

## San Diego Forward: The 2019 Federal Regional Transportation Plan

### Overview

On February 22, 2019, the Board of Directors approved an action plan to develop a bold new vision for the 2021 Regional Plan, with the goal of transforming the way people and goods move throughout the San Diego region. While work progresses to develop this new vision, the agency has concurrently been working on the [2019 Federal Regional Transportation Plan](#) (2019 Federal RTP) to comply with federal requirements, including air quality conformity. The agency must expedite the approval process for the 2019 Federal RTP due to recent changes at the federal level, which are explained further below. On October 4, 2019, the agency released the Draft 2019 Federal RTP for a public review and comment period, ending on October 22, 2019.

In addition, on October 8, 2019, [Assembly Bill 1730](#) (AB 1730) (Gonzalez) was signed by the governor. The bill provides a two-year extension to update San Diego Forward: The 2015 Regional Plan (2015 Regional Plan) and its Sustainable Communities Strategy for the San Diego region and ensures that the 2015 Regional Plan, its Sustainable Communities Strategy, and related environmental analysis remain valid for state compliance, funding eligibility, and other purposes through 2021. AB 1730 also provides an exemption from the California Environmental Quality Act (CEQA) for the 2019 Federal RTP.

### Key Considerations

Consistent with the direction provided by the Board of Directors in February 2019, the draft 2019 Federal RTP largely includes the same projects, programs, and policies included in the 2015 Regional Plan. The only modifications made were to remove projects that have been completed since the 2015 Regional Plan was adopted; make minor schedule updates to align with the current Regional Transportation Improvement Program; and update the cost estimates and financial assumptions as required by federal law. The 2019 Federal RTP was also developed using updated modeling tools and an updated Regional Growth Forecast<sup>1</sup>.

#### Action: **Adopt**

The Board of Directors is asked to adopt Resolution No. 2019-12, adopting the air quality conformity determination, finding that the Revenue Constrained Plan is in conformance with the State Implementation Plan for air quality; adopting the 2019 Federal Regional Transportation Plan and its supporting analyses, and; adopting findings in support of a Notice of Exemption under the California Environmental Quality Act.

#### Fiscal Impact:

An air quality conformity determination from the U.S. Department of Transportation for the 2019 Federal Regional Transportation Plan will protect the flow of transportation funding to our region.

#### Schedule/Scope Impact:

Pending Board of Directors' action, the Final 2019 Federal Regional Transportation Plan will be transmitted to the U.S. Department of Transportation requesting action on air quality conformity.

<sup>1</sup> Appendix T of the draft 2019 Federal RTP documents the SANDAG travel demand model methodology and Appendix J details the 2050 Regional Growth Forecast (Series 14, version 17).

## ***Recent Federal Changes***

In late September 2019, the federal government issued the Safer Affordable Fuel-Efficient Vehicles Rule Part One (SAFE Rule), which provides for nationwide fuel economy and greenhouse gas standards for automobiles and light trucks. Prior to this ruling, California could enforce stricter greenhouse gas standards and zero-emission vehicle mandates. The SAFE Rule will go into effect on November 26, 2019. SANDAG, Caltrans, Metropolitan Transit System, North County Transit District, the 18 cities and the County of San Diego will be at risk of losing funding eligibility if the 2019 Federal RTP is not adopted by SANDAG and an air quality conformity determination is not made by federal agencies before this date. To avoid the risk of the region losing millions of dollars in funding, SANDAG has advanced completion of what was previously under development as the 2020 Federal RTP, now referred to as the 2019 Federal RTP.

## ***Public Participation Process***

The 2019 Federal RTP outlines nearly \$208 billion in transportation investments in our region and carries forward the projects, programs, and policies included in the 2015 Regional Plan; to create, maintain, and improve a balanced transportation network over the next 30 years. Public outreach and consultation for the Draft 2019 Federal RTP used key sections from the Public Involvement Plan for San Diego Forward:

The 2021 Regional Plan, to comply with all applicable federal outreach elements (23 CFR 450.316 and 450.324). Main approaches to public outreach over the past seven months have included public information releases, face-to-face interaction, meetings with the SANDAG community-based partnership network, web-based interactive communications, and other media. Tribal consultation was conducted through the SANDAG Interagency Technical Working Group on Tribal Transportation Issues. SANDAG working groups also provided a forum for stakeholder involvement throughout the development of the Draft 2019 Federal RTP.

The proposed draft transportation network that is included in the Draft 2019 Federal RTP was released in July for a 30-day comment period. The Draft 2019 Federal RTP including its air quality conformity analysis was released for public review and comment on October 4, 2019. In addition to the outreach methods described above, an open house and public hearing were held during the Draft 2019 Federal RTP public review period. Appendix F of the Draft 2019 Federal RTP documents public involvement activities. Comments made during the development of the proposed draft transportation network; the October 15, 2019, open house and the October 18, 2019, public hearing; as well via other means, are included with staff responses in Attachment 2.

## ***Air Quality Conformity***

[Appendix B](#) of the Draft 2019 Federal RTP (Attachment 3), describes the process used to document the conformity of the 2019 Federal RTP Revenue Constrained Plan and the 2018 Regional Transportation Improvement Program, as amended, with the State Implementation Plan for air quality. This process, which is required by federal law, involves estimating regional vehicle emissions resulting from the Revenue Constrained Plan within the Draft 2019 Federal RTP and making a determination that they will not exceed established emissions budgets.

## ***California Environmental Quality Act Compliance***

CEQA does not apply to projects that are expressly exempt by statute. AB 1730 amends California Government Code Section 65080(d) to include an exemption from CEQA for the 2019 Federal RTP. The Board of Directors is asked to make a finding that the Draft 2019 Federal RTP is exempt from CEQA pursuant to California Government Code Section 65080(d)(2)(E), as amended by AB 1730.

## ***Next Steps***

Pending Board of Directors' approval, the Final 2019 Federal RTP will be sent to the U.S. Department of Transportation (DOT) and the U.S. Environmental Protection Agency, with the request that the U.S. DOT

make its air quality conformity determination prior to November 26, 2019, when the new SAFE Rule will go into effect.

***Hasan Ikhata, Executive Director***

Key Staff Contact: Rachel Kennedy, (619) 699-1929, [rachel.kennedy@sandag.org](mailto:rachel.kennedy@sandag.org)

- Attachments:
1. Resolution No. 2019-12
  2. Draft 2019 Federal Regional Transportation Plan Public Comments and Responses
  3. 2019 Federal Regional Transportation Plan: Appendix B: Air Quality Planning and Transportation Conformity
  4. Notice of Exemption



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## **Resolution No. 2020-12**

# **A Resolution of the San Diego Association of Governments Board of Directors Adopting the Air Quality Conformity Determination, San Diego Forward: The 2019 Federal Regional Transportation Plan and its Supporting Analyses, and Findings in Support of Notice of Exemption Under the California Environmental Quality Act**

WHEREAS, the San Diego Association of Governments (SANDAG) is the federally-designated Metropolitan Planning Organization (MPO), pursuant to Title 23 United States Code Sections 134(a) and (g), and the state designated Regional Transportation Planning Agency (RTPA) for the San Diego County region pursuant to California Public Utilities Code Section 132005; and

WHEREAS, Title 23, Part 450 and Title 49, Part 613 of the Code of Federal Regulations (CFR), require SANDAG, as the MPO, to prepare and update a long-range Regional Transportation Plan (RTP) every four years; and

WHEREAS, on October 9, 2015, the SANDAG Board of Directors found the Revenue Constrained San Diego Forward: The 2015 Regional Plan (prepared in 2015) in conformance with the State Implementation Plans (SIPs) for air quality, in accordance with the transportation conformity requirements contained in 40 CFR Part 51 and Part 93, as required by the 1990 Clean Air Act Amendments; and with the 2009 Regional Air Quality Strategy (RAQS), in accordance with California law; and

WHEREAS, from February 2019 through October 2019, through the conduct of a continuing, comprehensive, and coordinated transportation planning process in conformance with all applicable federal requirements, SANDAG developed its latest RTP, San Diego Forward: The 2019 Federal Regional Transportation Plan (2019 Federal RTP), with a 2050 horizon year; and

WHEREAS, the 2019 Federal RTP serves as a blueprint for how the San Diego region will grow, and how SANDAG and other agencies in the region will invest in transportation infrastructure that will provide more choices, strengthen the economy, promote a healthy environment, and support thriving communities. The 2019 Federal RTP includes the mandatory policy, action, and financial elements as identified in the Code of Federal Regulations Title 23 Part 450 and Title 49, Part 613; and

WHEREAS, the 2019 Federal RTP considers, analyzes, and reflects, as appropriate, the metropolitan transportation planning process as identified in the federal Fixing America's Surface Transportation (FAST) Act (P.L. No. 114-94) as well as the National Highway System Designation Act of 1995, and is based on reasonably available funding provisions; and

WHEREAS, the 2019 Federal RTP serves as a Congestion Management Process, identifying the most serious congestion problems and evaluating and incorporating, as appropriate, all reasonably available actions to reduce congestion, such as Travel Demand Management and operational management strategies for all corridors with any proposed capacity increase; and

WHEREAS, SANDAG has conducted an air quality analysis of the 2019 Federal RTP and 2018 Regional Transportation Improvement Program (RTIP), as amended, utilizing the most recent planning assumptions, emissions model, and consultation provisions that comply with the San Diego Transportation Conformity Procedures adopted in July 1998. In turn, these procedures comply with federal requirements under 40 CFR Part 93 and include a quantitative regional emissions analysis that meets emissions budget requirements of the U.S. Environmental Protection Agency transportation conformity rule; and

WHEREAS, the 2019 Federal RTP contributes to all required emissions reductions, and

WHEREAS, transportation control measures (TCMs) from the 2016 RAQS and 1982 SIP for air quality have been given emphasis in the 2019 Federal RTP and 2018 RTIP, as amended, which provide for the expeditious implementation of all applicable TCMs; and

WHEREAS, the Regional Growth Forecast was developed for planning purposes by working with local jurisdictions, and projects growth based on existing land use plans and policies, and demographic and economic trends, which represent the most recent planning assumptions; and

WHEREAS, pursuant to federal public participation requirements (23 CFR Part 450.316), the 2019 Federal RTP was developed through a strategic, proactive, comprehensive public outreach and involvement program, which included implementing an adopted public participation plan; providing timely notice of public participation activities; providing time for public review and comment at key decision points and a reasonable opportunity to comment on the proposed 2019 Federal RTP and its transportation network; providing timely notice and reasonable access to information about transportation issues and processes; employing visualization techniques; making public information available in electronically accessible formats and means; holding public meetings at convenient and accessible locations and times; considering and responding to public input received; seeking out and considering the needs of those traditionally underserved by existing transportation systems; providing interpretation services; and coordinating with statewide transportation planning public involvement and consultation process under 23 CFR Part 450, Subpart B; and

WHEREAS, projects included in the 2019 Federal RTP and 2018 RTIP, as amended, satisfy the transportation conformity provisions of 40 CFR 93.122(g) and all applicable transportation planning requirements per 23 CFR Part 450, including all performance-based planning requirements; and

WHEREAS, the SANDAG Board of Directors wishes to render written findings in support of the determination that the 2019 Federal RTP is exempt from the California Environmental Quality Act (CEQA); and

WHEREAS, if a project is statutorily exempt from CEQA, no further agency evaluation of environmental impact is required; and

WHEREAS, California Assembly Bill 1730 (Gonzalez), which was signed into law on October 8, 2019, amends California Government Code Section 65080(d) to include an exemption from CEQA for the 2019 Federal RTP due to the provision that states that SANDAG's update to the 2015 regional transportation plan, submitted to federal agencies for purposes of compliance with federal laws applicable to regional transportation plans and air quality conformity, shall not be considered a project for purposes of CEQA.

NOW THEREFORE BE IT RESOLVED BY the SANDAG Board of Directors that the foregoing recitals are true and correct and incorporated by this reference; and

BE IT FURTHER RESOLVED THAT the SANDAG Board of Directors finds the Revenue Constrained 2019 Federal RTP to be in conformance with all applicable SIP requirements for air quality, and the emissions budgets included in the 2008 Eight-Hour Ozone Attainment Plan for San Diego County, in accordance with the transportation conformity requirements contained in 40 CFR Part 51 and Part 93, as required by Section 176(c) of the federal Clean Air Act (42 U.S.C. Sec. 7506) as amended, the 2015 revisions

to the National Ambient Air Quality Standards for ground-level ozone pursuant to Sections 108 and 109 of the Clean Air Act (42 U.S.C. Sec. 7408 and Sec. 7409) as amended, and the 2016 RAQS, in accordance with California law; and

BE IT FURTHER RESOLVED THAT the SANDAG Board of Directors does hereby adopt San Diego Forward: The 2019 Federal Regional Transportation Plan, and its supporting analyses; and

BE IT FURTHER RESOLVED THAT the SANDAG Board of Directors finds the 2019 Federal RTP exempt from CEQA as intended by the Legislature, pursuant to California Government Code Section 65080(d)(2)(E) as amended by California Assembly Bill 1730.

PASSED AND ADOPTED this 25th day of October 2019.

Attest:

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**Chair**

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**Secretary**

**Member Agencies:** Cities of Carlsbad, Chula Vista, Coronado, Del Mar, El Cajon, Encinitas, Escondido, Imperial Beach, La Mesa, Lemon Grove, National City, Oceanside, Poway, San Diego, San Marcos, Santee, Solana Beach, Vista, and County of San Diego.

**Advisory Members:** California Department of Transportation, Metropolitan Transit System, North County Transit District, Imperial County, U.S. Department of Defense, Port of San Diego, San Diego County Water Authority, Southern California Tribal Chairmen's Association, and Mexico.

## **Summary of Public Comments Received for Draft San Diego Forward: The 2019 Federal Regional Transportation Plan (as of October 16, 2019)**

Public comments were collected during two phases of the development of the Draft San Diego Forward: The 2019 Federal Regional Transportation Plan (2019 Federal RTP): during the development of the proposed draft transportation network and with the release of the Draft 2019 Federal RTP document. All comments received on the proposed draft transportation network and Draft 2019 Federal RTP (as of October 16, 2019) and are included with staff responses in this document.

### ***Draft 2019 Federal RTP: Proposed Draft Transportation Network Comments***

The proposed draft transportation network—including the list of projects and programs, network maps, performance measures results, and social equity analysis findings—was available on the 2019 Federal RTP dedicated webpage and public comments were solicited from July 22 to August 21, 2019. During this time, Community-Based Organization (CBO) partners conducted outreach to engage low income, minority, senior, and disabled populations. SANDAG held an open house on August 13, 2019, for the 2019 Federal RTP and related planning efforts. The public comment period and open house were advertised through the SANDAG (sandag.org) and San Diego Forward (SDForward.com) websites, social media platforms, and stakeholder email lists. The open house had bilingual staff, in English and Spanish, and materials explaining the proposed draft transportation network. During the public comment period, 57 comments were received and are detailed on subsequent pages of this attachment. Common themes included:

- Need for more transit routes and increased frequency of existing services, as well as desire for lower fares
- Support for developing the 2019 Federal RTP and the Five Big Moves
- Concerns with homelessness and safety while using transit services
- Desire for improved active transportation facilities
- Concerns that funds previously identified for highway improvements might be reallocated to other modes

### ***Draft 2019 Federal RTP Comments***

The draft 2019 Federal RTP was released for public comment from October 4-22, 2019 and is available on the SANDAG (sandag.org) and San Diego Forward (SDForward.com) websites. Print copies were provided to the CBO network and the Southern California Tribal Chairmen's Association. SANDAG held an open house on October 15, 2019. As of October 16, 2019, 43 comments had been received. Comments will continue to be collected through October 22, 2019. Responses to these comments, including those received at the October 18, 2019, public hearing, will be provided to the Board of Directors in advance of their requested action on October 25, 2019. Comments received on the draft 2019 Federal RTP to date include:

- Interest in extending the COASTER to San Ysidro
- Support for active transportation infrastructure and bicycle and pedestrian facility recommendations
- Interest in using measures such as dynamic pricing and transit-priority lanes to encourage shared rides
- Comments regarding clarifying language in various areas of the plan (goods movement, bicycle and pedestrian facilities, travel demand modeling technical documentation, map references).
- Improved multimodal access to employment centers
- Desire for funding for local roads supporting goods movement access to the Otay Mesa Port of Entry
- Question regarding the impacts of the SAFE ruling on the RTP
- Support for the draft 2019 Federal RTP

COMMENTS RECEIVED BY THE CLOSE OF THE PUBLIC COMMENT PERIOD ON AUGUST 21, 2019<sup>1</sup>

**Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments**

No.	Name	Agency	Comment	Source	Response
1	Carl Luster	Public	See attached email #1	Email/Online Comment	The 2021 Regional Plan is currently being developed to include a fully integrated, world class transportation system for the San Diego region. This plan will emphasize new and innovative technology. The proposed draft network for San Diego Forward: The 2019 Federal Regional Transportation Plan (2019 Federal RTP) does include support for electric vehicle charging stations (EVCS). The draft Plan also recommends the establishment of a Regional Charger Program by setting aside approximately \$30 million (approximately \$1 million annually) to fund the installation of publicly available EVCS.
2	Alex Maitre	Interfaith Community Services	There should be serious considerations made for providing free annual bus and train passes for homeless/indigent people. ~8000 on the PITC. This is often the only way these citizens can go to appointments and jobs and court hearings.	Comment Card	While it is understood that the cost of using transit can be a challenge for some people, fares are an important part of the funding picture for operating transit. Given the limited amount of funding available for transit operations, reducing fares would likely mean that Trolley and bus services would have to be reduced to cover the loss in revenues. Consideration will be given to subsidies for such passes in the 2021 Regional Plan.
3	Anonymous	Public	It is OK with me that we wait until 2020 to submit a new plan. Fast trains are a great idea- few stops. Trains and trolley should go all the way into the airport. The 8-125 Connector must be fixed.	Comment Card	In partnership with Caltrans, MTS, Port of San Diego, City of San Diego, and the Airport Authority, the Airport Development Plan Draft EIR is being revised to provide for transit connections that result from the work being done by the SANDAG Airport Connectivity Subcommittee.  The 2019 Federal RTP proposed draft network includes several major projects in and around the I-8 and SR 125 area. In terms of freeway improvements, the State Route 94 (SR 94)/State Route 125 (SR 125) south to east freeway connector ramp is planned to open by 2025, followed by the west to north connector in 2035. Improvements of two additional general purpose lanes and two additional Managed Lanes on SR 125 east of SR 94 are included in the proposed Draft Transportation Network in later years.

<sup>1</sup> All references to the 2020 RTP or 2020 Plan in this document are references to what is now known as the 2019 Federal RTP.

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
4	Anonymous	Public	<ol style="list-style-type: none"> <li>1. More frequent buses on their routes would increase the number of people using it</li> <li>2. Do something! So much planning and no change</li> <li>3. Start the Mobility Hubs now!</li> </ol>	<b>Comment Card</b>	The proposed Draft Transportation Network includes additional frequency enhancements on key corridors to 15 minutes by 2025 and 10 minutes by 2035. The 2021 Regional Plan is currently being developed to include a fully integrated, world class transportation system for the San Diego region which includes implementation of Mobility Hubs throughout the region and builds off the Mobility Hub investments identified in this Plan.
5	Anonymous	Public	Innovation is always great especially for transportation. As clients will need more route accessibility, more bus routes will be great.	<b>Comment Card</b>	Roughly half of the proposed Draft Transportation Network investments are dedicated to transit service improvements (both operations and capital) to provide better connections for people to get to where they want to go. Additional transit route frequencies on key local bus corridors also are included in the Draft Network.
6	Anonymous	Public	It would be great to monopolize the work commute into a city funded initiative. Secondly in efforts to reduce emissions we should tax recreational carbon emitting vehicle usage.	<b>Comment Card</b>	The Draft 2019 Federal RTP supports a greater focus on housing and job growth in the region's urbanized areas with existing and planned infrastructure; protecting sensitive habitat and open space; investing in a transportation network that gives people transportation options and reducing greenhouse gas emissions; addressing the housing needs of all economic segments of the population; and implementing the plan through incentives and collaboration with partners including cities and employers through employee outreach programs. Transportation Demand Management (TDM) division manages programs and services that reduce traffic congestion by encouraging the use of transportation alternatives. This includes educating the public on their transportation choices and providing incentives and support for vanpooling, carpooling, transit, biking and telework.
7	Anonymous	Public	I was raised in SD. I think if these new plans go through and the transportation is efficient more people will use it. In SF public transportation is the way lots of people get to work.	<b>Comment Card</b>	The proposed Draft Transportation Network includes a significant investment in both new rail and <i>Rapid</i> services, as well as improvements to the existing Trolley and bus system. The rich network of transit services will improve the access, connectivity, and convenience of using transit.

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
8	Anonymous	Public	Excited to hear about the proposed transportation plan. We are behind in California. Mobility Hubs are a great idea. The Next OS ideas are so important because many people worry about charging stations not being available during long distance travels.	<b>Comment Card</b>	The proposed Draft Transportation Network includes support for electric vehicle charging stations (EVCS). The Plan also recommends the establishment of a Regional Charger Program by setting aside approximately \$30 million (approximately \$1 million annually) to fund the installation of publicly available EVCS.
9	Denise Thompson	San Diego Youth Services	Labor Commission/taking into consideration families and where they work. Loves climate/environmental consideration. Yes, to resubmitting the transportation plan. Concern is COST!! Will MTS prices be reduced? Just because it's more "accessible" for low income/middle income SD residents to access will not automatically spill over into purchases if it is not affordable. With this connection/leap/mobility/and expansion, we need to be mindful of our youth especially minors and traffickers (human trafficking), having MORE access and easier mobility. Who is supervising? Will they be ID'd?	<b>Comment Card</b>	While it is understood that the cost of using transit can be a challenge for some people, fares are an important part of the funding picture for operating transit. Given the limited amount of funding available for transit operations, reducing fares would likely mean that Trolley and bus services would have to be reduced to cover the loss in revenues. Consideration will be given to subsidies for such passes in the 2021 Regional Plan.
10	Ruth Batton	Public	Send in proposals now. I am totally excited about the "Big 5 Moves". More frequent and faster transportation will be much more freeing, less stress and enjoyable.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
11	Bruce Johnson	Public	I support the delay of the Regional Plan and the submission of the federal plan. San Diego has long needed a better public transportation system that serves all people. Access should be improved for our seniors and low-income families. <i>Rapid</i> lines would help speed transportation lines up and encourage more riders. Large businesses and schools should be encouraged to offer shuttles.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
12	Tia Relles	Public	I love all the ideas for new public transportation, but what is being done about mental health? I took the bus and trolley for years while in college and always felt unsafe. Everyday there was someone being disruptive, yelling, etc. I would use it to get to work but feel unsafe. Idea- security guards would bring jobs and make people feel safer.	Comment Card	<p>MTS encourages riders to contact the Customer Service Department at (619) 557-4555. Rider safety and security is a priority for MTS. In addition to a large team of enforcement officers and security guards, many MTS buses and Trolley and stations have security camera systems that record activity. Also, MTS encourages riders to contact the Transit Enforcement Department at (619) 595-4960 or text (619) 318-1338 if they witness suspicious or criminal activity on MTS vehicles or property. More information on MTS Safety and Security initiatives can be found on the MTS website on the "MTS Safety &amp; Security" page (<a href="https://www.sdmts.com/riders-info/safety-security">https://www.sdmts.com/riders-info/safety-security</a>).</p> <p>NCTD contracts with the San Diego Sheriff's Office and local law enforcement agencies to patrol and provide law enforcement and security services at their transit centers. NCTD riders are encouraged to contact uniformed transit staff or call (760)-966-6700 to report suspicious behavior on the transit system. More information on NCTD Safety and Security initiatives can be found on the NCTD website (<a href="https://gonctd.com/about-nctd/safety-security/">https://gonctd.com/about-nctd/safety-security/</a>).</p>
13	Anonymous	Public	Bus routes are needed throughout Kearny Mesa from the trolley station. There are so many large areas that don't have access or bus routes available in all of San Diego.	Comment Card	The proposed Draft Transportation Network provides for increased mobility options, including a rich network of new and enhanced Trolley, <i>Rapid</i> services operating on Managed Lanes and arterials, and high frequency local bus improvements over the coming years (including many with connections to Kearny Mesa).
14	Victoria Abigania	Public	Safer bike lanes and public access bike racks around the county (East County). Safer/patrolled safe public parking lots. Great direction for plans. OK for fed gov't to get revised plan.	Comment Card	\$200 million for bicycle projects from the Regional Bike Plan were advanced under the Early Action Program, which will continue to build these projects over the few years. With this program, SANDAG is implementing as many protected bikeways and bike boulevards with traffic calming as possible. Studies show that well designed bike facilities such as these will attract more riders and improve safety for all roadway users.
15	Anonymous	Public	I'm ok with pushing the date of the plan. Think about the young and aging generation and how to make it easy for all to get around. Have more than 1 option available to buy bus passes. Have an option to buy ticket online and not waste paper.	Comment Card	Thank you for your comment. We encourage you to continue following the development of the plan by visiting SDForward.com. The Compass Card was the first step toward this goal of creating a paperless universal transportation card. The next generation of smart cards will make the Compass Card easier to use and will simplify fare payment.

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
16	Anonymous	Public	Our community needs long hours of operation for transit buses. They use buses when they go places then they get stuck, no transportation back. Lowering prices to help low income areas especially here in El Cajon. Free rides inside the cities.	<b>Comment Card</b>	The proposed Draft Transportation Network provides for increased mobility options, including a rich network of new and enhanced Trolley, <i>Rapid</i> services operating on Managed Lanes and arterials, and high frequency local bus improvements over the coming years. Reduced transit fare options will be considered in the 2021 Regional Plan.
17	Anonymous	Public	Yes- submit Federal Plan one more year. The North County is quickly becoming a major "hub" for many who work/play in San Diego. We have great options for going East-West with the Sprinter and a great North-South option with the train. My concern is that we will/are quickly outgrowing these. The weekends become a major pain to travel now.	<b>Comment Card</b>	The proposed Draft Transportation Network provides for increased mobility options, including a rich network of new and enhanced Trolley, COASTER, SPRINTER, and <i>Rapid</i> services operating on Managed Lanes and arterials, and high frequency local bus improvements over the coming years.
18	Anonymous	Public	San Diego has needed an updated transit system for years. Would like to see it moving faster! Loved the transit hubs but it will have to be on time, clean and safe. Trolley is ok but way too slow. Yes, on Federal Funds to help.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
19	Anonymous	Public	We need a transportation to enhance connectivity, safety, and to increase sustainability	<b>Comment Card</b>	The proposed Draft Transportation Network provides for increased mobility options, including a rich network of new and enhanced Trolley, COASTER, SPRINTER, and <i>Rapid</i> services operating on Managed Lanes and arterials, and high frequency local bus improvements. A network of regional bike projects also is included.
20	Anonymous	Public	I support the 2020 Regional Plan, but only if it leads to the 5 Big Moves in 2021.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
21	Melinda Mercado	Public	I support the 2020 Regional Plan but only if it leads to the 5 Big Moves in 2021.	<b>Comment Card</b>	SANDAG will continue work on the next Regional Plan to deliver a world class transportation system for the San Diego region and is expected to be adopted in 2021.
22	Nanette Stamm	Public	I support the proposed 2020 Plan as a provisional plan to be wholly updated and replaced with 2021 Plan.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
23	Anonymous	Public	Support the 2020 Regional Plan, Contingent in the Big 5 Moves in 2021.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
24	Anonymous	Public	Increase bus routes to unserved communities in San Diego (e.g. Scripps Ranch). Increase bus/trolley frequency. Extend services hours morning and evening. Improve the public transportation we already have along with implementing 2020 transportation plan.	<b>Comment Card</b>	The proposed Draft Transportation Network provides for increased mobility options, including a rich network of new and enhanced Trolley, COASTER, SPRINTER, and <i>Rapid</i> services operating on Managed Lanes and arterials, and high frequency local bus improvements. It also includes additional frequency enhancements on key transit corridors to 15 minutes by 2025 and 10 minutes by 2035.
25	Anonymous	Public	I support and agree with federal funds to extend the development of the regional plan until late 2021. I support the Big 5 Moves, it will help a lot of low-income families to access transportation to meet their needs.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
26	Anonymous	Public	I think public transportation takes too long. Even if you set up a system or route that goes from Point A to Point B without all the extra stops sounds good in theory. How would that problem be addressed? Last time I rode trolley a man was doing inappropriate things to himself and no trolley guy in my car to handle it. Until we do something about homeless population, they will continue to buy a ticket and stay all day for warmth. The technology idea sounds amazing, but I think implementation will be more difficult.	<b>Comment Card</b>	<p>The proposed Draft Transportation Network provides for increased mobility options, including a rich network of new and enhanced Trolley, COASTER, SPRINTER, and <i>Rapid</i> services operating on Managed Lanes and arterials, and high frequency local bus improvements.</p> <p>MTS encourages riders to contact the Customer Service Department at (619) 557-4555. Rider safety and security is a priority for MTS. In addition to a large team of enforcement officers and security guards, many MTS buses and Trolley and stations have security camera systems that record activity. Also, MTS encourages riders to contact the Transit Enforcement Department at (619) 595-4960 or text (619) 318-1338 if they witness suspicious or criminal activity on MTS vehicles or property. More information on MTS Safety and Security initiatives can be found on the MTS website on the "MTS Safety &amp; Security" page (<a href="https://www.sdmts.com/riders-info/safety-security">https://www.sdmts.com/riders-info/safety-security</a>).</p> <p>NCTD contracts with the San Diego Sheriff's Office and local law enforcement agencies to patrol and provide law enforcement and security services at their transit centers. NCTD riders are encouraged to contact uniformed transit staff or call (760)-966-6700 to report suspicious behavior on the transit system. More information on NCTD Safety and Security initiatives can be found on the NCTD website <a href="https://gonctd.com/about-nctd/safety-security">https://gonctd.com/about-nctd/safety-security</a>).</p> <p>SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan</p>
27	Anonymous	Public	There needs to be more frequent bus stops on the public transit system. There also needs to be more lines that go to various places throughout the county. Affordable transit is needed as well, and more options for passes. Needing to access it at various times (bus coming every 5 minutes) opposed to every half hour.	<b>Comment Card</b>	<p>The proposed Draft Transportation Network includes additional frequency enhancements on key corridors to 15 minutes by 2025 and 10 minutes by 2035. It provides for increased mobility options, including a rich network of new and enhanced Trolley, COASTER, SPRINTER, and <i>Rapid</i> services operating on Managed Lanes and arterials, and high frequency local bus improvements.</p>

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
28	Anonymous	Public	Would have to have more buses with fewer stops to get me out of my car. Trolley stops are not convenient to where I live in Spring Valley. Fortunately, I live close to my work, so I do not use the freeway at all (2 miles RT) except to do groceries, other shopping, church and vacations.	<b>Comment Card</b>	There are several major projects planned in and around Spring Valley that are included in the proposed Draft Transportation Network. Orange Trolley line frequency improvements are planned for 2030 with access via Spring Street. In terms of freeway improvements, the State Route 94 (SR 94)/State Route 125 (SR 125) south to east freeway connector ramp is planned to open by 2025, followed by the west to north connector in 2030. Improvements of two additional lanes on SR 94 east of SR 125 are included in the proposed Draft Transportation Network in later years.
29	Anonymous	Public	The underwater tunnel sounds interesting. More frequency in routes/accessibility. Mobility Hub sounds like a great idea.	<b>Comment Card</b>	The 2021 Plan is currently being developed to include a fully integrated, world class transportation system for the San Diego region which includes implementation of Mobility Hubs throughout the region and builds off the Mobility Hub investments included in the 2019 Federal RTP proposed Draft Transportation Network.
30	Anonymous	Public	Bus timing in the East County. Motorcycle lines in freeways and carpool lines in freeways. GREAT 5 Big Moves. Better pedestrian crossings.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
31	Anonymous	Public	Just do it! The future is gonna be awesome!!	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
32	Angel Flores	Public	I want to support the 5 Big Moves after listening and learning what this looks like. I truly think this is going to improve our commute and the environment. I will continue to share short term and long-term ideas and concerns.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
33	Anonymous	Public	Please look for and implement immediate solutions to gaps in access to transportation especially for assisting low income individuals in getting to work and training programs. Lives are affected while we work through the details of these issues. Please continue to keep those in mind so that the work can truly be a short-term solution.	<b>Comment Card</b>	SANDAG contracted with a network of community-based organizations from around the region in areas with high concentrations of traditionally underserved populations (including low-income, minorities, seniors, and the disabled) through a competitive Request for Proposal process. The Community Based Organization Outreach Network has been engaged and doing outreach all around the county with disadvantaged communities from the beginning and involved their communities in each step of the process. In each iteration of the Regional Transportation Plan we strive to reach out further and deeper. Please refer to Appendix H for more detail on both the process of engagement and the social equity analysis.
34	Anonymous	Public	Hotels and Resorts along Palomar Airport Road Carlsbad have trouble keeping staffing positions filled due to lack of bus transportation routes available for workers. As Career Specialist Candidates I refer to jobs available at these places. They still have trouble with access to reliable bus transportation. I support the 2020 RTP on condition that it is replaced by 5 Big Moves Plan 2021.	<b>Comment Card</b>	<i>Rapid</i> service 650, Chula Vista to Palomar Airport Road Business Park, is included in the proposed Draft Transportation Network. New <i>Rapid</i> services are also planned in a number of arterial and freeway corridors to provide higher-speed services for people making longer distance trips.
35	Lucy Jasso	Public	Need to increase bus routes and frequency of buses for people to commute more quickly to places they need to be. Excited for some ideas to improve public transportation options.	<b>Comment Card</b>	The proposed Draft Transportation Network includes additional local bus frequency enhancements on key corridors to 15 minutes by 2025 and 10 minutes by 2035.  The proposed Draft Transportation Network provides for increased mobility options, including a rich network of new and enhanced Trolley, COASTER, SPRINTER, and <i>Rapid</i> services operating on Managed Lanes and arterials, and high frequency local bus improvements.

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
36	Anonymous	Public	Anything that can help individuals to get where they need to go in a quick, cheap, and efficiency way is a great asset to the community. This includes the innovation and technology in your plan but also simple things such as more bus routes and more frequent bus times/stops.	<b>Comment Card</b>	<p>The proposed Draft Transportation Network includes additional local bus frequency enhancements on key corridors to 15 minutes by 2025 and 10 minutes by 2035.</p> <p>The proposed Draft Transportation Network provides for increased mobility options, including a rich network of new and enhanced Trolley, COASTER, SPRINTER, and <i>Rapid</i> services operating on Managed Lanes and arterials, and high frequency local bus improvements.</p>
37	Anonymous	Public	I'm looking forward to seeing the new transportation plan in action, but it needs to cover many areas for it to be effective. Hopefully that is the case so patients can reach services needed and have options for time. Current transportation also takes too long and can be unrealistic in providing reliable transportation options. Cost also needs to be less than avg. gas prices.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
38	Brittney Ochira	Public	It makes sense to submit the current plan temporarily if it can be updated later. I like the variety of options in the new plan, and ultimately making the change to public transportation will be a question of time. If I could get access the county with a comparable time and \$\$ as driving, I would prefer to be hands-free!	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
39	Valeria Agustin	Public	Increase bus times for more frequent pick-ups/drop-offs. Increase bus routes so bus is more accessible to more community. I like the idea of mobility hubs and possibility of being able to charge electric vehicle while driving on certain roads.	<b>Comment Card</b>	<p>The proposed Draft Transportation Network includes additional frequency enhancements on key corridors to 15 minutes by 2025 and 10 minutes by 2035.</p> <p>SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.</p> <p>The proposed Draft Transportation Network for the 2019 Federal RTP includes investments in Mobility Hubs, which also would be considered in the 2021 Regional Plan.</p>

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
40	Kelley Grimes	Public	I appreciate the thoughtfulness of the new plan and the complete corridors idea using improved technology and smart cars. I like that new technology will be incorporated in all the plan and that we are being more forward thinking than just relying on cars	<b>Comment Card</b>	SANDAG will continue work on the “5 Big Moves” to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
41	Carlos Alessandrini	Public	I’m particularly pleased with the mobility hubs. One stop center for all mass transit needs sounds great!	<b>Comment Card</b>	SANDAG will continue work on the “5 Big Moves” to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.  The proposed Draft Transportation Network for the 2019 Federal RTP includes investments in Mobility Hubs, which will also be considered in the 2021 Regional Plan.
42	Anonymous	Public	There needs to be a sea change in call time to get people out of cars. What would help is more buses and bus lines. Would appreciate trains that are accessible. Do a real study on needs for public transit. Make it efficient and locate affordable housing near the lines.	<b>Comment Card</b>	The proposed Draft Transportation Network provides for increased mobility options, including a rich network of new and enhanced Trolley, COASTER, SPRINTER, and <i>Rapid</i> services operating on Managed Lanes and arterials, and high frequency local bus improvements.  SANDAG will continue work on the “5 Big Moves” to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
43	Anonymous	Public	Fast and direct routes. More routes to schools.	<b>Comment Card</b>	The proposed Draft Transportation Network includes additional frequency enhancements on key corridors to 15 minutes by 2025 and 10 minutes by 2035. The proposed Draft Transportation Network provides for increased mobility options, including a rich network of new and enhanced Trolley, COASTER, SPRINTER, and <i>Rapid</i> services operating on Managed Lanes and arterials, and high frequency local bus improvements.

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
44	Anonymous	Public	I would have concerns that money already earmarked for freeway improvements might get lost or repurposed. e.g. the example of 67 to I-8 freeway exchange or the 52 corridor. These improvements need to be made because I don't believe culturally there will be a shift of "car" culture. Other improvements more bus routes but roadway improvements should be a focus.	<b>Comment Card</b>	The proposed Draft Transportation Network includes a mix of roadway, transit, and active transportation projects along with a host of systems and demand management programs to make the transportation system more efficient and effective.
45	Anonymous	Public	To ensure immediate results, increasing current bus and trolley routes like the project between Old Town and UTC would be great. The idea of mobility hubs tied to affordable housing sounds amazing for the low-income young adults we serve. Also, young adults would further invest in flexible fleets with rise of Uber and Lyft. Lastly, incorporation of technology should consider being more accessible for non-English speakers via signs, apps, etc.	<b>Comment Card</b>	The Draft Transportation Network includes additional frequency enhancements on key corridors to 15 minutes by 2025 and 10 minutes by 2035.  The proposed Draft Transportation Network also provides for increased mobility options, including a rich network of new and enhanced Trolley, COASTER, SPRINTER, and <i>Rapid</i> services operating on Managed Lanes and arterials, and high frequency local bus improvements.
46	Elizabeth Jackon	Public	High speed options for rural East County (Alpine, Lakeside, Harbison Canyon, Dehesa, Pine Valley, etc). Right now, the closest hub or transit center to Alpine is El Cajon. It takes half an hour just to get to El Cajon. Commuter rail or something like that from the Back Country to El Cajon or Santee would make a HUGE difference to a lot of commuters. The mobility hubs are GENIUS! San Diego is so spread out that you could easily have a 3-4-hour commute (one-way) via public transportation for a distance you could drive in 45 min-1 hour with traffic. Again, the hubs would need the high-speed/high-frequency options during rush hours.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.  The proposed Draft Transportation Network for the 2019 Federal RTP includes investments in Mobility Hubs, which will be also considered in the 2021 Regional Plan.

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
47	Anonymous	Public	I am excited about taking the time to plan a transportation plan that really addresses current needs and prepared for future opportunities. For now, we need more bus routes. We also need lots of mobility hubs to make public transportation work in a timely manner- so that travel times will be more on the level of what can be accomplished with a car. I am also excited about toads that charge electric cars as you drive on them. That will make electric cars more of an option. I don't fully understand the tube idea so I can't comment on that. I like that the plan is also looking at filling the niche met by uber with public transportation options. Rancho San Diego is poorly served by buses.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.  The proposed Draft Transportation Network for the 2019 Federal RTP includes investments in Mobility Hubs, which will also be considered in the 2021 Regional Plan. The proposed Draft Transportation Network includes support for electric vehicle charging stations (EVCS) and recommends the establishment of a Regional Charger Program by setting aside approximately \$30 million (approximately \$1 million annually) to fund the installation of publicly available EVCS.
48	Anonymous	Public	I believe the plan to innovate and improve public transportation is great. I agree to submit the current transportation plan for 2020.	<b>Comment Card</b>	SANDAG will continue work on the next Regional Plan to deliver a world class transportation system for the San Diego region and is expected to be adopted in 2021.
49	Anonymous	Public	Submit it. I think it's about time people in SD use public transportation. It's become a social stigma if you use public transportation, when in fact it's both economically and environmentally friendlier. Unfortunately, my job requires me to use my car to get me from place to place, but I'd love to have a carpool/rideshare to my nearest mobility hub that would then take me to the job centers where from there I can be shuttled to work. Let's go!!!	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.  The proposed Draft Transportation Network for the 2019 Federal RTP includes investments in Mobility Hubs, which will also be considered in the 2021 Regional Plan.
50	Angue Apuricco	Public	I support the 2020 Interim RTP in condition it will be fully replaced by the end of the year.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
51	Anonymous	Public	I support the 2020 RTP on the condition that it is replaced by the 5 Big Steps in 2021.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
52	Kelly Allen	Public	I support the 2020 RTP on the condition that includes the 5 Big Moves in 2021.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
53	Anonymous	Public	Yes- I support the 2020 RTP as long as it's replaced by the 5 Big Moves in 2021.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
54	Cindy Taylor	Operation HOPE- NORTH COUNTY	I support the 2020 Regional Transportation Plan (temporary) with the stipulation that the new 5 Big Moves RTP is adopted in 2021.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
55	Wendy Starring	Public	I support the interim 2020 Plan on the condition that is completely replaced by the 5 Big Moves Plan.	<b>Comment Card</b>	SANDAG will continue work on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and incorporate these concepts into the 2021 Regional Plan.
56	Lucile Lynch	Public	See attached email #2	<b>Email</b>	The Coordinated Plan provides a five-year implementation plan of public transit and specialized transportation concepts. It establishes a regional strategy to provide transportation to recognized transportation-disadvantaged groups, including seniors, individuals with disabilities, and persons with limited means. The plan also combines the regional requirement for a Short-Range Transit Plan with the federal requirement for a Coordinated Plan into one planning document. Additionally, ten percent of transit operating dollars throughout the 30-year plan are dedicated to the provision of ADA and specialized transportation services (\$2.6 billion). Also, MTS encourages riders to contact the customer service department at 619-557-4555 if they experience any issues with bus operators.

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan - Proposed Draft Transportation Network Public Comments

No.	Name	Agency	Comment	Source	Response
57	Supervisor Jim Desmond	County of San Diego	On the subject of the SR 78 interchange at I 15, in the 2020 finance plan there are dollars for the EIR just for that interchange, but the work does not start until 2035. So, I would ask to possibly move that up so that the EIR, that we are spending money on now, can go to construction very soon thereafter and not 15 years later.	<b>7/26/19 SANDAG Board Meeting</b>	The I-15/SR 78 Managed Lane connectors are included in the 2018 RTIP, as amended, with an open to traffic date of 2027. Consistent with the RTIP, this project is included in proposed Draft Transportation Network in the 2035 project phase, which includes projects that are anticipated to be completed between 2026-2035.

**From:** [carl.luster@carl.luster](mailto:carl.luster@carl.luster)  
**To:** [SDFORWARD](#)  
**Subject:** Comment on 2020/2021 Regional Transportation Plan  
**Date:** Tuesday, July 30, 2019 11:02:19 PM

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Why doesn't the regional transportation plan include electric trolley buses, trolley trucks, or solar panels on the roadways? These proven technologies would be direct and immediate ways to support local Climate Action Plan goals and meet state greenhouse gas reduction targets.

Deploying solar panels and trolley lines for buses and trucks would expand the use of electricity in support of clean fuel and greenhouse gas emission reduction policies.

Roadway electrification could at least partially pay for itself with a tax or surcharge on electric power used to charge or operate electric vehicles. This is similar to existing gasoline taxes and would make up for at least some reductions in state and federal funds.

Trolley lines are a proven technology for electric buses and trucks. Along with solar power generation on the roadways, they can significantly reduce vehicle emissions and improve air quality. These existing technologies deal with the lack of charging infrastructure and range limitations for electric vehicles. In the future, inductive or wireless charging technology might be embedded in roads to charge passenger EVs while they drive, but trolley lines and solar panels can be implemented successfully today.

Shouldn't the regional transportation plan look beyond giving people compelling alternatives to driving alone, and help to meet environmental goals by converting buses to an electric trolley system, which might be shared by commercial trucks and could be partially powered by solar panels along major roadways?

Please visit these web pages for explanations of the trolley and solar power systems I'm referring to.

The Verdict's Still Out on Battery-Electric Buses

<https://www.citylab.com/transportation/2019/01/electric-bus-battery-recharge-new-flyer-byd-proterra-beb/577954/>

There's Now An Electric Highway In California - Forbes

<https://www.forbes.com/sites/sebastianblanco/2017/11/08/electric-highway-california-siemens/>

eHighway | Electromobility | Siemens

<https://new.siemens.com/global/en/products/mobility/road-solutions/electromobility/ehighway.html>

Solar Highway Facts And Fallacies

<https://www.edn.com/design/power-management/4432228/Solar-highway-facts-and-fallacies>

**From:** [Lucile Lynch](#)  
**To:** [SDFORWARD](#)  
**Subject:** 2020 Federal RTP comment  
**Date:** Friday, July 26, 2019 3:44:24 PM

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Dear Transportation Team:

Thank you for working hard to improve transportation for all. I am writing though because transportation options for those with intellectual disabilities continue to appear to be under addressed and scarce. Unfortunately, this community is generally underrepresented due to these individuals' difficulties advocating for themselves, yet they are the most in need of true transportation options.

Programs such as those offered by the North County Transit Department in north San Diego (e.g. LIFT) are not sufficient to meaningfully address the need. Individuals often are on the buses for very long times and I have personally witnessed drivers keeping riders out in the cold while the driver was on break in a warm van. Our office closed but we waited with the rider until the driver had completed his break. In one instance, the driver (after taking his 10 minute break in his warm van), pulled over by the wall of our nonprofit to relieve himself against the wall in front of his male rider. Given this vulnerable population, riding the LIFT or other existing options is fraught with safety concerns and reliability.

Per MiraCosta Community College data, in North County San Diego, the intellectual disabled population is approximately 12,000 people. To many individuals with intellectual disabilities are not able to travel on buses alone or afford the companion support needed to make transportation accessible. Most live at the poverty line and are on SSI. Bus stops continue to be eliminated due to a lack of ridership, yet LIFT can only be used if within 3/4 of a mile within a bus stop.

Changes are needed to provide travel options and better funding so that these potential riders, who would be reliable dependent customers, have more reliable options in place. Lack of reliable transportation renders workforce and community assets inaccessible. For example at the MiraCosta Community College campus in Cardiff (the San Elijo Campus), there is no bus stop, which means individuals wishing to continue their education cannot take a bus or use the LIFT offered by NCTD. How are these individuals suppose to get to places or further their education to improve their employability if places if classes for adults with ID at our local community colleges have no public transportation to those locations?

Voucher systems of which I am aware do not make private transportation options very attractive because they only cover the mileage from pick up to drop off, not the time drivers expend to get to a location (e.g. \$11 for a today of 7 miles driving a day).

Possible solutions:

1. Create mini circuits along main thorough fares in counties that have specific pick up and drop off locations and drivers trained in support individuals with disabilities for eligible riders. That way family members, who are often the ones driving, do not have to spend so much time shuffling their loved ones around. Part of the circuit could include practice and education on how to take a bus (e.g. use a bus card, get off at the right stop, etc.). School districts do very little training and training options are very few.

2. Create a better voucher system so that private transportation of individuals with disabilities is more attractive. Possibly incentives for low income seniors who may need more money to get by.

3. Create an intellectual disabilities subcommittee so that families and riders themselves have a stronger voice. Their needs are very different from those with physical disabilities and often individuals with ID are not comfortable speaking in bigger committees. Let them help you problem solve? I would be happy to offer our offices to host such a meeting.

The ADA and requirements for reasonable accommodations often look through “lenses” for those with physical disabilities, but those with ID may need very different supports.

Thank you for considering this input.

Lucile Lynch

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Lucile Lynch  
Parent of two adults with development disabilities  
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*Empowering Adults with Disabilities in North County!*

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## Regional Transportation Plan (RTP) Public Comments - Proposed Draft Transportation Network

Comment ID	Name	Comment	Agency	Date
1	Luster, Carl	<p>Why doesn't the regional transportation plan include electric trolley buses, trolley trucks, or solar panels on the roadways? These proven technologies would be direct and immediate ways to support local Climate Action Plan goals and meet state greenhouse gas reduction targets.</p> <p>Deploying solar panels and trolley lines for buses and trucks would expand the use of electricity in support of clean fuel and greenhouse gas emission reduction policies.</p> <p>Roadway electrification could at least partially pay for itself with a tax or surcharge on electric power used to charge or operate electric vehicles. This is similar to existing gasoline taxes and would make up for at least some reductions in state and federal funds.</p> <p>Trolley lines are a proven technology for electric buses and trucks. Along with solar power generation on the roadways, they can significantly reduce vehicle emissions and improve air quality. These existing technologies deal with the lack of charging infrastructure and range limitations for electric vehicles. In the future, inductive or wireless charging technology might be embedded in roads to charge passenger EVs while they drive, but trolley lines and solar panels can be implemented successfully today.</p> <p>Shouldn't the regional transportation plan look beyond giving people compelling alternatives to driving alone, and help to meet environmental goals by converting buses to an electric trolley system, which might be shared by commercial trucks and could be partially powered by solar panels along major roadways?</p> <p>Please visit these web pages for explanations of the trolley and solar power systems I'm referring to.</p> <p>The Verdict's Still Out on Battery-Electric Buses  <a href="https://www.citylab.com/transportation/2019/01/electric-bus-battery-recharge-new-flyer-byd-proterra-beb/577954/">https://www.citylab.com/transportation/2019/01/electric-bus-battery-recharge-new-flyer-byd-proterra-beb/577954/</a></p> <p>There's Now An Electric Highway In California - Forbes  <a href="https://www.forbes.com/sites/sebastianblanco/2017/11/08/electric-highway-california-siemens/">https://www.forbes.com/sites/sebastianblanco/2017/11/08/electric-highway-california-siemens/</a></p> <p>eHighway   Electromobility   Siemens  <a href="https://new.siemens.com/global/en/products/mobility/road-solutions/electromobility/ehighway.html">https://new.siemens.com/global/en/products/mobility/road-solutions/electromobility/ehighway.html</a></p> <p>Solar Highway Facts And Fallacies  <a href="https://www.edn.com/design/power-management/4432228/Solar-highway-facts-and-fallacies">https://www.edn.com/design/power-management/4432228/Solar-highway-facts-and-fallacies</a></p>	San Diego Continuing Education Instructor and resident of the Mid-City El Cerrito Neighborhood	7/30/2019

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan — Comments (Received as of October 16, 2019)

No.	Date	Comment	Agency/Commenter	Response	Source
1.	10/04/2019	I would recommend extending the Coaster parallel to the Blue Line Trolley all the way to the terminus at San Ysidro. Currently the Blue Line takes a long time to reach downtown because of the numerous stops. Extending the Coaster to San Ysidro would effectively create an express service that could halve travel times. Extending the trolley and/or Coaster over to Tijuana would also be really helpful at speeding up congested border crossings. Finally, I believe a Coaster stop at University Town Center, connecting to the under construction mid coast trolley, would be quite useful as reaching UCSD from the north or east by transit is difficult. This would require a tunnel to be dug, but would have the additional benefit of considerably speeding up Coaster trips by eliminating the circuitous route around Miramar hill. The trolley route through Balboa Park and Mid city seems extremely useful.	Jeffrey Mihalik	Currently transit riders can take the COASTER to Downtown San Diego and then connect to the Blue Line Trolley to the San Ysidro Trolley Station. The 2019 Federal RTP includes <i>Rapid</i> Express services on the future Interstate 5 Managed Lanes from San Ysidro to downtown that will be a faster alternative to the Blue Line, as well as increased COASTER service frequencies. Route 640A, which will travel from San Ysidro to Old Town Transit Center via City College is planned to have 10-minute peak period frequencies and 15-minute off-peak frequencies. Route 688 from San Ysidro to Sorrento Mesa via I-805/I-15/SR 52 corridors is planned to have 15-minute peak-period frequencies. The Sorrento to Miramar Phase 2 double track and curve realignment project is currently in the design stage, which would add a second track and straighten curves along the Miramar Hill section of the LOSSAN corridor. This will allow for additional trains in the future. SANDAG will also evaluate how better to connect the Sorrento Valley COASTER station to both University City and the Sorrento Mesa employment area. These improvements are likely to be a more cost-effective solution than a tunnel due to its high capital cost.	Web
2.	10/07/2019	This plan prioritizes active transportation modes and is a great step to changing our region's priorities and goals when it comes to mobility. The plan could take more innovative and assertive measures to discourage solo driving such as dynamic pricing (with considerations/exceptions to low-income people) and transit-priority lanes that make mass transit a more competitive alternative to driving.	City Heights Community Development Corporation, Vianney Ruvalcaba	The draft 2019 Federal RTP is based on the concept of creating a wide range of transportation choices, including increased transit services, carpooling/vanpooling, and, as mentioned in the comment, also prioritizes bicycling, and walking modes. Regarding innovative measures to encourage shared mobility, the Managed Lanes are designed to give priority access to transit, carpool, and vanpool users free of charge while applying congestion pricing for people driving alone similar to the current I-15 Express Lanes, thus it is an important strategy in the region as an interconnected management strategy. Managed Lanes not only support carpools or driving alone modes, but also bus <i>Rapid</i> services. <i>Rapids</i> operate on Managed Lanes facilities that include direct access ramps. These network improvements ensure that <i>Rapid</i> services have fast and reliable travel by allowing the bypass of main lane congestion. Managed Lanes are a strategy that SANDAG has included in the 2019 Federal RTP to improve network efficiencies and reliability for all modes while promoting alternative modes of travel and thus influencing and supporting greenhouse gas emissions reductions. The implementation of Managed Lanes is one part of a broader strategic program in the 2019 Federal RTP that support the reduction of greenhouse gas emissions.	Web

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3.	10/07/2019	Will like to see inclusiveness and effectiveness for all residents knowing the fact that we are a region close to the border a destination that welcomes visitors and residents to our beautiful San Diego	Rocina Lizarraga	The 2019 Federal RTP acknowledges in its network the importance of being in a binational metropolitan region. The U.S General Services Administration's recent expansion and modernization of the San Ysidro Port of Entry, as well as projects like the San Ysidro Transit Center and the planned Otay Mesa East Port of Entry are indicative of the binational planning efforts. In addition, investments in transit, managed lanes, and active transportation projects serving the ports of entry are included in the 2019 Federal RTP. See Appendix A and Appendix U14 for more details.	Web
4.	10/07/2019	I think your plan is absurd - It is a ridiculous show of government hubris that they think they can effectively plan for a thirty year horizon. The Soviet Union only had 5 year plans and missed every one. Now the "geniuses" at SCAG want to have us believe that a wonderful world awaits us if we allow them to plan for our future and give them billions of dollars. Stop this nightmare of toll lanes and high density - cities have their own general plan you have no business trying to superceded it. By the way - having lobbyists and multi national corporation in your groups makes it clear you are catering to the BIA and residents have had 100% enough of "regional" - we want local control.	Michelle Schumacher	Federal law requires SANDAG to develop a transportation plan built on reasonable assumptions of the revenues that will be available during the period covered by that plan, which is required to be at least 20 years into the future. The Regional Transportation Plan is updated every four years, and with those updates, we continually reassess the region's travel needs and transportation-related investments.	Web
5.	10/11/2019	Can you educate me on what SANDAG can do to ensure compliance with the emissions goals in the Federal Regional Transportation Plan (RTP) in light of the new federal ruling on emissions?	League of Women Voters North County San Diego, Mary Thompson	The SANDAG Board will be asked to adopt the 2019 Federal RTP prior to the effective date of the new federal rules on emissions. Federal agencies responsible for taking action on the RTP will have 30 days to review the adopted plan prior to the effective date of the rule. The 2019 Federal RTP contains transit, active transportation, Managed Lane, Transportation System Management, and Transportation Demand Management projects and programs which will provide options to driving alone and help to reduce vehicle emissions.	Email

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6.	10/11/2019	Thank you for allowing us to submit comments on the draft 2019 Federal Regional Transportation Plan (RTP). The City of Poway would like to see vehicle, bike, pedestrian and transit infrastructure improvements and connections to be added to the draft 2050 maps from Santee north onto Highway 67 then west through Scripps Poway Parkway to the I-15 Freeway. I have spoken to several property and business owners within the South Poway Business Park (SPBP) including Geico and parking is a constant issue. There is currently no public transit route into the SPBP. Having public transit, bike, pedestrian and highway/road improvements/connections providing better more efficient access to the SPBP is essential for future employment growth in the area. Many workers in the Poway area live in East County and this is a vital connection for the City and the Region. SANDAG has also identified Scripps Poway as a Tier 3 employment center in their draft Employment Center analysis. Construction is also underway to add thousands of more employees in the SPBP. See attached recommended critical connection. [sent via email includes attachment] Also, please ensure there are the same connection improvements from El Cajon to Santee. That seems to be an obvious critical connection.	City of Poway, Development Services, David De Vries	The 2019 Federal RTP includes a rich network of transit services to help alleviate traffic congestion throughout the region. That being said, the region's land uses are not always ideally positioned to justify robust transit access in all areas of the County. There are several major projects; however, that have been completed or are planned in and around the Poway/ Scripps Poway Parkway area that are included in the 2019 Federal RTP transportation network. State Route 67 improvements will provide access benefits from Santee north to Scripps Poway Parkway. Additionally, four additional Managed Lanes were completed on Interstate 15 between SR 163 and Escondido providing access benefits both north and south of Scripps Poway Parkway on I-15. Additionally, SANDAG is currently working on the "5 Big Moves" to deliver a world class transportation system for the San Diego region and will incorporate these concepts into the 2021 Regional Plan.	Email
7.	10/14/2019	The California Department of Transportation (Caltrans) would like to commend SANDAG for their efforts to engage and consult with the 18 federally recognized tribal governments in the San Diego region. Appendix G of the 2019 Federal RTP provides a through overview of the framework used to consult with the tribes, the issues facing the tribal nations, and the tribe's concerns. Additionally, SANDAG provided a robust social equity analysis that was conducted in partnership with the Community Based Organizations identified in the 2019 Federal RTP. The analysis included a thorough discussion of the outreach and participation necessary to achieve social equity, environmental justice, fair treatment, and meaningful involvement.	Caltrans District 11	SANDAG collaborates with the 18 federally-recognized tribal governments in the San Diego region on transportation issues on an on-going basis. Appendix G documents the framework used to consult with the tribes for the 2019 Federal RTP. From the beginning of the development of the 2019 Federal RTP, SANDAG engaged affected communities in the planning process through an innovative collaborative effort with Community-Based Organizations (CBOs) and Collaboratives from around the region. The public involvement program for the 2019 Federal RTP is documented in Appendix F and Appendix H includes the social equity engagement and analysis for the 2019 Federal RTP.	Letter

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8.	10/14/2019	Title 23 CFR §450.324(f) (12), requires MPOs to include a discussion of the bicycle and pedestrian facilities within the region. While SANDAG identified the existing and proposed regional bicycle network in Chapter 2 and Appendix U 16, there is little discussion regarding the existing facilities for pedestrians. Caltrans recommends that SANDAG provide additional information identifying existing pedestrian facilities, needs, and proposed pedestrian improvements.	Caltrans District 11	<p>Title 23 CFR 450.324(f)(12), RTP development and content, relates to pedestrian walkway and bicycle transportation facilities in accordance with 23 USC 217 (g). Title 23 USC 217(g)(1) states that bicycle transportation facilities and pedestrian walkways shall be considered, where appropriate, in conjunction with all new construction and reconstruction of transportation facilities and (g)(2) relates to safety considerations for bicyclists and pedestrians. The following sections in the draft 2019 Federal RTP address these statutes.</p> <p>Page 32 – Includes discussion of Complete Streets and reference to the SANDAG Regional Complete Streets Policy (Appendix U2. Regional Complete Streets Policy). This policy applies to SANDAG transportation infrastructure projects. This policy also supports and encourages Complete Streets implementation by other entities throughout the region (e.g. local jurisdictions). SANDAG also encourages and supports Complete Streets methodologies in the design and construction of all projects in the region developed by Caltrans, as appropriate, consistent with Deputy Directive 64-R1, and in the maintenance and operation of all state highway and public transit facilities. In addition, Section 4(E)(3) of the TransNet Extension Ordinance requires all projects constructed under the Ordinance to routinely accommodate pedestrians and bicyclists. Rule #21 of SANDAG Board Policy No. 031 provides guidance for the implementation of that requirement.</p> <p>Pages 47 to 50 – Discussion of the Active Transportation Implementation Strategy (Appendix U16). This strategy includes:</p> <ul style="list-style-type: none"> <li>- The Regional Bike Plan, which will build bike projects with safety improvements not only for cyclists but also for pedestrians, such as shortened crossing distances at intersections.</li> <li>- Safe Routes to School (Appendix U16): The San Diego Regional Safe Routes to School Strategic Plan identifies a strategy to support local communities in establishing new Safe Routes to School programs, as well as sustaining and enhancing existing efforts. Additional opportunities for Safe Routes to School implementation can be found in the integration of Safe Routes to School into SANDAG project planning. When Regional Bike Plan, Safe Routes to Transit, and bike/pedestrian improvements at highway interchange projects include schools in their project areas, plans will include improvements to enhance school access and safety whenever possible.</li> </ul>	Letter

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				<p>- Safe Routes to Transit: These projects will make walking or riding a bike between transit stops or stations and a variety of destinations – including residential areas, commercial centers, and places of employment – safer and more comfortable. Retrofit Safe Routes to Transit projects would also be considered as part of the Mobility Hub Implementation Strategy given the nexus between mobility hubs at transit centers and access to those centers by pedestrians and people on bikes.</p> <p>- Active Transportation Improvements Related to Highway and Freeway Interchanges: The 2019 Federal RTP includes the incorporation of safer crossings as part of future projects at freeway and highway interchanges. Retrofit active transportation improvement projects surrounding existing highway on- or off-ramps will be considered for implementation as part of future operations and maintenance projects considering State Highway Operations and Preservation Program dollars.</p> <p>Pages 60 to 61 – Includes discussion of Mobility Hubs as places of connectivity, where different modes of transportation — walking, biking, ridesharing, and transit — come together seamlessly to connect people to their jobs, school, shopping, errands, recreation, and back home. Also, there is discussion of shared mobility services, which would give people convenient alternatives to driving alone, in addition to the more traditional options such as public transit, carpooling, vanpooling, biking, or walking to work. The Regional Mobility Hubs Implementation Strategy is included in Appendix U7.</p> <p>Page 64 – Rail Grade Separations – Rail tracks separated from streets allow cars, trucks, bicyclists, pedestrians, and goods shipped by rail to get to their destination removing conflicts. Discussion includes proposed rail grade separations along the LOSSAN, SPRINTER, Orange Line and Blue Line Trolley lines.</p>	
9.	10/14/2019	In accordance with Government Code 65080.1, RTPs should demonstrate how the California Coastal Trail has been integrated into the RTP update. Although there is a brief discussion of the California Coast Trail in Chapter 2, SANDAG should identify the existing and potential trail network segments, linkages, gaps and related coastal access trail needs.	Caltrans District 11	Added the following clarifying language to Chapter 2: SANDAG has developed technical memoranda entitled “Feasibility Study for the San Diego Portion of the California Coastal Trail” to inform the scoping of a comprehensive feasibility study for the region. The documents lay the groundwork and gather preliminary material to help identify existing and potential network segments, linkages, gaps, and coastal access routes. These technical memoranda are located in Technical Appendix U19: California Coastal Trail Technical Memoranda. A map of the California Coastal Trail is included as Figure A.16 in Appendix A: Transportation Projects, Costs, and Phasing, per Government Code Section 65080.1. Trails identified in the San Diego County Community Trails Master Plan (CTMP) are included on this map as well. Additionally, Figure 2.11 identifies the Coastal Rail Trail as alignment No. 11.	Letter

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10.	10/14/2019	<p>In keeping with the 2017 Regional Transportation Plan Guidelines for MPOs Section 6.12, Caltrans recommends that SANDAG provide the following information in the goods movement discussion:</p> <ul style="list-style-type: none"> <li>o Greater discussion of the role of goods movement within the region, including the types and the magnitudes of goods moved through the region and their economic importance. Please also refer to Appendix U 15 in the discussion of the 2016 Freight Gateway Study Update in Chapter 2.</li> <li>o An inventory of all major highway and roadway routes consistent with the National Highway Freight Network, including critical urban freight corridors. o Additionally, the maps contained in Chapter 2, Page 69, Figure 2.14. and Appendix A, Page 68, Figure A.20 depict the unconstrained goods movement strategy utilizing the 2012/2013 Commercial/Industrial Land Use layer. Please consider depicting this information with a projected land use layer.</li> </ul>	Caltrans District 11	<p>Additional language has been added to Chapter 2 to augment the discussion of the role of goods movement within the region: "Situated between major production, trade, and population centers, San Diego County depends on an integrated transportation network to effectively move people and goods within and through our region to the rest of the nation and around the world. Due to the interdependent nature of its binational economies, the mega-region's globally competitive business environment hosts a manufacturing sector that is one of the world's strongest cross-border supply chains, with a gross domestic product of approximately \$232 billion dollars for San Diego County in 2017. Our region therefore connects some of the largest supply chains in the United States, including movement of automobiles, electronic parts, and perishable foods, by bridging the major goods movement hubs in Southern California – the California-Baja California border region, the Ports of San Diego, Los Angeles, and Long Beach, and the Inland Empire distribution centers. The SANDAG 2016 Freight Gateway Study Update, found in Appendix U15, reviews our goods movement system and freight flows in detail." Additional language has been added to Chapter 2 to address the National Highway Freight Network (NHFN) routes, along with a map showing the NHFN in Appendix A: "As part of the FAST Act requirements, SANDAG has added the region's important freight routes to the National Highway Freight Network (NHFN) to potentially secure federal goods movement resources. The NHFN is shown in Figure A.21. SANDAG has also designated the following Critical Urban Freight Network/Critical Rural Freight Network (CUFC/CRFC) routes to the NHFN, and will continue to designate additional freight routes as necessary: State Route 11, Britannia Boulevard, and La Media Road." The maps contained in Chapter 2, Page 69, Figure 2.14 and Appendix A, Page 68, Figure A.20 will be modified in the 2021 Regional Plan to include an updated Commercial/Industrial Land Use layer. "</p>	Letter
11.	10/14/2019	<p>Chapter 2, Page 45 High-Speed Train Service indicates that, "This is a project funded by the State of California." Although the future of High-Speed Rail in San Diego remains uncertain at this time, please include that the Federal Government also provided funding for the high-speed rail project.</p>	Caltrans District 11	<p>Added the following language to Chapter 2: The federal government also has provided funds for the high-speed rail project.</p>	Letter

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12.	10/14/2019	Chapter 2, page 52 Carpool Lanes indicates that, "These lanes, also known as HOV or high occupancy vehicle lanes, have a limited number of access points along the highway. They are similar to Express Lanes, but solo drivers are precluded from using them." Please clarify that vehicles carrying a Clean Air Vehicle decal are allowed single occupancy use of High Occupancy Vehicle (HOV or carpool) lanes.	Caltrans District 11	Added language in parentheses to clarify. They are similar to Express Lanes, but solo drivers are precluded from using them (motorcycles, emergency vehicles, and low-emission vehicles with Clean Air Vehicle decals are allowed single occupancy use of carpool or HOV lanes).	Letter
13.	10/14/2019	Chapter 2, page 63 indicates that, "Moving forward, the readiness plan for plug-in electric vehicles identified barriers that the region still needs to address. These include the need for a better installation process for chargers at multi-unit dwellings, at the workplace, and at other commercial sites. Also needed is a more streamlined permitting process, as well as the integration of plug-in electric vehicle infrastructure into building codes." Please note that guidance was added to the California Building Code in section 11 B-812 Electric Vehicle Charging Stations.	Caltrans District 11	In Chapter 2, the final sentence was clarified as follows: Also needed are more streamlined permitting processes, as well as increased education and outreach about electric vehicle infrastructure requirements in building codes, such as guidance added to the California Building Code related to Electric Vehicle Charging Stations.	Letter
14.	10/14/2019	Chapter 2, page 72 states that, "The Airport Authority has completed its expansion of Terminal 2, known as The Green Build, which opened in August 2013. In 2018, the Airport Authority released the Draft Environmental Impact Report (EIR) for the Airport Development Plan, which identified the next phase of improvements so SDIA can meet demand through 2035." Caltrans recommends using the common abbreviation for the Draft Environmental Impact Report of DEIR to further differentiate from EIR, which is generally considered the final Environmental Impact Report.	Caltrans District 11	The reference in Chapter 2 has been revised to DEIR.	Letter
15.	10/14/2019	Concept 3, also listed in Chapter 2 on page 72, "includes a Central Mobility Hub, which includes a multi modal transportation center with numerous connections to regional transit lines, excluding Amtrak and COASTER services, and with high-frequency APM service to SDIA, and an airport-like curb experience for auto-based travelers. An APM station would provide service to SDIA via a 2.6-mile surface/elevated route along Pacific Highway, Laurel Street, and Harbor Drive, with intermediate stops at the airport Rental Car Center and planned development at Harbor Island East Basin." Please clarify whether the "multimodal transportation center" is the same project as the Intermodal Transit Center indicated throughout the Project Lists in Appendix A.	Caltrans District 11	The following language was added to provide clarification. It should be noted that the Central Mobility Hub is a separate concept from the Airport ITC described earlier in this chapter and identified in the 2015 Regional Plan/2019 Federal RTP. The Central Mobility Hub is anticipated to include new regional transit services and connections to the SDIA and will be part of San Diego Forward: The 2021 Regional Plan.	Letter

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16.	10/14/2019	Programming/Operations: Appendix A contains SANDAG's list of constrained and unconstrained projects, however, it is somewhat difficult to determine which projects are unconstrained. Table A.5 has columns both for "Revenue Constrained" and "Unconstrained", but many of the projects on the list indicate that they are both "Revenue Constrained" and "Unconstrained". Please clarify the difference and ensure that the unconstrained list is discernable.	Caltrans District 11	An endnote has been added to Appendix A Table A.5 to clarify that projects included in the Unconstrained Transportation Network show a check mark in the Unconstrained column. Projects that are included in the Revenue Constrained Network show check marks in both the Revenue Constrained and Unconstrained columns. Between both networks, for Transit Facilities, some projects show different service frequencies. For Managed Lanes/Toll Lanes/Highway Projects/Operational Improvements, some projects show different number of lanes between the Constrained and Unconstrained networks.	Letter
17.	10/14/2019	Financial: Per Title 40 CFR §93.101, SANDAG must specifically identify regionally significant projects in their project list. Appendix A, however, does not reflect this. Please clearly document which projects are regionally significant.	Caltrans District 11	The regionally significant projects are included in Appendix B, Tables B.11 through B.13. Additional text has been added to Appendix A to state: The regionally significant projects and the timing for when they are expected to be open to traffic in each conformity analysis year are documented in Appendix B in Tables B.11 through B.13.	Letter
18.	10/14/2019	Financial: Chapter 3 page 80 states that, "None of the new fund sources are assumed to begin prior to 2024, with the exception of the Future Metropolitan Transit System (MTS) Local Revenues for Transportation, which is estimated to begin in 2021, but they would be required to complete all of the projects in the 2019 Federal RTP." For transparency, please clarify that the MTS local revenue funds would come from a potential ballot measure, as referred to on page 87.	Caltrans District 11	Language has been added to Chapter 3 to address the comment: MTS is considering placing a tax measure on the ballot in 2020. The Future MTS Local Revenues for Transportation would be contingent on that ballot measure passing.	Letter
19.	10/14/2019	Financial: Chapter 3 Page 89 indicates that "In its 2014 Annual Report, the CTC urged the Governor and the Legislature to address near term funding needs to preserve the existing transportation system. The report notes: "For over a decade the Commission has implored the Legislature and the Administration to address this dire situation. No longer do we have the luxury of time; definitive and non-partisan action is required immediately to ensure the economic stability and public safety of the people we serve." There are a number of options being discussed to augment revenue sources for transportation. Each comes with both challenges and opportunities for transportation programs. Some of the options include: mileage-based user fees, toll pricing, an increase to the fuel tax, an increase to vehicle weight fees, an increase to other vehicle-related fees, and opportunities for more public-private partnerships." Caltrans requests that this paragraph be updated to reflect the passage of Senate Bill 1, the Road Repair and Accountability Act.	Caltrans District 11	The following language below has been added to Chapter 3: After years of advocating for a solution to the state's transportation funding crisis, the Legislature passed and the Governor signed SB 1 (Beall, 2017), also known as the Road Repair and Accountability Act of 2017, increasing transportation funding and instituting program reforms. SB 1 provided the first significant, stable, and on-going increase in state transportation funding in more than two decades. The revenue generated by all gasoline taxes and additional fees created by SB1 are constitutionally protected, which guarantees these funds can only be used for transportation purposes. The legislation also emphasized a commitment to accountability and transparency by holding Caltrans and local governments accountable for the investment of these public funds to maintain public highways, streets, and roads. Further details on the funding programs created by SB1 are discussed in Chapter 3.	Letter

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20.	10/14/2019	Modeling: Travel Market In Appendix T, page 5, Table T.1, Travel Market column, San Diego resident travel (internal-external) is listed as the average weekday travel by San Diego residents between San Diego County and other counties, or between San Diego County and Mexico. Given the different travel restrictions and behaviors while crossing a county-line vs. crossing the Mexico border, please clarify if and/or how these two groups of trips are treated differently in SR 14/ ABM2.	Caltrans District 11	The San Diego resident travel to Mexico and to other counties are based on observations from the resident travel survey and expanded to estimate the total number of trips made by San Diego residents to other locations. The ABM uses a binary logit model for a person's trip making choice as a function of accessibility to external stations and demographic characteristics. The differences in travel restrictions and behaviors would be reflected in the destination constant of the logit model.	Letter
21.	10/14/2019	Modeling: Mode Appendix T, page 15, Table T.6 indicates the Trip Modes for Assignment. The Mode names listed are inconsistent throughout the 2019 Federal RTP, which could cause confusion. For example, on page 15 there are 18 modes listed, with the auto modes listed as 2-person non-toll or toll-eligible, or 3-person non-toll or toll-eligible. However, in the texts and tables on pages 34, 35, 36, 37, 48, 51, and 57, the same modes are named as shared-ride 2 free or pay, or shared 3+ free or pay.	Caltrans District 11	Appendix T text has been updated to note that for consistency purposes the following terms are used: 2-person non-toll, 2-person toll eligible, 3+ person non-toll, and 3+ person toll eligible.	Letter
22.	10/14/2019	Modeling: Mode In Appendix T, Table T.9 page 37, mode Shared 2 Toll or Shared 3+ Toll vehicles occupied with 2 or 3+ passengers will be tolled if travelling on toll and HOT lanes. Please state the starting year that the toll applies to those HOV vehicles. In the previous version, the model assumes that HOV 2+ would be tolled in 2035 and beyond.	Caltrans District 11	Table T.9 has been updated to reflect the starting year of 2035 when the toll would apply to HOV 2 passenger vehicles (which is the same as the 2015 Regional Plan). Specifically, from 2016-2034 the policy is: (1) All 2 lane (1 lane in each direction) managed facilities would operate as HOV 2+ free only; and (2) All 4 lane (2 lanes in each direction) managed facilities would operate as HOV 2+ free and SOV tolled (same as I-15 today). From 2035-2050: All managed facilities, regardless of the number of lanes, would operate as HOV 3+ free, HOV2/SOV tolled.	Letter
23.	10/14/2019	Modeling: Mode The increase of ride-hailing-services (RHS), such as Uber, Lyft, or ride-sharing apps, etc., is quite significant in recent years, especially in the airport passenger and overnight visitor travel markets. However, there is no mention of how RHS is considered as a trip mode in SR 14/ ABM2.	Caltrans District 11	A paragraph has been added to Appendix T (Page 5) to explicitly address TNCs and other new mobility technologies. TNCs are implicitly modeled as HOV and will be addressed explicitly in the next version of the SANDAG ABM.	Letter
24.	10/14/2019	Modeling: Telework Assumptions in Appendix T, Table T.15, page 79 indicates that in 2050, 15.5% of employees working in the San Diego region will telework at least occasionally. Please explain how this assumption changed from previous telework share of 25%.	Caltrans District 11	A consultant firm was retained by SANDAG to review the telework assumptions as part of the Future Mobility Research Program. The memo prepared by the consultant, dated March 26, 2018, analyzes teleworking trends from the SANDAG Employee Commute Survey in 2013, the SANDAG Regional Transportation Study in 2016, the American Community Survey (2005-2016), Caltrans Household Travel Survey in 2012, and the National Household Travel Survey in 2017. Based on the analysis, the consultant recommended new telework rates based on actual data for our region and research on telework trends, which were agreed upon by the SANDAG Transportation Demand Management team. The memo has been added as an attachment to Appendix T.	Letter

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25.	10/14/2019	Modeling: Telework Assumptions o Also, please clarify why the percentages of "Telework Occasionally" are invariably maintained at 5% from 2016 to 2050, while the percentage of "Telework always or primarily" grows gradually during the same period.	Caltrans District 11	A consultant was retained by SANDAG to review the telework assumptions as part of the Future Mobility Research Program. The memo prepared by the consultant, dated March 26, 2018, analyzes teleworking trends from the SANDAG Employee Commute Survey in 2013, the SANDAG Regional Transportation Study in 2016, the American Community Survey (2005-2016), Caltrans Household Travel Survey in 2012, and the National Household Travel Survey in 2017. Based on the analysis, the consultant recommended new telework rates based on actual data for our region and research on telework trends, which were agreed upon by the SANDAG Transportation Demand Management team. The memo has been added as an attachment to Appendix T.	Letter
26.	10/14/2019	Modeling: Post-Processing Since the release of SR 13/ ABM model, the post-processing of UVOL/ A VOL no longer exists. This raised concerns and frustrations among professionals who rely on the model as a prime source to provide adjusted volumes based on existing traffic counts while working on their highway design and traffic analysis projects. Please verify if this issue was addressed in SR 14/ABM2.	Caltrans District 11	The SANDAG ABM2 does not provide volume adjustments beyond the forecasted volumes produced by the model. Each project may necessitate a different methodology to correct for any model bias in facility projections. Qualified traffic engineers and forecasters should apply their professional knowledge to each project.	Letter
27.	10/14/2019	Modeling: Post-Processing In addition to UVOL/ A VOL, there are no Peak-Hour volumes available in SR 14/ ABM2. Prior to SR 13/ ABM, there were post-processing procedures to produce not only peak-period but also AM/PM peak-hour volumes. Please verify if this issue will be addressed.	Caltrans District 11	ABM2 does produce AM and PM peak period volumes. Qualified traffic engineers and forecasters should apply their professional knowledge of the project area, current traffic conditions, and potential future conditions to derive a peak hour volume based on the ABM2 peak period assigned volumes.	Letter
28.	10/14/2019	Modeling: Link Attributes It would be helpful to incorporate a new link attribute, namely " "Route ID" ", into the current highway link attribute table. There is a need to quickly identify, select, and/or search links along an interstate or a state route in corridor traffic studies, like GHG/MSAT analyses. The current model does have a " "NM" " (meaning name) attribute to help perform the task, but in many cases, the " "NM" " attribute won't work well due to the fact that the same route/interstate may be named differently from segment to segment."	Caltrans District 11	We believe "NM" (name) field is sufficient for this purpose. Additionally, on the hwycov arc coverage, there is an attribute called "RTNO" (route number) that can be used to identify contiguous route segments. Please identify any issues that are occurring with the "NM" field and SANDAG will work with Caltrans staff directly to address them.	Letter
29.	10/14/2019	Modeling: Border Crossing Volumes In Appendix T, page 81, Section 9.3 Cross Border Tours, it states that "The projected increase of border tours is based on taking 2016 crossing volumes for vehicle passengers and pedestrians." Please clarify if this statement is intended to mean that one year of data is used to project the vehicle passenger and pedestrian crossing volumes trends through 2050.	Caltrans District 11	The future projected increase of border tours uses 2016 crossing volumes for vehicle passengers and pedestrians as a starting point. Forecasted growth is based on the SR11 Traffic & Revenue study for vehicle passengers and historical growth trends for pedestrians. The text in Appendix T, Section 9.3 has been reworded for clarity.	Letter

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan — Comments (Received as of October 16, 2019)

No.	Date	Comment	Agency/Commenter	Response	Source
30.	10/14/2019	Modeling: Auto Operating Costs/ Air Quality: In Appendix T, page 80, 9.2 Auto Operating Costs states, "From 2025 to 2050 fuel efficiency increases offset increases in fuel costs resulting in a more stabilized auto operating cost. Model performance measures (such as vehicle miles traveled and transit mode share) between 2020 and 2030 will be impacted by the higher AOC." Please clarify if there are government findings that indicate fuel efficiency and alternative fuel/vehicle costs are keeping pace with the increase in fuel costs. Also, please specify how the AOC compare to other considerations that factor into VMT reductions and mode share increases to transit and other non-auto modes.	Caltrans District 11	The statements in the documentation were based on an analysis of the trends. The forecasted source of gas prices and fuel efficiency are from the U.S. Energy Information Administration (EIA) and California Air Resources Board (ARB). Additional documentation on impacts of gas prices on vehicle use can be found in research sponsored by ARB ( <a href="https://ww3.arb.ca.gov/cc/sb375/policies/gasprice/gasprice_brief.pdf">https://ww3.arb.ca.gov/cc/sb375/policies/gasprice/gasprice_brief.pdf</a> and <a href="http://ww3.arb.ca.gov/cc/sb375/policies/gasprice/gasprice_bkgd.pdf">http://ww3.arb.ca.gov/cc/sb375/policies/gasprice/gasprice_bkgd.pdf</a> ). The text in section 9.2 has been updated with these links.	Letter
31.	10/14/2019	Modal Discussion: The 2017 Regional Transportation Plan Guidelines for Metropolitan Planning Organizations (MPOs) outlines in Section 6.8 the recommended elements for the highways discussion in a RTP. Caltrans suggests SANDAG include the following information in the 2019 Federal RTP: o An overview of the primary highway and arterial road system within the region. o Identification of the national and state highway system, and regionally significant streets and roads. The maps SANDAG provides in the 2019 Federal RTP appear to combine the current transportation system and the future/proposed system. Caltrans recommends providing maps that will allow the reader to make a clear comparison.	Caltrans District 11	The existing primary highway and arterial road system can be found on Figures A.13 and A15. In addition, Figure A.12 covers existing transit services and A.14 includes the regional bike network.	Letter

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan — Comments (Received as of October 16, 2019)

No.	Date	Comment	Agency/Commenter	Response	Source
32.	10/14/2019	<p>(Part 1 of 2) We read with great interest the transportation budget that was recently passed last month by the Board of SANDAG. There are approximately 900 local projects that have been identified in need of funding, each seeking their share of the \$594 million in funds to be allocated for next year. Simple math tells us that not all of them are going to make the final cut and be financed. Your organization's plan incorporates innovation by enlisting Five Big Moves, or strategic areas, which are formulated to contend with transportation circulation issues in the coming years. We would like to address just one of those in this letter -your plan for Complete Corridors. No one can dispute the necessity of highways and roads to connect different areas of the County to allow for safe and efficient traffic flow. We cannot over emphasize both the benefits as well as the significance of this concept when applied to the ports of entry at the international border. In 2015, then Governor Brown executed an executive order entitled the California Sustainable Freight Action Plan. The document was signed with the intent for Caltrans and other U.S. local and regional transportation agencies to coordinate with their Mexican counterparts in matters of logistics. The Plan recognized that the Otay Mesa Port of Entry was the largest commercial crossing between California and Mexico. Annually, the port manages more than 700,000 southbound trucks, most of which will return to the U.S. hauling in excess of \$20 billion in goods. The City of San Diego's Public Works Department has approved a capital improvement plan which has identified funding in excess of \$13 million to environmentally clear, design, acquire right-of-way, and build the south bound Otay Truck Route (SANDAG ID 102A). It will extend from the southerly terminus of La Media Road eastward to the Port of Entry. Phase one of the project will allow both empty and laden trucks to more efficiently navigate the distance along the border fence to reach the international port. The predicament the region finds itself in is that La Media Road, while a critical corridor for California exports, exists basically as a two-lane street between the off-ramp at State Route 905 and its intersection with the Otay Truck Route. The distance is approximately one mile in length and travel is impeded by virtue of a major flooding issue where the street intersects with Airway Road. It is paramount that SANDAG partner with the City of San Diego to identify the necessary funding for the estimated \$37 million it will cost to put into operation this missing piece, which is fully discussed in the City of San Diego CIP SI5018. Only about 78% of the necessary funding is available through the City's Facility Benefit Assessment account which is capitalized by property owners in Otay Mesa.</p>	National Enterprises Incorporated, David Wick	The City of San Diego's Otay Truck Route Widening Project (CIP S11060/MPO ID SD102A) Phase I is included in the Draft 2019 Federal RTP in Appendix B, Table B.13 (Page 32) and Phase II is included in Appendix B, Table B.13 (Page 35). SANDAG will continue to collaborate with the City of San Diego on seeking additional funding opportunities for these projects.	Letter

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan — Comments (Received as of October 16, 2019)

No.	Date	Comment	Agency/Commenter	Response	Source
33.	10/14/2019	(Part 2 of 2) The second phase of the south bound truck route has been proposed to extend westward, from La Media Road to Britannia Boulevard. There are some integrated management studies that indicate that this western portion of the Otoy Truck Route may not be necessary to manage the truck traffic. This could provide the requisite resources to bridge the gap between the state freeway and the truck route. The California Sustainable Freight Action Plan serves as a pivotal blueprint to empower California businesses to make the most of their proximity to Mexico and the economic markets it offers. Freight planning for the International Border Area requires special considerations, involving stakeholders on both sides of the border. While allocating augmented tax dollars to public transportation may be well intended, history has demonstrated that the larger a transit system grows the larger subsidies it requires. It is not financially viable to spend half of all sales tax dollars to accommodate three percent of the population. If one of the goals of the Five Big Moves is to complete corridors, there's no better way than to upgrade the necessary transportation infrastructure major in the international border area. Based on the information, please add the City of San Diego's CIP S15018 to the list of pending projects under the 2019 Federal Regional Transportation Plan.	National Enterprises Incorporated, David Wick	The City of San Diego's La Media Road Improvements Project (CIP S15018/MPO ID SD250) is currently under the "Preliminary Engineering" phase of project development and is found in the 2018 Regional Transportation Improvement Program. In addition, this project is part of the "Otoy Mesa Southbound Truck Route Improvements" project listed in the Draft 2019 Federal RTP Appendix A, Table A.5 (Page 38). SANDAG will also continue to collaborate with the City of San Diego on seeking additional funding opportunities for this project.	Letter
34.	10/15/2019	Peak Hour Volumes. According to Appendix T, SANDAG Travel Demand Model and Forecasting Documentation, peak hour volumes are not included as a native output of the regional transportation model. As an end user of SANDAG transportation model, Caltrans uses peak hour volumes, preferably from the regional transportation model. The primary reason for this is peak hour volumes are key inputs for roadway design and traffic operational analyses.	Caltrans District 11	ABM2 does produce AM and PM peak period volumes. Qualified traffic engineers and forecasters should apply their professional knowledge of the project area, current traffic conditions, and potential future conditions to derive a peak hour volume based on the ABM2 peak period assigned volumes.	Letter
35.	10/15/2019	I believe that we should move forward with the Federal Regional Transportation Plan.	Home Start, Caroline Wessel	The SANDAG Board of Directors will be asked to adopt San Diego Forward: The 2019 Federal Regional Transportation Plan at its October 25, 2019, meeting.	Web
36.	10/15/2019	Approve the Draft 2019 Federal Regional Transportation Plan	Home Start	The SANDAG Board of Directors will be asked to adopt San Diego Forward: The 2019 Federal Regional Transportation Plan at its October 25, 2019, meeting.	Web
37.	10/15/2019	I understand the Draft 2019 Federal Regional Transportation Plan and believe that we should submit for final approval.	Home Start	The SANDAG Board of Directors will be asked to adopt San Diego Forward: The 2019 Federal Regional Transportation Plan at its October 25, 2019, meeting.	Web
38.	10/15/2019	Please approve the 2019 Federal Transportation Plan as drafted.	Home Start	The SANDAG Board of Directors will be asked to adopt San Diego Forward: The 2019 Federal Regional Transportation Plan at its October 25, 2019, meeting.	Web
39.	10/15/2019	I agree that we need to submit the Draft 2019 Federal Regional Transportation Plan to be approved as is. I have no changes to suggest.	Home Start	The SANDAG Board of Directors will be asked to adopt San Diego Forward: The 2019 Federal Regional Transportation Plan at its October 25, 2019, meeting.	Web

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan — Comments (Received as of October 16, 2019)

No.	Date	Comment	Agency/Commenter	Response	Source
40.	10/16/2019	<p>We read about the transportation budget that was recently passed last month by the Board of SANDAG. There are approximately 900 local projects that have been identified in need of funding, each seeking their share of the \$594 million in funds to be allocated for next year. Simple math tells us that not all of them are going to make the final cut and be financed. Your organization's plan incorporates innovation by enlisting Five Big Moves, or strategic areas, which are formulated to contend with transportation circulation issues in the coming years. We would like to address just one of those in this letter - your plan for Complete Corridors. No one can dispute the necessity of highways and roads to connect different areas of the County to allow for safe and efficient traffic flow. We cannot overemphasize both the benefits as well as the significance of this concept when applied to the ports of entry at the international border. In 2015, then Governor Brown executed an executive order entitled the California Sustainable Freight Action Plan. The document was signed with the intent for Caltrans and other U.S. local and regional transportation agencies to coordinate with their Mexican counterparts in matters of logistics. The Plan recognized that the Otay Mesa Port of Entry was the largest commercial crossing between California and Mexico. Annually, the port manages more than 700,000 southbound trucks, most of which will return to the U. S. hauling in excess of \$20 billion in goods. The City of San Diego's Public Works Department has approved a capital improvement plan which has identified funding in excess of \$13 million to environmentally entitle, design, acquire right-of-way, and build the southbound Otay Truck Route (SANDAG ID 102A). It will extend from the southerly terminus of La Media Road eastward to the Port of Entry. Phase one of the project will allow both empty and laden trucks to more efficiently navigate the distance along the border fence to reach the international port. The predicament the region finds itself in is that La Media Road, while a critical corridor for California exports, exists basically as a two-lane street between the off-ramp at State Route 905 and its intersection with the Otay Truck Route. The distance is approximately one mile in length and travel is impeded by virtue of a major flooding issue where the street intersects with Airway Road. It is paramount that SANDAG partner with the City of San Diego to identify the necessary funding for the estimated \$37 million it will cost to put into operation this missing piece, which is fully discussed in the City of San Diego CIP S15018. Only about 78% of the necessary funding is available through the City's Facility Benefit Assessment account which is capitalized by property owners in Otay Mesa.</p>	Murphy Development Company, Kaitlin Arduino	<p>The City of San Diego's Otay Truck Route Widening Project (CIP S11060/MPO ID SD102A) Phase I is included in the Draft 2019 Federal RTP in Appendix B, Table B.13 (Page 32) and Phase II is included in Appendix B, Table B.13 (Page 35). SANDAG will continue to collaborate with the City of San Diego on seeking additional funding opportunities for these projects.</p>	Letter

## Draft San Diego Forward: The 2019 Federal Regional Transportation Plan — Comments (Received as of October 16, 2019)

No.	Date	Comment	Agency/Commenter	Response	Source
41.	10/16/2019	The second phase of the southbound truck route has been proposed to extend westward, from La Media Road to Britannia Boulevard. There are some integrated management studies that indicate that this western portion of the Otay Truck Route may not be necessary to manage the truck traffic, let alone the impact to the Cross Border Express terminal. This could provide the requisite resources to bridge the gap between the state freeway and the truck route. The California Sustainable Freight Action Plan serves as a pivotal blueprint to empower California businesses to make the most of their proximity to Mexico and the economic markets it offers. Freight planning for the International Border Area requires special considerations, involving stakeholders on both sides of the border. While allocating augmented tax dollars to public transportation may be well intended, history has demonstrated that the larger a transit system grows the larger subsidies it requires. It is not financially viable to spend half of all sales tax dollars to accommodate three percent of the population. If one of the goals of the Five Big Moves is to complete corridors, there's no better way than to upgrade the necessary transportation infrastructure major in the international border area. Based on the information, please add the City of San Diego's CIP S15018 to the list of pending projects under the 2019 Federal Regional Transportation Plan.	Murphy Development Company, Kaitlin Arduino	The City of San Diego's La Media Road Improvements Project (CIP S15018/MPO ID SD250) is currently under the "Preliminary Engineering" phase of project development and is found in the 2018 Regional Transportation Improvement Program. In addition, this project is part of the "Otay Mesa Southbound Truck Route Improvements" project listed in the Draft 2019 Federal RTP Appendix A, Table A.5 (Page 38). SANDAG will also continue to collaborate with the City of San Diego on seeking additional funding opportunities for this project.	Letter
42.	10/16/2019	I want to clarify that the High-Speed Rail Authority does not currently have any guaranteed or programmed funds for Phase 2 construction projects, including in the SANDAG region. While 2036-2050 is many years out, I would recommend clarifying that the State High-Speed Rail funds listed (\$16,076) are not currently committed in the timeframe identified.	California High Speed Rail Authority, Ben Lichty	Funding commitments and programming typically occur closer to the expected delivery of the project. Similar to other future funding sources in the last period of the Draft 2019 Federal RTP, the High-Speed Rail Authority funds are considered reasonably expected to be available. Anticipated revenues and funding commitments are updated every time a Regional Transportation Plan is prepared.	Email

**Draft San Diego Forward: The 2019 Federal Regional Transportation Plan — Comments (Received as of October 16, 2019)**

No.	Date	Comment	Agency/Commenter	Response	Source
43.	10/16/2019	Figure A.16 in Appendix A identifies the major east-west regional trails in the county. The title "community trails" on this figure is misleading because the CTC Trail (and the others) are regional trails and as such serve the entire County and beyond. Referring to them as "community trail" downplays their importance in and to the region. It is unclear how the RTP relates to or intends to address the regional trails in a consistent way. For example, various segments of the San Diego River Park trail are listed in the project tables in this appendix but the San Dieguito River Park trail is not mentioned or listed at all. The official name of the San Dieguito River Park's regional trail shown on Figure A.16 is the Coast to Crest Trail. The western part of the CTC Trail is located in urban areas and must cross major streets and infrastructure, and is intended to link to the street network for access. But the existing and planned crossings do not appear in the RTP. How does the RTP recognize the needed crossings to connect the regional trails across and to major transportation facilities (roads, regional bike lanes, etc)? The RTP should address this as a component of the county's transportation network particularly with regard to non-motorized transportation choices. This is not only a semantics issue, but a funding issue as well as the RTP drives grant funding dollars to be spent on transportation facilities. Thank you.	San Dieguito River Park JPA, Shawna Anderson	The relationship between trails and the regional transportation network is based on policy direction given for the development of the regional bike network developed as part of Riding to 2050: San Diego Regional Bike Plan which was originally adopted in 2010. At that time connections to unpaved trails were considered to the extent to which they could be incorporated into the regional transportation network. Moving forward, the role all trails can play in providing network connections will be considered with the development of the 2021 Regional Plan as well as an update of the Regional Bike Plan.	Web

# Appendix B

## Air Quality Planning and Transportation Conformity

### Appendix Contents

Executive Summary

Background

Transportation Conformity: Modeling Procedures

Motor Vehicle Emissions Modeling

Exempt Projects

# Air Quality Planning and Transportation Conformity

## Executive Summary

The San Diego Association of Governments (SANDAG), as the region's Metropolitan Planning Organization (MPO), must make a transportation air quality conformity determination for regional transportation plans (RTPs) and regional transportation improvement programs (RTIPs). The purpose of transportation conformity is to ensure that federally funded or approved activities are consistent with the State Implementation Plan (SIP). This ensures that no transportation activities will cause or contribute to new air quality violations, worsen existing violations, or delay the attainment of any relevant National Ambient Air Quality Standards (NAAQS). This report documents a demonstration of conformity for the 2008 and 2015 Ozone NAAQS for San Diego Forward: The 2019 Federal Regional Transportation Plan (2019 Federal RTP) and the 2018 Regional Transportation Improvement Program (2018 RTIP), as amended.

## Background

The federal Clean Air Act (CAA), which was last amended in 1990, requires the United States Environmental Protection Agency (U.S. EPA) to set National Ambient Air Quality Standards (NAAQS) for pollutants considered harmful to public health and the environment. California has adopted state air quality standards that are more stringent than the NAAQS. Areas with levels that violate the standard for specified pollutants are designated as nonattainment areas.

The U.S. EPA requires that each state containing nonattainment areas develop plans to attain the NAAQS by a specified attainment deadline. These attainment plans are called State Implementation Plans (SIP). The San Diego County Air Pollution Control District (APCD) prepares the San Diego portion of the California SIP. Once the standards are attained, further plans—called Maintenance Plans—are required to demonstrate continued maintenance of the NAAQS.

The San Diego Association of Governments (SANDAG) and the United States Department of Transportation (U.S. DOT) must make a determination that the Regional Transportation Plan (RTP) and the Regional Transportation Improvement Program (RTIP) conform to the SIP for air quality. Conformity to the SIP means that transportation activities will not create new air quality violations, worsen existing violations, or delay the attainment of the national ambient air quality standards. The SANDAG conformity determinations are guided by U.S. EPA's Transportation Conformity rule (40 CFR 93.100 et seq.).

## 2008 Ozone Standard

On May 21, 2012, the U.S. EPA designated the San Diego air basin as a nonattainment area for the 2008 Eight-Hour Ozone standard and classified it as a marginal area with an attainment date of December 31, 2015. This designation became effective on July 20, 2012. SANDAG demonstrated conformity of the 2011 Regional Plan and 2012 RTIP to the 2008 ozone standard on May 24, 2013, using the applicable model approved by the U.S. EPA to forecast regional emissions (EMFAC2011). The U.S. DOT, in consultation with the U.S. EPA, made its conformity determination on June 28, 2013.

Effective June 3, 2016, the U.S. EPA determined that 11 areas, including the San Diego air basin, failed to attain the 2008 ozone NAAQS by the applicable attainment date of July 20, 2015, and thus were reclassified by operation of law as Moderate for the 2008 ozone NAAQS (81 FR 26697). States containing these new Moderate areas were required to submit SIP revisions that met the statutory and regulatory requirements that apply to 2008 ozone nonattainment areas classified as Moderate by January 1, 2017. The APCD submitted a SIP revision addressing

Moderate area requirements to the Air Resources Board (ARB) on December 27, 2016. Effective December 4, 2017, the U.S. EPA found the motor vehicle emissions budgets for the Reasonable Further Progress milestone year of 2017 from the *2008 Eight-Hour Ozone Attainment Plan for San Diego County* adequate for transportation conformity purposes for the 2008 ozone NAAQS.

On August 23, 2019, U.S. EPA published a final rule in the Federal Register reclassifying the San Diego air basin by operation of law from a Moderate nonattainment area for the 2008 ozone NAAQS to Serious effective September 23, 2019 (84 FR 44238). This rulemaking changes the 2008 ozone NAAQS attainment deadline to July 20, 2021, with an attainment year of 2020.

### **2015 Ozone Standard**

On October 26, 2015, the U.S. EPA announced a revised ozone standard, referred to as the 2015 Ozone standard (80 FR 65292). The new standard revised the allowable ozone level to 0.070 parts per million (ppm). The 2015 ozone standard became effective on December 28, 2015. On June 4, 2018, U.S. EPA published a final rule that designated the San Diego air basin as nonattainment, with a classification of Moderate, for the 2015 ozone NAAQS with an attainment deadline of August 3, 2024, and an attainment year of 2023 (83 FR 25776, effective August 3, 2018).

On May 24, 2019, the SANDAG Board of Directors (Board) adopted the 2015 Ozone National Ambient Air Quality Standard Conformity Demonstration for San Diego Forward: The Regional Plan (2015 Regional Plan) and the 2018 RTIP. The conformity demonstration found the 2015 Regional Plan and 2018 RTIP, as amended, in conformity with the requirements of the federal Clean Air Act and applicable SIP. The U.S. DOT, in consultation with U.S. EPA, made its conformity determination on June 21, 2019, indicating that all air quality conformity requirements have been met, including those for the 2015 ozone standard.

### **Carbon Monoxide Standard**

The San Diego region had been designated by the U.S. EPA as a federal maintenance area for the Carbon Monoxide (CO) standard. On November 8, 2004, ARB submitted the 2004 revision to the California SIP for CO to the U.S. EPA, which extended the maintenance plan demonstration to 2018. Effective January 30, 2006, the U.S. EPA approved this maintenance plan as a SIP revision. On March 21, 2018, the U.S. EPA documented in a letter that transportation conformity requirements for CO would cease to apply after June 1, 2018. Therefore, this appendix does not include a CO conformity analysis.

### **Conformity Determinations for 2015 Regional Plan, 2014 RTIP, and 2018 RTIP**

On October 9, 2015, SANDAG made a conformity demonstration for the 2015 Regional Plan, which serves as the RTP. The U.S. DOT issued its conformity finding for the 2015 Regional Plan and the 2014 RTIP through Amendment No. 8 on December 2, 2015. On September 28, 2018, the Board adopted the Final 2018 RTIP and its conformity demonstration and redemonstration of conformity of the 2015 Regional Plan. The U.S. DOT, in consultation with the U.S. EPA, made its conformity determination for the 2018 RTIP on December 17, 2018. Conformity of the 2015 Regional Plan expires on December 2, 2019.

## Transportation Conformity: Modeling Procedures

### Growth Forecasts

Every three to five years, SANDAG produces a long-range forecast of population, housing, and employment growth for the San Diego region. On May 25, 2018, the Board approved the assumptions for the Series 14, 2050 Regional Growth Forecast, which were used in development of the 2019 Federal RTP.

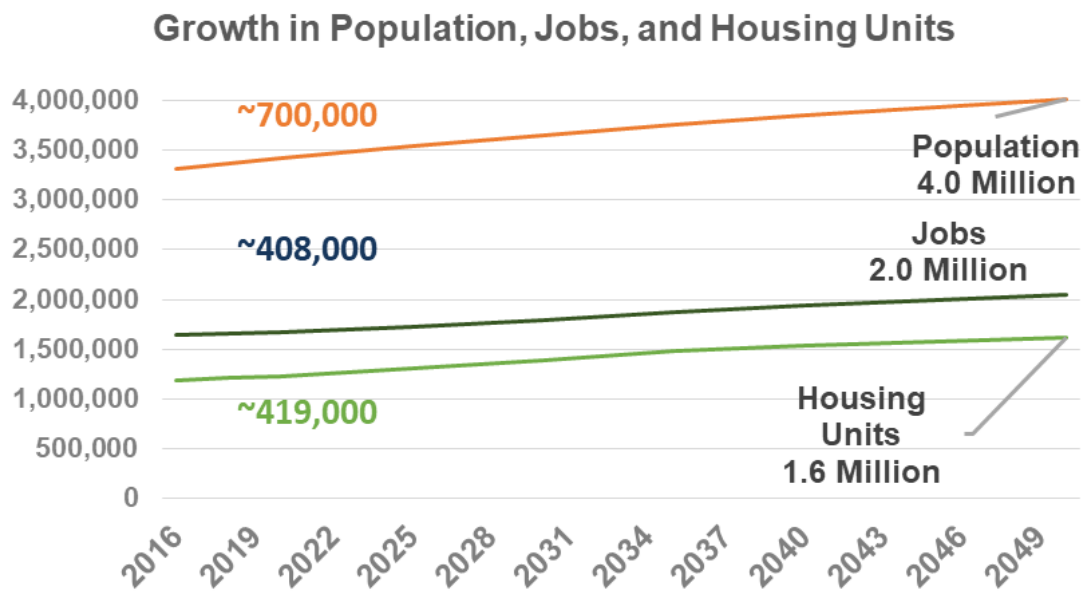
The forecast process relies upon an integrated forecasting model. The first element is the San Diego Demographic and Economic model (SanDE), which provides a detailed socioeconomic forecast for the region. Next, the regionwide data are allocated to the parcel level based upon the current plans and policies of the jurisdictions. The parcel-level forecast data can be aggregated up to larger sub-regional areas of interest.

On April 3, 2019, SANDAG consulted with the San Diego Region Conformity Working Group (CWG) on the use of the Series 14, 2050 Regional Growth Forecast for the air quality conformity analysis of the 2019 Federal RTP and 2018 RTIP, as amended. Previously, both the U.S. DOT and the U.S. EPA concurred that approved plans should be used as input in the air quality conformity process. Figure B.1 and Table B.1 show the regional population, jobs, and housing growth forecast for the San Diego region through 2050.

Figure B.1

### San Diego Regional Population, Jobs, and Housing Forecast

## Regional Growth Forecast



Source: Series 14 Version 17, 2050 Regional Growth Forecast, SANDAG

**Table B.1****San Diego Regional Population and Employment Forecast**

Year	Population	Employment
2016	3,316,187	1,643,741
2025	3,545,073	1,723,744
2035	3,753,630	1,870,403
2050	4,011,145	2,051,357

Source: Series 14 Version 17, 2050 Regional Growth Forecast, SANDAG

The Series 14, 2050 Regional Growth Forecast is based largely upon the adopted general plans and community plans and policies of the 18 cities and the County. Because many of the local general plans have horizon years of 2030 – 20 years before the 2050 Growth Forecast horizon year – the later part of the forecast was developed in collaboration with each of the local jurisdictions through an iterative process that allowed each city to provide their projections for land uses in those later years. The Series 14 forecast thus represents in compliance with 40 CFR 93.110(a), the “latest planning assumptions” in force at the time this conformity analysis began.

### Transportation Modeling

SANDAG uses an updated activity-based model (ABM) that incorporates the latest planning assumptions at the time the conformity analysis began per 40 CFR 93.110 to support the development of the RTP1F<sup>1</sup> and its conformity demonstration. An ABM simulates individual and household transportation decisions that comprise their daily travel itinerary. It predicts whether, where, when, and how people travel outside their home for activities such as work, school, shopping, healthcare, and recreation.

The powerful analytic capabilities of an ABM are particularly helpful in evaluating social equity, carpooling, transit access, parking conditions, tolling, and pricing. Because an ABM tracks the characteristics of each person, the model can be used to analyze the travel patterns of a wide range of socioeconomic groups. For example, a household with many members may be more likely to carpool, own multiple vehicles, and share shopping responsibilities.

ABM outputs are used as inputs for regional emissions forecasts. The estimates of regional transportation-related emissions analyses conducted for the 2019 Federal RTP and 2018 RTIP, as amended, conformity analysis meet the requirements established in the Transportation Conformity Regulation (40 CFR §93.122[b] and §93.122[c]). These requirements relate to the procedures to determine regional transportation-related emissions, including the use of network-based travel models, methods to estimate traffic speeds and delays, and the estimation of vehicle miles traveled (VMT).

The regionally significant projects and the timing for when they are expected to be open to traffic in each analysis year are documented in Tables B.11 through B.13. The design concept and scope of projects allow adequate model representation to determine interactions with regionally significant facilities, route options, travel times, transit ridership, and land use.

Since the 2015 Regional Plan, SANDAG has enhanced the ABM to address the following aspects. The ABM has been updated based on 2016/2017 household travel survey data and 2015 transit on-board survey data, and the base-year of the model was updated to 2016. Several changes and enhancements were also made to the travel model system, including:

- Conversion of the commercial transportation modeling package from TransCAD to EMME2F<sup>2</sup>
- Implementation of a new model that explicitly models “partially joint” travel episodes, specifically the drop-off and pick-up of children at school by parents
- Incorporation of recently completed work to implement Strategic Highway Research Program recommendations regarding improving the sensitivity of travel models to pricing and reliability<sup>3F3</sup>
- Update of the algorithm used to find transit paths
- Update of volume-delay function parameters based upon an analysis of INRIX travel-time data
- Replacement of an asserted, aggregate commercial vehicle model with a disaggregate commercial vehicle model developed several years ago but not previously integrated with the San Diego travel model system<sup>4F4</sup>
- Update of the heavy truck model, which models internal–external truck flows, to incorporate the latest Freight Analysis Framework (FAF4) data and projections
- Implementation of an airport ground access model for the Cross-Border Express (CBX) facility serving Tijuana International Airport
- Update of models to better match “big data” for special travel destinations including beaches, parks, hospitals, and shopping malls
- Incorporation of a new population synthesizer developed by SANDAG

The new model system is referred to as ABM2. The document uses ABM2 to refer to the latest model used for the 2019 Federal RTP.

This appendix describes the key modeling units, ABM2 model flow, the San Diego residents travel module, highway, transit and active transportation networks, data sources, and emissions modeling.

### **Key Modeling Units**

An ABM simulates individual and household travel decisions through tours—that is, a journey that begins and ends at home. A tour includes a chain of trips (segments of travel with a given origin and destination). The advantage of modeling tours and trips hierarchy is to ensure spatial, temporal, and modal consistency and integrity across trips within a tour.

To simulate trips and tours made by individuals and households, the SANDAG ABM2 includes a total of eight person-types (shown in Table B.2). The person-types are mutually exclusive with respect to age, work status, and school status.

**Table B.2**  
**Person Types**

Number	Person-Type	Age	Work Status	School Status
1	Full-time worker <sup>5</sup>	18+	Full-time	None
2	Part-time worker	18+	Part-time	None
3	College student	18+	Any	College+
4	Non-working adult	18 – 64	Unemployed	None
5	Non-working senior	65+	Unemployed	None
6	Driving-age student	16 – 17	Any	Pre-college
7	Non-driving student	6 – 15	None	Pre-college
8	Pre-schooler	0 – 5	None	None

Further, workers are stratified by their occupation to take full advantage of information provided by the land use and demographic models. Table B.3 outlines the worker categories. These models are used to segment destination choice attractiveness for work location choice based on the occupation of the worker.

**Table B.3**  
**Occupation Types**

Number	Description
1	Management, Business, Science, and Arts
2	Services
3	Sales and Office
4	Natural Resources, Construction, and Maintenance
5	Production, Transportation, and Material Moving
6	Military

The SANDAG ABM2 assigns one of the activity types to each out-of-home location that a person travels to in the simulation (shown in Table B.4). The activity types are grouped according to whether the activity is mandatory, maintenance, or discretionary. The classification scheme of activities into the three categories helps differentiate the importance of the activities. Mandatory includes work and school activities. Maintenance includes household-related activity such as drop-off and pick-up of children, shopping, and medical appointments. Discretionary includes social and recreational activities. To determine which person-types can be used for generating each activity type, the model assigns eligibility requirements. For example, a full-time worker will generate mandatory work activities, while a non-working adult or senior is eligible for non-mandatory activities. The classification scheme of each activity type reflects the relative importance or natural hierarchy of the activity, where work and school activities are typically the most inflexible in the person’s daily travel itinerary.

**Table B.4**  
**Activity Types**

Type	Purpose	Description	Classification	Eligibility
1	Work	Working at regular workplace or work-related activities outside the home	Mandatory	Workers and students
2	University	College+	Mandatory	Age 18+
3	High School	Grades 9-12	Mandatory	Age 14-17
4	Grade School	Grades K-8	Mandatory	Age 5-13
5	Escorting	Pick-up/drop-off passengers	Maintenance	Age 16+
6	Shopping	(auto trips only)	Maintenance	5+ (if joint travel, all persons)
7	Other Maintenance	Shopping away from home	Maintenance	5+ (if joint travel, all persons)
8	Social/ Recreational	Personal business/services and medical appointments	Discretionary	5+ (if joint travel, all persons)
9	Eat Out	Recreation, visiting friends/family	Discretionary	5+ (if joint travel, all persons)
10	Other Discretionary	Eating outside of home	Discretionary	5+ (if joint travel, all persons)

The SANDAG ABM2 models a full travel day of activity broken into half-hour intervals. These half-hour increments begin at 3 a.m. and end at 3 a.m. the next day, though the hours between 1 a.m. and 5 a.m. are aggregated to reduce computational burden. The ABM2 ensures temporal integrity so that no activities are scheduled with conflicting time windows, with the exception of short activities/tours that are completed within a half-hour increment. The ABM2 assigns auto and transit traffic at five discrete time-of-day periods aggregated from the half-hour intervals shown in Table B.5.

**Table B.5**  
**Time Periods for Level of Service Skims and Assignment**

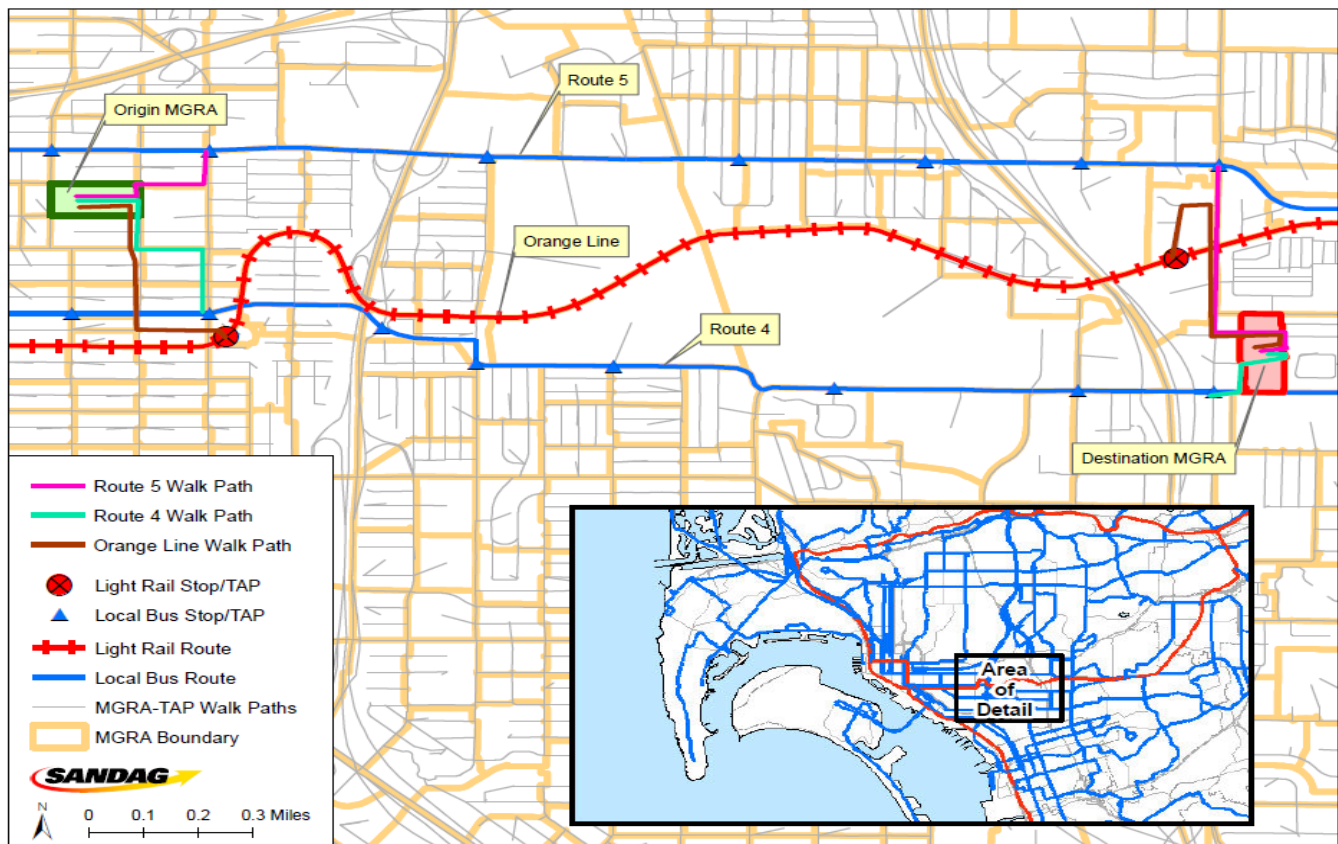
Number	Description	Begin Time	End Time
1	Early	3 a.m.	5:59 a.m.
2	A.M. Peak	6 a.m.	8:59 a.m.
3	Midday	9 a.m.	3:29 p.m.
4	P.M. Peak	3:30 p.m.	6:59 p.m.
5	Evening	7 p.m.	2:59 a.m.

The SANDAG ABM2 uses three-tier zone systems, as shown in Table B.6. The Master-Geographic Reference Area (MGRA) zone system is used for transit access, calculations, and location choice models; the Traffic Analysis Zone (TAZ) system is used for highway path building and assignment; and the pseudo-TAZ called Transit Access Point (TAP) is used for transit path building and assignment. The 23,000 MGRAs are roughly equivalent to census block groups. The ABM2 uses generalized transit stops as TAPs and relies on the traffic assignment software to generate TAP-TAP Level of Service (LOS) matrices (also known as “skims”) such as in-vehicle time, first wait, transfer wait, and fare for transit calculation at the MGRA level. A custom-built software calculates walk access time from MGRA to TAP through paths from an all-street active transportation network including bike paths and walkways for non-motorized travel, and build paths following the Origin MGRA – Boarding TAP – Alighting TAP – Destination MGRA patterns. Figure B.2 shows a graphical depiction of MGRA – TAP transit paths. It displays potential walk paths from an origin MGRA through three potential boarding TAPs (two of which are local bus, and one of which is rail) with three potential alighting TAPs at the destination end.

**Table B.6**  
**Zone System**

Zone System	Description	Number of Zones
MGRA	Master-Geographic Reference Area	23,000
TAZ	Traffic Analysis Zone	4,996
TAP	Transit Access Point	2,500

**Figure B.2**  
**Example Master-Geographic Reference Area – Transit Access Point Transit Accessibility**



The ABM2 includes 18 modes available to residents, including auto by occupancy, toll/non-toll choice, walk and bike modes, and walk and drive access to local, premium, or local and premium transit modes. Pay modes are those that involve paying a choice or “value” toll. Table B.7 lists the trip modes defined in the SANDAG ABM2.

To model transit flow, the ABM2 uses five transit line-haul modes: (1) Commuter Rail (COASTER); (2) Light Rail Transit (LRT) (including Trolley, SPRINTER, and Streetcar); (3) Bus *Rapid* Transit (*Rapid*)/*Rapid* Bus; (4) Express Bus; and (5) Local Bus. The first four modes are premium transit modes. The mode of access to transit includes walk, Park & Ride (PNR), and kiss & ride (KNR or drop-off).

**Table B.7**  
**Trip Modes**

Number	Mode
1	Drive Alone (Non-Toll)
2	Drive Alone (Toll Eligible)
3	Share Ride 2 Person (Non-Toll)
4	Share Ride 2 Person (Toll Eligible)
5	Share Ride 3+ Person (Non-Toll)
6	Share Ride 3+ Person (Toll Eligible)
7	Walk – Local Bus Only
8	Walk – Premium Transit Only
9	Walk – Local Bus and Premium Transit
10	PNR – Local Bus Only
11	PNR – Premium Transit Only
12	PNR – Local Bus and Premium Transit
13	KNR – Local Bus Only
14	KNR – Premium Transit Only
15	KNR – Local Bus and Premium Transit
16	Walk
17	Bike
18	School Bus (only available for school purpose)

## **ABM2 Model Flow**

To simulate how San Diego residents, non-residents, and freight travel, the SANDAG ABM 2 includes several models and steps.

Figure B.3 outlines the overall flow of the SANDAG ABM2. It starts with building highway and transit networks in the traffic assignment software, followed by traffic assignment to create congested highway and transit travel times. A parallel step is to create a year-specific active transportation network and generate walking accessibility measures between MGRAs, between MGRA and TAP, and bike accessibility measures between MGRAs and between TAZs. The congested highway and transit skims, and the walking and biking accessibility measures, are inputs to the simulated models. The congested highway skims are also inputs to the aggregate models. Once the simulated and aggregated models generate trips by residents or various travelers, the ABM2 aggregates the vehicle trips from MGRA to TAZ to TAZ matrices by time of day, by toll and non-toll, and by vehicle class, and assigns the vehicle trips to the highway network. The traffic assignment generates the congested networks by time of day. The ABM then skims the congested networks to provide accessibility for the next iteration of the simulated and aggregated models. The process iterates three feedback loops. The last iteration assigns both highway and transit trips and creates skims for land use models. The outputs from the final step are used to generate input for EMFAC emissions modeling.

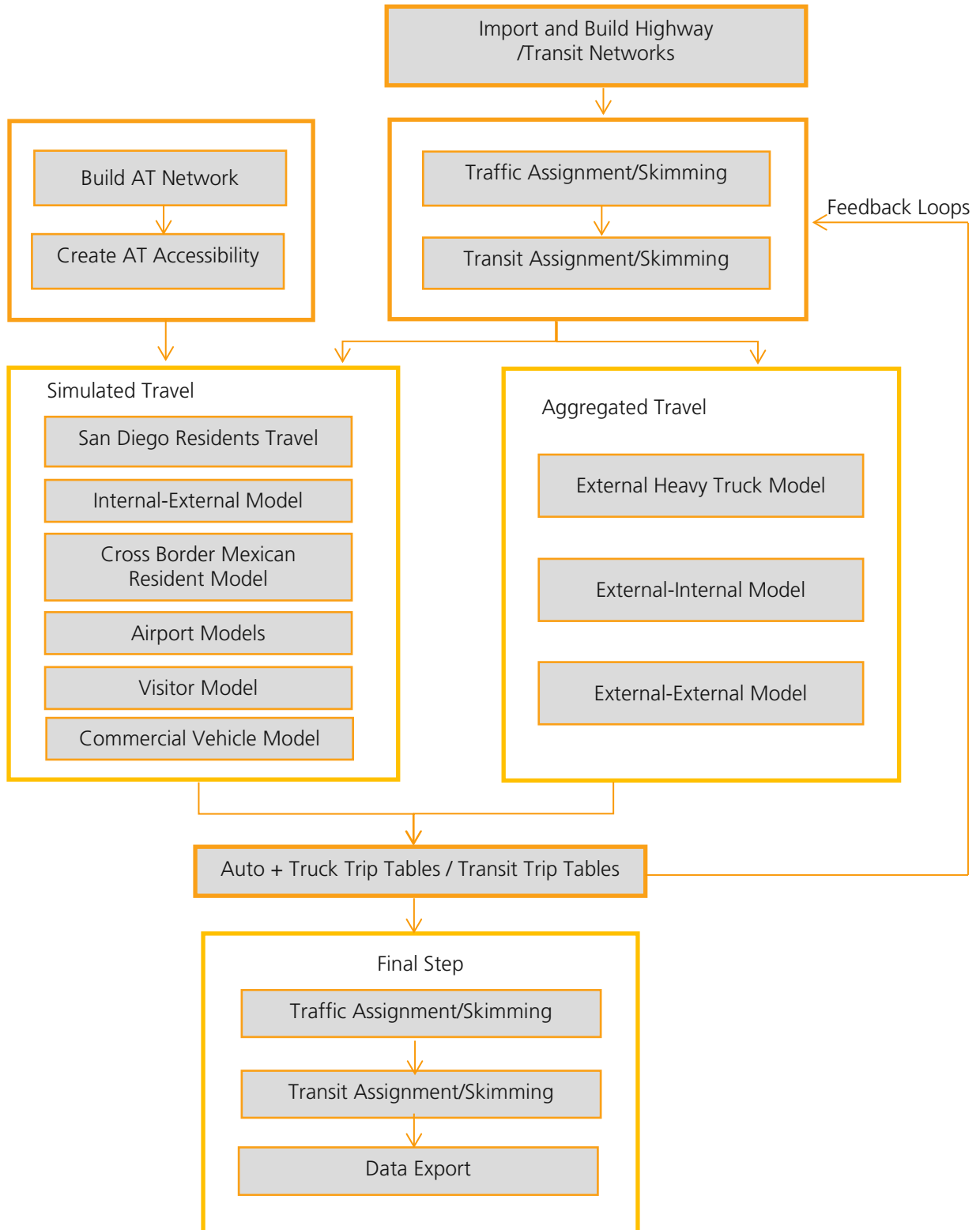
At the heart of the SANDAG ABM2 is the San Diego County residents' travel module. It simulates San Diegans' daily travel choices. In addition to the residents' travel, there are trips made by visitors, commercial vehicles, and freight transportation. A number of special travel models (commercial vehicle model, truck model, air passenger model, external trip model, visitor model, and cross-border model) account for these other sources of transportation demand. The models are run in parallel with the residents' travel module. Trips generated from the simulated and aggregate models are summed up to an auto trip matrix and transit trip matrix by time of day by mode and assigned to highway and transit networks.

After network assignment, the EMFAC model is used to generate emissions summaries based on the inputs generated by the post-processing of traffic assignment outputs.

## **San Diego Residents Travel Module**

The San Diego residents' travel module comprises numerous interacting components called "sub-modules." It starts with generating a representative population for the San Diego region. Once a representative population is created, the model predicts long-term and medium-term decisions such as a choice of work or school location and a household's choice of number of cars to own. Next, each person's day is scheduled, taking into account the priority of various activities and interaction among the household members. Once all journeys to and from home have been scheduled, the model predicts specific travel details such as mode, the number of stops to make, where to stop, and when to depart from each stop to continue the tour. The final step of the ABM2 is traffic assignment where trips are summarized by traffic analysis zones and assigned to the transportation network.

**Figure B.3**  
**SANDAG ABM2 Flow Chart**



The following section discusses the sub-modules in the order that each sub-module is taken within the San Diego residents' travel module.

*Step 1: Population synthesis (build a representative population that looks like San Diego)*

The first step is to create a "synthetic" population of San Diego County. A synthetic population is a table that has a record for every individual and household with the individual's and the household's characteristics. For example, if there are 41,000 18-year-old males in the region in 2050, there would be approximately 41,000 records in the table for males age 18, with each record also having other characteristics such as school enrollment and labor force participation status. Taken as a whole, this synthetic population represents the decision-makers whose travel choices the model will simulate in later steps. For each simulation year, a full population is synthesized to match the forecasted socioeconomic and housing characteristics of each part of the region at the zonal level. These forecasts, a key ABM2 input, come from the land use model. Synthesis works by replicating a sample of census records (each containing complete household and individual characteristics) and placing them around the region in such a way that the forecasted characteristics of each zone are matched.

*Step 2: Work and school location (assign a work location to workers and a school location to students)*

The second step predicts where each individual will go to work or school, if applicable. The work and school location sub-module simulates each worker's choice of work location, taking into account many factors, including ease-of-travel and the number of employees by occupation type in each location. The sub-module also simulates each student's choice of school, taking into account factors that include the distance from home to school, school enrollment, and district boundaries. The results from this step affect later travel choices significantly because of the prominent role that workplace and school usually play in the itinerary of workers and students.

*Step 3: Determine certain mobility characteristics of individuals and households*

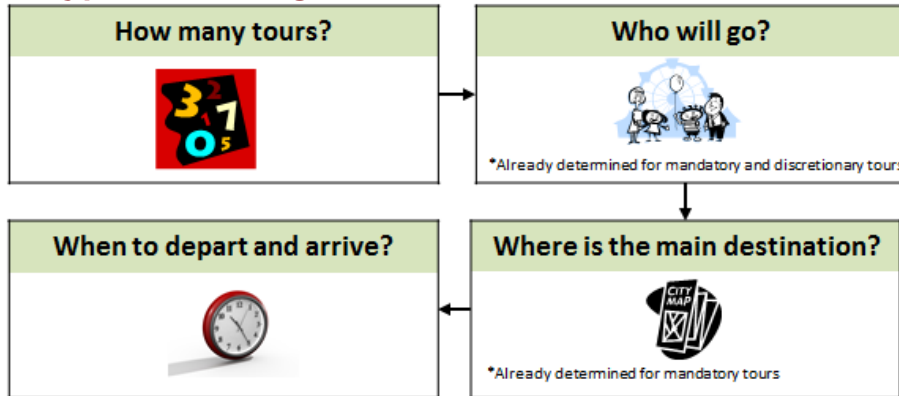
This step predicts the number of automobiles each household owns, whether each household owns a toll transponder, and whether worker parking costs are employer-reimbursed. The sub-module assigns each household zero cars, one car, two cars, three cars, or four or more cars, taking into account a number of criteria, including household size, income, number of drivers, and how easy it is to reach destinations from the household's place of residence. This step sets certain mobility characteristics that influence how people travel.

*Step 4: Schedule the day*

The fourth step begins by predicting a "daily activity" pattern for each individual. A daily activity pattern is a theme that dictates an individual's schedule. A "mandatory" pattern means that an individual travels to work and/or school, and then schedules other activities around work/school. An "at-home" pattern means that an individual's daily schedule involves no travel in the region. A "non-mandatory" pattern means that an individual's daily schedule involves traveling, but only to destinations other than work or school. The pattern type of other household members influences an individual's daily pattern type. For example, if a child stays home from school, a working parent might be more likely to stay home from work as well.

Once the sub-module selects an individual’s daily activity pattern, it schedules the tours that he or she will take. Recall that a tour is a journey that begins and ends at home, and it can include stops at other destinations on the way to or from the primary destination. The ABM2 deals with three main categories of tours: (1) mandatory tours; (2) joint tours; and (3) non-mandatory tours. Mandatory tours have work or school as the primary destination. Joint tours involve out-of-home activities that multiple members of a household partake in together. Non-mandatory tours involve purposes other than work or school that an individual undertakes independent of other members of his or her household. The sub-module schedules each tour type by predicting how many tours of that type there are, who will participate in the tour, where the main destination is, and when to depart and arrive (see Figure B.4).

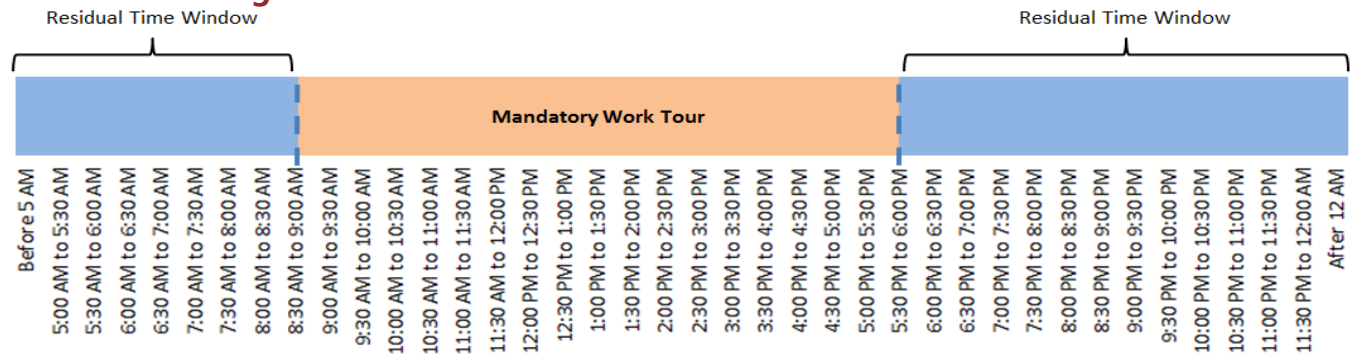
**Figure B.4**  
**Predicting Tour Type Scheduling Details**



For individuals assigned a “mandatory” activity pattern, the sub-module first assigns the number of work tours and/or school tours they will make. After the number of these mandatory tours has been determined, the sub-module selects the time of departure from and arrival back home for each tour.

After scheduling the mandatory tours, the sub-module calculates time remaining for other tours. Remaining intervals of time are called “residual time windows,” and other tours can only be scheduled in these open slots (see Figure B.5 for an example) to guarantee temporal consistency.

**Figure B.5**  
**Tour Scheduling Windows**

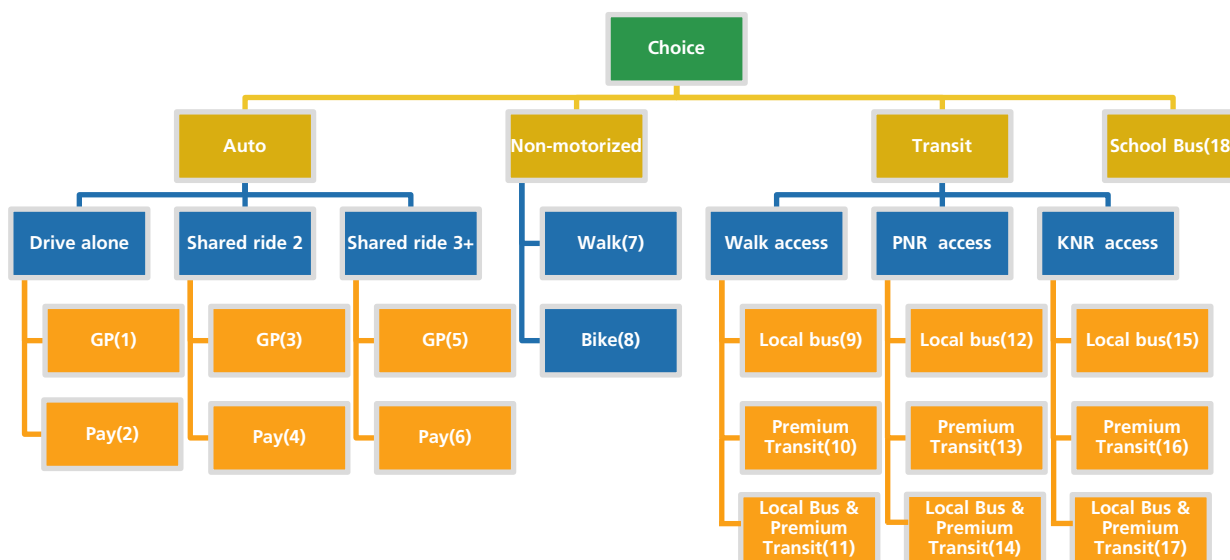


In time remaining after mandatory tours are scheduled, the sub-module determines the number of joint tours to be made for each household. It only schedules joint tours in the time windows that overlap between individuals after it accounts for mandatory activities. After the number and purpose of these joint tours has been determined, the sub-module decides which household members will participate in each joint tour and whether the joint tour must involve a combination of children and adults. The sub-module then chooses a specific destination for the tour and the specific times when tour participants will depart from and arrive back home together. Next, “non-mandatory” tours are scheduled. For each household, the sub-module decides what other tours need to be made for the purpose of household “maintenance” activities such as shopping. These tours are assigned to specific household members to carry out individually. For the person who is assigned each maintenance tour, the model selects a specific destination and schedules the tour to take place in a time window that mandatory tours and joint tours have left open. Finally, in what time remains, the model decides whether each individual will take non-mandatory “discretionary” tours. These low-priority tours involve activities related to recreation, eating out, and social functions. Discretionary tours can only take place in time windows that remain after all other tours have been scheduled. The sub-module chooses a specific destination and departure/arrival combination for each discretionary tour a person makes.

*Step 5: Make tour and trip-level decisions*

The ABM2 then selects more detailed characteristics of each tour for every traveler. This step fills in travel details after the major aspects of the day have been scheduled. Tour characteristics that need to be determined include: primary mode of the tour, how many times to stop, where to stop, and when to depart from each stop to continue the tour. Figure B.6 includes the available modes and mode hierarchy. After tour characteristics are set, the sub-module determines the mode of each trip (conditional upon tour mode). Recall that trips are segments of tours that have a given origin and destination. If the trip mode involves an automobile and the destination is a parking-constrained area, then the model chooses a parking location for the traveler at the trip destination.

**Figure B.6**  
**Tour and Trip Modes**



### *Step 6: Aggregating and Assigning Auto and Transit Trips*

The previous step provided travel details for each person down to the trip level. In this final step, the model sums all trips taken by individuals in San Diego County along with trips generated by other models that represent special categories of travel within the region that are not covered by the ABM2. The model aggregates auto trips in TAZ to TAZ matrices by time of day and assigns trips to the highway network, and aggregates transit trips in TAP to TAP matrices by time of day and assigns to the transit network.

SANDAG loads traffic using the Multimodal Multiclass Assignment function of the traffic assignment software. Multiclass assignment allows SANDAG to assign the six vehicle modes (drive alone non-toll; drive alone toll eligible; share ride 2 non-toll; share ride 2 toll eligible; share ride 3+ non-toll; and share ride 3+ toll eligible) plus the six-truck toll, and non-toll by truck class modes (light-heavy duty non-toll/toll; medium-heavy duty non-toll/toll; and heavy-heavy duty non-toll/toll) from truck model and commercial vehicle model in one combined procedure.

The traffic assignment model works by finding roads that provide the shortest travel impedance between each zone pair. Trips between zone pairs are then accumulated on road segments making up minimum paths. Highway impedances consider posted speed limits, signal delays, congestion delays, and costs. The model computes congestion delays for each segment based on the ratio of the traffic volume to roadway capacity. Motorists may choose different paths during peak hours, when congestion can be heavy, and off-peak hours, when roadways are typically free-flowing. For this reason, traffic is assigned separately for five time periods (as defined in the Key Modeling Units section). Vehicle trip tables for each scenario reflect increased trip-making due to population growth and variations in travel patterns due to the alternative transportation facilities/networks proposed. Customized programs process outputs from traffic assignment and generate total VMTs by vehicle class, and percentage of VMTs by speed bin and by vehicle class. This information is input to the EMFAC program to generate emissions summaries.

For transit assignment, traffic assignment software assigns TAP to TAP transit trips to the network. Altogether, 45 separate transit assignments are produced for five time periods: (1) walk; (2) Park & Ride; (3) kiss & ride; and (4) three transit modes. These individual assignments are summed to obtain total transit ridership forecasts.

### **Model Inputs**

The SANDAG ABM2 utilizes a variety of data as inputs. Besides the growth forecast inputs (used to provide existing and planned land use and demographic characteristics) there are three major inputs: (1) highway networks used to describe existing and planned roadway facilities; (2) transit networks used to describe existing and planned public transit service; and (3) an active transportation network used to describe non-motorized bicycle and pedestrian facilities.

The regionally significant projects and the years they are expected to open to traffic for each analysis year are documented in Tables B.11 through B.13. The design concept and scope of projects allow adequate model representation to determine intersections with regionally significant facilities, route options, travel times, transit ridership, and land use. The VMT for non-regionally significant federal projects is also accounted for in the regional emissions analysis.

### **Highway Networks**

The regional highway networks in the 2019 Federal RTP include all roads classified by local jurisdictions in their general plan circulation elements. These roads include freeways, expressways, and the Regional Arterial System (RAS). The RAS consists of all conventional state highways, prime arterials, and selected major streets. In addition, some local streets are included in the networks for connectivity between TAZs.

The route improvements and additions in the 2019 Federal RTP and 2018 RTIP, as amended, are developed to provide adequate travel service that is compatible with adopted regional policies for land use and population growth. All regionally significant projects are included in the quantitative emissions analysis. These include all state highways, all proposed national highway system routes, all regionally significant arterials, and all "other principal arterials" functionally classified by the Federal Highway Administration. These include both federal and non-federal regionally significant projects.

The networks also account for programs intended to improve the operation of the highway system, including HOV lanes, Managed Lanes, and ramp metering. Existing and proposed toll facilities also are modeled to reflect time, cost, and capacity effects of these facilities. State Route (SR) 125 South, SR 11, additional lanes on Interstate 15 (I-15) north of SR 78, and additional lanes on I-5 north of Vandegrift Boulevard are modeled toll facilities included in the Revenue Constrained Plan for the San Diego region.

In addition, several Managed/High Occupancy Vehicle (HOV) lanes are included in the Revenue Constrained 2019 Federal RTP (Table B.11, located at the end of this appendix). Facilities with proposed Managed Lanes include Interstate 5 (I-5), I-15, I-805, SR 52, SR 54, SR 78, SR 94, and SR 125. Managed Lanes are defined as reversible HOV routes and HOV routes with two or more lanes in the peak direction. Additionally, one-lane HOV facilities that operate as two-person carpool lanes in the earlier years of the 2019 Federal RTP transition to Managed Lanes by 2035. It is assumed that the excess capacity not utilized by carpools and transit on these facilities would be managed so that single-occupant vehicles could use these lanes under a pricing mechanism. Traffic flows would be managed so that the facility would operate at LOS D or better.

SANDAG maintains a master transportation network from which a specific year network, between the years 2010 and 2050, can be built. For air quality conformity analyses of the 2019 Federal RTP and 2018 RTIP, as amended, SANDAG built and verified five highway networks (2020, 2023, 2030, 2040, and 2050) from the master transportation network.

A list of the major highway and near-term regional arterial projects included in the conformity analysis, along with information on phasing for their implementation, are included in Tables B.11 and B.13. Locally funded, regionally significant projects have also been or are included in the air quality conformity analysis. These projects are funded with *TransNet* Extension funds—a 40-year, half-cent local sales tax extension approved by voters in 2004 that expires in 2048—and other local revenue sources.

### **Transit Networks**

SANDAG also maintains transit network datasets for existing and proposed transit systems. Most transit routes run over the same streets, freeways, HOV lanes, and ramps used in the highway networks. The only additional facilities that are added to the master transportation network for transit modeling purposes are:

- Rail lines used by commuter rail, Trolleys, and streetcars
- Streets used by buses that are not part of local general plan circulation elements

*Rapid* service has stop spacing similar to commuter rail stations and operating characteristics midway between rail and bus service. *Rapid* service is provided by advanced design buses operating on HOV lanes or Managed Lanes, some grade-separated transit ways, and surface streets with priority transit systems.

Bus speeds assumed in the transit networks are derived from modeled highway speeds and reflect the effects of congestion. Higher bus speeds may result for transit vehicles operating on highways with HOV lanes and HOV bypass lanes at ramp meters, compared to those routes that operate on highways where these facilities do not exist.

In addition to transit travel times, transit fares are required as input to the mode choice model. A customized procedure using the traffic assignment software replicates the San Diego region's fare policies for riders (seniors, disabled, students), which differ among:

- Local Buses, which collect a flat fare of between \$1.75 for NCTD and \$2.25 MTS (COASTER Connection buses are free and some future shuttle routes charge \$1)
- Trolleys, which charge \$2.50 for all trips
- SPRINTER, which charges \$2
- Commuter rail (COASTER), which has a zone-based fare of between \$4 and \$5.50
- Proposed regional *Rapid* routes, which are assumed to charge \$2.50 (\$5 for Express Freeway *Rapids*)
- Proposed *Rapid* Bus routes, which are assumed to charge \$2.25

Transit fares reflect ridership costs at the time the transportation model was developed. Fares are expressed in 2010 dollars and are held constant in inflation-adjusted dollars over the forecast period.

Near-term transit route changes are drawn from the Coordinated Plan, which was produced in cooperation with the region's transit agencies. Longer-range improvements are proposed as a part of the 2019 Federal RTP development and other transit corridor studies. In addition to federal- and state-funded projects, locally funded transit projects that are regionally significant have been included in the air quality conformity analysis of the 2019 Federal RTP and the 2018 RTIP, as amended. Once network coding is completed, the ABM2 is run for the applicable scenarios (2020, 2023, 2030, 2040, and 2050).

### **Active Transportation Networks**

SANDAG maintains an all-street active transportation network including existing and planned bike projects to support bike project evaluation and impact analysis. Based on the proposed bike projects in the regional bikeway system developed through *Riding to 2050 – San Diego Regional Bike Plan*, SANDAG generates year-specific active transportation networks and uses these networks to create accessibility measures from MGRA to MGRA for walking and biking and from TAZ to TAZ for biking modes. These active transportation accessibility measures are inputs to the SANDAG ABM2 to simulate people's choice of travel mode and choice of bike routes.

The active transportation networks include five classification types for bike facilities in the regional bikeway system: (1) class I – bike path; (2) class II – bike lanes; (3) class III – bike routes; (4) class IV – bike boulevard; and (5) class V – cycle track.

### **Data Sources**

Besides network inputs, SANDAG relies on several survey data to estimate and calibrate the model parameters. The most important survey data is household travel survey data. The latest household travel survey conducted for SANDAG was the 2016–2017 Household Travel Behavior Survey (HTS2016) with smartphone-based travel diaries as the primary means of travel data collection. Since 1966, consistent with the state of the practice for the California Household Travel Survey and National Household Travel Survey, SANDAG and Caltrans conduct a comprehensive travel survey of San Diego county every ten years. HTS2016 surveyed 6,139 households in San Diego County. The survey asked all household with smartphones to participate using the smartphone-based GPS travel diary and survey app (rMove) for one week and accommodated participating households without smartphones by allowing them to complete their one-day travel diary online or by calling the study call center.

Additional data needed for the mode choice components of the ABM2 come from a transit on-board survey. The most recent SANDAG survey of this kind is the 2015 Transit On-Board Survey (OBS2015). OBS2015 collected data on transit trip purpose, origin and destination address, access and egress mode to and from transit stops, the on/off stop for surveyed transit routes, number of transit routes used, and demographic information.

Population synthesis requires two types of data: (1) individual household and person census records from San Diego County; and (2) aggregate data pertaining to the socio-demographic characteristics of each zone in the region. The first type of data is available from the Public Use Micro-data Sample (PUMS), a representative sample of complete household and person records that is released with the Census and American Communities Survey. The second type of data is from the census for the base year and from land use forecasts for future years.

Table B.8 lists data sources mentioned above along with other necessary sources of data. Modeling parking location choice and employer-reimbursement of parking cost depends on parking survey data collected from 2010 into early 2011 as well as a parking supply inventory. The transponder ownership sub-model requires data on transponder users. Data needed for model validation and calibration include traffic counts, transit-boarding data, Census Transportation Planning Package (CTPP) data, and Caltrans Performance Measurement System (PeMS) and Highway Performance Monitoring System (HPMS) data.

**Table B.8**

## **ABM2 Input Data**

SANDAG Surveys	Outside Data Sources
<ul style="list-style-type: none"><li>Household Travel Behavior Survey (2016)</li><li>Transit On-Board Survey (2015)</li><li>Parking Inventory Survey (2010)</li><li>Parking Behavior Survey (2010)</li><li>Border Crossing Survey (2011)</li><li>Visitor Survey (2011)</li><li>Special Events Survey (2011)</li><li>Commercial Vehicles Survey (2011)</li></ul>	<ul style="list-style-type: none"><li>San Diego International Airport Air Passenger Survey</li><li>Traffic and Bicycle counts</li><li>Census data<ul style="list-style-type: none"><li>Census Transportation Planning Package (CTPP)</li><li>Public Use Micro-data Sample (PUMS)</li></ul></li><li>American Communities Survey (ACS)<ul style="list-style-type: none"><li>Census Transportation Planning Package (CTPP)</li><li>Public Use Micro-data Sample (PUMS)</li></ul></li><li>Transponder ownership data</li><li>Caltrans' Performance Measurement System (PeMS)</li><li>Caltrans' Highway Performance Monitoring System (HPMS)</li></ul>

## **Motor Vehicle Emissions Modeling**

### **Emissions Model**

On March 1, 2018, ARB released EMFAC2017 v1.0.2 to the public. On August 15, 2019, the U.S. EPA approved EMFAC2017 for use in conformity determinations and allowed for a two-year grace period (84 FR 41717).

Consistent with 40 CFR 93.111, EMFAC2017 v1.0.2, as the latest emissions model was used to project the regional emissions for the 2019 Federal RTP conformity determination and 2018 RTIP, as amended, conformity redetermination.

Projections of daily regional emissions were prepared for reactive organic gases (ROG) and nitrogen oxides (NOx).

The following process emissions are generated for each pollutant:

- All Pollutants – Running Exhaust, Idling Exhaust, Starting Exhaust, Total Exhaust
- ROG and total organic gasses – Diurnal Losses, Hot-Soak Losses, Running Losses, Resting Losses, Total Losses

EMFAC2017 models multiple vehicle categories, including the following:

- Passenger cars
- Motor homes
- Medium-duty trucks
- Medium-heavy-duty trucks
- School buses
- Motor coaches
- Motorcycles
- Light-duty trucks
- Light-heavy-duty trucks
- Heavy-heavy-duty trucks
- Urban buses
- Other bus types

EMFAC2017 includes updated motor vehicle fleet information from the California Department of Motor Vehicles for 2013–2016 and a new module which improves the characterization of activity and emissions from transit buses. Additionally, EMFAC2017 allows users to estimate emissions of natural gas-powered vehicles in addition to gasoline- and diesel-powered vehicles.

### **Regional Emissions Forecasts**

Regional transportation forecasts were initiated in June 2019. Output from the ABM2 was then reformatted and adjusted to be useful for emissions modeling. Beginning in June 2019, SANDAG prepared countywide forecasts of average weekday ROG and NOx emissions for 2020, 2023, 2030, 2040, and 2050 using the EMFAC2017 v1.0.2 model. ROG and NOx emissions are based upon the summer season.

### **2008 Eight-Hour Ozone Standard**

Effective December 4, 2017, the U.S. EPA found the motor vehicle emissions budgets for the Reasonable Further Progress milestone year of 2017 from the 2008 Eight-Hour Ozone Attainment Plan for San Diego County adequate for transportation conformity purposes for the 2008 ozone NAAQS (82 FR 54339).

The analysis years were selected to comply with 40 CFR 93.106(a)(1) and 93.118(a). According to these sections of the Conformity Rule, the first horizon year (2020) must be within ten years from the base year used to validate the regional transportation model (2016), the last horizon year must be the last year of the transportation plan's forecast period (2050), and the horizon years may be no more than ten years apart (2030 and 2040). The 2020 analysis year is also used to demonstrate conformity to the 2008 ozone standard attainment year.

### **2015 Eight-Hour Ozone Standard**

The SANDAG region was designated as a nonattainment area for the 2015 Eight-Hour Ozone standard with a classification of moderate, effective August 3, 2018 (83 FR 25776). Nonattainment areas with a moderate classification have an attainment date of August 3, 2024. The nearest complete ozone season (January–December) to the attainment year must be included in the analysis years (see implementation requirements for 2015 ozone standard, 83 FR 62998).

The analysis years were selected to comply with 40 CFR 93.106(a)(1), 93.118(a), and 93.119(g). According to these sections of the Conformity Rule, the first horizon year (2020) must be within ten years from the base year used to validate the regional transportation model (2016), the last horizon year must be the last year of the transportation plan's forecast period (2050), and the horizon years may be no more than ten years apart (2030 and 2040). In addition, the first analysis year must be no more than five years beyond the year in which the conformity determination is being made (2020, 2023). The year 2023 was included in the emissions analysis to demonstrate conformity to the 2015 ozone NAAQS attainment year.

This conformity determination precedes the development of a SIP for the 2015 ozone standard, which would establish new emission budgets. U.S. EPA has published the Transportation Conformity Guidance for 2015 Ozone NAAQS Nonattainment Areas, which details procedures needed to demonstrate conformity without a 2015 Ozone SIP. The conformity analysis was conducted in accordance with the above guidance and 40 CFR 93.109(c)(2).

SANDAG meets the two criteria established by the EPA guidance needed to allow for the "budget test" procedure (i.e., using emissions budgets for the 2008 ozone standard) to demonstrate conformity. The qualification criteria for the budget test are:

1. The region has approved budgets for a previous (2008 eight-hour) ozone NAAQS.
2. The non-attainment areas for the previous ozone NAAQS and 2015 ozone NAAQS are identical.

### Emissions Modeling Results

An emissions budget is the part of the SIP that identifies emissions levels necessary for meeting emissions reduction milestones, attainment, or maintenance demonstrations.

To determine conformity of the 2019 Federal RTP and redetermine conformity of the 2018 RTIP, as amended, the emission analysis described in the Regional Emissions Forecast section was used. Table B.9 shows that the projected ROG and NOx emissions from the 2019 Federal RTP and 2018 RTIP, as amended, are below the applicable ROG and NOx budgets for both the 2008 and 2015 ozone standards.

**Table B.9**  
**2019 Federal Regional Transportation Plan and 2018 RTIP, as amended**  
**Conformity Analysis for the 2008 and 2015 Eight-Hour Ozone Standards**  
**(EMFAC2017)**

Year	Average Weekday Vehicle Starts (1,000s)	Average Weekday Vehicle Miles (1,000s)	ROG		NOx	
			SIP Emissions Budget Tons/Day	ROG Emissions Tons/Day	SIP Emissions Budget Tons/Day	NOx Emissions Tons/Day
2020	10,807	83,650	23	17	42	25
2023	11,183	84,716	23	14	42	17
2030	12,565	90,457	23	11	42	14
2040	14,006	95,639	23	9	42	12
2050	15,225	100,040	23	8	42	13

Note: Emissions budgets from the *2008 Eight-Hour Ozone Attainment Plan for San Diego County (December 2016)*, which were found adequate for transportation conformity purposes by the U.S. EPA effective December 4, 2017, are used for all analysis years.

## Exempt Projects

40 CFR Section 93.126 exempts certain highway and transit projects from the requirement to determine conformity. The categories of exempt projects include safety, mass transit, air quality (ridesharing and bicycle and pedestrian facilities), and other (such as planning studies).

Table B.10 illustrates the exempt projects considered in the Revenue Constrained 2019 Federal RTP and 2018 RTIP, as amended. This table shows short-term exempt projects. Additional unidentified projects could be funded with revenues expected to be available from the continuation of existing state and federal programs.

**Table B.10**

### Exempt Projects

Project/Program Description	Project/Program Description
<i>Bikeway, Rail Trail, and Pedestrian Projects</i>	
Bayshore Bikeway	Kearny Mesa – Beaches Bicycle Corridor
Bay-to-Ranch Bikeway	Kensington – Balboa Park Bicycle Corridor
Border Access Bicycle Corridor	Mid-County Bikeway
Camp Pendleton Trail	Mira Mesa Bicycle Corridor
Carlsbad – San Marcos Bicycle Corridor	Mission Valley – Chula Vista Bicycle Corridor
Central Coast Bicycle Corridor	National City – Highland Avenue Community Corridor
Chula Vista Greenbelt	North Park – Centre City Bicycle Corridor
City Heights – Old Town Bicycle Corridor	Oceanside – Bicycle Master Plan
Clairemont – Centre City Bicycle Corridor	Otay Mesa Port of Entry Pedestrian/Bicycle Facilities
Coastal Rail Trail	Park Boulevard Bicycle Connector
East County Northern Bicycle Loop	Poway Bicycle Loop
East County Southern Bicycle Loop	San Diego Regional Bicycle Plan
El Camino Real Bicycle Corridor	San Diego River Multi-Use Bicycle and Pedestrian Path
Encinitas – San Marcos Bicycle Corridor	San Luis Rey River Trail
Escondido Creek Bike Path Bridge and Bikeway	Santee – El Cajon Bicycle Corridor
Gilman Bicycle Connector	SR 15 Bikeway
Hillcrest – El Cajon Bicycle Corridor	SR 52 Bikeway
Imperial Beach Bicycle Connector	SR 125 Bicycle Corridor
Inland Rail Trail	SR 905 Bicycle Corridor
Interstate 8 Bicycle Corridor	Tecate International Border Crossing Pedestrian Facilities
Interstate 805 Bicycle Corridor	Vista Way Bicycle Connector

**Table B.10 (continued)**  
**Exempt Projects**

Project/Program Description	Project/Program Description
<i>Safety Improvement Program</i>	<i>Transportation Systems Management</i>
Bridge Rehabilitation/Preservation/Retrofit	Traveler Information System
Collision Reduction	Bus on Shoulder Service
Emergency Response	Compass Card
Hazard Elimination/Safe Routes to School	<i>FasTrak®</i>
Highway Maintenance	Freeway Service Patrol
Safety Improvement Program	Vehicle Automation
Roadway/Roadside Preservation	Regional Vanpool Program
Smart Growth Incentive Program	Multimodal Integration and Performance-Based Management
Safe Routes to Transit	Intelligent Transportation System for Transit
Safe Routes to School	ITS Operations
<i>Transit Terminals</i>	<i>Joint Transportation Operations Center</i>
Airport Intermodal Transit Center/Terminal	Trolley Fiber Communication Network
San Ysidro Intermodal Transit Center/Terminal	Electronic Payment Systems and Universal Transportation Account
	Various Traffic Signal Optimization/Prioritization
	Transit Infrastructure Electrification
	Employer Services and Outreach
	Commuter Services and Bike Program
	Mobility Hubs
	Active Traffic and Demand Management
	Shared Mobility Services

**Implementation of Transportation Control Measures**

There are four federally approved Transportation Control Measures (TCMs) that must be implemented in San Diego, which the SIP refers to as transportation tactics. They include: (1) ridesharing; (2) transit improvements; (3) traffic flow improvements; and (4) bicycle facilities and programs.

These TCMs were established in the 1982 SIP, which identified general objectives and implementing actions for each tactic. The TCMs have been fully implemented<sup>6</sup>. Ridesharing, transit, bicycling, and traffic flow improvements continue to be funded, although the level of implementation established in the SIP has been surpassed.

## Interagency Consultation Process and Public Input

The consultation process followed to prepare the Air Quality Conformity Analysis for the 2019 Federal RTP, and 2018 RTIP, as amended, complies with the San Diego Transportation Conformity Procedures adopted in July 1998. In turn, these procedures comply with federal requirements under 40 CFR Part 93. Interagency consultation involves SANDAG (as the MPO for San Diego County), the APCD, Caltrans, CARB, U.S. DOT, and U.S. EPA.

Consultation is a three-tier process that:

1. Formulates and reviews drafts through a conformity working group.
2. Provides local agencies and the public with opportunities for input through existing regional advisory committees and workshops.
3. Seeks comments from affected federal and state agencies through participation in the development of draft documents and circulation of supporting materials prior to formal adoption.

SANDAG consulted on the development of the Air Quality Conformity Analysis of the 2019 Federal RTP and 2018 RTIP, as amended, at meetings of the San Diego Region CWG, as follows:

- On March 6, 2019, SANDAG staff presented the action plan approved by the Board on February 22, 2019, for the development of the 2019 Federal RTP.
- On April 3, 2019, SANDAG staff presented information about the criteria and procedures to be followed for its conformity analysis. Staff presented information on the 2050 Regional Growth Forecast, Travel Demand Model, Transportation Control Measures, Revenue Constrained financial assumptions, latest emissions model and emissions budgets, and public involvement and outreach.
- On June 5, 2019, SANDAG staff presented additional information on the 2019 Federal RTP schedule, travel demand modeling, and updated revenue-constrained financial assumptions.
- On July 22, 2019, through August 21, 2019, public comment was sought on the proposed draft transportation network for the 2019 Federal RTP.
- On July 26, 2019, SANDAG staff presented the 2019 Federal RTP proposed draft transportation network to the Board.
- On August 2, 2019, SANDAG staff distributed the 2019 Federal RTP proposed draft transportation network to the CWG. The project lists were discussed at the August 7, 2019, CWG meeting.
- On September 20, 2019, SANDAG staff distributed the draft conformity analysis for the 2019 Federal RTP and 2018 RTIP, as amended to the CWG for interagency consultation.
- The CWG discussed the conformity analysis for the 2019 Federal RTP conformity demonstration and a redemonstration of conformity for the 2018 RTP, as amended, at its October 2, 2019, meeting.
- On October 25, 2019, the SANDAG Board of Directors adopted Resolution No. 2019-12, adopting the air quality conformity determination, finding that the Revenue Constrained Plan is in conformance with the State Implementation Plan for air quality; adopting the 2019 Federal Regional Transportation Plan and its supporting analyses, and; adopting findings in support of a Notice of Exemption under the California Environmental Quality Act.

Members of the public were welcomed to provide comments at meetings of the CWG, the *TransNet* Independent Taxpayer Oversight Committee, the Transportation Committee, and the Board.

**Table B.11**

**Phased Highway Projects – 2019 Federal Regional Transportation Plan**

Conformity Analysis Year	Freeway	From	To	Existing	With Improvements	Capital Cost (\$2019); millions	Capital Cost (\$YOE); millions
<i>Managed Lanes / Toll Lanes</i>							
2023	SR 11/ Otay Mesa East Port of Entry (POE)	SR 125	Mexico	--	4T + POE	\$472	\$472
2023	I-5	Manchester Ave	SR 78	8F	8F+2ML	\$51	\$51
2030	I-5	SR 905	SR 54	8F	8F +2ML	\$542	\$627
2030	I-5	SR 54	SR 15	8F	10F+2ML	\$467	\$540
2030	I-5	La Jolla Village Dr	I-5/805 Merge	8F/14F	8F/14F+2ML	\$422	\$513
		I-5/I-805 Merge	SR 56	8F/14F+2ML	8F/14F+4ML		
2030	I-5	SR 78	Vandegrift Blvd	8F	8F+2ML	\$116	\$131
2030	I-15	I-8	SR 163	8F	8F+2ML	\$64	\$72
2030	I-805	SR 94	SR 15	8F	8F+2ML	\$234	\$264
2030	I-805	SR 52	Carroll Canyon Rd	8F+2ML	8F+4ML	\$778	\$996
2040	I-5	SR 56	SR 78	8F+2ML	8F+4ML	\$2,082	\$3,019
2040	SR 15	SR 94	I-805	6F	6F+2ML	\$41	\$59
2040	SR 78	I-5	I-15	6F	6F+2ML	\$1,621	\$2,127
2040	SR 94	I-5	I-805	8F	8F+2ML	\$728	\$955
2040	I-805	SR 905	Palomar St	8F	8F+2ML	\$235	\$316
2040	I-805	SR 54	SR 94	8F+2ML	8F+4ML	\$742	\$998
2040	I-805	SR 163	SR 52	8F	8F+2ML	\$195	\$269
2050	I-5	I-8	La Jolla Village Dr	8F/10F	8F/10F+2ML	\$978	\$2,067
2050	I-5	SR 78	Vandegrift Blvd	8F+2ML	8F+4ML	\$632	\$1,336

**Table B.11 (continued)**

**Phased Highway Projects – 2019 Federal Regional Transportation Plan**

Conformity Analysis Year	Freeway	From	To	Existing	With Improvements	Capital Cost (\$2019); millions	Capital Cost (\$YOE); millions
<i>Managed Lanes / Toll Lanes</i>							
2050	I-5	Vandegrift Blvd	Orange County	8F	8F+4T	\$3,165	\$6,687
2050	I-15	Viaduct		8F	8F+2ML	\$1,040	\$2,197
2050	I-15	SR 78	Riverside County	8F	8F+4T	\$1,744	\$3,684
2050	SR 15	I-5	SR 94	6F	8F+2ML	\$185	\$391
2050	SR 52	I-805	I-15	6F	6F+2ML	\$238	\$503
2050	SR 52	I-15	SR 125	4F/6F	4F/6F+2ML (R)	\$405	\$856
2050	SR 54	I-5	SR 125	6F	6F+2ML	\$151	\$319
2050	SR 94	I-805	SR 125	8F	8F+2ML	\$501	\$1,057
2050	SR 125	SR 54	I-8	6F/8F	6F/10F+2ML	\$690	\$1,457
2050	I-805	SR 94	SR 15	8F+2ML	8F+4ML	\$83	\$175
2050	I-805	SR 15	SR 163	8F/10F	8F/10F+4ML	\$1,567	\$3,310
2050	I-805	SR 163	SR 52	8F+2ML	8F+4ML	\$438	\$925
<i>Highway Projects</i>							
2030	SR 67	Mapleview St	Gold Bar Ln	2C	4C	\$82	\$92
2040	SR 52	Mast Blvd	SR 125	4F	6F	\$103	\$147
2050	I-8	2nd St	Los Coches	4F/6F	6F	\$44	\$94
2050	SR 52	I-5	I-805	4F	6F	\$151	\$319
2050	SR 56	I-5	I-15	4F	6F	\$192	\$405
2050	SR 67	Gold Bar Ln	Dye Rd	2C/4C	4C	\$591	\$1,248
2050	SR 94	Avocado Blvd	Jamacha	4C	6C	\$124	\$261
2050	SR 94	Jamacha	Steele Canyon Rd	2C/4C	4C	\$54	\$115
2050	SR 94	SR 125	Avocado Blvd	4F	6F	\$190	\$401
2050	SR 125	San Miguel Rd	SR 54	4F	8F	\$241	\$509
2050	SR 125	SR 905	San Miguel Rd	4T	8F	\$439	\$741

**Table B.11 (continued)**

**Phased Highway Projects – 2019 Federal Regional Transportation Plan**

Conformity Analysis Year	Freeway	From	To	Existing	With Improvements	Capital Cost (\$2019); millions	Capital Cost (\$YOE); millions
<i>Operational Projects</i>							
2050	I-5	SR 15	I-8	8F	8F+ Operational	\$1,985	\$4,194
2050	I-8	I-5	SR 125	8F/10F	8F/10F+ Operational	\$907	\$1,917
2050	I-8	SR 125	2nd St	6F/8F	6F/8F+ Operational	\$227	\$480
2050	SR 76	I-15	Couser Canyon	2C/4C	4C/6C+ Operational	\$178	\$376
<i>Managed Lanes Connectors</i>							
2030	I-5	I-805	North to North & South to South			*	*
2030	I-15	SR 78	East to South & North to West			\$144	\$171
2030	SR 15	I-805	North to North & South to South			\$110	\$124
2040	I-5	SR 78	South to East & West to North, North to East & West to South			\$344	\$451
2040	SR 15	SR 94	South to West & East to North			\$97	\$127
2040	I-805	SR 52	West to North & South to East			*	*
2040	I-805	SR 94	North to West & East to South			\$137	\$180
2050	I-15	SR 52	West to North & South to East			\$177	\$374
<i>Freeway Connectors</i>							
2030	SR 94	SR 125	South to East			\$94	\$106
2030	SR 94	SR 125	West to North			\$110	\$134
2040	I-5	SR 56	West to North & South to East			\$371	\$487
2040	I-5	SR 78	South to East & West to South			\$371	\$487
2050	I-15	SR 56	North to West			\$104	\$219

\* Project cost included in associated Managed Lane project

**Table B.12**

**Phased Transit Services – 2019 Federal Regional Transportation Plan**

Conformity Analysis Year	Service	Route	Description	Capital Cost (\$2019); millions	Capital Cost (\$YOE); millions
2023	Trolley	510	Mid-Coast Trolley Extension	\$919	\$919
2030	Airport Express	--	Airport Express Routes <sup>A</sup>	\$71	\$82
			Phase I: Double tracking (20-minute peak frequencies and 120-minute off-peak frequencies)	\$609	\$693
2030	COASTER	398	Phase II: Double tracking (20-minute peak frequencies and 60-minute off-peak frequencies, grade separations at Leucadia Boulevard, stations/platforms at Convention Center/Gaslamp Quarter, and extension to Camp Pendleton)	\$1,224	\$1,488
2030	<i>Rapid</i>	2	North Park to Downtown San Diego via 30th St	\$54	\$62
2030	<i>Rapid</i>	10	La Mesa to Ocean Beach via Mid-City, Hillcrest, Old Town	\$57	\$65
2030	<i>Rapid</i>	11	Spring Valley to SDSU via Southeast San Diego, Downtown, Hillcrest, Mid-City	\$154	\$199
2030	<i>Rapid</i>	28	Point Loma to Kearny Mesa via Old Town, Linda Vista	\$67	\$80
2030	<i>Rapid</i>	30	Old Town to Sorrento Mesa via Pacific Beach, La Jolla, UTC	\$143	\$172
2030	<i>Rapid</i>	41	Fashion Valley to UTC/UC San Diego via Linda Vista and Clairemont	\$75	\$90
2030	<i>Rapid</i>	90	El Cajon Transit Center to San Diego International Airport ITC via SR 94, City College (peak only)	\$27	\$32
2030	<i>Rapid</i>	120	Kearny Mesa to Downtown via Mission Valley	\$127	\$145
2030	<i>Rapid</i>	SR 163 DARs	Kearny Mesa to Downtown via SR 163. Stations at Sharp/Children's Hospital, University Ave, and Fashion Valley Transit Center	\$204	\$215
2030	<i>Rapid</i>	473	Phase I – Solana Beach to UTC/UC San Diego via Highway 101 Coastal Communities, Carmel Valley	\$58	\$70
2030	<i>Rapid</i>	550	SDSU to Palomar Station via East San Diego, Southeast San Diego, National City	\$112	\$126
2030	<i>Rapid</i>	635	Eastlake to Palomar Trolley via Main St Corridor	\$105	\$126
2030	<i>Rapid</i>	638	Iris Trolley Station to Otay Mesa via Otay, Airway Dr, SR 905 Corridor	\$52	\$67

**Table B.12 (continued)**

**Phased Transit Services – 2019 Federal Regional Transportation Plan**

Conformity Analysis Year	Service	Route	Description	Capital Cost (\$2019); millions	Capital Cost (\$YOE); millions
2030	Rapid	640A/ 640B	Route 640A: I-5 – San Ysidro to Old Town Transit Center via City College Route 640B: I-5 Iris Trolley/Palomar to Kearny Mesa via Chula Vista, National City and City College	\$208	\$229
2030	Rapid	688/689/ 690	Route 688: San Ysidro to Sorrento Mesa via I 805/ I-15/ SR 52 Corridors (Peak Only) Route 689: Otay Mesa Port of Entry (POE) to UTC/Torrey Pines via Otay Ranch/ Millennia, I-805 Corridor (Peak Only) Route 690: Mid-City to Sorrento Mesa via I-805 Corridor (Peak Only)	\$623	\$757
2030	Rapid	709	H St Trolley Station to Millennia via H St Corridor, Southwestern College	\$89	\$101
2030	Rapid	950	Extension of Iris Trolley Station to Otay Mesa Port of Entry (POE) route with new service to Imperial Beach (formerly route 905)	\$3	\$3
2030	Rapid	910	Coronado to Downtown via Coronado Bridge	\$54	\$65
2030	Shuttle	448/449	San Marcos Shuttle <sup>B</sup>	\$0	\$0
2030	SPRINTER	399	SPRINTER efficiency improvements (20-minute frequencies by 2025); double tracking Oceanside to Escondido for 10-minute frequencies and six rail grade separations at El Camino Real, Melrose Dr, Vista Village Drive / Main St, North Dr, Civic Center, Auto Pkwy and Mission Avenue	\$1,287	\$1,564
2030	Streetcar	553	Downtown San Diego: Little Italy to East Village <sup>C</sup>	\$15	\$20
2030	Streetcar	554	Hillcrest/Balboa Park/Downtown San Diego Loop <sup>C</sup>	\$39	\$45
2030	Streetcar	555	30th Street to Downtown San Diego via North Park/Golden Hill <sup>1</sup>	\$23	\$29
2030	Trolley	510	Phase I – Blue Line Frequency Enhancements and rail grade separations at 28th Street, 32nd Street, E Street, H Street, Palomar Street, and Blue/ Orange Track Connection at 12th & Imperial	\$279	\$339
2030	Trolley	520	Orange Line Frequency Enhancements and four rail grade separations at Euclid Avenue, Broadway/ Lemon Grove Avenue, Allison Avenue/ University Avenue, Severin Drive	\$363	\$453
2030	Trolley	561	UTC to COASTER Connection (extension of Route 510)	\$467	\$581

**Table B.12 (continued)**

**Phased Transit Services – 2019 Federal Regional Transportation Plan**

Conformity Analysis Year	Service	Route	Description	Capital Cost (\$2019); millions	Capital Cost (\$YOE); millions
2030			Local Bus Routes – 15 minutes in key corridors	--	--
2040	<i>Rapid</i>	103	Solana Beach to Sabre Springs <i>Rapid</i> station via Carmel Valley	\$91	\$152
2040	<i>Rapid</i>	235	Temecula (peak only) Extension of Escondido to Downtown <i>Rapid</i> (formerly Route 610)	\$133	\$222
2040	<i>Rapid</i>	440	Carlsbad to Escondido Transit Center via Palomar Airport Road	\$140	\$234
2040	<i>Rapid</i>	473	Phase II – Oceanside to Solana Beach via Hwy 101 Coastal Communities	\$118	\$197
2040	<i>Rapid</i>	477	Camp Pendleton to Carlsbad Village via College Boulevard, Plaza Camino Real	\$109	\$181
2040	<i>Rapid</i>	636	SDSU to Spring Valley via East San Diego, Lemon Grove, Skyline	\$53	\$88
2040	<i>Rapid</i>	637	North Park to 32nd St Trolley Station via Golden Hill	\$60	\$101
2040	<i>Rapid</i>	650	Chula Vista to Palomar Airport Road Business Park via I-805/I-5 (peak only)	\$112	\$186
2040	<i>Rapid</i>	653	Mid-City to Palomar Airport Road via Kearny Mesa/I-805/I-5	\$14	\$22
2040	SPRINTER	588	SPRINTER Express	\$332	\$545
2040	Streetcar	565	Mission Beach to La Jolla via Pacific Beach	\$34	\$57
2040	Trolley	510	Phase II – Blue Line rail grade separations at Taylor Street and Ash Street	\$307	\$505
2040	Trolley	562	Phase I – San Ysidro to Kearny Mesa via Chula Vista via Highland Avenue/4th Avenue, National City, Southeast San Diego, Mid-City, and Mission Valley	\$4,575	\$6,290
2040			Local Bus Routes – 10 minutes in key corridors	--	--
2050	COASTER	398	COASTER double tracking (completes double tracking; includes Del Mar Tunnel) and grade separations	\$3,921	\$8,258
2050	<i>Rapid</i>	471	Downtown Escondido to East Escondido	\$46	\$94
2050	<i>Rapid</i>	474	Oceanside to Vista via Mission Avenue/ Santa Fe Road Corridor	\$99	\$202
2050	<i>Rapid</i>	870	El Cajon to UTC via Santee, SR 52, I-805	\$100	\$190
2050	<i>Rapid</i>	890	El Cajon to Sorrento Mesa via SR 52, Kearny Mesa	\$16	\$31

**Table B.12 (continued)**

**Phased Transit Services – 2019 Federal Regional Transportation Plan**

Conformity Analysis Year	Service	Route	Description	Capital Cost (\$2019); millions	Capital Cost (\$YOE); millions
2050	SPRINTER	399	Branch Extension to Westfield North County	\$239	\$479
2050	Trolley	520	Orange Line Frequency Enhancements	\$0	\$0
2050	Trolley	530	Green Line Frequency Enhancements	\$0	\$0
2050	Trolley	560	SDSU to Downtown via El Cajon Boulevard/ Mid-City (transition of Mid-City <i>Rapid</i> to Trolley)	\$3,251	\$6,676
2050	Trolley	562	Phase II – Kearny Mesa to Carmel Valley	\$2,191	\$4,389
2050	Trolley	563	Pacific Beach to El Cajon Transit Center	\$1,579	\$3,024

- Notes:
- A. Implementation of these services is dependent upon funding from aviation and other private sources.
  - B. Capital cost to be funded by the City of San Marcos.
  - C. Streetcar cost is representative of 10 percent of the total capital cost.

**Table B.13****Phased Arterial Projects – 2019 Federal Regional Transportation Plan**

Conformity Analysis Year	SANDAG ID	Lead Agency	Project Title	Project Description
2020	CB04B	Carlsbad	El Camino Real and Cannon Road	In Carlsbad, along the eastside of El Camino Real just south of Cannon Road, widen to prime arterial standards with three through lanes, a right turn lane, and a sidewalk approaching the intersection
2020	CB13	Carlsbad	Poinsettia Lane Reach E – Cassia Drive to Skimmer Court	In Carlsbad, from Cassia Drive to Skimmer Court, construct a new 4-lane roadway with median, bike lanes, and sidewalks/trails to major arterial standards
2020	CB34	Carlsbad	Palomar Airport Road – Palomar Airport Road to Paseo Del Norte	In Carlsbad, widening along eastbound Palomar Airport Road to provide a dedicated right turn lane to southbound Paseo Del Norte
2020	CB35	Carlsbad	Palomar Airport Road – Palomar Airport Road to Paseo Del Norte	In Carlsbad, lengthen the left turn pocket along eastbound Palomar Airport Road to northbound Paseo Del Norte
2020	CHV08	Chula Vista	Willow Street Bridge Project – Bonita Road to Sweetwater Road	Replace 2-lane bridge with 4-lane bridge (Phase II)
2020	ESC02A	Escondido	East Valley/Valley Center	Widen roadway from 4 to 6 lanes with raised medians and left turn pockets; modify signal at Lake Wohlford and Valley Center Road; widen bridge over Escondido Creek
2020	ESC06	Escondido	El Norte Parkway Bridge at Escondido Creek – Kaile Lane to Key Lime Way	Construct missing 2-lane bridge at Escondido Creek
2020	ESC24	Escondido	Centre City Parkway	Mission Road to SR 78, widen 4 lanes to 6 lanes with intersection improvements

**Table B.13 (continued)**

**Phased Arterial Projects – 2019 Federal Regional Transportation Plan**

Conformity Analysis Year	SANDAG ID	Lead Agency	Project Title	Project Description
2020	NC01	National City	Plaza Boulevard Widening	Phase II of Plaza Boulevard from Highland Avenue to N Avenue, widen from 2 to 3 lanes, including a new traffic lane in each direction, new sidewalks, sidewalk widening, traffic signal upgrades, and interconnection at Plaza Boulevard
2020	SD83	San Diego	SR 163/Friars Road Interchange Modification	Widen and improve Friars Road and overcrossing; reconstruct interchange including improvements to ramp intersections (Phase 1); construct new connector roadways and structures (Phase 2); construct auxiliary lanes along northbound and southbound SR163 (Phase 3) (CIP Legacy#52-455.0,WBS# S-00851)
2020	SD102A	San Diego	Otay Truck Route Widening	Phase I (from La Media Rd to Drucker Lane) of Otay Truck Route in San Diego from Drucker Lane to La Media, add 1 lane (total 3 lanes) for trucks; from Britannia to La Media, add 1 lane for trucks and one lane for emergency vehicles (border patrol/fire department access); add one lane for trucks along Britannia from Britannia Court to the Otay Truck Route.
2020	SM22	San Marcos	South Santa Fe – Bosstick to Smilax	From Bosstick to Smilax, realign and signalize the South Santa Fe/Smilax intersection (Phase I)
2020	SM31	San Marcos	Discovery Street Improvements	From Via Vera Cruz to Bent Avenue/Craven Road, widen roadway to 4-lane secondary arterial
2020	SM48	San Marcos	Creekside Drive	Construct approximately 3,000 feet of a 2-lane collector road from Via Vera Cruz to Grand Avenue in the City of San Marcos. The road will include two 12-foot lanes, diagonal parking on the north side, and parallel parking on the south side. In addition, the project also will include a 10-foot bike trail meandering along the south side
2020	V15	Various	I-5/Gilman Drive Bridge	In San Diego, construct new overcrossing over I-5 between Gilman Drive and Medical Center Drive

**Table B.13 (continued)**

**Phased Arterial Projects – 2019 Federal Regional Transportation Plan**

Conformity Analysis Year	SANDAG ID	Lead Agency	Project Title	Project Description
2023	CB12	Carlsbad	College Blvd Reach A – Badger Lane to Cannon Road	In Carlsbad, from Badger Lane to Cannon Road, construct a new segment of College Boulevard to provide 4-lane roadway with raised median, bike lanes, and sidewalks/trails in accordance with major arterial standards
2023	CB22	Carlsbad	Avenida Encinas – widen from Palomar Airport Road to EWPCF	In Carlsbad, Avenida Encinas from Palomar Airport Road southerly to existing improvements adjacent to Embarcadero Lane, roadway widening to secondary arterial standards
2023	CB32	Carlsbad	El Camino Real Widening – Cassia to Camino Vida Roble	In Carlsbad, widen El Camino Real from 900 feet north of Cassia Road to Camino Vida Roble, along the northbound side of the roadway to provide three travel lanes and a bike lane in accordance with prime arterial standards
2023	CHV69	Chula Vista	Heritage Road Bridge	Heritage Road from Main Street/Nirvana Avenue to Entertainment Circle, widen and lengthen bridge over Otay River from 4-lane to 6-lane bridge that accommodates shoulders, sidewalk, and median; project is on Heritage Road from the intersection of Main Street and Nirvana Avenue to Entertainment Circle
2023	CNTY21	San Diego County	Bradley Ave Overpass at SR 67	Widen Bradley Avenue from Magnolia Avenue to Mollison Avenue; widen from 2 lanes to 4 lanes plus sidewalks. Replace 2-lane bridge over SR 67 with a 6-lane bridge which accommodates turn pockets
2023	CNTY24	San Diego County	Cole Grade Road	Cole Grade Road from north of Horse Creek Trail to south of Pauma Heights Road, widen to accommodate 14-foot traffic lane in both directions, 12-foot center 2-way left turn, 6-foot bike lane and 10-foot pathway

**Table B.13 (continued)**

**Phased Arterial Projects – 2019 Federal Regional Transportation Plan**

Conformity Analysis Year	SANDAG ID	Lead Agency	Project Title	Project Description
2023	CNTY88	San Diego County	Ashwood Street Corridor Improvements – Mapleview to Willow	Ashwood Street/Wildcat Canyon Road from Mapleview Street to 1100 feet north of Willow Road in Lakeside- traffic signal improvements at Mapleview and Ashwood; traffic signal installation at Willow and Ashwood/Wildcat Canyon; and the addition of turn lanes, addition of a passing lane in a non-urbanized area, bike lanes, and pedestrian facilities
2023	ESC04	Escondido	Citracado Parkway II	West Valley to Harmony Grove, widen from 2 to 4 lanes with raised medians; construct bridge over Escondido Creek
2023	ESC08	Escondido	Felicita Ave./Juniper St. – from Escondido Blvd to Juniper St. and from Juniper St. to Chestnut St.	Widen from 2 to 4 lanes with left turn pockets, raised medians on Felicita; new traffic signals at Juniper and Chestnut, Juniper, and 13th Avenue, Juniper and 15th Avenue; modify traffic signal at Juniper and Felicita
2023	NC01	National City	Plaza Boulevard Widening	Phase III of Plaza Boulevard from I-805 to Euclid Avenue, widen from 2 to 3 lanes, including a new traffic lane in each direction, new sidewalks, sidewalk widening, traffic signal upgrades, and interconnection at Plaza Boulevard
2023	O22	Oceanside	College Boulevard – Avenida de la Platte to Waring Road	In Oceanside, widen from the existing 4 lanes to 6 lanes with bike lanes and raised median
2023	SD70	San Diego	West Mission Bay Drive Bridge	In San Diego, replace bridge and increase from 4- to 6-lane bridge including Class II bike lane (52-643/S00871)
2023	SD247	San Diego	Camino del Sur and Carmel Mountain Road	On Camino del Sur from Carmel Mountain Road to Dormouse Road, and on Camino del Sur from Torrey Santa Fe to Carmel Mountain Rd, construction of Camino del Sur as a 2-lane interim roadway (S00872 and RD15000). Project also includes construction of Carmel Mountain Road, from Sundance Avenue to Camino del Sur as a 4-lane major street with Class II bicycle lanes.

**Table B.13 (continued)**

**Phased Arterial Projects – 2019 Federal Regional Transportation Plan**

Conformity Analysis Year	SANDAG ID	Lead Agency	Project Title	Project Description
2023	SM19	San Marcos	Grand Avenue Bridge and Street Improvements	From Discovery Street to San Marcos Boulevard, construct 4-lane arterial bridge and a 6-lane arterial street from Craven to Grand Avenue
2023	SM32	San Marcos	Via Vera Cruz Bridge and Street Improvements	From San Marcos Boulevard to Discovery Street, widen to 4-lane secondary arterial and construct a bridge at San Marcos Creek
2023	SM42	San Marcos	Street Improvements: Discovery Street – Craven Road to West of Twin Oaks Valley Road	In the City of San Marcos, on Discovery Street from Craven Road to west of Twin Oaks Valley Road, construct approximately 5,100 lineal feet of a new 6-lane roadway
2023	V18	Various	I-5/Voigt Drive Improvements	In San Diego, on Interstate 5, construction of the realignment of both Campus Point and Voigt Drive between I-5 and Genesee Avenue
2030	CB31	Carlsbad	El Camino Real – La Costa Avenue to Arenal Road	In Carlsbad, along El Camino Real from 700 feet north of La Costa Avenue to Arenal Road, widening along the southbound side of the roadway to provide three travel lanes and a bike lane in accordance with prime arterial standards
2030	CNTY14A	San Diego County	South Santa Fe Avenue South	South Santa Fe from 700 feet south of Woodland Drive to Smilax Road, widening of South Santa Fe Avenue to a 5-lane major road with a center left turn lane, curb, gutter, sidewalk, bike lanes, and drainage improvements from 700 feet south of Woodland Drive to Smilax Road
2030	CNTY34	San Diego County	Dye Road Extension	Dye Road to San Vicente Road – in Ramona, study, design, and construct a 2-lane community collector road with intermittent turn lanes, bike lanes, curb, gutter, and pathway/walkway
2030	CNTY35	San Diego County	Ramona Street Extension	From Boundary Avenue to Warnock Drive – in the community of Ramona, construct new road extension, 2 lanes with intermittent turn lanes, bike lanes, and walkway/pathway

**Table B.13 (continued)**

**Phased Arterial Projects – 2019 Federal Regional Transportation Plan**

Conformity Analysis Year	SANDAG ID	Lead Agency	Project Title	Project Description
2030	SD34	San Diego	El Camino Real	In San Diego on El Camino Real from San Dieguito Road to Via de la Valle, reconstruct and widen from 2 to 4 lanes and extend transition lane and additional grading to avoid biological impacts (CIP 52-479.0)
2030	SD102A	San Diego	Otay Truck Route Widening	Phase II (from Britannia to La Media Rd) of Otay Truck Route in San Diego from Drucker Lane to La Media, add 1 lane (total 3 lanes) for trucks; from Britannia to La Media, add 1 lane for trucks and one lane for emergency vehicles (border patrol/fire department access); add one lane for trucks along Britannia from Britannia Court to the Otay Truck Route
2030	SD190	San Diego	Palm Avenue/I-805 Interchange	Improvements to the Palm Avenue Bridge over I-805, including repairs to the bridge approaches; a new Project Study Report and Preliminary Environmental Assessment Report. Phase II of the project will include widening of the bridge, realignment of existing ramps, possible addition of northbound looping entrance ramp, restriping of traffic lanes, and signal modifications. Phase III will provide the ultimate build-out of the project which will incorporate improvements of Phase II plus the northbound and southbound entrance ramps (CIP 52-640.0)
2030	SM10	San Marcos	SR 78/Smilax	Construct new interchange at Smilax Road interchange and SR 78 improvements
2030	SM24	San Marcos	Woodland Parkway Interchange Improvements	From La Moree Road to Rancheros Drive, modify existing ramps at Woodland Parkway and Barham Drive; widen and realign SR 78 undercrossing and associated work
2040	SD81	San Diego	Genesee Avenue – Nobel Drive to SR 52	In San Diego, future widening to 6-lane major street north of Decoro Street and to a 6-lane primary arterial south of Decoro Street and included Class II bicycle lanes (CIP 52-458.0)

## Endnotes

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- <sup>1</sup> San Diego Forward: The Regional Plan Appendix T: SANDAG Travel Demand Model and Forecasting Documentation includes additional detail regarding the overall model structure.
- <sup>2</sup> For documentation regarding the model conversion project, see SANDAG Travel Model in Emme User Guide, INRO consultants, 2017.
- <sup>3</sup> For documentation regarding the SHRP2 C04 model enhancements, see Pricing and Travel Time Reliability Enhancements in the SANDAG Activity-Based Travel Model: Final Report, Prepared for San Diego Association of Governments by RSG, June 30, 2016.
- <sup>4</sup> For documentation regarding the disaggregate commercial vehicle model, see Final CVM Model Development and Calibration Project Deliverable: M.9B by HBA Spectro Incorporated, July 2014.
- <sup>5</sup> Full-time employment is defined in the SANDAG 2006 household survey as at least 30 hours/week. Part-time is less than 30 hours/week on a regular basis.
- <sup>6</sup> 2008 Eight-Hour Ozone Attainment Plan for San Diego County, San Diego County Air Pollution Control District, December 2016

**Notice of Exemption**

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**To:**

Office of Planning and Research  
P.O. Box 3044, Room 113  
Sacramento, CA 95812-3044

County Clerk  
County of San Diego  
1600 Pacific Highway, Suite 260  
San Diego, CA 92101

**From:**

San Diego Association of Governments (SANDAG)  
401 B Street, Suite 800  
San Diego, CA 92101

**Project Title:** San Diego Forward: The 2019 Federal Regional Transportation Plan

**Project Location:** San Diego County

**Description of Specific Location, Nature, Purpose, and Beneficiaries of Project:**

On February 22, 2019, the SANDAG Board of Directors approved an action plan to develop a bold new vision for the 2021 Regional Plan, with the goal of transforming the way people and goods move throughout the San Diego region. While work progresses to develop a 2021 Regional Plan that will combine all state and federal law requirements into one document, SANDAG has concurrently been developing San Diego Forward: The 2019 Federal Regional Transportation Plan (2019 Federal RTP) to comply with federal requirements, including air quality conformity, to meet a December 2019 deadline based in federal law.

The 2019 Federal RTP carries forward the projects, programs, and policies included in the 2015 Regional Plan, while development of the 2021 Regional Plan continues. The 2019 Federal RTP uses the latest modeling tools and Regional Growth Forecast as well as updated costs and revenue assumptions and meets all federal RTP requirements. The 2019 Federal RTP also includes the Air Quality Conformity Determination demonstrating the 2019 Federal RTP's conformity with the State Implementation Plans for air quality, in accordance with the Transportation Conformity Requirements in 40 C.F.R. 51 and 93, as required by the 1990 Clean Air Act Amendments.

**Name of Public Agency Approving and Carrying out Project:** San Diego Association of Governments

**Exempt Status:**

- Statutory Exemption. State statute: Government Code Section 65080(d)(2)(e) as amended by Assembly Bill 1730 (AB 1730)

**Reasons why project is exempt:**

AB 1730 (Gonzalez), which was signed into law on October 8, 2019, amends California Government Code Section 65080(d) to state that SANDAG's update to the 2015 regional transportation plan, "submitted to federal agencies for purposes of compliance with federal laws applicable to regional transportation plans and air quality conformity . . . shall not constitute a project for purposes of the California Environmental Quality Act." By adding this language in California Government Code Section 65080(d)(2)(e), the California Legislature codified its intent that the 2019 Federal RTP be statutorily exempt from the California Environmental Quality Act

**Lead Agency Contact Person:** Keith Greer

**Area Code/Telephone:** 619-699-7390

**Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Title:** Principal Regional Planner

- Signed by Lead Agency