Lane	-0.04%
Pricing	-1.41%
TDM/Telecommute/Work from Home	-0.46%
Baseline	
Tele-Medicine	-0.15%
E-Commerce	-0.20%
Exogenous Factors (Growth, XX Trips)	-11.32%

Off-Model Analysis	
Electric Vehicle Strategies	-1.76%
Emerging Technology (e.g. carshare and bikeshare)	-0.78%
Job Center and Commute Strategies (e.g. co-working)	-0.30%
Multimodal Strategies (e.g Safe Routes to School)	-0.70%
Induced Demand	0.56%

19.1% Total GHG Emissions Reduction



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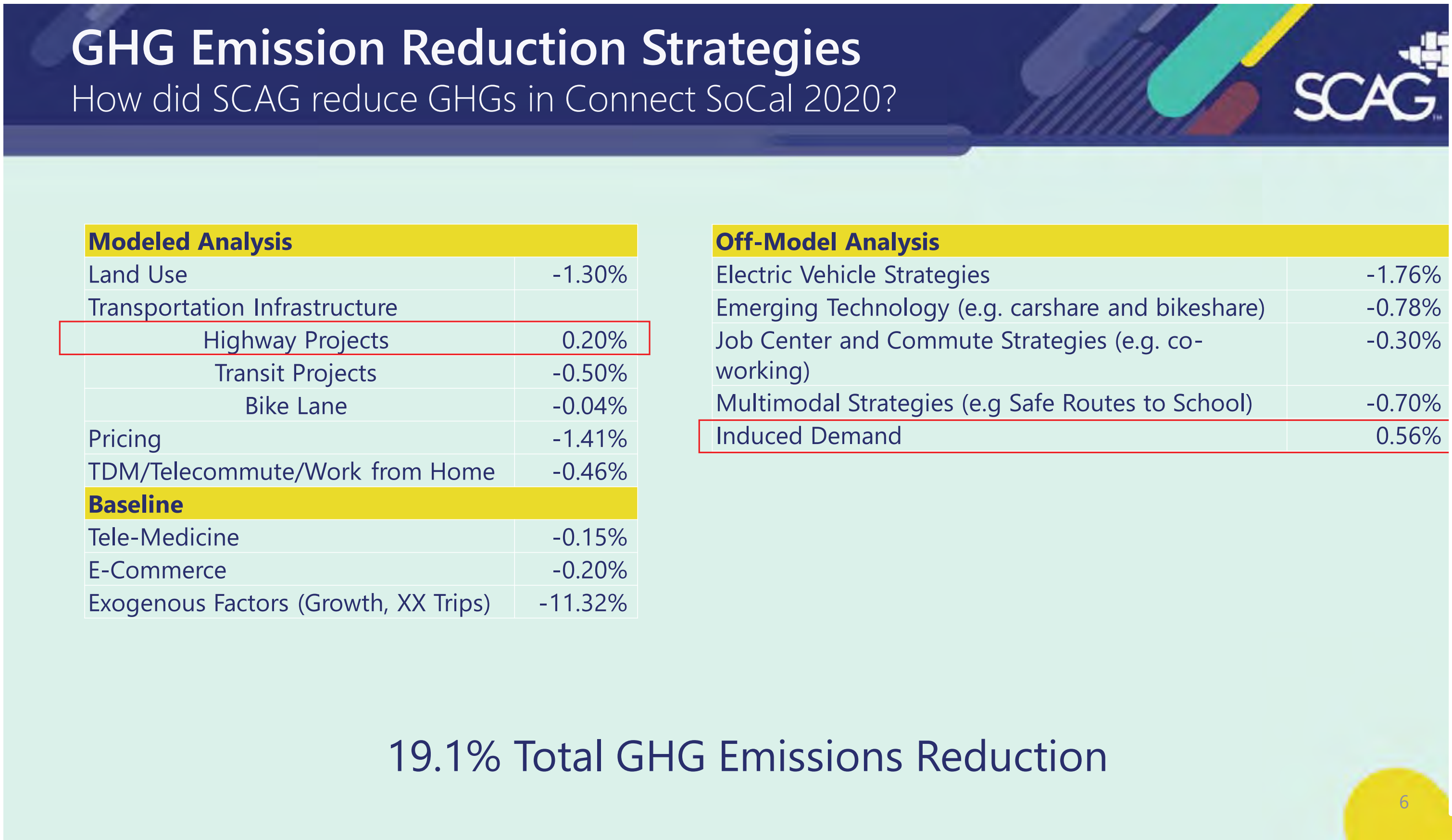

GHG Emission Reduction Strategies

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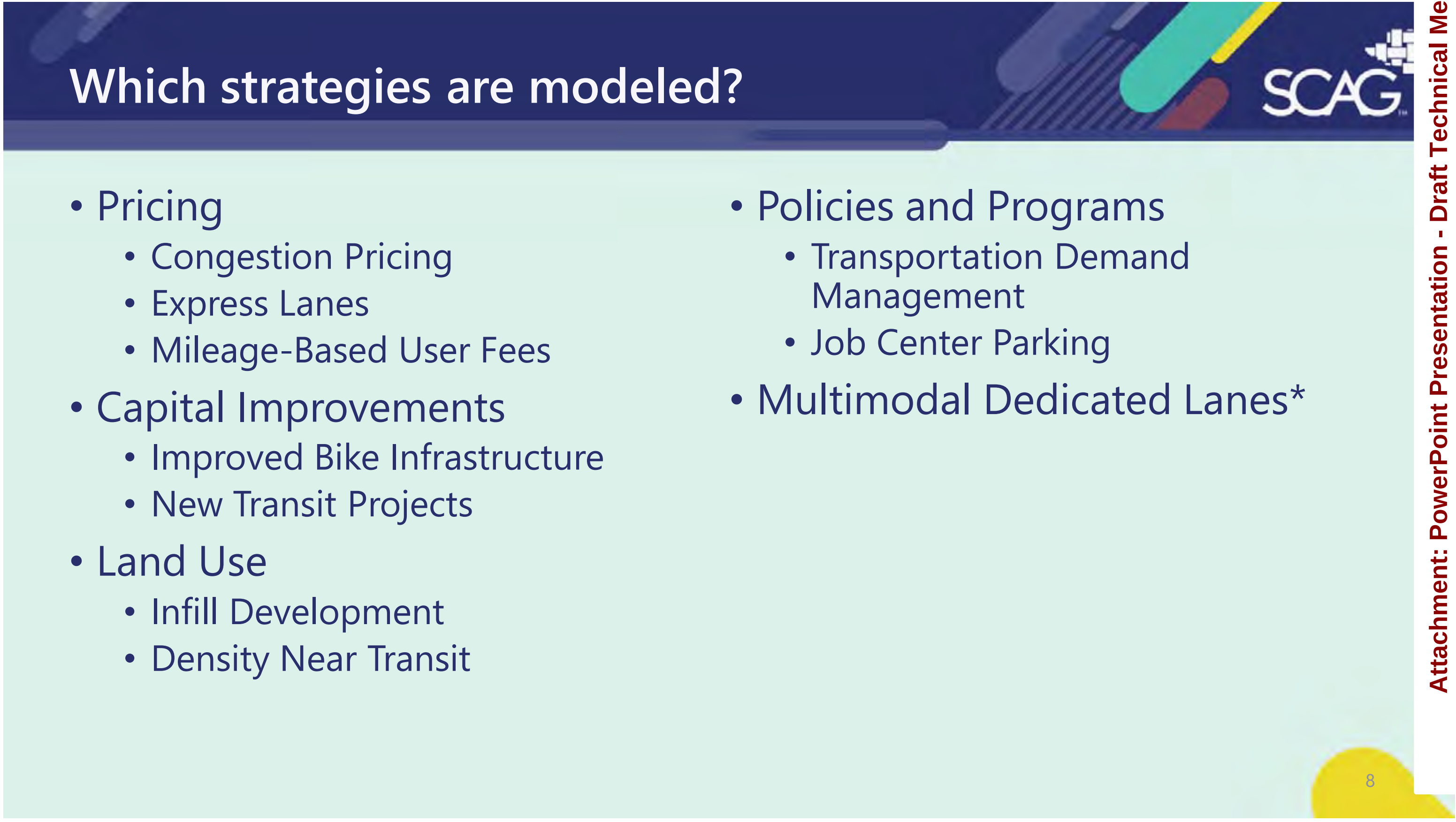
19.1% Total GHG Emissions Reduction

What has changed since last cycle?

Connect SoCal 2024 is carrying forward the strategies from 2020

Some strategies are being refined to reflect updated research, regulation and implementation context:

- **Mobility Hubs:** Merging 3 previously separate strategies
- **Pedestrian Infrastructure:** Incorporating urban greening
- **Safe Routes to School:** Focusing on encouragement
- **Parking Deregulation:** Updating geography
- **Co-working:** Identifying new locations



Which strategies are modeled?

- Pricing
  - Congestion Pricing
  - Express Lanes
  - Mileage-Based User Fees
- Capital Improvements
  - Improved Bike Infrastructure
  - New Transit Projects
- Land Use
  - Infill Development
  - Density Near Transit
- Policies and Programs
  - Transportation Demand Management
  - Job Center Parking
- Multimodal Dedicated Lanes*

What strategies are quantified off-model?

- Improved Pedestrian Infrastructure
- Mobility Hubs
    - Car Share, Bike Share/Micromobility, and Microtransit
- Safe Routes to Schools
- Parking Deregulation
- Electric Vehicle Incentives and Infrastructure
- Co-working
- Average Vehicle Ridership (AVR) for Job Centers

What's Next?

February 2023

Submit draft Technical Methodology to CARB

Ongoing

Continued SCAG staff refinement of strategies; review and feedback by CARB staff

April 2024

Submit final Technical Methodology with SCS submission to CARB

Questions?
Comments?

FOR MORE INFORMATION, PLEASE VISIT
SCAG.CA.GOV/CONNECT-SOCAL

Attachment: PowerPoint Presentation - Draft Technical Methodology (Connect SoCal 2024: Draft SCS Technical Methodology)

AGENDA ITEM 7
REPORT

Southern California Association of Governments
February 2, 2023

To: Energy & Environment Committee (EEC)
Regional Council (RC)

EXECUTIVE DIRECTOR'S APPROVAL

Kome Ajise

From: Karen Calderon, Senior Regional Planner
(213) 236-1983, calderon@scag.ca.gov

Subject: Connect SoCal 2024 Program Environmental Impact Report (State Clearinghouse No.: 2022100337): Status Update on Notice of Preparation Comments

RECOMMENDED ACTION FOR EEC:
Information Only – No Action Required

RECOMMENDED ACTION FOR RC:
Receive and File

STRATEGIC PLAN:
This item supports the following Strategic Plan Goal 2: Advance Southern California's policy interests and planning priorities through regional, statewide, and national engagement and advocacy.

EXECUTIVE SUMMARY:
At the October 6, 2022 meeting, Energy and Environment Committee (EEC) authorized the release of a Notice of Preparation (NOP) of a Draft Program Environmental Impact Report (PEIR) for the proposed 2024-2050 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), referred to alternatively as "Connect SoCal 2024", "Plan", or "Project". This report provides the EEC with a status update on the NOP that SCAG released on October 17, 2022 for a required 30-day public review and comment period ending on November 16, 2022 in accordance with applicable provisions of the California Environmental Quality Act (CEQA). Further, this report provides a schedule of events relating to preparation of the PEIR. Staff plans to provide periodic updates on the progress of the PEIR development and to give EEC members ample opportunity to become familiar with the PEIR such that a recommendation for approval to release the Draft PEIR can be made to the Regional Council (RC) which is currently planned in the fall of 2023.

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 2024, will incorporate important updates of fundamental data, enhanced strategies and investments based on, and intended to strengthen, the last plan adopted by the SCAG Regional Council in 2020.

CEQA, codified at Public Resource Code (PRC) Section 21000 et seq., and its implementing regulations, CEQA Guidelines, found at California Code Regulations Title 14, Chapter 3, Section 15000 et seq., require SCAG as the Lead Agency to evaluate the potential environmental impacts for any discretionary governmental action and disclose the evaluation in a CEQA document that is appropriate for the proposed governmental action (CEQA Guidelines Section 15002(b)). As Lead Agency, SCAG found a PEIR is the appropriate type of EIR for the proposed Connect SoCal 2024.

The PEIR will serve as a first-tier, programmatic document and provides a region-wide assessment of potential environmental impacts of the proposed Connect SoCal 2024, including direct and indirect impacts, growth-inducing impacts, and cumulative impacts. The PEIR must also evaluate alternatives to the proposed Connect SoCal 2024 and propose feasible mitigation measures.

Status Update on the NOP of the Proposed Connect SoCal 2024 Draft PEIR:
At the October 6, 2022 meeting, EEC authorized the release of a NOP of a Draft PEIR for a required 30-day public review and comment period beginning on October 17, 2022 and ending on November 16, 2022 and directed staff to carry out all associated administrative tasks for the public release. SCAG staff released the NOP on October 17, 2022 to notify interested agencies, organizations, and individuals that SCAG plans to prepare a PEIR for the proposed Connect SoCal 2024 and to seek input from them on the scope and content of environmental information to be considered and evaluated in the Draft PEIR. During the 30-day public review and comment period, two virtual public NOP scoping meetings were conducted on November 9 and 10, 2022, respectively. SCAG received 16 comment letters (including two comment letters received after close of the public comment period) and seven verbal comments at the public NOP scoping meetings. A breakdown of NOP commenters is listed in Table 1.

Table 1: Breakdown of NOP Commenters

Commenters	Number
Sovereign Nation	1
State Agency	4
Regional Agency	2
Local Agency (SCAG Member Jurisdiction)	4
Other Interested Organization and Individuals	12

Both PEIR and Plan topics were raised by the commenters. SCAG received 50 individual comments related to the PEIR and 30 individual comments on the Plan. A breakdown of the NOP comments by

PEIR and Plan topic areas is presented in Table 2. The NOP and comments received on the NOP will be included in an appendix to the Draft PEIR document.

Table 2: Breakdown of NOP Comments by Topic Areas*

	Topic Areas	**Number**
PEIR	Project Description	7
	Air Quality	2
	Biological Resources	1
	Cultural Resources	2
	Greenhouse Gas Emissions	4
	Hydrology and Water Quality	1
	Population and Housing	3
	Recreation	3
	Transportation	4
	Tribal Cultural Resources	2
	Utilities and Service Systems	2
	Wildfire	1
	Mitigation Measures	7
	Alternatives	5
	PEIR Development Process	4
	Findings of Fact/Statement of Overriding Considerations	1
Plan (Connect SoCal 2024)	Plan Requirements	2
	Plan Development Process	3
	Plan Goals and Performance Measures	4
	Transportation Planning	5
	Transportation Conformity	2
	Forecasted Regional Development Pattern	8
	Climate and Resilience	4
	Data	2

*Table 2 does not include comments from the California Coastal Commission in the breakdown because their comments, which were submitted to SCAG on November 16, 2022, were dated February 21, 2019 in response to the NOP of Connect SoCal 2020 (2020 RTP/SCS) PEIR (State Clearinghouse No.: 2019011061).

Next Steps:

Key milestones for development of the Connect SoCal 2024 PEIR are listed in Table 3.

Table 3: Key Milestones for the Connect SoCal 2024 PEIR

Milestones	Dates (Expected)
Release of Draft PEIR for Public Review and Comments	Within 30 days after Draft Connect SoCal 2024 Release
Draft PEIR Public Review and Comment Period Closes	At least 45 days after Draft PEIR Release
Certification of the Final PEIR for the Final Connect SoCal 2024 by the RC	April 2024

Key milestones for EEC review of and action on the Connect SoCal 2024 PEIR are listed in Table 4.

Table 4: Key Milestones for EEC Review of and Action on the Connect SoCal 2024 PEIR

Milestones	Dates (Expected)
EEC Review of Connect SoCal 2024 PEIR Key Approaches* and Preliminary Outline	Spring-Summer 2023
EEC Review of the Proposed Draft PEIR for the Proposed Draft Connect SoCal 2024 and Consideration to Recommend that RC Release the Proposed Draft PEIR for Public Review and Comments	Fall 2023
EEC Review of the Proposed Final PEIR for the Proposed Final Connect SoCal 2024 and Consideration to Recommend that RC Certify the Proposed Final PEIR	March 2024

*SCAG staff is considering and evaluating appropriate approaches to the Connect SoCal 2024 PEIR, including, but not limited to, mitigation measures and alternatives analysis. Staff will provide periodic status updates to the EEC at the next several EEC or Joint Committee meetings as development of the Connect SoCal 2024 PEIR progresses such that a recommendation for approval to release the Draft PEIR can be made to the RC currently planned in the fall of 2023. Staff will continue to engage with stakeholders and conduct ongoing outreach throughout the PEIR development and report back to EEC as appropriate.

FISCAL IMPACT:

Work associated with this item is included in the current Fiscal Year 2022/23 Overall Work Program (23-020.0161.04: Environmental Compliance, Coordination & Outreach).