Appendix F.1

Responses to Comments on the Draft SEIR
APPENDIX F.1
RESPONSE TO COMMENTS ON THE DRAFT SEIR

The Draft Supplemental Environmental Impact Report (SEIR) for the Amendment to the 2021 Regional Plan (proposed Amendment) was distributed for public review on July 13, 2023, for a 47-day public review period that ended August 28, 2023. The Draft SEIR and all appendices were available for review online at www.sandag.org; at San Diego Association of Governments (SANDAG) offices located at 401 B Street, Suite 800, San Diego, California 92101; and at the San Diego Central Library located at 330 Park Boulevard, San Diego, California 92101. The Central Library facilitates inter-library transfers upon request by a member of the public in order to provide access at local libraries. On a case-by-case basis, the San Diego Central Library can also digitize documents and transfer them to other libraries. No such requests were made of SANDAG with respect to providing access to the Draft SEIR during the public comment period.

A total of 21 comment letters, web comments, or other written documents such as emails (hereinafter collectively referred to as “comment letters”) were received before the close of the public review period. Table F-1 provides a list of all comments received, including the name of the public agency, organization, or individual that submitted the letter and the date of the letter. Each comment letter also has been assigned an identification number in Table F-1.

In this appendix, each comment letter is reproduced in its entirety and is aligned side-by-side with the response(s) to the letter. Where commenters provided multiple comments, each comment is identified with a bracket and an identifying number in the margin of the comment letter. All comment letters received on the Draft SEIR were evaluated for significant environmental issues, and written responses to comments on environmental issues were prepared. In addition to comments related to environmental issues, several of the comment letters submitted on the Draft SEIR also include individual comments on the content of the Amendment itself that are not related to the adequacy of the Draft SEIR. All comments will be provided to the SANDAG Board of Directors for their consideration. For ease of reference, responses to comments on the proposed Amendment are included as Appendix F.2 to the Final SEIR.

Table F-1
List of Comment Letters on the Draft SEIR for the Proposed Amendment

<table>
<thead>
<tr>
<th>Identification Number</th>
<th>Public Agency, Organization, or Individual</th>
<th>Date of Letter</th>
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<tbody>
<tr>
<td>1</td>
<td>Diane Ake</td>
<td>7/22/2023</td>
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<tr>
<td>2</td>
<td>Mike Bullock</td>
<td>8/28/2023</td>
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<td>3</td>
<td>Carrie Chambers</td>
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<td>4</td>
<td>City of Carlsbad</td>
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<td>6</td>
<td>Charlotte Kingston</td>
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<td>7</td>
<td>Moses Lonetto</td>
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<td>Beatrice Miller</td>
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<td>Richard Moranville</td>
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<td>10</td>
<td><a href="mailto:Neygom@gmail.com">Neygom@gmail.com</a></td>
<td>7/22/2023</td>
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<tr>
<td>11</td>
<td>North Park Planning Committee</td>
<td>8/5/2023</td>
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<tr>
<td>12</td>
<td>Greg Payne</td>
<td>7/22/2023</td>
</tr>
<tr>
<td>13</td>
<td>Christine Sprecco</td>
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## Identification Number

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<td>14</td>
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<td>Bruce Truax</td>
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<td>16</td>
<td>Don Wood</td>
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### Comments Received via Website

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<td>18</td>
<td>Michael Hampson</td>
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<td>Michael LaDouceur</td>
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<td>20</td>
<td>Harry Nunns</td>
<td>8/6/2023</td>
</tr>
<tr>
<td>21</td>
<td>Daniel Parker</td>
<td>8/11/2023</td>
</tr>
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</table>
COMMENT LETTER 1: DIANE AKE

This comment expresses opposition to the road usage charge. The proposed Amendment removes the regional road user charge from the approved Plan. This comment is not related to the adequacy of the Draft SEIR. As such, no further response is required.
COMMENT LETTER 2: MIKE BULLOCK

RESPONSE TO COMMENT 2-1
Initially, please note that SANDAG’s Board has not voted to “weaken the original RTP 2021.” This decision on whether to approve removal of the road usage charge from the approved Plan will be made only after the SANDAG Board considers the information in this SEIR and makes the appropriate CEQA findings. The comment incorrectly states that SB 375 includes a driving reduction criterion of 19 percent below 2005 levels by 2035. GHG emissions reduction targets established for SANDAG by CARB in 2018 under SB 375 are to reduce per capita CO₂ emissions 15 percent below 2005 levels by 2020, and to 19 percent below 2005 levels by 2035.

As discussed under Impact GHG-2 (Conflict with the SANDAG Region’s Achievement of SB 375 GHG Emissions Reduction Target for 2035) in Section 4.3.4 of Chapter 4, Greenhouse Gas Emissions, of this Draft SEIR, implementation of the proposed Amendment would reduce per capita CO₂ emissions from passenger cars and light-duty trucks to 18.6 percent below 2005 levels by 2035. CARB’s Final SCS Program and Evaluation Guidelines provide: “Metropolitan planning organizations (MPOs) that rely on a combination of modeled and off-model methods to estimate per capita GHG emission reductions from its RTP/SCS should round to the nearest integer percent” (Final SCS Program and Evaluation Guidelines, Appendices, at p. 28). Therefore, after rounding to 19 percent, implementation of regional growth and land use change and transportation network improvements and programs would not conflict with SB 375 GHG emission reduction targets.

RESPONSE TO COMMENT 2-2
This comment incorrectly states that the 2022 CARB Scoping Plan requires a road user charge and other mitigation measures not included in either the approved Plan or the proposed Amendment. Transportation Sustainability is listed as a Key Sector in Chapter 4 of the 2022 Scoping Plan, and reducing VMT is recognized as a key element to reducing the overall transportation energy demand.
Appendix E (Sustainable and Equitable Communities) identifies a series of policies that, if implemented, could help achieve the recommended VMT reduction trajectory.

One of the objectives under Strategy Area 1: Plan and Invest in a Sustainable Transportation System includes the implementation of a state mileage-based fee program as an alternative to the gas tax. Under the 2022 Scoping Plan, mileage-based fee pilots in the State are to be completed by 2025. The proposed Amendment would remove the regional road usage charge from the approved Plan but would not impact any state pilot programs.

As analyzed in Section 4.3.4 of Chapter 4.3, Greenhouse Gas Emissions, of the Draft SEIR, Impact GHG-5 (Be inconsistent with the State’s ability to achieve the 2030 reduction target of SB 32, the accelerated 2030 reduction target of the 2022 Scoping Plan, and long-term reduction goals of Executive Orders S-3-05, B-55-18, and AB 1279) would result in new more severe and significant impacts in comparison to the approved Plan PEIR for years 2030, 2045, and 2050. Mitigation measures would help reduce regional GHG emissions by reducing VMT, increasing use of zero-emission fuels, sequestering carbon from the atmosphere, and other measures; they would reduce inconsistency of the proposed Amendment’s GHG emissions with the State’s ability to achieve the SB 32, 2022 Scoping Plan, EO B-55-18, EO S-3-05, and AB 1279 GHG reduction goals. However, full implementation of the changes required to achieve these goals is beyond SANDAG’s and local agencies’ current jurisdiction and authority. As such, they were identified as significant and unavoidable. While the proposed Amendment results in significant impacts related to VMT and GHG, anticipated reductions in per capita VMT and GHG, along with proposed mitigation measures, would reduce inconsistency of the proposed Amendment with the State’s ability to achieve VMT and GHG goals, and puts SANDAG on a trajectory that more closely aligns with regulatory targets. Reducing GHG emissions and achieving state goals related to carbon neutrality requires actions at all levels of government. SANDAG looks to support and encourage local jurisdictions, state agencies, and other partners to reduce emissions beyond what is included in the proposed Amendment.
RESPONSE TO COMMENT 2-3

This comment inaccurately describes the California Supreme Court’s decision with respect to consideration of the Governor’s Executive Order S-3-05 in SANDAG’s 2011 RTP. The California Supreme Court held that “SANDAG, in analyzing greenhouse gas impacts at the time of the EIR, did not abuse its discretion by declining to adopt the Executive Order as a measure of significance or to discuss the Executive Order more than it did” (Cleveland National Forest Foundation v. San Diego Assn. of Governments (2017) 3 Cal.5th 497, 518).

The Governor’s Office of Planning and Research (OPR) published the CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review technical advisory on June 19, 2008, which offers technical guidance on addressing climate change and GHG emissions in CEQA planning. The OPR’s technical advisory does not include climate stabilization as a requirement for projects under CEQA. The Attorney General’s comments submitted on the DEIR for the SANDAG 2050 RTP/SCS do not constitute official legal policy. Climate stabilization is not an environmental topic in Appendix G of the CEQA Statute and Guidelines nor a requirement for a Project under CEQA.

As shown in Table ES-1 of the Executive Summary of this Draft SEIR, the proposed Amendment would result in significant and unavoidable impacts to Air Quality, GHG Emissions, Noise and Vibration, and Transportation. Should the SANDAG Board chose to certify the Draft SEIR and adopt the proposed Amendment, it will also adopt a Statement of Overriding Considerations discussing specific reasons why the agency found that the “benefits of the project outweigh the significant effects on the environment.”

As analyzed in Section 4.3.4 of Chapter 4.3, Greenhouse Gas Emissions, of the Draft SEIR, Impact GHG-5 (Be inconsistent with the State’s ability to achieve the 2030 reduction target of SB 32, the accelerated 2030 reduction target of the 2022 Scoping Plan, and long-term reduction goals of Executive Orders S-3-05, B-55-18, and AB 1279) would result in new more severe and significant impacts in comparison to the approved Plan PEIR for years 2030, 2045, and 2050.
Mitigation measures would help reduce regional GHG emissions by reducing VMT, increasing use of zero-emission fuels, sequestering carbon from the atmosphere, and other measures; they would reduce inconsistency of the proposed Amendment’s GHG emissions with the State’s ability to achieve the SB 32, 2022 Scoping Plan, EO B-55-18, EO S-3-05, and AB 1279 GHG reduction goals, and puts SANDAG on a trajectory that more closely aligns with regulatory targets. However, full implementation of the changes required to achieve these goals is beyond SANDAG’s and local agencies’ current jurisdiction and authority. As such, they were identified as significant and unavoidable. SANDAG looks to support and encourage local jurisdictions, state agencies, and other partners to reduce emissions beyond what is included in the proposed Amendment.

The comment further states that the regional transportation plan (RTP) should reduce driving by 25 percent below 2019 levels by 2030. The 2022 CARB Scoping Plan includes the Scoping Plan Scenario, a series of actions that are expected to reduce GHG emissions. One of the primary actions is to reduce vehicle miles traveled (VMT) per capita by 25 percent below 2019 levels by 2030, and 30 percent below 2019 levels by 2045. Note that CARB’s VMT reduction targets and strategies of the 2022 Scoping Plan are not regulatory requirements but would inform future planning processes. CARB does not have the authority to set regulatory limits on VMT; the authority to set regulatory limits on VMT largely lies with state, regional, and local transportation, land use, and housing agencies.

As discussed under Impact TRA-2 (Conflict or be inconsistent with CEQA Guidelines Section 15064.3 by not achieving the substantial VMT reductions needed to help achieve statewide GHG reduction goals) in Section 4.5.4 of Chapter 4.5, Transportation, of this Draft SEIR, implementation of the proposed Amendment, under Year 2030 conditions, would result in a 6.09 percent decrease in the region’s VMT per capita, as compared to Starting Year – Year 2019 conditions, and a 10.29 percent decrease below 2019 levels by 2045. This is less than the 25 percent VMT per capita reduction below 2019 levels by 2030 goal and less than the 30 percent reduction below 2019 levels by 2045 goal and is a substantially more severe significant impact in
comparison to the approved Plan PEIR. The GHG emissions mitigation measures identified in the approved Plan PEIR would still be applicable to the proposed Amendment.

As stated in Section 4.5.4 of Chapter 4.5, *Transportation*, of this Draft SEIR, mitigation measure TRA-2: Achieve Further VMT Reductions for Transportation and Development Projects includes minor updates resulting in further reductions in project level VMT compared to approved Plan PEIR.

Nonetheless, the regional VMT per capita is more than 1.1 percent higher than the threshold to meet, or keep pace with, the State’s GHG reduction goals under each horizon year. Additionally, the identified VMT reductions associated with the proposed mitigation measures would not significantly reduce the daily VMT generated within the San Diego region to a point where it would no longer be considered substantial. Therefore, this impact would remain significant and unavoidable under the proposed Amendment. The State has indicated that additional State policy actions and funding would be required to close the VMT gap between what the MPOs could achieve through implementation of their SCSs, and reductions needed to meet State goals. In addition, transportation sponsors other than SANDAG, such as Caltrans, must evaluate and potentially mitigate any induced VMT that may be associated with the implementation of enhancements to the freeway and State Highway system.
RESPONSE TO COMMENT 2-4

This comment proposes changes to SANDAG’s parking management system to achieve further VMT reduction under the proposed Amendment.

SANDAG recognizes that effective parking management policies contribute to the region’s ability to meet the SB 375 GHG emissions reduction target by applying parking pricing and reduced parking supply assumptions, which are included in the travel demand model for the approved Plan (see Appendix D: Sustainable Communities Strategy Documentation and Related Information of the approved Plan).

SANDAG developed a Parking Strategies for Smart Growth guide as part of their Planning Tools for the San Diego Region, which contains parking strategies that SANDAG is recommended to pursue to reduce parking demand. SANDAG also developed a regional parking management toolbox that provides jurisdictions within the San Diego region with a framework for evaluating, implementing, and managing parking management strategies that support their economic development, sustainability, and mobility goals.

The proposed Amendment would remove the regional road usage charge from the approved Plan and would not amend any other parking or curb management strategies listed in Appendix B: Implementation Actions of the approved Plan.

As discussed in Chapter 2 of the approved Plan, through the San Diego region’s Transit Demand Management (TDM) program, formerly known as iCommute, SANDAG offers complimentary assistance to employers to create policies to influence employee commuting choices, such as commuter benefits, financial incentives, and parking management strategies. The approved Plan envisions a regional TDM policy that requires employers and developers to provide transportation benefits and on-site amenities that encourage people to use sustainable transportation choices.

While the authority to implement parking and curb policies remains with local jurisdictions, SANDAG plays a unique role of informing these policies by sharing resources and best practices and serving as the
Appendix F.1: Response to Comments on the Draft SEIR

regional Mobility Data Clearinghouse. See Response to Comment 2-11 related to the ongoing collaborative development of the goals, policies, and mitigation measures for the 2025 Regional Plan.

RESPONSE TO COMMENT 2-5

This comment proposes recommendations for regional parking management policies to achieve further VMT reduction under the proposed Amendment. These recommendations have been noted and will be forwarded to the Board for further consideration. See Response to Comment 2-4 regarding parking management strategies.
RESPONSE TO COMMENT 2-6

This comment proposes recommendations for regional parking management policies to achieve further VMT reduction under the proposed Amendment. See Response to Comment 2-4 regarding parking management strategies.

RESPONSE TO COMMENT 2-7

This comment proposes recommendations for regional parking management policies to achieve further VMT reduction under the proposed Amendment. See Response to Comment 2-4 regarding parking management strategies.

RESPONSE TO COMMENT 2-8

This comment discusses the VMT reduction proposals in the 2022 CARB Scoping Plan. This comment is not related to the adequacy of the Draft SEIR. As such, no further response is required. See Response to Comment 2-3 regarding VMT analysis in the Draft SEIR for the proposed Amendment compared to the approved Plan PEIR and discussion of how revised Mitigation Measure TRA-2 in the Draft SEIR would decrease project-related VMT.
Appendix F.1: Response to Comments on the Draft SEIR

RESPONSE TO COMMENT 2-9
This comment provides recommendations for the State related to transportation pricing strategies. This comment is not related to the adequacy of the Draft SEIR. As such, no further response is required.

RESPONSE TO COMMENT 2-10
Thank you for your comment. The commenter’s biographical information does not pertain to the proposed Amendment or adequacy of the SEIR. No further response is required.

RESPONSE TO COMMENT 2-11
This comment requests SANDAG to make either the proposed Amendment and Draft SEIR or the 2025 Regional Plan compliant with the 2022 CARB Scoping Plan. See Response to Comment 2-2 regarding the proposed Amendment and the 2022 CARB Scoping Plan.

Goals, policies, and mitigation measures for the 2025 Regional Plan have not yet been determined. SANDAG is currently conducting community workshops to educate the public on the ongoing short-term transportation projects and programs and solicit public comments on these efforts. See the 2025 Regional Plan Public Involvement Plan: A Guide for Public & Stakeholder Engagement for the 2025 Regional Plan for more information.
Appendix F.1: Response to Comments on the Draft SEIR

RESPONSE TO COMMENT 2-12

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. Please note that Response to Comments 2-12 through 2-90 apply to the proposed Amendment or to the previously approved Plan or its PEIR, not to the adequacy of the Draft SEIR, but responses are nevertheless provided. Please refer to subsequent individual responses to comments below for detailed responses. Also, see Response to Comment 2-11 related to the ongoing collaborative development of the goals, policies, and mitigation measures for the 2025 Regional Plan.
I have also attached all 10 of the letter’s references. They are in order and named to show their reference number.

Thank you for your leadership in performing your critical work. Thank you for reading this material and for providing the comments and response. Please let me know if you would like to meet to discuss this letter or related topics.

Highest regards,

[Signature]

Mike Shulock
1030 Rayberry Drive
Oceanside, CA 92054
760 421 9482

Former California Democratic Party Delegate, 78th Assembly District (author of 2 adopted resolutions and 3 Platform changes)
Former Elected (now Associate) Member of the San Diego County Democratic Party Central Committee (author of 5 adopted resolutions)

Final title before leaving Aerospace: Senior Staff Systems Engineer

Air and Waste Management Association published and presented papers:

Author, The Development of California Light-Duty Vehicle (LDV) Requirements to Support Climate Stabilization: Fleet-Emission Rates & Per-Capita Driving
Author, A Climate-Killing Regional Transportation Plan Winds Up in Court: Background and Remedies
Co-author, A Plan to Efficiently and Conveniently Unbundle Car Parking Costs

Quotes from the Secretary General of the UN

1. We have a Code Red Climate Emergency
2. We are on a path to an unlivable planet
3. We are driving towards Climate Hell with our feet on the accelerator
4. We are dangerously close to the point of no return
Appendix F.1: Response to Comments on the Draft SEIR

RESPONSE TO COMMENT 2-13

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. No further response is required. Please refer to subsequent individual responses to comments below for detailed responses. Also, see Response to Comment 2-11 regarding the ongoing collaborative development of the goals, policies, and mitigation measures for the 2025 Regional Plan.

RESPONSE TO COMMENT 2-14

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. The commenter’s attached references are provided in Appendix F.3. See Response to Comment 2-11 regarding the ongoing collaborative development of the goals, policies, and mitigation measures for the 2025 Regional Plan.

January 10, 2023

Kirsten Uchitel, Associate Regional Planner SANDAG
401 B Street, Suite 800
San Diego, CA 92101
Kirsten.Uchitel@sandag.org

Subject: Scoping the SEIR for Removing the RUC from the 2021 RTP AND the NOP letter from SANDAG dated December 9, 2022.

SANDAG,

I appreciate the opportunity to comment on this important subject.

Introductory Comments

Removing the RUC from the 2021 RTP is a major change. As will be shown in this letter, there are many indications that it would be ill-advised. If the SEIR exposes this truth, the SANDAG Board could remove it and the SANDAG staff could get on with the work of producing the 2025 RTP, with an improved RUC and implementing the 2021 RTP. The state RUC should be

- a replacement for the state gas tax,
- means based,
- designed to protect privacy,
- value-priced, with a dynamic congestion pricing algorithm to ensure free flow on at least some lanes, and
- implemented as soon as possible, in recognition of our 2030 climate stabilization requirement to significantly reduce per-capita driving (to be shown.)

The 2025 RTP could add in additional charges if needed in coordination with the state. Reference 1 has more information on why we need a RUC. It also describes many of the needed RUC characteristics. Reference 2 shows the strong support from the environmental community for a RUC.

Comments on SANDAG’s NOP of a SEIR for the RTP 2021 1 of 29
As will be shown, doing a legal SEIR will require that SANDAG learn how to do an RTP that achieves the first-occurring climate stabilization requirement. Learning that will help SANDAG understand that the 5 Big Moves (the 2021 RTP) can be a framework allowing the changes we so desperately need. SANDAG will learn what is important (supporting climate stabilization at a livable level) and how it can be done.

RESPONSE TO COMMENT 2-15

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-16

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR.

GHG impacts related to light duty vehicles (LDV) are addressed in Impact GHG-1 in Section 4.3.4 of Chapter 4.3, Greenhouse Gas Emissions, of this Draft SEIR. Cumulative impacts are addressed in Chapter 5 of the Draft SEIR. The proposed Amendment’s incremental contributions to cumulative noise and vibration and air quality impacts in years 2025, 2035, and 2050 would remain cumulatively considerable post-mitigation. Cumulative GHG emissions impacts in years 2030, 2045, and 2050 would remain cumulatively post-mitigation. Cumulative energy impacts would not be significant. Cumulative transportation impacts for years 2025, 2030, 2035, 2045, and 2050 would remain cumulatively considerable post-mitigation.

See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-17

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR.

See Response to Comment 2-1 regarding SANDAG’s obligations and purpose under SB 375. The term “target” is used in SB 375 and is therefore used in the proposed Amendment and SEIR.

As stated in the CEQA and Climate Change: Addressing Climate Change Through California Environmental Quality Act (CEQA) Review technical advisory, CARB acknowledges that transportation accounts for approximately 40 percent of GHG emissions, with light-duty vehicles (LDVs) accounting for 30 percent of overall GHG emissions. GHG emissions from LDVs under the proposed Amendment are addressed under Impact GHG-1 in Section 4.3.4 of Chapter 4.3, Greenhouse Gas
Emissions, of this Draft SEIR. As addressed in Table 4.3-5, 4.3-6, and 4.3-7, under the proposed Amendment, GHG emissions from passenger cars and LDVs would increase compared to the approved Plan for years 2025, 2035, and 2050.

See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

**RESPONSE TO COMMENT 2-18**

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the climate stabilization requirements for years 2030 and 2045.

See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

**RESPONSE TO COMMENT 2-19**

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses climate stabilization in reference to SB 375.

See Response to Comment 2-1 regarding GHG emission reduction mandates under SB 375. See Response to Comment 2-3 regarding the new more severe and significant impacts in comparison to the approved Plan PEIR under Impact GHG-5. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.
Appendix F.1: Response to Comments on the Draft SEIR

**RESPONSE TO COMMENT 2-20**

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses climate stabilization in reference to EO S-3-05. See Response to Comment 2-3 regarding the new more severe and significant impacts in comparison to the approved Plan PEIR under Impact GHG-5, as well as climate stabilization and climate change requirements under the CEQA process.

**RESPONSE TO COMMENT 2-21**

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses climate stabilization in reference to EO S-3-05. See Response to Comment 2-1 regarding GHG emission reduction mandates under SB 375. See Response to Comment 2-3 regarding the new more severe and significant impacts in comparison to the approved Plan PEIR under Impact GHG-5, as well as climate stabilization and climate change requirements under the CEQA process.

**RESPONSE TO COMMENT 2-22**

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the 2030 and 2045 climate stabilization targets. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

**RESPONSE TO COMMENT 2-23**

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses GHG emissions from LDVs relative to the 2030 climate stabilization requirement. See Response to Comment 2-17 regarding GHG emissions impacts related to LDVs. See response to Comment 2-3 regarding the new more severe and significant impacts in comparison to the approved Plan PEIR under Impact GHG-5, as well as climate stabilization and climate change requirements under the CEQA process.
RESPONSE TO COMMENT 2-24

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the adequacy and legality of the prior EIR in regard to climate stabilization. See Response to Comment 2-1 GHG emission reduction mandates under SB 375. See Response to Comment 2-11 regarding the ongoing collaborative development of the goals, policies, and mitigation measures for the 2025 Regional Plan. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-25

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the adequacy and legality of the EIR in regard to climate stabilization. The Draft SEIR analyzes whether the removal of the regional road usage charge would result in new or more severe significant impacts than disclosed in the approved Plan PEIR. As shown in Table ES-1 of the Executive Summary of this Draft SEIR, the proposed Amendment would result in new more severe significant and unavoidable impacts to Air Quality, GHG Emissions, Noise and Vibration, and Transportation. Should the SANDAG Board chose to certify the Draft SEIR and adopt the proposed Amendment, it will also adopt a Statement of Overriding Considerations discussing specific reasons why the agency found that the “benefits of the project outweigh the significant effects on the environment.” See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-26

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses climate stabilization. See Response to Comment 2-27 regarding environmental topics of analysis under CEQA for this Draft SEIR. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.
RESPONSE TO COMMENT 2-27

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses potential impacts to environmental resources.

Under SB 375, SANDAG is required to develop a regional transportation plan/sustainable communities strategy (RTP/SCS) which demonstrates goals, policies, and strategies that SANDAG will undertake to meet the GHG emissions reduction targets established by CARB. SANDAG is required to evaluate and address the environmental impacts of the RTP/SCS in an Environmental Impact Report (EIR) as part of the CEQA process. Appendix G: Environmental Checklist Form of the CEQA Statute and Guidelines includes a checklist of 19 environmental topics that must be evaluated in the EIR. This Draft SEIR evaluates the environmental factors impacted by the removal of the regional road usage charge from the approved Plan: Air Quality, GHG Emissions, Energy, Noise and Vibration, and Transportation. The approved Plan PEIR evaluated the environmental impacts related to the remaining 14 topics, whose impact determination remain unchanged under the proposed Amendment.

See Response to Comment 2-1 regarding GHG emission reduction mandates under SB 375. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.
Appendix F.1: Response to Comments on the Draft SEIR

RESPONSE TO COMMENT 2-28
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses incorporating climate stabilization into cumulative impacts analysis. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-16 regarding a discussion of the cumulative effects of the Draft SEIR.

RESPONSE TO COMMENT 2-29
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment provides quotes from the Secretary General of the United Nations.

RESPONSE TO COMMENT 2-30
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-31
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses Light Duty Vehicles (LDVs) and proposes a path to climate stabilization through enforceable measures for LDVs. The Draft SEIR includes minor updates to mitigation measure TRA-2 which would cause a decrease in VMT compared to the approved Plan PEIR. As discussed in Impact GHG-1 in Section 4.3.4 of Chapter 4.3, Greenhouse Gas Emissions, of this Draft SEIR, the proposed Amendment would result in increased GHG emissions for passenger cars and LDVs compared to the approved Plan PEIR. However, the total annual regional emissions would be below the 2016 baseline for years 2025, 2035, and 2050. Therefore, although the proposed Amendment increases the GHG emissions within the San Diego region for each of the horizon years, the conclusion for the Draft SEIR would be unchanged from what was identified in the approved Plan PEIR and would remain less than significant.
See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-11 regarding the ongoing collaborative development of the goals, policies, and mitigation measures for the 2025 Regional Plan.
RESPONSE TO COMMENT 2-32

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. See Response to Comment 2-1 regarding GHG emission reduction mandates under SB 375. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-17 regarding GHG Emissions impacts related to LDVs.

RESPONSE TO COMMENT 2-33

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG.

RESPONSE TO COMMENT 2-34

This comment suggests a falsehood in Chapter 1 of the previously approved Plan. This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. As such, no further response is required.
Chapter 1 introduces the 5 “Big Moves,” an approach which seems to reflect a recognition that we need fundamental change. However, before the strategies are identified, a falsehood is suggested. The falsehood it suggests is that the primary task is to enhance mobility while achieving “state and federal requirements,” regarding climate change and air pollution.

It says, regarding the 5 Big Moves (emphasis added in bold type):

"These interdependent strategies are designed to address the greatest transportation and mobility challenges that we face: safety and traffic congestion, social inequities, and state and federal requirements to reduce greenhouse gas (GHG) emissions and air pollution."

That statement is false. In response to comments on the Draft SEIR, we have stated: "ClimateChange is a fundamental misunderstanding of the climate emergency that we face. By 2050, our greatest “mobility challenge” is to plan and adopt a regional transportation plan (RTP) that will guarantee that the GHG emissions from cars and light-duty trucks (the “Light-Duty Vehicle” or “LDV” category called out in SS 375) will meet the climate-stabilizing requirements provided by climate science. The first climate-stabilizing requirement is for LDVs to emit GHG at no more than 80% below the level they emitted in 1990, by no later than the end of 2030 (Reference 3). If we meet the 2030 requirement, the later requirement will be relatively easy. The later requirement is to have LDVs and all other GHG emitters emit no more than what can be offset by carbon sequestration, AKA “net zero.” This is the “net zero” emission level of 2045. Often, governments only speak of the “net zero” requirement of 2045 (or 2050, the older value), without mentioning the more-difficult 2030 requirement."

Primary Challenges Misstated

Figure 1 is from Section 1 of the EIR of the 2021 RTP (with the RUC). It is said to show our “three primary challenges.”

Our Code Red Climate emergency is mankind’s primary challenge. It means that our Region’s primary challenge is to do its part to ensure that the emission of GHG from our LDVs in 2030 support climate stabilization. Their emissions must be 2030 lower than they were in 1990.

Reference 3 shows how that can be done. We will need to significantly reduce VMT, as proven in Reference 3 and as will be shown in Table 1. When that is done, there will be no congestion and, given that fact, it is not correct to assert that Congestion is a primary challenge. Social Equity is a goal like “Democracy” or “Equal Opportunity” that we must always move towards, as fast as we can. However, when “Social Equity” is discussed in the context of our Anthropogenic climate change problem, the harm of living close to pollution caused by our reliance on fossil fuels is often mentioned. That harm will be reduced and, in some cases (refineries will be closed) eliminated, if we meet our climate-change challenge. The largest “Social Inequity” would be climate destabilization because it would cause a "devastating collapse of the human population" according to the June 2005 issue of Scientific American’s article, "Ethics and Economics of Climate Change.”

Many reliable sources write that human extinction will be an outcome of climate change, which is the path we are on now. This will be the ultimate inequity if it happens and make no mistake, it will probably happen.
RESPONSE TO COMMENT 2-35

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the 5 Big Moves in Chapter 1 of the approved Plan. The 5 Big Moves are the key strategies to achieving the goals of the approved Plan. As discussed in Appendix G: Public Involvement Program of the approved Plan, the 5 Big Moves were developed by SANDAG and refined through the public participation process.

See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-17 regarding GHG Emissions impacts related to LDVs.

See Response to Comment 2-11 regarding the ongoing collaborative development of the goals, policies, and mitigation measures for the 2025 Regional Plan.

RESPONSE TO COMMENT 2-36

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the “three primary challenges” in Chapter 1 of the approved Plan. As discussed in Appendix G: Public Involvement Program of the approved Plan, primary goals and strategies of the approved Plan were developed by SANDAG and refined throughout the public participation process.

See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-37

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment on Figure 1, Section 1 of the approved Plan PEIR has been noted.

RESPONSE TO COMMENT 2-38

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment suggests reducing the size of freeways.
See Appendix A: Transportation Projects, Programs, and Phasing of the approved Plan for further information on transportation network modification under the approved Plan and the proposed Amendment.

See Response to Comment 2-3 regarding VMT reductions under the proposed Amendment compared to the approved Plan. See Response to Comment 2-11 regarding the ongoing collaborative development of the goals, policies, and mitigation measures for the 2025 Regional Plan.

RESPONSE TO COMMENT 2-39

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the vision, goals, strategies, and actions of the approved Plan.

As discussed in Appendix G: Public Involvement Program of the approved Plan, primary goals and strategies of the approved Plan were developed by SANDAG and refined throughout the public participation process.

See Response to Comment 2-3 regarding VMT reductions under the proposed Amendment compared to the approved Plan, as well as climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-11 regarding the ongoing collaborative development of the goals, policies, and mitigation measures for the 2025 Regional Plan. See Response to Comment 2-17 regarding GHG Emissions impacts related to LDVs.
Appendix F.1: Response to Comments on the Draft SEIR

RESPONSE TO COMMENT 2-40

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the goals and policies of the previously approved Plan in relation to climate stabilization.

CARB has not developed either a 2030 target or any post-2035 targets for GHG emissions reduction for the SANDAG region. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG.

See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-17 regarding GHG Emissions impacts related to LDVs.

RESPONSE TO COMMENT 2-41

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the adequacy and legality of the previously approved Plan and its PEIR in regard to climate stabilization. See Response to Comment 2-27 regarding environmental topics of analysis under CEQA. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-16 regarding cumulative impacts of the proposed Amendment.

RESPONSE TO COMMENT 2-42

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the adequacy and legality of the previously approved Plan and PEIR. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-11 regarding the ongoing collaborative development of the goals, policies, and mitigation measures for the 2025 Regional Plan. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.
clearly is in violation of CEQA law is that it does not state that the industrialized world’s first climate stabilization requirement (target), which is for 2030, is to emit GHG at no more than 80% below what we emitted in 1990, as is derived in Reference 3 and shown on Slides 10 and 11 of Reference 5. SANDAG needs to redo its RTP using a Plan like that shown in Reference 3, besides doing a revised EIR for the 2021 RTP and an SEIR for the 2021 SEIR with the RUC removed.

Figure 2  SANDAG’s Admission of Climate-Stabilization Failure Because These Do NOT Cover Achieving the Industrial World’s 2030 Climate-Stabilizing Target.

Key State goals, policies, and Executive Orders considered in the 2021 Regional Plans:
- SB 375 and SCS Program and Evaluation Guidelines
- California Assembly Bill 600 (Gonzalez Hatcher, 2017): identification of disadvantaged communities, inclusion of strategies to reduce pollution exposure in those communities, and use of a skilled and trained workforce
- 2017 Regional Transportation Plan Guidelines for Metropolitan Planning Organizations
- California Transportation Plan 2050
- California Senate Bill 132 (I shelby, 2016): Reduce GHG emissions 40% below 1990 levels by 2030
- EO B-35-18: Carbon Neutrality by 2046
- EO S-5-15: Reduce GHG emissions 80% below 1990 levels by 2050
- EO N-10: Zero-emission vehicle sales by 2035
- EO N-02: Conserve at least 50% of California’s land and coastal waters by 2035

Achieving the industrialized world’s 2030 Climate-Stabilizing Requirement would obviously be a ‘Key policy’ and accomplishment for SANDAG. Figure 2 and the stated organization of the DEIR means that there is no need for me to read further to know that SANDAG has made no effort to consider what it would take for the RTP to conform to achieving the 2030, climate stabilizing requirement. Page 13 of Chapter 1 of the 2021 RTP presents the RTP’s Visions and Goals. There is nothing there about stabilizing the climate at a livable level. That is shown in Figure 2, which is taken from Chapter 1 of the RTP.

Also, Chapter 2 is defined by what is written on Page 15 of Chapter 1. It says there that Chapter 2, the Transportation Plan’s Regional Sustainable Community Strategy
RESPONSE TO COMMENT 2-43
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the adequacy of the previously approved Plan and PEIR in regard to climate stabilization. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-11 regarding the ongoing collaborative development of the goals, policies, and mitigation measures for the 2025 Regional Plan. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-44
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the adequacy of the previously approved Plan’s Vision and Goals without a 2030 climate stabilization target. As discussed in Appendix G: Public Involvement Program of the approved Plan, primary goals and strategies of the approved Plan were developed by SANDAG and refined throughout the public participation process.

See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-45
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment provides edit suggestions related to climate stabilization to Chapter 2 of the previously approved Plan’s Vision and Goals for SANDAG. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-46
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. The
Appendix F.1: Response to Comments on the Draft SEIR

Comment has been noted. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-47

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment provides recommendations to connect the per-capita driving in 2030 with the 2030 climate stabilization requirement. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-11 regarding the ongoing collaborative development of the goals, policies, and mitigation measures for the 2025 Regional Plan. See Response to Comment 2-17 regarding GHG Emissions impacts related to LDVs.
Appendix F.1: Response to Comments on the Draft SEIR

RESPONSE TO COMMENT 2-48

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment provides potential RTP scenarios and their potential impact on percent reduction in per capita driving. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG.

See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-17 regarding GHG Emissions impacts related to LDVs.

RESPONSE TO COMMENT 2-49

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses electric vehicle sale forecasts. As discussed in Chapter 2 of the approved Plan, electric vehicle infrastructure, such as public charging facilities for electric vehicles and hydrogen-fueled vehicles, are a component of the Complete Corridors strategy help support California’s overall shift to electric vehicles. As shown in Appendix B: Implementation Actions of the approved Plan, the SANDAG region is forecasted to have 311,000 electric vehicles on the road by 2025, and 771,000 electric vehicles by 2030. The proposed Amendment would remove the road user charge from the approved Plan and would not make any other changes to the transportation network. The electric vehicle forecast for the SANDAG region may be updated as part of the ongoing process to develop the 2025 Regional Plan (See Response to Comment 2-11).

RESPONSE TO COMMENT 2-50

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-3 regarding VMT reductions under the proposed Amendment compared to the approved Plan. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.
Appendix F.1: Response to Comments on the Draft SEIR

RESPONSE TO COMMENT 2-51
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment displays a figure showing the 2030 climate stabilization target compared to state mandates.

See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-3 regarding the VMT reductions under the proposed Amendment compared to the approved Plan, as well as the new more severe and significant impacts in comparison to the approved Plan PEIR for years 2030, 2045, and 2050 under Impact GHG-5. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-52
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses climate stabilization. See Response to Comment 2-1 regarding GHG emission reduction mandates under SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-17 regarding GHG emissions impacts related to LDVs.
RESPONSE TO COMMENT 2-53

This comment states that Chapter 1 of the previously approved Plan and its PEIR do not account for the Code Red Climate Emergency parameters. This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. As such, no further response is required.

RESPONSE TO COMMENT 2-54

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment suggests four figures (Figures 4 through 7 in the attached references provided in Appendix F.3) to include in the Draft SEIR: a comparison of the 2030 climate stabilization target to state mandates, the atmospheric CO2 levels over recent decades, atmospheric CO2 and mean temperature over the last 800,000 years, and atmospheric CO2 and mean temperature over the last 1,000 years. The approved Plan PEIR included information on atmospheric CO2 from pre-industrial concentrations to current concentrations as well as predicted annual average temperature increases in Section 4.8, Greenhouse Gas Emissions. Appendix C, Climate Change Projections, Impacts, and Adaptation, of the approved Plan PEIR describes how climate may change in the San Diego region in the future due to the effects of global warming, and how those changes could affect each of the resource areas discussed in the approved Plan PEIR. Individual sections of the approved Plan PEIR and this SEIR evaluate whether the approved Plan and proposed Amendment, respectively, would exacerbate a climate change impact. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-55

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses Figure 6 included in the Comment Letter’s attached references provided in Appendix F.3. See Response to Comment 2-54 for more information regarding Figures 4 through 7.
Appendix F.1: Response to Comments on the Draft SEIR

RESPONSE TO COMMENT 2-56
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses Figure 7 included in the Comment Letter’s attached references provided in Appendix F.3. See Response to Comment 2-54 for more information regarding Figures 4 through 7.

RESPONSE TO COMMENT 2-57
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the role of LDVs in reducing GHG emissions. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-17 regarding GHG Emissions impacts related to LDVs.
RESPONSE TO COMMENT 2-58

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses Figure 5: Atmospheric CO2, Increasing Over Recent Decades included in the Comment Letter’s attached references provided in Appendix F.3. See Response to Comment 2-54 for more information regarding Figures 4 through 7.

RESPONSE TO COMMENT 2-59

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses Figure 6: Atmospheric CO2 and Mean Temperature, from 800,000 years ago, with Current CO2 Spike, included in the Comment Letter’s attached references provided in Appendix F.3. See Response to Comment 2-54 for more information regarding Figures 4 through 7.
RESPONSE TO COMMENT 2-60

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses Figure 7: Atmospheric CO2 and Mean Temperature, Over the Last 1,000 Years, included in the Comment Letter’s attached references provided in Appendix F.3. See Response to Comment 2-54 for more information regarding Figures 4 through 7.

RESPONSE TO COMMENT 2-61

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses the role of LDVs in reducing GHG emissions. As discussed in Response to Comment 2-3, GHG emissions mitigation measures identified in the approved Plan PEIR would still be applicable to the proposed Amendment. Mitigation Measure TRA-2 includes minor updates resulting in further reductions in project level VMT compared to the approved Plan PEIR. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-17 regarding GHG emissions impacts related to LDVs.

RESPONSE TO COMMENT 2-62

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment suggests that a state road usage charge should be added to the 2025 Regional Plan. The proposed state road usage charge is entirely separate from the regional road usage charge. The Amendment removes the regional road usage charge from the approved Plan but has no impact on the proposed state road usage charge, which is outside of SANDAG’s authority. See Response to Comment 2-11 regarding the ongoing collaborative development of the goals, policies, and mitigation measures for the 2025 Regional Plan.
RESPONSE TO COMMENT 2-63
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment offers suggestions for the parking management system, including the use of a third-party vendor to run a parking system for SANDAG employees which unbundles the cost of parking. SANDAG does not currently implement this type of parking system for SANDAG employees. See Response to Comment 2-4 regarding regional parking management policies.
Appendix F.1: Response to Comments on the Draft SEIR

RESPONSE TO COMMENT 2-64

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment offers suggestions for the parking management system, including a value-priced car parking system which includes a congestion-pricing algorithm. SANDAG does not currently employ a third-party vendor to implement such a system. See Response to Comment 2-4 regarding regional parking management policies.

RESPONSE TO COMMENT 2-65

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to the approved Plan PEIR. As discussed under Impact GHG-3 in Section 4.3.4 of Chapter 4.3, Greenhouse Gas Emissions, of this Draft SEIR, the approved Plan PEIR identified that Impact GHG-3 in the year 2035 would be less than significant. As shown in Table 4.3-9, by 2035, the proposed Amendment would reduce GHG emissions by 43 percent compared to the 2016 baseline, exceeding the SANDAG Board Resolution target of a 30 percent reduction by 2035. Therefore, implementation of the proposed Amendment would not conflict with or impede achievement of at least 30 percent reduction in per capita GHG emissions from the entire on-road transportation sector by 2035 compared to existing conditions (2016).
RESPONSE TO COMMENT 2-66

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment discusses CARB’s GHG emission reduction targets and EO S-3-05. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-3 regarding the new more severe and significant impacts in comparison to the approved Plan PEIR for years 2030, 2045, and 2050 under Impact GHG-5, and climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-67

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to the approved Plan PEIR. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-3 regarding the new more severe and significant impacts in comparison to the approved Plan PEIR for years 2030, 2045, and 2050 under Impact GHG-5, as well as the changes to Mitigation Measure TRA-2 to reduce VMT under the proposed Amendment.

RESPONSE TO COMMENT 2-68

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to Mitigation Measure TRA-2 under the approved Plan PEIR. See Response to Comment 2-3 regarding the changes to Mitigation Measure TRA-2 to reduce VMT under the proposed Amendment.

RESPONSE TO COMMENT 2-69

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to Alternative 3: All Growth in Mobility Hubs and More Progressive Value Pricing and User Fee Policies as proposed under the approved Plan PEIR. Alternative 3 was determined to be the environmentally superior alternative under the approved Plan PEIR but
was not adopted by the SANDAG Board of Directors for the reasons stated in the Statement of Overriding Considerations and Findings adopted in December 2021.

RESPONSE TO COMMENT 2-70
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment offers suggestions for the parking management system in regard to climate stabilization. See Response to Comment 2-4 regarding regional parking management policies.
Appendix F.1: Response to Comments on the Draft SEIR

RESPONSE TO COMMENT 2-71

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. The approved Plan PEIR included information on atmospheric CO2 from pre-industrial concentrations to current concentrations as well as predicted annual average temperature increases in Section 4.8, Greenhouse Gas Emissions. Appendix C, Climate Change Projections, Impacts, and Adaptation, of the approved Plan PEIR describes how climate may change in the San Diego region in the future due to the effects of global warming, and how those changes could affect each of the resource areas discussed in the approved Plan PEIR.

Individual sections of the approved Plan PEIR and this SEIR evaluate whether the approved Plan and proposed Amendment, respectively, would exacerbate a climate change impact. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-72

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to page 4-3 of the approved Plan PEIR. The commenter is requesting mitigation measures (i.e., Transportation Demand Management (TDM) Ordinances) apply to existing developments. Please note that CEQA addresses the significant impacts of proposed projects not existing development. SANDAG’s Sustainable Transportation Services program, formerly known as iCommute, is the TDM program for the San Diego region. Response to Comment 2-3 regarding the changes to Mitigation Measure TRA-2 to reduce VMT under the proposed Amendment. See Response to Comment 2-4 regarding regional parking management policies.

RESPONSE TO COMMENT 2-73

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to Section 4.8 of the approved Plan PEIR. The approved Plan PEIR included information on atmospheric CO2 from pre-industrial concentrations to current concentrations as well as...
predicted annual average temperature increases in Section 4.8, Greenhouse Gas Emissions. Appendix C, Climate Change Projections, Impacts, and Adaptation, of the approved Plan PEIR describes how climate may change in the San Diego region in the future due to the effects of global warming, and how those changes could affect each of the resource areas discussed in the approved Plan PEIR. Individual sections of the approved Plan PEIR and this SEIR evaluate whether the approved Plan and proposed Amendment, respectively, would exacerbate a climate change impact. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-54 for more information regarding Figures 4 through 7.
RESPONSE TO COMMENT 2-74

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to Section 4.8 of the approved Plan PEIR. The approved Plan PEIR included information on atmospheric CO2 from pre-industrial concentrations to current concentrations as well as predicted annual average temperature increases in Section 4.8, *Greenhouse Gas Emissions*. Appendix C, Climate Change Projections, Impacts, and Adaptation, of the approved Plan PEIR describes how climate may change in the San Diego region in the future due to the effects of global warming, and how those changes could affect each of the resource areas discussed in the approved Plan PEIR. Individual sections of the approved Plan PEIR and this SEIR evaluate whether the approved Plan and proposed Amendment, respectively, would exacerbate a climate change impact. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-75

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to Section 4.8 of the approved Plan PEIR. The approved Plan PEIR included information on atmospheric CO2 from pre-industrial concentrations to current concentrations as well as predicted annual average temperature increases in Section 4.8, *Greenhouse Gas Emissions*. Appendix C, Climate Change Projections, Impacts, and Adaptation, of the approved Plan PEIR describes how climate may change in the San Diego region in the future due to the effects of global warming, and how those changes could affect each of the resource areas discussed in the approved Plan PEIR. Individual sections of the approved Plan PEIR and this SEIR evaluate whether the approved Plan and proposed Amendment, respectively, would exacerbate a climate change impact. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.
RESPONSE TO COMMENT 2-76
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to CEQA Appendix G Threshold VII a) Would the Project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment. See Response to Comment 2-16 regarding cumulative impacts of the proposed Amendment. See Response to Comment 2-17 regarding GHG emissions impacts related to LDVs.

RESPONSE TO COMMENT 2-77
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to CEQA Appendix G Threshold XVII c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-16 regarding cumulative impacts of the proposed Amendment. See Response to Comment 2-17 regarding GHG Emissions impacts related to LDVs.
Appendix F.1: Response to Comments on the Draft SEIR

RESPONSE TO COMMENT 2-78
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to Tables 4.8-7 and 4.8-8 of the approved Plan PEIR.

RESPONSE TO COMMENT 2-79
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to Table 4.8-9 of the approved Plan PEIR. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-80
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to Section 7.2.9 of the approved Plan PEIR. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.
RESPONSE TO COMMENT 2-81

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to Section 7.2.9 of the approved Plan PEIR. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process.

RESPONSE TO COMMENT 2-82

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to the 2022 CARB Scoping Plan. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-2 regarding mileage-based fee pilots under the 2022 CARB Scoping Plan. See Response to Comment 2-3 in regard to mitigation measures to reduce regional GHG emissions by reducing VMT under this Draft SEIR.
RESPONSE TO COMMENT 2-83

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to the 2022 CARB Scoping Plan. Under the 2022 CARB Scoping Plan, mileage-based fee pilots in the State are to be completed by 2025. The proposed state road usage charge is entirely separate from the regional road usage charge.

The Amendment removes the regional road usage charge from the approved Plan but has no impact on the proposed state road usage charge, which is outside of SANDAG’s authority. The approved Plan assumes the San Diego region will receive future revenues resulting from a state-administered road usage charge, which is still in the pilot program phase. Discussion of the state-administered road usage charge remains unchanged from the approved Plan. The proposed Amendment assumes a state road usage charge of 0.7 cents ($2020) starting in 2030 and increasing to 1.2 cents by 2050 to cover the funding gap created as fuel taxes diminish over time due to greater fuel efficiency and a shift to zero emission vehicles. The State has not released a start date for the state road usage charge; however, 2030 is consistent with the assumption made by other California MPOs. See Response to Comment 2-2 regarding mileage-based fee pilots under the 2022 CARB Scoping Plan. See Response to Comment 2-3 regarding mitigation measures to reduce regional GHG emissions by reducing VMT under this Draft SEIR.
RESPONSE TO COMMENT 2-84

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to the 2022 CARB Scoping Plan. See Response to Comment 2-2 regarding mileage-based fee pilots under the 2022 CARB Scoping Plan. See Response to Comment 2-3 in regard to mitigation measures to reduce regional GHG emissions by reducing VMT under this Draft SEIR.

Impact service models that complement transit and ensure equitable access for priority populations.

4. Encourage future housing production and multi-use development in infill locations and other areas in ways that make future trip origins and destinations closer together and create more visible environments for transit, walking, and biking.

The pace of change to reduce VMT must be accelerated. (That is not possible if they don’t understand the need for good pricing systems. However, Appendix E shows they may understand this.) Certainly, structural reform will be challenging, but California has demonstrated time and again that it possesses the collective leadership and commitment to break away from ideas that no longer represent Californians’ values and their aspirations for the many generations to come.

Strategies for Achieving Success:

1. Achieve a per capita VMT reduction of at least 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045. [Where is it shown that this will achieve success? Where do they define “success”?]

2. Achieve a per capita VMT reduction of at least 25 percent below 2019 levels by 2030 and 30 percent below 2019 levels by 2045. [Where is it shown that this will achieve success? Where do they define “success”. However, this far exceeds the SB 375 requirements.]

3. Reimagine new roadway projects that decrease VMT in a way that meets community needs and reduces the need to drive. [Bullock’s Note: If a roadway project reduces the number of lanes, congestion will return to its former level (due to induced traffic demand, in reverse) but there will be less VMT and GHG.]

4. Invest in making public transit a viable alternative to driving by increasing affordability, reliability, coverage, service frequency, and consumer experience.

5. Implement equitable roadway pricing strategies based on local context and need, reallocating revenues to improve transit, bicycling, and other sustainable transportation choices. [Bad politics and not necessary.]

6. Expand and complete planned networks of high-quality active transportation infrastructure.

7. Channel the deployment of autonomous vehicles, ride-hailing services, and other new mobility options toward high passenger-occupancy and low VMT-impact service models.
RESPONSE TO COMMENT 2-85

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to Appendix E: Sustainable and Equitable Communities of the 2022 CARB Scoping Plan. The proposed Amendment would remove the regional road usage charge from the approved Plan but would not impact any other parking management strategies included in the approved Plan. See Response to Comment 2-1 regarding SB 375 and CARB GHG emissions targets for 2020 and 2035 for SANDAG. See Response to Comment 2-2 regarding mileage-based fee pilots under the 2022 CARB Scoping Plan.

See Response to Comment 2-3 regarding climate stabilization and climate change requirements under the CEQA process. See Response to Comment 2-4 regarding regional parking management policies.
RESPONSE TO COMMENT 2-86

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to Appendix E: Sustainable and Equitable Communities of the 2022 CARB Scoping Plan. The proposed Amendment would remove the regional road usage charge from the approved Plan but would not impact any other parking management strategies included in the approved Plan. See Response to Comment 2-4 regarding regional parking management policies.

great trouble and great expense] strategies as these strategies are projected to achieve up to 27 to 37 percent of the needed per capita VMT reduction. The four largest IMPs have included multiple pricing strategies in their adopted sustainable communities strategies (SCs) to reduce regional GHG emissions. Pricing strategies would need to be implemented with an emphasis to ensure equitable outcomes, and in accordance with local needs and context. In particular, pricing strategies need to consider the potential travel options available for low income and other disadvantaged populations to ensure they are not unduly impacted by the strategy. Actions: Permit implementation of a suite of roadway pricing strategies by 2025 in support of adopted SCs. [Note the 2025 year. I have been telling SANDAG that 2030 is too late because our first-occurring climate stabilization requirement is 2030.]

2 Prioritize addressing key transit bottlenecks and other infrastructure investments to improve transit operational efficiency over investments that increase VMT. Offering high-quality transit services that represent a viable alternative to driving will require multiple coordinated efforts. The proposed investments to expand service capacity and increase frequencies (described in Strategy Area 1) will be ineffective if those transit vehicles end up stuck in traffic or have limited space to operate efficiently. Transit agencies and local jurisdictions across California should come together to identify, plan, and implement strategies to prioritize transit speeds and reliability over general roadway level of service and private car needs. These strategies, which include capital investments in the strategic redistribution of the right-of-way, signaling, and supportive traffic regulations, should be prioritized in federal and State funding programs and local investment plans.

Actions:

1. Permit the conversion of general-purpose lanes to transit-only lanes or toll lanes and full facility tolling of state-owned facilities.

2. Establish requirements to demonstrate that addressing transit bottlenecks and other transit efficiency investments are a priority in local jurisdiction and transit agency investment plans, such as a prerequisite for overall transportation project funding eligibility.
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment is in regard to SANDAG Executive Director Ikhrata's comments provided to The Voice of San Diego. This comment has been noted.

**SANDAG Executive Director’s Comments, Regarding RUC Removal**

3. Develop and implement a statewide transportation demand management (TDM) framework with VMT mitigation requirements for large employers and large developments. The goal of TDM is to provide people with information, incentives, and other support programs that help them utilize sustainable transportation options such as transit, ridesharing, bicycling, and walking and rely less on cars. A strategic point of focus for TDM program implementation could be large employers (more than 100 employees), which often incentivize driving alone by offering free parking, gas stipends, and similar perks, and do not offer similar levels of support to employees to take transit, ride their bicycle, or walk. Employer-based TDM strategies are needed to achieve widespread implementation for the State to meet its climate goals, including commute trip reduction programs, ride-sharing programs, on-site bicycle facilities, vanpool and shuttle services, transit fare subsidies, and parking cash-out. (Note: parking cash-out is better than "free"; however, it is a half-baked idea. The system proposed in the San Diego County lawsuit against the County's CAP is a fully thought out system that the CEO of ACE parking would like to provide.) Another strategic point of focus for TDM programs could be large developments, particularly new ones, that through decisions such as their location, design, transportation, parking infrastructure, and their treatment and general interaction with their surrounding environment ingrain high or low VMT travel patterns for decades to come.

**Actions:**

1. End the State’s subsidies for employee parking and take additional actions to move away from subsidizing public spaces for car parking more generally while expanding efforts to promote pedestrian, bicycle, and transit travel. As the State of California employs over 200,000 people, it can expand its TDM programs (this is what I have been telling CARB and others, for years), which currently vary by agency and employee union.

2. Build on existing resources to further support the development and enforcement of local TDM ordinances and help begin developing a statewide TDM framework. ("Help begin"? No, we need to do this ASAP. The Climate Clock ticks!)
RESPONSE TO COMMENT 2-88
This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. This comment includes an excerpt from an article in *The Voice of San Diego*: “Morning Report: Ikhrata Says the State Isn’t Serious About Climate if It Approves SANDAG Plan Without Driving Fee.” This comment has been noted.

RESPONSE TO COMMENT 2-89
SANDAG has reviewed the attached reference documents and responded above to those Draft SEIR comments that cite or use information from these reference documents. No responses to the attachments specifically have been included because they do not contain comments specific to the SEIR and/or proposed Amendment. The attached references have been provided in Appendix F.3 of this SEIR.
Appendix F.1: Response to Comments on the Draft SEIR

RESPONSE TO COMMENT 2-90

This comment letter was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. As such, no further response is required.
COMMENT LETTER 3: CARRIE CHAMBERS

This comment expresses opposition to the road usage charge. The proposed Amendment removes the regional road usage charge from the approved Plan. This comment is not related to the adequacy of the Draft SEIR. As such, no further response is required.

RESPONSE TO COMMENT 3-1

This comment expresses opposition to the road usage charge. The proposed Amendment removes the regional road usage charge from the approved Plan. This comment is not related to the adequacy of the Draft SEIR. As such, no further response is required.

I highly oppose the road user charge. It will have a negative financial effect for my family in these already expensive times.

Carrie Chambers
COMMENT LETTER 4: CITY OF CARLSBAD

August 28, 2023

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

RE: CITY OF CARLSBAD COMMENTS ON DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT FOR THE PROPOSED AMENDMENT TO THE 2023 REGIONAL PLAN

Dear Ms. Uchitel:

The City of Carlsbad (the “City”) appreciates the opportunity to provide comments on the draft Supplemental Environmental Impact Report (“SEIR”) for the proposed amendment to the 2023 Regional Plan (the “Amendment”). The Amendment is dated July 2023. The Regional Plan (“Plan”) is an important plan for the region and will guide the next phase of growth for the member agencies of the San Diego Association of Governments (“SANDAG”), including the City. An effectively designed and implemented regional transportation plan would help ensure improved transportation options for area residents, businesses and other community members, as well as meaningful reductions in greenhouse gas (“GHG”) emissions and improved quality of life as we grow our communities.

The California State Legislature created specific provisions to promote streamlined environmental review for certain types of projects. Determining in particular situations whether it is appropriate to prepare a subsequent or supplemental SEIR to project-specific consideration, based on many factors. Pursuant to CEQA Guidelines section 15163(b), (a) supplement to the EIR need only the information necessary to make the previous EIR adequate for the project as revised.” CEQA Guidelines section 15163 provides, in pertinent part: “(a) The lead or responsible agency may choose to prepare a supplement to an EIR rather than a subsequent EIR: (1) Any of the conditions described in Section 15162 would require the preparation of a subsequent EIR, and (2) Only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation. Thus, CEQA Guidelines section 15163 applies when an EIR can be made adequate by additions or changes that respond to a limited set of issues, whereas a subsequent EIR is necessary when the project’s EIR must be rewritten from the ground up to make it environmental analysis adequate. For the reasons stated in this letter, a subsequent EIR or new EIR is appropriate. There is no support to proceed under CEQA’s supplemental review provisions because the original environmental document does not contain information value to the ongoing decision-making process. It is only logical that SANDAG start from the beginning under CEQA section 15161 by conducting an initial study to determine whether the project may have substantial effects on the environment. Failure to satisfy this CEQA obligation constitutes a prejudicial abuse of discretion, which is precisely what CEQA seeks to avoid, and it undermines the public’s ability to obtain a fully informed evaluation of the project.

SANDAG is the lead agency for the proposed Amendment and Draft SEIR.

RESPONSE TO COMMENT 4-1

This comment includes opening remarks and notes the importance of the approved Plan. No further response is required.

RESPONSE TO COMMENT 4-2

The basic purposes of the CEQA are to inform government decision makers and the public about potential significant environmental impacts of projects, identify ways the impacts can be reduced or avoided, prevent significant avoidable environmental damage through alternatives and mitigation, and disclose to the public the reason that decision makers approved a project that may result in unavoidable significant impacts. Under CEQA, a lead agency may choose to prepare a supplement to an EIR when substantial changes are proposed that may result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects, but only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation. Pursuant to CEQA Guidelines Section 15163, a supplement to an EIR “need contain only the information necessary to make the previous EIR adequate for the project as revised.”

Section 1, Introduction, includes a brief discussion explaining why the impacts on 14 of the 19 Appendix G resource areas would not be significant with the project modifications in the proposed Amendment. The lead agency is required to consider the information in the previous EIR as revised by the supplemental EIR, along with any other relevant information, in making its decisions on the project approval. SANDAG is the lead agency for the proposed Amendment and Draft SEIR.
RESPONSE TO COMMENT 4-3

This comment states that many comments from the City’s October 11, 2021, letter are repeated in this letter. No further response is required.

RESPONSE TO COMMENT 4-4

This comment addresses the City’s comments on the approved Plan and Final PEIR and does not pertain to the proposed Amendment or adequacy of the Draft SEIR.

The Final PEIR informed decisionmakers and the public generally of the significant environmental effects of the approved Plan, identified ways to minimize the significant effects, and described reasonable alternatives to the approved Plan (CEQA Guidelines Section 15121(a)). The Final PEIR properly considered cumulative impacts (CEQA Guidelines Section 15168(b)(2)), identified a baseline (CEQA Guidelines Section 15125), described a range of reasonable alternatives to the approved Plan (CEQA Guidelines Section 15126.6), and described feasible mitigation measures that would minimize significant adverse environmental impacts (CEQA Guidelines Section 15126.4).

RESPONSE TO COMMENT 4-5

The comment mischaracterizes the CEQA requirements for review of the Draft SEIR. There is no CEQA requirement to conduct the public comment period for the Draft SEIR required by CEQA Guidelines Section 15087 simultaneously with the public comment period required by Government Code Section 65080 for the proposed Amendment. There is also no CEQA requirement for comments on the Draft SEIR to be responded to before publishing, or incorporated into, the Draft SEIR. The Draft SEIR properly evaluates the Draft Amendment and preparation of each has run concurrently consistent with CEQA Guidelines Section 15004. SANDAG has evaluated
comments received on significant environmental issues and prepared written responses consistent with CEQA Guidelines Section 15088.

Responses to comments received on the Draft SEIR are included in this Appendix (Appendix F.1 of this SEIR).

**RESPONSE TO COMMENT 4-6**

This comment mischaracterizes the process for public participation in the Draft and Final EIRs. There is no CEQA requirement to conduct the public comment period for the Draft SEIR required by CEQA Guidelines Section 15087 simultaneously with the public comment period required by Government Code Section 65080 for the proposed Amendment. There is also no CEQA requirement for comments on the Draft Amendment to be responded to before publishing, or incorporated into, the Draft SEIR. The Draft SEIR properly evaluates the Draft Amendment and preparation of each has run concurrently consistent with CEQA Guidelines Section 15004. SANDAG has evaluated comments received on significant environmental issues and prepared written responses consistent with CEQA Guidelines Section 15088. Responses to comments received on the Draft SEIR are included in this Appendix (Appendix F.1 of this SEIR), and responses to comments received on the proposed Amendment are included in Appendix F.2 of this SEIR.

Specific to public outreach conducted by SANDAG, there have been extensive opportunities for meaningful public participation in the proposed Amendment and Draft SEIR. SANDAG initiated the SEIR scoping process on December 9, 2022, through the circulation of an NOP. Receipt of the NOP by the State Clearinghouse at the California Office of Planning and Research on December 9, 2022, initiated a 30-day comment period that ended January 9, 2023. The NOP provided formal notification to all federal, State, and local agencies involved with funding, and to other interested organizations and members of the public, that an SEIR would be prepared for the proposed Amendment. The NOP was intended to encourage interagency communication concerning the proposed Amendment and provide sufficient background information so that agencies, organizations, and individuals could respond to SANDAG with specific comments and questions on the scope and content of this SEIR.
The NOP is provided in full in Appendix A-1. The written comments are provided in full in Appendix A-2.

Consistent with CEQA (PRC Section 21083.9), SANDAG noticed and held a public scoping meeting on December 21, 2022, at SANDAG’s office at 401 B Street, San Diego, CA 92101. The purpose was to receive perspective and input from agencies, organizations, and individuals on the scope and content of the environmental information to be addressed in the Draft SEIR. To support the development of the proposed Amendment, SANDAG implemented a public outreach and involvement program consistent with State and federal requirements. Early in the planning process, SANDAG developed a Public Involvement Strategy (Strategy) to guide the public outreach program. The Strategy identifies public engagement techniques to involve the public and collect input for the proposed Amendment, including public meetings, social media, visualizations, and other approaches to outreach.

The Draft SEIR for the proposed Amendment was released to the public on July 13, 2023, and was available for a 47-day public review period, consistent with CEQA which requires a 45-day public review. SANDAG published a public notice for the Draft SEIR public review period in local newspapers on or about July 12, 14, 21, and 28, 2023. SANDAG also filed a Notice of Completion (NOC) with the State Clearinghouse to indicate the availability of the Draft SEIR for public review and comment on July 13, 2013. The Draft SEIR was distributed to the agencies, organizations, and individuals that provided written comments on the NOP, the SANDAG Board of Directors, SANDAG member agencies, and other interested parties and stakeholders. Agencies, organizations, and individuals were invited to provide written comments on the Draft SEIR during the public review period from July 12 to August 28, 2023.

The Draft SEIR and all appendices were available for review online at www.sandag.org, at SANDAG offices located at 401 B Street, Suite 800, San Diego, California 92101, and at the San Diego Central Library located at 330 Park Boulevard, San Diego, California 92101. The Central Library will facilitate inter-library transfers upon request by a member of the public in order to provide access at local libraries.
On a case-by case basis, the San Diego Central Library can also digitize documents and transfer them to other libraries. There will be a further opportunity for public participation on October 13, 2023, at the SANDAG Board of Directors meeting where decision makers will consider certification of the SEIR and adoption of the proposed Amendment.

RESPONSE TO COMMENT 4-7

The City’s August 8, 2023, comment letter on the proposed Amendment addressed the approved Plan and does not pertain to the adequacy of the Draft SEIR. At the direction of the SANDAG Board of Directors, the proposed Amendment is narrowly focused on removing the regional road usage charge while meeting state and federal requirements. The Amendment includes no changes to land use.

This comment incorrectly asserts that the previously approved Plan uses faulty land use assumptions. Government Code Section 65080(b)(2)(B) provides that an SCS “use most recent planning assumptions considering local general plans and other factors.” It also requires that the SCS “set forth a forecasted development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board.” The SCS projects development that would achieve the State-mandated GHG emissions reduction target when integrated with the transportation investments, programs, and policies in the approved Plan, as amended.

RESPONSE TO COMMENT 4-8

SANDAG is typically required to update the Regional Plan every four years to account for the changes since the last Plan was adopted, including projected growth, technology and/or state law, as mentioned by the commenter. Those assumptions will be updated as needed in developing the 2025 Regional Plan.
With respect to implementation, Appendix B, Implementation Actions, of the approved Plan as revised by Attachment A to the Amendment, Errata to the 2021 Regional Plan, provides SANDAG’s strategy for implementing the proposed Amendment.
RESPONSE TO COMMENT 4-9
This comment does not pertain to the proposed Amendment or the adequacy of the Draft SEIR. At the direction of the SANDAG Board of Directors, the proposed Amendment is narrowly focused on removing the regional road usage charge while meeting state and federal requirements. The Amendment includes no changes to land use.

The comment inaccurately suggests that the City’s General Plan was ignored in developing the previously approved Plan. SANDAG relied upon local general plans and other factors to develop the forecasted development pattern for the region consistent with Government Code Section 65080(b)(2)(B). Consistency of the approved Plan with relevant general plans is analyzed in Section 4.11, Land Use, of the Final PEIR. Due to the programmatic nature of the EIR analysis, the Final PEIR did not call out specific policies from local jurisdictions’ general plans or other local planning documents. Consistency of individual second-tier projects with these policies would be considered during project-specific CEQA reviews.

RESPONSE TO COMMENT 4-10
The basic purposes of the CEQA are to inform government decision makers and the public about potential significant environmental impacts of projects, identify ways the impacts can be reduced or avoided, prevent significant avoidable environmental damage through alternatives and mitigation, and disclose to the public the reason that decision makers approved a project that may result in unavoidable significant impacts.

Under CEQA, a lead agency may choose to prepare a supplement to an EIR when substantial changes are proposed that may result in new significant environmental effects or a substantial increase in the severity of previously identified significant effects, but only minor additions or changes would be necessary to make the previous EIR adequately apply to the project in the changed situation. Pursuant to CEQA Guidelines Section 15163, a supplement to an EIR “need contain only the information necessary to make the previous EIR adequate for the project as revised.” Section 1, Introduction, includes a brief discussion explaining why the impacts on 14 of the 19
Appendix G resource areas would not be significant with the project modifications in the proposed Amendment. The lead agency is required to consider the information in the previous EIR as revised by the supplemental EIR, along with any other relevant information, in making its decisions on the project approval. SANDAG is the lead agency for the proposed Amendment and Draft SEIR.

This comment also refers to the City’s comments on the approved Plan. At the direction of the SANDAG Board, the proposed Amendment is narrowly focused on removing the regional road usage charge while meeting state and federal requirements. The Amendment includes no changes to land use.

This comment incorrectly asserts that the previously approved Plan uses faulty land use assumptions. Government Code Section 65080(b)(2)(B) provides that an SCS “use most recent planning assumptions considering local general plans and other factors.” It also requires that the SCS “set forth a forecasted development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board.”

The SCS projects development that would achieve the State-mandated GHG emissions reduction target when integrated with the transportation investments, programs, and policies in the approved Plan, as amended.

RESPONSE TO COMMENT 4-11

This comment refers to the City’s comments on the previously approved Plan. At the direction of the SANDAG Board, the proposed Amendment is narrowly focused on removing the regional road usage charge while meeting state and federal requirements. The Amendment includes no changes to land use.

Consistency of the approved Plan with relevant general plans and LCPs is analyzed in Section 4.11 of the Draft PEIR. Due to the programmatic nature of the Final PEIR analysis, the Final PEIR does not call out specific policies from local jurisdictions’ general plans,
LCPs, or other local planning documents. Consistency of individual second-tier projects with these policies would be considered during project-specific CEQA reviews.

Government Code Section 65080(b)(2)(B) provides that an SCS “use most recent planning assumptions considering local general plans and other factors.” It also requires that the SCS “set forth a forecasted development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board.” The SCS projects development that would achieve the State-mandated GHG emissions reduction target when integrated with the transportation investments, programs, and policies in the approved Plan, as amended.

**RESPONSE TO COMMENT 4-12**

This comment inaccurately asserts that the Draft SEIR does not disclose analysis of VMT, GHG and air pollutant emissions, and inconsistencies with RAQs, SIP, and regional traffic modeling. The Draft SEIR evaluates each and the relevant identified impacts in Sections 4.1 (Air Quality), 4.3 (Greenhouse Gas Emissions), and 4.5 (Transportation), as well as Chapter 5 (Cumulative Impact Analysis), among others.

This comment also refers to the City’s comments on the approved Plan. At the direction of the SANDAG Board of Directors, the proposed Amendment is narrowly focused on removing the regional road usage charge while meeting state and federal requirements. The Amendment includes no changes to land use.

The comment inaccurately suggests that the City’s General Plan has been ignored in the previously approved Plan. SANDAG relied upon local general plans and other factors to develop the forecasted development pattern for the region consistent with Government Code Section 65080(b)(2)(B). The thresholds for land use analysis in Appendix G of the CEQA Guidelines include an evaluation of whether the project causes a significant environmental impact due to a conflict with a land use plan, policy, or regulation adopted for the purpose of
avoiding or mitigating an environmental effect. A conflict alone does not necessarily result in a significant environmental impact. As stated above, consistency of the approved Plan with relevant general plans is analyzed in Section 4.11 of the Final PEIR. Due to the programmatic nature of the EIR analysis, the Final PEIR does not call out specific policies from local jurisdictions’ general plans or other local planning documents. Consistency of individual second-tier projects with these policies would be considered during subsequent project-specific CEQA reviews.
This comment refers to the City’s comments on the approved Plan. At the direction of the SANDAG Board of Directors, the proposed Amendment is narrowly focused on removing the regional road usage charge while meeting state and federal requirements. The Amendment includes no changes to land use.

Government Code Section 65080(b)(2)(B) provides that an SCS “use most recent planning assumptions considering local general plans and other factors.” It also requires that the SCS “set forth a forecasted development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, will reduce the GHG Emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board.” The SCS projects development that would achieve the State-mandated GHG emissions reduction target when integrated with the transportation investments, programs, and policies in the approved Plan, as amended.

This comment mischaracterizes the impact of the land use assumptions underlying the previously approved Plan on the VMT, GHG, and air quality resource analyses included in the Final PEIR. The approved Plan focuses growth and development in the Mobility Hub areas. The allocation of housing units to subregional areas represents general areas projected for future growth, not specific parcels, for future housing development or housing unit type. Specifically, outputs are generated at the Master Geographic Reference Area (MGRA)-level for use as inputs to SANDAG’s Activity Based Model (ABM). MGRA is comparable in size to census blocks and cover the entire region. A number of land uses at the parcel level, aggregated up, comprise these general areas and VMT, GHG, and air quality impacts are analyzed at the regional level consistent with the programmatic nature of the Final PEIR.

For Carlsbad, the SCS land use pattern forecasts 6,575 housing units from 2016 to 2050, which is within the total housing unit capacity of the City’s general plan as provided to SANDAG (6,992 housing units) and accommodates the City’s RHNA allocation of 3,873 housing units.
by 2035. The precise zoning at the parcel level is within local jurisdictions’ land use authority. As such, future development projects would undergo separate, project-specific environmental review, and any impacts associated with conflicts with land use plans, policies or regulations, including the general plan and any applicable airport land use compatibility plans, would be evaluated and mitigated when the timing, location, and other specifications of a specific project have been defined.

**RESPONSE TO COMMENT 4-14**

In 2022, anomalous traffic counts and employment at some large employment location sites and Traffic Analysis Zones (TAZs) were identified and corrected, and the Series 14 Regional Growth Forecast was updated to incorporate these corrections. The corrected inputs resulted in slight changes to regional employment figures and more concentrated employment across a handful of sectors at a limited number of employment locations; previously employment had been more dispersed across the region. These corrections resulted in a regional vehicle miles traveled (VMT) increase.

ABM 2+ model runs for the Amendment also reflect corrections made to one of the special market models included in ABM2+, the crossborder model. The crossborder model measures the impact of Mexican resident travel on the San Diego transportation network. In 2022, a software bug was discovered in the crossborder model that affected the number of crossings via Otay Mesa East and resulting traffic volumes on SR 11. The software bug was fixed, improving the accuracy of traffic volumes on SR 11. The fix had minor impacts on regional VMT.

**RESPONSE TO COMMENT 4-15**

For additional information about modeling procedures, please see Appendix S, Travel Demand Modeling Tools, of the approved Plan and Attachment B, Air Quality Planning and Transportation Conformity, of the proposed Amendment. A detailed description of the background, data sources, methodologies, and outputs associated with ABM2+ can also be found at https://github.com/SANDAG/ABM/wiki.
RESPONSE TO COMMENT 4-16

The regional road usage charge was not intended to be implemented until 2030, and as such was only a revenue source for the final 20 years of the approved Plan.

Updated revenue assumptions for the Amendment provide sufficient revenues to fund the projects in the approved Plan, including historic levels of infrastructure investment from the federal and state government resulting from the Infrastructure Investment and Jobs Act (IIJA, also known as the Bipartisan Infrastructure Law).

RESPONSE TO COMMENT 4-17

CEQA requires the consideration of alternatives to the proposed Amendment and the analysis of impacts associated with those alternatives. By comparing the proposed Amendment to the alternatives, the advantages of each can be weighed and analyzed.

Section 15126.6 of the CEQA Guidelines requires that an EIR “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project and evaluate the comparative merits of the alternatives.” An EIR must discuss alternatives to a project in its entirety and is not required to discuss alternatives to each particular component of a project. Also, an EIR need not evaluate in detail alternatives that would not substantially lessen the proposed project’s significant environmental impacts. Finally, CEQA Guidelines Section 15126.6 specifically states that “[a]n EIR need not consider every conceivable alternative to a project.”

This comment also inaccurately characterizes the discussion in Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal. 3d 376. The Court does not state that CEQA requires an EIR to describe all reasonable alternatives to the project. Rather, the Court in Laurel Heights stated that “[a]n EIR’s discussion of alternatives must contain analysis sufficient to allow informed decision making” (Laurel Heights Improvement Assn. v. Regents of University of California (1988) 47 Cal. 3d 376, 404). As mentioned
above, CEQA Guidelines Section 15126.6 specifically states that “[a]n EIR need not consider every conceivable alternative to a project.”

The Draft SEIR Alternatives were developed as alternate means of achieving most of the basic project objectives for the Final PEIR. Those objectives are found in Chapter 2, Project Description, of the Final PEIR.

The proposed Amendment has the additional objective of removing the regional road usage charge while continuing to meet State and federal planning requirements, regional GHG reduction targets, and federal air quality conformity standards. As discussed in Chapter 6, Alternatives Analysis, of the Draft SEIR, five alternatives were considered in detail:

Alternative 1: No Project (the approved Plan). The No Project Alternative assumes that all of the plans and policies included in the approved Plan would be implemented, including the regional road usage charge, and is further described in Chapter 2, Project Description, of the approved Plan Final PEIR.

Alternative 2: 2019 Transportation Network With New Value Pricing and User Fee Policies. Alternative 2 is the same as described in Chapter 6, Alternatives Analysis, of the approved Plan Final PEIR.

Alternative 3: All Growth In Mobility Hubs and More Progressive Value Pricing And User Fee Policies. Alternative 3 is the same as described in Chapter 6 of the approved Plan Final PEIR.

Alternative 4: Progressive Pricing and No Regional Road Usage Charge. Alternative 4 consists of the approved Plan transportation network and land use pattern included in the SCS, with more progressive toll pricing and parking costs. Alternative 4 does not include the regional road usage charge.

Alternative 5: All Growth In Mobility Hubs, Progressive Pricing, and No Regional Road Usage Charge. Alternative 5 consists of the approved Plan transportation network, a land use pattern focusing all regional growth in mobility hubs, with more progressive toll pricing and parking costs. Alternative 5 does not include a regional road usage charge.
This comment also restates the City’s comments on the approved Plan. At the direction of the SANDAG Board of Directors, the proposed Amendment is narrowly focused on removing the regional road usage charge while meeting state and federal requirements. The Amendment includes no changes to land use.

This comment incorrectly asserts that the Final PEIR uses faulty land use assumptions. Government Code Section 65080(b)(2)(B) provides that an SCS “use most recent planning assumptions considering local general plans and other factors.” It also requires that the SCS “set forth a forecasted development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board.” The SCS projects development that would achieve the State-mandated GHG emissions reduction target when integrated with the transportation investments, programs, and policies in the approved Plan, as amended.

With respect to SB 9, which took effect on January 1, 2022, the Series 14 Regional Growth Forecast incorporates assumptions about ADUs occurring in the local jurisdictions as potential future capacity for housing unit development. ADUs were assumed to be available on 5 percent of all single-family lots in the region that were 5,000 square feet or larger. This equates to about 20,000 additional units of housing unit capacity throughout the region outside of the rural villages in the unincorporated area. The Series 15 Regional Growth Forecast is currently being developed in coordination with local jurisdictions and may include updated assumptions surrounding ADU development.

Consistency of the approved Plan with relevant general plans is analyzed in Section 4.11 of the Final PEIR. Due to the programmatic nature of the PEIR analysis, the Final PEIR does not call out specific policies from local jurisdictions’ general plans or other local planning documents. Consistency of individual second-tier projects with these policies would be considered during subsequent project-specific CEQA reviews.
RESPONSE TO COMMENT 4-18

This comment mischaracterizes the requirements for a financially constrained RTP and inaccurately states that the implementation and challenges to fund the proposed Amendment have not been appropriately discussed. Federal and State laws require SANDAG to develop a regional plan built on reasonable assumptions of the revenues that will be available during the period covered by that plan (Government Code Section 65080(b)(4); 23 CFR 450.322(f)(10)(ii)). New funding sources are revenues that do not currently exist or that may require additional steps before the MPO or transit agency can commit such funding to a transportation project. (2017 RTP Guidelines for MPOs). Strategies for ensuring their availability must be identified and future revenues may be projected based on historical trends, including consideration of past legislative or executive actions (2017 RTP Guidelines for MPOs). The level of uncertainty in projects based on historical trends is generally greatest for revenues in the “outer years” (10 years or more) of an RTP. Appendix V of the approved Plan as revised by Attachment A to the Amendment, Errata to the 2021 Regional Plan, explains the anticipated revenues to fund implementation of the proposed Amendment. Table V.3 as revised by Attachment A to the Amendment describes the availability assumptions for new revenue sources identified in Appendix V.

As explained in Response to Comment 4-19, the Draft SEIR does evaluate a reasonable range of alternatives that achieve most of the basic project objectives and that are potentially feasible.
RESPONSE TO COMMENT 4-19

The basic purposes of the CEQA are to inform government decision makers and the public about potential significant environmental impacts of projects, identify ways the impacts can be reduced or avoided, prevent significant avoidable environmental damage through alternatives and mitigation, and disclose to the public the reason that decision makers approved a project that may result in unavoidable significant impacts.

CEQA requires the consideration of alternatives to the proposed Amendment and the analysis of impacts associated with those alternatives. By comparing the proposed Amendment to the alternatives, the advantages of each can be weighed and analyzed. Section 15126.6 of the CEQA Guidelines requires that an EIR “describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project.”

Five alternatives were analyzed in the Draft SEIR, including the No Project Alternative, to afford decision makers with information about the potential environmental impacts of the proposed Amendment. The SEIR carried forward two of the alternatives analyzed in the Final PEIR, as well as analyzing the No Project Alternative and two new alternatives based on the additional objective of the proposed Amendment to remove the regional road usage charge.

RESPONSE TO COMMENT 4-20

The regional road usage charge was not intended to be implemented until 2030, and as such was only a revenue source for the final 20 years of the approved Plan. Updated revenue assumptions for the Amendment provide sufficient revenues to fund the projects in the approved Plan, including historic levels of infrastructure investment from the federal and state government resulting from the
Infrastructure Investment and Jobs Act (IIJA, also known as the Bipartisan Infrastructure Law).

This comment also mischaracterizes the requirements for a financially constrained RTP and inaccurately states that the implementation and challenges to fund the proposed Amendment have not been appropriately discussed. Federal and State laws require SANDAG to develop a regional plan built on reasonable assumptions of the revenues that will be available during the period covered by that plan (Government Code Section 65080(b)(4); 23 CFR 450.322(f)(10)(ii)). New funding sources are revenues that do not currently exist or that may require additional steps before the MPO or transit agency can commit such funding to transportation project (2017 RTP Guidelines for MPOs). Strategies for ensuring their availability must be identified and future revenues may be projected based on historical trends, including consideration of past legislative or executive actions (2017 RTP Guidelines for MPOs). The level of uncertainty in projects based on historical trends is generally greatest for revenues in the “outer years” (10 years or more) of an RTP. Appendix V of the approved Plan, as revised by Attachment 1 to the proposed Amendment, explains the anticipated revenues to fund implementation of the proposed Amendment. Table V.3 in the approved Plan, as revised by Attachment 1 of the proposed Amendment, describes the availability assumptions for new revenue sources identified in Appendix V.

IIJA authorized $1.2 trillion for transportation and infrastructure spending with $550 billion of that figure going toward “new” investments and programs. The federal and state discretionary programs near-term estimates have been updated accordingly to assume historical leveraging rates of local TransNet revenue.

The total estimate of near-term State and Federal Discretionary Programs resulting from IIJA is $6.35 billion.

In Fiscal Years 2021-2023 since the passage of IIJA, SANDAG has already received $1.6 billion in discretionary funding revenue ($876 million in state funding and $766 million in federal funding) compared to the Amendment’s assumed $950 million in discretionary funding revenue ($507 million in state funding and $441 million in federal funding).
As explained in Response to Comment 4-19, the Draft SEIR does evaluate a reasonable range of alternatives that achieve most of the basic project objectives and that are potentially feasible.

**RESPONSE TO COMMENT 4-21**

This comment restates the City’s comments on the approved Plan. At the direction of the SANDAG Board, the proposed Amendment is narrowly focused on removing the regional road usage charge while meeting state and federal requirements. The Amendment includes no changes to land use.

For the approved Plan, population and growth impacts are analyzed in Section 4.14 of the Final PEIR. As stated on pages 4.14-16 and 4.14-17: “the regional growth and land use change forecasted in the proposed Plan would be implemented by local jurisdictions through local plans and individual development projects, and most transportation network improvements would be implemented by transportation project sponsors other than SANDAG. The approved Plan was developed to accommodate forecasted regional growth and failing to do so would be inconsistent with the federal and State requirements for RTPs. In addition, precluding growth would conflict with the requirements to provide sufficient housing for the region’s population contained in SB 375. As discussed in Section 4.14.2, Government Code Section 65080(b)(2)(B)(ii) requires that the RTP/SCS must house all the population of the region, including all economic segments of the population, over the course of the planning period of the regional transportation plan.”

This comment also addresses future transit priority projects. As described above, future development projects would be implemented by local jurisdictions. CEQA Guidelines Sections 21155 through 21155.4 identify CEQA streamlining provisions for transit priority projects that are consistent with an MPO’s SCS that has been accepted by CARB. Figures D.8 and D.9 in Appendix D of the approved Plan identify potential areas for transit priority projects. The approved Plan is an iterative planning document that is typically updated every four years to account for new data, analysis, policy, and experience. SANDAG looks forward to coordinating with the City on future Plan updates.
RESPONSE TO COMMENT 4-22

SANDAG has fully complied with the requirements of CEQA in the preparation of the Draft and Final SEIRs for the proposed Amendment. Regarding disclosure of the proposed Amendment’s physical impacts on the environment in the Draft and Final SEIRs, SANDAG has disclosed impacts and identified mitigation measures for impacts on air quality; energy; GHG; noise and vibration; transportation; and cumulative impacts, and has identified alternatives to the proposed Amendment consistent with CEQA, the CEQA Guidelines, and the discussion in *Friends of Mammoth v. Board of Supervisors* (1972) 8 Cal.3d 247 referenced in the comment. For clarity with respect to the cited discussion in *County of Inyo v. Yorty* (1973) 32 Cal.App. 3d 795, the court states that an EIR is an “environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return” (*County of Inyo v. Yorty*, p. 810). The court also cites an earlier version of PRC Section 21000, which states that the government of the state should “take all action necessary to protect, rehabilitate, and enhance the environmental quality of the state” (*County of Inyo v. Yorty*, p. 802).

The court in *County of Inyo v. Yorty* does not state that lead agencies “should take all action necessary to alert decision-makers and the public to the environmental changes associated with the project,” contrary to the comment’s assertion.

Prior to consideration and certification of the Final SEIR, and consistent with the discussion in *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal. 3d 376, SANDAG will provide the SANDAG Board of Directors with a Final SEIR completed in compliance with CEQA Guidelines Section 15132 that reflects SANDAG’s independent judgment and analysis as required by CEQA Guidelines Section 15090 (a). SANDAG will also present the SANDAG Board of Directors with Findings consistent with CEQA Guidelines.
Section 15091, a Statement of Overriding Considerations consistent with Section 15093, and a Mitigation Monitoring and Reporting Program consistent with Section 15097 prior to the SANDAG Board consideration of the proposed Amendment and Final SEIR.
City of Cerritos Comments on Draft Supplemental Environmental Impact Report for the proposed Amendment to the 2021 Regional Plan
August 28, 2023
Page 8

Attachment:
1. Aug. 8, 2023, City of Cerritos Comment Letter on the Amendment to the 2021 Regional Plan (includes Aug. 6, 2021, comment letter on Draft Regional Plan and Sept. 30, 2021, clarification letter)

CC: Scott Chadwick, City Manager
    Cindy Middlebro, City Attorney
    Geoff Fein, Assistant City Manager
    Rin Kenco, Senior Assistant City Attorney
    Gary Barbetti, Deputy City Manager, Community Services
    Pat Gomewa, Deputy City Manager, Public Works
    Mike Strong, Assistant Community Development Director
    Erik Jentsy, City Planner
    Nathan Schmitt, Transportation/Planning and Mobility Manager
    Jason Geldert, Engineering Manager
    Robert Effret, Principal Planner
    Scott Donnell, Senior Planner
    Nicole Morrow, Assistant Planner
RESPONSE TO COMMENT 4-23

This comment addresses the proposed Amendment and the approved Plan and is not related to the adequacy of the Draft SEIR. As such, no further response is required.
City of Carlsbad Comments on the Amendment to the 2021 Regional Plan  
Aug. 6, 2023  
Page 2

1. Paying for the Plan:  
The 2021 Regional Plan sets out an ambitious plan to build and operate a region-wide system of transportation projects, programs and other improvements. This is a substantial role for SANDAG to play in supporting both the construction and operation of these projects, programs and other improvements. SANDAG should set annual revenue targets to directly fund everything and should approve any recommended sustainable revenue tools to help meet these targets. Many of the funding strategies will require legislative changes, or voter-approved taxation. SANDAG should clarify what will occur if the funding is not available, if opposition to projects stops them from construction, and if General Plans in the region are not modified to implement the Plan/Plan Amendment.

2. Appendix D: Sustainable Communities Strategy Documentation:  
Appendix D includes the Sustainable Communities Strategy, which outlines assumptions included in the Activity Based Model (ABM) 2+ and how to factor in these assumptions applied to ABM 2+. Specifically, the addition of pricing, parking costs for coastal communities, teleworking and micromobility. SANDAG should provide direction on how this could be worked into General Plans that are updated every 5-10 years. The plan should provide a process for implementing all phases of the Build North County Corridor (BNC) managed lanes project and the supporting active transportation infrastructure projects. It is also recommended that the plan pivot from the existing low ridership fixed routes transit services to flexible fleets along the I-5 and SR-76 corridors to maximize the objectives of the plan. As stated in the Regional Plan, priority Flexible Fleet will help make the region more accessible, equitable, and environmentally friendly.

3. Appendix A: Transportation Projects, Programs, and Policies:  
Trips to and from school sites result in a significant congestion, VMT generation, and peak hour delay throughout the region. Additional funding and projects should be recommended with a specific focus on improving safety and multimodal access in and around school sites along with programs to incentivize non-single occupancy vehicle trips to schools.  
Table A.11: Given the proven success of the Carlsbad Connect microtransit pilot program, the city agrees with the Plan/Plan Amendment’s recommendations to provide similar on-demand microtransit systems throughout North County to all mobility hub sites and major transit centers.  
The preferred Interstate-5 freeway alternative identified in the North Coast Corridor (NCC) Final EIR is the refined B+4 buffer alternative, with four freeway lanes and two managed lanes in each direction and completion by 2035. Appendix A, Table A.5 describes NCC project (s) (DCD04, DCD 7-09P) as “B+4+VMT” with completion by 2030. While this might lead to further study, it is not clear why there is a different freeway configuration (i.e., reduction of freeway lanes) proposed. How does it make sense to continue to meet NCC potential project benefits of maintaining or improving traffic operations and improving the safe and efficient regional movement of people and goods?
Appendix F.1: Response to Comments on the Draft SEIR

City of Carlsbad Comments on the Amendment to the 2021 Regional Plan
Aug. 8, 2023
Page 3

4. Active Transportation:

The city appreciates the Plan/Plan Amendment’s overall approach of providing a connected network of high-quality bicycle facilities throughout the region. Regional bikeways are recommended throughout the city including along Palmas Airport Road which will provide a key east-west connection and El Camino Real which will provide a new north-south bikeway connection through the city. Both roadways are proposed to include “on-street bikeways”. Due to the high traffic volumes and vehicle speeds experienced along both corridors, the city recommends considering “off-street bikeways” or Class I facilities where feasible in order to stimulate the shift from personal motor vehicle use to people choosing to bike.

It is extremely important that municipal transportation plans align with regional transportation plans to achieve regional goals for land use and transportation and to promote the region working together to build a cohesive regional transportation network. Considering there are currently no mechanisms in place to ensure municipalities coordinate local transportation plans with regional planning documents, the Plan should provide an approach on how SANDAG plans to engage with municipalities, especially in areas of potential disagreement or conflict (as aforementioned in this subsection and others). It is also recommended that the Plan Amendment provide additional direction regarding the application of protected bikeways in a variety of applicable contexts. While vertical measures such as soft hill posts may be appropriate in lower volume and lower speed roadways, arterial roadways with high traffic volumes and high speeds warrant much more substantial physical protection from vehicles. In addition, special consideration should be given at intersections and driveways which may be impacted due to the additional width and visibility impacts created by protected bikeways.

City staff look forward to working with SANDAG on improving mobility and land use access in the region and building sustainable, equitable and healthy modes of transportation, and we appreciate the opportunity to comment on the Plan Amendment that will help the region reach these goals.

If you have any questions related to comments on the transportation network, please contact Tom Frank, Transportation Director/City Engineer, at Tom.Frank@cityofcarlsbad.ca.gov or if you need additional information related to comments on the land use assumptions, please contact Eric Landy, City Planner, at Eric.Landy@cityofcarlsbad.ca.gov.

Sincerely,

JEFF MURPHY
Community Development Director

TOM FRANK
Transportation Director/City Engineer
Appendix F.1: Response to Comments on the Draft SEIR

City of Carlsbad Comments on the Amendment to the 2021 Regional Plan
Aug. 8, 2023
Page 4

Attachment:
1. City of Carlsbad comments on draft 2021 Regional Plan dated August 6, 2021

CC:
Scott Chadwick, City Manager
Girllle McMahon, City Attorney
Geoff Patras, Assistant City Manager
Ron Kemp, Senior Assistant City Attorney
Robby Contreras, Assistant City Attorney
Gary Barberio, Deputy City Manager, Community Services
Pat Gorner, Deputy City Manager, Public Works
Mike String, Assistant Director, Community Development
Eric Lardy, City Planner
Nathan Schmidt, Transportation Planning and Mobility Manager
Jason Gebert, Engineering Manager
Robert Effrd, Principal Planner
Scott Dornell, Senior Planner
Nicole Morrow, Assistant Planner
Appendix F.1: Response to Comments on the Draft SEIR

Don Neu, City Planner
Nathan Schmidt, Transportation Planning and Mobility Manager
Jason Gelbert, Engineering Manager
Eric Lardy, Principal Planner
Scott Donnell, Senior Planner
Corey Funk, Associate Planner
Sept. 30, 2023
San Diego Association of Governments
401 B Street, Suite 900
San Diego, CA 92101
Visit SANDAG.org

RE: City of Carlsbad Comments on Draft 2021 Regional Plan

To whom it may concern,

This letter serves to inform SANDAG that the City does not wish to remove project CB32 from the Regional Arterials Project list.

Please disregard the comment regarding project CB32 from the attached letter sent to SANDAG on Aug. 4, 2021.

Thank you for bringing this to our attention, and please contact me if you have any other questions regarding the 2021 Regional Plan comment letter.

Best Regards,

[Signature]

Tom Frank, PE
Transportation Director/City Engineer


cc: Scott Chadwick, City Manager
    Celia Brewer, City Attorney
    Geoff Potmesil, Assistant City Manager
    Ron Kemp, Assistant City Attorney
    Robby Contreras, Assistant City Attorney
    Gary Borrego, Deputy City Manager, Community Services
    Paz Gomaa, Deputy City Manager, Public Works
    Mike Strong, Assistant Director, Community Development

Public Works Branch | Transportation Department
1635 Hobson Avenue | Carlsbad, CA 92008 | 760-602-2780
Appendix F.1: Response to Comments on the Draft SEIR

City of Carlsbad

Attachment A

To Whom It May Concern,

The City of Carlsbad appreciates the opportunity to review comments on the draft 2021 Regional Plan ("Plan"). This is an important plan for this region and will guide the next phase of growth for the member agencies of the San Diego Association of Governments ("SANDAG"). An effectively designed and implemented Regional Transportation Plan would help ensure improved transportation options for area residents, businesses, and other community members; meaningful reductions in greenhouse gas ("GHG") emissions; and improved quality of life as we grow our communities.

The City of Carlsbad, acting in accordance with the requirements of the California Environmental Quality Act ("CEQA") and the California Environmental Quality Act ("CEQA"). Thus, the City submits comments on the Plan in accordance with the requirements of the CEQA and the California Environmental Quality Act ("CEQA").

Implementing the regional transportation network outlined in the Plan requires municipalities to support the regional and local infrastructure and services for the priority bus routes, local bus services, and pedestrian and cycling connections to major transit infrastructure. These components, which are delivered by municipalities, are also essential to creating a coherent and comprehensive local transportation network that feeds into regional services. For that reason, an effective public review of the Plan should involve a transparent and thorough process for identifying and evaluating potential impacts, physical changes to the environment, and indirect (off-site and cumulative) impacts that might result from implementation activities that may reasonably occur with the Plan.

The City's residents, businesses, and other community members will greatly benefit from the involvement and technical assistance from the prospective Draft Environmental Impact Report ("EIR"). Therefore, what follows in this correspondence represents our agency's preliminary comments and recommendations. The City reserves the right to add, amend, change or remove comments and recommendations based on additional review and understanding of the Plan and the environmental analysis provided under the California Environmental Quality Act ("CEQA").

The City thanks SANDAG staff for meeting with City staff on Feb. 2, 2021, to discuss some of these comments in advance of this letter. Following that meeting, SANDAG provided language that they may recommend adding to the Regional Plan for additional clarification on land use authority. The language is, "Local land use authority is consistent with local jurisdictional land use authority; however, they are best positioned to effectively implement the objectives outlined in the Plan through understanding of the unique needs of local communities and geographies." This language will be helpful to clarify that land use authority rests with

Transportation & Community Development Departments
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Appendix F.1: Response to Comments on the Draft SEIR

Attachment A

City of Carlsbad Comments on Draft 2021 Regional Plan
Aug. 6, 2021
Page 2

The City of Carlsbad offers the following comments with the intent to support development of a feasible and realistic regional plan.

SECTION I: CLARITY AND OTHER CONSIDERATIONS

City staff has attended the series of workshops that SANDAG hosted during the public review period, and respectfully states this section with several questions related to the process of the Plan and the Draft EIR. As an introduction, a jurisdiction’s General Plan, such as the City’s General Plan, identifies the expected population of the city and any lands outside of the city lands but within their sphere of influence where future growth is anticipated to occur. The city’s General Plan identifies the subject area adjacent to the McChord-Palmer Airport for development under the designations for limited and light industrial use.

For future land use planning, land use assumptions must be reasonably proxy and be generally consistent with local planning standards and programs, to be considered growth accommodating rather than growth inducing. SANDAG has the authority under Government Code Section 65364 to determine existing and projected housing needs, as well as the share of housing needs to be allocated to city and county, but it is unclear if SANDAG has jurisdiction to allocate new housing growth to areas in a manner not consistent with Government Code Section 65364. Attachment 1 includes additional information on the applicable Government Code and standards. Therefore, and as indicated above, the build-out of properties within the business park and flight activity zone must be done in accordance with the city’s General Plan Land Use Diagram, as amended, in accordance with city approval.

The initial questions on the planning process associated with developing the Plan are provided below:

1. The SANDAG website states, “SANDAG’s Sustainable Communities Strategy and Final EIR from its 2015 Regional Plan will remain valid and in compliance for purposes of state funding eligibility by all other state and federal consistency processes until the SANDAG Board of Directors adopts a new Regional Plan and EIR, provided those actions are completed by the end of December 2021.” SANDAG needs to clarify how the Draft EIR, Response to Comments and Adoption will be completed this year and what will occur if they are not completed by the end of this year. Additionally, please clarify when the Draft EIR will be available; it is difficult to completely assess the full impacts of this plan when the public review of the document is incomplete.
   a. SANDAG should clarify all public comments on the Plan are going to be addressed in the Draft EIR prior to its release.
   b. In the Draft EIR, SANDAG needs to clearly articulate the impacts to land use and if the Plan will cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating environmental effects. Appendix F: Regional Growth Incentive and Sustainable Communities Strategy Land Use Pattern appears to be inconsistent with the city’s General Plan and zoning program to accommodate the Regional Housing Needs Assessment, as well as the general plans of other jurisdictions, such as the cities of Coronado, Del Mar and the County of San Diego. The Draft EIR should clarify how implementation of this Plan can occur if these changes are not made.
2. The city has three mobility hubs associated with the Employment Centers published supporting the SANDAG Regional Plan.1 McClellan-Palomar Airport is the fifth largest employment center in the region, with Carlsbad State Beach and Carlsbad Village as “Tier 3 and Tier 4” employment centers. The city thanks SANDAG for providing data for analysis to determine impacts and provide for accurate comments on the Plan. Attachment 2 shows a summary of the Mobility Hubs and Housing units assumed in the Series 14 Growth Forecast for the year 2050. In summary:
   a. The assumptions in the updated Series 14 Growth Forecast contain inconsistencies with the city’s General Plan. The Carlsbad Palomar Major Employment Mobility Hub does include increases in density beyond what the citywide numbers appear to show when they are looked at in more detail:
      i. There are three locations in which density is shown to be inconsistent with good planning principles, the city’s General Plan and the Airport Land Use Compatibility Plan. The three most problematic areas (shown in Attachment 3) are:
         1. 736 units on parcels immediately adjacent to the McClellan-Palomar Airport runway. The location of the airport within this mobility hub was shared with SANDAG staff multiple times at workshops. This is inconsistent with the regulations provided by the San Diego County Regional Airport Authority and conflicts with standard planning principles for siting housing away from hazards.
         2. 2,735 units on existing developed resort properties and open space dedicated lands adjacent to Legoland.
         3. 65 units in a preserved open space area.
      ii. SANDAG should provide additional detail why units were assumed in these areas, what planning principles those decisions were based on, and how SANDAG expects this to be implemented.
   iii. Concentration of units in the mobility hubs alone appears to conflict with the direction received from the California Department of Housing and Community Development ("HCD") to implement new Affirmatively Furthered Fair Housing ("AFFH"), which seeks to combat housing discrimination, eliminate racial bias, undo historic patterns of segregation, and lift barriers that restrict access in order to foster inclusive communities and achieve racial equity, fair housing choice and opportunity for all Californians. The allocations of land use provided by SANDAG seem to focus all the higher density housing into one area of the city. (This is one of the largest points of analysis that each jurisdiction in the region needs to respond to in order to receive a certified Housing Element.)
   b. Additionally, looking at the detailed data provided by SANDAG, it is now clear why the citywide numbers only show moderate increases in population. Our analysis has shown that there is an assumed reduction of population by 2,310 persons in the areas within the city but outside of the mobility hubs. This is likely due to assumed reductions in persons per household over time, but SANDAG should clarify the source and reasonableness of this assumption. If housing is not provided consistent with these areas, is it still reasonable to assume persons per household will be reduced in 2050?"
Appendix F.1: Response to Comments on the Draft SEIR

City of Carlsbad Comments on Draft 2021 Regional Plan
Aug. 6, 2021
Page 4

- Furthermore, this reduction in population is not limited to the City of Carlsbad. There is an approximately 85,000 reduction in population assumed outside of mobility hubs regionally. SANDAG seeks to address it as a reasonable assumption and if this will result in other impacts to public and private projects that will rely on this growth forecast, and the associated Activity-Based Model (ABM) in project future impacts to transportation, GHG, air quality, and noise.

- The forecast has decreased in future population based on current trends, but it is not clear if there is enough housing provided with reductions and increases in some jurisdictions. Will the reduced amount of housing that will be provided result in an increase in externalities of the affordability ratio.

- There is a lack of clarity about how the Plan would be implemented at the municipal level. SANDAG should develop an approach for engaging with municipalities to ensure local support for enhancing the regional transportation network. Staff from local jurisdictions have the knowledge and ability to share where there are local use assumptions that conflict with planning and zoning laws. Our analysis focused on the City of Carlsbad, but if those types of assumptions are made regionally, it presents future issues in the overall analysis. These flows per the assumed reductions in vehicle miles traveled (VMT) and ability to implement the Regional Plan into question.

- The area designated is controlled for use and activity density and intensity through its spatial association with the McCarran-Paloma Airport. The McCarran-Paloma Airport is utilized by the Federal Aviation Administration (FAA) as a commercial service airport that is open to private aircraft, has regularly scheduled commercial flights to Los Angeles International Airport (LAX). The McCarran-Paloma Airport Land Use Compatibility Plan (ALUCP) is prepared according to FAA requirements, adopted by the San Diego County Regional Authority acting as the Airport Land Use Commission for the County of San Diego.

- The ALUCP provides measures to minimize the public’s exposure to excessive noise and safety hazards within areas around the airport that are likely to be impacted by noise and flight activity created by aircraft operations at the airport. These impacted areas include the Airport Influence Area (AIA), the Daily使用和飞机活动创造的机场运营影响的公共区域。这些受冲击的区域包括机场影响区域（AIA），日常使用和飞机活动创造的机场运营影响的公共区域。这些受冲击的区域包括机场影响区域（AIA），The ALUCP establishes safety zones for the purpose of evaluating safety compatibility with future land use actions. The safety zone establishes departure risk of aircraft accidents occurring near the airport and are determined by general aviation aircraft accident location data and data regarding the airport’s surrounding configuration and airport operational procedures. The ALUCP limits development intensities in these zones by imposing floor area and lot coverage maximums, by incorporating risk reduction measures in the design and construction of buildings, and/or by restricting certain uses altogether. For example, all residential and virtually all non-residential uses are considered incompatible land uses in these zones, while commercial or residential land uses are considered suitable for compatibility with the airport in other regions. Attachment 4 shows the McCarran-Paloma Airport, noise contours and SANDAG’s proposed housing 6th.

- If the proposed SANDAG land use assumptions are endorsed, an amendment to the city’s General Plan would be required to change the land use designation to Mixed Use Commercial or residential land uses within the existing business parks in order to accommodate the underlying assumptions of SANDAG staff. This is not a realistic
Appendix F.1: Response to Comments on the Draft SEIR

City of Calabasas Comments on Draft 2021 Regional Plan
Aug. 6, 2021
Page 5

at section 4.1. Further, the projected air space referenced in the AIR and the AUICP must also be amended based on SANDAG's regional planning assumptions. (The FAA establishes airspace protection zones in the airspace above and surrounding airports in order to protect aircraft from obstructions such as buildings, towers, etc. in navigable airspace.)

d. When a General Plan is adopted or amended, the allowable growth pattern of an area is defined and the expansion or updating of the various land uses as specified in the General Plan can occur throughout the planning horizon. Without such growth considerations, the expansion or intensification of existing land uses could be considered “growth inducing.” Unplanned and uncontrolled growth may have significant adverse impacts on the environment. CEQA requires a discussion of how a project could increase population, employment, or housing growth in surrounding areas and the impacts resulting from this growth. The CEQA Guidelines indicate that a project would normally have a significant effect on the environment if it would induce substantial growth or a substantial concentration of population.

4. At this point, it is not clear if SANDAG's assumptions adequately contemplate the development patterns included in the Sustainable Communities Strategy (SCS), Regional Transportation Plan (RTP), and Regional Air Quality Strategy (RAQS), local climate action planning business-as-usual estimates, subregional traffic modeling, or the airspace assumptions of the AIR and the AUICP.

5. The City seeks clarity on the Plan's underlying assumptions made to justify the proposed extensive high-speed rail network considering the significant changes in travel behavior which have occurred throughout the region as a result of the COVID-19 pandemic and due to the advancements in disruptive technologies such as telecommuting, autonomous vehicles, micro-rail, etc.

a. Recent North County Transit District (NCTD) Coaster ridership data show riders are not returning to riding the Coaster in comparison to other modes of travel as shown in Attachment 5.

b. This question is consistent with comments made by SANDAG's panel expert Bob Poole regarding the impact of the COVID-19 pandemic on train ridership and large transit projects. See comments by Bob Poole during the March 12, 2021 presentation to SANDAG starting at timestamp 1:30 p.m. [https://youtu.be/0LcoS7k8k40]

6. The City seeks clarity as to why an alternative analysis was not conducted with consideration of other transit alternatives such as automated vehicle technologies and personalized zero-emissions transit programs that are capable of utilizing the existing regional freeway infrastructure in response to recent developments explained in the above comment.

7. The City seeks clarity on why the Plan does not incorporate policies to promote roundabouts over signalized intersections and include a budget line item under the Complete Corridors to fund the construction of roundabouts at new locations and to replace signalized intersections when found feasible. This clarification would support the Federal Highway Administration (FHWA)'s project for Roadway Roundabout Implementation in the United States and the County of San Diego Air Pollution Control District's support for implementing roundabouts in addresses cool and reduce fatalities.

8. The City seeks clarity on the project planning process within the Plan. Specifically, the City is seeking to understand the timing of implementations of unfunded Transit projects related to...
Appendix F.1: Response to Comments on the Draft SEIR

The recent projects presented within the Regional Plan. For a city, the city is requesting that SAMATIS report the information requested in Table 3 (Attachment 4). Specific questions:

a. Please provide more information about the status and the high-speed rail agglomerations.
   - How will it affect the current alignment?
   - Will the Coast be the same route?
   - What funding is proposed and available for the Corvallis/Milwaukie trench and the other projects along the current WCVR corridor? What is the timeline for these projects?

SECTION 2. COMMENTS AND RECOMMENDATIONS

In addition to the comments on process, the Draft SEIR provided above, the city staff remain concerned with the need to implement these significant costs in the transportation strategy. On this specific point, we outline our recommendations and comments below:

1. Planning for the Plan:
   The updated Regional Plan sets out an ambitious plan to build and operate a region-wide system of public and private transportation projects and other improvements. This is a substantial action for SAMATIS to plan in support of both the construction and operation of these projects.
   - The city staff would support an enhanced regional transportation strategy, and should propose any recommended sustainable scenarios, tools to help meet these goals.
   - Many of the funding strategies need to be rigorously changed, or water spent to ensure a sustainable strategy. SAMATIS should clarify what will occur if the funding is not available. If opposition to projects stops them from construction, if General Plans in the region are not updated to implement the Plan.

2. Appendix E: Sustainable Community Strategies:
   - The Sustainable Community Strategy, which includes recommendations presented in the Activity Based Model (ABM) and Scenario (PAMA) Evaluations, City staff should propose an enhanced regional transportation strategy, and should present scenarios that reflect the region's current condition.
   - SAMATIS should provide information on how these scenarios will be reflected in the Development Plan.

3. Appendix K: Transportation Projects, Programs, and Planning:
   - Prior to and from school sites result in a significant congestion. SAMATIS must consider the population growth and peak hour delay for the region. Additional funding and projects should be recommended with a specific focus on improving safety and multimodal access to and around school sites along with programs to incentivize non-motorized vehicle trips to schools.
Appendix F.1: Response to Comments on the Draft SEIR

City of Carolinas Comments on Draft 2021 Regional Plan
Aug. 5, 2021

Page 7

Table A.12: Given the present success of the Carolinas Connector竖琴计划, the
City supports the Plan's recommendations to provide similar on-demand microtransit systems
throughout the State and major transit centers.

Table A.13: The corridor of the Carolinas Connector between Wilmington and Carolina Beach is
proposed to be undertaken from north to south to preserve the coastal ecosystems. With the adoption
of the State's regional plan, the City has determined that the corridor of the Carolinas Connector
is feasible due to consistent travel patterns and is feasible to the existing roadways. City staff
recommend the removal of the proposed project recommendations SP22 (a male parking
structure), F4 (a bicycle parking facility), and F2 (a bicycle parking facility) as they are
not consistent with the regional plan goals and objectives.

The preferred alternative for the project is identified in the North Coast Corridor (NCC)
Study. F22/F23 is the preferred alternative, with four lanes in each direction and
two lanes in each direction and four lanes in each direction and four lanes in each direction
and four lanes in each direction and four lanes in each direction. Appendix A, Table A.5 describes
the project's key elements, with completion by 2026. While the project is a forward
study, it is not clear why there is a difference in the proposed configuration of the
revised regional plan proposed. The draft in this area continues to meet NCC project
benefits of maintaining or improving traffic operations and improving the safe and efficient
collaboration of people and goods.

4. Active Transportation

The City supports the Plan's overall approach of providing a connected network of
high-quality sidewalks throughout the region. Regional sidewalks are recommended
throughout the City's existing and future regional planning efforts and are
recommended to be integrated with existing regional plans and regional
transportation facilities. Due to the high traffic volumes and vehicle speeds experienced
east of the City, the City recommends considering "on-street bike lanes" or "in-street bike lanes"
in areas where feasible. The Plan is to be aligned with regional plans and facilities.

City staff look forward to working with SARTOG on improving mobility and land use access in the region
and building sustainable, equitable, and healthy modes of transportation, and we appreciate the
opportunity to comment on the Plan that will help the Region realize these goals.

Amendment to the 2021 Regional Plan
Supplemental Environmental Impact Report
Page F.1-89
Attachment A

City of Carlsbad Comments on Draft 2021 Regional Plan
Aug. 8, 2021
Page 8

If you have any questions related to comments on the transportation network, please contact Tom Frank, Transportation Director/City Engineer, at Tom.Frank@carlsbadca.gov or if you need additional information related to comments on the land use elements, please contact Eric Landy, Principal Planner, at Eric.Landy@carlsbadca.gov.

Sincerely,

NDS
JEFF MURPHY
Community Development Director

TOM FRANK
Transportation Director/City Engineer

Attachments:
1. Board report: Case 6S20 (4B:375) Summary
2. City of Carlsbad Mobility Bests
3. City of Carlsbad: Palomar Airport Road Mobility Plan Analysis
4. Palomar-Miramar Airport Flight Paths
5. Recent NCTD Coaster Ridership Data
6. Table 1: Project Data Request
7. Table 3: Detail of Proposed Rail Lines

Scott Chadwick, City Manager
Colita Breen, City Attorney
Geoff Patmore, Assistant City Manager
Rob Kaemmer, Assistant City Attorney
Rob McFarland, Assistant City Attorney
Gary Baritors, Deputy City Manager, Community Services
Paco Gomez, Deputy City Manager, Public Works
Mike Strong, Assistant Director, Community Development
Don Neu, City Planner
Nehemiah Schmidt, Transportation Planning and Mobility Manager
Jason Gallent, Engineering Manager
Eric Landy, Principal Planner
Scott Deverell, Senior Planner
Corey Parks, Associate Planner
Appendix F.1: Response to Comments on the Draft SEIR

Attachment 1: Government Code 65022 (S.B. 373) Summary

Government Code section ("GOV §") 65022, also referred to as California Senate Bill 373 (Steinberg, 2008) ("SB 373"), is one area of law that provides SANDAG with guidance to which a regional transportation plan must be developed.

Among other things, the regional transportation plan that is developed "shall be an internally consistent document" (GOV § 65080 (b)) and shall include a "sustainable communities strategy prepared by each metropolitan planning organization as follows" (GOV § 65080 (b)(2)(B)):

- Each metropolitan planning organization shall prepare a sustainable communities strategy, subject to the requirements of Part 450 of Title 13 of, and Part 92 of Title 40 of, the Code of Federal Regulations, including the requirement to utilize the most recent planning assumptions considering local general plans and other factors. The sustainable communities strategy shall (i) identify the general location of uses, residential densities, and building intensities within the region, (ii) identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the regional transportation plan taking into account net migration into the region, population growth, household formation and employment growth, (iii) identify areas within the region sufficient to house an eight-year projection of the regional housing need for the region pursuant to Section 65388. (iv) identify a transportation network to service the transportation needs of the region, (v) gather and consider the best practically available scientific information regarding resource areas and formulate in the region as defined in subdivisions (a) and (b) of Section 65360.1, (vi) consider the state housing goals specified in Sections 65515.5 and 65515.2(c) set forth a forecasted development pattern for the region that, when integrated with the transportation network, reduce greenhouse gas emissions and forecasts to achieve. If there is no feasible way to do so, the greenhouse gas emission reduction targets approved by the state board and (vii) allow the regional transportation plan to comply with Section 716 of the federal Clean Air Act (42 U.S.C. Sec. 2016).

The 2023 Draft Regional Transportation Plan includes a Sustainable Communities Strategy ("SCS"). As required by SB 373 for the San Diego region (herein after called "Draft Regional Plan"). The Draft Regional Plan indicates that SB 373 requires the SCS to include a pattern for forecasted growth and development that accomplishes the following: 1) When combined with the transportation network, the SCS will achieve the regional GHG emission reduction targets; 2) The SCS will accommodate the Regional Housing Needs Assessment ("RHA") Determination; and 3) The SCS utilizes the most recent planning assumptions. (Reference p. 19 of the 2021 Regional Plan.)

Predicting the effect of transportation plans or projects on land uses and land use planning is critical to developing context sensitive solutions for transportation projects. Therefore, utilization of the most recent planning assumptions is not only necessary but is required as specifically stated therein GOV § 65080. If inconsistencies are found in the land use assumptions or adverse impacts are anticipated, SANDAG should be actively engaged in the development of measures to address these issues.

The SANDAG Board of Directors approved the final RHA plan with the final housing unit allocation on July 10, 2020, which was based on the most recent land use planning assumptions and an adopted methodology to allocate housing in accordance with GOV § 65584 (d and e). The City of Carlsbad received a total RHA allocation of 3,073 units as a result of RHA plan adoption. The adopted April 6, 2021 city’s Housing Element accommodates its housing needs through current zoning and other programs.

City of Carlsbad Comment Letter
August 6, 2021
as needed to meet the city’s RHHA obligation at all income levels. The land use inputs derived from this local planning document constitutes the most recent land use assumptions. On July 13, 2021, the Department of Housing and Community Development found the adopted housing element is in substantial compliance with State Housing Element Law (Article 3.6 of the Gov. Code).

The most recent planning assumptions are critical for the development of the draft Regional Plan as the document must comply with other specific state and federal mandates including a SCS per California Senate Bill 375, which achieves GHG emissions reduction targets set by the California Air Resources Board and compliance with federal civil rights (Title VI) requirements, environmental justice considerations, air quality conformity, and public participation. To monitor compliance and attainment of state reduction goals in GHG, Gov. § 65080 (b)(1) requires that:

(i) Prior to adopting a sustainable communities strategy, the metropolitan planning organization shall quantify the reduction in greenhouse gas emissions projected to be achieved by the sustainable communities strategy and set forth the difference, if any, between the amount of that reduction and the target for the region established by the state board.

(ii) Prior to starting the public participation process adopted pursuant to subparagraph (i), the metropolitan planning organization shall submit a description to the state board of the technical methodology it intends to use to estimate the greenhouse gas emissions from its sustainable communities strategy and, if appropriate, its alternative planning strategy.

There is inevitably some uncertainty regarding the use of projected future conditions. However, what is certain is that the project will not operate under the conditions that exist today. There will be new residential and employment growth in the intervening years between now and the proposed build-out of the draft Regional Plan. Nonetheless, projections utilized should represent the best available information assembled by the local agencies with jurisdiction and expertise. Judgments about land use assumptions utilized in the draft Regional Plan should be based on and supported by facts, adopted plans, and “most recent planning assumptions,” rather than speculation and personal opinions. The land use assumptions for “uses, residential density, and building intensities within the region” (as required by Gov. § 65080 (b)(2)(B)) should also be the same as that provided to the state board for SCS (required per Gov. § 65080 (b)(2)(B)).

SB 375 directs CARB to accept or reject the determination of SANDAG that its SCS submitted to CARB would, if implemented, achieve the region’s GHG emissions reduction targets. CARB’s technical evaluation of SANDAG’s draft Regional Plan would be based on all the evidence provided, including the models, the data inputs and assumptions, the SCS strategies, and the performance indicators.

The transportation planning assumptions are also extremely important as it is relied on for other master planning exercises. The Regional Air Quality Strategy ("RAQS") relies on information from CARB and SANDAG for information regarding projected growth in the cities and San Diego County. This in turn is utilized to address other state requirements, including the San Diego portion of the California State Implementation Plan ("SIP") and promulgating their own rules and regulations regarding air quality in the region or to address federal requirements.

City of Carlsbad Comment Letter
August 6, 2021
Appendix F.1: Response to Comments on the Draft SEIR

Attachment A

Amendment to the 2021 Regional Plan
Supplemental Environmental Impact Report

Page F.1-93
1. Inventory the existing land use patterns (including undeveloped land), development trends, and transportation systems. The inventory of existing land uses should include the following land use types: residential, commercial, industrial, recreational, institutional, public services, community services, emergency services, transportation, utilities, agricultural, and undeveloped land in the study area. The study area should include the surrounding community that is generally associated with the project area within which community impacts could occur. The inventory should also address development trends and identify recent developments in the area to include the development's name, size, status (planned, built), under construction, and the jurisdiction in which it is located. A map showing the location of existing and planned land uses in the area should also be prepared.

2. Determine whether the project is consistent with local and regional policies that govern land use and development. For the consistency analysis, the policies and programs considered in the analysis should include transportation plans and programs (MTPs/RTPs), regional growth plans, local General Plans that establish land use and growth management policies for the study area, and any specific or pipeline development proposals. This analysis should also include a discussion of consistency with the Coastal Zone Management Act of 1972, California Coastal Act of 1976, the National Wild and Scenic Rivers Act (Pub. Res. Code § 5098.76 et seq.), and the California Wild and Scenic Rivers Act (Pub. Res. Code § 5098.50 et seq.). After preparing a preliminary list of measures to be considered in the analysis, SANDAG’s planner should meet with the staff of the various agencies to review the list to determine if it is complete and revise the list as necessary.

3. Assess the changes that would occur in land uses and growth and without the project.

4. The draft Regional Plan and each project alternative should be considered separately since the results may be different.

5. Develop measures to avoid, minimize, and/or mitigate potential adverse effects.

The resulting environmental analysis should identify the current development trends and the State and/or local government plans and policies on land use and growth in the area which will be impacted by the proposed project. These plans and policies are normally reflected in local General Plans. If found to be consistent, then the findings in the EIR should be documented in the report and no further analysis or action is necessary. When found to be inconsistent with a policy or program, then consideration must be given to modifying the draft Regional Plan alternative to make it consistent, or measures to address the inconsistency must be developed. SANDAG should be actively engaged in the development of measures to address these issues and be prepared to assess the consistency of the draft Regional Plan and alternatives with the comprehensive development plans adopted for the area and/or (as applicable) other plans used in the development of the transportation plan required by Section 33 U.S.C. § 134. For any new land use growth assumptions, the secondary social, economic, and environmental impacts of any substantial, foreseeable, induced development should be presented for the draft Regional Plan and each alternative, including adverse effects on existing communities. The results should be shared with the public during the public involvement process, e.g., at community meetings, etc. Public input should be considered by SANDAG and if necessary, the findings of the analysis should be revised to reflect information gained through the public involvement process.
Appendix F.1: Response to Comments on the Draft SEIR
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Amendment to the 2021 Regional Plan
Supplemental Environmental Impact Report

Page F.1-114
### Amendment to the 2021 Regional Plan

#### Supplemental Environmental Impact Report

**Appendix F.1: Response to Comments on the Draft SEIR**

#### PLEASE NOTE: PRELIMINARY RESULTS - SUBJECT TO REVISIONS

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**Attachmnet...**
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COMMENT LETTER 5: COUNTY OF SAN DIEGO

August 28, 2023

Kirsten Uchtel
Associate Planner
SANDAG
401 B Street, Suite 800
San Diego, CA 92101

Dear Kirsten Uchtel,

Thank you for the opportunity to review and provide comment on the San Diego Association of Governments (SANDAG) 2021 Regional Plan Supplemental Environmental Impact Report (SEIR). The County has previously provided comments on the 2021 Regional Plan Amendment on August 6, 2023 (Attachment A), the 2021 Draft Programmatic Environmental Impact Report (PEIR) on October 11, 2021 (Attachment B), and the 2021 Draft Regional Plan on August 5, 2021 (Attachment C).

In these letters, the County outlined opportunities and requested further clarification, exploration, and consideration of equitable and sustainable strategies for all communities within the region with specific emphasis on the unincorporated communities that have less access to alternative modes of transportation but higher populations than several incorporated cities. These comments still stand with the removal of the Regional Road Usage Charge (RUC), and the County looks forward to further discussions with SANDAG on how to best address equity considerations for the unincorporated areas.

The County is requesting a SANDAG Response to Comments on County comments provided in Sections 1 and 2 below and look forward to continued conversations and identification of solutions to comments provided in Section 3. County staff is committed to continue to work with SANDAG staff on our shared goals of implementing programs and services to improve the quality of life of all residents and offers the following comments for your consideration. Please note that the comments provided should not be construed as County support or opposition for the Project.

RESPONSE TO COMMENT 5-1

SANDAG appreciates the County of San Diego’s feedback on the proposed Amendment and your participation in the environmental review process. Please refer to subsequent responses to your comments below for detailed responses.

The County’s comments on the proposed Amendment are addressed in the master responses to the proposed Amendment found in Appendix F.2. Please note that Response to Comments 5-3 through 5-7 apply to the proposed Amendment or to the approved Plan, not to the adequacy of the Draft SEIR, but responses are nevertheless provided.
Appendix F.1: Response to Comments on the Draft SEIR

RESPONSE TO COMMENT 5-2

This comment summarizes the scope of the SEIR and notes that the SEIR utilized the same baseline conditions that were in the approved Plan PEIR. This is not a comment on the adequacy of the SEIR. As such, no further response is required.

RESPONSE TO COMMENT 5-3

The regional road usage charge was not intended to be implemented until 2030, and as such was only a revenue source for the final 20 years of the approved Plan. The regional road usage charge was projected to generate $14.2 billion in revenues between 2030 and 2050 under the approved Plan and was anticipated to support transportation expenditures between 2030 and 2050, in combination with several other revenue sources. These regional road usage charge revenues have been excluded from the revenue projections in the Amendment.

Updated revenue assumptions for the Amendment provide sufficient revenues to fund the projects in the approved Plan. In updating revenue assumptions for the Amendment, SANDAG included the Infrastructure Investment and Jobs Act (IIJA, also known as the Bipartisan Infrastructure Law), which was signed into law in November 2021, after the financial plan for the approved Plan was developed. The IIJA authorized $1.2 trillion for transportation and infrastructure spending with $550 billion of that figure going toward “new” investments and programs. The historic level of infrastructure investment from the federal and state government in the early phase years of the approved Plan was unknown and underestimated. The federal and state discretionary programs near-term estimates have been updated to assume historical leveraging rates of local TransNet revenue. The total estimate of near-term State and Federal Discretionary Programs resulting from IIJA is $6.35 billion.

In Fiscal Years 2021-2023 since the passage of IIJA, SANDAG has received $1.6 billion in discretionary funding revenue (876 million in state funding and 766 million in federal funding) compared to the Amendment’s assumed $950 million in discretionary funding revenue ($507 million in state funding and $441 million in federal funding).
RESPONSE TO COMMENT 5-4
The proposed state road usage charge would be administered by the State of California and revenue eligibility would likely be determined by the funding agency at the state level. The proposed Amendment assumes that Future State Revenues for Transportation may include a state road usage charge or other state transportation funding increase at a level that covers the funding gap created as fuel taxes depreciate over time due to greater fuel efficiency. The additional revenues are assumed to start in 2030 to fund the gap and support transit and highway capital expenses.

RESPONSE TO COMMENT 5-5
Project prioritization based on planning horizon years 2025, 2035 and 2050 under the Amendment remains unchanged from the approved Plan. It is worth noting that there will be more unknowns for revenues and costs in the outer years of the Regional Plan. SANDAG is typically required to update the Regional Plan every four years to account for the changes in funding outlooks, priorities, and planning assumptions, and will update priorities, costs, and revenues as part of the 2025 Regional Plan.
Appendix F.1: Response to Comments on the Draft SEIR

This comment reiterates the County of San Diego’s comments provided on the approved Plan and is not related to the adequacy of the Draft SEIR.

The coverage area of each regional Mobility Hub represents a general area defined through a propensity analysis (detailed in Appendix T to the approved Plan). The mobility hubs of the approved Plan depict a framework that will be used to guide future collaborative planning efforts between SANDAG and local jurisdictions. SANDAG agrees that certain unincorporated areas identified by the County (i.e., North County Metro, Lakeside, and Spring Valley) are appropriate to consider in future mobility hub planning. The identified areas also align with Transit Priority Areas. In the final 2021 approved Plan, mobility hub maps were updated to reflect Transit Priority Areas to be more inclusive of these areas.

Investments in the approved Plan for unincorporated communities include improvements to local bus service (increased frequencies and span of service) and Flexible Fleet services. Additional details on the improvements to local bus service has been added to Appendix A to the approved Plan. In addition, the investments in the mobility hubs also serve residents of the unincorporated area as many residents live near a mobility hub and will be able to access the transit system within a reasonable amount of time on a Flexible Fleet service, then be able to make use of the Rapid bus, light rail, or commuter rail systems.

RESPONSE TO COMMENT 5-7

This comment reiterates the County of San Diego’s comments provided on the approved Plan and is not related to the adequacy of the Draft SEIR.

The approved Plan accommodates the regional housing need determined by the Department of Housing and Community Development for the 6th Cycle RHNA. That determination specifically identified additional need resulting from a low vacancy rate, overcrowding, and housing unit demolitions in the region. The remaining housing projected through 2050 is based on the January
2020 vintage of the Department of Finance population projections. As described in Appendix F to the approved Plan, additional assumptions used in developing the forecasted housing units include a gradual increase in the region’s vacancy rate to 4 percent by 2040, identification of vacation rentals as unoccupiable units, and a decline in household size as the population ages. While land use authority is reserved to the local jurisdictions, land use patterns will directly impact GHG emissions from the transportation sector. Government Code section 65080(b)(2)(B) requires that the SCS “set forth a forecasted development pattern for the region, which, when integrated with the transportation network and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board.”

The SCS included in the approved Plan projects development that would achieve the state-mandated GHG emissions reduction target when integrated with the transportation investments, programs and policies in the Plan. The Regional Plan and its SCS are iterative planning documents that are typically updated every four years to account for new data, analysis, policy, and experience.

**RESPONSE TO COMMENT 5-8**

See Response to Comment 5-7 above for how the approved Plan projects development and transportation network improvements that would achieve the state-mandated GHG emissions reduction target. The analysis in Section 4.3, *Greenhouse Gas Emissions*, in this SEIR is based on the *2016 GHG Inventory and Projections for the San Diego Region* report prepared by SANDAG (Appendix H of the approved Plan PEIR), the updated Activity Based Model (ABM) traffic data associated with the proposed Amendment, and the updated EMFAC2017 emission rates associated with the repeal of the SAFE Vehicles Rule Part One. This report provides an estimate of 2016 GHG emissions for the San Diego region and GHG projections for the years 2025, 2035, and 2050. As discussed under Impact GHG-1 in Section 4.3, the proposed Amendment would result in a slight increase in GHG emissions within the San Diego region compared to the approved
Appendix F.1: Response to Comments on the Draft SEIR

Plan (0.5 percent in 2035 and 0.6 percent in 2050). This impact was determined to be less than significant because the proposed Amendment would not directly or indirectly result in an increase in GHG emissions compared to existing conditions because annual regional emissions would be approximately 28 percent lower in 2035 and 31 percent lower in 2050 relative to 2016.

RESPONSE TO COMMENT 5-9

Thank you for your comments. SANDAG looks forward to future coordination with the County of San Diego during preparation of the 2025 Regional Plan to address the concerns expressed in this comment.
RESPONSE TO COMMENT 5-10

This comment was submitted during the NOP scoping period for the SEIR and is not a comment on the adequacy of the SEIR. The SEIR preparers received the County’s NOP comments and considered them in the preparation of the SEIR. Many of the concerns expressed in the NOP comment letter are repeated in the County’s Draft SEIR comment letter, and are addressed in the above responses. No additional response is required.
Appendix F.1: Response to Comments on the Draft SEIR

Kirsten Uchitel  
August 8, 2023  
Page 2

Plan Draft Programmatic Environmental Impact Report (October 11, 2021), provided as attachments to this comment letter (Attachment A and Attachment B, respectively). The County requests that SANDAG consider and provide responses to the County’s comments.

Removal of the Regional Road User Charge and Revenue Assumptions

The Regional Road User Charge (RUC) was previously deemed a necessary component in the 2021 Regional Plan. As was argued in our comments on the 2021 Regional Plan (Attachment A), it is important for the County to better understand how investment would be applied to ensure that both the benefits and costs of the Regional Plan are equitably distributed across the region and the methodology for how the amended plan and future projects will function without the RUC. The proposed project provides updated revenue assumptions that show a net decrease in revenues from $173 billion to $163 billion over the plan’s 30-year life. The updated revenue assumptions include future local sales tax revenue, updated TransNet revenue, and updated State and Federal funding. The Amendment states that this revenue will be sufficient to fund the anticipated transportation improvements as well as the ability to document the federal Air Quality Planning and Transportation Conformity; however, these funding sources are not guaranteed and therefore, may not be realized.

For example, a TransNet amendment may not qualify for the 2024 ballot and/or may not be passed by the voters and Bipartisan Infrastructure Law funding (BIL) is a competitive grant process that may not provide the level of funding that is anticipated. Considering this, the County is requesting further clarification on:

1. Revenue Assumptions: How the 2021 Regional Plan will meet its revenue assumptions, including the risks and impacts to projects if these anticipated revenue sources are not realized over the life of the Plan. It is unclear whether projects that have previously been planned, programmed, or awarded as part of TransNet would retain funding that was previously allocated, or if there would be any changes to the current allocation or use of funds that local agencies receive directly for local road system improvements if the revenue assumptions are not realized; and

2. Project Prioritization: It is unclear what methodology SANDAG will utilize for prioritizing projects if funding assumptions are not realized, including what, if any, criteria would be utilized to include or not include projects on the list for funding and how will local jurisdictions be involved in the process of project prioritization. The County reemphasizes that revenues generated should be allocated to support additional transportation and mobility options in unincorporated communities, which often have longer commutes and less access to alternative transportation options due to inadequacy of regional planning for transit services to these communities.

Expansion of Mobility Hubs

In previous comment letters to SANDAG, the County provided comments regarding the need for more consideration and planning for the unincorporated areas. Less than 1% of the unincorporated area was included within mobility hubs, which is where transit and on-demand travel infrastructure investment is focused. To promote greater equity, mobility hubs should be inclusive of adjacent unincorporated communities, many which have greater populations than the incorporated cities and often, less access to alternative transportation options.
The removal of the RUC should be examined in terms of its impact on the planned transportation system, particularly in providing travelers with alternatives to driving. Previously, the County provided comment regarding the 2021 Regional Plan which delineated the boundaries of mobility hubs along jurisdictional boundaries, excluding more than 90% of the unincorporated area. The County maintains that there are opportunities to expand the proposed mobility hubs to include unincorporated communities, which would benefit from additional access to investment associated with inclusion in the adjacent mobility hubs, as these communities have few existing alternative options to driving. Below are some areas the County requests clarification on regarding mobility hubs:

1. **Implications:** Providing an assessment of the implications of the change in proposed funding sources, including the removal of the RUC, on the unincorporated county and its potential impact on growth in these areas is important.

2. **Development:** Understanding how this change might affect growth dynamics is key for evaluating regional development.

3. **Boundaries:** Reconsidering the boundaries of mobility hubs to include unincorporated areas is an important aspect to address within the regional plan. The County requests further details on SANDAG's approach to reevaluating the boundaries of the mobility hubs.

**Regional Housing Needs Assessment and Sustainable Communities Strategy**

County staff relies on SANDAG population, housing, and job growth forecasts for planning efforts. For the 6th Cycle Regional Housing Needs Allocation (RHNA), the unincorporated portion of the County was allocated 8,700 units for the planning period of 2021 – 2029. The 2021 Regional Plan forecasts that the County will build 7,415 units through 2050. Historic data shows that from 2010 to 2020, 7,330 new homes were built in the unincorporated area. If that trend continued, an additional 22,000 new homes would be built in the unincorporated area by 2050. In contrast to these historical trends, the Regional Plan forecast projects that the unincorporated county will only grow by 719 units between 2020 and 2050 and projects no future growth in the unincorporated area through 2050. The Sustainable Community Strategy for the unincorporated area should not be a no-growth strategy. The County is interested in understanding how SANDAG will account for future growth within the unincorporated areas, including natural growth beyond 2035 in the Regional Plan. Growth within the unincorporated areas should be included in the regional planning process. Below are some areas the County requests clarification regarding RHNA and the Sustainable Communities Strategies (SCS):

1. **Goals and Growth:** The County is requesting further transparency as to how SANDAG plans to reconcile this discrepancy and ensure alignment between RHNA goals, growth forecasts, funding availability, and the need to incorporate future growth in the unincorporated areas into the regional planning process.

2. **Alignment:** There should be alignment between RHNA goals, growth forecasts, and funding availability.
Appendix F.1: Response to Comments on the Draft SEIR

Greenhouse Gas Reduction Strategies

The County has continued to request that SANDAG align GHG reduction and housing goals both in the 2021 Regional Plan and in the forthcoming 2025 Regional Plan. Ensuring alignment between GHG reduction strategies and RHNA goals is also essential for an integrated and sustainable planning approach. SANDAG’s alignment with California Air and Resource Board (CARB) targets for transportation emissions must consider similar GHG reduction targets which are also set by CARB for local jurisdictions. The Amendment to the 2021 Regional Plan also identifies the need for funding beyond a fuel tax due to the shift in electric vehicles (EV) and more fuel-efficient vehicles. Below are some areas the County requests clarification on regarding GHG Reduction Strategies:

1. Feasibility: The County requests further transparency about the strategy and feasibility of implementing programs and plans to achieve GHG reductions in compliance with State targets that may be impacted from the removal of the RUC. Elaborating on how SANDAG intends to align these components would enhance transparency and clarify and will help ensure that coordination of regional GHG reduction goals.

2. Local Alignments: Please clarify how RUC removal and funding sources impact SANDAG partnerships which rely on grant funding to initiate programs, improvements, and initiatives which support smart growth in Mobility Hubs, connection, and reduction of Vehicle Miles Traveled (VMT) initiatives for GHG emissions within the unincorporated areas, including environmental considerations and RHNA growth projection alignments.

3. Cost: It would be valuable to know if SANDAG made network performance assumptions to account for the contemporary increased costs of vehicles, rate of electric vehicle adoption, maintenance, fuel, insurance, inflation, and the overall cost of living for drivers, commuters, and other social and demographic trends and shifts to quantify the economic and greenhouse gas emissions impact.

4. Funding Allocations: Clarifying the approach taken to funding allocation would provide a better understanding of the analysis for the GHG emission reduction alignments with the state, CARB grant funding, and expanding Mobility Hub connections within the unincorporated region. Regarding the implementation of projects and achievement of compliant emission levels, it would be beneficial to clarify which funds have been reallocated or will be added for this purpose.

Conclusion

Loss or reallocation of funding due to the removal of funding sources such as the RUC would affect anticipated projects and limit the County’s ability to provide housing and affordable, reliable, and safe mobility options, particularly to unincorporated communities. It is important to understand how SANDAG will address potential scenarios where revenue sources, such as TransNet funding or competitive BIL funding, are not realized at the anticipated levels. In such cases, it would be valuable to know how SANDAG will prioritize projects and adjust its strategies to ensure effective and equitable resource allocation and what role local jurisdictions will have in the project prioritization process. The County would like to understand if there are plans to review an updated RUC or consideration of a similar revenue stream to replace the RUC and how SANDAG plans to address the County’s previously provided feedback (Attachment A and Attachment B). The County is committed to working with SANDAG to ensure
Kirsten Uchtel  
August 8, 2023
Page 5

that potential funding and project opportunities within the unincorporated areas are not precluded in the future. The County would like to understand how County comments provided to date will be addressed in this amended plan and on a go-forward basis.

The County appreciates the opportunity to comment on this Project. We look forward to receiving future documents related to this Project and providing additional assistance, at your request. If you have any questions regarding these comments, please contact Ashley Rivera, Land Use / Environmental Planner / Long Range Planning Division, at (619) 620-4438, or via e-mail at Ashley.Rivera@sdcounty.ca.gov.

Sincerely,

Lynnette Santos
Chief, Long Range Planning Division
Planning & Development Services

Enclosures: Attachment A – CDD Comment Letter 2021-08-06
Attachment B – CDD Comment Letter 2021-10-11

cc: Stephanie Hernandez, CIO Staff Officer, LUG (Stephanie.Hernandez@sdcounty.ca.gov)
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RESPONSE TO COMMENT 5-11

Thank you for providing the County of San Diego’s comment letter on the approved Plan PEIR. Responses to these comments were provided in Responses to Comments 12-1 through 12-48 in Appendix P1 to the approved Plan PEIR.

The County of San Diego (County) staff reviewed SANDAG’s Draft Programmatic Environmental Impact Report (Draft PEIR) for “San Diego Forward: The 2021 Regional Plan,” dated August 2021. County staff provided detailed comments regarding the 2021 Regional Plan (Proposed Plan) in a letter previously submitted to SANDAG. The letter, dated August 5, 2021 (Attachment A), outlined opportunities within the Proposed Plan for which County staff requested further clarification, exploration, and consideration. County staff would like to continue discussions with SANDAG on how these opportunities align with the objectives of the proposed plan and the Draft PEIR.

To ensure that potential opportunities within the unincorporated area are not precluded in the future, County staff requests that SANDAG consider the comments below on the Draft PEIR and that any necessary refinements be reflected in Chapter 2, Project Description, and analyzed in the appropriate sections of the Final PEIR. County staff appreciates the opportunity to review the Draft PEIR for the Proposed Plan and offers the following comments for your consideration:

GENERAL

1. The Draft PEIR (Table 3-5) notes that 56% (1,855,597 out of 3,309,910 total people) of San Diego County residents are currently located outside of a Mobility Hub Network, including 512,597 people in the unincorporated area. With the significant investment described in the Proposed Plan, County staff would like to ensure that it is fairly and equitably distributed for the benefit of all County residents, including rural residents living in unincorporated communities.
2. Staff recommends the inclusion of potential investments in roads identified in the County's Mobility Element and in the Regional Arterial System that would further connect the unincorporated area to proposed mobility hubs, with consideration of those roads that also serve as evacuation routes.

3. Staff would also request consideration of how transit can be aligned with recreation access points to increase access to these important regional amenities.

4. The Proposed Plan focuses on mobility and land use changes that would serve three primary user groups: pedestrians, bicyclists, and vehicles. Please consider updating the analysis to consider mobility needs for wildlife (wildlife corridors) and for equestrians where appropriate.

5. From a social equity standpoint, please consider if allowing single occupancy vehicles should be permitted in managed lanes. Allowing single occupants that can afford to travel in managed lanes will create some inequities in the community.

AIRPORTS

1. The San Diego County Regional Airport Authority adopted Airport Land Use Compatibility Plans for the eight airports, which included land use compatibility policies related to airports, noise, safety, and overflight. These policies have been adopted by the County of San Diego through its General Plan and Zoning Code. After evaluating the forecasted increases in housing and jobs around the Mobility Hubs, there are several land use assumptions made in the Proposed Plan related to safety and noise around Fallbrook Airport, Jacumba Airport, Gillespie Field and McClellan–Palomar Airport that County staff would like to better understand. For example, there are forecasted incompatible housing increases within the Runway Protection Zones at Gillespie Field. These inconsistencies could result in making the assumed intensities and density increases included in the Proposed Plan unachievable.

AESTHETICS AND VISUAL RESOURCES

1. Page 4.1-10 of the Draft PEIR mentions the County of San Diego Dark Sky Ordinance and associated regulation of outdoor light fixtures within 15 miles of local observatories. This ordinance also includes the minimization of light pollution to reduce impacts to wildlife. Please consider expanding the analysis to address direct and indirect impacts due to light and glare on open space lands and wildlife corridors/linkages.

2. It is not clear what type of trees and vegetation will be used to replace impacted vegetation in cases where vegetation disruption causes potential aesthetic impacts (Mitigation Measures AEB-2a, 2d, AEB-3a). Mitigation Measure BG-1 is specified that certain invasive species shall not be used to replace impacted vegetation. Please consider adding that same requirement to the Aesthetic/Visual Resources mitigation measures in the Draft PEIR.
BIological Resources

1. Please clarify the significant reduction in acreages impacted between the 2015 EIR and the 2021 Draft EIR, especially as they relate to Wetlands and Riparian Habitat, Upland Habitat, Agricultural Land, and Transportation. The differences do not appear to correlate with the changes or updates made between the 2015 and 2021 Regional Plan.

2. On January 13, 2017, County staff submitted comments to SANDAG on the Notice of Preparation (NOP) of the Regional Plan Draft PEIR (Attachment B). In that letter, the County requested that SANDAG coordinate with County staff and evaluate in the Draft PEIR potential direct and indirect impacts on the Multiple Species Conservation Plan (MSCP). The comments related to the MSCP still stand (Attachment B). As such, it is not clear how the Proposed Plan would impact the MSCP, or if there is specific mitigation proposed to reduce these impacts. Please consider updating the analysis to clarify these potential impacts and associated mitigation.

3. Please ensure that maps are using the latest GIS data available from SanGIS, which is regularly updated. For example, the maps showing Open Space Parks and Recreation land (Figures 4.15-1 and 4.15-2) seem to be missing some of the County’s Department of Parks and Recreation properties. Please ensure all references to County Department of Parks and Recreation properties are updated throughout the 2021 Draft PEIR.

4. Please consider including County parks and preserves and associated proposed project impacts to each specific park and preserve within the Draft PEIR data on County parks and preserves can be found on SanGIS. For example, on Page 4.4-107, it states that the largest area of encroachment and associated impacts would occur on the Otay Ranch Preserve. However, the level and extent of that potential impact is not clear. Please coordinate in advance with the County Department of Parks and Recreation prior to implementation of projects that may have impacts to County parks and preserves.

5. The figures within the Draft PEIR do not show property ownership overlaid with the proposed project. To better understand and analyze potential impacts of the project, please consider the inclusion of a figure that shows County parks and preserves.

6. Please consider revising “Hardline Preserve” to “MSCP Preserve” throughout the Draft PEIR, as MSCP Preserve is the term most commonly used.

7. In Table 4.2-2 and Table 4.4-4, Otay Ranch and the associated General Development Plan/Subregional Plan are categorized as falling under the jurisdiction of the City of Chula Vista. While the text clarifies that Otay Ranch is jointly owned and managed by the City of Chula Vista and the County, the categorization in the tables is unclear. Please consider revising the tables to show the joint ownership and management of this area.

8. Figure 4.4-16, San Diego Conservation Planning Areas and Conserved Lands, does not appear to be consistent with the Subarea Plans under Adopted MSCP/MMCP Subregional Plans listed in Table 4.4-5. Please consider revising these to show all Subarea Plans.

9. On page 4.4-107, Section B4.4 Analysis Methodology please consider updating the methodology to take into consideration requirements of the Public Park Preservation Act of
Appendix F.1: Response to Comments on the Draft SEIR

Ms. Uchitel
October 11, 2021
Page 4

1371 (Public Resources Code Sections 5400-5408). In the event the Proposed Plan results in “take” of any County MSCP Preserve Lands, this would be considered “take” of designated park land and may require land or other compensation for loss of park land.

10. In Figures 4.4-3 through 4.4-8, one of the data sources for those figures is stated as the County of San Diego’s SanDiego data from 2017. Please consider using the County of San Diego’s SanDieGo data through 2020, as this contains updated data.

11. Table 4.4-5 states that the County is pursuing an amendment to the South County Subarea Plan to include the Quino checkerspot butterfly (QCB). Please remove reference to QCB as the County has expanded the project to the Regional Butterflies Habitat Conservation Plan (RBHCP) to include a comprehensive approach that would cover QCB, Harbison’s dune skipper, Hermes copper and the Laguna Mountains skipper.

a. Additionally, the RBHCP is currently being developed and has not yet been adopted. Therefore, reference to the RBHCP may not need to be included in Table 4.4-5 related to adopted regional conservation plans. Please consider removing the reference.

12. Given the significance and regional importance of wildlife corridors and wildlife linkages, please consider updating the analysis to consider areas where linkages and corridors could be impacted by the Proposed Plan and any mitigation measures that could be implemented to improve wildlife linkages.

13. Spread of invasive plants is a significant regional issue that many land managers face throughout the San Diego region. County staff supports Mitigation Measure BIO-1e, which would require a prohibition on planting or seeding of invasive species that appear on the most recent version of the California Invasive Plant Council California Invasive Plant Inventory. Please consider inclusion of an integrated invasive plant control plan with enforceable protocols for maintenance, construction, and emergency activities to follow when working within and moving between important habitat areas.

14. Section 4.4 has a description of the TransNet Environmental Mitigation Program (EMP) and states that the EMP provides funding for the acquisition, restoration, and management costs for the implementation of local Natural Community Conservation Plans (NCCPs). The EMP or other funding from TransNet may not provide a long-term regional funding source for conservation, including funding for the acquisition and management and monitoring. Please consider updating the FEIR to clarify that an adequate regional funding source has not yet been identified or put in place, which leaves local jurisdictions responsible for securing ongoing funding to implement local NCCPs.

CULTURAL RESOURCES

1. Please consider associated potential impacts on County parks and preserves related to cultural and historical resources. Staff understand that this is a FEIR, so please include the maximum possible area of impacts. Please coordinate in advance with the County Department of Parks and Recreation prior to implementation of projects that may have impacts to County parks and preserves and associated cultural and historical resources.
Appendix F.1: Response to Comments on the Draft SEIR

GEOLOGY, SOILS AND PALEONTOLOGY

1. The Grading and Erosion Regulations section does not identify and summarize applicable grading and erosion control ordinances. Applicable regulations are generally referenced to support a risk-based significant determination for thresholds (e.g., GKO-2, Roast in Substantial Soil Erosion or the Loss of Topsoil). The County’s Grading Ordinance appears to only be referenced within the context of paleontological resources. Please consider also referencing the County’s Grading Ordinance in the Grading and Erosion Regulations section.

2. Please consider revising Table 4.7.3 to reference the County of San Diego General Plan Goals S-8 and S-9. Local Policies Concerning Geologic and Seismic Hazards references Goal S-7, but it should read “The San Diego County General Plan Goal S-8 and S-9 in the Safety Element requires minimized personnel injury and property damage resulting from seismic hazards, and damage caused by mudslides, landslides, or rock falls.”

3. Within Table 4.7.4, Local Policies Concerning Unique Geological and Paleontological Features, for the County of San Diego, please consider including the following: “COS-9.1 Preservation. Require the salvage and preservation of unique paleontological resources when exposed to the elements during excavation or grading activities or other development processes.”

4. The Draft PEIR states “there would be development on soils incapable of supporting septic tanks or Onsite Wastewater Treatment Systems (OWTS).” However, the analysis also states that through future corrective measures/required requirements, impacts to groundwater would be less than significant. Please consider adding a discussion of which regulations would be applicable and how those regulatory requirements would ensure that there would be no adverse groundwater impacts.

GREENHOUSE GAS EMISSIONS

1. On January 13, 2017, the County submitted comments to SANDAG on the Notice of Preparation (NOP) of the Regional Plan Draft PEIR (Attachment B). At the time of these comments, the County was in the process of preparing the 2018 Climate Action Plan (CAP). Since the release of the NOP and submission of these comments, County staff is now preparing a CAP Update that will set new greenhouse gas (GHG) emissions targets and identify measures to reduce GHG emissions in the unincorporated area. County staff would like to work collaboratively with SANDAG on the Proposed Plan to identify an efficient and cleaner multi-modal transportation system that reduces vehicle miles traveled for unincorporated area residents by providing mobility options, which would reduce greenhouse gas emissions, and improve air quality for all residents in the region (Attachment A). County staff requests that SANDAG consider the comments provided previously and listed below in the Draft PEIR:

a. Analyze alternatives that address multi-modal transportation options for the unincorporated county, particularly as it relates to transit services and alternative fuel infrastructure. County staff would encourage SANDAG to consider extending the benefits of mobility hubs and transit loop opportunities to unincorporated communities in which these services do not currently exist.
Appendix F.1: Response to Comments on the Draft SEIR

Ms. Uchitel
October 11, 2021
Page 6

b. Analyze whether the developed/urban communities within the unincorporated county meet the Urban Area Transit Strategy. The Urban Area Transit Strategy, considered in the previous 2050 Regional Transportation Plan, is not considered in this Proposed Plan and is replaced with broad concepts of Mobility Hubs. County staff is supportive of these efforts to centralize mobility investments for all users in urbanized areas. However, staff would encourage SANDAG to consider in the project description and analysis the potential for mobility hubs concepts that can be applied to unincorporated area communities that are not currently identified as being within and benefiting from mobility hubs and associated investments (Attachment A).

c. Analyze an environmentally sustainable transportation system that can reduce vehicle miles traveled, gasoline consumption, and GHG emissions, while providing alternative modes of transportation for all economic sectors of our population. County staff continues to encourage SANDAG to consider and identify sustainable transportation systems and strategies that can reduce vehicle miles traveled and GHG emissions from residents in unincorporated communities. For example, extending existing transit routes and reducing headways to increase transit service to unincorporated communities will encourage increased ridership, reduce vehicle trips, and will assist in decreasing GHG emissions.

d. The County requests that SANDAG staff coordinate with County staff to ensure that the most recent planning assumptions are incorporated in the transportation models and growth forecasts. It is not clear what projects or plans were considered and incorporated into the Proposed Plan modeling. However, there are some areas in which inconsistencies appear between approved development projects in the unincorporated area and projected growth identified in the Proposed Plan modeling. County staff relies on SANDAG population, housing, and job growth forecasts for planning efforts. As recently as July 2021, long-range planning efforts, such as the County’s Housing Element Update, have relied on forecasts that project future housing growth in the unincorporated area of 50,164 new units between 2018 and 2050. These prior projections are significantly greater than the forecasted growth of 7,419 units during a similar time period in the Proposed Plan. Further, historic data shows that from 2010 to 2020, 7,330 new homes were built in the unincorporated area. If that trend continued, an additional 22,000 new homes would be built in the unincorporated area by 2050. County staff would appreciate continued coordination with SANDAG staff to ensure the most recent planning assumptions and projects are considered.

2. Based upon a review of the Draft PEIR, County staff encourages continued collaboration with SANDAG to ensure the most recent planning and land use assumptions (including approved development projects or those that are under construction) are reflected in regional modeling and growth forecasting. Through continued collaboration, the County can support the vision of the Proposed Plan by developing the CAP Update and related efforts based on similar assumptions and goals.

HAZARDS AND HAZARDOUS MATERIALS

1. Within Table 4-9-1 Major Envirosor Hazardous Waste and Substances Sites in the San Diego Region, the list of sites does not appear to match the current Cortes list on the Department of Toxic Substances Control’s (DTSC) website. Please consider adding a figure

Amendment to the 2021 Regional Plan
Supplemental Environmental Impact Report
Page F.1-136
Appendix F.1: Response to Comments on the Draft SEIR

Ms. UnhTed
October 11, 2021
Page 7

to show where these sites are in relation to proposed land use changes and transportation improvements.

2. Threshold HAZ-1 seems to apply specifically for potential release of hazardous materials during pre-construction, demolition, or construction activities. However, the analysis in this section also discusses the potential for releases during operational activities. Please consider updating the mitigation measures to reduce the risk of hazardous materials releases during project operation.

HYDROLOGY AND WATER QUALITY

1. Please consider augmenting the analysis to consider potential water quality impacts that could affect sensitive wildlife species and their associated habitats.

LAND USE

1. The County’s Community Trails Master Plan identifies multiple regional trails that are regional resources, as they would benefit residents and visitors throughout the region. Please consider how the potential transportation and land use changes could impact the connectivity of these regional trails. The County also requests that SANDAG consider further coordination with the County Department of Parks and Recreation during implementation of the Proposed Plan when potential regional and community trail impacts are anticipated. Additionally, please consider working with County staff to look for further opportunities to provide trail connections during implementation of transportation infrastructure projects where feasible.

PUBLIC SERVICES AND UTILITIES (RECREATIONAL FACILITIES)

1. Within the Section “County and City General Plans,” please consider adding the County’s Parkland Dedication Ordinance, Community Trails Master Plan, and County of San Diego Parks Master Plan to the Draft PEIR, as these are all resource documents that discuss regional trail and recreation facilities.

2. Page 4.15-42 and Page 4.15-46, Section REC-1:
   a. 2025
      i. The Regional Growth and Land Use Change section states that “As noted under Threshold FS-1, approximately 78.8 percent of the 2025 population growth would occur within the City of San Diego, City of Chula Vista, and City of Escondido.” Of the remaining 21.2 percent, it is unclear what portion is anticipated within the unincorporated County area. Please consider revising the PEIR to further clarify this.
      ii. Transportation Network Improvements and Programs section: Please consider adding a table showing areas of impacts to recreational facilities belonging to or within the County’s jurisdiction. The PEIR does not appear to specify which County of San Diego Recreational Facilities are impacted by the proposed project.
Appendix F.1: Response to Comments on the Draft SEIR

Ms. Uchitel
October 11, 2021
Page 8

b. 2035

i. As with the comment above under “2025,” please consider revising the Regional Growth and Land Use Change section to show the percentage breakdown within the unincorporated area of the county.

ii. This section also states, “Between 2025 and 2035, the majority of the open space conversions would occur as a result of growth and land use change in the Warner Springs area shown in Figure 4.15-2, which would convert 275 acres of open space parks to spaced rural residential use.” However, the analysis does not appear to explain the potential impact associated with this proposed loss of open space/park land. It should also be noted that this project is not yet approved and therefore may not result in open space conversion for additional growth and land use change(s). Please consider updating the analysis to take this into consideration and to further clarify and explain potential impacts.

3. Page 4.15-47, under RFC-1 Implement Mitigation Measures Parks and other Recreational Facilities, please specify and/or provide information on the impacted facilities within the unincorporated areas of the county. Are there impacts to existing parks, campgrounds, trails, etc.? Please also consider including details of impacted County of San Diego facilities within the environmental document.

4. In the Pedestrian Facilities section of the Draft PEIR it states, “It should be noted that trail facilities are also considered part of the pedestrian network. The trail facilities within the San Diego region are further described and analyzed in Section 4.15, Public Services and Utilities, of this PEIR, along with other recreational facilities.” Section 4.15 Public Services and Utilities further explains the trail facilities. However, the information is limited in that it only references the California Coastal Trail. Trails are an important aspect of the regional transportation network. Please consider updating the analysis to include existing trails and pathways and include this information as part of the pedestrian facilities assessment. The County’s existing Community Trails Master Plan may be used as a reference document regarding regional trails.

TRANSPORTATION

1. If the boundaries of the proposed mobility hubs are not intended to be static, please include narratives and/or graphics to further clarify that the boundaries are not absolute.

2. County staff recommends that any 5 Big Moves pilot program or case study include and/or consider the unincorporated area (i.e. Flexible Fleet Strategic Plan).

3. Please coordinate with County staff in advance of transportation plans that go through or near County properties and facilities.

4. Regarding page 4.15-34, 4.16.3 SIGNIFICANCE CRITERIA, TRA-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including -transit, roadway, bicycle, and pedestrian facilities:
Appendix F.1: Response to Comments on the Draft SEIR

Ms. Ushijima
October 11, 2021
Page 9

a. 2055 Transportation Network Improvements and Programs, under Pedestrian (page 4.16-34). Table 4.16-8 shows a Pedestrian Analysis table showing average daily walking trips, walking mode share, and average length of walking trip. It is unclear as to whether these include an assessment of trail system(s) and trail facilities. Please consider including trails as a part of this analysis.

b. 2055 Transportation Network Improvements and Programs. Same comment as 2025 above.

c. 2056 Transportation Network Improvements and Programs. Same comment as 2025 above.

Thank you again for the opportunity to comment on the Draft PEIR. County staff looks forward to continued discussions with SANDAG on how we can work together to better ensure that consideration is given to future investments and incentives that would result in expanded options for transit, active transportation, and shorter and fewer automobile trips. If you have any questions regarding these comments, please contact Luis Duran, Land Use/Environmental Planner, at (619) 214-4969, or via e-mail at luis.duran@sandiego.gov.

Sincerely,

Lynnette Tosaitors
Chief, Long Range Planning Division
Planning & Development Services

cc: Rosa Olascoaga, Policy Advisor, Board of Supervisors, District 1
Gregory Kuehn, Land Use Director, Board of Supervisors, District 2
Cody Petterson, Policy Advisor, Board of Supervisors, District 3
Emily Wyr, Policy Advisor, Board of Supervisors, District 4
Benjamin Mills, Policy Advisor, Board of Supervisors, District 5
Luis Palma, CAO Staff Officer, LUG
Luis Duran, Land Use/Environmental Planner, PDS
Sue Walters, Land Use/Environmental Planner, DPW
Crystal Benham, Group Program Manager, DPR
Emmet Aquino, Park Project Manager, DPR
Appendix F.1: Response to Comments on the Draft SEIR

August 6, 2021

Hasan Ikhrata
Executive Director
SANDAG
401 B Street, Suite 800
San Diego, CA 92101

Sent via email to: SDForward@sandag.org

REQUEST FOR COMMENTS ON THE DRAFT 2021 REGIONAL PLAN FOR THE SAN DIEGO ASSOCIATION OF GOVERNMENTS (SANDAG)

Dear Mr. Ikhrata,

Thank you to the San Diego Association of Governments (SANDAG) for your efforts to create a Regional Comprehensive Plan and Sustainable Communities Strategy (Regional Plan) to help design a regional transportation system that is fast, fair, clean and reduces greenhouse gas emissions. As County staff, we are committed to working with SANDAG staff on our shared goals of implementing programs and services to improve the quality of life of our residents as we determine where and how we grow, connect people and places, protect the environment, and provide opportunity for all of our region’s residents.

This comment letter outlines areas within the Regional Plan for which County staff would like to request further clarification, exploration, and consideration. Attachment A provides additional comments from County staff for your consideration and incorporates additional information related to County-specific plans or policies that may further inform the Regional Plan.

LAND USE, TRANSPORTATION PLANNING, AND SMART GROWTH

Land use and transportation planning in the San Diego region is evolving to better address the most pressing issues of today, including climate change, quality of life, affordable housing, and social and economic inequities. The County has several planning efforts underway which prioritize addressing these issues, including the Regional Decarbonization Framework, the Climate Action Plan Update, the Electric Vehicle Roadmap, Office of Environmental and Climate Justice, and establishment of VMT thresholds. While independent of the Regional Plan, these efforts are aligned with the goals of the Regional Plan. County staff is interested in further understanding the regional growth modeling assumptions used within the Regional Plan and alignment with those County efforts.
Appendix F.1: Response to Comments on the Draft SEIR

PLANNING FOR THE UNINCORPORATED AREAS

The County represents more than 500,000 residents who live within 34 unincorporated communities throughout the region. County staff would like to better understand how the Regional Plan will address transportation options outside of proposed mobility hubs for these communities. The unincorporated community of Ramona, for example, has a population of 36,000 residents, which is a larger population than the incorporated communities of Imperial Beach, Lemon Grove, Coronado, Solana Beach, and Del Mar.

Less than 1% of the unincorporated area is within the proposed mobility hubs, which is where transit and on-demand travel infrastructure investment will be focused. The unincorporated north and east county communities represent a significant population with higher-than-average VMT in the region. Investment in public transit and other transportation options will make it easier for people to drive less, which results in decreased GHG emissions. However, investment outside of mobility hubs appears to be limited, which would make it difficult for unincorporated residents to use new transit services.

To promote greater equity, County staff see opportunities to expand the proposed mobility hubs to include adjacent unincorporated communities. When we overlay the proposed mobility hubs with the County’s VMT efficient areas (using both the unincorporated and regional averages), North County Miramar Lakeside, and Spring Valley (Attachment B) are adjacent to what appear to be proposed mobility hubs. These unincorporated communities would benefit from additional access and investment associated with inclusion in adjacent mobility hubs, as these communities have few existing alternative options to driving.

County staff is also interested in understanding how Regional Housing Needs Assessment (RHNA) allocations would be assigned. For the current 6th RHNA cycle, which covers 2021 – 2029, SANDAG allocated 6,700 units for the unincorporated area, with a total housing forecast in the Regional Plan of 7,419 units through 2050 for the unincorporated area. This forecast projects the County’s RHNA allocation of 6,700 units being met by 2029, with an additional growth of 719 units by 2055, and projects no further growth in the unincorporated area through 2050. Based on this forecast, it appears that beyond 2035, all future housing needs in the region from RHNA cycles would be allocated to and met by growth in incorporated cities.

In order to fulfill the goals of the Regional Plan in providing access to affordable, reliable, and safe mobility options for everyone in the region, County staff would like to work with SANDAG to ensure consideration is given to future investments and incentives within the unincorporated area that would result in expanded options for transit and active transportation, and to encourage shorter and fewer automobile trips, including locations of mobility hubs, transit stops, and complete corridors.

COMMUTER PATTERNS AND MOBILITY IN THE UNINCORPORATED AREA

The Regional Plan focuses on five key investment opportunities: Complete Corridors, Transit Leap, Mobility Hubs, and Flexible Fleets. Many of the Regional Plan investments would be contained within proposed mobility hubs and along identified complete corridors. The majority of infrastructure improvements appear to support a shift to new rail and trolley line infrastructure, largely along the coastal areas. However, Ramona, Lakeside, Spring Valley, and other unincorporated east and north county communities represent a significant population that would benefit from similar consideration for infrastructure improvements as that proposed for the coastal communities with less population. According to SANDAG’s “Commuting Patterns in the San Diego Region” study, a majority of the unincorporated east and north county residents who are employed commute outside the boundaries of their County Supervisors...
Appendix F.1: Response to Comments on the Draft SEIR

2021 Regional Plan - County of San Diego Staff Comments
August 6, 2021
Page 3

district, with 64% of District 2 residents working outside the district and 82% of District 5 residents working outside the district. Vehicle miles traveled could be reduced through greater mobility options for the unincorporated area (i.e., expansion of mobility hubs, increased transit options such as bus rapid transit, and improvements to transit frequency and service areas).

The County worked closely with SANDAG as part of the 2015 Regional Plan to identify roads in the unincorporated areas to include in the Regional Arterial System (RAS). Many of these roads serve as evacuation routes during emergencies, provide access to unincorporated communities from Caltrans roads, and create a link to the larger San Diego region.

County staff would like to continue coordinating with SANDAG to further identify Regional Plan investments in infrastructure, technology, and communication improvements for roads identified in both the County's Mobility Element and unincorporated roads included in the RAS and how these investments will further connect the unincorporated area to proposed mobility hubs, flexible fleets, or transit isaps. In addition to providing efficient movement of people and goods, these investments would increase the efficiency of evacuation routes, relay important information on evacuation conditions to first responders, and assist in getting residents safely away from hazardous conditions, all important components of resiliency planning.

FUNDING AND FINANCING
County staff appreciates the difficulty in forecasting funding and revenue sources for a regional transportation network. The Regional Plan identifies use of TransNet funds as part of the implementation, but it is not clear whether projects that have previously been planned, programmed, or awarded as part of the previous plan using TransNet would retain that funding allocation, or if there would be a reallocation of these funds as part of the Regional Plan. It is also unclear if there would be any changes to the current allocation or use of funds that local agencies receive directly for local road system improvements. The unincorporated area relies on TransNet funding to build, improve, and maintain transportation facilities that enhance roadway safety and support smart growth development, including road infrastructure to support increased transit options. Loss or reallocation of this funding could affect these projects and limit the County's ability to provide transportation services in support of our goal of reducing greenhouse gas emissions.

The Regional Plan indicates that user fees would help build a transportation system that provides incentives with alternatives to driving. County staff would like to further discuss how the proposed road user charges would be developed, implemented, and applied to ensure that this funding strategy will not disproportionately burden unincorporated communities, which often have longer commutes and less access to alternative transportation options due to lack of regional planning for transit services to these communities. Revenues generated should also be allocated to support additional transportation and mobility options in unincorporated communities, while vehicle use by those with access to alternative modes of transportation should be decoupled since their communities are receiving significant investments in public transit.

County staff looks forward to learning more about how future funding and investment would be applied to ensure that both the benefits and the costs of the Regional Plan are equitably distributed across the region.

RESOURCE DISTRIBUTION
The Regional Plan provides SANDAG with an opportunity to guide future investments in a way that meets smart growth objectives and reduces GHG emissions, but also guides future allocation of resources to achieve equitable outcomes. Several of the unincorporated communities, such as Lakeside, Spring Valley, and Ramona, have larger populations than some of the incorporated...
2021 Regional Plan – County of San Diego Staff Comments
August 6, 2021
Page 4

cities that are prioritized in the Regional Plan. In review of the proposed plan expenditures, a
majority of the capital investments (55% of RTP funding) appear to go toward mobility hubs, complete
corridors, and Next OS investments that are primarily outside of unincorporated
communities. It is unclear what proportion of investment would go toward addressing mobility
challenges within unincorporated communities and infrastructure investment that would provide
linkages between the unincorporated areas and the proposed mobility hubs, transit loop, flexible
fleets, and complete corridors. County staff is committed to working with SANDAG to further
identify opportunities to equitably distribute the mobility benefits of the 5 Big Moves and further
reduce GHG emissions regionwide.

The County appreciates the opportunity to comment on the Draft Regional Plan, and staff looks
forward to future discussions regarding these comments. If you have questions regarding this
letter, please contact Rami Talleh, Deputy Director with the Department of Planning and
Development Services at 858-485-5475 or Rami.Talleh@sdcounty.ca.gov.

Sincerely,

SARAH E. AGHASSI
Deputy Chief Administrative Officer

cc: Chair Nathan Fletcher; Board of Supervisors, District 4
Vice Chair Nora Vargas; Board of Supervisors, District 1
Supervisor Joel Anderson; Board of Supervisors, District 2
Supervisor Terra Lawson-Remer; Board of Supervisors, District 3
Supervisor Jim Desmond; Board of Supervisors, District 5
Kathleen Flannery, Acting Director, Planning and Development Services
Jeff C. Moneta, Director, Department of Public Works
Brian Albright, Director, Department of Parks and Recreation

Attachments:
Attachment A: Comments from County Departments and Divisions
Attachment B: Expansion Potential of Mobility Hubs (North County Metro, Lakeside, and Spring
Valley)
Appendix F.1: Response to Comments on the Draft SEIR

ATTACHMENT A
2021 REGIONAL PLAN COMMENTS FROM COUNTY OF SAN DIEGO DEPARTMENTS AND DIVISIONS

County of San Diego (County) staff in Planning & Development Services, the Department of Public Works, and the Department of Parks and Recreation reviewed the San Diego Association of Governments’ (SANDAG) Draft 2021 Regional Plan (Regional Plan), for applicability to their respective work programs and County initiatives that are planned or currently underway. The County offers the following comments for your consideration.

TRANSPORTATION

1. County staff would be interested to better understand and discuss further with SANDAG the potential for Regional Plan strategies to be used as part of a potential regional mitigation strategy related to Vehicle Miles Traveled (VMT).

2. When would funding be expected to be implemented related to Transit Leap/Flexible Fleet Connections to Mobility Hub areas, as this is a potential opportunity to reduce VMT for residents living in the unincorporated area?

3. The County has developed an Electric Vehicle (EV) Roadmap and is committed to assisting with the deployment of regionwide EV infrastructure to reduce GHG emissions in the transportation sector. Could SANDAG provide additional details on the future development, application, and implementation of the proposed Road User Fees and other proposed road usage revenues? Will consideration be given to exemptions for use of clean mobility strategies?

4. County staff would like to discuss with SANDAG staff the Regional Plan strategies, including funding for Major Transit (for purposes of CEGA, defined as a rail transit station, ferry terminal served by bus or rail, and a bus stop with two or more lines that provide transit service at 15 minute intervals or better during peak commute periods) in areas of the unincorporated area that are identified as “VMT efficient” in the SANDAG VMT Map.

5. There is significant investment in development and infrastructure in the Otay Mesa area, and Otay Mesa is identified as a “Mobility Hub” area in the RTP. County staff would like to better understand what funding has been identified for this “Mobility Hub” area.

6. County staff would like to discuss with SANDAG the potential for “Major Transit” services along the I-15 corridor, such as the potential for buses on shoulders.
Appendix F.1: Response to Comments on the Draft SEIR

2021 Regional Plan – County of San Diego Staff Comments
August 9, 2021
Page 2

Attachment A

ROADS/TRAFFIC/FIELD ENGINEERING

7. Complete Corridors, such as the SR-67 and I-15 Corridors, are envisioned to act as the backbone of the regional transportation system. In addition to providing for safe and comfortable spaces to get around for all modes of transportation, road improvements such as intersection widening are important for the safe and reliable movement of all road users. County staff would like to discuss further identification and investment within complete corridors that provide linkages to the unincorporated area. These improvements could assist in providing routes for the County’s eastern and northern rural regions that could be essential in the event of accidents or fire evacuation. For example, County staff would like to discuss with SANDAG the option of including safety improvements along the SR-67 Corridor on Wildcat Canyon Road, as this road is a relief route to SR-67. Additionally, road improvements on Old Hwy 395 and Pala Temescal Road in the north county may merit further conversation, as both of these roads serve as alternate routes to I-15 during peak traffic hours.

8. County staff would like to further discuss improvements of low flow crossings that are necessary to limit area flooding as well as the safe passage of motorists.

9. County staff would like to work with SANDAG to identify evacuation routes at a regional level, and the possibility of creating a separate section within the Regional Plan that would identify improvements of these routes and potential funding that could be part of the 2021 Regional Plan.

10. County staff would like to discuss with SANDAG how Smart Infrastructure and Connected Vehicles will address the legal and financial challenges with sharing traffic signal data with private entities and the liability of the potential misuse of signal timing data.

11. County staff would like to better understand the impact of Electric Vehicle Infrastructure on County of San Diego public right of way.

WATERSHED

   a. “The County of San Diego has initiated an update of the 2010 Needs Assessment’s 40-year water quality cost estimate using more recent water quality planning documents and strategies for achieving regulatory compliance and water quality objectives throughout the region. Since 2010, the Cooperatives have worked to formulate Water Quality Improvement Plans (WQIPs) for the region’s watersheds, including strategies, planned projects, and schedules to address their respective water quality objectives and compliance needs. The update to the Needs Assessment is intended to assist the County in planning and decision making and will draw upon the most recent WQIPs, with a focus on unincorporated areas to develop updated cost information.”
Appendix F.1: Response to Comments on the Draft SEIR

BIOLOGY

13. Figure AA.1 shows the conserved habitat lands in the San Diego region (light green) and displays the areas included in the four subregional habitat conservation plans (subfigure).
   a. The Pre-Approved Mitigation Area (PAMA) of the South County Multiple Species Conservation Program (MSCP) and draft PAMA of the draft North County MSCP are labeled as “Proposed Conserved Habitat Lands” (dark green). This label may be misunderstood by readers. While the MSCP Preserves will be assembled within the PAMA, not all PAMA designated lands will be conserved or are being actively pursued for conservation at this time.
   b. The draft Focused Conservation Area (FCA) of the draft East County MSCP was not included in the “Proposed Conserved Habitat Lands” (dark green). This area is equivalent to the draft North County MSCP’s draft PAMA and should be included in this figure.
   c. The Rancho Guajito property located north of San Pasqual Valley Road will not be included in future iterations of the draft North County MSCP Permit Area. The portions of this property identified within the draft North County MSCP should be changed from dark green to white to reflect this change.
   d. In the subfigure, both the draft North County MSCP and Multiple Habitat Conservation Plan (MHCP) are identified by the number “4.” The MHCP area should be identified by the number “1” to correspond with the provided key.

14. Although the draft 2021 Regional Plan mentions the importance of protecting habitat corridors and wildlife linkages through land acquisition, it does not appear to include the construction of safe passageways to connect wildlife to preserved lands bisected by existing and future regional transit corridors. It is recommended that SANDAG work with the San Diego Monitoring and Management Program (SDMMP) and community partners to identify the areas along regional transit corridors that would benefit from wildlife crossings and that these improvements be included in future regional projects.

PARKS AND RECREATION

15. For proposed projects that occur adjacent to Department of Parks and Recreation (DPR) County-managed lands, DPR staff would like to coordinate with SANDAG staff to ensure wildlife connectivity is maintained from adjacent lands to preserved County lands, including wildlife-only crossings.

16. For proposed projects that occur adjacent to or near existing or potential future trail connections, DPR staff would like to coordinate with SANDAG staff on trail connectivity throughout the County and incorporate safe multi-use crossings such as bridges or overpasses for nonresidential use.

17. DPR staff request SANDAG staff coordinate in developing SANDAG’s 5 Comprehensive Multimodal Corridor Plans as mentioned in Appendix B: Implementation near DPR facilities.
   a. Central Mobility Hub and Connections, Coast, Canyons, and Trails – State Route 52, North County – SPRINTER/Palmar Airport Road/State Route 75/State Route 76, San Vicente – State Route 67, South Bay to Sorrento – Purple Line/Interstate 805/Blue Line/Interstate 5 South.
Appendix F.1: Response to Comments on the Draft SEIR

2021 Regional Plan – County of San Diego Staff Comments
Attachment A
August 6, 2021
Page 4

b. Study additional seven corridors to inform the next Regional Continuing Actions.
c. Pursue funding opportunities for projects, programs, and services identified in completed
   CMCPs.

18. County Staff would like to discuss with SANDAG the possibility of including trails and trail
   systems within the unincorporated area as part of the 2021 Regional Plan and to consider
   California Coastal Trail connections to DPR facilities.

AIRPORTS

19. As the owner and operator for eight airports in the region, County Airports continues efforts
to safely operate its facilities, ensure future land uses are compatible with aircraft operations,
and protect the health and safety of people and property within the vicinity of an airport. The
County’s airports serve as transportation hubs, emergency service facilities and economic
engines in their communities. McClellan-Palomar Airport is the only commercial airport in
North County and has over 145,000 annual aircraft operations. It is also a Customs and Border
Protection Port of Entry. In East County, Gillespie Field is the 4th busiest airport in the nation
with 240,000 annual operations. Both of these airports support thousands of jobs and
generate hundreds of millions of dollars in economic activity. The County looks forward to the
integration of these airports into the regional transportation system.

20. The San Diego County Regional Airport Authority adopted Airport Land Use Compatibility
   Plans for the eight airports, which included land use compatibility policies related to airspace,
   noise, safety and oversight. Those policies have been adopted by the County of San Diego
   through its General Plan and Zoning Codes. After evaluating the forecasted increases in
   housing and jobs around the Mobility Hubs, there are several land use assumptions related
to safety and noise around Fallbrook Airport, Jacumba Airport, Gillespie Field and McClellan-
   Palomar Airport that County staff would like to better understand. For example, there are
   forecasted incompatible housing increases within the Runway Protection Zones at Gillespie
   Field. These inconsistencies could result in the assumed intensities and densities increases
   being unachievable.
ATTACHMENT B
2021 REGIONAL PLAN PROPOSED MOBILITY HUB EXPANSION AREAS

The Regional Plan will focus future investment, development, and growth in centralized areas referred to as "mobility hubs." There are locations in the unincorporated area that the County has forecasted for future growth, which included already designated Regional Housing Needs Assessment (R-HA) sites, and are located within close proximity to a proposed mobility hub. The County would like to work with SANDAG to consider the expansion of proposed mobility hubs to include additional unincorporated north and east county communities. As indicated in Figure 1, these proposed expansions include areas in North County Metro, Lakeside, and Spring Valley. Additional details for these three mobility hub expansions are provided below.

The North County Metro community is located between the proposed Vista and San Marcos mobility hubs. Expansion of the San Marcos mobility hub could include the Buena Creek Sprinter Station and additional housing units, including multiple R-HA sites.

Lakeside has multiple areas that are identified as efficient areas compared to the regional vehicle miles traveled (VMT) average. These areas are located immediately adjacent to the proposed El Cajon mobility hub. Expansion of the El Cajon mobility hub could include these VMT efficient areas as well as potentially including additional growth areas in Lakeside along the I-8 corridor.

Spring Valley is located east of the proposed Lemon Grove mobility hub and south of the proposed La Mesa mobility hub. This community has existing transit access along Jamacha Boulevard and is in close proximity to the MTS Trolley stations in Lemon Grove. Expansion of this mobility hub could include the Spring Valley areas near SR-125 and along Jamacha Boulevard.
January 13, 2017

Andrew Martin  
Senior Regional Planner  
SANDAG  
401 B Street, Suite 800  
San Diego, CA 92101  

Via email to: Andrew.martin@sandag.org

COMMENTS ON THE NOTICE OF PREPARATION OF A PROGRAM ENVIRONMENTAL IMPACT REPORT FOR SAN DIEGO FORWARD: THE REGIONAL PLAN

Dear Mr. Martin,

The County of San Diego (County) has reviewed the Notice of Preparation for the San Diego Forward Regional Plan Program Environmental Impact Report (PEIR). We appreciate the opportunity to provide input for SANDAG’s consideration. The County offers the following comments.

TRAFFIC/TRANSPORTATION

The County is currently developing an Active Transportation Plan (ATP) for the unincorporated communities of the county. The ATP will integrate and update several existing plans and documents into a single plan. The ATP will serve as a master plan and policy document to guide the development and maintenance of active transportation infrastructure including sidewalks, pathways, multi-use trails, and bikeways; the ATP will include the Safe Routes to School programs for the unincorporated county. Additionally, the ATP is expected to be one of the implementation measures for the County’s Climate Action Plan. Please consider identifying transit improvements and ATP and Transportation Demand Measures (TDM) in the SANDAG Regional Plan and PEIR which will assist the rural unincorporated areas in meeting the region’s greenhouse gas (GHG) emission goals.
AIRPORTS

Incorporating the Regional Aviation Strategic Plan (RASP) and Airport Multimodal Accessibility Plan (AMAP) assumptions into the development of the Regional Plan is an important part of planning for the region’s future transportation needs. Aviation travel is expected to grow substantially according to projections from the San Diego Regional Airport Authority and SANDAG. Please consider prioritizing the ground transportation network surrounding McClellan-Palomar and Gillespie Field airports to accommodate increased demand as San Diego International Airport nears operational capacity.

CLIMATE CHANGE AND GREENHOUSE GAS

The County is currently developing a Climate Action Plan for the unincorporated county. The largest GHG emission source in the region is the Transportation Sector. The County looks towards the Regional Plan to lead the efforts in reducing GHG emissions in the Transportation Sector. The recommendations noted are important for the local jurisdictions in meeting their share of the region’s GHG emission reductions. The County and SANDAG, working collaboratively on the Regional Plan, can move towards an efficient and cleaner multi-modal transportation system. As it relates to SANDAG’s Regional Plan, the County requests the following be considered:

a. Analyze alternatives that address multi-modal transportation options for the unincorporated county, particularly as it relates to transit service and alternative fuel infrastructure;

b. Analyze whether the developed/urban communities within the unincorporated county meet the Urban Area Transit Strategy;

c. Analyze an environmentally sustainable transportation system that can reduce vehicle miles traveled, gasoline consumption, and GHG emissions, while providing alternatives modes of transportation for all economic sectors of our population;

d. Clarify whether the Regional Plan GHG emission reductions will be consistent with the Air Resources Board (ARB) 2030 Target Scoping Plan; and

e. SANDAG’s 2015 Regional Transportation Plan incorporated the County’s 2011 General Plan Update Land Use and Mobility Elements. Since 2011, the County has adopted several general plan amendments (GPA) to the 2011 General Plan. The County requests that SANDAG staff coordinate with County staff to ensure that the adopted GPA’s are incorporated in the transportation models and growth forecasts for the Regional Plan and PEIR Analysis.
Appendix F.1: Response to Comments on the Draft SEIR

MULTIPLE SPECIES CONSERVATION PLAN (MSCP)

The proposed Regional Plan covers areas that are critical to the County’s Multiple Species Conservation Program (MSCP), both North and South County plans—including the assembly of a Preserve in each. The South County Subarea Plan was adopted in 1997; and the North County Plan is currently in development. As the Regional Plan encourages projects that are consistent with an SCS that achieves GHG reductions, we would anticipate that the PEIR would analyze the effects of the proposed Regional Plan on the MSCP South and North County plans, the assembly of the Preserve and full implementation of the plans. Any effect (direct or indirect) of the Regional Plan on the MSCP should be evaluated and mitigated, if necessary. SANDAG staff should coordinate with County staff to best determine how to evaluate the MSCP South and NC Plan in the upcoming Regional Plan and PEIR.

PARKS AND RECREATION

The County’s trails and pathway network provides safe, secure, healthy, affordable, and convenient travel choices between the places where people live, work, and play while reducing use of personal vehicles, thereby reducing GHG emissions. Please consider incorporating a discussion of the County’s Community Trails Master Plan and encourage investment in trails and pathways that connect people with places where they live, work, and play.

VECTOR CONTROL PROGRAM

The County’s Vector Control Program (VCP) is responsible for the protection of public health through the surveillance and control of mosquitoes that are vectors for human disease including West Nile virus (WNV). The VCP has completed their review and has the following comments regarding the Regional Plan.

1. The VCP requests that when implementing transportation projects or components of the environmental mitigation program, impacts from possible mosquito breeding sources are considered. Any area that is capable of accumulating and holding at least ½ inch of water for more than 96 hours can support mosquito breeding and development.

2. For your information, the County’s Guidelines for Determining Significance for Vectors can be accessed at http://www.sandiegocounty.gov/content/dam/sdcpdfs/docs/vector_guidelines.pdf.

Mr. Martin  
January 13, 2017  
Page 4  

The County looks forward to receiving future documents and/or notices related to this project and providing additional assistance at your request. If you have any questions regarding these comments, please contact Danny Serrano, Land Use / Environmental Planner at (650) 694-3880, or via email at daniel.serrano@co.santaclara.ca.gov.  

Sincerely,  

MARY KOVASKIE, Chief  
Advance Planning Division  
Planning & Development Services  

Email cc:  
Michael De La Rosa, Policy Advisor, Board of Supervisors, District 1  
Adam Wilson, Policy Advisor, Board of Supervisors, District 2  
Dustin Steiner, Chief of Staff, Board of Supervisors, District 3  
Adrian Granda, Policy Advisor, Board of Supervisors, District 4  
Melanie Wilsohn, Policy Advisor, Board of Supervisors, District 5  
Vincent Kattoula, CAO Staff Officer, LUEG  
Nick Ortiz, Project Manager, PDS  
Everett Hauser, Transportation Specialist, PDS  
Brian Carlope, Planner, PDS  
Jeff Keshaj, Planner, DPW  
Richard Chin, Associate Transportation Specialist, DPW  
Eric Landy, Chief, Community Health Division, DEH
RESPONSE TO COMMENT 5-12

Thank you for providing the County of San Diego’s comment letter on the draft approved Plan. Responses to these comments were provided in responses L165 through 174 in Appendix P2 to the approved Plan PEIR.
Appendix F.1: Response to Comments on the Draft SEIR

2021 Regional Plan – County of San Diego Staff Comments
August 6, 2021
Page 2

PLANNING FOR THE UNINCORPORATED AREAS
The County represents more than 300,000 residents who live within 34 unincorporated
communities throughout the region. County staff would like to better understand how the Regional
Plan will address transportation options outside of proposed mobility hubs for those communities.
The unincorporated community of Ramona, for example, has a population of 36,000 residents,
which is a larger population than the incorporated communities of Imperial Beach, Lemon Grove,
Coronado, Solana Beach, and Del Mar.

Less than 1% of the unincorporated area is within the proposed mobility hubs, which is where
transit and on-demand travel infrastructure investment will be focused. The unincorporated north
and east county communities represent a significant population with higher-than-average VMT in
the region. Investment in public transit and other transportation options will make it easier for
people to drive less, which results in decreased GHG emissions. However, investment outside of
mobility hubs appears to be limited, which would make it difficult for unincorporated residents to
use new transit service.

To promote greater equity, County staff see opportunities to expand the proposed mobility hubs
to include adjacent unincorporated communities. When we overlay the proposed mobility hubs
with the County’s VMT efficient areas (using both the unincorporated and regional averages),
North County Metro, Lakeside, and Spring Valley (Attachment B) are adjacent to what appear to
be proposed mobility hubs. These unincorporated communities would benefit from additional
access and investment associated with inclusion in adjacent mobility hubs, as these communities
have low existing alternative options to drive.

County staff is also interested in understanding how Regional Housing Needs Assessment
(RHNA) allocations would be assigned. For the current 6th RHNA cycle, which covers 2021 –
2029, SANDAG allocated 6,700 units for the unincorporated area, with a total housing forecast in
the Regional Plan of 7,418 units through 2050 for the unincorporated area. This forecast projects
the County’s RHNA allocation of 6,700 units being met by 2029, with an additional growth of 719
units by 2050, and projects no further growth in the unincorporated area through 2050. Based on
this forecast, it appears that beyond 2035, all future housing needs in the region from RHNA
cycles would be allocated to and met by growth in incorporated cities.

In order to fulfill the goals of the Regional Plan in providing access to affordable, reliable, and safe
mobility options for everyone in the region, County staff would like to work with SANDAG to ensure
consideration is given to future investments and incentives within the unincorporated area that
would result in expanded options for transit and active transportation, and to encourage shorter
and fewer automobile trips, including locations of mobility hubs, transit stops, flexible fleets, and
complete corridors.

COMMUTER PATTERNS AND MOBILITY IN THE UNINCORPORATED AREA
The Regional Plan focuses on five key investment opportunities: Next Operating System (OS),
Complete Corridors, Transit Leap, Mobility Hubs, and Flexible Fleets. Many of the Regional Plan
investments would be contained within proposed mobility hubs and along identified complete
corridors. The majority of infrastructure improvements appear to support a shift to new rail and
trolley line infrastructure, largely along the coastal areas. However, Ramona, Lakeside, Spring
Valley, and other unincorporated east and north county communities represent a significant
population that would benefit from similar consideration for infrastructure improvements as that
proposed for the coastal communities with less population. According to SANDAG’s “Commuting
Patterns in the San Diego Region” study, a majority of the unincorporated east and north county
residents who are employed commute outside the boundaries of their County Supervisors...
Appendix F.1: Response to Comments on the Draft SEIR

2021 Regional Plan – County of San Diego Staff Comments
August 6, 2021
Page 3

district, with 84% of District 2 residents working outside the district and 82% of District 5 residents working outside the district. Vehicle miles traveled could be reduced through greater mobility options for the unincorporated area (i.e., expansion of mobility hubs, increased transit options such as bus rapid transit, and improvements to transit frequency and service areas).

The County worked closely with SANDAG as part of the 2015 Regional Plan to identify roads in the unincorporated areas to include in the Regional Arterial System (RAS). Many of these roads serve as evacuation routes during emergencies, provide access to unincorporated communities from Caltrans roads, and create a link to the larger San Diego region.

County staff would like to continue coordinating with SANDAG to further identify Regional Plan investments in infrastructure, technology, and communication improvements for roads identified in both the County’s Mobility Element and unincorporated roads included in the RAS and how these investments will further connect the unincorporated area to proposed mobility hubs, flexi- bility, or transit lines. In addition to providing efficient movement of people and goods, these investments would increase the efficiency of evacuation routes, relay important information on evacuation conditions to first responders, and assist in getting residents safely away from hazardous conditions, all important components of resiliency planning.

FUNDING AND FINANCING
County staff appreciates the difficulty in forecasting funding and revenue sources for a regional transportation network. The Regional Plan identifies use of TransNet funds as part of the implementation, but it is not clear whether projects that have previously been planned, programmed, or awarded as part of the previous plan using TransNet would retain that funding allocation, or if there would be a reallocation of these funds as part of the Regional Plan. It is also unclear if there would be any changes to the current allocation or use of funds that local agencies receive directly for local road system improvements. The unincorporated area relies on TransNet funding to build, improve, and maintain transportation facilities that enhance roadway safety and support smart growth development, including road infrastructure to support increased transit options. Loss or reallocation of this funding could affect these projects and limit the County’s ability to provide transportation services in support of our goal of reducing greenhouse gas emissions.

The Regional Plan indicates that user fees would help build a transportation system that provides transportation to all communities. County staff would like to further discuss how the proposed road user charges would be developed, implemented, and applied to ensure that this funding strategy will not disproportionately burden unincorporated communities, which often have longer commutes and less access to alternative transportation options due to lack of regional planning for transit services in these communities. Revenues generated should also be allocated to support additional transportation and mobility options in unincorporated communities, while vehicle use by those with access to alternative modes of transportation should be disencumbered as their communities are receiving significant investments in public transit.

County staff looks forward to learning more about how future funding and investment would be applied to ensure that both the benefits and the costs of the Regional Plan are equitably distributed across the region.

RESOURCE DISTRIBUTION
The Regional Plan provides SANDAG with an opportunity to guide future investments in a way that meets smart growth objectives and reduces GHG emissions, but also guides future allocation of resources to achieve equitable outcomes. Several of the unincorporated communities, such as Lakeside, Spring Valley, and Ramona, have larger populations than some of the incorporated
Appendix F.1: Response to Comments on the Draft SEIR

2021 Regional Plan – County of San Diego Staff Comments
August 6, 2021
Page 4

Cities that are prioritized in the Regional Plan. In review of the proposed plan expenditures, a majority of the capital investments (55% of RTP funding) appear to go toward mobility hubs, complete corridors, and Next GIS investments that are primarily outside of unincorporated communities. It is unclear what proportion of investment would go toward addressing mobility challenges within unincorporated communities and infrastructure investment that would provide linkages between the unincorporated areas and the proposed mobility hubs, transit loop, flexible fleets, and complete corridors. County staff is committed to working with SANDAG to further identify opportunities to equitably distribute the mobility benefits of the 5 Big Moves and further reduce GHG emissions region wide.

The County appreciates the opportunity to comment on the Draft Regional Plan, and staff looks forward to future discussions regarding these comments. If you have questions regarding this letter, please contact Ram Tallett, Deputy Director with the Department of Planning and Development Services at 858-485-5475 or Ram.Tallett@sdcouunty.ca.gov.

Sincerely,

SARAH E. AGHASI
Deputy Chief Administrative Officer

cc: Chair Nathan Fletcher: Board of Supervisors, District 4
    Vice Chair Nora Vargas: Board of Supervisors, District 1
    Supervisor Joel Anderson: Board of Supervisors, District 2
    Supervisor Terra Lawson-Remer: Board of Supervisors, District 3
    Supervisor Jim Desmond: Board of Supervisors, District 5
    Kathleen Flannery, Acting Director, Planning and Development Services
    Jeff C. Moncrie, Director, Department of Public Works
    Brian Albright, Director, Department of Parks and Recreation

Attachments:
Attachment A: Comments from County Departments and Divisions
Attachment B: Expansion Potential of Mobility Hubs (North County Metro, Lakeside, and Spring Valley)
Appendix F.1: Response to Comments on the Draft SEIR

ATTACHMENT A
2021 REGIONAL PLAN COMMENTS FROM COUNTY OF SAN DIEGO DEPARTMENTS AND DIVISIONS

County of San Diego (County) staff in Planning & Development Services, the Department of Public Works, and the Department of Parks and Recreation reviewed the San Diego Association of Governments' (SANDAG) Draft 2021 Regional Plan (Regional Plan), for applicability to their respective work programs and County initiatives that are planned or currently underway. The County offers the following comments for your consideration.

TRANSPORTATION

1. County staff would be interested to better understand and discuss further with SANDAG the potential for Regional Plan strategies to be used as part of a potential regional mitigation strategy related to Vehicle Miles Traveled (VMT).

2. When would funding be expected to be implemented related to Transit Leap/Flexible Fleet Connections to Mobility Hub areas, as this is a potential opportunity to reduce VMT for residents living in the unincorporated area?

3. The County has developed an Electric Vehicle (EV) Roadmap and is committed to assisting with the deployment of statewide EV infrastructure to reduce GHG emissions in the transportation sector. Could SANDAG provide additional details on the future development, implementation, and application of the proposed Road User Fees and other proposed road usage revenues? Will consideration be given to exemptions for use of clean mobility strategies?

4. County staff would like to discuss with SANDAG the Regional Plan strategies, including funding for Major Transit (for purposes of CEQA, defined as a rail transit station, ferry terminal, or bus stop with two or more lines that provide transit service at 15 minute intervals or better during peak commute periods) in areas in the unincorporated area that are identified as "VMT efficient" in the SANDAG VMT Map.

5. There is significant investment in development and infrastructure in the Otay Mesa area, and Otay Mesa is identified as a "Mobility Hub" area in the RTP. County staff would like to better understand what funding has been identified for this "Mobility Hub" area.

6. County staff would like to discuss with SANDAG the potential for "Major Transit" services along the I-15 corridor, such as the potential for buses on shoulders.
ROADS/TRAFFIC/FIELD ENGINEERING

7. Complete Corridors, such as the SR-67 and I-15 Corridors, are envisioned to act as the backbone of the regional transportation system. In addition to providing for safe and comfortable spaces to get around for all modes of transportation, road improvements such as intersection widening are important for the safe and reliable movement of all road users. County staff would like to discuss further identification and investment within complete corridors that provide linkages to the unincorporated area. These improvements could assist in providing routes for the County’s eastern and northern rural regions that could be essential in the event of accidents or fire evacuation. For example, County staff would like to discuss with SANDAG the option of including safety improvements along the SR-67 Corridor on Wildcat Canyon Road, as this road is a relief route to SR-67. Additionally, road improvements on Old Hwy 395 and Palomar Temescal Road in the north county may merit further conversation, as both of these roads serve as alternate routes to I-15 during peak traffic hours.

8. County staff would like to further discuss improvements of low flow crossings that are necessary to limit area flooding as well as the safe passage of motorists.

9. County staff would like to work with SANDAG to identify evacuation routes at a regional level, and the possibility of creating a separate section within the Regional Plan that would identify improvements of these routes and potential funding that could be part of the 2021 Regional Plan.

10. County staff would like to discuss with SANDAG how Smart Infrastructure and Connected Vehicles will address the legal and financial challenges with sharing traffic signal data with private entities and the liability of the potential misuse of signal timing data.

11. County staff would like to better understand the impact of Electric Vehicle Infrastructure on County of San Diego public right-of-way.

WATERSHED

12. Stormwater Management & Regional Needs Assessment; suggested edits in Appendix R, page R-2:
   a. “The County of San Diego has initiated an update of the 2010 Needs Assessment’s 40-year water quality cost estimate using more recent water quality planning documents and strategies for achieving regulatory compliance and water quality objectives throughout the region. Since 2010, the Committees have worked to formulate Water Quality Improvement Plans (WQIPs) for the region’s watersheds, including strategies, planned projects, and schedules to address their respective water quality objectives and compliance needs. The update to the Needs Assessment is intended to assist the County in planning and decision making and will draw upon the most recent WQIPs, with a focus on unincorporated areas to develop updated cost information.”
BIOLGY

13. Figure 2A.1 shows the conserved habitat lands in the San Diego region (light green) and displays the areas included in the four subregional habitat conservation plans (subfigures).

a. The Pre-Approved Mitigation Area (PAMA) of the South County Multiple Species Conservation Program (MSCP) and draft PAMA of the draft North County MSCP are labeled as “Proposed Conserved Habitat Lands” (dark green). This label may be misinterpreted by readers. While the MSCP Preserves will be assembled within the PAMA, not all PAMA designated lands will be conserved or are being actively pursued for conservation at this time.

b. The draft Focus Conservation Area (FCA) of the draft East County MSCP was not included in the “Proposed Conserved Habitat Lands” (dark green). This area is equivalent to the draft North County MSCP’s draft PAMA and should be included in this figure.

c. The Rancho Guajito property located north of San Pasqual Valley Road will not be included in future iterations of the draft North County MSCP Permit Area. The portions of this property identified within the draft North County MSCP should be changed from dark green to white to reflect this change.

d. In the subfigure, both the draft North County MSCP and Multiple Habitat Conservation Plan (MHCP) are identified by the number “4.” The MHCP area should be identified by the number “1” to correspond with the provided key.

14. Although the draft 2021 Regional Plan mentions the importance of protecting habitat corridors and wildlife linkages through land acquisition, it does not appear to include the construction of safe passageways to connect wildlife to preserved lands bisected by existing and future regional transit corridors. It is recommended that SANDAG work with the San Diego Metropolitan Transit System (SDMTP) and community partners to identify the areas along regional transit corridors that would benefit from wildlife crossings and that these improvements be included in future regional projects.

PARKS AND RECREATION

15. For proposed projects that occur adjacent to Department of Parks and Recreation (DPR) County-managed lands, DPR staff would like to coordinate with SANDAG staff to ensure wildlife connectivity is maintained from adjacent lands to preserved County lands, including wildlife-only crossings.

16. For proposed projects that occur adjacent to or near existing or potential future trail connections, DPR staff would like to coordinate with SANDAG staff on trail connectivity throughout the County and incorporate safe multi-use crossings such as bridges or overpasses for nonresidential use.

17. DPR staff request SANDAG staff coordinate in developing SANDAG’s 5 Comprehensive Multimodal Corridor Plans as mentioned in Appendix B: Implementation near DPR facilities.

a. Central Mobility Hub and Connections, Coast, Canyons, and Trails – State Route 52, North County – SPRINT/PAırım Airpot Road/State Route 75/State Route 76, San Vicente – State Route 67, South Bay to Sorrento – Purple Line/Interstate 805/Blue Line/Interstate 5 South.
Appendix F.1: Response to Comments on the Draft SEIR

2021 Regional Plan – County of San Diego Staff Comments
August 8, 2021

b. Study additional seven corridors to inform the next Regional Continuing Actions.

c. Pursue funding opportunities for projects, programs, and services identified in completed
CMCPs.

18. County Staff would like to discuss with SANDAG the possibility of including trails and trail
systems within the unincorporated area as part of the 2021 Regional Plan and to consider
California Coastal Trail connections to DPR facilities.

AIRPORTS

19. As the owner and operator for eight airports in the region, County Airports continues efforts
to safely operate its facilities, ensure future land uses are compatible with aircraft operations,
and protect the health and safety of people and property within the vicinity of an airport. The
County’s airports serve as transportation hubs, emergency service facilities and economic
engines in their communities. McClellan-Palomar Airport is the only commercial airport in
North County and has over 145,000 annual aircraft operations. It is also a Customs and Border
Protection Port of Entry. In East County, Gillespie Field is the 44th busiest airport in the nation
with 240,000 annual operations. Both of these airports support thousands of jobs and
generate hundreds of millions of dollars in economic activity. The County looks forward to the
integration of these airports into the regional transportation system.

20. The San Diego County Regional Airport Authority adopted Airport Land Use Compatibility
Plans for the eight airports, which included land use compatibility policies related to airspace,
noise, safety and oversight. Those policies have been adopted by the County of San Diego
through its General Plan and Zoning Code. After evaluating the forecasted increases in
housing and jobs around the Mobility Hubs, there are several land use assumptions related
to safety and noise around Fallbrook Airport, Jacumba Airport, Gillespie Field and McClellan-
Palomar Airport that County staff would like to better understand. For example, there are
forecasted incompatible housing increases within the Runway Protection Zones at Gillespie
Field. These inconsistencies could result in the assumed intensities and densities increases
being unachievable.
ATTACHMENT B
2021 REGIONAL PLAN PROPOSED MOBILITY HUB EXPANSION AREAS

The Regional Plan will focus future investment, development, and growth in centralised areas referred to as "mobility hubs." There are locations in the unincorporated area that the County has forecasted for future growth, which included already designated Regional Housing Needs Assessment (RHNA) sites, and are located within close proximity to a proposed mobility hub. The County would like to work with SANDAG to consider the expansion of proposed mobility hubs to include additional unincorporated north and east county communities. As indicated in Figure 1, these proposed expansions include areas in North County Metro, Lakeside, and Spring Valley. Additional details for these three mobility hub expansions are provided below.

The North County Metro community is located between the proposed Vista and San Marcos mobility hubs. Expansion of the San Marcos mobility hub could include the Buena Creek Sprinter Station and additional housing units, including multiple RHNA sites.

Lakeside has multiple areas that are identified as efficient areas compared to the regional vehicle miles traveled (VMT) average. These areas are located immediately adjacent to the proposed El Cajon mobility hub. Expansion of the El Cajon mobility hub could include these VMT efficient areas as well as potentially including additional growth areas in Lakeside along the I-8 corridor.

Spring Valley is located east of the proposed Lemon Grove mobility hub and south of the proposed La Mesa mobility hub. This community has existing transit access along Jamacha Boulevard and is in close proximity to the MTS Trolley stations in Lemon Grove. Expansion of this mobility hub could include the Spring Valley area near SR-125 and along Jamacha Boulevard.
COMMENT LETTER 6: CHARLOTTE KINGSTON

RESPONSE TO COMMENT 6-1

This comment recommends that the road usage charge should only apply to vehicles that do not operate on gasoline or diesel and is not related to the adequacy of the Draft SEIR. The proposed Amendment removes the regional road usage charge for all vehicle types from the approved Plan. Due to the economic challenges posed in the aftermath of the recent pandemic and the more recent rise in inflation, the increased costs of a regional road usage charge on residents of the San Diego region, whether applied to gasoline or electric vehicles, is financially burdensome and undesirable from a policy perspective.
COMMENT LETTER 7: MOSES LONETTO

RESPONSE TO COMMENT 7-1

Thank you for your comment. The proposed Amendment removes the regional road usage charge from the approved Plan. This comment is not related to the adequacy of the Draft SEIR. As such, no further response is required.
COMMENT LETTER 8: BEATRICE MILLER

RESPONSE TO COMMENT 8-1

Thank you for your comment. The proposed Amendment removes the regional road usage charge from the approved Plan.
COMMENT LETTER 9: RICHARD MORANVILLE

RESPONSE TO COMMENT 9-1

This comment is not related to the proposed Amendment or the adequacy of the SEIR. As such, no further response is required.
COMMENT LETTER 10: NEYGOM@GMAIL.COM

RESPONSE TO COMMENT 10-1

Thank you for your comment. The proposed Amendment removes the regional road usage charge from the approved Plan. SANDAG agrees that action is needed now to provide fast, frequent, reliable, accessible, and safe transit so that commuting is not a “struggle.”

One of the major goals of the approved Plan is to develop a safe, equitable, and accessible system that improves everyone’s access to basic needs, opportunities, and major destinations. The approved Plan also shows a threefold focus in social equity focused populations (people with low incomes, people of color, and seniors) living within a half-mile of commuter rail, light rail, or rapid transit stop. Currently, only 25 percent of low-income residents can access the region’s largest employment centers (Sorrento Valley, Kearny Mesa, and Downtown) in 30 minutes via transit. With the approved Plan implemented, that percentage will increase to 42 percent by 2050.
COMMENT LETTER 11: NORTH PARK PLANNING COMMITTEE

Good morning,

The North Park Planning Committee is in the process of updating its CIP priority list for North Park. We would love to work with SANDAG on this update to ensure we are aligned.

If you could provide input or a point of contact to work with that would be outstanding.

Steve
Chair NPPC

On Thu, Jul 13, 2023, 3:14 PM 'San Diego Association of Governments' via NPO
<info@northparkplanning.org> wrote:

RESPONSE TO COMMENT 11-1

Thank you for your comment. SANDAG looks forward to coordinating with the North Park Planning Committee. This comment is not related to the proposed Amendment or the adequacy of the SEIR. As such, no further response is required.
COMMENT LETTER 12: GREG PAYNE

RESPONSE TO COMMENT 12-1

Thank you for your comment. The proposed Amendment removes the regional road usage charge from the approved Plan. This comment is not related to the adequacy of the Draft SEIR. As such, no further response is required.
RESPONSE TO COMMENT 13-1

Thank you for your comment. The proposed Amendment removes the regional road usage charge from the approved Plan. This comment is not related to the adequacy of the Draft SEIR. As such, no further response is required.

RESPONSE TO COMMENT 13-2

This comment expresses need for transportation network improvements and is not related to the proposed Amendment or the adequacy of the SEIR. SANDAG agrees that action is needed now to provide fast, frequent, reliable, and accessible transit, especially on highly utilized routes. One of the major goals of the approved Plan is to develop a safe, equitable, and accessible system that improves everyone’s access to basic needs, opportunities, and major destinations. The approved Plan also shows a threefold focus in social equity focused populations (people with low incomes, people of color, and seniors) living within a half-mile of commuter rail, light rail, or rapid transit stop. Currently, only 25 percent of low-income residents can access the region’s largest employment centers (Sorrento Valley, Kearny Mesa, and Downtown) in 30 minutes via transit. With the approved Plan implemented, that percentage will increase to 42 percent by 2050.
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More taxes in California is like "illegal aliens", too much and too many.

First order should be to get rid of SANDAG. It is running terrible interference with the good of our State.

Barry A. Treacy
14775 El Monte Rd.
Lakewood Ca. 90713
COMMENT LETTER 15: BRUCE TRUAX

RESPONSE TO COMMENT 15-1

Thank you for your comment. The proposed Amendment removes the regional road usage charge from the approved Plan. This comment is not related to the adequacy of the Draft SEIR. As such, no further response is required.
COMMENT LETTER 16: DON WOOD

From: Donald Wood
To: SANDAG
Subject: Public Comment #16
Date: August 16, 2020

I oppose any amendment to the Regional Plan Update removing the road usage charge concept. The state gas tax base is eroding as more and more people purchase EVs and stop buying gasoline altogether. The state has indicated that it plans to substitute new road usage charges in place of the gas tax. When that happens, SANDAG needs to be in a position to adopt its own fees tied to the state’s. Removing the concept from the RTP update at this early date might hamstring SANDAG as the state moves forward with the new charges, hindering its own efforts to meet State mandates to reduce greenhouse gas emissions.

Don Wood
819-463-9035
Dwood81@cox.net

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RESPONSE TO COMMENT 16-1

The proposed Amendment removes the regional road usage charge from the approved Plan not the state road usage charge. The proposed state road usage charge is entirely separate from the regional road usage charge. The Amendment has no impact on the proposed state road usage charge, which is outside of SANDAG’s authority. The approved Plan assumes the San Diego region will receive future revenues resulting from a state road usage charge, which is still in the pilot program phase. SANDAG will continue to coordinate with the state and other metropolitan planning organizations on the state’s road usage charge pilot program.

As discussed under Impact GHG-1 in Section 4.3, Greenhouse Gas Emissions, of the SEIR, the proposed Amendment would result in a slight increase in GHG emissions within the San Diego region compared to the approved Plan (0.5 percent in 2035 and 0.6 percent in 2050). This impact was determined to be less than significant because the proposed Amendment would not directly or indirectly result in an increase in GHG emissions compared to existing conditions because annual regional emissions would be approximately 28 percent lower in 2035 and 31 percent lower in 2050 relative to 2016. Additionally, as discussed under Impact GHG-2 in Section 4.3, the proposed Amendment would meet SB 375’s 2035 emission reduction target of 19 percent and would exceed the Board Resolution for a 30 percent reduction in per capita GHG emissions from all on-road transportation by 2035.

However, the proposed Amendment’s GHG emissions would be inconsistent with the State’s ability to achieve the goals of SB 32, 2022 Scoping Plan, EO B-55-18, EO S-3-05, and AB 1279. As discussed in Section 4.3 in the SEIR, mitigation measures would help reduce regional GHG emissions by reducing VMT, increasing use of zero-emission fuels, sequestering carbon from the atmosphere, and other measures; they would reduce inconsistency of the proposed Amendment’s GHG emissions with the State’s ability to achieve the
SB 32, 2022 Scoping Plan, EO B-55-18, EO S-3-05, and AB 1279 GHG reduction goals. However, full implementation of the changes required to achieve these goals is beyond SANDAG’s and local agencies’ current jurisdiction and authority. As such, they were identified as significant and unavoidable. While the proposed Amendment results in significant impacts related to VMT and GHG, anticipated reductions in per capita VMT and GHG, along with proposed mitigation measures, would reduce inconsistency of the proposed Amendment with the State’s ability to achieve VMT and GHG goals, and puts SANDAG on a trajectory that more closely aligns with regulatory targets.
COMMENT LETTER 17: MIKE BULLOCK

Comment Letter 17

17.1
SANDAG’s RTP2031 resulted in a lawsuit that was joined by the state of CA (AG Harris). One issue was SANDAG’s incorrect position that it could ignore S-3-05, the Governor's Executive Order that established 3 climate mandates for CA. The AG disagreed with SANDAG, stating that S-3-05 was an official CA policy and an attempt to stabilize the climate, and that climate stabilization was an objective of CEQA. The AG won this point. Today, SB 32 is a CA climate mandate. The official plan to achieve SB 32 is the CARB Scoping Plan, adopted in December of 2022. No CEQA document, like the Draft or Final SEIR for the modified (degraded) RTP2021, can ignore SB 32 or fail to comply with the CARB Scoping Plan. Failing to achieve SB 32 (comply with the CARB Scoping Plan) is equivalent to climate destabilization, which would push the impact of the modified RTP far over the significance threshold, with no good reason, since the mitigation measures in the CARB Scoping Plan are enforceable and feasible. The modified RTP2021 needs to comply with Appendix B of the CARB Scoping Plan. It must reduce driving by 25% with respect to 2019 levels, by 2030.

17.2
To do this it must increase transit service levels (as specified in Appendix F), have a Road Use Charge, and priced parking must become widespread. You will claim that you can’t price parking. However, I have specified how this could be done and you could write a Requirements Document to support an RFP process to select a vendor to design, install, and operate the system for SANDAG employees. I have presented the car parking system to many conferences, so it has been peer reviewed. A solid majority of employees would like the system because those that drive to work every day would break even and those that drove to work less than every day would earn extra money. In my comment letter to you regarding the Scoping, I included a reference showing one potential vendor (the CEO of ACE Parking) who would submit a proposal. A vendor would be anxious to manage parking (the system increases economic equity and choice while it reduces driving everywhere).

RESPONSE TO COMMENT 17-1
Please see Response to Comments 2-1 and 2-3 for a detailed discussion about the proposed Amendment’s consistency with state climate goals and the 2022 Scoping Plan.

RESPONSE TO COMMENT 17-2
This comment provides suggestions to reduce driving by 25 percent compared to 2019 levels by 2030 and to improve parking management. See Response to Comment 2-3 regarding VMT impacts and Response to Comment 2-4 regarding parking management strategies. See Appendix B: Implementation Actions of the approved Plan for additional road pricing strategies.
COMMENT LETTER 18: MICHAEL HAMPSON

Comment Letter 18

Commenter: Michael Hampson
Agency: Private Citizen
Contact Information: michaelwestcoast@yahoo.com
Date Received: 7/14/2023

RESPONSE TO COMMENT 18-1
This comment requests specific transportation network improvements and is not related to the proposed Amendment or the adequacy of the SEIR. See Appendix A to the approved Plan for a list of specific transportation improvement projects including improvements to trolley services.

RESPONSE TO COMMENT 18-2
This comment requests specific transportation network improvements and is not related to the proposed Amendment or the adequacy of the SEIR. See Appendix A to the approved Plan for a list of specific transportation improvement projects including improvements to trolley services.

RESPONSE TO COMMENT 18-3
This comment requests specific transportation network improvements and is not related to the proposed Amendment or the adequacy of the SEIR. See Appendix A to the approved Plan for a list of specific transportation improvement projects including improvements to trolley services.

RESPONSE TO COMMENT 18-4
This comment requests specific transportation network improvements and is not related to the proposed Amendment or the adequacy of the SEIR. The California High Speed Rail project is included in Appendix A of the approved Plan as it is slated to connect Los Angeles to San Diego via the Inland Empire with stations planned in Murrieta/Temecula and Escondido. This project would be implemented and funded by the California High Speed Rail Authority. SANDAG will track the project as it is developed by the State.
COMMENT LETTER 19: MICHAEL LADOUCEUR

Comment Letter 19

Comment 1: It is inappropriate and irresponsible to update future revenue (Updated revenue assumption 3 in particular) while failing to update future costs. Cost estimates were based on costs in 2020 dollars. It is unclear whether inflation was factored into the cost estimates provided in Appendix U. Inflation over the last 2 years has been historically high and could have a large impact on whether the cost estimates from 2020 are still reasonable. As such, it is inappropriate to compare updated Transnet revenue (updated with the most recent data) with outdated cost estimates. Therefore, it is unsupported and incorrect to state that revenues would exceed costs under the proposed amendment. It is also unsupported and incorrect to state that “no changes to projects listed in the 2023 Regional Plan would result from the proposed Amendment”, because no such analysis has been completed. SANDAG has the fiscal responsibility to update the 2020 cost estimates to ensure that both revenues and costs are using similar projections.

Comment 2: SANDAG has not provided reasonable justification for updating the State Discretionary Program estimates and Federal Discretionary Program estimates. SANDAG should provide justification for the estimates. Has SANDAG or other local or regional transit agencies received increased funding since the Bipartisan Infrastructure Law (BIL) was passed? Are there reasonably foreseeable dollars that will be coming from BIL, and how is SANDAG planning on this? Appendix V of Attachment A to the Errata states that federal funding “assumes one large New Starts eligible project and three Small Starts eligible projects per decade…”, but it is unclear how these assumptions were made and whether they are reasonable. These assumptions are critical to balancing revenues and cost and implementing all aspects of the 2023 Regional Plan. Future transportation plans could be significantly altered if these assumptions are incorrect, which would lead to other calculations being incorrect, such as the projected decrease in Green House Gasses.

RESPONSE TO COMMENT 19-1

The Amendment costs are reflected in 2020 and year of expenditure dollars in Attachment 1 to the Amendment: Errata to the approved Plan. Generally, planning assumptions must be updated at least every five years according to FHWA Guidance for the Use of Latest Planning Assumptions in Transportation Conformity Determinations. (Environmental Protection Agency, EPA420-B-08-901, Guidance for the Use of Latest Planning Assumptions in Transportation Conformity Determinations, Revision to January 18, 2001, Guidance Memorandum, 2008). Consistent with the transportation conformity rules and regulations, SANDAG consulted with federal agencies early in the Amendment development process concerning the latest planning assumptions for the Amendment. The cost information from the approved Plan was the latest available at the time SANDAG began its transportation conformity analysis for the Amendment.

RESPONSE TO COMMENT 19-2

In updating revenue assumptions for the Amendment, SANDAG included the Infrastructure Investment and Jobs Act (IIJA, also known as the Bipartisan Infrastructure Law), which was signed into law in November 2021. The Infrastructure Investment and Jobs Act (IIJA) authorized $1.2 trillion for transportation and infrastructure spending with $550 billion of that figure going toward “new” investments and programs. The historic level of infrastructure investment from the federal and state government in the early phase years of the approved Plan was unknown and underestimated. The federal and state discretionary programs near-term estimates have been updated to assume historical leveraging rates of local TransNet revenue. The total estimate of near-term State and Federal Discretionary Programs resulting from IIJA is $6.35 billion.

In Fiscal Years 2021-2023 since the passage of IIJA, SANDAG has received $1.6 billion in discretionary funding revenue ($876 million in state funding and $766 million in federal funding) compared to the Amendment’s assumed $950 million in discretionary funding revenue.
($507 million in state funding and $441 million in federal funding). The assumptions for future New Starts/Small Starts projects are based on SANDAG’s historical success in receiving New Starts funding and on the pipeline of eligible projects over the 30-year planning period.
COMMENT LETTER 20: HARRY NUNNS

Comment Letter 20

Commenter: Harry Nunn
Agency: Not Provided
Contact Information: Harry.nunns@gmail.com
Date Received: 8/6/2023

Comment:
There is 4 miles of rail corridor in Rose Canyon between Genesee Ave and Balboa Ave with no pedestrian crossings. Given the number of people walking in the canyon as well as commuting between Clairemont, UC, and PB, I think there is a duty for the railway to provide a safe crossing. I use the Rose Canyon Bikeway to commute with my son from UC to Northwest Clairemont, and I have to make a 3-mile detour down to Balboa since there is no bike/pedestrian rail crossing. I think there needs to be one bridge at Judland Dr to Sanie Fe st, and a second crossing at Gilman/La Jolla Colony.

RESPONSE TO COMMENT 20-1

This comment requests specific pedestrian and bikeway improvements and is not related to the proposed Amendment or the adequacy of the SEIR.

The approved Plan and proposed Amendment aim to create safe and well-connected routes for bicyclists and pedestrians. The intention of the network in the Regional Plan is a framework which facilitates trips associated with regional purposes designed to enhance neighborhood connections to schools, employment centers, and other everyday destinations. The regional network will not include details regarding the types of bicycle and pedestrian facilities for specific projects are not yet determined and will require future planning and coordination with local jurisdictions, community members, and stakeholders.
COMMENT LETTER 21: DANIEL PARKER

Comment Letter 21

Commenter: Daniel Parker
Agency: Not Provided
Contact Information: pennyploy@gmail.com
Date Received: 8/11/2003
Comment:

21.1

The vast majority of tax paying and voting residents do not support 3 story apartment/condo's with minimal parking in existing mature contemporary neighborhoods. Already, I live in a relatively upscale neighborhood with a half dozen UCSD residents with an addition half dozen cars. Parking is sparse, existing residents and voters don’t support this. Multi-story buildings will cause a revolt.

RESPONSE TO COMMENT 21-1

This comment is not related to the proposed Amendment or the adequacy of the SEIR. As such, no further response is required.
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Appendix F.2
Comments and Responses on the Draft Amendment
Attachment C: Public Participation
Table of Contents

Introduction ........................................................................................................................................................................................ 3
Responses ............................................................................................................................................................................................ 3
Memorandum to the Board of Directors ........................................................................................................................................... 10
Public Hearing Transcript ........................................................................................................................................................ 14
Web, Workshop and Email Comments ........................................................................................................................................ 46
Letters ................................................................................................................................................................................................. 60
Reference .......................................................................................................................................................................................... 135
Public Participation

Introduction

In September 2022, the San Diego Association of Governments (SANDAG) Board directed staff to prepare an amendment to the 2021 Regional Plan (Amendment). The proposed Amendment was available for public review and comment from June 13, 2023, through August 8, 2023, to solicit public input on the proposed Amendment. During the public review period, four public meetings were held: a public hearing on June 23, 2023, and three virtual workshops on July 18, July 31, and August 8, 2023.

SANDAG also received comments on the proposed Amendment through an online comment response form; and via e-mail. A total of 56 public comments were received that commented on the proposed Amendment via the online comment response form, email, or letter, which are included in this document.

Responses

The following section provides SANDAG responses to the comments received organized by the following topic areas:

- Opposition to the Regional RUC
- Support for the Regional RUC
- Requesting Clarification on the Impacts of Removing the Regional RUC
- Social Equity
- Land Uses, Specific Transportation Network Elements, and Electric Vehicle Concerns
- Opposition to SANDAG
- Public Outreach Efforts
- Revenues and Costs

SANDAG also responded to selected questions received during the June 23, 2023, public hearing in a July 13, 2023, memorandum to the Board of Directors. The public hearing transcript and memorandum are included in this Attachment C.

Opposition to the Regional RUC

SANDAG received multiple comments expressing opposition to the regional RUC. Most of these comments opposed any additional fees associated with driving and several expressed concern over the potential financial hardship of a regional RUC. Some commentors also expressed concerns over tracking people’s movements and the regional RUC limiting mobility and creating “15-minute cities.”

SANDAG appreciates the feedback received on concerns about additional costs. At the direction of the SANDAG Board of Directors, the 2030 implementation of the regional RUC is proposed to be removed from the 2021 Regional Plan, and so these concerns are addressed by the Amendment itself.

In response to comments received about tracking people’s movements, any program or policy with the potential for privacy impacts would need to satisfy California’s extensive privacy laws and regulations. However, because this Amendment proposes to remove the regional RUC from the 2021 Regional Plan, these concerns are addressed by the Amendment.
itself. Similarly, neither the 2021 Regional Plan nor the regional RUC were intended to confine residents to a limited geographical area. While 15-minute cities are a planning concept for creating convenient access to resources within a walkable or bikeable range of 15 minutes to expand access to resources, SANDAG did not use the 15-minute city concept in developing either the 2021 Regional Plan or the Amendment.

Support for the Regional RUC

SANDAG also received multiple comments in support of the regional RUC. These comments expressed concern over the VMT, GHG, and air quality implications of removing the regional RUC and that the Amendment was setting the region back in achieving GHG and air quality goals and creating future environmental and financial risks for our region. Other commentors expressed concern over how removing the regional RUC could limit the expansion of transit options in our region. Additional comments expressed support for a modified regional RUC that applied to electric vehicles but not gas-powered vehicles or for a means-based regional RUC that integrated personal privacy protections.

SANDAG appreciates the feedback received on concerns about the adverse environmental impacts of removing the regional RUC; these are disclosed in the SEIR that SANDAG has prepared for the proposed Amendment, and will be considered by the Board of Directors prior to their taking action on the proposed Amendment. As discussed in Section 4 of the Amendment, the removal of the regional RUC would decrease the cost to operate an automobile, resulting in an increase in single occupancy drivers. Consequently, the Amendment would result in an increase in VMT, GHG emissions, and air pollutants from tailpipe emissions compared to the adopted 2021 Regional Plan. Similarly, while the air quality impacts of removing the regional RUC do not rise to a level of regional significance, there are greater emissions of criteria pollutants and new or substantially more severe significant air quality impacts under the Amendment than under the 2021 Regional Plan. The Amendment would expose new receptors to substantial concentrations of toxic air contaminant emissions and increase the incremental area of threshold exceedance for new land uses. Although the Amendment has greater GHG and air quality impacts than the 2021 Regional Plan, the Amendment does still meet SB 375 regional GHG emissions reduction targets, and state and federal air quality standards. The SANDAG Board of Directors has proposed that the regional RUC be removed from the 2021 Regional Plan. However, there are many policies and programs to reduce VMT, GHG, and improve regional air quality, and SANDAG is committed to identifying the best policies for our region that will meet required state and federal standards in the 2025 Regional Plan. SANDAG will be holding multiple public outreach events throughout the County to ensure that interested members of the public can understand and provide feedback on the development of the 2025 Regional Plan.

Requesting Clarification on the Impacts of Removing the Regional RUC

SANDAG received comments requesting clarification about the impact of removing the regional RUC on implementation of the proposed state RUC, on funding opportunities for the region, and how removing the regional RUC impacts the 2025 Regional Plan.

SANDAG appreciates the feedback received requesting clarification on the impacts of removing the regional RUC. The proposed state RUC is entirely separate from the regional RUC. The proposed Amendment would remove the regional RUC from the 2021 Regional Plan but has no impact on the proposed state RUC, which is outside of SANDAG’s authority. The adopted 2021 Regional Plan assumes the San Diego region will receive future revenues
resulting from a state RUC, which is still in the pilot program phase. Discussion of the state RUC remains unchanged from the adopted 2021 Regional Plan. The proposed Amendment assumes a state RUC of 0.7 cents ($2020) starting in 2030 and increasing to 1.2 cents by 2050 to cover the funding gap created as fuel taxes diminish over time due to greater fuel efficiency and a shift to zero emission vehicles. The State has not released a start date for the state RUC; however, 2030 is consistent with the assumption made by other California MPOs. More information on the status of the state RUC can be found here: California Road Charge program.

At present, SANDAG is not aware of any risks to local or regional state and federal funding eligibility resulting from removing the regional RUC. Adequate funding sources have been identified to implement the adopted 2021 Regional Plan without funding from a regional RUC.

The 2025 Regional Plan is SANDAG’s next major update of the region’s long range transportation planning document and is separate from the Amendment to the 2021 Regional Plan. SANDAG will be holding multiple public outreach events throughout the County to ensure that interested members of the public can provide feedback on the development of the 2025 Regional Plan. A concept for the 2025 Regional Plan without the regional RUC will be presented later this year.

Social Equity

Comments were received expressing concerns over the broad social equity impacts of removing the regional RUC, the impacts associated with PM 2.5 emissions on disadvantaged communities specifically and San Diego residents generally, and the need to develop and fund affordable and accessible public transit.

SANDAG appreciates the feedback shared over the social equity impacts of removing the regional RUC. As discussed in Attachment 1 to the Errata: Amendment Social Equity Analysis, the proposed Amendment would not result in either a disparate impact or disproportionate effect on disadvantaged communities in the San Diego region. Additionally, the proposed Amendment would result in a less than 2 percent change in all social equity performance measures compared to the adopted 2021 Regional Plan. Specific to PM 2.5 emissions, there is less than a 1 percent change between the adopted 2021 Regional Plan and the Amendment (Attachment 1 to the Errata: Amendment Social Equity Analysis, Table SE4-20). The adopted 2021 Regional Plan also identified specific transportation strategies to reduce pollution exposure in disadvantaged communities, which are included in Appendix H: Social Equity: Engagement and Analysis of the adopted 2021 Regional Plan. These strategies remain unchanged with the Amendment.

As to suggestions for future transit projects, the 2025 Regional Plan is SANDAG’s next major update of the region’s long range transportation planning document and is separate from the Amendment to the 2021 Regional Plan. SANDAG will be holding multiple public outreach events throughout the County to ensure that interested members of the public can provide feedback on the development of the 2025 Regional Plan. There will be opportunities for the public to suggest measures for SANDAG and transit agencies to consider that would increase opportunities for affordable and accessible public transit.
Land Uses, Specific Transportation Network Elements, and Electric Vehicle Concerns

SANDAG received several comments on various planning assumptions, including land uses, regional housing issues, the need to provide greater funding for transit generally and for specific transportation network elements, and concern over potential risks associated with e-bikes and electric vehicle batteries.

SANDAG appreciates the feedback shared on land use, regional housing, potential transit investments, specific transportation network concerns, and e-bike and electric vehicle concerns as part of the Amendment public comment process. At the direction of the SANDAG Board of Directors, the Amendment is narrowly focused on removing the regional RUC while meeting state and federal requirements. The Amendment includes no other change to land use or to the transportation projects, programs, and policies identified in the 2021 Regional Plan. The 2025 Regional Plan is SANDAG’s next major update of the region’s long range transportation planning document and is separate from the Amendment to the 2021 Regional Plan. SANDAG will be holding multiple public outreach events throughout the County to ensure that interested members of the public can provide feedback on the development of the 2025 Regional Plan. There will be opportunities for the public to suggest changes to the adopted 2021 Regional Plan to address concerns that are outside the scope of the proposed Amendment.

Opposition to SANDAG

SANDAG received multiple comments expressing dislike for SANDAG generally as an agency, disapproval of the weighted vote, and dissatisfaction with SANDAG leadership. Other comments accused SANDAG of using the regional RUC specifically, and the regional planning process generally, to implement a United Nations-driven “globalist” agenda with the goal of restricting mobility, eliminating cars, and enslaving San Diego residents.

SANDAG is aware that there are multiple views in our community on the work SANDAG does and appreciates the public interest in providing feedback, regardless of whether it is supportive or critical.

SANDAG strives to optimize internal procedures with a goal of increased efficiency, transparency, and accuracy. These efforts have focused on our workforce (our people), along with the processes and technology used to complete agency work. SANDAG regularly undergoes required audits administered by our federal and state funding agencies. These audits are conducted in accordance with federal and state laws and often result in necessary process changes and improvements to ensure the agency meets our fiduciary responsibilities.

SANDAG’s weighted voting process is the result of a state legislative reform under Assembly Bill (AB) 805, which was signed into law by Governor Jerry Brown in 2017. AB 805 modified SANDAG’s weighted voting process for the 21-member board, which granted proportionally more votes for the most populated jurisdictions in the SANDAG region (California Legislative Information, 2017).

SANDAG does not act at the direction of the United Nations or the World Economic Forum or implement measures developed by these organizations. SANDAG, acting as both a metropolitan planning organization (MPO) and a council of governments, is required to comply with federal and state laws. Under federal law, SANDAG is mandated to develop and implement a long-range Regional Transportation Plan/Sustainable Communities Strategy
(RTP/SCS) every four years. That RTP/SCS process must be completed, including a demonstration that the RTP/SCS meets federal air quality standards and a federal social equity analysis, so that the San Diego region will remain eligible to receive federal transportation funding. Under state law, SANDAG is required to comply with Assembly Bill (AB) 805 and Senate Bill (SB) 375, both of which require RTP/SCSs to address GHG emissions reduction targets set by CARB and to include strategies that provide for mode shift to public transportation. The goal of the RTP/SCS is not to “price people out of their cars” or make it impossible for individuals to drive, it is to comply with state and federal requirements while also making our transportation system more convenient, safe, healthy, and equitable with various options for all users to travel to their destinations.

Public Outreach Efforts

SANDAG received comments requesting that meetings be scheduled at times when the public can attend. SANDAG appreciates the feedback received on the public outreach for the proposed Amendment. Several public meetings were held for the public to provide comments on the proposed Amendment. A public hearing was held on June 23, 2023, at 9:00 am during the Board meeting; Board meetings are regularly held on the 2nd and 4th Fridays of every month. The full year meeting schedule for the Board, Policy Advisory Committees, and Working Groups is published in advance on the SANDAG website. Committee meetings are recorded and published for public viewing on the SANDAG Meetings YouTube channel.

In addition, three virtual workshops were also held on July 18 at 12:30 pm, July 31 at 5:15 pm, and August 3 8:30 am. The virtual workshops were held via Zoom at different times of the day to accommodate the general public. Meeting-related resources including the presentation, meeting videos, and agenda are available to the public on the SANDAG website.

Revenues and Costs

SANDAG received comments related to the revenue estimates used to develop the proposed Amendment and implement transportation infrastructure throughout the region. Commentors expressed confusion over how the Amendment would fully implement the 2021 Regional Plan without regional RUC funds, and criticism of the explanation of revenues in the Amendment and the absence of updated project costs. SANDAG also received comments objecting to the cost to prepare the Amendment itself.

SANDAG appreciates the feedback shared on revenues and costs. The regional RUC was not intended to be implemented until 2030, and as such was only a revenue source for the final 20 years of the 2021 Regional Plan. The regional RUC was projected to generate $14.2 billion in revenues between 2030 and 2050 under the 2021 Regional Plan and was anticipated to support transportation expenditures between 2030 and 2050, in combination with several other revenue sources. These regional RUC revenues have been excluded from the revenue projections in the Amendment.

In updating revenue assumptions for the proposed Amendment, adequate funding sources have been identified to implement the adopted 2021 Regional Plan without funding from a regional RUC. SANDAG included funding from the Infrastructure Investment and Jobs Act (IIJA, also known as the Bipartisan Infrastructure Law), which was signed into law in November 2021. The Infrastructure Investment and Jobs Act (IIJA) authorized $1.2 trillion for transportation and infrastructure spending with $550 billion of that figure going toward “new” investments and programs. The historic level of infrastructure investment from the
federal and state government in the early phase years of the 2021 Regional Plan was unknown and underestimated. The federal and state discretionary programs near-term estimates have been updated to assume the amount of federal and state dollars the region will receive for each local TransNet dollar based on prior years. The total estimate of near-term State and Federal Discretionary Programs resulting from IIJA is $6.35 billion.

Additionally, SANDAG has already received $650 million above what was anticipated between Fiscal Years 2021-2023 in the Amendment. The Amendment assumed $950 million in discretionary funding revenue ($507 million in state funding and $441 million in federal funding) between Fiscal Years 2021-2023. During that same period SANDAG has received $1.6 billion in discretionary funding revenue ($876 million in state funding and $766 million in federal funding).

Concern was expressed specifically over the assumptions for future New Starts/Small Starts projects. Those assumptions are based on SANDAG’s historical success in receiving New Starts funding and on the pipeline of eligible projects over the 30-year planning period. Assumptions around New Starts/Small Starts projects were not revised in the Amendment.

Some commentors asked how SANDAG could be assured of funding for the 2021 Regional Plan and how projects would be prioritized for funding if there are funding shortfalls. Federal regulations require that SANDAG provide estimates of costs and revenues that are reasonably expected to be available, and may also include recommendations on new financing strategies and funding sources.\(^1\) The revenue assumptions were updated to remove the regional RUC and because federal regulations require an amendment to reflect revenue sources that are subsequently removed or substantially reduced.\(^2\) This also included the projected sales tax measure in the 2021 Regional Plan. These revenues were replaced by funding sources as described above.

Project prioritization under the Amendment remains unchanged from the 2021 Regional Plan. While funding shortfalls are not anticipated, it is worth noting that there will be more unknowns for revenues and costs in the outer years of the Regional Plan. SANDAG is typically required to update the Regional Plan every four years to account for the changes in funding outlooks, priorities, and planning assumptions, and will update priorities, costs, and revenues as part of the 2025 Regional Plan.

As to costs, these are reflected in 2020 and year of expenditure dollars in Attachment 1 to the Amendment: Errata to the 2021 Regional Plan. Generally, planning assumptions must be updated at least every five years according to FHWA Guidance for the Use of Latest Planning Assumptions in Transportation Conformity Determinations.\(^3\) Consistent with the transportation conformity rules and regulations, SANDAG consulted with federal agencies early in the Amendment development process, and the latest planning assumptions have been used for the Amendment. The cost information from the 2021 Regional Plan was the latest available at the time SANDAG began its transportation conformity analysis for the Amendment.

\(^1\) 23 CFR 450.324(f)(11)
\(^2\) 23 CFR 450.324(f)(11)(viii)
\(^3\) EPA420-B-08-901
Project prioritization under the Amendment remains unchanged from the 2021 Regional Plan. It is worth noting that there will be more unknowns for revenues and costs in the outer years of the Regional Plan. SANDAG is typically required to update the Regional Plan every four years to account for the changes in funding outlooks, priorities, and planning assumptions, and will update priorities, costs, and revenues as part of the 2025 Regional Plan.

Related to the cost of preparing the Amendment, itself, certain technical work requiring consultant support was necessary for the Supplemental Environmental Impact Report. However, much of the remaining work was completed with existing in-house staff and resources to minimize the net cost to prepare the Amendment.
Memorandum to the Board of Directors
7/13/2023

Memo to: SANDAG Board of Directors
From: Hasan Ikhrata, SANDAG Chief Executive Officer
Subject: Follow up from June 23 Meeting

On June 23, 2023, the SANDAG Board of Directors discussed the proposed Amendment to the 2021 Regional Plan. This memorandum is in response to several questions that arose during the meeting.

1. What can SANDAG take credit for to meet the CARB greenhouse gas (GHG) emission reductions target?

SANDAG can take credit for local and regional programs beyond State programs that reduce GHG emissions, such as development and implementation of regional transportation demand management programs (TDM), and regional EV charger and zero emission vehicle incentive programs.

SB 375 does not allow Metropolitan Planning Organizations (MPOs) to take credit for State programs that improve vehicle emissions standards, changes in fuel composition, and other State measures that reduce GHG emissions to demonstrate target achievement. (See Government Code Section 65080(b)(2)(iii)).

2. Is a reduction target set for vehicle miles traveled (VMT) as well as GHG, and what will be required under the CARB updated 2022 Scoping Plan?

There is currently no target for VMT reductions. SANDAG’s current target, established in 2018, is a 19% reduction in per capita passenger vehicle GHG emissions relative to a 2005 baseline. Under SB 375, CARB is tasked to update the regional targets every eight years, with the option of revising them every four years. Under the current timeline, we expect CARB to set SANDAG’s new target in 2026, which would apply to the 2029 Regional Plan.

On December 15, 2022, CARB approved its final 2022 Scoping Plan for achieving carbon neutrality concluding that “the pace of change to reduce VMT must be accelerated.” The Scoping Plan outlines a strategy that includes “VMT per capita reduced 25% below 2019 levels by 2030, and 30% below 2019 levels by 2045.” However, the Scoping Plan does not set a regional target for VMT. (See 2022 Scoping Plan, p. 193).

How this will translate into future targets established by CARB for MPOs is uncertain at this time, but it is likely that a new VMT target and a higher GHG reduction target for MPOs will occur in the future.
3. How was the GHG emission reduction under the proposed Amendment determined, how does it compare to the 2021 Regional Plan, and where can the model that was used be found?

The GHG emission reductions under the proposed Amendment was determined using SANDAG's activity-based model (ABM 2+) and the State's Emission Factor (EMFAC) model. Detailed documentation describing the ABM2+ used in the 2021 Regional Plan is included as Appendix S of the 2021 Regional Plan and also publicly available at SANDAG's GitHub repository and wiki site: github.com/SANDAG/ABM/wiki. The methodology was rigorously peer-reviewed and approved by CARB early in the development of the 2021 Regional Plan and the same methodology was used for the proposed Amendment.

As discussed in Section 2 of the proposed Amendment and the Introduction to Attachment A, Errata to the 2021 Regional Plan, the proposed Amendment was run on an updated ABM 2+ model which accounted for low traffic counts at some large employment sites, slight changes in employment and population distribution figures, changes to cross-border fleet mix, and more accurate traffic volumes on State Route 11.

The 2021 Regional Plan that was submitted in December 2021 had a 20.4% GHG per capita reduction from 2005. The proposed Amendment, which was based on the updated version of ABM 2+ and the removal of the regional road usage charge (RUC), results in a total reduction of 18.6%.

<table>
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<tr>
<th>Comparison of SB 375 Results</th>
<th>2021 Regional Plan (ABM2+ with RUC)</th>
<th>2021 Regional Plan (Updated ABM2+ with RUC)</th>
<th>Proposed Amendment (Updated ABM2+ without RUC)</th>
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<tbody>
<tr>
<td>Population</td>
<td>3,620,349</td>
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<tr>
<td>SB 375 VMT</td>
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<td>81,418,476</td>
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<td>SB 375 VMT/Person</td>
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<tr>
<td>GHG Per Capita Reduction from 2005</td>
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<td>-19.9%</td>
<td>-18.6%</td>
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</table>

<table>
<thead>
<tr>
<th>Difference in GHG Per Capita Reduction from 2005 compared to adopted 2021 Regional Plan</th>
<th>Approved Plan</th>
<th>Due to ABM2+ Update</th>
<th>Due to Removal of Regional RUC</th>
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</table>

4. Does the model consider number of cars and not just vehicle miles traveled (VMT)?

Yes. ABM2+ simulates people's travel behavior. In addition to VMT and mode share, it also tracks traffic volumes (i.e., passenger vehicle trips, and medium and heavy-duty trucks) on the roads through simulated travel. These numbers are not reported as part of the Regional Plan primary or supporting performance metrics but are made available through the SANDAG’s Transportation Forecast Information Center (TFIC) website after the adoption of the Regional Plan.
5. What are the amounts of the state and regional RUC assumed in the 2021 Regional Plan and what is the status of the state RUC?

There is no regional RUC in the proposed Amendment to the 2021 Regional Plan. The proposed Amendment assumes a state RUC of 0.7 cents ($2020) starting in 2030 and increasing to 1.2 cents by 2050 to cover the funding gap created as fuel taxes diminish over time due to greater fuel efficiency and a shift to zero-emission vehicles. The State has not released a start date; however, 2030 is consistent with the assumption made by other California MPOs.

California was first authorized to study a road charge pilot in 2014, which was ultimately funded through federal grant programs, to research the possibility of a state RUC as a sustainable and equitable gas tax replacement. More information on the status of this effort can be found here: California Road Charge program.

6. Does the Amendment show Revenues in year of expenditure dollars?

Yes, Appendix V Table V-4 (p. 34) of the proposed Amendment Errata shows the changes in the Major Revenue sources in year of expenditure dollars.
Public Hearing Transcript

Chairwoman Nora Vargas:

Moving on to item number 16. This is a time and place set for public hearing on the draft amendment for the 2021 Regional Plan. Thank you to all the team that was here for all the other items. Appreciate that. So we're going to have a staff presentation that is going to be provided to all of us. And then we're going to have public comment. After public comment, we're going to hear comments from the Board. So if you have comments remember use your clicker, and then we're going to close the public hearing.

I want to just emphasize two things. This is the 2021 Regional Plan not the 2025 Regional Plan. There is no action to be taken today, and it's just an opportunity for us to be able to have comments and discussion to focus on the draft amendment in front of us. We're going to continue our conversation on workshops for the 2025 Regional Plan at our next board meeting. And then also a reminder for those of you who want to speak to submit your slips to the clerk of the board and raise your hand online before the end of the press staff presentation. And so with that I'll turn it over to Keith. Thank you.

Keith Greer:

Thank you, Chair, and good morning board. My name is Keith Greer. I'm one of the Regional Planning managers, and we have a very short presentation. So, last September, the board discussed options to remove the regional road user charge, otherwise known as the RUC, that would've gone in effect in 2030 from the '21 Regional Plan. The board selected option two, to prepare a focused amendment to the '21 Regional Plan without the regional road user charge and prepared a supplemental California Environmental Quality Act analysis.

As discussed at the board meeting, option two included the removal of the regional RUC, updated revenue assumptions resulting from the removal of the RUC, and other changes since the adoption of the '21 Regional Plan. And also, no changes to the transportation network, no changes in land use, and no changes to any of the programs, policies, or projects included in the Regional Plan itself.

The proposed amendment and supporting documents are completed and they've been posted to the SANDAG website for review. The amendment includes a 14-page narrative, in both English and Spanish, that describes removal of the road user charge and its effects on meeting our greenhouse gas targets, our revenues, our network transportation performance and transportation conformity.

Supporting documents and information includes a 37-page Errata, which shows in a strikeout underlying all the changes that need to be made in the '21 Regional Plan to remove the regional road user charge, and updated 19-page social equity analysis, and a 52-page air quality conformity analysis. The amendment is available for public review through August 8th, as well as supporting materials.

Moving forward onto the greenhouse gas targets and what happens when you remove the regional road user charge. So, the Sustainable Communities and Climate Protection Act better known as SB 375, is a state law that requires CARB to set greenhouse gas reduction targets for each MPO. For SANDAG, as the MPO for this region, our carbon-established target as 19% reductions of GHG per capita as measured against the 2005 baseline.
The ’21 Regional Plan exceeded that target and achieved a 20.4% reduction. The removal of the RUC results in an increase of 1.3 million vehicle miles traveled per day, and the amendment result in 18.6% reduction. So the Regional Plan was higher, the amendment is lower. But when rounded up per CARB’s own guidelines, it meets the 19% reduction target. In addition to the reduction target, CARB will look at the policy commitments made in the plan itself.

SANDAG staff have been keeping our CARB contacts up to date on the status of the amendment it proceeds, and to date, we have heard nothing that indicates that the CARB will not approve the amendment as proposed. According to revenues, we have both reductions in revenues and also increases in revenues, coming from, since last time the point when Regional Plan was adopted. For reductions, the removal of the regional road usage charge will result in $14.3 billion reduction in revenues.

In addition, local revenues from a sales tax measure envisioned to be occurring in 2023, in the Regional Plan, have been delayed to 2025. Increases includes TransNet. TransNet has been revised to reflect the board’s own adopted April 22nd estimates, based upon higher than anticipated sales tax revenues. And the last two items are dealing with state and federal discretionary programs.

So since the adoption of the Regional Plan, there’s been a tremendous increase in infrastructure funding coming out of Washington and Sacramento, coming from the infrastructure investment in Jobs Act or IIJA and other state sources that were not known at the time that the Regional Plan was adopted. The net result of all these increases in reductions is a $17.9 billion reductions in revenues for the amendment.

I should note that all these dollars are in 2020 dollars and are consistent with the ’21 Regional Plan and reflect the revenues assumptions at the time the board direct us to move forward with the removal of the RUC. Revenues in the proposed plan would decrease by 7.9 billion, as I mentioned, to 165 billion. This is still sufficient to cover the 163 billion-dollar cost of projects and programs included in the Regional Plan as envisioned, with a $2.4 billion buffer.

There are few other considerations to the board should consider. The amendment to Regional Plan would be consistent with the ozone budgets established for the regions. In addition, the amendment result in minor changes to network performance measures established in the ‘21 Regional Plan, with differences being less than 1%. The amendment would not result in a disparity impact or disproportionate effect on disadvantaged communities.

Finally, moving to the timelines and next steps. The amendment and supporting information has been released for public review, which will end on August 8th. A supplemental EIR will be released in July for a 45-day public review. In addition today’s public hearing, staff will be hosting outreach events in July and August to get more feedback on the amendment and the supplemental EIR.

In September, the amendment and supplemental EIR will be revised based on comments received from the public and finalized for board consideration. All comments received will be addressed in writing and provided to the board, along with a final amendment and final supplemental EIR for your consideration. We’d hope to get back to the board in September, but the air quality modeling required for the supplemental EIR has taken longer. Based upon the number, timing, and complexity of the comments that we receive, it’s estimated the final amendment and supplemental EIR will be brought back to the board business meeting in October.
If the board approves the amendment, it would be submitted to federal and state agencies for approval and the transportation conformity determination, and for CARB’s approval, the Sustainable Communities Strategy. CARB’s approval of the Sustainable Communities Strategy, which includes that 19% reduction target, takes several months to complete and may involve back-and-forth questions between the staff. That concludes staff’s presentation. We'd be happy to answer any questions. Thank you.

Chairwoman Nora Vargas:
Thank you for your presentation. We’re going to turn it over to Francesca for a public comment. Then I'll just remind my colleagues if you want to speak on this item, feel free to click your clicker I guess.

Francesca Webb, Clerk to the Board:
Thank you Chairwoman. We have a total of 12 public comments on this item. We’ll start with Consuelo and then go to Mary Davis.

Mary Davis:
Thank... There is a... any roads charge... want to impose them elsewhere. Did you hear the first part or could I start again?

Speaker 5:
Start her time.

Mary Davis:
Can you start where-

Speaker 5:
Start her time.

Mary Davis:
Okay. Thank you, I'll start again. Mary Davis here. First, no to any road usage charge, road charge, mile tax, whatever you want to call it, no, no, no. And no to any tolls or new fees or charges. You're openly advocating to retire the State Route 125 South Bay Expressway toll early, yet hypocritically, want to impose them elsewhere. So no to that. And we reject most of all the paradigm shift that both SANDAG and the state of California are trying to implement.

Going from a public benefit model of funding our roads to infrastructure to a user pay system, which inevitably will involve telematics and tracking, regardless of whether the government does it or it goes to some third-party platform. At its very core, the concept of tracking people's movements is antithetical to both our national and our state constitutions, as well as the core American principles of individual autonomy and privacy. Thank you.

Francesca Webb, Clerk to the Board:
Our next speaker will be Alan C., who will be followed by Paul Henkin.
Alan C.:  
Hello. Being a Navy guy, I always show up early. I was downstairs about 7:00 this morning. I saw your caterer holding the truck downstairs. Now imagine if she has to pay a road use tax. How much more would them pastries cost me as a taxpayer to serve you guys your free donuts? How much more would that taco shop I mentioned last... couple weeks ago, now is $12 for a breakfast burrito. How well would his overhead be with the price of electricity, price everything else, price of gas, and now the delivery trucks to deliver the groceries, goods he needs to prepare that breakfast burrito.  

No, the road use tax. And as he mentioned, you don't need the road use tax, it covers it. Now it meets your climate footprint, as the electric car takes over, that will meet your climate agenda, what do you want to call it, because nobody's going to take your empty bus. Just look out your window, empty bus, empty bus, empty bus. You put more empty bus, that idiot on the telephone said, "We need a bus every 10 minutes." How many more empty bus you going to put out there? What's the climate footprint of all them empty buses not transporting people, when my right to actually drive from my home to Costco, anywhere I need to go, I can do that. How many on board here took the bus? Nobody, huh? And yet, you're going to push buses? I yield back.  

Francesca Webb, Clerk to the Board:  
Our next speaker is Paul Henkin, who will be followed by Truth.  

Paul Henkin:  
This so-called amendment has no mandatory language, like add or delete. SANDAG is assuming it will get $165 billion in federal money from the Infrastructure Investments and Jobs Act, signed into law in November, 2021 from page four there. It's hard... and it still has a few other revenue sources. Since the plan needs 163 billion, it doesn't seem to need any kind of VMT or RUC.  

It looks like SANDAG has been playing with us since 2021, claiming it needs some kind of tax, road user charge, or VMT, another reason not to trust it. Then it plans to disrupt our schools to put this agenda, saying reach out to families through K to 12 school functions or tap into local high schools and colleges, universities to involve youth, either directly or through awarded...  

Francesca Webb, Clerk to the Board:  
Time has expired.  

Paul Henkin:  
... [inaudible] tax and programs.  

Francesca Webb, Clerk to the Board:  
Our next speaker is Truth.  

Paul Henkin:  
Disband SANDAG. And-
Francesca Webb, Clerk to the Board:
Your time has expired. After Truth will be Dr. Timothy Bilash.

Truth:
Oh. All right. The fact that it costs $1.5 million just to amend this horrible Regional Plan is ridiculous. I demand a people's refund of the whole thing, especially since the 3.3 cents per mile road user charge was fraudulently suggested as necessary, but no matter what factor is used to tax people off the roads, whether it's hours traveled, distance traveled, per ride, or restricted vehicles, hours or zones, it's all to implement the totalitarian 15-minute city plan that just happens to be popping up all over the world at the same time.

Even this item says, "Percentage of residents that can access retail and parks within 15 minutes." And just as the World Economic Forum wrote in their Sustainable Road Transport and Pricing whitepaper, "As prices increase for road use, individuals will be forced to choose alternative paths or times, or walking and biking. Personal car usage and even public transport could quickly become for the elite few." And voting on charges with the vote center model corruption, forget compromising or voting. I just say no to all Regional Plans. Thank you.

Francesca Webb, Clerk to the Board:
Our next speaker is Dr. Timothy Bilash, who will be followed by Mark.

Dr. Timothy Bilash:
Good morning, Board. I will try to make this brief. I have two slides to share, if you could remote me. We're not doing enough. Kudos to the committee, to SANDAG for again taking the impossible and doing what was asked. But we're doing less, not more and what it was before is not enough, and so, I have two slides to share. To just to bring this, I'm a physician, OB-GYN, women's doctor, for 32 years, and a scientist. And I should do something?

Speaker 5:
Read his time.

Dr. Timothy Bilash:
Is my screen being shared? Yes. So a new paper, pulled it this morning. I'm sorry and this is the problem, the complexity of science, joint effect of ambient particle matter 2.5 micron exposure with vitamin B12 during pregnancy. And the slide I offer and I sent the link to the board this morning, shows a two to three times risk of diabetes in pregnancy when you combine particulate matter 2.5 with a vitamin B12 deficiency. Particulate matter comes from the tires in your car. You have to replace them every few years? Well, that goes into the air and that goes into our lungs and it goes into the babies. Thank you for listening.

Francesca Webb, Clerk to the Board:
Our next speaker will be Mark, who will be followed by Andres Wong.
Mark:
Mark. In this video, Katie explains what's happening in Oxford right now. Are they limiting people's movement? There's no excuse for limiting people's movement. It's literally a totalitarian gesture to enslave people. And when you've got people who are disarmed, like we are here in California, whose gun would be lucky to shoot accurately across the street at their neighbor's door, not that anyone would want to do that, and they can't travel freely, you can do anything to them, anything at all.

And they are in the UK. That's why the people revolted. You people need to see these videos. This is on BitChute. This one, you can just Google. Oxfordshire, and see on the city council's website what they're planning for you. Next, what they're doing there, right next to London. This is a worldwide movement. You need to see these videos. Rosa Corey is a Democrat. I'm not Democrat or Republican. Both sides screw us in different ways. They take turns. This one is about how they're replacing our government with unelected council-

Francesca Webb, Clerk to the Board:
Time has expired. Our next speaker is Andres Wong, who will be followed by The Original Dra.

Andres Wong:
Good morning. Thank you all for being here and thank you for this chance to hear my voice. I am from the supposedly beautiful city of Chula Vista and I speak now about the RUC, originally named mileage tax, because it is a tax. For the Union Tribune, earlier this week after the $4.50 we pay at the pump, $1.19 already goes to taxes and fees. We are already taxed to the hilt. I therefore ask all of you to remove and trash the RUC. This morning, there's obviously animosity towards all of you, please think why. I pray to our Lord Jesus that you listen to your constituents. Thank you.

Francesca Webb, Clerk to the Board:
And we're going to move on to Zoom where we have four remaining speakers. The first will be The Original Dra, followed by Carolina Martinez.

The Original Dra:
Amen brother. Yeah, so I love how you guys think that taking $14.3 billion from the people that are already in dire straights could ever have been a good idea. You have to be brainwashed to believe that, because if you just divide that by the amount of people in the county, that's $4,230 every year, which is $353 extra a month. That's if every person had a car, which isn't true. So that means those would be astronomical charges to people that can't even afford to buy food, to live in a house, to do all the things that you guys are forcing them into.

This is so ridiculous. And then you want to spend 1.5 million to amend this? You guys act... Man, it's so sad. You never listen to the people. You're listening to these globalists and you're pushing this down the pipe, and it's all to push us into a 15-minute city. It's clear as day. If you cared about the people, you would look at that astronomical amount and be like, “Oh, my gosh, we can't do this to the people.” You better never do it to the people.

Francesca Webb, Clerk to the Board:
Our next speaker will be Carolina Martinez, followed by Mike Bullock.
Carolina Martinez:

Good morning. My name is Carolina Martinez, with the Environmental Health Coalition. Thank you for the report and all the flexibility. We're here to request trainings for concepts like the road user charge for our community members in Barrio Logan, National City, and City Heights. To be able to understand these concepts, they're very complicated and we want to ensure misinformation is not used against them when making decisions.

I support residents in Barrio Logan, National City, and City Heights in understanding policies that are impacting their transportation. And I've conducted at least five different workshops on the road user charge. I explained to them that folks with less fuel-efficient vehicles are the ones that are paying the most when it comes to the gas tax. So we request that both SANDAG and the state dedicate capacity to support our community members in understanding this concept so that information is not used against them. Thank you.

Francesca Webb, Clerk to the Board:

Your time has expired. Our next speaker will be Mike Bullock, who will be followed by Blair Beekman.

Mike Bullock:

Yeah, thank you very much, Board, and thank you, Board, for all the work that you do. It is very unfortunate that we went down this path, because this road use charge was not going to take place until 2030. And of course, there's the 2025 Regional Transportation Plan, which you're working on right now. And the Regional Transportation Plan could get this right. And admittedly, it was not done right in the 2021 Regional Transportation Plan.

It should be obvious to all of us now that the state gasoline tax should be replaced by a means-based road use charge that does protect our privacy. And that can happen. That's one thing Democrats, Republicans agree on that we don't want to live in a police state. We respect our privacy and that can be done. I say that as a retired satellite systems engineer, Lockheed and-

Francesca Webb, Clerk to the Board:

Your time has expired. Our final speaker on this item will be Blair Beekman. You can go ahead.

Blair Beekman:

Hi, Blair Beekman here. To note that we, public comment, we are headed towards a future where there's going to be a lot of biometric technology used on our buses and I think we have to be ready for that with really open, accountable, clear policies and not be afraid to have those conversations openly. I mean, obviously, they're creating a lot of fear and angst and worry, and we need to learn how to be open in those conversations and it's open public policies that can allow that good conversation to take place and decisions to be made.

I also, with the ideas around many more buses, it's just an idea to increase ridership. Good luck how to do that. And I wanted to offer that the electric bus issue really looked to the VTA for ideas on the future of electric buses. And good luck on housing to really consider low-income housing development as a very viable option. Don't be afraid to talk about that either. Thank you.
Francesca Webb, Clerk to the Board:
Chair, that concludes the public comments on this item.

Chairwoman Nora Vargas:
Hey, thank you. We have a couple of members who have comments. I'm going to turn it over to Councilmember Shu.

Councilmember Jack Shu:
Thank you. Keith, I'd like to ask you a few questions first before I make my comments. Keith, you mentioned that this amendment will reduce our ability to reduce greenhouse gas emissions, from 20 to 18 point something, about almost 2%. What's the current CARB scoping plans targets with regards to reducing greenhouse gas emissions?

Keith Greer:
CARB hasn't set targets for MPOs yet, so the current target for SANDAG is 19%.

Councilmember Jack Shu:
You didn't answer my question. What is the current CARB scoping plan, just passed in November or December of last year, with regards to greenhouse gas reductions?

Keith Greer:
So there's two things happening here. The CARB scoping plan, which is a guidelines for how much overall state needs to reduce greenhouse gas, overall state, 25%. The current SANDAG target established by CARB is 19%.

Councilmember Jack Shu:
Isn't that 25% by 2030? Five years early?

Keith Greer:
25% by 2030. That's correct.

Councilmember Jack Shu:
Correct. Do you think the CARB will set a target for MPOs that is going to be higher or less than 19% in the future?

Keith Greer:
I do not have a crystal ball. The trend is going up. It's going to be harder to get our greenhouse gas targets at 19%. More likely it's going to go up from that.

Councilmember Jack Shu:
Can you say that again? Do you think it's going to go higher than 19% in the future?

Keith Greer:
All signs are it's going to go higher. It's going to be harder to reach your target.
Councilmember Jack Shu:
So, just to be clear, by passing this amendment, we're going in the opposite direction than what we might have in the future.

Keith Greer:
So, I think there's two ways to look at this. Right now, your target is 19%. Pursuant to the CARB's guidelines, you're meeting that target. You will have a choice as a board in the future, as part of the '25 plan and future Regional Plans, for how you choose to meet future targets. But for right now, you are meeting CARB's targets pursuant to their guidelines.

Councilmember Jack Shu:
Thank you. So, as most of you know on board, I've been against making this amendment to the '21 Regional Plan for a variety of reasons. There are many states, many regions of this country, and others, that have looked into road use charge. In fact, the state of California did with a pilot program which showed that people who use the road use charge found it much better than the current road use charge, which is a gas tax. 75% favored it.

We know the gas tax is regressive, that poor people pay more than rich people. So again, by putting this amendment forward, we're going against this body's own equity policies. SANDAG said we were going to try to deal with equity issues, because we know the poor suffered more, not only in terms of pollution, but also in terms of not having adequate transportation options. So, to me, it was just a complete quandary for me why we would want to do something to punish the poor because of misinformation that this body was working with.

And I get information from other sources. A conservative body that deals with tax issues, the American Tax Foundation, have looked into road use charge. They favor it. They think we should move towards it sooner rather than later. And lastly, another piece of misinformation that the public has been working with is that this body has the ability to impose a tax. We don't. We can't do that. Even if all of us unanimously voted to impose a tax, we don't. We put it before the people.

By placing this item on the plan, it gives the people of this region the option to impose, it means to raise funding for transportation with a road use tax, with a road use charge. So, to me, by taking this out of the plan, we're taking the ability of our constituents to decide for themselves whether or not they want a road use charge to fund adequate transportation.

Keith Greer:
Thank you.

Councilmember Jack Shu:
So again, it's very undemocratic and we're being dictatorial by taking that option away from the people to make that choice. And lastly, by amending this plan to go backwards with regards to reducing greenhouse gas emissions, we're giving this burden to the next board, the next generation to have to come up with a plan to reduce greenhouse gas emissions even more. 25% reduction per capita by 2030 is the new goal. Not 19%, not 20% with our last plan. That's the science, and that many of you have told me that you believe in climate change. Well, if you believe in climate change, you have to believe in climate science and climate math.
So, to me, voting for this amendment going forward is just contradictory to what we need to be doing here at SANDAG. These are hard numbers. I don't like them. I don't like the idea that our transportation system is inadequate. There are means to deal with privacy issues, there are means to make sure that a road use charge is means-based, and that people who rely on transportation are able to continue to use it and to provide other subsidies or means to help those who need help financially.

We do that with other utility bills, we do that with a number of means and it's able to do that. Privacy issues can also be dealt with. And I get this from other studies that I've read with regards to how this can work well. Hawaii, Oregon, Washington, Pennsylvania, other states throughout the country are looking into it. California certainly looking into it. We should have the ability to go forward and think forward. So I hope all of you take that into consideration as we go forward on this issue. Thank you.

Chairwoman Nora Vargas:
Thank you. Councilmember Burkholder.

Councilmember Melanie Burkholder:
Thank you, Chair. In light of my colleague's comments, Mr. Greer, on the slide, I think it's number seven, where it talks about the result in disparate impact, can you please explain to the board how you came to that conclusion that removing the charge would not result in that?

Keith Greer:
So as part of our-

Councilmember Melanie Burkholder:
And I'm sorry, and then I have one comment and I'm done.

Keith Greer:
Sorry about that. And as part of our Regional Plan, we have to do a social equity analysis. So when the amendment comes along, we do look at the amendment and we have that same social equity analysis updated. So that's part of your attachments to Errata. It's attachment one. It's posted online. And what they look at in social equity analysis is disadvantaged populations and the difference between disadvantaged populations for both benefits and things that are not benefits against the non-discriminatory population. So it's comparison analysis.

Zero would mean there's no difference. For the majority of the items under the amendment, there is no difference. It affects both the disadvantaged populations and the non-disadvantaged populations the same. Some are actually a benefit to them. So, for example, a road use charge is a cost. So for disadvantaged population, that cost is a greater burden than for non-disadvantaged populations. So in that case, it's a more of a benefit for them not to have that. So it's a social equity analysis, it's attachment to the Errata and it's publicly online.
Councilmember Melanie Burkholder:
Thank you for that. And completely off of that topic, Carlsbad is very interested in partnering with SANDAG in the flexible fleet program, and I'm just asking staff to accelerate that program. Thank you.

Chairwoman Nora Vargas:
Thank you. Councilmember Gaasterland.

Councilmember Terry Gaasterland:
Great, thank you very much. Keith, thank you for the presentation. Could you bring up slide four, please?

Keith Greer:
[inaudible].

Councilmember Terry Gaasterland:
Okay, I'm going to assume that it's up there, because I can't see it from here. Oh, there we are. Okay, so I always check the math and when... This corresponds to table, ugh, I'm sorry, table 4.2, I think, in our report. On table 4.2, we are given the numbers 22.1 and 22.5 as the VMT projected, in the old versus the new. What we're not given is, at least I couldn't find it, maybe it's there, is the VMT in 2005 that we are comparing to.

So I do the math, and I take these percents, 20.4, and that means that the 22.1 is 79.67% of X. Calculate X, take it to three decimals and do the same with the 22.5, which is really 22.489 and the 22.1 is really 22.143. So you get a different X. And if I use the old X, so 22.1, and that number, and then ask what's the difference with the new projection? The number I get is 18.9598. So it's actually really, really close to that 19%.

So I bring this up, because we really are talking about two tenths of a percentage point difference here and there. Your numbers that are in the table come to a different X. My point being, we're really concerned about this VMT reduction and yet the math doesn't add up.

Keith Greer:
So, first of all, let me thank you for going through that math. I couldn't follow all of it, but we do have a program here where we do check our math and have a QA/QC process. It's part of our peer review process that Dr. Burke's in charge of. I can say that both the numbers shown up here are consistent with the report and there's also shown in the Errata. And Dr. Burke, would you like to add, adjust anything else?

Dr. Burke:
We do have Wu San online. He was unable to be here today. Wu, he was promoted panelist, if you want to explain anything quickly?

Dr. Wu Sun:
Sure. Can you hear me and see me okay?
Dr. Burke:
Yes we can. Thank you.

Dr. Wu Sun:
So I have to say there are a lot of numbers there. I don't follow hundred percent, but in terms of the to each difference, with and without RUC, is roughly 1.8. It's combination of the mode share change, which represented drive behavior change. So for example, driving alone for work trip increased by 0.3%, and also because driving is cheaper, the average trip events increase by 1% overall. So that's the combination of these two factors.

Councilmember Terry Gaasterland:
Okay. So I would urge all of us to really ask for accurate numbers. Precision to three decimal points isn't necessarily necessary, but I get 19% if I ignore the decimal points, and I'm going to tell you how I get it. 22.1 is the VMT number in the old. 22.5 is the VMT number in the amendment. If we take 22.1 and divide by 79.6%, we get the 2005 number, presumably. If we take 22.5 and divide by 81.46%, 0.4%, we get a different number. So that means that we're off a little bit. And my calculation of the off a little bit is 2/10 thousandths of a percentage point away from 19%. So I think by rounding, you're doing the calculation a slight disservice, that this is actually very, very, very close, a whisper close to 19%.

Dr. Burke:
If it would be acceptable, we'd be happy to follow up with you after this meeting to explain. We've done this consistently throughout, and we definitely want to do this to be compliant with CARB. So we'll definitely make sure that we can work through the numbers with you to explain how we've gotten there and we can return back to the board to let them know how that's worked out.

Councilmember Terry Gaasterland:
Yeah, that's good. That's fine.

Chairwoman Nora Vargas:
Thank you. The next person is Councilmember Duncan?

Councilmember John Duncan:
Thank you. I think my questions were answered by the other director's questions. The part of the point, though, is this, it's modeling, right? And all models are somewhat imperfect. We try to make them as perfect as possible, but I just wanted clarification. It seems to me that the two main factors that are going into the models that would lead to the conclusion of the greenhouse gas increase or not as much reduction are one, that the road user charge would have a suppressive effect on driving due to its cost, due to the increased cost.

And the other aspect appears to be that it may slow down some other mass transit or other projects that might lessen the desire to drive. I am interested in how heavily each of those factors weighed in the calculation. I know this may be too simplistic, but if you have any comments on that that may help me more, that would be great, but I appreciate the comments you've already made as well.
Keith Greer:
Just really quickly, I think Dr. Sun online explained it. So when you take out the road usage charge, it makes it cheaper to drive so people drive more and then drive further. And so, that's simplistically how it works.

Councilmember John Duncan:
Right. And that's what I just said. My question, I guess would be a little bit more specific, and if we don't have it right now, that's fine, would be the percentage impacts of those. I mean, if based on what you just said, if the change in the calculation for greenhouse gas reduction target would be based, based on what you just said, I believe 100% on the fact that there would be more driving, because it's not going to be increased the cost of it. But I think it was more complex also. It actually also included the other factor that I mentioned. I can look into it deeply separately. Thank you.

Chairwoman Nora Vargas:
Thank you, Mayor Jones?

Mayor Rebecca Jones:
Thank you, Chair. Okay, so I had a couple of comments and then a couple of questions. So, I have a little bit of heartburn about the $1.5 million that we are spending on this, only because eight of the original cities that voted on this were my city, Carlsbad, Coronado, El Cajon, Oceanside, Poway, Santee, and Vista. We originally voted no, because we did know about the, how close the reduction was, enough to almost meet the goal and round up.

Many of the board members that were on at the time have actually said, "Oh, the RUC is already out of the plan." It's not, and we have found today that it's moving forward. October, we should have board approval and then moving forward to submit to CARB. That would happen in November. So again, still not taken out, not out of it. But I do have some questions. And oh, one other thing, the road user charge does not pay or is not in lieu of the actual gas tax, it's on top of the gas tax. It does not replace it.

So the metrics, I did ask a question on Wednesday. I did get a response last night. The ABM travel demand, I'm not going to go through all of that right now today, but can I have that sent to me where that's located, because I haven't been able to locate that. You don't have to do that right now, but I would like to talk about... Oh-

Chairwoman Nora Vargas:
We'll send it to everybody so everybody has a copy of it.

Mayor Rebecca Jones:
Perfect. On page 188, we're talking about the revenue assumptions and we still talk about them in 2020 dollars. Which again, I have a little bit of an issue with that, because we do have the year of expenditure numbers. The item number one, which is the removal of the road user charge is 14.2 billion over the life of the '21 plan. However, the year of expenditure is 24.47 billion, which is quite a bit of a difference. It's 10 billion more. I would like for us to start talking in the dollars and year of expenditure, because that's actually more of what we actually will be paying.
And then also, I do have this question on number three of that same revenue assumptions. The update in the TransNet, we're figuring that'll be about two billion more, and I don't think that we actually voted on reallocating the TransNet dollars from what our residents have actually agreed to pay for. So if I missed that and somehow we voted on that and I didn't realize that, I would like to know. And if not, when are we planning on actually moving forward with the reallocation of TransNet dollars to the new Regional Plan?

CEO Hasan Ihkrata:  
Let me, if I may answer the question of the mayor. The TransNet allocation is totally different from this amendment. This amendment is based on a request by this board to remove the RUC from the plan and we're doing that. I said many times before, and I'm going to say it again to you, that the TransNet money right now in the account is enough to pay the debt. There is no additional TransNet money to reallocate. We could BS you until, "Yeah, we'll do that, we'll bring..." But between now and 2030, more than 85% of the TransNet money is going in paying the debt we borrowed to build the project.

So Mayor, with all due respect, when you say reallocate, you have to have money to reallocate. There is no money in the TransNet, at least between now and 2030, and that's a different process than the amendment. This board requested to remove the road user charge from the plan. We did it. We're going to release it for public review as the modeler said, it's 18.6 rounded to 19%, and we'll let the state decide how to do about that, to go about approving it or not approving it. But I just want to make sure we're clear. There is nothing to reallocate and the fact that somebody at one point told you we have all this money, it's double what's actually is, I'm sorry. I apologize that you are under the impression that TransNet has more money than it actually does.

Mayor Rebecca Jones:  
I'm sorry Mr. Ihkrata, so you're saying between now and 2030, but this is a... this would happen in 2030 anyway.

CEO Hasan Ihkrata:  
Correct.

Mayor Rebecca Jones:  
So you said 85% of TransNet would go toward debt service, so there was-

CEO Hasan Ihkrata:  
Yes.

Mayor Rebecca Jones:  
.... there's still 15%-

CEO Hasan Ihkrata:  
Correct.

Mayor Rebecca Jones:  
... at some point. Yeah.
CEO Hasan Ihkrata:
Yeah.

Mayor Rebecca Jones:
So the 15% we have not voted on reallocating that, correct?

CEO Hasan Ihkrata:
You did not prepare-

Mayor Rebecca Jones:
And the reason... Sorry, the reason I bring this up is because it's right here in the revenue assumptions on page 188 that we are counting TransNet dollars.

CEO Hasan Ihkrata:
Sure.

Mayor Rebecca Jones:
That's why I bring it up.

CEO Hasan Ihkrata:
Yeah. And the 15% has been allocated many times over to match the grant we're getting. So the bottom line is there is no money to reallocate. That's the honest answer. Now, if you want to go about debating why and how, that's fine.

Mayor Rebecca Jones:
No. No, I'm sorry. Maybe I'm not understanding, because we are counting income from TransNet to actually pay for this plan, which also bases on-

Chairwoman Nora Vargas:
[inaudible]

Mayor Rebecca Jones:
Okay.

Keith Greer:
We also have a chief financial officer here, but there's two things going on here. This is not about reallocation. The number in here is about an estimate in the future of what TransNet would bring in and it's updating that estimate based upon the board's own adopted 2022 estimate.

Mayor Rebecca Jones:
But if it's a revenue assumption to pay for the '21 plan, then it is being used for the '21 plan.
Keith Greer:
That same revenue assumption was built in the '21 plan, nothing's changed. All that's changed is the amount of the estimate in the future, based upon higher than anticipated sales tax.

Mayor Rebecca Jones:
Okay, but the TransNet was actually, sorry... Maybe I'm splitting hairs, but I want to understand this. I'm trying to get at it. I'm sure I'm probably not the only one. So when we're looking at TransNet, it was to pay for certain improvements, and what I'm trying to figure out is if it's paying for the new plan, where are those dollars actually going that are specific to the actual original plan? I'm sorry, the '21 plan?

Keith Greer:
Maybe Andre would be more helpful in this.

Coleen Clementson:
I can add something here, if I may.

Mayor Rebecca Jones:
Yeah.

Coleen Clementson:
So, remember that having a revenue scenario is a federal requirement to get this plan approved. And so, what we have to do is show the federal government that this is a possible way to pay for this plan. The only thing that's been done here is we've looked at the revenues and that was based on the board input. How much more do we think we're going to get from state and federal grants because there's a tremendous amount of money out there that we didn't anticipate? So we upped that piece.

Then we also looked at our latest revenue assumptions for TransNet and we built that up as well. That's what made up for the $14 billion shortfall once you take the road usage charge out. The critical thing here is that that additional revenue is not attributed to any particular project. It's really just getting that math problem right so we can take this amended plan and give it to the federal government and ask them to approve it so that we can continue to get federal funding. So that's how it's done.

It's not that this 1.2 billion is going to this project or that project. It's overall to meet that hole in the plan that comes as a result of pulling out the road usage charge, and-

Mayor Rebecca Jones:
Thank you, Coleen.

Coleen Clementson:
... that's all there is to it.

Mayor Rebecca Jones:
Yeah, I think you're understanding what I'm asking.
Coleen Clementson:
Yes.

Mayor Rebecca Jones:
So we haven't actually allocated it, but we're using it as an assumption that we will reallocate it at some point in time and it will be used for the new plan. Great, thank you for that clarification. I'm sorry to be splitting hairs. I'm really not trying to waste our time. I just want to understand it completely. Thank you.

Chairwoman Nora Vargas:
All right, Mayor? Deputy Mayor Goble?

Deputy Mayor Steve Goble:
Thank you, Chair. I think the public might be a little confused why we're making revisions to a historical document rather than modifying a future document. Can you help me understand that?

Chairwoman Nora Vargas:
Go ahead.

Coleen Clementson:
Certainly. So these plans are required to be updated every four years. That's a federal law and a state law. So the most recent plan that the board of directors approved was in December of 2021. Your next plan, the 2025 plan is due in the fall of 2025 to the state and federal agencies. What the board had asked staff to do as, a result of a lot of public input, take that road usage charge out of the 2021 plan. That's what's before you today is a proposed amendment to the plan that the board adopted in December of 2021. We recognize that some of your discussion here is important for the 2025 plan and we've got a full workshop planned for you all on funding for the 2025 plan coming up.

Deputy Mayor Steve Goble:
Great. Thank you.

Coleen Clementson:
Thank you for the question, because I know that can be really confusing for the public, too.

Deputy Mayor Steve Goble:
Thank you. My next question has to do with the 19% reduction by 2035. Does that include the benefit of conversion from gas to electric cars? CARB says that we will have 2.9 million less gas engines sold by 2030 and 9.5 million less gas engines sold by 2035, implying they'll be electric by then. Does the 19% reduction include the benefit of that conversion from gas to electric?
Keith Greer:
So the number that CARB gives us, it's against the 2005 baseline and it's very specific what we can count and not count, and it's already built into the model, including things like fleet turnover, which is what you're getting at. So the number we've given you, that 18.6, has all the built-in assumptions as we know right now already built into it.

Deputy Mayor Steve Goble:
So it's, answer sounds like yes-

Keith Greer:
Does include.

Deputy Mayor Steve Goble:
... it does include the conversion, gas to electric, is what you're saying.

Keith Greer:
Correct.

Deputy Mayor Steve Goble:
I understand. Okay, thank you. My point-

Coleen Clementson:
I think one clarifying point there. So the laws that we have to comply with and the math problem that we have to use to get to that 19%, the law doesn't allow us to count electric vehicles, unless it goes above and beyond what the state is already expecting this region to accomplish. So the measurement that we have to use looks at vehicle miles traveled per person, how long the trips are, how many trips I take on an annual basis. That's what we have to use and that's the proxy to get to this greenhouse gas reduction. I know it's super complicated and in the weeds, but that's the law that the state has for us and for everybody in the state of California to have to meet. So even if every vehicle today was electric, we wouldn't see a big increase there. So that, I just wanted to clarify that point in the law that makes this really complicated.

Deputy Mayor Steve Goble:
If you said every car today was electric, we wouldn't beat the 19%?

Coleen Clementson:
We still would have to meet our vehicle miles traveled. So it doesn't... the vehicle miles traveled, you may still drive even if your car is electric. So we're all accumulating miles, you may actually drive more.

Deputy Mayor Steve Goble:
So, it's really more about miles driven than-
Coleen Clementson:
That's the math problem that we have-

Deputy Mayor Steve Goble:
... GHG reduction is what I'm hearing you say.

Coleen Clementson:
That's true.

Deputy Mayor Steve Goble:
So really-

Coleen Clementson:
That's the math problem.

Deputy Mayor Steve Goble:
Really, this is about getting-

Chairwoman Nora Vargas:
Excuse me, hold on one second.

Deputy Mayor Steve Goble:
... out of CARB rather than what kind of car we're driving?

Chairwoman Nora Vargas:
Can you hold on one second? Give me a second. The members of the audience, can you please refrain from making any comments or clapping or anything? That we need to have this discussion as a board, so we ask that you are respectful of our time. Go ahead, sir.

Deputy Mayor Steve Goble:
So am I right in hearing you saying it's less about the kind of car we're driving gas for electric and more about the number of miles that we're driving?

Chairwoman Nora Vargas:
I think the important thing to mention here is that there's rules and formulas and regulations that the state has directed us. And so it's not necessarily what she's saying or what we're saying, it is the regulations that we have to follow. And so that's where the math is where it's at, but happy to have a conversation in terms of some of the laws.

If you remember when we did the Regional Plan for 2025, we had a whole briefing about what were the factors that we had to take in place so that we as we're trying to reach our goals, that we really understood what those were. I think we can go back and check so that everybody understands for the 2021 plan what those were in case you have any specific questions on that.
Deputy Mayor Steve Goble:
Yeah, I think the public would say what's really driving the 19%, the conversion to electric or fewer miles traveled?

CEO Hasan Ihkrata:
Vehicles miles traveled.

Deputy Mayor Steve Goble:
That's what the public would ask. Yeah, yeah.

CEO Hasan Ihkrata:
Vehicles miles traveled.

Chairwoman Nora Vargas:
Mm-hmm.

Deputy Mayor Steve Goble:
My final question, we took out the 3.30 cent road user charge from the regional charge. Page three of the staff report says separate from the regional RUC, the 2021 Regional Plan also assumes revenues resulting from the state administered RUC. What's the amount per mile of that and how much is in the plan, in terms of billions of dollars?

Keith Greer:
Let's get back to you on that. We might have an answer online in one second. The actual state charge. I do not know it right now.

Deputy Mayor Steve Goble:
It would have been 3.30 cents, plus the state charge, is what the staff report is implying. And I'm trying to find out 3.30 cents plus 4 cents? And since we took out 14 billion, it assumes there are several billion still in there from state RUC. I'm trying to figure that out, too.

Keith Greer:
You're precise that this removes the regional road usage charge. It doesn't affect anything the state's doing. We're trying to get that number for you, but this does not affect the state's regional road usage charge.

Deputy Mayor Steve Goble:
I understand. I think a public would say, "What's the total nut we're trying to crack?"

Chairwoman Nora Vargas:
We can get that number for you. We can get that number for you. And I think it's important and the good news is that that's why we're here today to have a discussion and to be able to address any questions that you have. And you have to remember there are things that we can do based on our jurisdiction and then there are other things that we must comply with because of the state. And if there's anything that we need to change with the state, I think is
working directly with our state legislators to be able to modify some of that. Any other questions, sir? All right, Mayor Minto.

Mayor John Minto:

All right, this is kind of interesting. I'm hearing about all these numbers and everything, and you mentioned the, complying with the state of California. And bottom line is, we're also trying and comply with the federal law, and so it's all getting passed down to all the jurisdictions to make us the bad guy. I guess what we're really talking about is this concept of climate change and the reduction of our greenhouse emissions by 19%, and that's an attempt to help reduce the rise in temperature, not just in San Diego County but the state and maybe across the world.

So, if we were actually to implement this road user tax, I see what the number is for money, but how many cars would it actually take off the streets? I don't know if you have this information today, but you can get it to us. I think that's important, because it goes to what Deputy Mayor Goble was saying, is it's really not about just about getting cars off the street, doesn't matter what they are. So then, to one end, do we know what the temperature change would be in milestone years?

For instance in 2030, '35, '40, maybe even 2050, are we talking about reducing the rise in temperature? Are we talking about there would be a lowering of a temperature worldwide, or would there be no change, which means we just stay where we're at today? And even if it went up 1% in temperature change, what's the real effect of that worldwide and how is it that we are, by what we're doing here in San Diego County changing the world? Because I can tell you right now, in my opinion, we're not changing the world with what we're doing here. Some will say, "But it's a start." Yeah, well, you know what? I can't afford to pay more for driving, like a lot of people. I'm retired. I'm on a fixed income now. Always wanted to say that. So I don't know if you have any of those answers. I doubt it, because we're too busy. Everybody's too busy talking about reducing the greenhouse gas effects and preventing the worldwide temperature rise, but nobody seems to know what that worldwide temperature rise will be in 40 years even, or 20 years even. And so, I don't know, I guess the question is how can you justify, how can we justify it? How can the state justify it or the federal government justify it if they don't know the answer? So I just thought I'd throw that out for fun, if nothing else.

Chairwoman Nora Vargas:

All right, thank you. Councilmember Shu.

Councilmember Jack Shu:

Sure I have a... Well, let me address what Council... I mean, Mayor Minto's thing real quick, and have a question for Mayor Jones. We're going to have breakfast about this Minto and I, but that's similar to someone that would say, "I shouldn't pay any-"

Chairwoman Nora Vargas:

Give me one second. It's not a Q&A. This is a board discussion. And in board discussion members are able to have conversations with each other. That's what this process is all about. So no, it's not a Q&A, it's, a comment was made by one of my colleagues. My other
colleague was already in the queue and so I gave him the power to be able to ask anything he can. He can ask anybody in this room any questions that he has. So just for clarification.

Councilmember Jack Shu:
So Mayor Minto, when that issue was brought up to me by another elected person, I say, "Well, that’s like the federal government’s already what, three, $4 trillion in debt, how much is my little income tax to the federal government’s going to make?" Wouldn’t make any difference at all. Maybe I don’t have to pay any taxes at all. Anyway, we’ll leave that for our breakfast discussion. But Mayor Jones, you had mentioned that the road use charge would be in addition to the gas tax, not a replacement of the gas tax. I’m just wondering where did you get that from?

Mayor Rebecca Jones:
Councilmember Shu, right in the document, the funding document, it has the gas tax still in there, and then it also has the road user charge as not being able to be used for any road fixing or anything like that. It's on page V4 of the appendix, if you'd like to read that. Thank you.

Councilmember Jack Shu:
Sure.

Mayor Rebecca Jones:
And if you'd like to meet for coffee, I'd be happy to do that-

Councilmember Jack Shu:
I'd love it. I'll love it.

Mayor Rebecca Jones:
... anytime so we don't waste our board's time. Thank you.

Councilmember Jack Shu:
Thank you. That's really news to me, because all the documents I've read and information from the state and the other states, the road use charge is to replace the gas tax, which they believe is getting obsolete. We've had it for a hundred years and it's obsolete in the sense that I know you drive electric vehicle so you know your $200 per registration fee, per year is a fraction of what others are paying with the gas tax. So-

Mayor Rebecca Jones:
Page V4 Councilmember.

Councilmember Jack Shu:
Coffee's on me. I'll look forward to that. Thank you.

Chairwoman Nora Vargas:
Thank you. Councilmember Melendez.
**Councilmember Katie Melendez:**

Thank you. Great discussion, everyone. And I'm glad that we're at this point where we're looking at alternatives to our previous plan, but regardless of a discussion around a regional road usage charge, the state RUC is coming, and from my understanding, we have yet to be given a confident timeline of when the gas tax will be abolished. It has become less profitable of a revenue stream over the past several decades as cars have become more fuel efficient.

And now with the change to laws with the sale of internal combustion vehicles, we know that it will be essentially obsolete, but we haven't been given a confident timeline from the state. And I really believe that we need to, in addition to our planning regionally, we need to put ourselves in a position of education and advocacy, and has this body taken a position of legislative advocacy to abolish the gas tax?

In the City of Vista, I brought forward a resolution to insist on just that and I really believe that for the benefit of the public and for the working people that are going to continue to use gas-powered vehicles, because that is all that they can afford, I want to have full confidence for them that at no point will members of the public be suffering from a doubles taxation. And I really believe we need to put ourselves in a position of legislative advocacy, regardless of a state or regional road usage charge. We have to have a clear definition of when the gas tax is going to be abolished.

**Keith Greer:**

Thank you. Deputy Mayor Molina?

**Deputy Mayor Luz Molina:**

Yes, thank you, Chair Vargas. I would like to expand on Councilmember Melendez's comments. And absolutely, I completely understand the confusion that is out there, the facts and the other facts that the public seems to be catching. Of course, these are extremely complicated figures and methods and mechanisms by how we arrived at these figures. I would like to call for SANDAG to provide us board members, so that we can then disseminate the information to our, the people that we represent, in a way that is understandable.

Regarding the road usage charge that is coming from the state, this would not be the one that SANDAG or whoever's going to go and put on a voter ballot, right? That's completely different. There's one from the state that's coming. The one here from SANDAG or for the regional transportation plan is getting taken off 2021. What does that mean? People are still going to see a road usage charge from the state of California? I mean, there's a lot that needs to be explained clearly.

And I would like to request a way for me to explain that information to the people that come and ask me, "Is the road usage charge going to be on top of the gas tax?" Here, we're hearing... At this table, we're hearing two different things. So what is it? I need to know that information so that I can explain it to the people that I'm speaking with. Thank you.

**CEO Hasan Ihkrata:**

Hi, Mayor, Chairwoman. I think the councilwoman from National City is asking a great question and we are now getting into this philosophical discussion of it's a VMT or it's a greenhouse gas emission. Is it the temperature rising or falling? That's beside the point. We're a transportation agency. We have a state law and a federal law. The state law said that you have to meet certain targets. Don't ask us why this target, whether it's logical. We didn't
set those targets. If you want to change those target, like the chairwoman alluded to, talk to the legislators and change the law.

I think Councilmember Fisher was saying last time in the workshop, "Let's change the law." Change the law. But the law is this, in the regional transportation plan, and by the way, in every regional transportation plan in the state, there is the statewide assumption and that is either a gas tax or a replacement of the gas tax. We have nothing to do with that. That's a statewide assumption. On top of that, we assumed a road user charge. I think it's about two cents per mile and the board ask us to remove it and that's what we're doing. So let's not complicate these issues and make it philosophical discussion.

It's very simple, this board directed staff to take the road user charge on top of the statewide, which we have nothing to do with, out. We're taking it out. We're resubmitting the plan to the state. It's up to the state whether they're going to approve it or not, but we're following your direction. And look, you all smart people, but this is definitely beyond my pay scale to start solving the modeling problem here that require few PhDs that doing it right now, like Dr. Wu, to solve.

But this discussion is really about following your direction and taking the road user charge out and putting this for public review. There is no other discussion that been taken. There is no changes to the plan. We are following your direction and removing the road user charge. The statewide charge, we have nothing to do with it. And every plan in the state, San Francisco, Los Angeles, Sacramento, all the 18 MPOs have that statewide assumption. Now, the state now is doing a pilot to replace the gas tax with a different user charge. We don't know the result of that and we don't control it either, and I hope that answered your question.

Chairwoman Nora Vargas:

Yeah. But I do believe, Vice Mayor, that your request is not one that I don't know that necessarily is where you stand on the issue. What's you're asking is for a document with the facts. And I know that that's handy, because we have used the facts to have these conversations over and over again. I think there's absolutely an opportunity and that's why this discussion is so important. There are people who have very different perspectives and that's why we all run for office with our different perspectives, and our constituents elected into office and we all are sitting here having the discussion.

And there are going to be clear philosophical reasons of how we get to one place or another. Some of us may be leaning one way or another and that's okay. That's what this body is supposed to be doing. And in the retreat, all of you asked for opportunities to have further deep dives on some of these issues and that's what we're doing here today. It's taking this long because it's a process we have to follow. Because part of our responsibility and our job is to ensure that there is opportunities for public comment, et cetera, et cetera.

I know that it's been said, it has been since last December where the recommendation was done to take the road user charge out of this plan. I was on TV announcing that we were going to take it out. And then there was assumptions made that I said, "Oh, I'm taking it out." No, this is not the nor show. I never said that I was going to take it out. What I said is that that's the direction that the board gave us and that's the direction that we're going to be going under my leadership as chair, and that's what we're doing right now.

Could it happen faster? I wish government worked faster, I really do, every day of my life. And I've been a public servant for a couple of years now. It doesn't work that fast. But I think to
your point, it is extremely important that if it takes us longer to have these conversations, because if you have questions and you have access to all this data every day, imagine what the public is asking for. So, to respond to you, we will make sure that we have some sort of, I know that we have it already, because I've seen them, and we'll get that to you so that you can share with your colleagues and we'll get it to everyone else. All right, Councilmember?

Councilmember Andrea Cardenas:

Yeah. So first of all, I think the discussion is really great. I think part of what we're seeing right now, though, is there's two separate things that we're trying to get at. One of them being the item at hand, which is looking at the amendment that was requested from this board for something a previous board did. There are things that are just what we need to do to be in compliance, and please correct me at any point if I'm wrong, with both state and federal law, and that's the way that we must govern.

There is also a lot of discussion, though, on how we feel about those things and that's perfectly okay for us to have a conversation on. However, I genuinely believe that that's a conversation we must be having when we're talking about our legislative priorities and the things that we would like to change about the way that we must govern or we want to operate in here. I'm hearing, of course, it's not ideal that we're not taking into consideration several assumptions and whatnot, but we still have a formula that we need to input the data in that's going to give us the result, and that's the formula that's been handed to us.

That's a card that's been handed to us as what we must do until we are able to, either decide as a board we want to advocate as an agency to our state, federal legislators, that's perfectly fine. I just think that we're getting all of these things convoluted and that's why it gets so muddled in this conversation. They're two completely different conversations to have. One is, are we doing what we must do, per accordance with what our board is here to do? And the other is what do we want to see changed, right?

And I think we've had those conversations both at the retreat and in some of our workshops about, well, we just don't like that we have to do these things or we don't think that it's conducive to the work that we do in our region. And that's fair, but we must take that conversation on the action of what we can do about that policy rather than the overall of our philosophical or our ideas.

I do think we can be a stronger advocacy agency for the things that we believe don't work for our region. Because the reality is, our region is very unique in a lot of ways. We have not only the border but just, we are a very specific region that the needs that we have are different than other parts of the state or the country. And so, I just would like for us to, although I think this conversation is very great and fruitful, we must be able to differentiate that as we're moving forward, because if not, we get caught up in the, "Well, who's making us do this and why?"

And we need to be able to separate that in order for us to have some conclusion when we're trying to get, not just getting through the meeting, because of course, we want to hear what we all are thinking and what the public has to say, but that's when it gets also very confusing for the public, in my opinion, because there is that we're not differentiating between the legislative and policies that we would like to see changed and what we need to do as a board. And so, I just think that there is a lot of great conversation here. We just need to be able to direct it in an element where it makes sense.
Chairwoman Nora Vargas:
Mayor Kranz.

Mayor Tony Kranz:
Yes, thank you. I would point out that Mr. Irkhata's comments about this being a philosophical discussion. In reality what it is, writ large, is a political conversation and there's no question that for the last couple of years, this issue has been used as a tool to bludgeon this agency. And so, while the chair talks about government not being very fast, I'm reminded of the term government in action and depending on how you say that, I'm inclined to use the term inaction, because it has taken entirely too long to get to the point where we're able to consider this in a serious way. So I'm thankful that we're at that point.

I would also like to point out that we have a road usage charge. It is a gas tax that is as inequitable as you could possibly get. I office from home, I ride my bike to city hall. Unfortunately, I don't have a transportation system that allows me to come to these meetings by public transit or I would gladly do that. My son, a tradesman, works throughout the state, pays crazy money to drive his truck in order to transport his tools.

He recently had the opportunity with the company that he works with to get a company vehicle, with a company gas credit card, and it was like a huge pay increase for him. So while we have these conversations about the best way to pay for improvements to our transportation system, whether that's public transit, modes of public transit, modes of people getting from where they need to be to back home, et cetera, I think it is important that we remember that the impacts that these decisions have on the common man are pretty important. So I look forward to putting this to rest in the 2021 plan and actually relish the opportunity to have this conversation again with the 2025 plan.

Chairwoman Nora Vargas:
Thank you. Mayor Vasquez?

Mayor Racquel Vasquez:
I will make my comments very short and I hope sweet. I support a fact sheet regarding what a road use charge is, but also clarifying the difference between the state road use charge and SANDAG. I think that that would help to inform real people about what's going on here, and I think that would help to shore up what the future of transportation allocations of funding will look like.

Secondly, I'd like to say, wow, this is 2021. I'm really looking forward to working on the future Regional Plan and I am pleased to see that outlined in the key considerations that budgetary question, that budgetary shortfall has been met with the adjustments that are currently recommended in item number 16. So fact sheet number one regarding, and I'm talking about a one-page fact sheet, a nice and simple, provided to us that can be updated. And when updated, notifying us to let us know when it is updated, but also a one-page fact sheet regarding the upcoming Regional Plan. Thank you.

Chairwoman Nora Vargas:
Thank you, Mayor Vasquez. Mayor Jones?
Mayor Rebecca Jones:
Thank you so much, Chair. So we do have a fact sheet, though it's 26 pages, which is the funding for the Regional Plan. And it actually has out there, and actually, you had brought this up, Vice Mayor Molina. On V23, it has two billion dollars that is going to be... It's called city/county local gas taxes. So that, through 2050, is going to bring in revenue to pay for the Regional Plan. So anyway, I just want to bring that up, because we do actually have it. I read all these little details, I'm geeky like that. So anyway, thanks.

Chairwoman Nora Vargas:
No. I'm sure people are not saying that they haven't read it. I think what they're saying is how do we digest 26 pages into one document, so that the community who is not responsible for doing this work every day can actually absorb it. Right? I think that's what I'm hearing from my colleagues, but thank you for sharing that. Councilmember Duncan.

Councilmember John Duncan:
Thank you. So this matter is on the agenda today as a public hearing, correct? We're not taking action today? So-

Chairwoman Nora Vargas:
Nope. That's exactly what I said.

Councilmember John Duncan:
Yes, and that's exactly what I'm repeating rhetorically. The vast majority of the other directors' comments and questions, to me today, were totally appropriate with having a public hearing. So I felt that Mr. Ihkrata's comments about our conduct is inappropriate and very excessive in regard to chastising us for asking questions. For me to ask a question about in the calculation of an increase in greenhouse gases based off of the amendment to the Regional Plan that we're having a public hearing about, and whether that's primarily about an increase in vehicle miles traveled, as whereas they may be suppressed if there's a road user charge, is exactly what I think we're here and we're supposed to do. And I don't think that our CEO should chastise our fellow directors when they ask a question and want to try to understand something. I understand maybe he's frustrated with the fact that the road user charge is coming out or that it takes a long time or that it's been work to be done, and I appreciate that, but I don't appreciate being chastised publicly for doing what I think our job is.

Chairwoman Nora Vargas:
So Councilmember Duncan, I think we all take information differently, and as somebody who deals with microaggressions on a day-to-day basis in every hour, I can understand where people may have different interpretations of the information that is provided. I do believe that it's appropriate for executive director to try to guide us and to share with us where the different laws are in the state and the local level. His directiveness may not be something that you appreciate, but I don't think that, in my opinion, there was nothing that was chastising.
I do take your comment and I appreciate your comment, but I also think it's important that our CEO has an opportunity to be able to delineate where the rules are coming from and some of the feedback that he's getting. Which is why I also emphasized, with no intention of chastising anyone, that it was important to ensure. And I think Councilmember Cardenas, also Deputy Mayor Kat McGovern has also mentioned it, and a couple of other folks, that it's really about a lot of the discussions that are taking place are philosophical.

Because if you heard the passion the Councilmember Shu had around some of the goals, and Mayor Minto had a very different, separate discussion and I was, “Ah, okay, well climate change is real for me, but he's looking at it from a different lens.” I think those are philosophical questions. And so, I apologize that you may be absorbing this information in a different way, but I do think it's important that our CEO has an opportunity to share information. We can work together to figure out how that information is shared and move forward. But I do think it's appropriate and I'm sorry that you took it a different way. Go ahead.

Councilmember John Duncan:
May I respond?

Chairwoman Nora Vargas:
Actually no, we'll keep moving. So go ahead. I mean, did you want to say, because I am happy to have a... If this is a personnel issue, we can have it separately, because I think it's important. I just wanted to address to you how I didn't see it that way, and I acknowledge that what you saw is your perspective and I think that's important. Is there anything else that you want to add?

Councilmember John Duncan:
Yeah, just very briefly. I think everything you said about what the CEO could do can be done by saying those things without the chastisement part, and we have spoken about that before. And the other just last comment I'll make is, when people make very lengthy comments about that they think that the meeting is taking too long, they don't seem to realize that they're very lengthy comments about the meeting taking too long is causing the meeting to last a lot longer and have people respond to those comments. Thank you.

Chairwoman Nora Vargas:
The meeting is going to take as long as we need it to happen and people can have their opinions. Go ahead, sir.

Caltrans Director Gustavo Dallarda:
Thank you Chair Vargas. I wanted to comment on two things quickly. One is on the importance of VMT reduction. And you may recall a year, but maybe it was two years ago, we had CARB here explaining why GHG and VMT reduction is important. And my recollection, and maybe if we can pull up that meeting and share the presentation with some of the new board members, was that even after the state has a very good program to change the fleet from gas or diesel-consuming vehicles to electric, and it's leading the rest of the nation and the world in that respect.
But even when those mandates come up, that's for new vehicles. And there's going to be many years where people don't change the vehicles every year and some people cannot afford to do that. Truckers sometimes they can't afford to buy a new truck overnight, so there's still going to be millions of gas and diesel-consuming vehicles and that's why it's important to continue looking at reducing VMT. So that was one comment.

The second comment was I want to echo what Mayor Kranz said, I'm not ashamed, but when I go to put gas in my car, I am paying a road user charge and we're all paying a different road user charge. If you're lucky enough to have an electric vehicle, you're not paying anything when you charge. None of the money when you charge is going to maintain and keep our transportation system in order. If you happen to have an old car that is not fuel efficient, you're paying a lot more than somebody that has a fuel efficient vehicle. That speaks to the inequality that Mayor Kranz talked about.

And with more zero-emission vehicles on the road, that means less revenue to be able to keep our transportation system in good order so that you can keep traveling on it. So that's why this state and many other states, and eventually the federal government, will have to look at a different way of collecting from people so that, because collecting at the pump is not going to yield enough money to be able to keep the system going. So I hope that that clarifies. Thank you, Mayor Kranz for bringing that up.

Chairwoman Nora Vargas:

Thank you. And there's a lot of discussions happening in the state about how we meet our goals, infrastructure needs funding. And I think the other piece of it is the amount of funding that's going to come from the federal government so that we can ensure. This is the first time that we're going to get that much funding for some of these initiatives and projects. And so, how do we make sure that that is being allocated to address some of these challenges that we have? Let me go ahead and Mayor... I mean, Councilmember... Yeah, yeah, White.

Mayor Dane White:

Thank you very much.

Chairwoman Nora Vargas:

Mm-hmm.

Mayor Dane White:

I just need some clarification on something that Mayor Jones had said, and that is the revenue collected from a road user charge cannot be put back into roads. Is that accurate? The region? Got it. So with that being said-

Chairwoman Nora Vargas:

Hold on, let me ask, can somebody respond to that question?

Keith Greer:

I'm not sure I can. So the revenue generated from RUC would go into implementing the Regional Plan.
Mayor Dane White:
Correct.

Keith Greer:
Yes.

Mayor Dane White:
Which is mostly public transportation.

Keith Greer:
It's all the policy projects and programs in there. It's a slew of things.

Mayor Dane White:
Okay.

Chairwoman Nora Vargas:
Where's our...

Mayor Dane White:
With that being said-

Chairwoman Nora Vargas:
Hold on one second. Hold on, hold on, because I'm hearing no over here. So, Coleen?

CEO Hasan Ihkrata:
No, it's not mostly public transportation, it's for the programs, right, Coleen?

Coleen Clementson:
Yeah. So the road usage charge, if there were a regional road usage charge which is being pulled out of this, it's pretty flexible and what it could be used for, because actually the people and the board would get to decide how to utilize that. So the state would set the rules for the state road usage charge. Any regional collection would really be up to the board and ultimately the people to decide how that money should be spent.

Mayor Dane White:
Understood. Can you clarify-

Mayor Rebecca Jones:
It says right on page V4 that the eligible uses are transit capital and ATP/programs. That's where the Xes are on that actual page. It has transit operations blank, highway capital blank, highway operations blank, local streets and roads blank, and then also debt service blank. It says specifically on that page, those two eligible uses, because that's what is called, eligible uses. [inaudible] source-
Chairwoman Nora Vargas:
Mayor Jones, I'm just going to ask you to use your clicker. I just want to be fair-

Mayor Rebecca Jones:
Sorry.

Chairwoman Nora Vargas:
... because there's other people-

Mayor Rebecca Jones:
Certainly he's fine. [inaudible]-

Chairwoman Nora Vargas:
... waiting in line.

Mayor Dane White:
It's okay. I asked her-

Chairwoman Nora Vargas:
I know. So if I can just ask, hold on one second. We need to have a process so that we are able to make sure that everybody who is asking to... When you get elected, you are happy to run this meeting. Okay. We're going to have a process and I want everybody to have discussion, but I have people waiting on the queue. If you have specific questions for anybody, we're going to have staff respond. If you have specific questions to a colleague, I'm going to ask the colleague to put yourself on the queue so we can follow a process. Is that cool with everybody?

Mayor Dane White:
That's fine. And moving forward-

Chairwoman Nora Vargas:
All right, fantastic. Go ahead and ask your question.

Mayor Dane White:
So my point is, with that being said, I represent the fourth-largest city in the county, where the average household income is $30,000 below the county average. If my residents, in large part, are construction workers traveling throughout the county are being charged for every mile that they drive and that money cannot be used to be reinvested back into those roads, that seems pretty inequitable to me. So I just wanted to make that point and hope we can find something that works for all cities, not just a few.

Chairwoman Nora Vargas:
Okay. [inaudible]?
Vice Chair Sean Elo-Rivera:

Thank you, Chair. I just wanted to pivot back. I appreciated your comments. Recognizing exactly as you said the way that different comments can land with different folks. I also did not hear a chastising of the board and I think it’s really important that staff can speak directly with the board about when we are and are not staying on track with what we have to do. And if we respond in a way that makes them feel like every time they are direct with us, there’s going to be blow back.

We’re going to have staff that’s walking on eggshells, and we are dealing with highly technical issues, with legal requirements, and this whole thing’s going to get screwed up. And so I think that there’s a necessity for decorum and for respect amongst the board, amongst the board to staff, to staff to board. I also don’t want to create a culture or environment of folks not feeling like they can say, “Look, we’re going... It’s an important road that you’re traveling down, but it’s not the road that we need to in order to end up at the destination that we have to for this particular conversation.”

I think that staff has done a really good job of that. And I haven’t been here for that long, but I was here last year, and as Mayor Kranz mentioned, this issue was used to bludgeon this agency over the better part of, we’re going on almost two years now. And so I think that’s important context for any response from staff or other board members when this conversation is happening. Because while your questions and comments might be on the up and up, the reality is that not all of them have been.

And there has been a lot of... I won’t even go down the rest of that path. But I just want to add that context, I want to support the chair’s comments, and I really, really hope that we can appreciate staff’s responsibility to be direct with us when we are talking about technical issues and legal requirements. The last thing that I’ll mention, it’s important to note what Coleen had said there. Ultimately, we are the board and we will have policymaking authority to determine how equitable the way any revenue that we bring in is utilized. I’ll conclude there, Chair. Thank you.

Chairwoman Nora Vargas:

Thank you. With that, we’re going to go ahead and close the public hearing. Thank you everyone for your feedback. Continue to process this and then we’re going to go ahead and move forward. We have a focus in how we’re going to go and do the next steps.
Web, Workshop and Email Comments

<table>
<thead>
<tr>
<th>Name</th>
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<tr>
<td>Shannon Biggs</td>
<td>Thank you for getting rid of the Road Use Tax. I was worried about the impact it would have on our blue collar workers who have to use vehicles transportation.</td>
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<tr>
<td>Carla Pekin</td>
<td>please announce meetings well in advance. Please hold meetings at a time when people can actually attend. Not work day hours.</td>
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<tr>
<td>Paul Lindsey</td>
<td>The amendment states, “result in a net decrease in revenues from $173 billion identified in the 2021 Regional Plan to $165 billion. This revenue would still be sufficient to fund the anticipated $163 billion of planned transportation improvements included in the 2021 Regional Plan.” If the income without the road usage charge was sufficient to pay for the 2021 Regional Plan without reductions, then why was the RUC even included? This calls into question the entire methodology used to calculate the funding requirements. Is SANDAG simply cooking the numbers to make it work?</td>
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<td>Alejandro Ortega Jr</td>
<td>Removing the RUC is necessary, it seems that the organization has not taken into account, nor reviewed, data on the cost of living and how many residents within San Diego County commute for employment. While San Diego is not Los Angeles in size, we are still a vast area. I, myself, commute from Oceanside to Miramar and the initially proposed RUC would've added a significant strain to my situation on top of already high gas prices (which have always been historically higher than the rest of the nation), high rent/mortgage prices and for any parents, high cost of daycare expenses. You cannot add additional costs to residents by saying that they now have to pay a per mile tax to just go to work and for daily lives, that is unethical. My proposal that has always been a lingering question is why aren't county officials researching public transportation systems that are on the east coast. It’s understandable that we cannot have subways due to our regional geographical setup, but rail systems that are above ground work. When say in above ground, not cutting traffic off on regular roads, but above the roads. Yes, ANY project is going to cost money, but, and this may be a personal rant, officials need to understand and estimate that while initial costs may be high, the long term effect is providing a reliable and sustainable public transportation system that will allow more residents to use public transportation and reduce traffic congestion and our carbon footprint. Making it easier for residents to get from North County to South County without having to take 4 hours is something many have been asking for years.</td>
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Morgen Ruby

Page 7, titled "The Challenges" - it is unclear if these infographics represent regional or national data, such as stated in the pedestrian fatalities statistic. Can you add either a footnote or embed in the text, for example "only 12% of residents ~in the region~ live within..." to help put the numbers into perspective?

Public advocate, retired

As a prior activist for environmental oversight, I see San Diego unelected board making decisions for bureaucrats who prepare today’s imagining for the future. There will be no future as Los Angeles and San Francisco with San Diego following in their footsteps. Failed leadership abounds as we look at tomorrow’s vision of creating division among the people with some bureaucrat’s opinion of equity. Having San Diego to carry the burden of Mexico’s open cesspools who pollute our beaches when they have a Trillion-dollar budget, but they come beg for help while our leadership falls for it every time a meeting is held at Tijuana River Valley Regional Park. Mexico has yet to set a Net Zero target, Mexico is the second-largest greenhouse gas (GHG) emitter in Latin America and the Caribbean. The reduction of fossil fuels when there is no alternative but an ancient grid. The infrastructure of our streets are in decay and held together with patch work that fails as it rains. The homeless programs and shelters fail at accountability. As a native San Diegan and a once democrat supporter, Fix today’s problems and not leave it for some bureaucrat in the future is there is any. It’s all about money and following the tribe of destroy and rebuild, yet they never created anything themselves. So, what is our elected officials doing? But delegating their responsibilities to bureaucrats who are not held accountable of how they are destroying our once beautiful city piece by piece. They appear and disappear and deny during voting time.

Brooks Rogers

I think the proposed RUC would have been hard to implement and can see why it had so much pushback. I do agree, however, that everyone who uses our roads should be paying to maintain them and that can not happen purely through a gas tax.

My suggestion is to achieve this through the use of more tollways in the region. Tollways are especially useful in the SANDAG region because so much of our traffic is just passing through between LA and Mexico. The addition of more tollways would allow us to charge those who use SANDAG region roads in direct proportion to how much they use those roads. Like Delaware we would be collecting a lot of toll money from people who are just passing through and would not normally have to stop at our gas stations to pay gas tax or skip out on a RUC if it did exist.

An added benefit of more toll roads is that it would encourage people to use other forms of transportation such as busses, trolleys, and bikes.
Completely unrelated, let's remove the 163 through Balboa park and replace it with a trolley line that would connect all the way to Convoy Street! Would give us a trolley stop in Balboa Park, rid the park of the road noise and pollution, connect convoys to better public transit options as that area is built up with more residential units.

Peter Adams

I am opposed to the Road User's Tax. Especially as it doesn't appear to fund road maintenance and expansion. I am also opposed to unelected bureaucrats pushing new fees/taxes on tax payers. Sandag and Carb should be disbanded/eliminated/reorganized. Their mission should be facilitate efficient movement in and about the region, not to milk the citizens to accomplish their misguided goals.

Sharon

Instead of imposing a mileage tax SANDAG should be pressuring the local and state governments to drop gas taxes and let federal taxes be used for new types of transportation infrastructure. Toll roads are better and less invasive of personal liberties. Plus they are not conducive to being hacked as individual devices in each vehicle.

Marc Hobelman

While I understand that the RUC was largely unpopular with the public and with regional leadership, I am disappointed that it's being replaced by measures that only barely still meet the GHG emissions goals of the state. We had a strong, ambitious, sustainable direction in the original plan! But the compromise will add years and years of additional car dependency and auto-oriented development pattern to our region. There isn't a suggestion I have that can make this amendment work better from my perspective on San Diego's future. The only thing I can suggest is to not include the amendment at all.

I'm disturbed that the political pressure has resulted in this compromise where the projections now include more emissions, more VMT, worse air quality, worse transit ridership, and worse fiscal standing in the future. Those adjusted projections are explicit in the amendment, but they leave out crucial knock-on effects. Reducing VMT would not only make our region environmentally and economically more sustainable by the metrics listed here, but it would compound the benefits associated with less car dependency. Parking pressures, auto traffic, street noise, pedestrian safety, community connection, and local business foot traffic would all improve if we are bold enough to enact incentives to change travel mode behaviors.

We can't acquiesce to only do popular, incremental, half-measure at a time moves in a climate catastrophe. We have to do as much as we can as fast as we can. I thought it was bold and impressive
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<tr>
<th>Name</th>
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<tbody>
<tr>
<td>James Anderson</td>
<td>I think sandag should be dissolved. I don't think city mayor's should be deciding regional projects or assessing taxes and fees to a region. Getting elected to an office doesn't make them smart. As far as a use tax, that's unrealistic for this region. How will visitors from out of state be charged? There is no fair way to implement this. Get rid of sandag now.</td>
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<td>Charlotte Kingston</td>
<td>I am against the proposed amendment for a mileage tax. As a senior, my social and lifelong learning events require independence to travel the county. On a fixed income, we are already feeling the effects of higher fuel costs that include more taxes than in most other states. It is imperative that we are able to pursue our interests until we are no longer able without more taxation.</td>
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<td>Jacob Finnell</td>
<td>I oppose the removal of the road user charge. Adopting the charge will make San Diego a leader in 1) Disincentivizing driving &amp; 2) Raising funds for transit projects Both of which are critical for achieving our climate goals, as well as advancing mobility for all San Diegans.</td>
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<td>Nancy Goldstein</td>
<td>I appreciate the opportunity to comment about the proposed driving/road tax. I have lived in San Diego for 45 years after relocating from New York. It’s been a wonderful city and I’m very proud to live here! However, this initiative to tax people for our given right to drive on the roads we already pay taxes for is absolutely ludicrous. It’s already an extremely expensive city to live in and many people are leaving San Diego and California due to the cost of living and won’t be able to retire here either. I’m totally against the idea of taxing our citizens and hard working people for something we’re already paying taxes for in several was with the high gas tax, toll roads, etc. Also, we should be able to drive our vehicles without being tracked, or paying extra money! Please do the right thing for the people of San Diego and of California by NOT allowing this absurd RUC proposal to be voted into law. Thank you</td>
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<td>Robert Scott</td>
<td>Please include in your long-term plans a bike and pedestrian undercrossing along Carmel Valley Road at Interstate 5, connecting the Carmel Valley neighborhoods east of the freeway to the Los Penasquitos Lagoon and Torrey Pines reserve areas and beach west of the freeway. Without a direct connect from eastbound SR56 to northbound I-5, bicyclists and pedestrians effectively travel on a major highway between El Camino Real and the I-5, a very hazardous condition for the</td>
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bicyclists and pedestrians alike. The walk to the beach would otherwise be lovely except for this area of pending motorist-pedestrian conflicts.

Kilroy was supposed to forward the design plans for an extension of the SR56 bike path under the I-5 as a condition of approval for the One Paseo project and I do not know the status or exact requirements of that condition.

Please don’t miss this opportunity, it looks like it could have happened with the I-5 widening project (like the new paths in Solana Beach and Encinitas) so let’s not let that happen again.

Thanks,
Respectfully,
Bob Scott, PhD

Alan Feingold  Cars are here to stay. Please stop pretending that people will give up their vehicles and take up biking. Not going to happen. To improve traffic flow, coordinate traffic signals. A red light at each intersection helps no one. Stop with the “road diets”. Keep lanes the proper width. Roundabouts may be engineers dreams but drivers hate them. Stop taking away traffic lanes to add bike lanes. We have enough. Maybe too many. Enforce traffic laws for bikers. They regularly run red lights and pay no attention to cars or pedestrians. We need age minimums (16?) for e-bikes. Bikers must be licensed and bikes-both electric and not-need easily seen license plates. To replace revenue lost from electric vehicles, they need an annual road-use fee or a per-mile fee or both. Gas/diesel vehicles pay a road tax with every gallon of fuel. Electric vehicles are getting a free ride. They need to pay their fair share.

Carla Pekin  I do not in anyway approve of the road usage charge. It must be removed

G. King  Stop increasing our taxes during this recession / depression. NO Mileage Tax!!! People are struggling to pay bills as Feds print unbacked currency & steal from our devalued savings through 4 to 9% inflation. WE DON'T HAVE MONEY TO SPARE!

G. King  YOUR CEO IS STEALING TAXES BY LAVISH DINNERS & BOOZE BILLS.
## Web Comments

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<thead>
<tr>
<th>Name</th>
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<tr>
<td>G. King</td>
<td>“Taxpayers Pony Up for Transit Systems They'll Never Use, The median resident of Southern California takes zero transit trips annually, and only 2 percent of the region's population frequently uses mass transit.” STEVEN GREENHUT reason.com 7.7.2023</td>
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<td></td>
<td>Lethal Danger from gangs, crazy homeless &amp; aggressive dogs</td>
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<td></td>
<td>Unsanitary with homeless' &amp; dogs' pee &amp; poop</td>
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<td>Respiratory Viruses, TB, lice, Hepatitis, MRSA</td>
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<td>Strikes, walk-outs, &amp; sick-outs by drivers &amp; mechanics shut it down</td>
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<td>20 minute drive becomes a 2 1/2 hr ordeal</td>
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<td>Need pre-purchased tickets or exact change</td>
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<td>&quot;...'Road diets' that increase congestion by reducing the number of traffic lanes in a silly quest to prod us into abandoning our cars. 'equity platforms' to promoting affordable housing. ...The Caltrans future blueprint is more about battling greenhouse-gas emissions than creating bus systems that arrive on time and freeways that are less congested. It's a long mish-mash of politically correct goals, bolstered by legislation that treats customer concerns as a side issue.&quot;</td>
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<tr>
<td>G. King</td>
<td>You broke your commitment to build more single car freeway lanes when we passed the last county tax increase for roads. YOU LIE TO OUR FACES.</td>
</tr>
<tr>
<td>G. King</td>
<td>When epidemics, terrorists, gangs, homeless crazies, get on the bus, train or trolley, then I want my car. YOU DON'T GET ON THOSE EITHER!!!</td>
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<tr>
<td>G. King</td>
<td>NO TAXATION WITHOUT REPRESENTATION! San Diego &amp; Chula Vista unfairly dominate SANDAG. North County gets nothing. Disband SANDAG!</td>
</tr>
<tr>
<td>G. King</td>
<td>Mileage tax requires you track our movements like a creepy stalker. My privacy is not any of your business. NO MILEAGE TAX, it makes you look like communist dictators.</td>
</tr>
<tr>
<td>Michael LaDouceur</td>
<td>Comment 1: It is inappropriate and irresponsible to update future revenue (Updated revenue assumption 3 in particular) while failing to update future costs. Cost estimates were based on costs in 2020 dollars. It is unclear whether inflation was factored into the cost estimates provided in Appendix U. Inflation over the last 2 years has been historically high and could have a large impact on whether the cost estimates from 2020 are still reasonable. As such, it is inappropriate to compare updated Transnet revenue (updated with the most recent data) with outdated cost estimates. Therefore, it is unsupported and</td>
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incorrect to state that revenues would exceed costs under the proposed amendment. It is also unsupported and incorrect to state that “no changes to projects listed in the 2021 Regional Plan would result from the proposed Amendment”, because no such analysis has been completed. SANDAG has the fiscal responsibility to update the 2020 cost estimates to ensure that both revenues and costs are using similar projections.

Comment 2: SANDAG has not provided reasonable justification for updating the State Discretionary Program estimates and Federal Discretionary Program estimates. SANDAG should provide justification for the estimates. Has SANDAG or other local or regional transit agencies received increased funding since the Bipartisan Infrastructure Law (BIL) was passed? Are there reasonably foreseeable dollars that will be coming from BIL and how is SANDAG certain of this? Appendix V of Attachment A to the Errata states that Federal funding “assumes one large New Starts eligible project and three Small Starts eligible projects per decade…”, but it is unclear how these assumptions were made and whether they are reasonable. These assumptions are critical to balancing revenues and cost and implementing all aspects of the 2021 Regional Plan. Future transportation plans could be significantly altered if these assumptions are incorrect, which would lead to other calculations being incorrect, such as the projected decrease in Green House Gasses.

Alex Wong

I commend SANDAG for removing the road user charge from the RTP. While I support SANDAG’s continual quest to invest more on transit instead of on freeways, a road user charge could actually prematurely drum up NIMBY opposition against mass transit when road user charges are levied before massively improving San Diego’s frankly low-frequency, inconvenient transit.

Consider this: Canadian cities like Vancouver and Calgary do not have VMT taxes or congestion pricing but have achieved over quadruple the per-capita transit ridership of San Diego. These cities realize that it’s important to first optimize transit service to maximize ridership, to give motorists a great alternative to driving before levying road user charges.

I never expect transit to be profitable. I support sales taxes like Let's Go San Diego's initiative to raise funds for transit. These sales taxes, unlike road user charges, do not involve data/location privacy issues and therefore are much less controversial.
SANDAG's Regional Plan does not provide realistic options for decreasing the traffic to and from Coronado or the other military bases in San Diego. SANDAG needs to work more closely with City officials and the military to create more viable, cost effective transportation plans that include the health and safety of residents and our military personnel. One solution for Coronado would be for the Navy to provide additional single room housing units on base, at NASNI, the Amphibious Base and Training Center for active duty military personnel. The Navy currently provides shuttle services on base at NASNI, and could expand services between the other two bases in Coronado. This would help relieve at least a small percentage of the volume of traffic impacting Coronado and the lives of our military personnel. Additional options and better use of taxpayer funds would be to build several parking structures for all military personnel and contractors working at the shipyards and San Diego bases with continuous electric shuttle services to and from. And additional ferry services to NASNI and the shipyard from San Diego, and new services from Pt. Loma, Chula Vista and National City. The use of mobility hubs and MTS buses won't reduce the use of vehicles due to conflicts with schedules and requirements for the need of a personal vehicle. More than 100,000 cars every work day continue to cross the Coronado bridge with the majority of vehicles traveling to and from the military bases located in Coronado. And with the Navy's plans to increase the pier-side maintenance for three aircraft carriers being in port at the same time from 29 days per year to an "average" of 180 days per year the volume of traffic will increase exponentially. Coronado residents respect the work and demands placed on our military and also want to reduce the traffic gridlock, and protect the safety of drivers, bike riders and pedestrians sharing our streets. Additional options in the Regional Plan need to be explored, and foolish and dangerous options such as adding a bike lane on the Coronado bridge need to be removed from the Regional Plan. Health and safety must be the number one priority along with more realistic and creative ways to spend our taxpayer dollars on transportation plans that work with our current roadway systems, landmass restrictions, protect our environment, public health and welfare.

Getting rid of the Road User Charge Tax out of the SANDAG 2021 Regional Plan was great. But here’s why the entire SANDAG Regional Plan is still horrible:

- It cost $1.5 million just to remove the Road User Charge.
- The 3.3 cents Per Mile Road User Charge was fraudulently suggested as necessary, when it wasn’t.
- Even without the “Regional” Road User Charge, there is still a State Road User Charge coming.
- There is No guaranteed funding for this plan, and SANDAG is already operating with over $2.4 billion in Long-Term Debt.
- The original 2021 Regional Plan met the California Air Resources Board’s 19% GHG reduction target, but the SANDAG Board of Directors was told it didn’t just because a select few didn’t want to round up the
18.6%.
• There has never been discussion as to the details of why there is a GHG reduction goal. Is it to reduce warming temperatures? If so, by how much? If not, then is the goal cleaner air? If so, what is the measuring tool?
• The Real goal of this Regional Plan has always been about Controlling Mobility – it doesn’t matter if it’s a traditional car or a new expensive and combustible lithium-based electric car. The admitted goal of this Regional Plan, via the State of California and funded by the Federal Government, is to reduce Vehicle Miles Traveled.
• TransNet Taxes on drivers are being used towards bike lanes and pedestrian projects. That’s taxation without representation.
• There are going to be 800 miles of Managed Toll Lanes.
• Hasan Ikhrata admitted that there will not be any new highways or lanes when that’s what would actually help trip times, congestion, and air quality.
• SANDAG talks about “Shorter Boarding Times, Faster Travel Times, and More Frequent Transit”, but only 1-3% of people even use public transit! And according to SANDAG Deputy CEO Coleen Clementson, the trolley only goes 20MPH, and there’s not even enough public transit drivers as it is!
• The 2021 Regional Plan approved on December 10, 2021 reads: “[Smart Cities with]…a High Concentration of people…Microtransponder ownership of 100% by 2035. Converting existing...lanes to Managed [Toll] Lanes. ...Substantially Increasing the Price of Parking [and] the Cost of Driving.
The system...[means no] No new highways or general...lanes.
More than 93% of housing...will be Multi-Family [stack-and-packs]...Residential Parking Permit...
...[Our] GHG Reduction Goals will Require...Fundamental Transformations in the Economic, Social, Technological, and Political Fabric of Life in California and Beyond...
Government...Regulating Economic Activities and Personal Behaviors..."
• Based on that above information, there will still be microtransponders in everyone’s cars to track their trips for “Vehicle Miles Traveled” fee or “Vehicle Hours Traveled Fees”.
• Hasan Ikhrata, who admitted to blocking the Audit, had a charge of over $300 worth of taxpayer money on a dinner with Lorena Gonzalez and Nathan Fletcher at Donovan’s Steakhouse, while getting paid over $580,000 a year, and now finally resigning, is the one who pushed this Totalitarian Regional Plan, openly admitting that it’s about “Behavior Change” – not saving the environment from GHGs.
• SANDAG is working to implement the Totalitarian United Nations’ 2030 Agenda, as overtly expressed in the joint February meeting with SANDAG, Mexico, and UN Habitat. This agenda includes making sure people are stacked-and-packed into high-density Smart Cities away from suburban and rural areas,
discouraging what the UN calls “sprawl” and “human settlements”. Based on that joint meeting, there seems to be an idea to create a “Bi-National Association of Governments” in order to further Consolidate and Expand power over Americans’ and Mexicans’ lives. These are a just a few reasons why this SANDAG 2021 Regional Plan – and the future 2025 Regional Plan – need to be disposed of into the hazardous waste bin. Short and sweet of it: Expensive, Unrealistic, Inequitable, Invasive, and Totalitarian.

Virtual Workshop July 18, 2023
Unknown
I’m just wondering if this process has any effect on the planning for the 2025 Regional Plan.

Virtual Workshop July 31, 2023
Alex Wong
Yeah, can you hear me? I would just like to make it clear that, I thought that the difference between the Draft 2021 RTP and the 2021 RTP final version was the purple line frequencies would increase from every 10 minutes to every 5 minutes during the peak hours. I just wanted to confirm if that was true, and if so, I would strongly recommend reverting back to 5 minute frequencies because I believe that the purple line, you know, put that there. I mean, we definitely need to. Hi everybody. I thought that the purple line now had a 10 minute frequency rather than a 5 minute frequency.

Original Dra
I am curious to know if you guys are aware of the UN agenda plan to enslave the people in 15 minute cities?

Original Dra
I find it interesting that you guys don't want to answer that question when Nora Vargas is going to the UN and getting awards for UN Habitat BS. And then you have Hasan who is going and getting awarded for attending some metropolis stuff. And they're all pushing this stuff in the community listening to globalists tell them what's best for the people in San Diego. And when I am asking you a question, that is not a comment. That's a question that you, if you're not aware of what you're pushing, you need to find out because there are 15 min cities coming down the pipe that they are pushing. And all of the things that you are going on with SANDAG and their whole, you know, push for all of this climate BS. Because you guys won’t even look at stuff that is going on with the environment like you're sitting here claiming that you want to protect the environment and your plans and doing all these things. Yet at the end of the day, the things that you're pushing are actually not good for the environment and they aren't healthy for people. Like electric vehicles have these lithium batteries that are combustible and can recombust just from fumes and they're not recyclable just to make them. They're totally toxic to the environment and the people and nobody wants to acknowledge that. That's why when you guys are
sitting here selling people that you're pushing some kind of plan. You need to be honest with the people and tell them what agenda this is, because it's the UN's agenda, the World Economic Forum agenda, all of these globalist elites who don't care about the people and are pushing them into 15 minute smart city enslavements. And it's all under the guise of like protecting the environment. And all we do is sit here and push that, but then it's like, we don't talk about the radiation that comes from these changing stations that are going to be set out to be everywhere. Or the vehicles that emit as well. SO as you're sitting here and you're telling me that you can't answer a question like that or that it's just a comment. It's not a joke. You should know what you are pushing. The people that you are letting push you to do these things. I mean, cause do, do you know that Nora got an award for engaging with the UN? I mean, and that's sad. So if you don't know that, you need to be doing your own due diligence and either listening to the people that come forward and tell you things that may seem crazy, but you need to look into. Because it's very serious, and this is a totalitarian takeover and you may think oh she's crazy and I don't really care because I'm here to blow the whistle and tell people what's really going on and not just like go along to get along. Because what's happening in this county is very, very disturbing. And people are so asleep. Because of what happened with COVID, they think that that's just it and you guys are coming in hot, you're taking away all of these freedoms that people have been acting like we're progressing when we're actually regressing and like going back in time. Because if we were like moving forward in the future, you know, it would be flying in cars. We wouldn't go back to walking and biking. And making sure that people are within a 15 min zone of everything, you know, just for the climate. We were building metropolises around all these areas and it's very sad that people don't see it and it's sad that you guys don't even know who you are engaging with, yet you're pushing this agenda. And then when somebody comes out and ask you if you know anything about it. You want to shut them up and be like, well, that's just a comment, and I can't answer. Well, you should be able to answer it. And if you don't know what I'm talking about, you need to go and do some research. Because the United Nations ain't no joke, you know the real. And what they have planned for the people ain't no joke either. And they're in bed with some really nefarious people. And so if you don't want to be under the same light, then you need to get out of that umbrella under them and start thinking on your own instead of pushing their agenda.
Alex Wong

Ridership reduce emissions and reduces traffic, and San Diego’s airport needs the people mover on an airport trolley branch. Actually, between today and the little town at the bottom, that’s both the green and blue line. NPS proposes to keep piggy backing on on their airport trolley branch and grant all protectors in the blue and green lines between Penn State and Middle Town. The problem is that [unintelligible] past the 20 minutes per hour. The blue and green lines need to have 8 trains per hour per directive or 15 trains combined with about 7.5 minute frequency. Within Valley and University City. These communities at least 15 trains per hours. Well, at least the airport trolley only 4 trolleys per hours can make that 15 minute frequency. There’s the next slide. We need people movers like in the downtown that provide a 4 minute frequency. Travelers can be to the airport in 15 minutes. It’s not what’s supposed to happen in the airport trolley branch. Because operation costs for higher drivers and simple probably to use automated company for drivers. That’s why we need to connect the airport and downtown with an automated people mover. By people mover I do not mean speculative technology. I mean proven, high tech that could carry over 300 people. Think the APM not that the airport peoplemover, but just as in our system and in the system of light rail. My group is even for being perfectly a lot more people needed. And APM will run every 4 minutes versus calling every 15 [unintelligible]. And this one is a space for both pedestrians and the car. If you know, I would accept more only by taking that step up. First of all, APM would not disrupt existing airport service. Compared to the Poly, the aerial, and the APM would at least be built on much better operations. That’s why I strongly support APM and recommend an aerial people mover only. It’s the most cost effective option, it’s the lowest cost per mile. And yes, there, of course, some people may, they complain that aerial structures block views. And poly will probably block even more views because they have directory systems and those or, usually [unintelligible] overhead wires.

Francisco Ortiz

How will the likely conversion of the state gas tax to a RUC mileage tax affect the region’s decisions to remove the RUC from the Regional Plan? Could it impact the region and the local jurisdictions eligiblity to see federal and state funding?

Email Comments

Debbie Bergquist

I would like to respond to the 2021 Regional Plan. I am not in agreement with the road tax. I do not feel we need huge improvements in mass transportation. We do not need four bike lanes and only one car lane per direction on a street. I do not feel safe on mass transportation. This is a car driven society and always will be. Think about improvements for the freeways and street improvements for traffic flow. We already increased taxes in Solana Beach for road improvements and pot holes. What has happened to that money? Why are there individuals at super markets trying to get individuals to sign a petition for repairs on pot holes when it is really for another new tax?
Steven Smith

I am on your email list and received an announcement about a virtual meeting regarding the regional plan. I am unable to attend but have some thoughts about how best to spend my tax money on transportation. First, I would like for you spend the money on projects already promised regarding freeway and highway improvements. I do not use public transportation, I do not want to use public transportation, I desire to be able to continue driving my own vehicle on roads that are maintained and improved to first class standards. I certainly don’t think it is asking too much for you to construct the projects promised with revenues previously collected that will improve our streets and highways. Second, I have a problem getting my head around construction of more public transportation projects that do not pay for themselves with the fares charged users. I understand there are some State laws mandating certain efforts to address climate change but I don’t think you should just roll over and figuratively "throw under the bus" those of us desiring to continue to use our own vehicles and force us onto public transportation. Finally, I absolutely reject any idea of a mileage tax for persons choosing to drive on existing roads and highways. That is one of the most preposterous proposals I’ve ever heard. Find some way for electric vehicle drivers to pay their fair share. They certainly are not paying gas tax. I most certainly pay gas tax. On some level it is unfair for EV drivers to avoid this cost of operating a vehicle on public roads funded with gas tax.

Steve, Chair of NPPC

Good morning,
The North Park Planning Committee is in the process of updating its CIP priority list for North Park. We would love to work with sandag on this update to ensure we are aligned. If you could provide input or a point of contact to work with that would be outstanding.

John Wotzka

A recent look at fires in shipping of EVs from Far Eastern manufactures, should be looked at by the Port Authority and the consequences on insurance companies and training of firefighters in fires involving Li-ion batteries will also be an issue. Hydrogen fueled cars will need to be reviewed too.

John Wotzka

The new Navy headquarters looks good. There are a lot of new high rise buildings going up downtown and we should see how higher speed rail will feed into the Harbor Drive and high rise building culture in the downtown future too, which is in the long term planning. Mayor Todd Gloria is hoping for a new city hall too. Offshore wind is picking up some interest and we should see if there will be any of it south of the border or into the Bay Front area. These are all long term and will need to be planned into the new city look.

Dwight Worden,
City Councilmember,
City of Del Mar

I have reviewed the draft Amendment to the 2021 RTP and offer the following comments, speaking only for myself and not necessarily for my city or my council colleagues:

1. I believe it was and is a mistake to remove the Regional RUC from the RTP, but I also understand that its removal was the direction given by the SANDAG Board. In that context the staff and draft Amendment do a good job of backfilling the Regional RUC removal. The Regional RUC only accounts for a bit less than 9% of the total estimated RTP cost of $163 billion and the Amendment shows how the Plan can still proceed.
2. I note that the RTP Amendment acknowledges that a state RUC is still in the works, and I hope that SANDAG will follow that process and that the Plan can be further adapted to accommodate a state RUC if one is enacted, or a resurrected Regional RUC.
3. I am attaching a copy of an op/ed I wrote in the U.T in December of 2022 explaining my reasons for supporting inclusion of the Regional RUC in the RTP. This is still my position

Mary Davis

1. NO TO *ANY* ROAD USAGE CHARGE, ROAD CHARGE, MILEAGE TAX, ETC. - EVER! Both SANDAG and the State of California need to find other mechanisms to fund our roads (i.e., vehicle registration surcharge, Point-of-Sale or Point-of-Charge system, etc.)

2. WE REJECT THE PARADIGM SHIFT THAT BOTH SANDAG AND THE STATE OF CALIFORNIA ARE TRYING TO IMPLEMENT - going from a Public Benefit model of funding our roads & infrastructure to a 'User Pays' system which inevitably will involve telematics and tracking (regardless of whether the government does it directly or uses a 3rd-party entity.) #PrivacyJustice

3. NO TO ANY TOLLS OR NEW FEES, CHARGES, ETC. You are openly advocating to retire the SR-125 Southbay Express toll early, yet hypocritically wanting to impose them elsewhere. NO NO NO to any tolls anywhere!

4. RESTRUCTURE/GET RID OF THE WEIGHTED VOTE. No matter how many Retreats you hold with feel-good exercises, the weighted vote is a cudgel to wield control. You can utilize your ‘Thumbs up/Thumbs down/Thumbs sideways’ gimmick all you want, but as long as you have & use the weighted vote, you’re saving the covert but most telling gesture for last ... middle finger(s) up as you flip the bird to most of the other members.

5. FIRE HASAN IKHRATA & REPLACE HIM WITH A MODERATE EXECUTIVE DIRECTOR WHO TRULY KNOWS HOW TO (& ACTUALLY WILL) BUILD RELATIONAL BRIDGES TO WORK WITH *ALL* PEOPLE.
Letters
San Diego Association of Governments
401 B Street, Suite 800
San Diego, CA 92101
RegionalPlanAmendment@sandag.org

Re: 2021 Regional Plan Amendment

The San Diego County Air Pollution Control District (District) appreciates the opportunity to comment on the 2021 Regional Plan Amendment (Plan). The District understanding of the Plan Amendment is that it consists of the removal of the Road User Charge (RUC) and updated revenue assumptions, but the projects and timelines remain the same as in the original 2021 plan. It is also the understanding of the District that the Conformity determination of the Plan is not changed.

Although the District understands the need to re-evaluate the RUC, it is unfortunate for the region that it will result in decreased transit boardings (page 10), decreased physical activity for the region’s population (page 11), and increased exposure to particulate matter (PM) (page 11), potentially impacting the health of residents. There is an increased need to further reduce PM emissions to the extent possible in anticipation of the Environmental Protection Agency (EPA) review and likely lowering of the primary annual PM2.5 standard.

The 2035 regional growth modeling for the amendment shows removal of the RUC will contribute to more driving in the region, which will impact communities, particularly low-income communities in El Cajon and Escondido, with higher levels of particulates compared to the original plan. The increased PM in El Cajon and Escondido is due primarily to road dust from increased freeway driving from the removal of the RUC. These higher exposures translate to increased health risks for residents in those communities, and according to the Plan’s Environmental Impact Report are significant and unavoidable, even with the proposed mitigation measures.

While overall emissions of criteria pollutants like reactive organic gases and nitrogen oxides (NOx) are reduced by the Plan, the emission reductions in the amendment are not as large as the original plan in the near term (increased daily emissions of NOx between 0.1-0.3 tons per day between 2023-2026). These increases will contribute to ozone generation in the region (4.1 Air Quality Analysis Table 4.1-11). These impacts do not rise to the level of significance for the regional analysis, but any increase in pollutants makes it more difficult to meet the region’s air quality goals. The San Diego Region is currently non-attainment for both the 2008 and 2015 National Ambient Air Quality Standards (NAAQS). In our 2020
Plan\(^1\) to meet the NAAQS the San Diego region was reclassified to severe non-attainment for both the 2008 and 2015 standards because of our inability to attain the standards in accordance with the requirements of the previous classifications. These reclassifications to severe non-attainment require the San Diego Region to meet the 2008 standard by 2027 and the 2015 standard by 2033. The increase in short term NOX will make achieving these goals more difficult.

Although the District acknowledges implementation of a RUC has generated equity concerns on the fairness of road pricing, we encourage SANDAG to continue evaluating alternatives through careful planning, phased implementation and ongoing public outreach to achieve emission reductions. We welcome the opportunity to continue working with SANDAG and other member agencies on this Plan and upcoming efforts to create a 2025 Plan that is making our transportation system faster, more equitable, and protective of air quality and the health of residents in the region.

Should you have any questions about these comments please contact Eric Luther, (858) 586-2893 or eric.luther@sdapcd.org.

Sincerely,

Eric Luther

Supervising Air Resources Specialist

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\(^1\) [https://www.sdapcd.org/content/sdapcd/planning.html](https://www.sdapcd.org/content/sdapcd/planning.html)
Aug. 8, 2023

San Diego Association of Governments
401 B Street, Suite 800
San Diego CA 92101
Via: RegionalPlanAmendment@sandag.org

RE: City of Carlsbad Comments on the Amendment to the 2021 Regional Plan

To Whom it May Concern,

The City of Carlsbad appreciates the opportunity to provide comments on the proposed amendment to the 2021 Regional Plan ("Plan Amendment"). This is an important plan for this region and guides the next phases of growth for the member agencies of the San Diego Association of Governments ("SANDAG"). An effectively designed and implemented regional transportation plan ensures improved transportation options for area residents, businesses and other community members; meaningful reductions in greenhouse gas ("GHG") emissions; and improved quality of life as we grow our communities.

The City of Carlsbad ("city") is submitting the following comments based on the policies, projects, programs and other improvements included in the Plan Amendment. The city reserves the right to add, amend, change or replace comments and recommendations based on additional review and understanding of the Plan Amendment and the environmental analysis provided under the California Environmental Quality Act ("CEQA").

SECTION 1: LAND USE

1. Alternatives included in the approved 2021 Regional Plan assumed housing in locations that were inconsistent with the city’s land use plans; this was discussed in detail in the city’s August 6, 2021/September 30, 2021, comments on the draft 2021 Regional Plan (Attachment 1). Consistent with those comments, city staff recommend the Plan Amendment:
   a. Consider the city’s land use plans, including the General Plan, Habitat Management Plan, and Local Coastal Program.
   b. Consider the McClellan-Palomar Airport Land Use Compatibility Plan (adopted by the county Airport Land Use Commission and amended Dec. 1, 2011) and the constraints identified therein.

2. City staff are encouraged by recent conversations with SANDAG staff that the proposed 2025 Regional Plan will consider the city’s land use documents. Doing so is recommended and expected and will help ensure better accuracy of data and assumptions.

SECTION 2: COMMENTS AND RECOMMENDATIONS

City staff remain concerned that there is not enough detail on the feasibility of implementation of this significant shift in transportation strategy. On specific content in the plans, we outline our recommendations and comments below:

Transportation & Community Development Departments
1635 Faraday Avenue | Carlsbad, CA 92008 | 760-602-2710
City of Carlsbad Comments on the Amendment to the 2021 Regional Plan
Aug. 8, 2023
Page 2

1. Paying for the Plan:
The 2021 Regional Plan sets out an ambitious plan to build and operate a region-wide system of transportation projects, programs and other improvements. This is a substantial role for SANDAG to play in supporting both the construction and operation of these projects, programs and other improvements. SANDAG should set annual revenue targets to directly fund everything and should approve any recommended sustainable revenue tools to help meet these targets. Many of the funding strategies will require legislative changes, or voter-approved taxation. SANDAG should clarify what will occur if the funding is not available, if opposition to projects stops them from construction, and if General Plans in the region are not modified to implement the Plan/Plan Amendment.

2. Appendix D: Sustainable Community Strategy Documentation:
Appendix D includes the Sustainable Communities Strategy, which outlines assumptions included in the Activity Based Model 2+ (“ABM 2+”). This model will be necessary for use by publicly and privately initiated land use projects preparing documents for consistency with VMT/CEQA Guidelines and Traffic Impact Analysis (“TIA”) Evaluations. City staff respectfully request direction from SANDAG on how to conduct modeling with the service bureau and how to factor in these assumptions applied to ABM 2+. Specifically, the addition of pricing, parking costs for coastal communities, 10% teleworking and micromobility. SANDAG should provide direction on how this could be worked into General Plans that are updated every 5-20 years.
The plan should provide a process for implementing all phases of the Build North County Corridor (NCC) managed lanes project and the supporting active transportation infrastructure projects. It is also recommended that the plan pivot from the existing low ridership fixed routes transit services to flexible fleets along the I-5 and SR-78 corridors to maximize the objectives of the plan. As stated in the Regional Plan, priority Flexible Fleet will help make the region more accessible, equitable, and environmentally friendly.

3. Appendix A: Transportation Projects, Programs, and Phasing:
Trips to and from school sites result in a significant congestion, VMT generation, and peak hour delay throughout the region. Additional funding and projects should be recommended with a specific focus on improving safety and multimodal access in and around school sites along with programs to incentivize non-single occupancy vehicle trips to schools.
Table A.11: Given the proven success of the Carlsbad Connector microtransit pilot program, the city agrees with the Plan/Plan Amendment’s recommendations to provide similar on-demand microtransit systems throughout North County at all mobility hub sites and major transit centers.
The preferred Interstate-5 freeway alternative identified in the North Coast Corridor (“NCC”) Final EIR/EIS is the refined 8+4 Buffer alternative, with four freeway lanes and two managed lanes in each direction and completion by 2035. Appendix A, Table A.5 describes NCC project IDs CC004, 007 - 009 as “8F to 6F+4ML” with completion by 2050. While this might lead to further study, it is not clear why there is a different freeway configuration (i.e., reduction in freeway lanes) proposed. How does a reduction in lanes continue to meet NCC potential project benefits of maintaining or improving traffic operations and improving the safe and efficient regional movement of people and goods?
Active Transportation:

The city appreciates the Plan/Plan Amendment’s overall approach of providing a connected network of high-quality bicycle facilities throughout the region. Regional bikeways are recommended throughout the city including along Palomar Airport Road which will provide a key east-west connection and El Camino Real which will provide a new north-south bikeway connection through the city. Both roadways are proposed to include “on-street bikeways”. Due to the high traffic volumes and vehicle speeds experienced along most of both corridors, the city recommends considering “off-street bikeways” or Class I facilities where feasible in order to stimulate the shift from personal motor vehicle use to people choosing to bike.

It is extremely important that municipal transportation plans align with regional transportation plans to achieve regional goals for land use and transportation and to promote the region working together to build a cohesive regional transportation network. Considering there are currently no mechanisms in place to ensure municipalities coordinate local transportation plans with regional planning documents, the Plan should provide an approach on how SANDAG plans to engage with municipalities, especially in areas of potential disagreement or conflict (as aforementioned in this subsection and others). It is also recommended that the Plan Amendment provide additional direction regarding the application of protected bikeways in a variety of applicable contexts. While vertical measures such as soft hit posts may be appropriate in lower volume and lower speed roadways, arterial roadways with high traffic volumes and high speeds warrant much more substantial physical protection from vehicles. In addition, special consideration should be given at intersections and driveways which may be impacted due to the additional width and visibility impacts created by protected bikeways.

City staff look forward to working with SANDAG on improving mobility and land use access in the region and building sustainable, equitable and healthy modes of transportation, and we appreciate the opportunity to comment on the Plan Amendment that will help the region realize these goals.

If you have any questions related to comments on the transportation network, please contact Tom Frank, Transportation Director/City Engineer, at Tom.Frank@carlsbadca.gov or if you need additional information related to comments on the land use assumptions, please contact Eric Lardy, City Planner, at Eric.Lardy@carlsbadca.gov.

Sincerely,

JEFF MURPHY
Community Development Director

TOM FRANK
Transportation Director/City Engineer
City of Carlsbad Comments on the Amendment to the 2021 Regional Plan
Aug. 8, 2023
Page 4

Attachment:
  1. City of Carlsbad comments on draft 2021 Regional Plan dated August 6, 2021

cc:  Scott Chadwick, City Manager
     Cindie McMahon, City Attorney
     Geoff Patnoe, Assistant City Manager
     Ron Kemp, Senior Assistant City Attorney
     Robby Contreras, Assistant City Attorney
     Gary Barberio, Deputy City Manager, Community Services
     Paz Gomez, Deputy City Manager, Public Works
     Mike Strong, Assistant Director, Community Development
     Eric Lardy, City Planner
     Nathan Schmidt, Transportation Planning and Mobility Manager
     Jason Geldert, Engineering Manager
     Robert Efird, Principal Planner
     Scott Donnell, Senior Planner
     Nicole Morrow, Assistant Planner
Sept. 30, 2021

San Diego Association of Governments
401 B street, Suite 800
San Diego, CA 92101
Via: SDForward@sandag.org

RE: City of Carlsbad Comments on Draft 2021 Regional Plan

To whom it may concern,

This letter serves to inform SANDAG that the City does not wish to remove project CB32 from the Regional Arterials Project list.

Please disregard the comment regarding project CB32 from the attached letter sent to SANDAG on Aug. 6, 2021.

Thank you for bringing this to our attention, and please contact me if you have any other questions regarding the 2021 Regional Plan comment letter.

Best Regards,

[Signature]

Tom Frank, PE
Transportation Director/City Engineer

Attachment A: Letter to SANDAG dated Aug. 6, 2021

cc: Scott Chadwick, City Manager
    Celia Brewer, City Attorney
    Geoff Patnoe, Assistant City Manager
    Ron Kemp, Assistant City Attorney
    Robby Contreras, Assistant City Attorney
    Gary Barberio, Deputy City Manager, Community Services
    Paz Gomez, Deputy City Manager, Public works
    Mike Strong, Assistant Director, Community Development

Public Works Branch – Transportation Department
1635 Faraday Avenue | Carlsbad, CA 92008 | 760-602-2766
cc: Don Neu, City Planner
    Nathan Schmidt, Transportation Planning and Mobility Manager
    Jason Geldert, Engineering Manager
    Eric Lardy, Principal Planner
    Scott Donnell, Senior Planner
    Corey Funk, Associate Planner
Aug. 6, 2021
San Diego Association of Governments
401 B Street, Suite 800
San Diego CA 92101
Via: SDForward@sandag.org

RE: City of Carlsbad Comments on Draft 2021 Regional Plan

To Whom It May Concern,

The City of Carlsbad appreciates the opportunity to provide comments on the draft 2021 Regional Plan (“Plan”). This is an important plan for this region and will guide the next phase of growth for the member agencies of the San Diego Association of Governments (“SANDAG”). An effectively designed and implemented regional transportation plan would help ensure improved transportation options for area residents, businesses and other community members; meaningful reductions in greenhouse gas (“GHG”) emissions; and improved quality of life as we grow our communities.

The City of Carlsbad (“city”) is submitting comments based on the policies, projects, programs and other improvements included in the Plan. Our agency’s comment letter is divided into two sections. The first section seeks clarity and other considerations that pertain to our agency’s review of the Plan. The second section identifies the city’s preliminary comments and recommendations.

Implementing the regional transportation network outlined in the Plan requires municipalities to support the regional vision and deliver on local infrastructure and services like the priority bus routes, local bus services, and pedestrian and cycling connections to major transit infrastructure. These components, which are delivered by municipalities, are essential to creating a coherent and comprehensive local transportation network that feeds into regional services. For that reason, an effective public review of the Plan should involve a transparent and thorough process for identifying and evaluating potential hazards, physical changes to the environment and indirect (off-site and cumulative) impacts that might result from implementation activities that may reasonably occur with the Plan.

The city’s residents, businesses and other community members will greatly benefit from the involvement and technical assistance from the prospective Draft Environmental Impact Report (“EIR”). Therefore, what follows in this correspondence represents our agency’s preliminary comments and recommendations. The city reserves the right to add, amend, change or replace comments and recommendations based on additional review and understanding of the Plan and the environmental analysis provided under the California Environmental Quality Act (“CEQA”).

The city thanks SANDAG staff for meeting with city staff on Aug. 2, 2021, to discuss some of these comments in advance of this letter. Following that meeting, SANDAG provided language that they may recommend adding to the Regional Plan for additional clarification on land use authority. The language is, “Land use authority is reserved to local jurisdictions because they are best positioned to effectively implement the objectives outlined in the Plan through understanding of the unique needs of their communities and geographies.” This language will be helpful to clarify that land use authority rests with
City of Carlsbad Comments on Draft 2021 Regional Plan
Aug. 6, 2021
Page 2

the local jurisdiction. The city still offers the following comments with the intent to support development of a defensible and realistic regional plan.

SECTION 1: CLARITY AND OTHER CONSIDERATIONS

City staff have attended the series of workshops that SANDAG hosted during the public review period, and respectfully starts this section with several questions related to the process of the Plan and the Draft EIR. By way of introduction, a jurisdiction’s General Plan, such as the city’s General Plan, identifies the expected population of the city and any lands outside of the city limits but within their Sphere of Influence where future growth is anticipated to occur. The city’s General Plan identifies the subject area adjacent to the McClellan-Palomar Airport for development under the designation for limited and light industrial use.

For future land use planning, land use assumptions must reasonably proxy and be generally consistent with local planning standards and programs, to be considered growth accommodating rather than growth inducing. SANDAG has the authority under Government Code Section 65584 to determine existing and projected housing needs, as well as the share of housing needs to be allocated to cities and counties, but it is unclear if SANDAG has jurisdiction to allocate new housing growth to areas in a manner not consistent with Government Code Section 65584. Attachment 1 Includes additional information on the applicable Government Code and standards. Therefore, and as indicated above, the build-out of properties within the Business Park and flight activity zone must be done in accordance with the city’s General Plan Land Use Diagram, as amended, in accordance with city approval.

The initial questions on the planning process associated with developing the Plan are provided below:

1. The SANDAG website states, “The SANDAG Sustainable Communities Strategy and Final EIR from its 2015 Regional Plan will remain valid and in compliance for purposes of state funding eligibility and other state and federal consistency purposes until the SANDAG Board of Directors adopts a new Regional Plan and EIR, provided those actions are completed by the end of December 2021.” SANDAG needs to clarify how the Draft EIR, Response to Comments and Adoption will be completed this year and what will occur if they are not completed by the end of this year. Additionally, please clarify when the Draft EIR will be available; it is difficult to completely assess the full impacts of this plan when the public review of the documents is piecemealed.
   a. SANDAG should clarify how public comments on the Plan are going to be addressed in the Draft EIR prior to its release.
   b. In the Draft EIR, SANDAG needs to clearly articulate the impacts to land use and if the Plan will cause a significant environmental impact due to a conflict with any land use plan, policy or regulation adopted for the purpose of avoiding or mitigating an environmental effect. Appendix F: Regional Growth Forecast and Sustainable Communities Strategy Land Use Pattern appears to be inconsistent with the city’s General Plan and rezon program to accommodate the Regional Housing Needs Assessment, as well as the general plans of other jurisdictions such as the cities of Coronado, Del Mar and the County of San Diego. The Draft EIR should clarify how implementation of this Plan can occur if those changes are not made.
The city has three mobility hubs, associated with the Employment Centers published supporting the SANDAG Regional Plan. McClellan-Palomar Airport is the fifth largest employment center in the region, with Carlsbad State Beach and Carlsbad Village as “Tier 3 and Tier 4” employment centers. The city thanks SANDAG for providing data for analysis to determine impacts and provide for accurate comments on the Plan. Attachment 2 shows a summary of the Mobility Hubs and housing units assumed in the Series 14 Growth Forecast for the year 2050. In summary:

- The assumptions in the updated Series 14 Growth Forecast contain inconsistencies with the city’s General Plan. The Carlsbad Palomar Major Employment Mobility Hub does include increases in density beyond what the citywide numbers appear to show when they are looked at in more detail.
  - There are three locations in which density is shown to be inconsistent with good planning principles, the city’s General Plan and the Airport Land Use Compatibility Plan. The three most problematic areas (shown in Attachment 3) are:
    1. 736 units on parcels immediately adjacent to the McClellan-Palomar Airport runway. The location of the airport within this mobility hub was shared with SANDAG staff multiple times at workshops. This is inconsistent with the regulations provided by the San Diego County Regional Airport Authority and conflicts with standard planning principles for siting housing away from hazards.
    2. 2,755 units on existing developed resort properties and open space dedicated lands adjacent to Legoland.
    3. 65 units in a preserved open space area.
  - SANDAG should provide additional detail why units were assumed in these areas, what planning principles those decisions were based on, and how SANDAG expects this to be implemented.
  - Concentration of units in the mobility hubs alone appears to conflict with the direction received from the California Department of Housing and Community Development (“HCD”) to implement new Affirmatively Furthering Fair Housing (“AFFH”), which seeks to combat housing discrimination, eliminate racial bias, undo historic patterns of segregation, and lift barriers that restrict access in order to foster inclusive communities and achieve racial equity, fair housing choice and opportunity for all Californians. The allocations of land use provided by SANDAG seem to focus all the higher density housing into one area of the city. (This is one of the largest points of analysis that each jurisdiction in the region needs to respond to in order to receive a certified Housing Element.)

Additionally, looking at the detailed data provided by SANDAG, it is now clear why the citywide numbers only show moderate increases in population. Our analysis has shown that there is an assumed reduction of population by 2,310 persons in the areas within the city but outside of the mobility hubs. This is likely due to assumed reductions in persons per household over time, but SANDAG should clarify the source and reasonableness of this assumption. If housing is not provided consistent with these areas, is it still reasonable to assume persons per household will be reduced in 2050?

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1. SANDAG Website: Employment Centers [SANDAG :: PROJECTS :: San Diego's Regional Planning Agency](https://www.sandag.org/Projects)
c. Furthermore, this reduction in population is not limited to the City of Carlsbad. There is an approximately 85,000 reduction in population assumed outside of mobility hubs regionwide. SANDAG needs to address if that is a reasonable assumption and if this will result in other impacts to public and private projects that will rely on this growth forecast, and the associated Activity Based Model (2+) to project future impacts to transportation, GHG, air quality and noise.

d. The forecast has decreased in future population based on current trends, but it is not clear if there is enough housing provided with reductions and increases in some jurisdictions. Will the reduced amount of housing that will be provided result in an increased exacerbation of the affordability crisis?

e. There is a lack of clarity about how the Plan would be implemented at the municipal level. SANDAG should develop an approach for engaging with municipalities to ensure local support for delivering the regional transportation network. Staff from local jurisdiction have the knowledge and ability to share where there are land use assumptions that conflict with planning and zoning laws. Our analysis focused on the City of Carlsbad, but if these types of assumptions are made regionwide, it presents flaws in the overall analysis. These flaws put the assumed reductions in vehicle miles traveled ("VMT") and ability to implement the Regional Plan into question.

3. The area designated is controlled for use and activity density and intensity through its spatial association with the McClellan-Palomar Airport. The McClellan-Palomar Airport is defined by the Federal Aviation Administration ("FAA") as a commercial service airport that, in addition to private aircraft, has regularly scheduled commercial flights to Los Angeles International Airport ("LAX"). The McClellan-Palomar Airport Land Use Compatibility Plan ("ALUCP") is prepared according to FAA requirements and adopted by the San Diego County Regional Airport Authority acting as the Airport Land Use Commission for the County of San Diego.

a. The ALUCP provides measures to minimize the public’s exposure to excessive noise and safety hazards within areas around the airport and identifies areas likely to be impacted by noise and flight activity created by aircraft operations at the airport. These impacted areas include the Airport Influence Area ("AIA"), the Clear Zone and the Flight Activity Zone.

b. Within the AIA, the ALUCP establishes six safety zones for the purpose of evaluating safety compatibility of new/future land use actions. The safety zone boundaries depict relative risk of aircraft accidents occurring near the airport and are derived from general aviation aircraft accident location data and data regarding the airport’s runway configuration and airport operational procedures. The ALUCP limits development intensities in these zones by imposing floor area and lot coverage maximums, by incorporating risk reduction measures in the design and construction of buildings, and/or by restricting certain uses altogether. For example, all residential and virtually all non-residential uses are considered incompatible land uses in some zones, while considered to be either compatible or conditionally compatible with the airport in other zones. Attachment 4 shows the McClellan-Palomar Airport, noise contours and SANDAG’s proposed housing units.

c. If the proposed SANDAG land use assumptions are endorsed, an amendment to the city’s General Plan would be required to change the land use designation to Mixed-Use Commercial or residential land uses within the existing Business Park in order to effectuate the underlying assumptions of SANDAG staff. This is not a realistic
assumption. Further, the protected airspace referenced in the AIA and the ALUCP must also be amended based on SANDAG’s regional planning assumptions. (The FAA establishes airspace protection zones in the airspace above and surrounding airports in order to protect aircraft from obstructions such as buildings, towers, etc. in navigable airspace.)

d. When a General Plan is adopted or amended, the allowable growth pattern of an area is identified and the expansion or updating of the various land uses as specified in the General Plan can occur throughout the planning horizon. Without such growth considerations, the expansion or intensification of existing land uses could be considered “growth inducing.” Unplanned and uncontrolled growth may have significant adverse impacts on the environment. CEQA requires a discussion of how a “project” could increase population, employment or housing growth in surrounding areas and the impacts resulting from this growth. The CEQA Guidelines indicate that a “project” would normally have a significant effect on the environment if it would induce substantial growth or a substantial concentration of population.

4. At this point, it is not clear if SANDAG’s assumptions adequately contemplate the development patterns included in the Sustainable Communities Strategy (“SCS”)/Regional Transportation Plan (“RTP”), and Regional Air Quality Strategy (“RAQS”), local climate action planning business-as-usual estimates, sub-regional traffic modeling, or the airspace assumptions of AIA and the ALUCP.

5. The city seeks clarity on the Plan’s underlying assumptions made to justify the proposed extensive high-speed rail network considering the significant changes in travel behavior which have occurred throughout the region as a result of the COVID-19 pandemic and due to the advancements in disruptive technologies such as telecommuting, autonomous vehicles, microtransit, etc.

a. Recent North County Transit District (“NCTD”) Coaster ridership data show riders are not returning to riding the Coaster in comparison to other modes of travel as shown in Attachment 5.

b. This question is consistent with comments made by SANDAG’s panel expert Bob Poole regarding the impact of the COVID-19 pandemic on transit ridership and mega-transit projects. (See comments by Bob Poole during the March 12, 2021 presentation to SANDAG starting at timestamp 1:30 p.m.: [https://youtu.be/q-e6bNYSuI8?t=5410])

6. The city seeks clarity on why an alternatives analysis was not conducted with consideration of other transit alternatives such as automated/shared vehicle technologies and personalized zero emissions transit programs that are capable of utilizing the existing regional freeway infrastructure in response to these recent developments explained in the above comment.

7. The city seeks clarity on why the Plan does not incorporate policies to promote roundabouts over signalized intersections and include a budget line item under the Complete Corridors to fund the construction of roundabouts at new locations and to replace signalized intersections when found feasible. This clarification would support the Federal Highway Administration (“FHWA”)’s project for Accelerating Roundabout Implementation in the United States and the County of San Diego Air Pollution Control Board’s support for implementing roundabouts to address GHG and reduce fatalities.

8. The city seeks clarity on the project phasing proposed within the Plan. Specifically, the city is seeking to understand the timing of implementation of unfunded TransNet projects related to
the new projects presented within the Regional Plan. To support this, the city is requesting that SANDAG input the information requested in Table 1 (Attachment 6).

9. The city seeks specific data on the proposed 200 miles of rail service contemplated in the Plan. To support this, the city is requesting that SANDAG input the information requested in Table 3 (Attachment 7). Specific questions:
   a. Please provide more information about the scope of the high-speed rail alignments, potential vehicle technologies and their cost estimates.
   b. Will the Coaster keep the same rail alignment?
   c. What funding is programmed or planned for the Carlsbad Village railroad trench and the other projects along the current NCTD/Coaster Service right-of-way?
   d. Will some of the tracks be at grade with fencing and trains traveling at 110 miles per hour speeds?

SECTION 2: COMMENTS AND RECOMMENDATIONS

In addition to the comments on process and the Draft EIR provided above, city staff remain concerned that there is not enough detail on the feasibility of implementation of this significant shift in transportation strategy. On specific content in the plans, we outline our recommendations and comments below:

1. Paying for the Plan:

   The draft 2021 Regional Plan sets out an ambitious plan to build and operate a region-wide system of transportation projects, programs and other improvements. This is a substantial role for SANDAG to play in supporting both the construction and operation of these projects, programs and other improvements. SANDAG should set annual revenue targets to directly fund everything and should approve any recommended sustainable revenue tools to help meet these targets. Many of the funding strategies will require legislative changes, or voter-approved taxation. SANDAG should clarify what will occur if the funding is not available, if opposition to projects stops them from construction, and if General Plans in the region are not modified to implement the Plan.

2. Appendix D: Sustainable Community Strategy Documentation:

   Appendix D includes the Sustainable Communities Strategy, which outlines assumptions included in the Activity Based Model 2+ ("ABM 2+"), updated for this. This model will be necessary for use by publicly and privately initiated land use projects preparing documents for consistency with VMT/CEQA Guidelines and Traffic Impact Analysis ("TIA") Evaluations. City staff respectfully request direction from SANDAG on how to conduct modeling with the service bureau and how to factor in these assumptions applied to ABM 2+. Specifically, the addition of pricing, parking costs for coastal communities, 10% teleworking and micromobility. SANDAG should provide direction on how this could be worked into General Plans that are updated every 5-20 years.

3. Appendix A: Transportation Projects, Programs, and Phasing:

   Trips to and from school sites result in a significant congestion, VMT generation, and peak hour delay throughout the region. Additional funding and projects should be recommended with a specific focus on improving safety and multimodal access in and around school sites along with programs to incentivize non-single occupancy vehicle trips to schools.
City of Carlsbad Comments on Draft 2021 Regional Plan  
Aug. 6, 2021
Page 7

Table A.11: Given the proven success of the Carlsbad Connector microtransit pilot program, the city agrees with the Plan’s recommendations to provide similar on-demand microtransit systems throughout North County at all mobility hub sites and major transit centers.

Table A.13: The segment of El Camino Real between Poinsettia Lane and Camino Vida Roble is proposed to be widened from two to three lanes to prime arterial standards. With the adoption of the city’s General Plan, the city has determined that the widening of this portion of El Camino Real is not feasible due to constrained right-of-way and would result in negative impacts to other travel modes. City staff recommend removal of this proposed project recommendation CB32 (that is, a “do nothing” scenario, or appraise and evaluate different mobility projects and/or alternative designs).

The preferred Interstate-5 freeway alternative identified in the North Coast Corridor ("NCC") Final EIR/EIS is the refined 8+4 Buffer alternative, with four freeway lanes and two managed lanes in each direction and completion by 2035. Appendix A, Table A.5 describes NCC project IDs CCO04, 007 - 009 as "8F to 6F+4ML" with completion by 2050. While this might lead to further study, it is not clear why there is a different freeway configuration (i.e., reduction in freeway lanes) proposed. How does a reduction in lanes continue to meet NCC potential project benefits of maintaining or improving traffic operations and improving the safe and efficient regional movement of people and goods?

4. Active Transportation:

The city appreciates the Regional Plan’s overall approach of providing a connected network of high-quality bicycle facilities throughout the region. Regional bikeways are recommended throughout the city including along Palomar Airport Road which will provide a key east-west connection and El Camino Real which will provide a new north-south bikeway connection through the city. Both roadways are proposed to include “on-street bikeways”. Due to the high traffic volumes and vehicle speeds experienced along most of both corridors, the city recommends considering “off-street bikeways” or Class I facilities where feasible in order to stimulate the shift from personal motor vehicle use to people choosing to bike.

It is extremely important that municipal transportation plans align with regional transportation plans to achieve regional goals for land use and transportation and to promote the region working together to build a cohesive regional transportation network. Considering there are currently no mechanisms in place to ensure municipalities coordinate local transportation plans with regional planning documents, the Plan should provide an approach on how SANDAG plans to engage with municipalities, especially in areas of potential disagreement or conflict (as aforementioned in this subsection and others). It is also recommended that the Plan provide additional direction regarding the application of protected bikeways in a variety of applicable contexts. While vertical measures such as soft hit posts may be appropriate in lower volume and lower speed roadways, arterial roadways with high traffic volumes and high speeds warrant much more substantial physical protection from vehicles. In addition, special consideration should be given at intersections and driveways which may be impacted due to the additional width and visibility impacts created by protected bikeways.

City staff look forward to working with SANDAG on improving mobility and land use access in the region and building sustainable, equitable and healthy modes of transportation, and we appreciate the opportunity to comment on the Plan that will help the region realize these goals.
City of Carlsbad Comments on Draft 2021 Regional Plan
Aug. 6, 2021
Page 8

If you have any questions related to comments on the transportation network, please contact Tom Frank, Transportation Director/City Engineer, at Tom.Frank@carlsbadca.gov or if you need additional information related to comments on the land use assumptions, please contact Eric Lardy, Principal Planner, at Eric.Lardy@carlsbadca.gov.

Sincerely,

[Signature]

JEFF MURPHY
Community Development Director

[Signature]

TOM FRANK
Transportation Director/City Engineer

Attachments:
2. City of Carlsbad Mobility Hubs
3. City of Carlsbad – Palomar Airport Road Mobility Hub Analysis
4. Palomar-McDillan Airport Flight Paths
5. Recent NCTD Coaster Ridership Data
6. Table 1 - Project Data Request
7. Table 3 - Detail of Proposed Rail Lines

cc: Scott Chadwick, City Manager
    Celia Brewer, City Attorney
    Geoff Patnoe, Assistant City Manager
    Ron Kemp, Assistant City Attorney
    Robby Contreras, Assistant City Attorney
    Gary Barberio, Deputy City Manager, Community Services
    Paz Gomez, Deputy City Manager, Public Works
    Mike Strong, Assistant Director, Community Development
    Don Neu, City Planner
    Nathan Schmidt, Transportation Planning and Mobility Manager
    Jason Geldert, Engineering Manager
    Eric Lardy, Principal Planner
    Scott Donnell, Senior Planner
    Corey Funk, Associate Planner
Attachment 1: Government Code 65020 (S.B. 375) Summary

Government Code section ("GOV §") 65080, also referred to as California Senate Bill 375 (Steinberg, 2008) ("SB 375"), is one area of law that provides SANDAG with guidance to which a regional transportation plan must be developed.

Among other things, the regional transportation plan that is developed "shall be an internally consistent document" (GOV § 65080 (b)) and shall include a "sustainable communities strategy prepared by each metropolitan planning organizations as follows" (GOV § 65080 (b)(2)(B)):

Each metropolitan planning organization shall prepare a sustainable communities strategy, subject to the requirements of Part 450 of Title 23 of, and Part 93 of Title 40 of, the Code of Federal Regulations, including the requirement to utilize the most recent planning assumptions considering local general plans and other factors. The sustainable communities strategy shall (i) identify the general location of uses, residential densities, and building intensities within the region, (ii) identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the regional transportation plan taking into account net migration into the region, population growth, household formation and employment growth, (iii) identify areas within the region sufficient to house an eight-year projection of the regional housing need for the region pursuant to Section 65584, (iv) identify a transportation network to service the transportation needs of the region, (v) gather and consider the best practically available scientific information regarding resource areas and farmland in the region as defined in subdivisions (a) and (b) of Section 65080.01, (vi) consider the state housing goals specified in Sections 65580 and 65581, (vii) set forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the state board, and (viii) allow the regional transportation plan to comply with Section 176 of the federal Clean Air Act (42 U.S.C. Sec. 7506).

The 2021 draft Regional Transportation Plan includes a Sustainable Communities Strategy ("SCS"), as required by SB 375 for the San Diego region (herein after called "draft Regional Plan"). The draft Regional Plan indicates that "SB 375 requires the SCS to include a pattern for forecasted growth and development that accomplishes the following: 1) When combined with the transportation network, the SCS will achieve the regional GHG emission-reduction targets; 2) The SCS accommodates the Regional Housing Needs Assessment ("RHNA") Determination; and 3) The SCS utilizes the most recent planning assumptions. (Reference p. 19 of the 2021 Regional Plan.)

Predicting the effect of transportation plans or projects on land uses and land use planning is critical to developing context sensitive solutions for transportation projects. Therefore, utilization of the most recent planning assumptions is not only necessary but is required as specifically stated therein GOV § 65080. If inconsistencies are found in the land use assumptions or adverse impacts are anticipated, SANDAG should be actively engaged in the development of measures to address these issues.

The SANDAG Board of Directors approved the final RHNA plan with the final housing unit allocation on July 10, 2020, which was based on the most recent land use planning assumptions and an adopted methodology to allocate housing in accordance with GOV §§ 65584.04(d and m). The City of Carlsbad received a total RHNA allocation of 3,873 units as a result of RHNA plan adoption. The adopted April 6, 2021 city’s Housing Element accommodates its housing needs through current zoning and other programs

City of Carlsbad Comment Letter

August 6, 2021
as needed to meet the city’s RNA obligation at all income levels. The land use inputs derived from this local planning document constitutes the most recent land use assumptions. On July 13, 2021 the Department of Housing and Community Development found "the adopted housing element is in substantial compliance with State Housing Element Law (Article 10.6 of the Gov. Code)."

The most recent planning assumptions are critical for the development of the draft Regional Plan as the document must comply with other specific state and federal mandates including a SCS per California Senate Bill 375, which achieves GHG emissions reduction targets set by the California Air Resources Board and compliance with federal civil rights (Title VI) requirements, environmental justice considerations, air quality conformity, and public participation. To monitor compliance and attainment of state reduction goals in GHG, GOV § 65080 (b)(2)) requires that:

\[(H) \text{ Prior to adopting a sustainable communities strategy, the metropolitan planning organization shall quantify the reduction in greenhouse gas emissions projected to be achieved by the sustainable communities strategy and set forth the difference, if any, between the amount of that reduction and the target for the region established by the state board.}\]

\[(I)(i) \text{ Prior to starting the public participation process adopted pursuant to subparagraph (F), the metropolitan planning organization shall submit a description to the state board of the technical methodology it intends to use to estimate the greenhouse gas emissions from its sustainable communities strategy and, if appropriate, its alternative planning strategy.}\]

There is inevitably some uncertainty regarding the use of projected future conditions. However, what is certain is that the project will not operate under the conditions that exist today. There will be new residential and employment growth in the intervening years between now and the proposed build-out of the draft Regional Plan. Nonetheless, projections utilized should represent the best available information assembled by the local agencies with jurisdiction and expertise. Judgments about land use assumptions utilized in the draft Regional Plan should be based on and supported by facts, adopted plans, and “most recent planning assumptions,” rather than speculation and personal opinions. The land use assumptions for “uses, residential densities, and building intensities within the region” (as required by GOV § 65080 (b)(2)(b)(i)) should also be the same, as that provided to the state board (as required per GOV §§ 65080 (b)(2)(b) and J) in estimating and analyzing GHG from the SCS and the effect on growth and whether the effects of that growth would be significant in the context of the region’s plans, natural setting, and growth patterns. Ultimately, the SCS must demonstrate whether SANDAG can meet the per capita passenger vehicle-related GHG emissions targets for 2035 set by the California Air Resources Board (“CARB”).

SB 375 directs CARB to accept or reject the determination of SANDAG that its SCS submitted to CARB would, if implemented, achieve the region’s GHG emissions reduction targets. CARB’s technical evaluation of SANDAG’s draft Regional Plan would be based on all the evidence provided, including the models, the data inputs and assumptions, the SCS strategies, and the performance indicators.

The transportation and planning assumptions are also extremely important as it is relied on for other master planning exercises. The Regional Air Quality Strategy (“RAQS”) relies on information from CARB and SANDAG for information regarding projected growth in the cities and San Diego County. This in turn is utilized to address other state requirements, including the San Diego portion of the California State Implementation Plan (“SIP”) and promulgating their own rules and regulations regarding air quality in the region or to address federal requirements.

City of Carlsbad Comment Letter

August 6, 2021
Attachment 1: Government Code 65020 (S.B. 375) Summary

The analysis of land use impacts for transportation projects is guided by FHWA Technical Advisory T 6640.8 and the CEQA Guidelines.

Under the FHWA Technical Advisory T 6640.8 (G)(1), Guidance for Preparing and Processing Environmental, states:

This discussion [of land use] should identify the current development trends and the State and/or local government plans and policies on land use and growth in the area which will be impacted by the proposed project. These plans and policies are normally reflected in the area’s comprehensive development plan, and include land use, transportation, public facilities, housing, community services, and other areas.

The land use discussion should assess the consistency of the alternatives with the comprehensive development plans adopted for the area and (if applicable) other plans used in the development of the transportation plan required by Section [23 U.S. Code §] 134. The secondary social, economic, and environmental impacts of any substantial, foreseeable, induced development should be presented for each alternative, including adverse effects on existing communities. Where possible, the distinction between planned and unplanned growth should be identified.

There is also a requirement to analyze the land use planning inconsistencies per CEQA Guidelines § 15126.2(a), which specifies that an EIR for a proposed project include:

The Significant Environmental Effects of the Proposed Project. An EIR shall identify and focus on the significant effects of the proposed project on the environment. In assessing the impact of a proposed project on the environment, the lead agency should normally limit its examination to changes in the existing physical conditions in the affected area as they exist at the time the notice of preparation is published, or where no notice of preparation is published, at the time environmental analysis is commenced. Direct and indirect significant effects of the project on the environment shall be clearly identified and described, giving due consideration to both the short-term and long-term effects. The discussion should include relevant specifics of the area, the resources involved, physical changes, alterations to ecological systems, and changes induced in population distribution, population concentration, the human use of the land (including commercial and residential development), health and safety problems caused by the physical changes, and other aspects of the resource base such as water, historical resources, scenic quality, and public services. The EIR shall also analyze any significant environmental effects the project might cause or risk exacerbating by bringing development and people into the area affected. For example, the EIR should evaluate any potentially significant direct, indirect, or cumulative environmental impacts of locating development in areas susceptible to hazardous conditions (e.g., floodplains, coastlines, wildfire risk areas), including both short-term and long-term conditions, as identified in authoritative hazard maps, risk assessments or in land use plans addressing such hazards areas.

Since the new land use assumptions are being utilized, as described by this letter, the EIR that is prepared shall also analyze any significant environmental effects the project might cause by bringing development and people into the area affected. The following are the basic steps in analyzing land use impacts as part of the community impact assessment process:

City of Carlsbad Comment Letter

August 6, 2021
Attachment 1: Government Code 65020 (S.B. 375) Summary

1. Inventory the existing land use patterns (including undeveloped land), development trends, and transportation systems. The inventory of existing land uses should include the following land use types: residential, commercial, industrial, recreational, institutional, public services, community services, emergency services, transportation, utilities, agriculture, and undeveloped land in the study area. The study area should include the surrounding community that is generally associated with the project area within which community impacts could occur. The inventory should also address development trends and identify recent developments in the study area to include the development’s name, size, status (planned, built, under construction), and the jurisdiction in which it is located. A map showing the location of existing and planned land uses in the area should also be prepared.

2. Determine whether the project is consistent with local and regional policies that govern land use and development. For the consistency analysis, the policies and programs considered in the analysis should include: transportation plans and programs (MTPs/RTPs and MTIPs/RTIPs), regional growth plans, local General Plans that establish land use and growth management policies for the study area, and any specific or pipeline development proposals. This analysis should also include a discussion of consistency with the Coastal Zone Management Act of 1972, California Coastal Act of 1976, the National Wild and Scenic Rivers Act (16 USC 1271) and the California Wild and Scenic Rivers Act (Pub. Res. Code § 5093.50 et seq.). After preparing a preliminary list of relevant plans to be considered in the analysis, the SANDAG planner should meet with the staff of the various agencies to review the list to determine if it is complete and revise the list as necessary.

3. Assess the changes that would occur in land uses and growth with and without the project.

4. The draft Regional plan and each project alternative should be considered separately since the results may be different.

5. Develop measures to avoid, minimize, and/or mitigate potential adverse effects.

The resulting environmental analysis should identify the current development trends and the State and/or local government plans and policies on land use and growth in the area which will be impacted by the proposed project. These plans and policies are normally reflected in local General Plans. If found to be consistent, then the findings in the EIR should be documented in the report and no further analysis or action is necessary. When found not to be inconsistent with a policy or program, then consideration must be given to modifying the draft Regional Plan alternative to make it consistent, or measures to address the inconsistency must be developed. SANDAG should be actively engaged in the development of measures to address these issues and be prepared to assess the consistency of the draft Regional Plan and alternatives with the comprehensive development plans adopted for the area and (if applicable) other plans used in the development of the transportation plan required by Section 23 U.S. Code § 134. For any new land use growth assumptions, the secondary social, economic, and environmental impacts of any substantial, foreseeable, induced development should be presented for the draft Regional Plan and each alternative, including adverse effects on existing communities. The results should be shared with the public during the public involvement process, e.g., at community meetings, etc. Public input should be considered by SANDAG and if necessary, the findings of the analysis should be revised to reflect information gained through the public involvement process.

City of Carlsbad Comment Letter

August 6, 2021
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### PLEASE NOTE: PRELIMINARY RIDERSHIP DATA - UNAUDITED AND SUBJECT TO ADJUSTMENTS

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<th>COASTER - TOTAL RIDERSHIP</th>
<th>FY21</th>
<th>FY20</th>
<th>Variance</th>
<th>%</th>
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<td>149,515</td>
<td>(139,252)</td>
<td>(93.11%)</td>
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<tr>
<td>Aug</td>
<td>9,412</td>
<td>153,482</td>
<td>(144,070)</td>
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<tr>
<td>Sept</td>
<td>10,030</td>
<td>114,353</td>
<td>(104,323)</td>
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<tr>
<td>Oct</td>
<td>10,681</td>
<td>111,045</td>
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<td>(90.21%)</td>
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</tr>
<tr>
<td>Nov</td>
<td>9,232</td>
<td>94,551</td>
<td>(85,319)</td>
<td>(90.26%)</td>
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<tr>
<td>Dec</td>
<td>7,518</td>
<td>63,951</td>
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<td>(89.01%)</td>
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<td>Jan</td>
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<td>91,845</td>
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<td>Mar</td>
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<td>49,510</td>
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</tr>
<tr>
<td>Apr</td>
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<td>5,344</td>
<td>9,840</td>
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</tr>
<tr>
<td>May</td>
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<tr>
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**Not final as of July 19, 2023**

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<tr>
<th>Month</th>
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<th>%</th>
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<tr>
<td>Aug</td>
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<td>Apr</td>
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<td>5,344</td>
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<td>FY Total</td>
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**Not final as of July 19, 2023**

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<th>Month</th>
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<th>Variance</th>
<th>%</th>
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<td>(9,415)</td>
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<tr>
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<td>-</td>
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<td>(14,348)</td>
<td>(100.00%)</td>
<td></td>
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<tr>
<td>Oct</td>
<td>-</td>
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<td>(100.00%)</td>
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<td>-</td>
<td>9,385</td>
<td>(9,385)</td>
<td>(100.00%)</td>
<td></td>
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<tr>
<td>Dec</td>
<td>-</td>
<td>4,367</td>
<td>(4,367)</td>
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<tr>
<td>Jan</td>
<td>-</td>
<td>3,218</td>
<td>(3,218)</td>
<td>(100.00%)</td>
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</tr>
<tr>
<td>Feb</td>
<td>-</td>
<td>5,181</td>
<td>(5,181)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>Mar</td>
<td>-</td>
<td>965</td>
<td>(965)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>Apr</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>-</td>
<td>1,287</td>
<td>0</td>
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<td>-</td>
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<td>5,081</td>
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<tr>
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<td>0</td>
<td>(50,027)</td>
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</tr>
<tr>
<td>FY Total</td>
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**Not final as of July 19, 2023**

<table>
<thead>
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<th>Month</th>
<th>COASTER - SUNDAY</th>
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<th>FY20</th>
<th>Variance</th>
<th>%</th>
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</thead>
<tbody>
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<td>-</td>
<td>9,882</td>
<td>(9,882)</td>
<td>(100.00%)</td>
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<tr>
<td>Aug</td>
<td>-</td>
<td>7,004</td>
<td>(7,004)</td>
<td>(100.00%)</td>
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<tr>
<td>Sept</td>
<td>-</td>
<td>13,625</td>
<td>(13,625)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>Oct</td>
<td>-</td>
<td>2,197</td>
<td>(2,197)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>Nov</td>
<td>-</td>
<td>5,254</td>
<td>(5,254)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>Dec</td>
<td>-</td>
<td>4,030</td>
<td>(4,030)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>Jan</td>
<td>-</td>
<td>5,653</td>
<td>(5,653)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>Feb</td>
<td>-</td>
<td>2,081</td>
<td>(2,081)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>Mar</td>
<td>-</td>
<td>1,477</td>
<td>(1,477)</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>Apr</td>
<td>-</td>
<td>0</td>
<td>0</td>
<td>(100.00%)</td>
<td></td>
</tr>
<tr>
<td>May</td>
<td>-</td>
<td>806</td>
<td>0</td>
<td>806</td>
<td></td>
</tr>
<tr>
<td>June**</td>
<td>-</td>
<td>3,905</td>
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<tr>
<td>YTD Total</td>
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<td>(45,820)</td>
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</tr>
<tr>
<td>FY Total</td>
<td>4,511</td>
<td>50,203</td>
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**Not final as of July 19, 2023**

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Attachment C: Public Participation

104
### ATTACHMENT 6 – Project Data Request

#### Table 1: Project Information Request

<table>
<thead>
<tr>
<th>Project</th>
<th>Estimated Total Project Cost</th>
<th>Current Planned Year of Construction</th>
<th>Draft RTP Assumed Year of Construction</th>
<th>Assumed Federal/State Matching Funding (%)</th>
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<tbody>
<tr>
<td>San Dieguito Lagoon Double Track and Platform</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Batiquitos Lagoon Double Track and Bridge Replacement</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Eastbrook to Shell Double Track</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Carlsbad Village Trench</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>La Costa to Swami Double Track</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>San Onofre Bridge Replacements</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Rose Canyon Bridge Replacements</td>
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## ATTACHMENT 7 – Detail of Proposed Rail Lines

<table>
<thead>
<tr>
<th>Table 3: Detail of Proposed Rail Lines</th>
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<tbody>
<tr>
<td>Rail Mode (CR, LR, HSR, Hybrid)</td>
</tr>
<tr>
<td>----------------------------------------</td>
</tr>
<tr>
<td>New Rail Line</td>
</tr>
</tbody>
</table>
August 8, 2023

Kirsten Uchitel
Associate Planner
SANDAG
401 B Street, Suite 800
San Diego, CA 92101

Sent via email to: RegionalPlanAmendment@sandag.org

REQUEST FOR COMMENTS ON THE AMENDMENT TO THE 2021 REGIONAL PLAN FOR THE SAN DIEGO ASSOCIATION OF GOVERNMENTS (SANDAG)

Dear Kirsten Uchitel,

County of San Diego (County) staff has reviewed the San Diego Association of Governments (SANDAG) Amendment to the 2021 Regional Plan (Project), dated June 13, 2023. The amendment proposes to remove the regional Road User Charge (RUC) from the 2021 Regional Plan. Included as part of this amendment are updates to the financial strategies intended to demonstrate that there will be sufficient revenues to pay for the planned transportation improvements without the RUC. The Amendment is also intended to demonstrate that the federal Air Quality Planning and Transportation Conformity will also still be met and analyzes consistency with state targets to reduce greenhouse gas (GHG) emissions consistent with Senate Bill 375 (SB 375).

County staff is committed to continuing to partner with SANDAG staff on our shared goals of implementing programs and services to improve the quality of life of our residents and offers the following comments for consideration. The comments provided below are not an indication of County support or opposition for this Project. However, the County remains concerned that the original 2021 Regional Plan does not sufficiently take into consideration the existing population of the unincorporated area, particularly underserved and disadvantaged communities. Currently, the Regional Plan planning framework precludes the County from competing for millions of dollars in much-needed infrastructure and planning funding available to the region. The County is concerned that the reduced revenue projected under the updated Regional Plan will exacerbate these inequities and possible future funding to the unincorporated area. This comment letter includes a summary of these, and other key issue areas identified by staff in previous comment letters to SANDAG on both the 2021 Regional Plan (August 6th, 2021) and the 2021 Regional...
Plan Draft Programmatic Environmental Impact Report (October 11, 2021), provided as attachments to this comment letter (Attachment A and Attachment B, respectively). The County requests that SANDAG consider and provide responses to the County’s comments.

Removal of the Regional Road User Charge and Revenue Assumptions

The Regional Road User Charge (RUC) was previously deemed a necessary component in the 2021 Regional Plan. As was shared in our comments on the 2021 Regional Plan (attachment A), it is important for the County to better understand how investment would be applied to ensure that both the benefits and costs of the Regional Plan are equitably distributed across the region and the methodology for how the amended plan and future projects will function without the RUC. The proposed project provides updated revenue assumptions that show a net decrease in revenues from $173 billion to $163 billion over the plan’s 30-year life. The updated revenue assumptions include future local sales tax revenue, updated TransNet revenue, and updated State and Federal funding. The Amendment states that this revenue will be sufficient to fund the anticipated transportation improvements as well as the ability to document the federal Air Quality Planning and Transportation Conformity; however, these funding sources are not guaranteed and therefore, may not be realized.

For example, a TransNet amendment may not qualify for the 2024 ballot and/or may not be passed by the voters and Bipartisan Infrastructure Law funding (BIL) is a competitive grant process that may not provide the level of funding that is anticipated. Considering this, the County is requesting further clarification on:

1. **Revenue Assumptions**: How the 2021 Regional Plan will meet its revenue assumptions, including the risks and impacts to projects if these anticipated revenue sources are not realized over the life of the Plan. It is unclear whether projects that have previously been planned, programmed, or awarded as part of TransNet would retain funding that was previously allocated, or if there would be any changes to the current allocation or use of funds that local agencies receive directly for local road system improvements if the revenue assumptions are not realized; and

2. **Project Prioritization**: It is unclear what methodology SANDAG will utilize for prioritizing projects if funding assumptions are not realized, including what, if any, criteria would be utilized to include or not include projects on the list for funding and how will local jurisdictions be involved in the process of project prioritization. The County reemphasizes that revenues generated should be allocated to support additional transportation and mobility options in unincorporated communities, which often have longer commutes and less access to alternative transportation options due to absence of regional planning for transit services to these communities.

Expansion of Mobility Hubs

In previous comment letters to SANDAG, the County provided comments regarding the need for more consideration and planning for the unincorporated areas. Less than 1% of the unincorporated area was included within mobility hubs, which is where transit and on-demand travel infrastructure investment is focused. To promote greater equity, mobility hubs should be inclusive of adjacent unincorporated communities, many of which have greater populations than the incorporated cities and often, less access to alternative transportation options.
The removal of the RUC should be examined in terms of its impact on the planned transportation system, particularly in providing travelers with alternatives to driving. Previously, the County provided comment regarding the 2021 Regional Plan which delineated the boundaries of mobility hubs along jurisdictional boundaries, excluding more than 99% of the unincorporated area. The County maintains that there are opportunities to expand the proposed mobility hubs to include unincorporated communities, which would benefit from additional access to investment associated with inclusion in the adjacent mobility hubs, as these communities have few existing alternative options to driving. Below are some areas the County requests clarification on regarding mobility hubs:

1. Implications: Providing an assessment on the implications of the change in proposed funding sources, including the removal of the RUC, on the unincorporated county and its potential impact on growth in these areas is important.

2. Development: Understanding how this change might affect growth dynamics is key for evaluating regional development.

3. Boundaries: Reconsidering the boundaries of mobility hubs to include unincorporated areas is an important aspect to address within the regional plan. The County requests further details on SANDAG’s approach to reevaluating the boundaries of the mobility hubs.

Regional Housing Needs Assessment and Sustainable Communities Strategy

County staff relies on SANDAG population, housing, and job growth forecasts for planning efforts. For the 6th Cycle Regional Housing Needs Allocation (RHNA), the unincorporated portion of the County was allocated 6,700 units for the planning period of 2021 – 2029. The 2021 Regional Plan forecasts that the County will build 7,419 units through 2050. Historic data shows that from 2010 to 2020, 7,330 new homes were built in the unincorporated area. If that trend continued, an additional 22,000 new homes would be built in the unincorporated area by 2050. In contrast to these historical trends, the Regional Plan forecast projects that the unincorporated county will only grow by 719 units between 2029 and 2035 and projects no future growth in the unincorporated area through 2050. The Sustainable Community Strategy for the unincorporated area should not be a no-growth strategy. The County is interested in understanding how SANDAG will account for future growth within the unincorporated areas, including natural growth beyond 2035 in the Regional Plan. Growth within the unincorporated areas should be included in the regional planning process. Below are some areas the County requests clarification regarding RHNA and the Sustainable Communities Strategies (SCS):

1. Goals and Growth: The County is requesting further transparency as to how SANDAG plans to reconcile this discrepancy and ensure alignment between RHNA goals, growth forecasts, funding availability, and the need to incorporate future growth in the unincorporated areas into the regional planning process.

2. Alignment: There should be alignment between RHNA goals, growth forecasts, and funding availability.
Greenhouse Gas Reduction Strategies

The County has and continues to request that SANDAG align GHG reduction and housing goals both in the 2021 Regional Plan and in the forthcoming 2025 Regional Plan. Ensuring alignment between GHG reduction strategies and RHNA goals is also essential for an integrated and sustainable planning approach. SANDAG’s alignment with California Air and Resource Board (CARB) targets for transportation emissions must consider similar GHG reduction targets which are also set by CARB for local jurisdictions. The Amendment to the 2021 Regional Plan also identifies the need for funding beyond a fuel tax due to the shift in electric vehicles (EV) and more fuel-efficient vehicles. Below are some areas the County requests clarification on regarding GHG Reduction Strategies:

1. **Feasibility:** The County requests further transparency about the strategy and feasibility of implementing programs and plans to achieve GHG reductions in compliance with State targets that may be impacted from the removal of the RUC. Elaborating on how SANDAG intends to align these components would enhance transparency and clarity and will help ensure that coordination of regional GHG reduction goals.

2. **Local Alignment:** Please clarify how RUC removal and funding sources impact SANDAG partnerships which rely on grant funding to initiate programs, improvements, and initiatives which support smart growth in Mobility Hubs, connection, and reduction of Vehicle Miles Traveled (VMT) initiatives for GHG emissions within the unincorporated areas including environmental considerations and RHNA growth projection alignments.

3. **Cost:** It would be valuable to know if SANDAG made network performance assumptions to account for the contemporary increased costs of vehicles, rate of electric vehicle adoption, maintenance, fuel, insurance, inflation, and the overall cost of living for drivers, commuters, and other social and demographic trends and shifts to quantify the economic and greenhouse gas emissions impact.

4. **Funding Allocations:** Clarifying the approach taken to funding allocation would provide a better understanding of the analysis for the GHG emission reduction alignments with the state, CARB, grant funding, and expanding Mobility Hub connections within the unincorporated region. Regarding the implementation of projects and achievement of compliant emission levels, it would be beneficial to clarify which funds have been reallocated or will be added for this purpose.

**Conclusion**

Loss or reallocation of funding due to the removal of funding sources such as the RUC and pending funding sources could affect anticipated projects and limit the County’s ability to provide housing and affordable, reliable, and safe mobility options, particularly to underserved communities. It is important to understand how SANDAG will address potential scenarios where revenue sources, such as TransNet funding or competitive BIL funding, are not realized at the anticipated levels. In such cases, it would be valuable to know how SANDAG will prioritize projects and adjust its strategies to ensure effective and equitable resource allocation and what role local jurisdictions will have in the project prioritization process. The County would like to understand if there are plans to revise an updated RUC or consideration of a similar revenue stream to replace the RUC and how SANDAG plans to address the County’s previously provided feedback (Attachment A and Attachment B). The County is committed to working with SANDAG to ensure
that potential funding and project opportunities within the unincorporated areas are not precluded in the future. The County would like to understand how County comments provided to date will be addressed in this amended plan and on a go-forward basis.

The County appreciates the opportunity to comment on this Project. We look forward to receiving future documents related to this Project and providing additional assistance, as your request. If you have any questions regarding these comments, please contact Ashley Rivero, Land Use / Environmental Planner / Long Range Planning Division, at (619) 629-4438, or via e-mail at Ashley_Rivero@sdcounty.ca.gov.

Sincerely,

Lynnette Santos
Chief, Long Range Planning Division
Planning & Development Services

Enclosures: Attachment A – COSD Comment Letter 2021-08-06
Attachment B – COSD Comment Letter 2021-10-11

cc: Stephanie Hernandez, CAO Staff Officer, LUEG (Stephanie.Hernandez@sdcounty.ca.gov)
Donald Chase, Planning and Development Services (Donald.Chase@sdcounty.ca.gov)
Nick Ortiz, Department of Public Works (Nick.Ormiz@sdcounty.ca.gov)
William Morgan, Department of Public Works (William.Morgan@sdcounty.ca.gov)
Jacob Armstrong, Planning and Development Services (Jacob.Armstrong@sdcountry.ca.gov)
Kevin Johnston, Planning and Development Services (Kevin.Johnston@sdcountry.ca.gov)
Tyler Farmer, Planning and Development Services (Tyler.Farmer@sdcountry.ca.gov)
August 6, 2021

Hasan Ikrata
Executive Director
SANDAG
401 B Street, Suite 800
San Diego, CA 92101

Sent via email to: SDForward@sandag.org

REQUEST FOR COMMENTS ON THE DRAFT 2021 REGIONAL PLAN FOR THE SAN DIEGO ASSOCIATION OF GOVERNMENTS (SANDAG)

Dear Mr. Ikrata,

Thank you to the San Diego Association of Governments (SANDAG) for your efforts to create a Regional Comprehensive Plan and Sustainable Communities Strategy (Regional Plan) to help design a regional transportation system that is fast, fair, clean and reduces greenhouse gas emissions. As County staff, we are committed to working with SANDAG staff on our shared goals of implementing programs and services to improve the quality of life of our residents as we determine where and how we grow, connect people and places, protect the environment, and provide opportunity for all of our region’s residents.

This comment letter outlines areas within the Regional Plan for which County staff would like to request further clarification, exploration, and consideration. Attachment A provides additional comments from County staff for your consideration and incorporates additional information related to County-specific plans or policies that may further inform the Regional Plan.

LAND USE, TRANSPORTATION PLANNING, AND SMART GROWTH
Land use and transportation planning in the San Diego region is evolving to better address the most pressing issues of today, including climate change, quality of life, attainable housing, and social and economic inequities. The County has several planning efforts underway which prioritize addressing these issues, including the Regional Decarbonization Framework, the Climate Action Plan Update, the Electric Vehicle Roadmap, Office of Environmental and Climate Justice, and establishment of VMT thresholds. While independent of the Regional Plan, these efforts are aligned with the goals of the Regional Plan. County staff is interested in further understanding the regional growth modeling assumptions used within the Regional Plan and alignment with these County efforts.
PLANNING FOR THE UNINCORPORATED AREAS

The County represents more than 500,000 residents who live within 34 unincorporated communities throughout the region. County staff would like to better understand how the Regional Plan will address transportation options outside of proposed mobility hubs for those communities. The unincorporated community of Ramona, for example, has a population of 36,000 residents, which is a larger population than the incorporated communities of Imperial Beach, Lemon Grove, Coronado, Solana Beach, and Del Mar.

Less than 1% of the unincorporated area is within the proposed mobility hubs, which is where transit and on-demand travel infrastructure investment will be focused. The unincorporated north and east county communities represent a significant population with higher-than-average VMT in the region. Investment in public transit and other transportation options will make it easier for people to drive less, which results in decreased GHG emissions. However, investment outside of mobility hubs appears to be limited, which would make it difficult for unincorporated residents to use new transit service.

To promote greater equity, County staff see opportunities to expand the proposed mobility hubs to include adjacent unincorporated communities. When we overlay the proposed mobility hubs with the County’s VMT efficient areas (using both the unincorporated and regional averages), North County Metro, Lakeside, and Spring Valley (Attachment B) are adjacent to what appear to be proposed mobility hubs. These unincorporated communities would benefit from additional access and investment associated with inclusion in adjacent mobility hubs, as these communities have few existing alternative options to driving.

County staff is also interested in understanding how Regional Housing Needs Assessment (RHNA) allocations would be assigned. For the current 6th RHNA cycle, which covers 2021 – 2029, SANDAG allocated 6,700 units for the unincorporated area, with a total housing forecast in the Regional Plan of 7,419 units through 2050 for the unincorporated area. This forecast projects the County’s RHNA allocation of 6,700 units being met by 2029, with an additional growth of 719 units by 2035, and projects no further growth in the unincorporated area through 2050. Based on this forecast, it appears that beyond 2035, all future housing needs in the region from RHNA cycles would be allocated to and met by growth in incorporated cities.

In order to fulfill the goals of the Regional Plan in providing access to affordable, reliable, and safe mobility options for everyone in the region, County staff would like to work with SANDAG to ensure consideration is given to future investments and incentives within the unincorporated area that would result in expanded options for transit and active transportation, and to encourage shorter and fewer automobile trips, including locations of mobility hubs, transit leap, flexible fleets, and complete corridors.

COMMUTER PATTERNS AND MOBILITY IN THE UNINCORPORATED AREA

The Regional Plan focuses on five key investment opportunities: Next Operating System (OS), Complete Corridors, Transit Leap, Mobility Hubs, and Flexible Fleets. Many of the Regional Plan investments would be contained within proposed mobility hubs and along identified complete corridors. The majority of infrastructure improvements appear to support a shift to new rail and trolley line infrastructure, largely along the coastal areas. However, Ramona, Lakeside, Spring Valley, and other unincorporated east and north county communities represent a significant population that would benefit from similar consideration for infrastructure improvements as that proposed for the coastal communities with less population. According to SANDAG’s “Commuting Patterns in the San Diego Region” study, a majority of the unincorporated east and north county residents who are employed commute outside the boundaries of their County Supervisorial
district, with 84% of District 2 residents working outside the district and 82% of District 5 residents working outside the district. Vehicle miles traveled could be reduced through greater mobility options for the unincorporated area (i.e., expansion of mobility hubs, increased transit options such as bus rapid transit, and improvements to transit frequency and service areas).

The County worked closely with SANDAG as part of the 2015 Regional Plan to identify roads in the unincorporated areas to include in the Regional Arterial System (RAS). Many of these roads serve as evacuation routes during emergencies, provide access to unincorporated communities from Caltrans roads, and create a link to the larger San Diego region.

County staff would like to continue coordinating with SANDAG to further identify Regional Plan investments in infrastructure, technology, and communication improvements for roads identified in both the County’s Mobility Element and unincorporated roads included in the RAS and how these investments will further connect the unincorporated area to proposed mobility hubs, flexible fleets, or transit loops. In addition to providing efficient movement of people and goods, these investments would increase the efficiency of evacuation routes, relay important information on evacuation conditions to first responders, and assist in getting residents safely away from hazardous conditions, all important components of resiliency planning.

FUNDING AND FINANCING
County staff appreciates the difficulty in forecasting funding and revenue sources for a regional transportation network. The Regional Plan identifies use of TransNet funds as part of the implementation, but it is not clear whether projects that have previously been planned, programmed, or awarded as part of the previous plan using TransNet would retain that funding allocation, or if there would be a reallocation of these funds as part of the Regional Plan. It is also unclear if there would be any changes to the current allocation or use of funds that local agencies receive directly for local road system improvements. The unincorporated area relies on TransNet funding to build, improve, and maintain transportation facilities that enhance roadway safety and support smart growth development, including road infrastructure to support increased transit options. Loss or reallocation of this funding could affect these projects and limit the County’s ability to provide transportation services in support of our goal of reducing greenhouse gas emissions.

The Regional Plan indicates that user fees would help build a transportation system that provides travelers with alternatives to driving. County staff would like to further discuss how the proposed road user charges would be developed, implemented, and applied to ensure that this funding strategy will not disproportionately burden unincorporated communities, which often have longer commutes and less access to alternative transportation options due to lack of regional planning for transit services to these communities. Revenues generated should also be allocated to support additional transportation and mobility options in unincorporated communities, while vehicle use by those with access to alternate modes of transportation should be disincentivized since their communities are receiving significant investments in public transit.

County staff looks forward to learning more about how future funding and investment would be applied to ensure that both the benefits and the costs of the Regional Plan are equitably distributed across the region.

RESOURCE DISTRIBUTION
The Regional Plan provides SANDAG with an opportunity to guide future investments in a way that meets smart growth objectives and reduces GHG emissions, but also guides future allocation of resources to achieve equitable outcomes. Several of the unincorporated communities, such as Lakeside, Spring Valley, and Ramona, have larger populations than some of the incorporated
2021 Regional Plan – County of San Diego Staff Comments
August 6, 2021
Page 4

cities that are prioritized in the Regional Plan. In review of the proposed plan expenditures, a
majority of the capital investments (55% of RTP funding) appear to go toward mobility hubs,
complete corridors, and Next OS investments that are primarily outside of unincorporated
communities. It is unclear what proportion of investment would go toward addressing mobility
challenges within unincorporated communities and infrastructure investment that would provide
linkages between the unincorporated areas and the proposed mobility hubs, transit leap, flexible
fleets, and complete corridors. County staff is committed to working with SANDAG to further
identify opportunities to equitably distribute the mobility benefits of the 5 Big Moves and further
reduce GHG emissions regionwide.

The County appreciates the opportunity to comment on the Draft Regional Plan, and staff looks
forward to future discussions regarding these comments. If you have questions regarding this
letter, please contact Rami Talleh, Deputy Director with the Department of Planning and
Development Services at 858-495-5475 or Rami.Talleh@sdcounty.ca.gov.

Sincerely,

[Signature]
SARAH E. AGHASSI
Deputy Chief Administrative Officer

cc: Chair Nathan Fletcher: Board of Supervisors, District 4
Vice Chair Nora Vargas: Board of Supervisors, District 1
Supervisor Joel Anderson: Board of Supervisors, District 2
Supervisor Terra Lawson-Remer: Board of Supervisors, District 3
Supervisor Jim Desmond: Board of Supervisors, District 5
Kathleen Flannery, Acting Director, Planning and Development Services
Jeff C. Moneda, Director, Department of Public Works
Brian Albright, Director, Department of Parks and Recreation

Attachments:
Attachment A: Comments from County Departments and Divisions
Attachment B: Expansion Potential of Mobility Hubs (North County Metro, Lakeside, and Spring
Valley)
ATTACHMENT A
2021 REGIONAL PLAN COMMENTS FROM COUNTY OF SAN DIEGO DEPARTMENTS AND DIVISIONS

County of San Diego (County) staff in Planning & Development Services, the Department of Public Works, and the Department of Parks and Recreation reviewed the San Diego Association of Governments’ (SANDAG) Draft 2021 Regional Plan (Regional Plan), for applicability to their respective work programs and County initiatives that are planned or currently underway. The County offers the following comments for your consideration.

TRANSPORTATION

1. County staff would be interested to better understand and discuss further with SANDAG the potential for Regional Plan strategies to be used as part of a potential regional mitigation strategy related to Vehicle Miles Traveled (VMT).

2. When would funding be expected to be implemented related to Transit Leap/Flexible Fleet Connections to Mobility Hub areas, as this is a potential opportunity to reduce VMT for residents living in the unincorporated area?

3. The County has developed an Electric Vehicle (EV) Roadmap and is committed to assisting with the deployment of regionwide EV infrastructure to reduce GHG emissions in the transportation sector. Could SANDAG provide additional details on the future development, application, and implementation of the proposed Road User Fees and other proposed road usage revenues? Will consideration be given to exemptions for use of clean mobility strategies?

4. County staff would like to discuss with SANDAG staff the Regional Plan strategies, including funding for Major Transit (for purposes of CEQA, defined as a rail transit station, ferry terminal served by bus or rail, and a bus stop with two or more lines that provide transit service at 15 minute intervals or better during peak commute periods) in areas of the unincorporated area that are identified as “VMT efficient” in the SANDAG VMT Map.

5. There is significant investment in development and infrastructure in the Otay Mesa area, and Otay Mesa is identified as a “Mobility Hub” area in the RTP. County staff would like to better understand what funding has been identified for this “Mobility Hub” area.

6. County staff would like to discuss with SANDAG the potential for “Major Transit” services along the I-15 corridor, such as the potential for buses on shoulders.
ROADS/TRAFFIC/FIELD ENGINEERING

7. Complete Corridors, such as the SR-67 and I-15 Corridors, are envisioned to act as the backbone of the regional transportation system. In addition to providing for safe and comfortable spaces to get around for all modes of transportation, road improvements such as intersection widening are important for the safe and reliable movement of all road users. County staff would like to discuss further identification and investment within complete corridors that provide linkages to the unincorporated area. These improvements could assist in providing routes for the County’s eastern and northern rural regions that could be essential in the event of accidents or fire evacuation. For example, County staff would like to discuss with SANDAG the option of including safety improvements along the SR-67 Corridor on Wildcat Canyon Road, as this road is a relief route to SR-67. Additionally, road improvements on Old Hwy 395 and Paia Temecula Road in the north county may merit further conversation, as both of these roads serve as alternate routes to I-15 during peak traffic hours.

8. County staff would like to further discuss improvements of low flow crossings that are necessary to limit area flooding as well as the safe passage of motorists.

9. County staff would like to work with SANDAG to identify evacuation routes at a regional level, and the possibility of creating a separate section within the Regional Plan that would identify improvements of these routes and potential funding that could be part of the 2021 Regional Plan.

10. County staff would like to discuss with SANDAG how Smart Infrastructure and Connected Vehicles will address the legal and financial challenges with sharing traffic signal data with private entities and the liability of the potential misuse of signal timing data.

11. County staff would like to better understand the impact of Electric Vehicle Infrastructure on County of San Diego public right of way.

WATERSHED

12. Stormwater Management & Regional Needs Assessment; suggested edits in Appendix R, page R-2:
   a. "The County of San Diego has initiated an update of the 2010 Needs Assessment's 40-year water quality cost estimate using more recent water quality planning documents and strategies for achieving regulatory compliance and water quality objectives throughout the region. Since 2010, the COPermittees have worked to formulate Water Quality Improvement Plans (WQIPs) for the region's watersheds, including strategies, planned projects, and schedules to address their respective water quality objectives and compliance needs. The update to the Needs Assessment is intended to assist the County in planning and decision making and will draw upon the most recent WQIPs, with a focus on unincorporated areas to develop updated cost information."
BIOLOGY

13. Figure AA.1 shows the conserved habitat lands in the San Diego region (light green) and displays the areas included in the four subregional habitat conservation plans (subfigure).
   a. The Pre-Approved Mitigation Area (PAMA) of the South County Multiple Species Conservation Program (MSCP) and draft PAMA of the draft North County MSCP are labeled as "Proposed Conserved Habitat Lands" (dark green). This label may be misinterpreted by readers. While the MSCP Preserves will be assembled within the PAMA, not all PAMA designated lands will be conserved or are being actively pursued for conservation at this time.
   b. The draft Focused Conservation Area (FCA) of the draft East County MSCP was not included in the "Proposed Conserved Habitat Lands" (dark green). This area is equivalent to the draft North County MSCP’s draft PAMA and should be included in this figure.
   c. The Rancho Guejito property located north of San Pasqual Valley Road will not be included in future iterations of the draft North County MSCP Permit Area. The portions of this property identified within the draft North County MSCP should be changed from dark green to white to reflect this change.
   d. In the subfigure, both the draft North County MSCP and Multiple Habitat Conservation Plan (MHCP) are identified by the number "4." The MHCP area should be identified by the number "1" to correspond with the provided key.

14. Although the draft 2021 Regional Plan mentions the importance of protecting habitat corridors and wildlife linkages through land acquisition, it does not appear to include the construction of safe passageways to connect wildlife to preserved lands bisected by existing and future regional transit corridors. It is recommended that SANDAG work with the San Diego Monitoring and Management Program (SDMMP) and community partners to identify the areas along regional transit corridors that would benefit from wildlife crossings and that these improvements be included in future regional projects.

PARKS AND RECREATION

15. For proposed projects that occur adjacent to Department of Parks and Recreation (DPR) County-managed lands, DPR staff would like to coordinate with SANDAG staff to ensure wildlife connectivity is maintained from adjacent lands to preserved County lands, including wildlife-only crossings.

16. For proposed projects that occur adjacent to or near existing or potential future trail connections, DPR staff would like to coordinate with SANDAG staff on trail connectivity throughout the County and incorporate safe multi-use crossings such as bridges or overpasses for recreational use.

17. DPR staff request SANDAG staff coordinate in developing SANDAG’s 5 Comprehensive Multimodal Corridor Plans as mentioned in Appendix B: Implementation near DPR facilities:
   a. Central Mobility Hub and Connections, Coast, Canyons, and Trails – State Route 52, North County – SPRINTER/Palomar Airport Road/State Route 78/State Route 76, San Vicente – State Route 67, South Bay to Sorrento – Purple Line/Interstate 805/Blue Line/Interstate 5 South.
2021 Regional Plan – County of San Diego Staff Comments
August 6, 2021
Page 4

b. Study additional seven corridors to inform the next Regional Continuing Actions.
c. Pursue funding opportunities for projects, programs, and services identified in completed
CMCPs.

18. County Staff would like to discuss with SANDAG the possibility of including trails and trail
systems within the unincorporated area as part of the 2021 Regional Plan and to consider
California Coastal Trail connections to DPR facilities.

AIRPORTS

19. As the owner and operator for eight airports in the region, County Airports continues efforts
to safely operate its facilities, ensure future land uses are compatible with aircraft operations,
and protect the health and safety of people and property within the vicinity of an airport. The
County’s airports serve as transportation hubs, emergency service facilities and economic
engines in their communities. McClellan-Palomar Airport is the only commercial airport in
North County and has over 145,000 annual aircraft operations. It is also a Customs and Border
Protection Port of Entry. In East County, Gillespie Field is the 44th busiest airport in the nation
with 240,000 annual operations. Both of these airports support thousands of jobs and
generate hundreds of millions of dollars in economic activity. The County looks forward to the
integration of these airports into the regional transportation system.

20. The San Diego County Regional Airport Authority adopted Airport Land Use Compatibility
Plans for the eight airports, which included land use compatibility policies related to airspace,
noise, safety and overflight. Those policies have been adopted by the County of San Diego
through its General Plan and Zoning Code. After evaluating the forecasted increases in
housing and jobs around the Mobility Hubs, there are several land use assumptions related
to safety and noise around Fallbrook Airpark, Jacumba Airport, Gillespie Field and McClellan-
Palomar Airport that County staff would like to better understand. For example, there are
forecasted incompatible housing increases within the Runway Protection Zones at Gillespie
Field. These inconsistencies could result in the assumed intensities and densities increases
being unachievable.
ATTACHMENT B
2021 REGIONAL PLAN PROPOSED MOBILITY HUB EXPANSION AREAS

The Regional Plan will focus future investment, development, and growth in centralized areas referred to as "mobility hubs." There are locations in the unincorporated area that the County has forecasted for future growth, which included already designated Regional Housing Needs Assessment (RHNA) sites, and are located within close proximity to a proposed mobility hub. The County would like to work with SANDAG to consider the expansion of proposed mobility hubs to include additional unincorporated north and east county communities. As indicated in Figure 1, these proposed expansions include areas in North County Metro, Lakeside, and Spring Valley. Additional details for these three mobility hub expansions are provided below.

The North County Metro community is located between the proposed Vista and San Marcos mobility hubs. Expansion of the San Marcos mobility hub could include the Buena Creek Sprinter Station and additional housing units, including multiple RHNA sites.

Lakeside has multiple areas that are identified as efficient areas compared to the regional vehicle miles traveled (VMT) average. These areas are located immediately adjacent to the proposed El Cajon mobility hub. Expansion of the El Cajon mobility hub could include these VMT efficient areas as well as potentially including additional growth areas in Lakeside along the I-8 corridor.

Spring Valley is located east of the proposed Lemon Grove mobility hub and south of the proposed La Mesa mobility hub. This community has existing transit access along Jamacha Boulevard and is in close proximity to the MTS Trolley stations in Lemon Grove. Expansion of this mobility hub could include the Spring Valley areas near SR-125 and along Jamacha Boulevard.
October 11, 2021

Kirsten Uchitel  
Associate Planner  
SANDAG  
401 B Street, Suite 800  
San Diego, CA 92101  

Sent via email to: RegionalPlanEIR@sandag.org

RE: REQUEST FOR COMMENTS ON THE DRAFT PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT FOR SAN DIEGO FORWARD: THE 2021 REGIONAL PLAN FOR SANDAG

Dear Ms. Uchitel,

The County of San Diego (County) staff reviewed SANDAG’s Draft Programmatic Environmental Impact Report (Draft PEIR) for “San Diego Forward: The 2021 Regional Plan,” dated August 2021. County staff provided detailed comments regarding the 2021 Regional Plan (Proposed Plan) in a letter previously submitted to SANDAG. The letter, dated August 6, 2021 (Attachment A), outlined opportunities within the Proposed Plan for which County staff requested further clarification, exploration, and consideration. County staff would like to continue discussions with SANDAG on how these opportunities align with the objectives of the proposed plan and the Draft PEIR.

To ensure that potential opportunities within the unincorporated area are not precluded in the future, County staff requests that SANDAG consider the comments below on the Draft PEIR and that any necessary refinements be reflected in Chapter 2, Project Description, and analyzed in the appropriate sections of the Final PEIR. County staff appreciates the opportunity to review the Draft PEIR for the Proposed Plan and offers the following comments for your consideration:

GENERAL

1. The Draft PEIR (Table 2-5) notes that 56% (1,855,597 out of 3,309,510 total people) of San Diego County residents are currently located outside of a Mobility Hub Network, including 512,597 people in the unincorporated area. With the significant investment described in the Proposed Plan, County staff would like to ensure that it is fairly and equitably distributed for the benefit of all County residents, including rural residents living in unincorporated communities.
2. Staff recommends the inclusion of potential investments in roads identified in the County’s Mobility Element and in the Regional Arterial System that would further connect the unincorporated area to proposed mobility hubs, with consideration of those roads that also serve as evacuation routes.

3. Staff would also request consideration of how transit can be aligned with recreation access points to increase access to these important regional amenities.

4. The Proposed Plan focuses on mobility and land use changes that would serve three primary user groups: pedestrians, bicyclists, and vehicles. Please consider updating the analysis to consider mobility needs for wildlife (wildlife corridors) and for equestrians where appropriate.

5. From a social equity standpoint, please consider if allowing single occupancy vehicles should be permitted in managed lanes. Allowing single occupants that can afford to travel in managed lanes will create some inequities in the community.

AIRPORTS

1. The San Diego County Regional Airport Authority adopted Airport Land Use Compatibility Plans for the eight airports, which included land use compatibility policies related to airspace, noise, safety, and overflight. Those policies have been adopted by the County of San Diego through its General Plan and Zoning Code. After evaluating the forecasted increases in housing and jobs around the Mobility Hubs, there are several land use assumptions made in the Proposed Plan related to safety and noise around Fallbrook Airpark, Jacumba Airport, Gillespie Field, and McClellan–Palomar Airport that County staff would like to better understand. For example, there are forecasted incompatible housing increases within the Runway Protection Zones at Gillespie Field. Those inconsistencies could result in making the assumed intensities and density increases included in the Proposed Plan unachievable.

AESTHETICS AND VISUAL RESOURCES

1. Page 4.1-10 of the Draft PEIR mentions the County of San Diego Dark Sky Ordinance and associated regulation of outdoor light fixtures within 15 miles of local observatories. This ordinance also includes the minimization of light pollution to reduce impacts to wildlife. Please consider expanding the analysis to address direct and indirect impacts due to light and glare on open space lands and wildlife corridors/linkages.

2. It is not clear what type of trees and vegetation will be used to replace impacted vegetation in cases where vegetation disruption causes potential aesthetic impacts (Mitigation Measures AES-2a, 2b, AES-3a). Mitigation Measure BIO-1e specifies that certain invasive species shall not be used to replace impacted vegetation. Please consider adding that same requirement to the Aesthetic/Visual Resources mitigation measures in the Draft PEIR.
BIOLOGICAL RESOURCES

1. Please clarify the significant reduction in acreages impacted between the 2015 EIR and the 2021 Draft EIR, especially as they relate to Wetlands and Riparian Habitat, Upland Habitat, Agricultural Land, and Transportation. The differences do not appear to correlate with the changes or updates made between the 2015 and 2021 Regional Plan.

2. On January 13, 2017, County staff submitted comments to SANDAG on the Notice of Preparation (NOP) of the Regional Plan Draft PEIR (Attachment B). In that letter, the County requested that SANDAG coordinate with County staff and evaluate in the Draft PEIR potential direct and indirect impacts on the Multiple Species Conservation Plan (MSCP). The comments related to the MSCP still stand (Attachment B). As such, it is not clear how the Proposed Plan would impact the MSCP, or if there is specific mitigation proposed to reduce these impacts. Please consider updating the analysis to clarify these potential impacts and associated mitigation.

3. Please ensure that maps are using the latest GIS data available from SanGIS, which is regularly updated. For example, the maps showing Open Space Parks and Recreation land (Figures 4.15-1 and 4.15-2) seem to be missing some of the County’s Department of Parks and Recreation properties. Please ensure all references to County Department of Parks and Recreation properties are updated throughout the 2021 Draft PEIR.

4. Please consider including County parks and preserves and associated proposed project impacts to each specific park and preserve within the Draft PEIR; data on County parks and preserves can be found on SanGIS. For example, on Page 4.4-107, it states that the largest area of encroachment and associated impacts would occur on the Otay Ranch Preserve. However, the level and extent of that potential impact is not clear. Please coordinate in advance with the County Department of Parks and Recreation prior to implementation of projects that may have impacts to County parks and preserves.

5. The figures within the Draft PEIR do not show property ownership overlayed with the proposed project. To better understand and analyze potential impacts of the project, please consider the inclusion of a figure that shows County parks and preserves.

6. Please consider revising “Hardline Preserve” to “MSCP Preserve” throughout the Draft PEIR, as MSCP Preserve is the term most commonly used.

7. In Table 4.2-2 and Table 4.4-6, Otay Ranch and the associated General Development Plan/Subregional Plan are categorized as falling under the jurisdiction of the City of Chula Vista. While the text clarifies that Otay Ranch is jointly owned and managed by the City of Chula Vista and the County, the categorization in the tables is unclear. Please consider revising the tables to show the joint ownership and management of this area.

8. Figure 4.4-16, San Diego Conservation Planning Areas and Conserved Lands, does not appear to be consistent with the Subarea Plans under Adopted MSCP/MHCP Subregional Plans listed in Table 4.4-5. Please consider revising these to show all Subarea Plan Areas.

9. On page 4.4-107, Section BIO-4 Analysis Methodology, please consider updating the methodology to take into consideration requirements of the Public Park Preservation Act of
Ms. Uchitel  
October 11, 2021  
Page 4

1971 (Public Resources Code Sections 5400-5409). In the event the Proposed Plan results in "take" of any County MSCP Preserve Lands, this would be considered "take" of designated park land and may require land or other compensation for loss of park land.

10. In Figures 4.4-3 through 4.4-8, one of the data sources for these figures is stated as the County of San Diego’s SanBios data from 2017. Please consider using the County of San Diego’s SanBios data through 2020, as this contains updated data.

11. Table 4.4-5 states that the County is pursuing an amendment to the South County Subarea Plan to include the Quino checkerspot butterfly (QCB). Please remove reference to QCB as the County has expanded the project to the Regional Butterflies Habitat Conservation Plan (RBHCP) to include a comprehensive approach that would cover QCB, Harbison’s dun skipper, Hermes copper, and the Laguna Mountains skipper.

a. Additionally, the RBHCP in currently being developed and has not yet been adopted. Therefore, reference to the RBHCP may not need to be included in Table 4.4-5 related to adopted regional conservation plans. Please consider removing the reference.

12. Given the significance and regional importance of wildlife corridors and wildlife linkages, please consider updating the analysis to consider areas where linkages and corridors could be impacted by the Proposed Plan and any mitigation measures that could be implemented to improve wildlife linkages.

13. Spread of invasive plants is a significant regional issue that many land managers face throughout the San Diego region. County staff supports Mitigation Measure BIO-1e, which would require a prohibition on planting or seeding of invasive species that appear on the most recent version of the California Invasive Plant Council California Invasive Plant Inventory. Please consider inclusion of an integrated invasive plant control plan with enforceable protocols for maintenance, construction, and emergency activities to follow when working within and moving between important habitat areas.

14. Section 4.4 has a description of the TransNet Environmental Mitigation Program (EMP) and states that the EMP provides funding for the acquisition, restoration, and management costs for the implementation of local Natural Community Conservation Plans (NCCPs). The EMP or other funding from TransNet may not provide a long-term regional funding source for conservation, including funding for the acquisition or ongoing management and monitoring. Please consider updating the PEIR to clarify that an adequate regional funding source has not yet been identified or put in place, which leaves local jurisdictions responsible for securing ongoing funding to implement local NCCPs.

CULTURAL RESOURCES

1. Please consider associated potential impacts on County parks and preserves related to cultural and historical resources. Staff understand that this is a PEIR, so please include the maximum possible area of impacts. Please coordinate in advance with the County Department of Parks and Recreation prior to implementation of projects that may have impacts to County parks and preserves and associated cultural and historical resources.
GEOLOGY, SOILS AND PALEONTOLOGY

1. The Grading and Erosion Regulations section does not identify and summarize applicable grading and erosion control ordinances. Applicable regulations are generally referenced to support a less-than-significant determination for thresholds (e.g. GEO-3, Result in Substantial Soil Erosion or the Loss of Topsoil). The County’s Grading Ordinance appears to only be referenced within the context of paleontological resources. Please consider also referencing the County’s Grading Ordinance in the Grading and Erosion Regulations section.

2. Please consider revising Table 4.7-3 to reference the County of San Diego General Plan Goals S-8 and S-9. Local Policies Concerning Geologic and Seismic Hazards references Goal S-7, but it should read “The San Diego County General Plan Goal S-8 and S-9 in the Safety Element requires minimized personal injury and property damage resulting from seismic hazards, and damage caused by mudslides, landslides, or rock falls.”

3. Within Table 4.7-4, Local Policies Concerning Unique Geological and Paleontological Features, for the County of San Diego, please consider including the following: “COS-9.1 Preservation. Require the salvage and preservation of unique paleontological resources when exposed to the elements during excavation or grading activities or other development processes.”

4. The Draft PEIR states “there would be development on soils incapable of supporting septic tanks or Onsite Wastewater Treatment Systems (OWTS).” However, the analysis also states that through future corrective measures/regulatory requirements, impacts to groundwater would be less than significant. Please consider adding a discussion of which regulations would be applicable and how those regulatory requirements would ensure that there would be no adverse groundwater impacts.

GREENHOUSE GAS EMISSIONS

1. On January 13, 2017, the County submitted comments to SANDAG on the Notice of Preparation (NOP) of the Regional Plan Draft PEIR (Attachment B). At the time of these comments, the County was in the process of preparing the 2018 Climate Action Plan (CAP). Since the release of the NOP and submittal of these comments, County staff is now preparing a CAP Update that will set new greenhouse gas (GHG) emissions targets and identify measures to reduce GHG emissions in the unincorporated area. County staff would like to work collaboratively with SANDAG on the Proposed Plan to identify an efficient and cleaner multi-modal transportation system that reduces vehicle miles traveled for unincorporated area residents by providing mobility options, which would reduce greenhouse gas emissions, and improve air quality for all residents in the region (Attachment A). County staff requests that SANDAG consider the comments provided previously and listed below in the Draft PEIR.

   a. Analyze alternatives that address multi-modal transportation options for the unincorporated county, particularly as it relates to transit service and alternative fuel infrastructure. County staff would encourage SANDAG to consider extending the benefits of mobility hubs and transit leap opportunities to unincorporated communities in which these services do not currently exist.
b. Analyze whether the developed/urban communities within the unincorporated county meet the Urban Area Transit Strategy. The Urban Area Transit Strategy, considered in the previous 2050 Regional Transportation Plan, is not considered in this Proposed Plan and is replaced with broad concepts of Mobility Hubs. County staff is supportive of these efforts to centralize mobility investments for all users in urbanized areas. However, staff would encourage SANDAG to consider in the project description and analysis the potential for mobility hubs concepts that can be applied to unincorporated area communities that are not currently identified as being within and benefiting from mobility hubs and associated investments (Attachment A).

c. Analyze an environmentally sustainable transportation system that can reduce vehicle miles traveled, gasoline consumption, and GHG emissions, while providing alternative modes of transportation for all economic sectors of our population. County staff continues to encourage SANDAG to consider and identify sustainable transportation systems and strategies that can reduce vehicle miles traveled and GHG emissions from residents in unincorporated communities. For example, extending existing transit routes and reducing headways to increase transit service to unincorporated communities will encourage increased ridership, reduce vehicle trips, and will assist in decreasing GHG emissions.

d. The County requests that SANDAG staff coordinate with County staff to ensure that the most recent planning assumptions are incorporated in the transportation models and growth forecasts. It is not clear what projects or plans were considered and incorporated into the Proposed Plan modeling. However, there are some areas in which inconsistencies appear between approved development projects in the unincorporated area and projected growth identified in the Proposed Plan modeling. County staff relies on SANDAG population, housing, and job growth forecasts for planning efforts. As recently as July 2021, long-range planning efforts, such as the County’s Housing Element Update, have relied on forecasts that project future housing growth in the unincorporated area of 50,184 new units between 2018 and 2050. These prior projections are significantly greater than the forecasted growth of 7,419 units during a similar time period in the Proposed Plan. Further, historic data shows that from 2010 to 2020, 7,330 new homes were built in the unincorporated area. If that trend continued, an additional 22,000 new homes would be built in the unincorporated area by 2050. County staff would appreciate continued coordination with SANDAG staff to ensure the most recent planning assumptions and projects are considered.

2. Based upon a review of the Draft PEIR, County staff encourages continued collaboration with SANDAG to ensure the most recent planning and land use assumptions (including approved development projects or those that are under construction) are reflected in regional modeling and growth forecasting. Through continued collaboration, the County can support the vision of the Proposed Plan by developing the CAP Update and related efforts based on similar assumptions and goals.

HAZARDS AND HAZARDOUS MATERIALS

1. Within Table 4.9-1 Major EnviroStor Hazardous Waste and Substances Sites in the San Diego Region, the list of sites does not appear to match the current Cortese list on the Department of Toxic Substances Control’s (DTSC) website. Please consider adding a figure
to show where these sites are in relation to proposed land use changes and transportation improvements.

2. Threshold HAZ-1 seems to apply specifically for potential release of hazardous materials during pre-construction, demolition, or construction activities. However, the analysis in this section also discusses the potential for releases during operational activities. Please consider updating the mitigation measure to reduce the risk of hazardous materials releases during project operation.

HYDROLOGY AND WATER QUALITY

1. Please consider augmenting the analysis to consider potential water quality impacts that could affect sensitive wildlife species and their associated habitats.

LAND USE

1. The County’s *Community Trails Master Plan* identifies multiple regional trails that are regional resources, as they would benefit residents and visitors throughout the region. Please consider how the potential transportation and land use changes could impact the connectivity of these regional trails. The County also requests that SANDAG consider further coordination with the County Department of Parks and Recreation during implementation of the Proposed Plan when potential regional and community trail impacts are anticipated. Additionally, please consider working with County staff to look for further opportunities to provide trail connections during implementation of transportation infrastructure projects where feasible.

PUBLIC SERVICES AND UTILITIES (RECREATIONAL FACILITIES)

1. Within the Section “County and City General Plans,” please consider adding the County’s Parkland Dedication Ordinance, Community Trails Master Plan, and County of San Diego Parks Master Plan to the Draft PEIR, as these are all resource documents that discuss regional trail and recreation facilities.

2. Page 4.15-42 and Page 4.15-45, Section REC-1:

   a. 2025
      i. The Regional Growth and Land Use Change section states that “As noted under Threshold PS-1, approximately 78.8 percent of the 2025 population growth would occur within the City of San Diego, City of Chula Vista, and City of Escondido.” Of the remaining 21.2 percent, it is unclear what portion is anticipated within the unincorporated County area. Please consider revising the PEIR to further clarify this.
      ii. Transportation Network Improvements and Programs section: Please consider adding a table showing areas of impacts to recreational facilities belonging to or within the County’s jurisdiction. The PEIR does not appear to specify which County of San Diego Recreational Facilities are impacted by the proposed project.
b. 2035

i. As with the comment above under “2025,” please consider revising the Regional Growth and Land Use Change section to show the percentage breakdown within the unincorporated area of the county.

ii. This section also states, "Between 2026 and 2035, the majority of the open space conversions would occur as a result of growth and land use change in the Warner Springs area shown in Figure 4.15-2, which would convert 275 acres of open space parks to spaced rural residential use." However, the analysis does not appear to explain the potential impact associated with this proposed loss of open space/park land. It should also be noted that this project is not yet approved and therefore may not result in open space conversion for additional growth and land use change(s). Please consider updating the analysis to take this into consideration and to further clarify and explain potential impacts.

3. Page 4.15-47, under REC-1 Implement Mitigation Measures Parks and other Recreational Facilities, please specify and/or provide information on the impacted facilities within the unincorporated areas of the county. Are there impacts to existing parks, campgrounds, trails, etc.? Please also consider including details of impacted County of San Diego facilities within the environmental document.

4. In the Pedestrian Facilities section of the Draft PEIR it states, "It should be noted that trail facilities are also considered part of the pedestrian network. The trail facilities within the San Diego region are further described and analyzed in Section 4.15, Public Services and Utilities, of this PEIR, along with other recreational facilities." Section 4.15 Public Services and Utilities further explains the trail facilities. However, the information is limited in that it only references the California Coastal Trail. Trails are an important aspect of the regional transportation network. Please consider updating the analysis to include existing trails and pathways and include this information as part of the pedestrian facilities assessment. The County’s existing Community Trails Master Plan may be used as a reference document regarding regional trails.

TRANSPORTATION

1. If the boundaries of the proposed mobility hubs are not intended to be static, please include narratives and/or graphics to further clarify that the boundaries are not absolute.

2. County staff recommends that any 5 Big Moves pilot program or case study include and/or consider the unincorporated area (i.e. Flexible Fleet Strategic Plan).

3. Please coordinate with County staff in advance of transportation plans that go through or near County properties and facilities.

4. Regarding page 4.16-34, 4.16.3 SIGNIFICANCE CRITERIA, TRA-1 Conflict with a program, plan, ordinance, or policy addressing the circulation system, including -transit, roadway, bicycle, and pedestrian facilities:
Ms. Uchitel  
October 11, 2021  
Page 9

a. 2025: **Transportation Network Improvements and Programs**, under Pedestrian (page 4.16-34). Table 4.16-8 shows a Pedestrian Analysis table showing average daily walking trips, walking mode share, and average length of walking trip. It is unclear as to whether these include an assessment of trail system(s) and trail facilities. Please consider including trails as a part of this analysis.

b. 2035: **Transportation Network Improvements and Programs**, Same comment as 2025 above.

c. 2050: **Transportation Network Improvements and Programs**, Same comment as 2025 above.

Thank you again for the opportunity to comment on the Draft PEIR. County staff looks forward to continued discussions with SANDAG on how we can work together to better ensure that consideration is given to future investments and incentives that would result in expanded options for transit, active transportation, and shorter and fewer automobile trips. If you have any questions regarding these comments, please contact Luis Duran, Land Use/Environmental Planner, at (619) 214-4696, or via e-mail at luis.duran@sdcounty.ca.gov.

Sincerely,

*Lynnette Tessitore*  
Chief, Long Range Planning Division  
Planning & Development Services

cc: Rosa Olascoaga, Policy Advisor, Board of Supervisors, District 1  
Gregory Kazmer, Land Use Director, Board of Supervisors, District 2  
Cody Petterson, Policy Advisor, Board of Supervisors, District 3  
Emily Vier, Policy Advisor, Board of Supervisors, District 4  
Benjamin Mills, Policy Advisor, Board of Supervisors, District 5  
Luis Pallera, CAO Staff Officer, LUEG  
Luis Duran, Land Use/Environmental Planner, PDS  
Sue Waters, Land Use/Environmental Planner, DPW  
Crystal Benham, Group Program Manager, DPR  
Emmet Aquino, Park Project Manager, DPR
January 13, 2017

Andrew Martin  
Senior Regional Planner  
SANDAG  
401 B Street, Suite 800  
San Diego, CA 92101  

Via email to: Andrew.martin@sandag.org

COMMENTS ON THE NOTICE OF PREPARATION OF A PROGRAM ENVIRONMENTAL IMPACT REPORT FOR SAN DIEGO FORWARD: THE REGIONAL PLAN

Dear Mr. Martin,

The County of San Diego (County) has reviewed the Notice of Preparation for the San Diego Forward Regional Plan Program Environmental Impact Report (PEIR). We appreciate the opportunity to provide input for SANDAG’s consideration. The County offers the following comments.

TRAFFIC/TRANSPORTATION

The County is currently developing an Active Transportation Plan (ATP) for the unincorporated communities of the county. The ATP will integrate and update several existing plans and documents into a single plan. The ATP will serve as a master plan and policy document to guide the development and maintenance of active transportation infrastructure including sidewalks, pathways, multi-use trails, and bikeways; the ATP will include the Safe Routes to School programs for the unincorporated county. Additionally, the ATP is expected to be one of the implementation measures for the County’s Climate Action Plan. Please consider identifying transit improvements and ATP and Transportation Demand Measures (TDM) in the SANDAG Regional Plan and PEIR which will assist the rural unincorporated areas in meeting the region’s greenhouse gas (GHG) emission goals.
AIRPORTS

Incorporating the Regional Aviation Strategic Plan (RASP) and Airport Multimodal Accessibility Plan (AMAP) assumptions into the development of the Regional Plan is an important part of planning for the region’s future transportation needs. Aviation travel is expected to grow substantially according to projections from the San Diego Regional Airport Authority and SANDAG. Please consider prioritizing the ground transportation network surrounding McClellan-Palomar and Gillespie Field airports to accommodate increased demand as San Diego International Airport nears operational capacity.

CLIMATE CHANGE AND GREENHOUSE GAS

The County is currently developing a Climate Action Plan for the unincorporated county. The largest GHG emission source in the region is the Transportation Sector. The County looks towards the Regional Plan to lead the efforts in reducing GHG emissions in the Transportation Sector. The recommendations noted are important for the local jurisdictions in meeting their share of the region’s GHG emission reductions. The County and SANDAG, working collaboratively on the Regional Plan, can move towards an efficient and cleaner multi-modal transportation system. As it relates to SANDAG's Regional Plan, the County requests the following be considered:

a. Analyze alternatives that address multi-modal transportation options for the unincorporated county, particularly as it relates to transit service and alternative fuel infrastructure;

b. Analyze whether the developed/urban communities within the unincorporated county meet the Urban Area Transit Strategy;

c. Analyze an environmentally sustainable transportation system that can reduce vehicle miles traveled, gasoline consumption, and GHG emissions, while providing alternatives modes of transportation for all economic sectors of our population;

d. Clarify whether the Regional Plan GHG emission reductions will be consistent with the Air Resources Board (ARB) 2030 Target Scoping Plan; and

e. SANDAG's 2015 Regional Transportation Plan incorporated the County's 2011 General Plan Update Land Use and Mobility Elements. Since 2011, the County has adopted several general plan amendments (GPA) to the 2011 General Plan. The County requests that SANDAG staff coordinate with County staff to ensure that the adopted GPAs are incorporated in the transportation models and growth forecasts for the Regional Plan and PEIR Analysis.
Mr. Martin
January 13, 2017
Page 3

MULTIPLE SPECIES CONSERVATION PLAN (MSCP)

The proposed Regional Plan covers areas that are critical to the County’s Multiple Species Conservation Program (MSCP), both North and South County plans—including the assembly of a Preserve in each. The South County Subarea Plan was adopted in 1997; and the North County Plan is currently in development. As the Regional Plan encourages projects that are consistent with an SCS that achieves GHG reductions, we would anticipate that the PEIR would analyze the effects of the proposed Regional Plan on the MSCP South and North County plans, the assembly of the Preserve and full implementation of the plans. Any effect (direct or indirect) of the Regional Plan on the MSCP should be evaluated (and mitigated, if necessary). SANDAG staff should coordinate with County staff to best determine how to evaluate the MSCP South and NC Plan in the upcoming Regional Plan and PEIR.

PARKS AND RECREATION

The County’s trails and pathway network provides safe, secure, healthy, affordable, and convenient travel choices between the places where people live, work, and play while reducing use of personal vehicles, thereby reducing GHG emissions. Please consider incorporating a discussion of the County’s Community Trails Master Plan and encourage investment in trails and pathways that connect people with places where they live, work, and play.

VECTOR CONTROL PROGRAM

The County’s Vector Control Program (VCP) is responsible for the protection of public health through the surveillance and control of mosquitoes that are vectors for human disease including West Nile virus (WNV). The VCP has completed their review and has the following comments regarding the Regional Plan.

1. The VCP requests that when implementing transportation projects or components of the environmental mitigation program, impacts from possible mosquito breeding sources are considered. Any area that is capable of accumulating and holding at least ½ inch of water for more than 96 hours can support mosquito breeding and development.

2. For your information, the County’s Guidelines for Determining Significance for Vectors can be accessed at http://www.sandiegocounty.gov/content/dam/sdc/pds/docs/vector_guidelines.pdf.

Mr. Martin  
January 13, 2017  
Page 4

The County looks forward to receiving future documents and/or notices related to this project and providing additional assistance at your request. If you have any questions regarding these comments, please contact Danny Serrano, Land Use / Environmental Planner at (858) 694-3680, or via email at daniel.serrano@sdcounty.ca.gov.

Sincerely,

MARY KORASKIE, Chief  
Advance Planning Division  
Planning & Development Services

Email cc:  Michael De La Rosa, Policy Advisor, Board of Supervisors, District 1  
Adam Wilson, Policy Advisor, Board of Supervisors, District 2  
Dustin Steiner, Chief of Staff, Board of Supervisors, District 3  
Adrian Granda, Policy Advisor, Board of Supervisors, District 4  
Melanie Wilson, Policy Advisor, Board of Supervisors, District 5  
Vincent Kattoula, CAO Staff Officer, LUEG  
Nick Ortiz, Project Manager, PDS  
Everett Hauser, Transportation Specialist, PDS  
Bulmaro Canseco, Planner, PDS  
Jeff Kashak, Planner, DPW  
Richard Chin, Associate Transportation Specialist, DPW  
Eric Lardy, Chief, Community Health Division, DEH
Guest commentary: The road user charge has a place in our future transportation planning — at least for now

This guest commentary presents my personal opinions and does not necessarily reflect the views of my city or city council colleagues. (1, see bottom)
**We need to reduce greenhouse gas (GHG) emissions:** San Diego needs to reduce GHG emissions for our future survival and quality of life, and to avoid severe state and federal penalties if we don’t. Transportation is the largest source of GHG emissions in our region at about 40% so we need to work on that sector.

**The solution is a revamped transportation system:** SANDAG has a comprehensive plan (see bottom) to do just that. It includes road and freeway projects, new rail service, improved bus service, accommodation for autonomous vehicles, support for electric vehicles, transit to serve work and other commuters, first and last mile options, bicycle and walking projects, environmental enhancements, and more. It will reduce our GHG emissions and meet local, state, and federal requirements. It will improve transportation options for everybody, reduce commute times, improve air quality, reduce congestion, and improve all aspects of our quality of life.

**The challenge is money:** What does it cost and how will we pay for it? $160 billion over the next 30 years is the cost estimate. Before you choke on that number, recognize that it is estimated that climate change left unaddressed will cost the U.S. $2 trillion per year (see bottom). So, think of the RTP in terms of its avoided costs. From a cost benefit point of view it’s our least expensive option.

Payment strategies proposed in the RTP include a series of 1 or ½ cent sales tax ballot measures, use of TRANSNET funds, and federal and state funds. Nobody likes more taxes, but they will be subject to vote on the ballot. San Diego County voters already, twice, approved TRANSNET taxes to improve our transportation system. San Diegans know how to vote “yes” for a good plan and we know how to vote “no” on a bad one.

**The Road User Charge or RUC.** The RUC has garnered more attention than it deserves. Of the $160 billion RTP price tag the RUC would account for only about $14 billion or 9%. So, what is it and why is it so controversial?

**A RUC is a charge by mile to use the road system.**
—**Current gas taxes are a RUC.** While we may not call it a RUC, current gas taxes (5.6% or about 54 cents a gallon at current prices) are a form of RUC. You pay these taxes every time you fill up for the right to drive our road systems. The funds are used to improve and maintain our roads. The more you drive the more you pay. Toll roads are also a current form of RUC. RUCs are not new.

**Problems with gas taxes.**

—*We are transitioning to electric vehicles.* Transitioning away from gas to EV cars and trucks is a good thing. But, EVs don’t buy gas so they don’t pay gas taxes. Currently, they use the road system for free. Gas taxes to build and repair roads are declining and are not a sustainable source to take care of our roads.

—**Gas taxes are inequitable.** Even used EVs are expensive. It is the well healed who can afford Teslas and other EVs. It’s the middle class and working poor who are stuck paying gas taxes with older, poor mileage, gas burners. Why would we burden this sector with the sole cost of road maintenance? That’s wrong on many levels.

**The solution: Replace gas taxes by transitioning to a system where everyone, including EVs, pays as they drive. That’s called a Road User Charge.**

—Such a system restores equity and sustainability. EV drivers and gas burners all pay to maintain our road system based on how much they use the road system. That’s sustainable and it’s fair.

—Gas taxes will continue to decline as more and more EVs take to the road. Those taxes need to be replaced if we value our road systems. Some type of RUC can be the answer. Done right, the overall cost to drive will go down as we replace gas taxes with lower user charges under a system where everyone pays a fair share including wealthy EV drivers.
—Nobody supports the current gas tax system plus a RUC on top, yet that is what some opponents would have you believe. These opponents create a straw man and then show it no mercy! A more productive discussion addresses what is actually proposed: developing a RUC that will work in San Diego to transition away from gas taxes to a system where everyone pays and the overall cost of driving for everyone can go down.

**The RUC in the plan is a placeholder.** The RUC in the RTP is a conceptual placeholder to pay for a small part (9%) of overall RTP costs.

—It’s only a concept. We can’t implement a RUC without state legislation that doesn’t exist.

— If the state authorizes RUCs in the future, we will figure out the specifics of a RUC that will work for San Diego. That’s what the RTP proposes. If we can’t build consensus we can drop it or the voters can reject it.

— It’s a mistake to take it off the table now before we even know what it will be.

I support the RUC concept set out in the RTP. I support studying it and developing specifics. Will I support its implementation? I can’t say until we put flesh on the proposal. If it shows me that, overall, driver costs will come down, it is more equitable, and is sustainable, I will support it. If not, I won’t.

Let’s be realistic. If we want to meet climate goals and avoid state and federal penalties we need a plan like the RTP and a way to pay for it. Let’s keep the RUC on the table for further study.

1. *Dwight Worden is the current Mayor of the City of Del Mar and is a retired land use, environmental, and government attorney.*

2. *The 2050 Regional Transportation Plan or RTP adopted in December 2021.*

OPINION

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ARTS & ENTERTAINMENT

The not-so-silent nights of a John Waters Christmas

EVENTS

Solana Beach Friends of the Library to present a musical evening

EVENTS

Dec. 1: Local and regional events
Appendix F.3

Attached References to Comments on the Draft SEIR
References provided by Mike Bullock
Resolution 22-01

Resolution of the Oceanside Bicycle and Pedestrian Committee in Support of Replacing the State Gas Tax with a Means-Based Road Use Charge (RUC) that Protects Privacy

WHEREAS, (1) Greenhouse gas (GHG) emissions must be significantly reduced by 2030 to mitigate a climate catastrophe; (2) about 40% of California’s GHG is emitted by on-road vehicles; and (3) even given the most ambitious estimates for fleet efficiency and fleet electrification, to support climate-stabilization requirements, it will be necessary to reduce per-capita driving; and furthermore,

WHEREAS, (1) California’s current road-use fees (our gas tax, our toll roads and our bridge-use tolls) do not currently cover the full cost of operating and maintaining roads, and gas tax revenues are projected to further decrease as vehicles become more efficient and/or electric powered; (2) having the full cost of motor vehicle road use hidden from users decreases incentives to bicycling and walking, thereby increasing driving and, thus adding significantly to air pollution, congestion, sprawl, and GHG emissions; (3) an assessment conducted by the California Transportation Commission (CTC) found that 58 percent of our state’s roads are in need of maintenance, 20 percent of our bridges need major or preventive maintenance, and 6 percent of our bridges require replacement; (4) roads and bridges are our most important cycling infrastructure; and (5) a RUC has been shown to be feasible by the CTC; and finally,

WHEREAS, (1) our gas tax is our most significant road-use fee; (2) state-mandated increases in battery-electric vehicles will reduce gas-tax revenue; (3) a gas tax is inherently regressive because low-income drivers tend to drive older, less fuel-efficient cars; and (4) a gas tax does not account for time, place, driver income, vehicle weight, vehicle pollution level, or instantaneous roadway congestion.

THEREFORE, BE IT RESOLVED, that the Oceanside Bicycle and Pedestrian Committee supports replacing the state gas tax with a road-use charge (RUC) pricing and payout system that (1) would cover all road-use costs; (2) would protect the economic interests of low- and middle-income drivers by use of a progressive price structure that also recognizes the needs of rural drivers; (3) would protect privacy by requiring a search warrant to obtain location or travel information and has built in safeguards against unauthorized data use; (4) would include an instantaneous congestion-pricing algorithm; (5) would ensure that the per-mile price incentive to drive energy-efficient cars would still be sufficient to support necessary fleet electrification; (6) would ensure that cyclists and pedestrians are not charged under the system, given that they contribute no emissions or wear-and-tear on the road system, and they help alleviate congestion.

BE IT FURTHER RESOLVED, that this support be communicated to the City of Oceanside.

Approved by a majority vote of those present at the March 14, 2022 Committee Meeting:

[Signature]
Tom Lichterman, Chairman

[Signature]
March 14, 2022
Date
November 17, 2021

SANDAG Board of Directors
401 B Street
San Diego, CA 92101

RE: Road Use Charges

Dear Chair Blakespear and SANDAG Board Members:

Recently there has been some public discussion of a proposed Road Use Charge (RUC), also known as a Vehicle Miles Traveled Fee (VMTF) included in the funding discussion in the current draft of the Regional Plan. The undersigned members of the Quality of Life Coalition support the concept of a Road Use Charge as part of a funding solution for transportation projects. We believe that a revised RUC would be more effective and equitable than current approaches to transportation funding, as explained below.

First, it is important to acknowledge that we already have a road use charge, known as the gas tax. There are both state and federal excise taxes included in the price we pay for gasoline and diesel fuel. These taxes have been in place for many years. Originally, they covered much of the cost of building and maintaining roads. However, because they were defined as cents per gallon, they failed to keep pace with inflation, and their real value has been steadily declining. They now cover only about one third of the costs of building and maintaining our road network. The rest of the cost must be taken from other tax revenue such as income, property, and sales taxes.

When the gas tax was first imposed, it was a reasonable approximation of road use. People who drove more, or who drove heavier vehicles, paid more. As fuel economy started to improve after the oil price shocks of the 1970’s, the gas tax became less equitable as drivers of newer, more efficient cars paid less, and drivers of less efficient cars paid more.

That gradual decline in both equity and effectiveness was accelerated by the introduction of hybrid cars, which saw huge gains in fuel efficiency, and finally completely upended by the introduction of all-electric cars. Drivers of plug-in battery electric cars pay no gas tax at all, although they continue to contribute to wear and tear of the road network.

The current system is patently unfair and unsustainable. Roads are expensive and must be maintained. Gas tax revenue will continue to decline toward insignificance, even as the cost of maintaining our
highway network continues to rise. Drivers of older internal combustion engine (ICE) cars will be paying a larger and larger share of the costs.

Transportation planners at the Federal Government and many states, including California, are looking at potential ways to implement an equitable revenue stream to replace the current falling gas taxes. It is clear that some other form of Road Use Charge will need to be implemented to replace the current Gas Tax RUC.

Various approaches are under consideration, but there is not currently a detailed proposal to replace the existing system. Opponents are citing various “issues” based on speculation about what a system might look like. We believe that it is more important to identify the characteristics that would be desirable in a replacement for the current RUC.

Here are some suggestions about what a replacement RUC should do:

**Equity**

Low-income drivers tend to drive older, less fuel-efficient cars, and therefore pay for a disproportionate amount of road maintenance and repair. On the other hand, EVs are expensive and inaccessible for many, and will be accessed first by higher-income drivers, who will avoid paying for road maintenance and repair under the current gas tax system.

The RUC should cover a substantial fraction, but not all, of the costs. Everyone benefits from having a network of roads, including people who never drive on them, so some of the cost should be covered by general revenue.

The RUC implementation should allow for adjustments for a variety of factors to ensure fairness.

All road users should pay their fair share of the costs. The RUC should be based on the number of miles driven, and not how the vehicle is powered. Heavier vehicles cause more road wear and damage, so they should pay more.

**Local Control**

A portion of the RUC should be collected and disbursed locally, not at the whim of politicians in Sacramento or DC. SANDAG is best positioned to collect and distribute local RUC proceeds because they are governed by the Board members, who are accountable to the voters.

**For More Information**

As you may know, California has conducted a pilot project to learn more about Road Use Charges. Participants:

- Drove more than 37 million miles,
- 73 percent felt that road charging was more equitable than a gas tax,
- 87 percent of participants found the pilot to be easy,
- 85 percent were overall satisfied with the pilot, and,
- 91 percent expressed willingness to participate in another road charge pilot.

Much more information about the pilot program is contained in the final report at: https://dot.ca.gov/-/media/dot-media/programs/road-charge/documents/rcpp-final-report-a11y.pdf
Quality of Life Coalition Letter on Road Use Charges

Caltrans has a web site with information on road use charges at https://caroadcharge.com/about


For more detailed analysis on Road Use Charges, please see the Information and Technology Innovation Foundation’s policy makers guide on Road Use Charges. (https://itif.org/publications/2019/04/22/policymakers-guide-road-user-charges) It concludes with:

"Road user charges are the most viable and sustainable long-term ‘user pay’ option for the federal government to both raise adequate and appropriate revenues and provide the federal share of funding for the nation’s surface transportation system.

David Grubb, Transportation Chair, Sierra Club San Diego

Pam Heatherington, Board Member, The Environmental Center of San Diego

Bee Mittermiller, Transportation Co-Chair, San Diego 350

Steven Gelb, Transportation Co-Chair, San Diego 350

William Rhatigan, Advocacy Manager, San Diego County Bicycle Coalition

Noah Harris, Transportation Policy Advocate, Climate Action Campaign
Deriving a Climate-Stabilizing Solution Set of Fleet-Efficiency and Driving-Level Requirements, for Light-Duty Vehicles in California

Paper #796315

Mike R. Bullock
Retired Satellite Systems Engineer, 1800 Bayberry Drive, Oceanside, CA 92054

ABSTRACT

An Introduction is provided, including the importance of light-duty vehicles (LDVs: cars and light duty trucks) and the top-level LDV requirements to limit their carbon dioxide (“CO2”) emissions. Climate crisis fundamentals are presented, including its cause, its potential for harm, California mandates, and a greenhouse gas (GHG) reduction road map to avoid disaster.

A 2030 climate-stabilizing GHG reduction target value is calculated, using statements by climate experts. The formula for GHG emissions, as a function of per-capita driving, population, fleet CO2 emissions per mile, and the applicable low-carbon fuel standard is given. The ratio of the 2015 value of car-emission-per-mile to the 2005 value of car-emission-per-mile is obtained.

Internal Combustion Engine (ICE) mileage values from 2000 to 2030 are identified, as either mandates or new requirements. A table is presented that estimates 2015 LDV fleet mileage.

Zero Emission Vehicle (ZEV) parameters are given. Methods are derived to compute equivalent 2030 mileage. Four cases are defined and overall equivalent mileage is computed for each. Those equivalent fleet mileage values are used to compute their corresponding required per-capita driving reductions, with respect to 2005. Measures to achieve the most reasonable per-capita driving reduction are described, with reductions allocated to each measure.

A conclusion is presented.

INTRODUCTION

Humanity’s top-level requirement is to stabilize our climate at a livable level. This top-level requirement must flow down to cars and light-duty trucks, also known as Light-Duty Vehicles (LDVs), due to the significant size of their emissions. As an example, LDVs emit 41% of the GHG in San Diego County\(^1\).

From a systems engineering perspective, the needed top-level LDV requirements are an upper bound on greenhouse gas (GHG) emissions per mile driven, applicable to all of the vehicles on the road, in the year of interest, and an upper bound on per-capita driving, given population growth. These two upper bounds must achieve the climate-stabilizing GHG emission target level. This paper will do a calculation of required driving levels, based on calculations of how clean our cars and fuels could be, predicted population growth, and the latest, science-based, climate-
stabilizing target, or requirement. All three categories of LDV emission-reduction strategies will
be used: cleaner cars, cleaner fuels, and less driving. Four cases will be considered.

BACKGROUND: OUR CLIMATE PREDICAMENT

Basic Cause

Our climate crisis exists primarily because of these two facts:\(^2\): First, our combustion of fossil
fuels puts “great quantities” of CO\(_2\) into our atmosphere; second, atmospheric CO\(_2\) traps heat.

California’s Primary CO\(_2\)_e Emission-Reduction Mandates

California’s Governor’s Executive Order S-3-05\(^3\) is based on the greenhouse gas (GHG)
reduction limits that were recommended by climate scientists, for industrialized nations, in 2005.
In 2005, climate scientists believed that if the industrialized nations of the world achieved the
reduction-targets of S-3-05 (and other nations did something less), the Earth’s climate could be
stabilized at a livable level, with a reasonably high level of certainty. More specifically, this
executive order aims for an average, over-the-year, atmospheric, temperature rise of “only” 2
degree Celsius, above the preindustrial temperature. It attempts to do this by limiting
atmospheric CO\(_2\)_e to 450 PPM by 2050 and then reducing emissions further, so that
atmospheric levels would come down to more tolerable levels in subsequent years. The S-3-05
emission targets are the 2000 emission level by 2010, the 1990 level by 2020, and 80% below
the 1990 level by 2050.

It was thought that if the industrialized world achieved S-3-05 (and the non-industrialized world
achieved an easier task), there would be a 50% chance that the maximum temperature rise will
be less than 2 degrees Celsius, thus leaving a 50% chance that it would be larger than 2 degrees
Celsius. A 2 degree increase would put over a billion people on the planet into a position
described as “water stress” and it would mean a loss of 97% of our coral reefs.

There would also be a 30% chance that the temperature increase would be greater than 3 degrees
Celsius. A temperature change of 3 degree Celsius is described in Reference 3 as being
“exponentially worse” than a 2 degree Celsius increase.

The second California climate mandate is AB 32, the Global Warming Solutions Act of 2006. It
includes provisions for a cap and trade program, to ensure meeting S-3-05’s 2020 target, which
is to be emitting at no more than the 1990 level of emissions. AB 32 was to continue after 2020.
AB 32 required CARB to always implement measures that achieved the maximum
*technologically feasible and cost-effective* (words taken from AB 32) greenhouse-gas-emission
reductions.

In 2015 Governor Brown signed B-30-15. This Executive Order established a mandate for 40%
below 2020 emissions by 2030, as can be seen by a Google search. If S-3-05 is interpreted as a
straight line between its 2020 and its 2050 targets, then the B-30-15 target of 2030 is the same as
the S-3-05 implied target of 2035, because 2035 is halfway between 2020 and 2050 and 40% is
halfway to 80%. More recently, California adopted SB 32, which made achieving B-30-15
legally binding. Finally, in 2018, the Governors Executive Order B-55-18 established a mandate
of zero net emissions by the year 2045.
California achieved the second GHG emission target of S-3-05 (to emit at the 1990 level by 2020) in 2018, which is two years early. However, the world emission levels have, for most years, been increasing, contrary to the S-3-05 trajectory. Because the world has been consistently failing to follow S-3-05’s 2010-to-2020 trajectory, if California, still wants to lead the way to human survival, it must do far better than S-3-05, going forward, as will be shown.

Failing to Achieve these Climate Mandates

What could happen if we fail to achieve S-3-05, AB 32, and B-30-15 or if we achieve them but they turn out to be too little too late and other states and countries follow our example or do less?

It has been written that, “A recent string of reports from impeccable mainstream institutions - the International Energy Agency, the World Bank, the accounting firm of PricewaterhouseCoopers - have warned that the Earth is on a trajectory to warm by at least 4 Degrees Celsius and this would be incompatible with continued human survival.”

It has also been written that, “Lags in the replacement of fossil-fuel use by clean energy use have put the world on a pace for 6 degree Celsius by the end of this century. Such a large temperature rise occurred 250 million years ago and extinguished 90 percent of the life on Earth. The current rise is of the same magnitude but is occurring faster.”

Pictures That Are Worth a Thousand Words

Figure 1 shows (1) atmospheric CO₂ (in blue) and (2) averaged-over-a-year-then-averaged-over-the-surface-of-the-earth, atmospheric temperature (in red). This temperature is with respect to a recent preindustrial revolution value. The data starts 800,000 years ago. It shows that the current value of atmospheric CO₂, which is over 410 PPM, far exceeds the values of the last 800,000 years. It also shows that we might expect the corresponding temperature to eventually be over 12 degrees above preindustrial temperatures. This would bring about a human disaster.

Figure 2 shows the average yearly temperature (in blue) with respect to the 1960-to-1990 baseline temperature. It also shows atmospheric levels of CO₂ (in red). The CO₂ spike of Figure 1 is seen on Figure 2 to be an accelerating ramp up, starting at the time of our industrial revolution. The S-3-05 goal of 450 PPM is literally “off the chart”, in Figure 2. Figure 2 shows that, as expected, temperatures are starting to rise along with the rising levels of CO₂. The large variations in temperature that are observed are primarily due to the random nature of the amount of solar energy being received by the earth.

FURTHER BACKGROUND: CALIFORNIA’S SB 375 AND AN IMPORTANT DATA SET

As shown in the Introduction, LDVs emit significant amounts of CO₂. The question arises: will driving need to be reduced or can cleaner cars and cleaner fuels arrive in time to avoid such behavioral change? Steve Winkelman, of the Center for Clean Air Policy (CCAP), worked on this problem and his results probably inspired California’s SB 375.
SB 375, the Sustainable Communities and Climate Protection Act of 2008

Under SB 375, the California Air Resources Board (CARB) has given each Metropolitan Planning Organization (MPO) in California driving-reduction targets, for the years 2020 and 2035. “Driving” means yearly, per capita, vehicle miles travelled (VMT), by LDVs, with respect to 2005. The CARB-provided values are shown at this Wikipedia link, http://en.wikipedia.org/wiki/SB_375. It is important to note that although this link and many other sources show the targets to be “GHG” and not “VMT”, SB 375 clearly states that the reductions are to be the result of the MPO’s Regional Transportation Plan (RTP), or, more specifically, the Sustainable Communities Strategy (SCS) portion of the RTP. Nothing in the SCS will improve average mileage. That will be done by the state and federal governments by their Corporate Average Fleet Efficiency (CAFÉ) standards and any other laws or regulations that they might adopt. The SCS can only reduce GHG by reducing VMT.

Figure 1  Atmospheric CO₂ and Mean Temperature from 800,000 Years Ago

![Figure 1](image1.png)

Figure 2  Atmospheric CO₂ and Mean Temperature, Over the Last 1,000 Years

![Figure 2](image2.png)
Under SB 375, every Regional Transportation Plan (RTP) must include a section called a Sustainable Communities Strategy (SCS). The SCS must include driving reduction predictions corresponding to the CARB targets. Each SCS must include only feasible transportation, land use, and transportation-related policy data. If the SCS driving-reduction predictions fail to meet the CARB-provided targets, the MPO must prepare an Alternative Planning Strategy (APS). An APS uses infeasible transportation, land use, and transportation-related policy assumptions. The total reductions, resulting from both the SCS and the APS, must at least meet the CARB-provided targets.

**Useful Factors from Steve Winkelman’s Data**

Figure 3 shows 5 variables as a percent of their 2005 value and also the 1990 emission value (turquoise) related to the 2005 CO2 emission value (the blue line). All of the variables are for LDVs. The year 2005 is the baseline year of SB 375. The red line is the Caltrans prediction of VMT. The purple line is California’s current mandate for a Low Carbon Fuel Standard (LCFS). The LCFS also can be used to get the equivalent mileage from the actual mileage by dividing the actual mileage by the LCFS. The LCFS can be used to get the equivalent CO2 per mile driven by multiplying the actual CO2 per mile driven by the LCFS. As shown, by 2020, fuel in California must emit 10% less per gallon than in 2005. As written above, the turquoise line is the 1990 GHG emission in California. As shown, it is 12% below the 2005 level. This is important because S-3-05 specifies that in 2020, state GHG emission levels must be at the 1990 level. The green line is the CO2 emitted per mile, as specified by AB 1493, also known as “Pavley 1 and 2” named after Senator Fran Pavley. The values shown do not account for the LCFS. The yellow (or gold) line is the S-3-05 mandate, referenced to 2005 emission levels. The blue line is the product of the red (miles), the green (CO2 per mile), and the purple line (LCFS, which reduces emission per mile) and is the percentage of GHG emissions compared to 2005. Since VMT is not being adequately controlled, the blue line is not achieving the S-3-05 line. Figure 3 shows that driving must be reduced. For this reason, Steve Winkelman can be thought of as the true father of SB 375.

**Figure 3**
The S-3-05 Trajectory (the Gold Line) AND the CO2 Emitted from Personal Driving (the Blue Line), where that CO2 is a Function (the Product) of the California-Fleet-Average CO2 per Mile (the Green Line), The Predicted Driving (VMT, the Red Line), and the Low-Carbon Fuel Standard (the Purple Line)
Figure 3 provides inspiration for a road map to climate success for LDVs. Climate-stabilization targets must be identified (from the climate scientists) and achieved by a set of requirements that will increase fleet efficiency and another set that will reduce per-capita driving.

THE DERIVATION OF CALIFORNIA’S TOP-LEVEL LDV REQUIREMENTS TO SUPPORT CLIMATE STABILIZATION

It is clear that more efficient (less CO2 emitted per mile) LDVs will be needed and this can be achieved with appropriate requirements. Significant improvements in efficiency will be needed if driving reductions are going to remain within what many people would consider politically achievable. Mileage and equivalent mileage will need to be specified. A significant fleet-fraction of Zero-Emission Vehicles (ZEVs, either Battery-Electric LDVs or Hydrogen Fuel Cell LDVs) will be needed. Since mileage and equivalent mileage are more heuristic than CO2 emissions per mile, they will be used in the derivations. CO2 per mile driven will not appear in the final equations.

Since the SB-375 work used 2005 as the reference year, that convention will be used. It will be assumed that cars last 15 years.

GHG Emission Target to Support Climate Stabilization

The primary problem with S-3-05 is that California’s resolve and actions have been largely ignored by other states, our federal government, and many countries. Therefore, rather than achieving 2000 levels by 2010 (the first target of S-3-05) and 1990 levels by 2020 (the 2nd target of S-3-05), world emission has been increasing for nearly all of the years since 2010. (California, on the other hand achieved its 1990 emission level in 2018. This is two years sooner than the 2nd target of the S-3-05 requirement.) Reference 7 states on Page 14 that the required rate of reduction, if commenced in 2020, would be 15%. That rate means that the factor of 0.85 must be achieved, year after year. If this were done for 10 years, the factor would be $(0.85)^{10} = 0.2$, by 2030. This reduction of 80% down from the 2020 value matches the 2050 target requirement of S-3-5, which is 80% below the 1990 value. According to S-3-05, the 2020 emission value should be the same as the 1990 emission value. As noted above, the S-3-05 emission of 2050 was designed to support capping atmospheric CO2 at 450 PPM$^3$. “Capping” means that the sum of all emissions (anthropogenic and natural) equals the sum of all sequestration (mostly photosynthesis.) Therefore, the author of the Reference 7 statement wanted the world to achieve the third target of S-3-05 to get the atmospheric CO2 to stop going up 20 years sooner than what S-3-05 was written to achieve. This shows the urgent nature of our climate crisis. Therefore, if California wants to do its part by setting an example for the world, the correct requirement for California is to achieve emissions that are reduced to 80% below California’s 1990 value by 2030. The world’s reduction rate is not anywhere near the needed 15% as we move towards the end of 2020. Therefore, the target, of 80% below 1990 levels by 2030 is considered to be correct for California. Reference 7 also calls into question the advisability of aiming for a 2 degree Celsius increase, given the possibilities of positive feedbacks that would increase warming. This concern for positive feedbacks is another reason that this paper will work towards identifying LDV requirement sets that will support LDVs achieving 80% below the 1990 value by 2030.
Thinking that LDVs can, for some reason, fail to achieve this target is dangerous thinking. As stated above, LDVs emit, by far, the most CO2 of all categories.

**Notes on Methods**

The base year is 2005. An intermediate year of 2015 is used. The car efficiency factor of 2015 with respect to 2005 is taken directly from Figure 3. The car efficiency factor of 2030 with respect to 2015 is derived herein, resulting in a set of car-efficiency requirements.

It is assumed that cars last 15 years. This is equivalent to assuming that the effect of the cars that last more than 15 years, thus increasing emissions, will be offset by the effect of the older cars that don’t last as long as 15 years, thus reducing old-car emissions. As will be seen, there will also have to be some sort of an additional action to remove many of the older Internal Combustion Engine cars that are 15, through just 8 years old. Natural attrition will take care of some of this since as cars get older the probability that they will be taken out of service increases. However, some sort of “cash for gas guzzlers” program will be needed. How this is done is not covered in this paper. This is not unique. As another example, the car manufacturers will have to figure out how to produce the needed cars and batteries.

**Primary Variables Used**

Table 1 defines the primary variables that are used.

**Fundamental Equations**

The emissions are equal to the CO2 per mile driven multiplied by the per-capita driving multiplied by the population, since per-capita driving multiplied by the population is total driving. This is true for any given year.

\[
\begin{align*}
\text{Future Year } k: & \quad e_k = c_k \times d_k \times p_k \quad \text{(Eq. 1)} \\
\text{Base Year } i: & \quad e_i = c_i \times d_i \times p_i \quad \text{(Eq. 2)}
\end{align*}
\]

Dividing both sides of Equation 1 by equal values results in an equality. The terms on the right side of the equation can be associated as shown here:

\[
\frac{e_k}{e_i} = \frac{c_k}{c_i} \times \frac{d_k}{d_i} \times \frac{p_k}{p_i} \quad \text{(Eq. 3)}
\]

**Table 1  Variable Definitions**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>(e_k)</td>
<td>LDV Emitted CO2, in Year “(k)&quot;</td>
</tr>
<tr>
<td>(L_k)</td>
<td>Low Carbon Fuel Standard (LCFS) Factor that reduces the Per-Gallon CO2 emissions, in Year “(k)”</td>
</tr>
<tr>
<td>(C_k)</td>
<td>LDV CO2 emitted per mile driven, average, in Year “(k)”, not accounting for the Low Carbon Fuel Standard (LCFS) Factor</td>
</tr>
<tr>
<td>(c_k)</td>
<td>LDV CO2 emitted per mile driven, average, in Year “(k)”, accounting for the Low Carbon Fuel Standard (LCFS) Factor</td>
</tr>
</tbody>
</table>
Since CO2 per mile ("c") is a constant (use "A", noting that it is equal to about 20 pounds per gallon) multiplied by the number of Gallons ("G") and since number of gallons is distance (use "D") divided by mileage (use "m"), then c = A*D/m. this shows that the ratio of the “c” values in different years is going to be equal to the reciprocal of the “m” values in those different years because the other variables will cancel out. Therefore:

To work with mileage: \[ \frac{m_i}{m_k} = \frac{c_k}{c_i} \] (Eq. 4)

Putting Equation 4 into Equation 5 results in the following equation:

\[ \frac{e_k}{e_i} = \frac{m_i}{m_k} \times \frac{d_k}{d_i} \times \frac{p_k}{p_i} \] (Eq. 5)

Showing the base year of 2005, the future year of 2030, introducing the intermediate year of 2015 and the year of 1990 (since emissions in 2030 are with respect to the 1990 value) results in Equation 6.

\[ \frac{e_{2030}}{e_{1990}} \times \frac{e_{1990}}{e_{2005}} = \frac{c_{2030}}{c_{2015}} \times \frac{c_{2015}}{c_{2005}} \times \frac{d_{2030}}{d_{2005}} \times \frac{p_{2030}}{p_{2005}} \] (Eq. 6)

The ratio on the far left is the climate-stabilizing target, which is the factor of the 2030 emission to the 1990 emission. It has been shown that this is 0.20 or 80% less. The next ratio is the emission of 1990 compared to 2005. It is the turquoise line of Figure 3, which is 0.87. The first ratio on the right side of the equation is the fleet emission per mile in 2030 compared to the value in 2015. This ratio will be derived in this report and it will result in a set of car-efficiency requirements. Moving to the right, the next ratio is the car efficiency in 2015 compared to 2005. It can obtained by multiplying the purple line 2015 value times the green line 2015 value, which is 0.90 * 0.93. The next term, still going from right to left, is the independent variable. It is the per-capita driving reduction required, with respect to the 2005 level of driving. The final term on the far right is the ratio of the population in 2030 to the population in 2005. Reference 8 shows that California’s population in 2005 was 35,985,582. Reference 9 shows that California’s population in 2030 is predicted to be 42,263,654. Therefore,

\[ \frac{p_{2030}}{p_{2005}} = \frac{42263654}{35985582} = 1.17446076 \] (Eq. 7)

Putting in the known values results in Equation 8:
\[ 0.20 \times 0.87 = \frac{c_{2030}}{c_{2015}} \times 0.90 \times 0.93 \times \frac{d_{2030}}{d_{2005}} \times 1.17446076 \quad \text{(Eq. 8)} \]

Combining the values, solving for the independent variable (the per-capita driving ratio), and changing from emission-per-mile to equivalent-miles-per-gallon results in the following:

\[ \frac{d_{2030}}{d_{2005}} = 0.177004896 \times \frac{m_{2030}}{m_{2015}} \quad \text{(Eq. 9)} \]

With the coefficient being so small, it is doubtful that we can get the equivalent mileage in 2030 to be high enough to keep the driving ratio from falling below one. The mileage of the 2015 fleet will be based on the best data we can get and by assuming cars last 15 years. The equivalent mileage in 2030 will need to be as high as possible to keep the driving-reduction factor from going too far below 1, because it is difficult to reduce driving too much. The equivalent mileage will be dependent on the fleet-efficiency requirements in the near future and going out to 2030. Those requirements are among the primary results of this report.

**Internal Combustion Engine (ICE) Mileage, from Year 2000 to Year 2030**

The years from 2000 to 2011 are taken from a plot produced by the PEW Environment Group, [http://www.pewenvironment.org/uploadedFiles/PEG/Publications/Fact_Sheet/History%20of%20Fuel%20Economy%20Clean%20Energy%20Factsheet.pdf](http://www.pewenvironment.org/uploadedFiles/PEG/Publications/Fact_Sheet/History%20of%20Fuel%20Economy%20Clean%20Energy%20Factsheet.pdf)

The plot is shown here as Figure 6. The “Both” values are used.

**Figure 4** Mileage Values From the PEW Environment Group

The values from 2012 to 2025 are taken from the US Energy Information Agency (EIA) as shown on their website, [http://www.c2es.org/federal/executive/vehicle-standards#ldv_2012_to_2025](http://www.c2es.org/federal/executive/vehicle-standards#ldv_2012_to_2025). They are the LDV Corporate Average Fleet Efficiency (CAFÉ) values enacted into law in the first term of President Obama. From 2025 to 2030, it is assumed that the yearly ICE improvement in CAFÉ will be 2.5 MPG.
Overall Mileage of California’s LDV Fleet in 2015

Table 2 uses these values of the Internal Combustion Engine (ICE) LDV mileage to compute the mileage of the LDV fleet in 2015. It assumes that the fraction of ZEVs being used over these years is small enough to be ignored. The 100 miles driven, nominally, by each set of cars, is an arbitrary value and inconsequential in the final calculation, because it will divide out. It is never-the-less used, so that it is possible to compare the gallons of fuel used for the different years. The “f” factor could be used to account for a set of cars being driven less. It was decided to not use this option by setting all of the values to 1. The Low Carbon Fuel Standard (LCFS) values are taken from Figure 3. The gallons of fuel are computed as shown in Equation 10, using the definition for \( L_k \) that is shown in Table 2.

\[
\text{Gallons Used per } f \times 100 \text{ miles} = \frac{fx100}{(CAFÉ MPG)/L_k} \tag{Eq. 10}
\]

As shown in Table 2, using the definitions in Eq. 9:

\[
m_{2015} = 27.63
\]

If it is deemed acceptable to have per-capita driving in 2030 be reduced 32% with respect to 2005 driving, then the left side of Eq. 9 becomes 0.68 and it is possible to use Eq. 9 to solve for the 2030 mileage as:

\[
m_{2030} = (27.63) \times 0.68 \times \left( \frac{1}{0.177004896} \right) = 106.1462 \tag{Eq. 11}
\]

Likewise if it is decided that the per-capita driving in 2030 should equal the per-capita driving in 2005 then:

\[
m_{2030} = (27.63) \times 1.00 \times \left( \frac{1}{0.177004896} \right) = 156.0974 \tag{Eq. 12}
\]

These values will provide the targets for the tables that compute the mileage values for 2030.

How ICE Mileage Values Will Be Used with ZEV Equivalent Mileage Values

To have LDVs achieve our climate-stabilizing target, after 2015, the net (computed using both ICE and ZEV vehicles) mileage values for each year will need to greatly improve by having a significant fraction of ZEVs. The ICE CAFÉ standards are used in this report as just the ICE contribution to fleet MPG. The ICE MPG values are inadequate by themselves and will therefore need to become less important; the ZEVs sales will need to overtake the ICE sales.

Federal requirements will need to change significantly. Currently, federally-mandated corporate average fuel efficiency (CAFÉ) standards have been implemented, from 2000 to 2025. These standards require that each corporation produce and sell their fleet of cars and light-duty trucks in the needed proportions, so that the combined mileage of all of the cars they sell (total miles driven in all cars sold in the year of interest divided by the total gallons used by all those cars, for any arbitrary distance) at least meets the specified mileage.
### Table 2  Calculation of the Fleet MPG for 2015

<table>
<thead>
<tr>
<th>LDV Set</th>
<th>Years Old</th>
<th>Model Year</th>
<th>CAFÉ MPG</th>
<th>LCFS Factor L&lt;sub&gt;Year&lt;/sub&gt;</th>
<th>Factor Driven f</th>
<th>Gallons Used Per 100 Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14-15</td>
<td>2001</td>
<td>24.0</td>
<td>1.0</td>
<td>1.0</td>
<td>4.17</td>
</tr>
<tr>
<td>2</td>
<td>13-14</td>
<td>2002</td>
<td>24.0</td>
<td>1.0</td>
<td>1.0</td>
<td>4.17</td>
</tr>
<tr>
<td>3</td>
<td>12-13</td>
<td>2003</td>
<td>24.0</td>
<td>1.0</td>
<td>1.0</td>
<td>4.17</td>
</tr>
<tr>
<td>4</td>
<td>11-12</td>
<td>2004</td>
<td>24.0</td>
<td>1.0</td>
<td>1.0</td>
<td>4.17</td>
</tr>
<tr>
<td>5</td>
<td>10-11</td>
<td>2005</td>
<td>25.0</td>
<td>1.0</td>
<td>1.0</td>
<td>4.00</td>
</tr>
<tr>
<td>6</td>
<td>9-10</td>
<td>2006</td>
<td>25.7</td>
<td>.9933</td>
<td>1.0</td>
<td>3.87</td>
</tr>
<tr>
<td>7</td>
<td>8-9</td>
<td>2007</td>
<td>26.3</td>
<td>.9867</td>
<td>1.0</td>
<td>3.75</td>
</tr>
<tr>
<td>8</td>
<td>7-8</td>
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<tr>
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<td>1.0</td>
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<tr>
<td>10</td>
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<td>2010</td>
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<td>1.0</td>
<td>3.45</td>
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<tr>
<td>11</td>
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<td>2011</td>
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<td>.9600</td>
<td>1.0</td>
<td>3.30</td>
</tr>
<tr>
<td>12</td>
<td>3-4</td>
<td>2012</td>
<td>29.8</td>
<td>.9533</td>
<td>1.0</td>
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<tr>
<td>13</td>
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<td>2013</td>
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<td>.9467</td>
<td>1.0</td>
<td>3.09</td>
</tr>
<tr>
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<td>.9400</td>
<td>1.0</td>
<td>2.99</td>
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<tr>
<td>15</td>
<td>0-1</td>
<td>2015</td>
<td>32.6</td>
<td>.9333</td>
<td>1.0</td>
<td>2.86</td>
</tr>
</tbody>
</table>

**Sum of Gallons:** 54.29  
**Miles = 100*Sum(f*s):** 1500  
**MPG = Miles/(Sum of Gallons):** 27.63

The car companies want to maximize their profits while achieving the required CAFÉ standard. In California, the car companies are already be required to sell a specified number of electric vehicles, which have a particularly-high, equivalent-value of miles-per-gallon. If the laws are not changed, this situation will allow companies to take advantage of their ZEV vehicles to sell more low-mileage, high-profit cars and light-duty trucks, and still achieve the federal CAFÉ standard. It will be better to apply the CAFÉ standards to only the ICEs and then require, in addition to the CAFÉ standards, that the fleet of LDVs sold achieve some mandated fraction of ZEVs. The ZEVs will get ever-improving equivalent mileage, as our electrical grid is powered by a larger percent of renewable energy. In other words, their equivalent mileage is not fixed, but will improve over the years. Requirements developed here are for 2030. Therefore a high percentage of all the electricity generated in the state, including both the “in front of the meter” (known as the “Renewable Portofolio Standard” or “RPS”) portion and the “behind the meter” portion is assumed to come from sources that do not emit CO2. The values of 85% and 90% are assumed. The values become one of the important fleet-efficiency requirements for cases that are considered. Hopefully these assumptions are reasonable. San Diego’s Climate Action Plan (CAP) was the first to specify 100% renewable energy by 2035. Many other cities have followed San Diego’s lead in this regard.
How to Compute the ZEV Equivalent Mileage Values

To calculate the equivalent mileage of the 2030 fleet of LDVs, it is necessary to derive a formula to compute the equivalent mileage of ZEVs, as a function of the percent of electricity that is generated without emitting CO2 (the mixed case), the equivalent ZEV mileage if the electricity is from 100% fossil fuel (the “West Virginia” case), and the equivalent ZEV mileage if the electricity is from 100% renewable sources (the ideal case), which is not infinity because it is assumed that the manufacturing of the car emits CO2. The variable definitions in Table 3 are used.

Table 3  Variables Used in the Calculation of ZEV Equivalent Mileage

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>$m_z$</td>
<td>ZEV Equivalent mileage</td>
</tr>
<tr>
<td>$m_{zr}$</td>
<td>ZEV Equivalent mileage if the electricity is from renewables</td>
</tr>
<tr>
<td>$m_{zf}$</td>
<td>ZEV Equivalent mileage if the electricity is from fossil fuels</td>
</tr>
<tr>
<td>$r$</td>
<td>fraction of electricity generated from renewable sources</td>
</tr>
<tr>
<td>$G$</td>
<td>Gallons of equivalent fuel used</td>
</tr>
<tr>
<td>$D$</td>
<td>Arbitrary distance travelled</td>
</tr>
<tr>
<td>Num</td>
<td>$m_{zr} * m_{zf}$</td>
</tr>
<tr>
<td>Den</td>
<td>$r * m_{zf} + (1 - r) * m_{zr}$</td>
</tr>
</tbody>
</table>

The derivation of the equation for equivalent ZEV mileage is based on the notion that the ZEV can be imagined to travel “r” fraction of the time on electricity generated from renewables and “(1-r)” fraction of the time on fossil fuel. If the vehicle travels “D” miles, then, using the definitions shown in Table 4, the following equation can be written.

$$G = \frac{r*D}{m_{zr}} + \frac{(1-r)*D}{m_{zf}}$$  \hspace{1cm} (Eq. 13)

$$m_{z} = D/G = D/\left(\frac{r*D}{m_{zr}} + \frac{(1-r)*D}{m_{zf}}\right)$$  \hspace{1cm} (Eq. 14)

Dividing the numerator and the denominator by D and multiplying the numerator and the denominator by the product of the two equivalent mileage values ($m_{zr}$ and $m_{zf}$) results in Equations 31.

$$m_{z} = m_{zr} * m_{zf} / \left( r * m_{zf} + (1 - r) * m_{zr} \right)$$  \hspace{1cm} (Eq. 15)

Using the definitions in Table 3:

$$m_{z} = \frac{Num}{Den}$$  \hspace{1cm} (Eq. 16)
Table 4 shows 3 assignments of assumed values in which the fraction of electricity generated from renewables is varied and the results, using Equations 15 and 16, results in the three values of ZEV equivalent mileage. This shows the urgent need to move towards cleaner electricity.

### Table 4  Variable Assignment and the Resulting ZEV Mileages

<table>
<thead>
<tr>
<th>(m_{zr})</th>
<th>(m_{zf})</th>
<th>(r)</th>
<th>(1-r)</th>
<th>Num</th>
<th>Den</th>
<th>(m_z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5000</td>
<td>70</td>
<td>0.80</td>
<td>0.20</td>
<td>350000.00</td>
<td>1056.00</td>
<td>331.44</td>
</tr>
<tr>
<td>5000</td>
<td>70</td>
<td>0.85</td>
<td>0.15</td>
<td>350000.00</td>
<td>809.50</td>
<td>432.37</td>
</tr>
<tr>
<td>5000</td>
<td>70</td>
<td>0.90</td>
<td>0.10</td>
<td>350000.00</td>
<td>563.00</td>
<td>621.67</td>
</tr>
</tbody>
</table>

**Additional Variables Needed to Compute the Overall Equivalent Mileage in 2030, Taking Into Account Both ICEs and ZEVs**

Table 5 shows the additional definitions that will be used in the calculation of 2030 overall mileage.

### Table 5  Additional Variables Used in the Calculation of 2030 LDV Mileage

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>(D_i)</td>
<td>Distance travelled by ICE vehicles</td>
</tr>
<tr>
<td>(D_z)</td>
<td>Distance travelled by ZEV vehicles</td>
</tr>
<tr>
<td>(G_i)</td>
<td>Gallons of equivalent fuel used by ICE vehicles</td>
</tr>
<tr>
<td>(G_z)</td>
<td>Gallons of equivalent fuel used by ZEVs</td>
</tr>
</tbody>
</table>

**Computing an LDV Overall Equivalent Fleet Mileage, for the \textit{Balanced}_1 Case**

Table 6 shows the calculation for the overall equivalent mileage for all the cars on the road, in the year of 2030, for the \textit{Balanced}_1 case.

The name, \textit{Balanced}_1, comes from the attempt to balance the difficulty of achieving the fleet efficiency-related requirements with the difficulty of achieving the driving-reduction related requirements. The \textit{Balanced}_1 case assumes that electricity is 85% renewable, which is also difficult.

There will also be a \textit{Balanced}_2 case that assumes that electricity is 90% renewable. Both the \textit{Balanced}_1 and the \textit{Balanced}_2 cases assume that it is reasonable to have per-capita driving in 2030 reduced 32%, with respect to 2005 per-capita driving. That assumption, along with the 85% renewable electricity assumption, was used to select the \(z\) values of Table 6 to result in the Equation 11 value of overall 2030 mileage, which is 106.1263 Miles Per Gallon (MPG). From Table 4, 85% renewable electricity results in a ZEV equivalent mileage of 432.37 MPG. That value of equivalent ZEV mileage in 2030, when electricity is 85% renewable, is used for all of the ZEV model years, for
this case. Note that this is overlooking the fact that not all BEVs are equally efficient. In order to simplify this analysis, the Table 4 values of \(m_{zr}\) and \(m_{zf}\) are considered to be applicable to all the ZEV models. Therefore, the 432.37 MPG value can be divided into each \(D_z\) value to compute the corresponding \(G_z\) value, in all of the model years being considered.

To reduce the miles driven in poor-mileage ICE’s, the “\(f\)” factor is used. For example, if “\(f\)” is set to 0.30, as it is in 2016, then the miles driven is reduced by 70%. Achieving the required “\(f\)” values may require some type of “cash-for-gas-guzzlers” program. However, it could also be noted that when older cars are second or third cars in multi-car families in which family members have the luxury of choosing which car to drive, family members will usually choose the car that is cheaper to operate, thus making the “\(f\)” factors easier to achieve. Finally, the Low Carbon Fuel Standard (LCFS) is assumed to continue to improve from the currently mandated value of 0.9 by the end of 2019. This is another method of reducing the CO2 emissions of the ICE vehicles.

For the ICE vehicles, the \(G_i\) values are computed as the \(D_i\) value divided by the equivalent MPG value. The equivalent MPG is the CAFÉ MPG divided by the LCFS factor.

It is arbitrarily assumed that the cars, for each year being considered (the models for that year, both ZEVs and ICEs), go a total of 100 miles. Although this is an extremely small fraction of the actual miles that will be driven, it doesn’t change the result because the number of gallons of equivalent gasoline is always proportional to miles. The fraction of cars that are ZEVs (\(z\)) is used to divide up this value of 100 Miles. However, the factor “\(f\)” reduces the miles driven by the ICE vehicles and this brings down the total miles driven for the years in which the “\(f\)” term is less than 1. For each year, the total miles per gallon (MPG) is computed as the total miles driven divided by the total gallons used. However, this value is not used in the calculation of the entire fleet equivalent mileage. The overall equivalent mileage is computed as the total miles driven divided by the total gallons used, where these quantities are summed over all of the 15 categories (years) of LDVs.

The following formulas are used to compute the overall equivalent mileage in 2030, of all of the LDVs on the road.

For the ICE calculations, for 2016, where

- “\(L_k\)” is defined in Table 1 (LCFS factor for year “\(k\)” and is the value in the “LCFS” column of Table 6 and
- “\(z\)” is from the “\(z\)” column and is the fraction of cars sold in the year that are ZEVs and
- “\(m_i\)” is the value from the CAFÉ MPG column:

\[
D_i = 100 \times f \times (1 - z) \quad \text{(Eq. 17)}
\]

\[
G_i = D_i / (m_i / L_{2016}) \quad \text{(Eq. 18)}
\]

For the ZEV calculations:

\[
D_z = 100 \times z \quad \text{(Eq. 17)}
\]

\[
G_z = D_z / (432.37) \quad \text{(Eq. 18)}
\]

In updating this report from its 2015 version, the fleet fraction of ZEVs (“\(z\)”), from 2015 to 2019, had to be reduced to approximate the low values that actually occurred from 2015 to 2019. However,
in 2020, it is assumed that the fraction will be at least as large as 8%, which is not such a trivial value. If it is actually larger than 8%, then there will be some margin built into the requirements derived in this report.

Table 6 Calculation of 2030 LDV Mileage Assuming the Balanced_1 Case

<table>
<thead>
<tr>
<th>Year</th>
<th>ICE Parameters and Calculations</th>
<th>ZEVs</th>
<th>Yearly Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAFÉ MPG</td>
<td>LCFS</td>
<td>Eq. MPG</td>
</tr>
<tr>
<td>2016</td>
<td>34.3</td>
<td>.9267</td>
<td>37.01</td>
</tr>
<tr>
<td>2017</td>
<td>35.1</td>
<td>.9200</td>
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<td>2018</td>
<td>36.1</td>
<td>.9133</td>
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<tr>
<td>2019</td>
<td>37.1</td>
<td>.9067</td>
<td>40.92</td>
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<tr>
<td>2020</td>
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<tr>
<td>2022</td>
<td>42.3</td>
<td>.8000</td>
<td>52.88</td>
</tr>
<tr>
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<td>44.3</td>
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<td>55.38</td>
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<td>2024</td>
<td>46.5</td>
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<td>60.88</td>
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<td>2026</td>
<td>51.2</td>
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</tr>
<tr>
<td>2030</td>
<td>61.2</td>
<td>.8000</td>
<td>76.50</td>
</tr>
</tbody>
</table>

**Sum of Miles and then Gallons of Equivalent Fuel:** 1235.60 11.64

**Equivalent MPG of LDV Fleet in 2030:** 106.17

Sum of ZEV Miles = 795. Fraction of Miles Driven by ZEVs = 64.3%
There is probably some margin from the 2016 to 2019 values as well. The difficult values are for 2022, 2023, and 2024, with 2024 requiring that ZEV sales are 80% of all the cars purchased in California. The purple color of the $z$ values denotes difficulty. This shows that the government will need to require that the car companies achieve the $z$ values or buy credits from a company such as Tesla, which sells 100% ZEVs.

The Table 6 $z$ values were put into an EXCEL spread sheet that looks like Table 6. It produced the values shown in Table 6. The values were selected to try to get to the 106.1462 value that was computed in Eq. 11.

Using the result of 106.17 MPG into Equation 9, gives the following result:

$$\frac{d_{2030}}{d_{2005}} = 0.17700 \times \frac{m_{2030}}{m_{2015}} = 0.17700 \times \frac{106.17}{27.63} = 0.68016 \quad \text{(Eq. 19)}$$

This is the 32% reduction desired. It will be difficult to achieve. However, the required schedule of ZEV adoption is also difficult. The values of $z$ from the years 2021 to 2025 will be at least as difficult as achieving the 32% reduction. This situation motivates the next case. If electricity could be made cleaner sooner, the years from 2021 to 2025 could be less difficult.

Computing an LDV Overall Equivalent Fleet Mileage, for the Balanced_2 Case

The Balanced_2 case is shown in Table 7.

The Balanced_2 case is the same as the Balanced_1 case except it includes an assumption that electricity is 90% renewable in 2030 instead of 85%. Table 7 shows the results using that assumption, which becomes a requirement for this case. For the Balanced_2 case, the values of $z$ are once again assigned to achieve the desired driving-reduction value of 32%.

From the second line of Table 4, this means that the equivalent mileage of the ZEV vehicles is 621.67 MPG.

Eq. 18 becomes:

$$G_z = D_z/(621.67) \quad \text{(Eq. 20)}$$

This is used to compute the gallons of equivalent fuel from the distance, for the ZEV vehicles in Table 7.

The Table 7 $z$ values were put into an EXCEL spread sheet that looks like Table 7. It produced the values shown in Table 7. The $z$ values were selected to try to get to the 106.1462 value that was computed in Eq. 11.

Using the Table 7 result of 106.22 MPG into Equation 9, gives the following result:
\( \frac{d_{2030}}{d_{2005}} = 0.17700 \times \frac{m_{2030}}{m_{2015}} = 0.17700 \times \frac{106.22}{27.63} = 0.68045 \)  
(Eq. 21)

<table>
<thead>
<tr>
<th>Year</th>
<th>ICE Parameters and Calculations</th>
<th>ZEVs</th>
<th>Yearly Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAFÉ MPG</td>
<td>LCFS</td>
<td>Eq. MPG</td>
</tr>
<tr>
<td>2016</td>
<td>34.3</td>
<td>.927</td>
<td>37.01</td>
</tr>
<tr>
<td>2017</td>
<td>35.1</td>
<td>.920</td>
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<td>.913</td>
<td>39.53</td>
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<tr>
<td>2019</td>
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<td>.907</td>
<td>40.92</td>
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<tr>
<td>2020</td>
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</tr>
<tr>
<td>2030</td>
<td>61.2</td>
<td>.800</td>
<td>76.50</td>
</tr>
</tbody>
</table>

Sum of Miles and then Gallons of Equivalent Fuel: 1233.60 | 11.61

Equivalent MPG of LDV Fleet in 2030: \textbf{106.22}

Sum of ZEV Miles = \textbf{761}. Fraction of Miles Driven by ZEVs = \textbf{61.7%}
This is the 32% reduction desired. It will be difficult to achieve. However, the required schedule of ZEV adoption is also difficult. The values of $z$ from the years 2021 to 2025 will be at least as difficult as achieving the 32% reduction. However, they are easier to achieve than the values needed in the Balanced_1 Case. This quantifies the benefit of increasing the renewable fraction of electricity from 85% to 90%.

**Computing an LDV Overall Equivalent Fleet Mileage, for the 2005_Driving Case**

When climate change and transportation policies are discussed, the opinion that we should simply electrify our fleet as soon as possible is often expressed. The idea is that the per-capita driving level does not have to be reduced, if we electrify our fleet fast enough. The relationships developed in this paper enable an analysis to see how this would work. This gives rise to the 2005_Driving Case. For this case, it is assumed that electricity is 90% renewable.

From the third line of Table 4, this means that the equivalent mileage of the ZEV vehicles is 621.67 MPG. Therefore, the relationship shown in Eq. 20 is used.

The 2005_Driving case is shown in Table 8.

For the 2005_Driving case, the values of $z$ are assigned to achieve the overall equivalent mileage (MPG) value computed in Eq. 12, which is 156.0974, because that value was computed for there being no change in the per-capita driving from the 2005 value.

Using the result of 155.99 MPG into Equation 9, gives the following result:

$$
\frac{d_{2030}}{d_{2005}} = 0.17700 \times \frac{m_{2030}}{m_{2015}} = 0.17700 \times \frac{155.99}{27.63} = 0.99930 
$$

(Eq. 22)

This is the 0% reduction desired. However, the required schedule of ZEV adoption is not possible. Jumping from 8% in 2020 to 82% in 2021 defies reason. It appears that our best bet, to do our part to avoid human extinction, is to proceed with the assumption (and thus requirement) that we are going to have to reduce per-capita driving, as shown in either the Balanced_1 or the Balance_2 case.

**Computing an LDV Overall Equivalent Fleet Mileage, for the Mary_Nichols Case**

Mary Nichols was first appointed to the California Air Resource Board (CARB) in 1975 and became Chair in 1979. After leaving CARB, she founded the Los Angeles Chapter of the Natural Resources Defense Council (NRDC) in 1989. She was reappointed to the position of Chair of
CARB in 2007 by Governor Arnold Schwarzenegger and she is still serving in that position today.

Table 8  
Calculation of 2030 LDV Mileage Assuming the 2005_Driving Case

<table>
<thead>
<tr>
<th>Year</th>
<th>ICE Parameters and Calculations</th>
<th>ZEVs</th>
<th>Yearly Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAFÉ MPG</td>
<td>LCFS</td>
<td>Eq. MPG</td>
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<tr>
<td>2016</td>
<td>34.3</td>
<td>.9267</td>
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<tr>
<td>2030</td>
<td>61.2</td>
<td>.8000</td>
<td>76.50</td>
</tr>
</tbody>
</table>

Sum of Miles and then Gallons of Equivalent Fuel: 1254.20 8.04

Equivalent MPG of LDV Fleet in 2030: 155.99

Sum of ZEV Miles = 990.0  Fraction of Miles Driven by ZEVs = 78.9%

The following quote\textsuperscript{13} inspires the Mary Nichols Case:
Regulations on the books in California, set in 2012, require that 2.7 percent of new cars sold in the state this year be, in the regulatory jargon, ZEVs. These are defined as battery-only or fuel-cell cars, and plug-in hybrids. The quota rises every year starting in 2018 and reaches 22 percent in 2025. Nichols wants 100 percent of the new vehicles sold to be zero- or almost-zero-emissions by 2030.

The mathematical relationships developed in this paper make it possible to determine the driving reduction that would be required if it is desired to stabilize the climate at a livable level, assuming the schedule of fleet electrification implied by the above quote. Electricity is required to be 90% renewable. The results of the Mary Nichols Case are shown in Table 9.

The corresponding driving reduction is computed using Eq. 9.

\[
\frac{d_{2030}}{d_{2005}} = 0.177005 \cdot \frac{m_{2030}}{m_{2015}} = 0.177055 \cdot \frac{77.24}{27.63} = 0.495 \quad \text{(Eq. 14)}
\]

This means that the per-capita driving will need to be about 50% less in 2030 than in year 2005. It is not known if CARB understands this.

The official policy of the California Democratic Party (CDP) is expressed in its Platform. A statement that applies to this report and to CARB can be viewed by looking at the California Democratic Party (CDP) website, then select “About Us”, “Standing Committees”, “Platform Committee”, “2020 Platform”, and finally “Energy and Environment Plank”. In that Plank, the following statement is found

- Demand a state plan specifying how cars and light-duty trucks can meet climate-stabilizing targets by defining enforceable measures to achieve necessary fleet efficiency and per-capita driving limits;

However, your author’s efforts to get CARB to do such a “state plan”, or to convince a state legislator to write legislation to direct CARB to do such a plan, have not been successful.

If CARB would do such a plan or would consider the results of this report, they would perhaps decide to push for a more ambitious fleet electrification schedule and would also push for state legislation and regulation to enact measures to reduce VMT.

**Preliminary Conclusions Drawn from the Results of the Four Cases Run**

Table 10 is a summary showing the most important results of the four cases considered. The purple-colored entries denote difficult requirements; red denotes nearly impossible.

Considering the Balance_1 and the Balanced_2 cases and the fleet electrification schedules for each, it is first concluded that California needs to work to get its electricity to be at least 85% renewable by 2030 and furthermore that getting it to be 90% from renewables by 2030 would make the electrification schedule much easier.
Table 9 Calculation of 2030 LDV Mileage Assuming the *Mary_Nichols* Case

<table>
<thead>
<tr>
<th>Year</th>
<th>ICE Parameters and Calculations</th>
<th>ZEVs</th>
<th>Yearly Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CAFe MPG</td>
<td>LCFS</td>
<td>Eq. MPG</td>
</tr>
<tr>
<td>2016</td>
<td>34.3</td>
<td>.9267</td>
<td>37.01</td>
</tr>
<tr>
<td>2017</td>
<td>35.1</td>
<td>.9200</td>
<td>38.15</td>
</tr>
<tr>
<td>2018</td>
<td>36.1</td>
<td>.9133</td>
<td>39.53</td>
</tr>
<tr>
<td>2019</td>
<td>37.1</td>
<td>.9067</td>
<td>40.92</td>
</tr>
<tr>
<td>2020</td>
<td>38.3</td>
<td>.9000</td>
<td>42.56</td>
</tr>
<tr>
<td>2021</td>
<td>40.3</td>
<td>.8500</td>
<td>47.41</td>
</tr>
<tr>
<td>2022</td>
<td>42.3</td>
<td>.8000</td>
<td>52.88</td>
</tr>
<tr>
<td>2023</td>
<td>44.3</td>
<td>.8000</td>
<td>55.38</td>
</tr>
<tr>
<td>2024</td>
<td>46.5</td>
<td>.8000</td>
<td>58.13</td>
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<tr>
<td>2025</td>
<td>48.7</td>
<td>.8000</td>
<td>60.88</td>
</tr>
<tr>
<td>2026</td>
<td>51.2</td>
<td>.8000</td>
<td>64.00</td>
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<tr>
<td>2027</td>
<td>53.7</td>
<td>.8000</td>
<td>67.13</td>
</tr>
<tr>
<td>2028</td>
<td>56.2</td>
<td>.8000</td>
<td>70.25</td>
</tr>
<tr>
<td>2029</td>
<td>58.7</td>
<td>.8000</td>
<td>73.38</td>
</tr>
<tr>
<td>2030</td>
<td>61.2</td>
<td>.8000</td>
<td>76.50</td>
</tr>
</tbody>
</table>

Sum of Miles and then Gallons of Equivalent Fuel: 1236.00 | 16.00

Equivalent MPG of LDV Fleet in 2030: 77.24

Sum of ZEV Miles = 457.9. Fraction of Miles Driven by ZEVs = 37.0%

Certainly, achieving a 32% reduction in driving in 2030 compared to the 2005 level will be difficult. However, increasing the rate of fleet electrification, from what is shown in the *Balanced_1* and *Balanced_2* cases ($z$, in Tables 6 and 7) would be even more difficult.
### Table 10  Four-Case Summary of Requirements

<table>
<thead>
<tr>
<th>Case Designations</th>
<th>Balanced_1</th>
<th>Balanced_2</th>
<th>2005 Driving</th>
<th>Mary Nichols</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Renewable Electricity</td>
<td>85.0%</td>
<td>90.0%</td>
<td>90.0%</td>
<td>90.00%</td>
</tr>
<tr>
<td>% ZEVs, Year 2016</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.70%</td>
</tr>
<tr>
<td>% ZEVs, Year 2017</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.0%</td>
<td>2.70%</td>
</tr>
<tr>
<td>% ZEVs, Year 2018</td>
<td>3.0%</td>
<td>3.0%</td>
<td>3.0%</td>
<td>5.11%</td>
</tr>
<tr>
<td>% ZEVs, Year 2019</td>
<td>4.0%</td>
<td>4.0%</td>
<td>4.0%</td>
<td>7.53%</td>
</tr>
<tr>
<td>% ZEVs, Year 2020</td>
<td>8.0%</td>
<td>8.0%</td>
<td>8.0%</td>
<td>9.94%</td>
</tr>
<tr>
<td>% ZEVs, Year 2021</td>
<td>20.0%</td>
<td>15.0%</td>
<td>82.0%</td>
<td>12.35%</td>
</tr>
<tr>
<td>% ZEVs, Year 2022</td>
<td>35.0%</td>
<td>25.0%</td>
<td>97.0%</td>
<td>14.76%</td>
</tr>
<tr>
<td>% ZEVs, Year 2023</td>
<td>55.0%</td>
<td>45.0%</td>
<td>99.0%</td>
<td>17.18%</td>
</tr>
<tr>
<td>% ZEVs, Year 2024</td>
<td>80.0%</td>
<td>70.0%</td>
<td>99.0%</td>
<td>19.59%</td>
</tr>
<tr>
<td>% ZEVs, Year 2025</td>
<td>94.0%</td>
<td>95.0%</td>
<td>99.0%</td>
<td>22.00%</td>
</tr>
<tr>
<td>% ZEVs, Year 2026</td>
<td>97.0%</td>
<td>97.0%</td>
<td>99.0%</td>
<td>37.60%</td>
</tr>
<tr>
<td>% ZEVs, Year 2027</td>
<td>98.0%</td>
<td>98.0%</td>
<td>99.0%</td>
<td>53.20%</td>
</tr>
<tr>
<td>% ZEVs, Year 2028</td>
<td>99.0%</td>
<td>99.0%</td>
<td>99.0%</td>
<td>68.80%</td>
</tr>
<tr>
<td>% ZEVs, Year 2029</td>
<td>99.0%</td>
<td>99.0%</td>
<td>99.0%</td>
<td>84.40%</td>
</tr>
<tr>
<td>% ZEVs, Year 2030</td>
<td>99.0%</td>
<td>99.0%</td>
<td>99.0%</td>
<td>100.00%</td>
</tr>
<tr>
<td>% Reduction in Per-Capita Driving With Respect to Year 2005</td>
<td>32.0%</td>
<td>32.0%</td>
<td>0%</td>
<td>50.5%</td>
</tr>
</tbody>
</table>
Besides that, it should be recognized that California alone cannot stabilize our earth’s climate. California’s best hope is to set an example for other states and other countries. Taking too many of the world’s production of electric vehicles will not work. For a more specific example, lithium batteries may be in short supply and so it may be counterproductive for California to have more than its fair share, thus preventing other states and countries from electrifying their fleet at the required rate. The rates of electrification shown for the Balanced_1 and the Balanced_2 cases are aggressive enough, as shown by the purple-colored entries.

California needs to adopt a set of requirements to achieve the 32% reduction. If CARB wants to work to have California legislate requirements to achieve the Mary Nichol’s case of a 50% reduction in driving, that would also work and allow more electric cars to go to other states and countries. However the 50% reduction in per-capita driving might be politically impossible at this time.

Since the 32% reduction seems prudent, it begs the question as to what this means in terms of roadway congestion.

The net (as opposed to the per-capita) driving change, going from 2005 to 2030 can be computed by multiplying the per-capita driving factor corresponding to the 32% reduction, which is 0.68, by the population factor of 1.1744, computed in Equation 7. The product of these two values is 0.7986. This means that, even with the 17% increase in California’s population, the net driving will have to drop by the factor of about 0.80, or by 20%. If this LDV-driving-reduction requirement (of 0.68) is selected, all of California’s transportation money can be used to improve transit, improve active transportation (mainly walking and biking), and maintain, but not expand, roads. There can be little or no congestion because California highway capacity now is larger than it was in 2005 while the state’s net driving must drop by 20%.

ACHIEVING THE REQUIRED DRIVING REDUCTION OF THE BALANCED_1 AND THE BALANCED_2 CASES

As shown in Equation 19, for the Balanced_1 case, and in Equation 21 for the Balanced_2 Case, in 2030, the per-capita driving will need to be 32% below the 2005 value. As shown in this link, https://en.wikipedia.org/wiki/Sustainable_Communities_and_Climate_Protection_Act_of_2008, California’s Metropolitan Planning Organizations (MPOs) are adopting Region Transportation Plans (RTPs) that will achieve reductions in year 2020 and 2035. The convention adopted in this report for these reductions, specifically the per-capita driving reduction with respect to the per-capita driving in 2005, matches the SB 375 convention. As shown in the link, the targets, for year 2035, range from 0% for the Shasta MPO to 16% for Sacramento Area Council of Governments. However, it may be true that some of the 2035 requirements have been revised upwards, to be as large as 19% for some MPOs. Since the climate stabilization target year here is 2030 instead of 2035, and to be reasonably conservative, it is assumed here that the state (this is for all MPOs) will achieve a 12% reduction in per-capita driving, in 2030, compared to 2005. This leaves approximately 20% to be achieved by new requirements.

The title of each of the following subsections contains the estimated per-capita driving reduction each strategy will achieve, by 2030.
Reallocate Funds Earmarked for Highway Expansion to Transit and Consider Transit-Design Upgrades (2%)

San Diego County has a sales tax measure called “TransNet”, which allocates approximately one-third for highway expansion, one-third for transit, and one-third for road maintenance. It has a provision that allows for a reallocation of funds, if supported by at least two-thirds of SANDAG Board members, including a so-called weighted vote, where governments are given a portion of 100 votes, proportional to their population. This requirement would be to reallocate the TransNet amount, earmarked for highway expansion, to transit and to do similar reallocations throughout California.

This money could be used to fund additional transit systems; improve transit operations; and/or fund the redesign and implementation of the redesign of existing transit systems. The redesign could include electrification and automation (including automation of fare collection and such features as screening passengers to prevent them from boarding if they have a fever or are in a “test positive” database) or even upgrading to a different transit technology.

A Comprehensive Road-Use Charge (RUC) Pricing and Payout System to Unbundle the Cost of Operating Roads (10%)

*Comprehensive* means that pricing would be set to cover all costs (including road maintenance and externalities such as harm to the environment and health); that privacy and the interests of low-income drivers doing necessary driving would be protected; that the incentive to drive fuel-efficient cars would be at least as large as it is under the current fuels excise tax; and finally, as good technology becomes available, congestion pricing is used to protect critical driving from congestion.

The words *payout* and *unbundle* mean that some of the money collected would go to people that are losing money under the current system.

User fees (gas taxes and tolls) are not enough to cover road costs\(^{10}\) and California is not properly maintaining its roads. Reference 10 shows that in California user fees amount to only 24.1% of what is spent on roads. Besides this, the improved mileage of the ICEs and the large number of ZEVs mean that gas tax revenues will drop precipitously.

This RUC system could be used to help reduce the ICE LDV miles driven in 2016 to 2022, as shown in the “f” column of Tables 6 through 9. This system could probably be implemented in less than 2 years if the urgency of our climate crisis is recognized.

Unbundling the Cost of Car Parking (8%)

Unbundling the cost of car parking\(^{11}\) throughout California is conservatively estimated to decrease driving by 8%, based on Table 1 of Reference 11. That table shows driving reductions that occur in response to introducing a price, for 10 cases. Its average reduction in driving is 25% and its smallest reduction is 15%. However, these numbers are for individual cases whereas the 8% is the decrease in driving in California, due to introducing value pricing where there is a zero price today, or where the price is below its value price. These concepts are explained in Reference 11.

The first such systems should be installed by a (RFP is Request for Proposal) RFP-process-identified, third-party vendor, such as Google, Qualcomm, Uber, or Lime Bicycle, for municipal government employees, as part of the government’s Climate Action Plan. The system would be operated for the financial gain of the employees, with a hard requirement in the RFP that even
employees that continue to drive every day would at least break even. The winning third-party vendor would be skilled at monetizing parking whenever it is not being used by the employees and skilled at monetizing data. The parking system would be fully automated, like Uber, except with a more useful phone app that would find the best parking at the user-specified price and walk-distance. The parking would be available to all drivers driving a car registered in the system. Briefly stated, the system is value priced, shared, automated, and provides earnings to all the people that are effectively losing wages or paying higher costs because the parking is being provided. The vendor would also be good at expanding the system both geographically and over all types of uses, in an economically disruptive way; as Uber and Lyft did to the taxi cab industry. The system would be as easy to use as “free” parking, once the car is registered. It would utilize congestion pricing to protect the desired maximum-occupancy rate.

**Good Bicycle Projects**

The best criterion for spending money for bicycle transportation is the estimated reduction in driving per the amount spent. The following strategies may come close to maximizing this parameter.

*Projects to Improve Bicycle Access (1%)*

All of the smart-growth neighborhoods, central business districts, and other high-trip destinations or origins, both existing and planned, should be checked to see if bicycle access could be substantially improved with either a traffic calming project, a “complete streets” project, more shoulder width, or a project to overcome some natural or made-made obstacle. For example, in some cases, long stretches of freeways cut off bicycle passage on surface streets that are perpendicular to the freeway. In some of these cases, a bicycle bridge over the freeway would be cost effective.

*League-of-American-Bicyclist-Certified (LCI) Instruction of “Traffic Skills 101” (1%)*

Most serious injuries to bike riders occur in accidents that do not involve a motor vehicle\(^\text{12}\). Most car-bike accidents are caused by wrong-way riding and errors in intersections; the clear-cut-hit-from-behind accident is rare\(^\text{12}\).

After attending *Traffic Skills 101*, students that pass a rigorous written test and demonstrate proficiency in riding in traffic and other challenging conditions, in passing an on-road-riding test, would be paid for their time and effort.

As an example of what could be done in San Diego County, if the average class size was 3 riders per instructor and each rider passes both tests and earns $100 and if the instructor, with overhead, costs $500 dollars, for a total of $800 for each 3 students, that would mean that $160M could teach $160M/$800 = 200,000 classes of 3 students, for a total of 600,000 students. The population of San Diego County is around 3 million.

**Eliminate or Greatly Increase the Maximum Height and Density Limits Close to Transit Stops that Meet Appropriate Service Standards (2%)**

As sprawl is reduced, more compact, transit-oriented development (TOD) will need to be built. This strategy will incentivize a consideration of what level of transit service will be needed, how it can be achieved, and what levels of maximum height and density are appropriate. Having no limits at all is reasonable if models show that the development can function without harming the existing adjacent
neighborhoods, given the level of transit service and other supporting transportation policies (such as car parking that unbundles the cost and supports the full sharing of parking\textsuperscript{12}) that can be assumed.

**Complete Streets (Streets designed for all users), “Road Diets”, and “Traffic Calming”, Such as Replacing Signalized Intersections with Roundabouts (1%)**

These projects will encourage active transportation, such as bicycling and walking. These projects also fit well with the addition of TOD and increasing density. They will reduce speeds and therefore reduce noise. The noise reduction and increased safety will encourage people to want to live on and around the redesigned arterials where they would not want to have lived before. People will also be more inclined to shop and to work in such surroundings.

**Net Driving Reduction from All Identified Strategies**

By 2030, the sum of these strategies should be realized as shown in Table 11.

**CONCLUSION**

The urgency of our climate crisis dictates that California should develop plans such as the cases considered in this paper for a climate-stabilizing target year of 2030. The state needs to select a case and move forward with legislation and implementation. The cases considered in this paper indicate that California should achieve electricity that is at least 85% from renewable sources and a per-capita driving reduction of at least 32% with respect to 2005 driving levels. The eight driving-reducing requirements described in this paper are an example of how this could be done.
Table 11  Requirements to Achieve a 32% Reduction in 2030 Per-Capita Driving, with Respect to 2005

<table>
<thead>
<tr>
<th>Driving Reduction Requirements</th>
<th>Percent Reduction</th>
<th>Factor</th>
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</thead>
<tbody>
<tr>
<td>Legislated (SB 375) Plans to Reduce Driving</td>
<td>12%</td>
<td>0.88</td>
</tr>
<tr>
<td>Value-Priced Road Use Charge (RUC)</td>
<td>10%</td>
<td>0.90</td>
</tr>
<tr>
<td>Value-Priced Parking (Unbundling the Cost)</td>
<td>8%</td>
<td>0.92</td>
</tr>
<tr>
<td>Transfer Highway Expansion Funds to Transit</td>
<td>2%</td>
<td>0.98</td>
</tr>
<tr>
<td>Increase Height &amp; Density by Transit Stations</td>
<td>2%</td>
<td>0.98</td>
</tr>
<tr>
<td>&quot;Complete Streets&quot;, &quot;Road Diet&quot; (walk/bike)</td>
<td>1%</td>
<td>0.99</td>
</tr>
<tr>
<td><strong>Pay-to-Graduate Bicycle Traffic-Skills Class</strong></td>
<td>1%</td>
<td>0.99</td>
</tr>
<tr>
<td>Bicycle Projects to Improve Access</td>
<td>1%</td>
<td>0.99</td>
</tr>
<tr>
<td><strong>Product of Factors</strong></td>
<td><strong>0.68</strong></td>
<td></td>
</tr>
<tr>
<td><strong>% Reduction</strong></td>
<td><strong>32%</strong></td>
<td></td>
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ABREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>AB 1493</th>
<th>California’s Assembly Bill 1493</th>
<th>ICE</th>
<th>Internal Combustion Engine LDV</th>
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</thead>
<tbody>
<tr>
<td>AB 32</td>
<td>California’s Assembly Bill 32</td>
<td>kW-h</td>
<td>Kilo Watt-hour</td>
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<tr>
<td>APS</td>
<td>Alternative Planning Strategy</td>
<td>LCFS</td>
<td>Low Carbon Fuel Standard</td>
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<tr>
<td>CAFE</td>
<td>Corporate Average Fleet Efficiency</td>
<td>LDV</td>
<td>Light-Duty Vehicle</td>
</tr>
<tr>
<td>CARB</td>
<td>California Air Resources Board</td>
<td>MPO</td>
<td>Metropolitan Planning Organization</td>
</tr>
<tr>
<td>CBD</td>
<td>Center for Biological Diversity</td>
<td>Pavley</td>
<td>Senator Pavley’s AB 1493</td>
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<td>CEQA</td>
<td>California Environmental Quality Act</td>
<td>PPM</td>
<td>Parts per Million</td>
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<td>CCAP</td>
<td>Center for Clean Air Policy</td>
<td>RPS</td>
<td>Renewable Portfolio Standard</td>
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<td>CNFF</td>
<td>Cleveland National Forest Foundation</td>
<td>RTP</td>
<td>Regional Transportation Plan</td>
</tr>
<tr>
<td>SB 375</td>
<td>California’s Senate Bill 375</td>
<td>S-3-05</td>
<td>Governor’s Executive Order S-3-05</td>
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<tr>
<td>CO₂</td>
<td>Carbon Dioxide</td>
<td>SANDAG</td>
<td>San Diego Association of</td>
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<tr>
<td>CO₂_e</td>
<td>Carbon Dioxide Equivalent GHG</td>
<td>Governments</td>
<td></td>
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<tr>
<td>EHM</td>
<td>“Extra Heroic Measures” LDV Case</td>
<td>SCS</td>
<td>Sustainable Community Strategy</td>
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<tr>
<td>GEO</td>
<td>Governor’s Executive Order</td>
<td>TransNet</td>
<td>San Diego County sales tax</td>
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ACKNOWLEDGEMENTS
Darrell Clarke, Lead Volunteer for the Sierra Club’s “Beyond Oil Campaign”; Dr. Dennis Martinek, Oceanside Planning Commissioner; Sandra Goldberg, formerly California Deputy Attorney General; Dr. Nilmini Silva-Send, Senior Policy Analyst of the Energy Policy Initiative Center; Diane Nygaard, Director of Preserve Calavera and founder of Nelson Nygaard Consulting Associates; Jack Shu, CNFF President; Joan Bullock; San Diego Sierra Club Executive Committee Chairs: Caroline Chase, John Stump, and (former Assembly Member) Lori Saldaña; Malinda Dickenson, Law Offices of Malinda R. Dickenson; Conservation Committee Chair Mollie Biggers; Ed Mainland and Jim Stewart, Co-Chairs, Energy-Climate Committee, Sierra Club California; Bern Grush, Chief Scientist, Skymeter Corporation; and SANDAG Staff: Susan Baldwin, Senior Regional Planner; Charles Stoll, Director of Land Use and Transportation Planning; and Stephan Vance, Senior Regional Planner.

REFERENCES
4. Hertsgaard, M; Latino Climate Solution, the Nation, Dec. 24/31, 2012.
5. Whitney E.; How to Meet the Climate Crisis, UU World, Volume XXVI No. 4, Winter 2012.
9. State of California Department of Finance, from http://www.dof.ca.gov/Forecasting/Demographics/Projections/ then select the EXCEL file from “Total Population by County”


**KEYWORDS**

Driving, climate, mandates, S-3-05, SB 375, RTP, CEQA, Unbundled, GHG, CAFÉ, ZEVs
September 16, 2011

Honorable Jerome Stocks  
Chair, Board of Directors  
San Diego Association of Governments  
401 B Street, Suite 700  
San Diego, CA 92101

RE: Draft Environmental Impact Report for 2050 Regional Transportation Plan and Sustainable Communities Strategy

Dear Chairman Stocks and Honorable Members of the Board:

Attorney General Kamala D. Harris submits the following comments on the Draft Environmental Impact Report (DEIR) prepared for the San Diego Association of Governments’ (SANDAG) 2050 Regional Transportation Plan and Sustainable Communities Strategy (RTP/SCS). While we recognize the difficulty of SANDAG’s task – to prepare the first SCS in the State as required by SB 375 – our review of the DEIR for the RTP/SCS has revealed some significant legal problems, as set forth below. We believe that SANDAG has the ability to correct these problems and improve the RTP/SCS, which will benefit not only the San Diego region, but will help to set the standard for other Metropolitan Planning Organizations across California.

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1 The Attorney General submits these comments pursuant to her independent power and duty to protect the environment and natural resources of the State from pollution, impairment, or destruction, and in furtherance of the public interest. (See Cal. Const., art. V, § 13; Gov. Code, §§ 12511, 12600-12612; D’Amico v. Bd. of Medical Examiners (1974) 11 Cal.3d 1, 14-15.) This letter is not intended, and should not be construed, as an exhaustive discussion of the DEIR’s compliance with the California Environmental Quality Act (CEQA).

2 Senate Bill 375 (Chapter 728, Statutes of 2008).
Comments on the DEIR

Localized Air Pollution

The SANDAG region has some of the most serious local air quality problems in the State and the nation – in substantial part caused by vehicle emissions. The harm from these pollutants is not necessarily distributed equally throughout the region, but may be more concentrated in communities immediately adjacent to large-scale industrial and commercial development and major transportation corridors, and may more particularly affect certain segments of the population. As discussed below, our review of the DEIR indicates that SANDAG has set too low a bar for determining whether the air quality impacts of its RTP/SCS are significant, and, further, has failed to analyze the impacts of projected increases in pollution on communities that are sensitive or already overburdened with pollution, in violation of CEQA.

Background: Pollutants of Concern in the San Diego Air Basin

It is well established that “[t]he significance of an activity depends upon the setting.” (Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692, 718 [citing Cal. Code Regs., tit. 14, § 15064, subd. (b)]; see also id. at 721.) Accordingly, the significance of any added pollutant emissions must be judged in the context of an air basin that already exceeds health-based federal air quality standards. (See ibid.) The San Diego area was ranked by the American Lung Association this year as having the seventh worst ozone problem, and the fifteenth worst particulate pollution problem, in the nation.3 Pollutants of concern in the San Diego air basin include ozone, the chemical commonly called “smog,” which may permanently decrease lung function;4 and particulate matter, which impairs lung function and can exacerbate asthma. Small particulate matter (2.5 microns in size or less), a component of diesel exhaust, is of particular concern, because it can penetrate deeply into the lungs, bypassing the body’s defenses, and can carry carcinogens on the surface of the particles.

The seriousness of the localized air pollution problem as it exists today in the region can hardly be overstated. The area exceeded the health-based federal ozone standard on 24 days in 2009, and it exceeded the federal particulate standard on 4 days. The basin exceeded the more stringent California standard for ozone on 127 days in 2009, and the fine-particulate standard on 78 days. The area has a history of failing to meet applicable air quality objectives. The San Diego Air Pollution Control District (APCD) stated in its 2009 Regional Air Quality Strategy (RAQS) that it has not consistently met the Health and Safety Code’s 5% per year ozone reduction target during any year during the 2003-2006 time period, and that the APCD expects reductions of only about 3% per year during the 2006-2009 time period. (San Diego APCD 2009-RAQS, p. 2.)

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4 Gauderman, et al., The Effects of Air Pollution on Lung Development from 10 to 18 Years of Age (Sept. 9, 2004) 351 The New England Journal of Medicine 1057-1068.
SANDAG’s Focus on “Conformity” with the State Air Pollution Plans Fails Adequately to Address the Region’s Serious Air Quality Problems.

Where an area exceeds federal air quality standards for air pollutants, federal law allows funding of the individual transportation projects listed in an RTP only if the RTP “conforms” to a federally approved state plan to meet those federal standards. The DEIR’s analysis of whether localized air pollution resulting from the RTP/SCS is significant under CEQA focuses almost exclusively on whether such conformity is achieved. There are significant problems with this limited approach, which substitutes a determination of whether certain federal laws are met for SANDAG’s obligation under CEQA to conduct a thorough analysis of the actual effects on the air and on public health that will result from the addition of the many hundreds of miles of highway expansion and extensions that are in the RTP/SCS.

California’s most recent federally approved plan was prepared in 2007, and therefore does not reflect current conditions. The DEIR acknowledges that the federal EPA is expected to soon reclassify the San Diego Air Basin as in “serious” nonattainment of the federal ozone standard, a designation that requires attainment of the federal standard by June of 2013. (DEIR, p. 4.3-6.) Demonstrating conformity with the 2007 plan emissions budgets does not, by itself, show that relevant health effects created by the new pollution generated by the RTP/SCS have been analyzed and disclosed, or even that the relevant federal standards will be met. Instead, EPA’s reclassification of the air basin as having worse air quality, and the imposition of such a short deadline for meeting the federal ozone standard, indicates a more serious air pollution problem that may require more stringent control measures to protect the public health.5

In addition, the DEIR fails to analyze whether the California standard for ozone, more stringent than the federal standard, will be met during the life of the RTP/SCS, or what the RTP/SCS’s contribution to current or future violations of that standard will be. The DEIR appears to rely solely on the RAQS to meet the state ozone standard. (See DEIR at p. 4.3-29-30.) Yet, as noted, the region has not consistently met the RAQS 5% per year ozone reduction target. The fact that U.S. EPA is expected to reclassify the Basin as in “serious” nonattainment of the less stringent federal ozone standard would indicate that the RAQS standards have not been enough to prevent deteriorating air quality. Thus, any assumption that the RAQS will consistently achieve the 5% reduction target in the future is unsupported, and any assertion that the RAQS will attain the state ozone standard at a time certain unfounded. A full analysis is

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5 Even if conformity with federal standards in state-approved plans were an appropriate benchmark for significance under CEQA, the DEIR does not contain a quantitative analysis, using the most recent available air quality measurements as the baseline, to determine whether the federal air quality standards will actually be met, and what the public health consequences would be of adding the expected pollutant load from the RTP/SCS to existing conditions. (DEIR, at p. 4.3-14.)
needed to show that the emissions caused by the RTP/SCS at different time points during its life will not contribute significantly to violations of the state ozone standard in the San Diego Air Basin.

SANDAG Has Failed Adequately to Address Impacts to Public Health and Communities Already Burdened with Pollution.

We commend SANDAG for including in its DEIR a chapter entitled “Environmental Justice.” (DEIR, ch. 4.06.) That section appears to focus primarily on the RTP/SCS’s effect on access to transit by traditionally underserved communities. SANDAG has, however, failed to analyze other equally, if not more, significant effects of the RTP/SCS on communities currently experiencing environmental injustice. The principal omission of the DEIR is the lack of any discussion of the impacts of the increased air pollution that will result from carrying out the RTP/SCS on communities already severely impacted by air pollution. As noted, CEQA requires that the significance of environmental impacts be considered in context. (Kings County Farm Bureau, supra, 221 Cal.App.3d at 718.) Such context may appropriately include (1) whether the region includes communities or subpopulations that may be particularly sensitive to increases in pollution; and (2) whether such communities or groups are already at or near their capacity to bear any additional pollution burden.

The DEIR does not identify whether the area affected by the RTP/SCS includes particularly sensitive communities that will be affected disproportionately by the acknowledged increase in pollution. “[A] number of studies have reported increased sensitivity to pollution, for communities with low income levels, low education levels, and other biological and social factors. This combination of multiple pollutants and increased sensitivity in these communities can result in a higher cumulative pollution impact.” (Office of Environmental Health Hazard Assessment, Cumulative Impacts: Building a Scientific Foundation (Dec. 2010), Exec. Summary at p. ix.)6 Research in other parts of California has shown that disadvantaged and minority communities are often exposed to unhealthful air more frequently and at higher levels than other groups.7 Identifying these communities is an essential part of describing the relevant CEQA setting.

Once such communities are identified, SANDAG must analyze how the health of the residents in these communities would be expected to be particularly affected. As discussed, residents already are experiencing serious air pollution that is impacting health and welfare, and it is reasonable to assume that these effects currently are more concentrated in certain areas of the region, for example, in communities adjacent to large-scale industrial or commercial operations or transportation corridors used by heavy-duty trucks. In addition, viewed at the individual community scale, there may be synergistic adverse effects. For example, research

6 Available at http://oehha.ca.gov/ef/cipa123110.html.
7 Hall and Brajer, The Benefits of Meeting Federal Clean Air Standards in the South Coast and San Joaquin Valley Air Basins (2008) at 22-23.
has shown that increases in greenhouse gas emissions may result in localized ozone increases; such increases have been observed in California.\(^8\)

We believe that particulate pollution may be of special concern to already burdened communities. As discussed, diesel particulate emissions have serious health effects, since they impact respiratory function and can exacerbate asthma. Further, diesel particulates are known to the State of California to cause cancer,\(^9\) and have been listed by the Air Resources Board (ARB) as a toxic air contaminant.\(^10\) The DEIR shows that particulate matter pollution will increase over the life of the RTP/SCS. (DEIR, Table 4.3-5, p. 4.3-25.) It also reports that the ARB estimated in 2000 – over a decade ago – that a subset of particulate pollution, fine particulates emitted by diesel vehicles, created an additional cancer risk of 720 cancer cases per one million persons exposed in the San Diego Air Basin. (DEIR, p. 4.3-8.) For comparison purposes, a private business must provide a warning if it exposes individuals to a chemical that poses an increased cancer risk of ten cases in one million people exposed. (Cal. Code Regs., tit. 27, § 25703(b).)

Despite this high cancer risk, and the DEIR’s own recognition that particulate pollution will increase over the life of the RTP/SCS, the DEIR does not analyze what public health effects the increase in particulate matter will cause. Nor does it estimate what portion of the increase in particulate pollution will be carcinogenic diesel particulate matter, and disclose the public health effects that increase may cause. Such an analysis is required under CEQA, so that both the decision maker and the public can know the full consequences of the decision being made. (Bakersfield Citizens for Local Control v. City of Bakersfield (2004) 124 Cal.App.4th 1184, 1219-1220.) We are especially concerned that no analysis is presented either of the current risk from particulate pollution, nor of the impact of the projected increase in particulate pollution, on already overburdened or sensitive communities. Given the increase in particulate emissions shown in the DEIR, given the emphasis in the RTP/SCS on the Goods Movement Strategy for the San Diego region (RTP/SCS, Chapter 6), and given the DEIR’s recognition that much of this goods movement will be accomplished by diesel trucks (DEIR, p. 4-16-8; see, also, RTP/SCS, Tech. Appdx. 4, p. 4 [estimating that roads and truckways will carry 90% by volume of goods through the region]), it is incumbent on SANDAG to fully analyze the public health consequences of the RTP/SCS in general, and of the Goods Movement Strategy, in particular.\(^11\)

\(^8\) Jacobson, *Enhancement of Local Air Pollution by Urban CO2 Domes* (2010) Environ. Sci. Technol. 2497-2502. This phenomenon is of concern because, as discussed, under the RTP/SCS, vehicle miles travelled (VMT) trends up as the total number of vehicles on the road increases. (DEIR, pp. 4.12-16, 4.12-21, 4.12-24; contrast with Table TA 3.1, showing an overall decrease of 1% in VMT by 2050.) Increases in VMT cause increased emissions of greenhouse gases, which may in turn exacerbate localized pollution.

\(^9\) Cal. Code Regs., tit. 27, § 27001.


The goal of an RTP/SCS is a sustainable community, and no community can be sustainable unless its public health is protected. Thus, while the inclusion of a separate chapter of the DEIR on environmental justice is commendable, the current analysis is deficient, and should be redone and expanded to disclose the full scope of the air pollution and public health consequences of the RTP/SCS, and to propose mitigation measures for those consequences that are proportional to the seriousness of the impacts. (City of Marina v. Board of Trustees of the California State University (2006) 39 Cal.4th 341, 361-62.) We would be happy to work with SANDAG in making this part of the DEIR more meaningful.

SANDAG Has Failed Adequately to Consider Feasible Mitigation for Localized Air Quality Impacts.

Although it finds the RTP/SCS’s impacts on localized air pollution to be significant, the DEIR proposes almost no mitigation measures to reduce or offset these impacts. Instead, the DEIR states that “mitigation measures at the program level is [sic] infeasible” for ozone precursors and carbon monoxide, and defers all mitigation for these pollutants to individual project-level CEQA processes. (DEIR, pp. 4.3-46, 4.3-47, 4.3-48.) CEQA requires that project changes or mitigation either be adopted or shown through substantial evidence to be infeasible; the DEIR, however, does not make such a showing.

The DEIR offers virtually no evidence that program-level mitigation is actually infeasible, and the mitigation measures it does propose lack certainty and are incomplete. For example, compliance with future local land use plans (the scope of which is not now known) is identified as the only feasible mitigation for ozone-related impacts. (DEIR, p. 4.3-48.) Mitigation for fine particulate matter is not discussed separately from mitigation for coarse particulates, despite their different sizes, health impacts, and sources. The dust control measures in the DEIR are not shown to be effective against fine particulates, which come more from industrial processes and fuel combustion than from ground disturbance. The DEIR’s treatment of mitigation for conventional air pollution does not comply with CEQA’s substantive mandate to mitigate all significant impacts. (Pub. Resources Code, §§ 21002, 21081(a).)

It is vital for the health of the San Diego region’s public that all feasible mitigation be adopted and carried out to prevent further deterioration of the already unhealthy air, and it is also vital for the region’s economy. Research shows consistently that the costs of reducing pollution are far outweighed by clean-air benefits such as increased worker productivity, increased agricultural outputs, and reductions in mortality and illness that result from cleaner air. The research cited above -- finding minority communities more severely affected by air pollution -- also calculated the significant costs associated with polluted air in other air basins. Costs ranged

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12 On a nationwide basis, the Office of Management and Budget has estimated that the benefits of clean air regulations outweigh the costs by a ratio of about four to one. OMB, “Informing Regulatory Decisions: 2003 Report to Congress on the Costs and Benefits of Federal Regulations and Unfunded Mandates on State, Local, and Tribal Entities.”
from $1,250 per person per year in the South Coast Air Basin to $1,600 per person per year in the San Joaquin Valley Air Basin, due to increased health care costs and emergency room visits, missed work and school days, and even premature deaths.\(^{13}\) CEQA mandates that SANDAG improve its analysis of the feasibility of localized air pollution mitigation, and the economic benefits of cleaner air and healthier communities must be considered in the feasibility calculus.

**Climate Change Impacts: Greenhouse Gas Emissions**

Before discussing the DEIR’s treatment of GHG emissions, it is important first to establish the relevant context for evaluating significance. The climate is affected by the concentration of GHGs in the atmosphere. The concentration of carbon dioxide, the primary GHG, has increased from approximately 280 parts per million (ppm) in pre-industrial times to well over 380 ppm, according to the National Oceanic and Atmospheric Administration’s (NOAA) Earth Systems Research Laboratory.\(^{14}\) Almost all of the increase is due to human activities (such as fossil fuel use).\(^{15}\) The current rate of increase in carbon dioxide concentrations is about 1.9 ppm/year; present carbon dioxide concentrations are higher than any time in at least the last 650,000 years.\(^{16}\) GHGs persist in the atmosphere for decades and in some cases millennia.\(^{17}\)

The atmosphere and the oceans are reaching their capacity to absorb GHGs without significantly (and perhaps abruptly) changing the Earth’s climate. California is already seeing the effects of climate change. As the Resources Agency observed in its 2009 report, we already are experiencing sea level rise, coastal erosion, increased average temperatures, more extreme hot days and increased heat waves, fewer shifts in the water cycle, and increases in the frequency and intensity of wildfires. (Resources Agency, 2009 *Climate Adaptation Strategy* at p. 3.)\(^{18}\) These effects are expected to increase with rising GHG levels in the atmosphere.

The burdens of climate change will not be shared equally. Future climate scenarios are expected to disproportionately affect, for example, the urban poor, the elderly and children, traditional societies, agricultural workers and rural populations. (Office of Environmental Health Hazard Assessment, *Indicators of Climate Change in California: Environmental Justice Impacts* (Dec. 2010) at p. 2.\(^{19}\)

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\(^{13}\) Hall and Brajer, at 5.

\(^{14}\) See [http://www.epa.gov/climatechange/science/recentac.html](http://www.epa.gov/climatechange/science/recentac.html).

\(^{15}\) Id.

\(^{16}\) Id.


\(^{18}\) Available at [http://www.climatechange.ca.gov/adaptation/](http://www.climatechange.ca.gov/adaptation/).

\(^{19}\) Available at [http://oehha.ca.gov/multimedia/epic/epic123110.html](http://oehha.ca.gov/multimedia/epic/epic123110.html).
In order to stabilize the climate and avoid the most catastrophic outcomes of climate change, we must substantially reduce our annual GHG emissions over time, achieving a low-carbon future by midcentury. California has memorialized this overarching environmental objective in law. Under AB 32, by 2020, California must reduce its total statewide greenhouse gas emissions to the level they were in 1990. (Health & Saf. Code, § 38550). To achieve AB 32’s 2020 target, total statewide greenhouse gas emissions must be reduced by approximately 15 percent from current (2008) levels. AB 32 implements Executive Order S-03-05 (2005), which set the statewide 2020 target as an interim step to reducing statewide emission levels, by 2050, to 80 percent below 1990 levels. “The 2020 goal was established to be an aggressive, but achievable, mid-term target, and the 2050 greenhouse gas emissions reduction goal represents the level scientists believe is necessary to reach levels that will stabilize climate.” (Air Resources Board (ARB), Scoping Plan at p. 4.)

The emissions reductions required to reach our statewide climate objective are substantial. In the longer term, we must reduce our total GHG emissions by approximately four percent per year between 2020 and 2030, and our per capita emissions by slightly less than five percent per year during the 2020 to 2030 period, with continued reductions required through midcentury. (These reductions required are graphically illustrated by the chart from ARB’s Scoping Plan, attached to this letter as exhibit A.) One of the prime objectives of SB 375, a law supporting and complementary to AB 32, and of the requirement for Sustainable Communities Strategies, is to create a long-term downward trajectory for GHG emissions in California through transportation and land use strategies.

Given the seriousness of the climate change problem, and the enormity of our GHG reduction task, we are greatly concerned that, when viewed in context, the RTP/SCS seems to be setting the region on a course that is inconsistent with the State’s climate objectives. Specifically, per capita GHG emissions from cars and light-duty trucks increase as compared to the previous year after 2020 (see RTP, Table 301 at p. 3-3), while AB 32 requires that we must aggressively and steadily reduce total per capita GHG emissions during this time period. (See Exhibit A.) Moreover, the total number of vehicle miles travelled (VMT) driven in the San Diego region will steadily increase over the life of the RTP/SCS over the 2010 baseline by 10%, 32%, and 51% in 2020, 2035, and 2050, respectively. (DEIR, pp. 4.12-16, 4.12-21, 4.12-24;

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21 The DEIR states that the Executive Order “does not constitute a ‘plan’ for GHG reduction, and no state plan has been adopted to achieve the 2050 goal.” (DEIR, pp. 4.8-29 to 4.8-30.) The DEIR therefore does not find the RTP/SCS’s failure to meet the Executive Order’s goals to be a significant impact. This position fails to recognize that Executive Order S-3-05 is an official policy of the State of California, established by a gubernatorial order in 2005, and designed to meet the environmental objective that is relevant under CEQA (climate stabilization). SANDAG thus cannot simply ignore it.
22 Available at http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. The Scoping Plan was readopted by ARB on August 24, 2011.
contrast with Table TA 3.1.) Under the most optimistic figures presented in the DEIR, total VMT will drop only 1% over current levels by 2050. Moreover, the DEIR predicts that the 14.33 million metric tons of greenhouse gases (expressed as MMT of carbon dioxide equivalent) emitted by cars and light duty trucks in 2010 (DEIR, p. 4.8-5) will fall to 12.04 MMT in 2020 (DEIR, p. 4.8-20), based largely on statewide tailpipe and fuel standards, but will then begin rising again, to 12.94 MMT in 2035 and 14.74 MMT in 2050. (DEIR, pp. 4.8-23, 4.8-25, respectively.) Thus, although SANDAG will meet the SB 375 goals for per capita GHG targets for cars and trucks set for it by ARB in 2020 and 2035, the DEIR shows that total GHG emissions from cars and light-duty trucks in 2050 will increase over the 2010 emissions level.

The DEIR finds the impact of the RTP/SCS on GHG emissions to be not significant in 2020 (DEIR, p. 4.8-20), significant in 2035 (DEIR, p. 4.8-23), and significant in 2050 (DEIR, p. 4.8-25). SANDAG must, however, make a determination whether the project as a whole has significant climate change impacts. We believe strongly that it does. What the DEIR shows is that the suite of strategies relied on by SANDAG, which include a heavy reliance on roadway expansion projects, does not deliver GHG reductions that are sustainable in the long term. In fact, infrastructure and land use decisions made in the early years of the RTP/SCS may lock in transportation inefficiencies and preclude any realistic possibility of meeting the Executive Order's goal of an 80% reduction in GHG emissions. The DEIR states that "[t]otal land-use based GHG emissions in 2050 are projected to be 21.85 MMT CO2e, or 50 percent greater than GHG emissions in 2010 (Table 4.8-11)." (DEIR at p. 4.8-24.) The DEIR should address the impact of the draft RTP/SCS on this important long-term policy in greater detail.

The DEIR is legally deficient for the additional reason that it does not analyze potential changes to the project design or specific mitigation measures for the GHG emissions impacts from land use; it makes only a generalized promise to prepare future RTPs "to incorporate policies and measures that lead to reduced GHG emissions." (DEIR, p. 4.8-35.) Further, the DEIR proposes some mitigation measures for GHG emissions attributable to transportation, but does not include any transportation mitigation that relates to land use, nor does it show that any such measures would be infeasible. We believe that CEQA requires much more analysis of potential mitigation measures, and that postponing this discussion and analysis until future RTP/SCS’s and individual projects is a violation of CEQA’s substantive provisions. (Public Res. Code §§ 21002, 21081(a); see Communities for a Better Environment v. City of Richmond (2010) 184 Cal.App.4th 70, 89-96.) SANDAG has the authority to approve the RTP/SCS even if it will have substantial environmental impacts, and CEQA will not second-guess the wisdom of that choice, so long as substantial evidence supports SANDAG’s findings. (Public Res. Code § 21081(b).) However, SANDAG may not approve an environmentally damaging project until and unless it has adopted all feasible mitigation measures or shown that further mitigation — including land use mitigation — is infeasible. The DEIR does not yet do so.

We recognize that this is the first SCS prepared in California, and that SANDAG is charting new territory. However, the legal requirements of CEQA, including the requirement to mitigate significant impacts to the extent feasible, are not satisfied simply because the RTP/SCS meets the targets contained in SB 375 for 2020 and 2035. CEQA demands a full analysis and all
feasible mitigation of every significant impact resulting from the implementation of the RTP/SCS, throughout the full life of the Plan. The DEIR does not now provide this for GHG emissions.

Comments on RTP/SCS

Although we are not commenting directly on the legal adequacy of the RTP/SCS under SB 375, we concur in the comments submitted to SANDAG by the California Office of Planning and Research (OPR). As discussed above, we are particularly concerned that per capita greenhouse gas (GHG) emissions associated with cars and light-duty trucks (and associated co-pollutants like particulate matter) begin to rise after 2020. (See OPR comment letter at pp. 3-4; Draft RTP at p. 3-3, Table 3.1; see also DEIR at Tables 4.3-5, p. 4.3-25.) As OPR notes, this “implies that future growth will be unavoidably less transportation efficient, which counters SB 375’s underlying purpose.” (OPR comment letter at p. 3.) If the RTP/SCS in fact runs counter to SB 375’s purpose to reduce transportation-related GHG emissions over time, this would bear on whether the effects of the plan should be considered significant under CEQA.

In addition, OPR’s comments discuss a failure of the DEIR and RTP/SCS to fully disclose the methodology by which VMT was projected, making it difficult or impossible for the lay public to determine for itself whether the information presented in the two documents is accurate and supported by substantial evidence. This lack of transparency is also a crucial flaw under CEQA, a statute whose purposes include accountability as to governmental decisions that affect the environment. (Laurel Heights Improvement Ass’n v. Regents of the University of California (1989) 47 Cal.3d 376, 392 [holding that “the EIR . . . is a document of accountability” for the public officials who certify it].)

Conclusion

We appreciate the difficulty of preparing the first SCS in California. We believe that SANDAG has not yet prepared a DEIR on the RTP/SCS that fully satisfies CEQA’s requirements, and urge SANDAG to redo several parts of the DEIR, as described in our comments herein. This RTP/SCS presents SANDAG with an opportunity to integrate transportation and land-use planning in a way that reduces GHG emissions and harmful air pollution, and that produces other benefits such as increased mobility and better public health for all the region’s residents, particularly its sensitive and already overburdened communities. We
would be happy to work with SANDAG to take the additional steps needed to take full advantage of this opportunity. We appreciate your consideration of our comments.

Sincerely,

Timothy R. Patterson
Supervising Deputy Attorney General

Susan Durbin
Deputy Attorney General

For Kamala D. Harris
Attorney General

cc: Gary Gallegos, Executive Director, San Diego Association of Governments
Julie D. Wiley, General Counsel, San Diego Association of Governments

Attachment
EXHIBIT A

Emissions Trajectory Towards 2050

(ARB, Scoping Plan, Figure 6, at p. 118.)
Deriving a **Climate-Stabilizing Solution Set of Fleet-Efficiency and Driving-Level Requirements**, for **Light-Duty Vehicles in California**

AWMA Paper 796315
Mike R. Bullock
mike_bullock@earthlink.net
Why pick on cars?

Greenhouse Gas (GHG) Emissions, SD County

Source: Energy Policy Initiatives Center (EPIC, USD)


On Road Transportation: 46%

Cars and light-duty trucks: 41%

Heavy Duty Vehicles: 5%

A&WMA Conference & Exhibit, 2020; Paper 796315
Why is there a Climate Problem?

Any Earth Science text book* contains the following facts:

- **Atmospheric CO2 traps heat**
  - CO2 Molecules absorb and then emit, in a random direction, infrared radiation, heat given off by the Earth’s surface
  - This effect is significant
- **Combustion of fossil fuels adds great quantities of CO2 to our Earth’s atmosphere**
  - The amount of CO2 in the atmosphere is well known
  - Our yearly emissions are well known

How Bad Could It Get?

- **Scientific American** June 2008 issue
  - 550 PPM CO2 possible in several decades
  - This could (5% probability) lead to 8 Deg. Celsius of warming
  - 8 Deg. Celsius could lead to “a devastating collapse of the human population, perhaps even to extinction”

- December 24/31 2012 Issue of Nation magazine:

A recent string of reports from impeccable mainstream institutions—the International Energy Agency, the World Bank, the accounting firm of PricewaterhouseCoopers—have warned that the Earth is on a trajectory to warm by at least 4 Degrees Celsius

[4 Degrees Celsius] would be **incompatible with continued human survival**.

Winter, *UU World* magazine (p. 57) “Lags in the replacement of fossil-fuel use by clean energy use have put the world on a pace for 6 degree Celsius by the end of this century. Such a large temperature rise occurred 250 million years ago and extinguished 90 percent of the life on Earth. The current rise is of the same magnitude but is occurring faster. We must reduce or eliminate all uses of fossil fuels.
Climate Data

- Keeling Curve:
  
  http://en.wikipedia.org/wiki/An_Inconvenient_Truth#Scientific_basis

Currently around 415 PPM!

Atmospheric Carbon Dioxide
Measured at Mauna Loa, Hawaii

Burning a gallon of gasoline releases about 19 #'s of CO2!
Likewise
A barrel of oil, about 700 #'s
A ton of coal, about 3 tons
Etc.
Climate Change, Mostly Normal

This spike is not normal. It is anthropogenic (man made).

Currently over 410 PPM!!
Let’s Zero In on that Spike

- Earth & Space Research (ESR) website: http://www.esr.org/outreach/climate_change/mans_impact/man1.html

![Graph showing temperature and CO2 levels over time.](Image)

**Current level over 410 PPM**

**Start of Industrial Revolution**
We must stabilize the value of the earth’s atmospheric $CO2_e$

$E_N$ + $E_A$ + $E_{WFB}$

- **Natural:** rotting, fire, digestion, respiration
- **Anthropogenic:** combustion of fossil fuel, methane, other
- **Warming Feed Back:** such as methane from melting permafrost

Sequestration (Photosynthesis)

$\geq \rightarrow$ Positive Slope

$\equiv \rightarrow$ Zero Slope

$\leq \rightarrow$ Negative Slope

Growth of plants on Earth

The Warming Feed Back term, $E_{WFB}$, is the wild card. It must not become dominant.
We must stabilize the value of the earth’s atmospheric CO2_e. Here is Step 1:

If Anthropogenic emissions were sufficiently low, the slope would be zero, thus capping the value of the Earth’s atmospheric CO2_e. To achieve this, industrialized nations must limit their emissions to 80% below their 1990 levels.

Warning: The Warming Feed Back terms must not become dominant.
A. Parties and Amici. Except for the following, all parties, intervenors, and amici appearing before the district court and in this Court are listed in the Brief for Plaintiffs-Appellants. James Hansen, David Beerling, Paul J. Hearty, Ove Hoegh-Guldberg, Pushker Kharecha, Valérie Masson-Delmotte, Camille Parmesan, Eelco Rohling, Makiko Sato, Pete Smith, and Lise Van Susteren are amici curiae in this appeal (referred to hereinafter as “Amici Scientists.”).
From the Climate Scientists

From Page 21: . . . the required rate of emissions reduction would have been about 3.5% per year if reductions had started in 2005, **while the required rate of reduction, if commenced in 2020, will be approximately 15% per year.**

- My math:
  - 15% means a factor of 0.85, year after year
  - Consider the 10 years from 2020 to 2030
  - $(.85)^{10} = .20$, which is 80% down
  - Other articles, describing Hansen’s work: “decarbonization by 2030”
New Climate-Stabilization Prescription

Shown with 3 California Mandates: **EO S-3-05 (Red Line & 4 Square Points)**, **SB 32** and **EO B-55-18**

- **SB 32**: 40% down by 2030
- **EO B-55-18**: 100% down by 2045
- **80% Below 1990 Value by 2050**

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**Area 1** is the net CO2_e emitted from Year 2010 to 2020.

**Area 2** is the net CO2_e emitted from Year 2020 to 2050.
How, for LDVs:

Deriving a Climate-Stabilizing Solution Set of Fleet-Efficiency and Driving-Level Requirements, for Light-Duty Vehicles in California

We have the climate scientist’s target. We must now derive the LDV Requirements.
Notes on Methods

• Base year 2005
• Intermediate year 2015
• Car Efficiency Factor from 2005 to 2015
  – Steve Winkelman’s data
• Car Efficiency Factor, 2015 to 2030
  – Derived in paper (and here)
  – Results in car-efficiency requirements
• Cars last 15 years

From a California law (SB 375) giving per-capita driving reduction targets to be achieved in Regional Transportation Plans.

Report on SB 375 See its Table 1.

Cars that survive beyond 2030 are balanced out by those that don’t survive to 2030.
Data Relating 1990, 2005, & 2015 Data

Purple (Low carbon fuel),
Green (CO2/Mile), & Gold (S-3-05)

Figure 1: Increasing VMT Threatens to Overwhelm Greenhouse Gas Savings From Cleaner Fuels and Vehicles

Source: S. Winkelman.
Based on CALTRANS VMT forecast, AB 1493 and LCFS.

A&WMA Conference & Exhibit, 2020; Paper 796315
## Variables

### Definitions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>$e_k$</td>
<td>LDV Emitted CO2, in Year “k”</td>
</tr>
<tr>
<td>$L_k$</td>
<td>Low Carbon Fuel Standard (LCFS) Factor that reduces the Per-Gallon CO2 emissions, in Year “k” (k is denotes Year 2030)</td>
</tr>
<tr>
<td>$C_k$</td>
<td>LDV CO2 emitted per mile driven, average, in Year “k”, not accounting for the Low Carbon Fuel Standard (LCFS) Factor</td>
</tr>
<tr>
<td>$c_k$</td>
<td>LDV CO2 emitted per mile driven, average, in Year “k”, accounting for the Low Carbon Fuel Standard (LCFS) Factor</td>
</tr>
<tr>
<td>$p_k$</td>
<td>Population, in Year “k”</td>
</tr>
<tr>
<td>$d_k$</td>
<td>Per-capita LDV driving, in Year “k”</td>
</tr>
<tr>
<td>$D_k$</td>
<td>LDV Driving, in Year “k”</td>
</tr>
<tr>
<td>$M_k$</td>
<td>LDV Mileage, miles per gallon, in Year “k”</td>
</tr>
<tr>
<td>$m_k$</td>
<td>LDV Equivalent Mileage, miles per gallon, in Year “k” accounting for the Low Carbon Fuel Standard (LCFS) Factor, so this is $M_k/L_k$</td>
</tr>
<tr>
<td>$N$</td>
<td>Number of pounds of CO2 per gallon of fuel but not accounting for the Low Carbon Fuel Standard (LCFS) Factor</td>
</tr>
</tbody>
</table>
Fundamental Equations

Future Year $k$: \[ e_k = c_k \cdot d_k \cdot p_k \]

Base Year $i$: \[ e_i = c_i \cdot d_i \cdot p_i \]

\[ \frac{e_k}{e_i} = \frac{c_k}{c_i} \cdot \frac{d_k}{d_i} \cdot \frac{p_k}{p_i} \]

To work with mileage: \[ \frac{m_i}{m_k} = \frac{c_k}{c_i} \]
Solution Overview

"k" denotes Year 2030
"i" denotes Year 2005

Car Efficiency Factor
From existing mileage requirements and the requirements defined herein

\[ \frac{e_k}{e_i} = \frac{m_i}{m_k} \times \frac{d_k}{d_i} \times \frac{p_k}{p_i} \]

From the known 1990-to-2005 factor and the Climate-Stabilizing-Target, which is the factor of 2030 emissions to 1990 emissions

The Independent Variable
It becomes the required per-capita driving reduction with respect to 2005 driving

From existing and predicted population
Solution Using Intermediate Year of 2015

From the **Climate-Stabilizing-Target**, which is the factor of 2030 emissions to 1990 emissions

\[
\frac{e_{2030}}{e_{1990}} \times \frac{c_{2015}}{c_{2005}} \times \frac{d_{2030}}{d_{2005}} \times \frac{p_{2030}}{p_{2005}}
\]

- \(e_{2030}/e_{1990}\): Taken from the Winkelman data: the known 1990-to-2005 factor of emissions (the light blue line)
- **Car Efficiency Factor**: From existing mileage requirements and the *requirements defined herein*
- From Winkelman. It is the product of the factor from the green line and the purple line.
- From known and predicted populations

*The Independent Variable*
It becomes the **required 2030 per-capita driving reduction with respect to 2005 driving**
Putting In the Easy-to-Get Values

From the Climate-Stabilizing-Target, which is the factor of 2030 emissions to 1990 emissions (“80% down”)

\[ 0.20 \times 0.87 = \frac{c_{2030}}{c_{2015}} \] * 0.90 * 0.93 * \frac{d_{2030}}{d_{2005}} * 1.17446

Taken from the Winkelman data: the known 1990-to-2005 factor of emissions (the light blue line)

Car Efficiency Factor
From existing mileage requirements and the requirements defined herein

From Winkelman. It is the product of the factor from the green line and the purple line. There is less CO2 per mile, thanks to the LCFS

This ratio is the Independent Variable. It is the required per-capita 2030 driving reduction with respect to 2005 driving.
Combining the Easy-to-Get Values, Solving for the Independent Variable, and Changing the 2015-to-2030 Car Efficiency from CO2-Per-Mile to Equivalent-Miles-Per-Gallon

\[
0.17700 = \frac{c_{2030}}{c_{2015}} \cdot \frac{d_{2030}}{d_{2005}}
\]

\[
\frac{d_{2030}}{d_{2005}} = 0.17700 \cdot \frac{c_{2015}}{c_{2030}}
\]

\[
\frac{d_{2030}}{d_{2005}} = 0.17700 \cdot \frac{m_{2030}}{m_{2015}}
\]

The required per-capita 2030 driving with respect to 2005 driving

Equivalent Mileage in 2030 is what we make it. It better be as high as possible, because a large driving reduction will be difficult.

= “NUMERATOR MILEAGE”

2015 Fleet Mileage is computed

= “DENOMINATOR MILEAGE”
Some **Requirements** Defined to Achieve 2030 Fleet Equivalent-Mileage

- Low-Carbon Fuel Standards (LCFS)
- Corporate Average Fuel Efficiency (CAFÉ) Standards from 2015 to 2030
- Driving Reduction Factors ($f_n$) for bad-mileage years (Year n)

Both California’s existing and extended, “L_k”

Existing, to 2025 Specified to 2030

- For example, 0.75 means 25% less driving
- **Cash for Gas-guzzlers?**
Three More Requirements

Defined to Achieve 2030 Fleet Equivalent-Mileage

• CAFÉ Standards only apply to Internal Combustion Engine (ICE) LDVs

• New Requirement: Fraction of fleet sold that must be Zero Emission Vehicles (ZEVs)

• In 2030, only 15%, or (the other case) 10% of electricity is from fossil fuels

Define “z” to be the fraction of fleet sold that must be ZEVs
# Fleet Mileage for Intermediate Year 2015

<table>
<thead>
<tr>
<th>LDV Set</th>
<th>Years Old</th>
<th>Model Year</th>
<th>CAFE MPG</th>
<th>LCFS Factor $L_{\text{Year}}$</th>
<th>Factor Driven $f$</th>
<th>Gallons Used Per $f$*100 Miles</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>14-15</td>
<td>2001</td>
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<td>1.0</td>
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<td>2</td>
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<td>1.0</td>
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<td>3.48</td>
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<tr>
<td>10</td>
<td>5-6</td>
<td>2010</td>
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<td>3.45</td>
</tr>
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<td>1.0</td>
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<td>3.09</td>
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<td>2.99</td>
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<tr>
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<td>2015</td>
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<td>2.86</td>
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</table>

**Computed** DENOMINATOR MILEAGE

- **Sum of Gallons:** 54.29
- **Miles = 100*Sum(f's):** 1500
- **MPG = Miles/(Sum of Gallons):** 27.63

A&WMA Conference & Exhibit, 2020; Paper 796315
# ZEV Derivation Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>$m_z$</td>
<td>ZEV Equivalent mileage (miles per equivalent gallon)</td>
</tr>
<tr>
<td>$m_{zr}$</td>
<td>ZEV Equivalent mileage if the electricity is from 100% renewables</td>
</tr>
<tr>
<td>$m_{zf}$</td>
<td>ZEV Equivalent mileage if the electricity is from 100% fossil fuels</td>
</tr>
<tr>
<td>$r$</td>
<td>fraction of electricity generated from sources not emitting CO2</td>
</tr>
<tr>
<td>$G$</td>
<td>Gallons of equivalent fuel used</td>
</tr>
<tr>
<td>$D$</td>
<td>Arbitrary distance travelled</td>
</tr>
<tr>
<td>Num</td>
<td>$m_{zr} \times m_{zf}$</td>
</tr>
<tr>
<td>Den</td>
<td>$r \times m_{zf} + (1 - r) \times m_{zr}$</td>
</tr>
</tbody>
</table>
ZEV Derivation

\[ G = \frac{r \times D}{m_{zr}} + \frac{(1 - r) \times D}{m_{zf}} \]

\[ m_z = D/G = D/\left(\frac{r \times D}{m_{zr}} + \frac{(1 - r) \times D}{m_{zf}}\right) \]

\[ m_z = m_{zr} \times m_{zf}/\left(r \times m_{zf} + (1 - r) \times m_{zr}\right) \]

\[ m_z = \text{Num}/(\text{Den}) \]

<table>
<thead>
<tr>
<th>( m_{zr} )</th>
<th>( m_{zf} )</th>
<th>( r )</th>
<th>1-( r )</th>
<th>Num</th>
<th>Den</th>
<th>( m_z )</th>
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</thead>
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</table>

A&WMA Conference & Exhibit, 2020; Paper 796315
Four Variable Definitions & Selecting a Target Numerator Mileage Value

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>$D_i$</td>
<td>Distance travelled by ICE vehicles</td>
</tr>
<tr>
<td>$D_z$</td>
<td>Distance travelled by ZEV vehicles</td>
</tr>
<tr>
<td>$G_i$</td>
<td>Gallons of equivalent fuel used by ICE vehicles</td>
</tr>
<tr>
<td>$G_z$</td>
<td>Gallons of equivalent fuel used by ZEVs</td>
</tr>
</tbody>
</table>

This previously-derived equation was used.

\[
\frac{d_{2030}}{d_{2005}} = 0.17700 \times \frac{m_{2030}}{m_{2015}}
\]

The driving reduction, $\frac{d_{2030}}{d_{2005}}$, was set to 0.68, corresponding to a 32% reduction in driving.

Then, using the previously-computed $m_{2015} = 27.63$ mile per gallon (MPG), the Numerator Mileage ($m_{2030}$) was computed to be around $106$ MPG.

Finally, the $z$ values were selected in the following table, by trial and error, to get the Numerator Mileage ($m_{2030}$) to be close to that $106$ MPG value.
### ICE Parameters and Calculations

<table>
<thead>
<tr>
<th>Year</th>
<th>CAFÉ MPG</th>
<th>LCFS</th>
<th>Eq. MPG</th>
<th>f</th>
<th>D_i</th>
<th>G_i</th>
<th>z</th>
<th>D_z</th>
<th>G_z</th>
<th>Total Miles</th>
<th>Total Gallons</th>
<th>2030 MPG</th>
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<tbody>
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<tr>
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<td>0.009</td>
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<td>0.229</td>
<td>100.00</td>
<td>0.2420</td>
<td>413.15</td>
</tr>
</tbody>
</table>

**Sum of Miles and then Gallons of equivalent fuel:** 1235.60 | 11.64

**Equivalent MPG of LDV Fleet in 2030:** 106.17

**ZEV Miles Driven = 795.0**  
**Fraction of Miles Driven by ZEVs = 64.3%**
Computing the Ratio of Per-Capita 2030 Driving to Per-Capita 2005 Driving

\[
\frac{d_{2030}}{d_{2005}} = 0.1770 \times \frac{106.17}{27.63} = 0.68
\]

The factor of 0.68 means there is a 32% reduction in per-capita driving, from 2005 to 2030.

Again, for the next case, the \( z \) values were selected by trial and error, to get the 106 MPG value, corresponding to a 32% decrease in driving.
### “Balanced_2”, 90% Renewable Electricity

ZevMileage = 621.67 So $G_z = \frac{D_z}{621.67}$

<table>
<thead>
<tr>
<th>Year</th>
<th>CAFÉ MPG</th>
<th>LCFS</th>
<th>Eq. MPG</th>
<th>f</th>
<th>$D_i$</th>
<th>$G_i$</th>
<th>$z$</th>
<th>$D_z$</th>
<th>$G_z$</th>
<th>Total Miles</th>
<th>Total Gallons</th>
<th>2030 MPG</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>34.3</td>
<td>0.927</td>
<td>37.01</td>
<td>0.3</td>
<td>29.4</td>
<td>0.7943</td>
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<td>0.003</td>
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<td>2017</td>
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<td>0.920</td>
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<td>39.53</td>
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<td>57.6</td>
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Sum of Miles and then Gallons of equivalent fuel: 1233.60 11.61

Equivalent MPG of LDV Fleet in 2030: **106.22**

ZEV Miles Driven = 761.0 Fraction of Miles Driven by ZEVs = 61.7%
Selecting a Target Numerator Mileage Value to Get a 0% Reduction in Driving

This previously-derived equation was used.

\[
\frac{d_{2030}}{d_{2005}} = 0.17700 \cdot \frac{m_{2030}}{m_{2015}}
\]

The driving reduction, \(\frac{d_{2030}}{d_{2005}}\), was set to 1.00, corresponding to a 0% reduction in driving.

Then, using the previously-computed \(m_{2015} = 27.63\) mile per gallon (MPG), the Numerator Mileage \((m_{2030})\) was computed to be around 156 MPG.

Finally, the \(z\) values were selected in the following table, by trial and error, to get the Numerator Mileage \((m_{2030})\) to be close to that 156 MPG value.
### ICE Parameters and Calculations

<table>
<thead>
<tr>
<th>Year</th>
<th>CAFÉ MPG</th>
<th>LCFS</th>
<th>Eq. MPG</th>
<th>f</th>
<th>D_i</th>
<th>G_i</th>
<th>z</th>
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<th>G_z</th>
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**Equivalent MPG of LDV Fleet in 2030:** 155.99

**ZEV Miles Driven:** 990.0

**Fraction of Miles Driven by ZEVs:** 78.9%

**Computed NUMINATOR MILEAGE:** 32
Computing the Ratio of Per-Capita 2030 Driving to Per-Capita 2005 Driving

Equivalent Mileage in 2030 is what we made it by selecting the “z” values in the previous table. = “NUMERATOR MILEAGE”

\[
\frac{d_{2030}}{d_{2005}} = \frac{.1770 \times \frac{155.99}{27.63}} = 1.00
\]

2015 Fleet Mileage was computed = “DENOMINATOR MILEAGE”

For the next case, the z values were taken from a published article describing values selected by the Chair of the California Air Resources Board, Mary Nichols.
**“Mary Nichols Case”, 90% Renewable Electricity**

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### ICE Parameters and Calculations

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**Sum of Miles and then Gallons of equivalent fuel:** 1236.00 16.00

**Equivalent MPG of LDV Fleet in 2030:** 77.24

ZEV Miles Driven = 457.9

Fraction of Miles Driven by ZEVs = 37.0%

**Computed NUMINATOR MILEAGE**
Computing the Ratio of Per-Capita 2030 Driving to Per-Capita 2005 Driving

Equivalent Mileage in 2030 is what resulted from the Mary Nichols statement. It is the “NUMERATOR MILEAGE”

\[
\frac{d_{2030}}{d_{2005}} = .1770 \times \frac{77.24}{27.63} = .495
\]

2015 Fleet Mileage was computed = “DENOMINATOR MILEAGE”

CARB may not understand that the fleet electrification schedule suggested by their Board Chair would require that per-capita driving be about half what it was in 2005, if LDVs are to achieve climate-stabilizing targets.
Net Driving Decrease with Respect to 2005 Driving for the “Balanced” Cases

\[(\text{Per-Capita Driving Factor}) \times (\text{Population Factor}) = \text{Net Driving Factor}\]

\[(0.68) \times (1.1744) = 0.80\]

Therefore, even though the population will grow 17%, **net driving must decrease by 20%**.

**Therefore, why add highway lanes?**

We need enforceable measures to reduce driving so much there will be no more congestion!
4 Cases that Support Climate Stabilization

Note: Purple denotes difficult; red, impossible.

<table>
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<tr>
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% Reduction in Per-Capita Driving With Respect to Year 2005

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</tbody>
</table>
Enforceable Measures to Reduce 2030 Driving by 32% With Respect to 2005

These enforceable measures are described in the AWMA paper.
An Important **Pricing** Strategy

**A Road-Usage-Charge (RUC) Pricing & Payout System**

THEREFORE, BE IT RESOLVED, that the Democratic Club of Carlsbad and Oceanside (DEMCCO) supports a road-usage charge (RUC) pricing & payout system that would (1) cover all road-use costs, including the environmental & health costs caused by driving; (2) mitigate impacts on low-income users; (3) protect privacy; (4) include congestion pricing; (5) keep the per-mile price incentive to drive energy-efficient cars at least as large as it is with today’s fuel excise tax; and (6) send its earnings to all citizens and institutions that are currently losing money by subsidizing road use.
Another Important **Pricing** Strategy

A good car-parking system: value-priced (with congestion pricing), shared, automated, and providing earnings to those losing money because the parking is being provided.

The first such systems should be installed by a third-party vendor (such as **Google, Qualcomm, Uber, or Lime Bicycle**), selected by a RFP (Request for Proposal) process, for municipal government employees, as part of the government’s **Climate Action Plan**. It would be operated for the financial gain of the employees. The RFP would specify that even employees that continue to drive every day would at least break even. The winning third-party vendor would be skilled at monetizing parking, whenever it is not being used by the employees; at monetizing data; and at expanding the system. The system would be automated with a useful phone app to find the best parking at the user-specified price and walk-distance.
From the 2020 California Democratic Party (CDP) Platform

- Work to ensure that all graduating high school students are climate literate, including knowing
  - reasons for anthropogenic climate change and its potential for harm;
  - the difference between climate stabilization and destabilization;
  - climate-stabilizing greenhouse gas (GHG) reduction targets;
    - the basis for those targets, and
    - the measures needed to achieve them; and
  - the primary categories of emissions, including the most problematic category: cars and light-duty trucks;

- Demand a state plan specifying how cars and light-duty trucks can meet climate-stabilizing targets by defining enforceable measures to achieve necessary fleet efficiency and per-capita driving limits;

- Demand Regional Transportation Plan (RTP) driving-reduction targets, shown by science to support climate stabilization;

- Work for equitable and environmentally-sound road and parking operations; smart growth; “complete streets”; teaching bicycling traffic skills; and improving transit, from local systems to high-speed rail;

- Support the design and implementation of a single, environmentally-sound technology system that will collect and distribute fees for the use of roads, parking, and transit that is both economically fair and convenient and protects user privacy and the interests of low-income users;

- Work for the electrification of all trucking and transit systems;

- Work to ensure that freeway expansion projects are subordinate to more sustainable alternatives that will result in more jobs and growth.

From the 2016 & 2018 Platform *(Dividend Account Parking)*

- Work for shared, convenient, and value-priced parking, operated with a system that provides earnings to those paying higher costs or receiving a reduced wage, due to the cost of providing the parking.

Please email comments or questions to mike_bullock@earthlink.net
Dividend-Account Parking: Feasible & Enforceable Mitigation

Updated from Air and Waste Management Association Paper 2010-A-554-AWMA

Mike R. Bullock
Satellite Systems Engineer (36 years), now retired, 1800 Bayberry Drive, Oceanside, CA 92054

ABSTRACT

Bundled-cost and bundled-benefit car-parking systems (generally called “free parking”) are defined, showing that they are not free and that they increase the drive-alone mode, since non-drivers lose just as much money as those that use the parking.

Dividend-Account Parking (DAP) is defined as a parking system in which all of the parking spaces are shared by all drivers that are driving a car that is registered in the system. “Registered” means that the car can be associated with a person having an account in the system. The parking is value-priced, with an option for a congestion pricing overlay. The critical final feature is that the earnings (dividends) are given to the people, for whom the parking is built, such as employees, shoppers, residents of apartments or condominiums, students, or train riders. It is stated that this system is defined in the California Democratic Party (CDP) Platform, making it the official policy of the largest political, environmental, and public-policy-advocacy organization in California. It is also at the center of the Sierra Club’s lawsuit against the San Diego County’s Climate Action Plan (CAP). The court has found in multiple rulings that DAP is feasible mitigation.

Motivations for change are provided, mostly based on an Air and Waste Management Association paper, Climate-Stabilizing California Light-Duty-Vehicle (LDV) Requirements. The following is shown:

1. Parking reform is needed, since fleet electrification, while critically needed (ASAP), cannot, under even the most wildly-optimistic assumptions, achieve the needed GHG emission reduction, for light-duty vehicles (LDVs), soon enough to achieve climate-stabilizing targets.

2. Per-capita driving must be reduced.

It is asserted that parking reform has a large role to play.

DAP is presented as a feasible, enforceable, mitigation measure for any Climate Action Plan or for any application where sustainability is a goal.

100 word summary:

Bundled-cost and bundled-benefit car-parking systems (erroneously called “free”) are defined, showing that they are not free and that they increase the drive-alone mode, since non-drivers lose just as much money as drivers, due to the parking.

Dividend Account Parking (DAP) is presented as a mitigation measure for any Climate Action Plan (CAP) or for any application where sustainability is a goal. The parking is shared, convenient, fully automated, and value priced with a congestion-pricing algorithm. Earnings go to those losing money because the parking is provided.

Motivations are provided, based on an Air and Waste Management Association (AWMA) paper.
Dividend-Account Parking (DAP) is defined as a parking system in which all of the parking spaces are *shared* by all drivers that are driving a car that is registered in the system. “Registered” means that the car can be associated with a person having an *account* in the system. The parking is *value-priced*, with an option for a *congestion pricing overlay*. The critical final feature is that the earnings (*dividends*) are given to the people, for whom the parking is built, such as employees, shoppers, residents of apartments or condominiums, students, or train riders. It is stated that this system is defined in the California Democratic Party (CDP) Platform, making it the official policy of the largest political, environmental, and public-policy-advocacy organization in California. It is also at the center of the Sierra Club’s lawsuit against the San Diego County’s Climate Action Plan (CAP). The court has found in multiple rulings that DAP is feasible mitigation.

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It is asserted that parking reform has a large role to play.

DAP is presented as a feasible, enforceable, mitigation measure for any Climate Action Plan or for any application where sustainability is a goal.

It shows documented driving reductions due to the pricing of parking. It notes that although the benefits of priced and shared parking are known, such parking has not been widely implemented, due to understandable concerns. It states that a system solution, called *Dividend-Account Parking*, can overcome these concerns, because it would be easy to use, share, understand, and support. The system operates the parking to maximize the financial gain of those losing money because of the parking. Eight background informational items are provided, including how value-priced parking would help California achieve greenhouse gas (GHG) reduction targets.

Arguments for less parking, shared parking, and priced parking are made. Barriers to progress are identified. The fair pricing of parking is described. Seven goals of *Dividend-Account Parking* are listed. Eleven definitions and concepts that define *Dividend-Account Parking* are given. This includes a method to compute a baseline price of parking and how to adjust that price instantaneously to keep the vacancy above 15%. That price adjustment implements “Congestion Pricing.” This information is sufficient to support a “Request for Proposal” (RFP) process to get a *Dividend-Account Parking* design. An implementation strategy is provided.

**INTRODUCTION:**

It has been well established that appropriately priced parking will significantly reduce driving. Most case studies presented in Table 1 are evaluations of the most general type of “car-parking cash-out”: *a program that pays employees extra money each time they get to work without
driving. They show that a price differential between using parking and not using parking will significantly reduce driving, even when transit is described as poor. Since driving must be reduced, the pricing of parking is desirable.

Shared parking is also recognized as desirable because it can sometimes result in less parking being needed.

Although the advantages of pricing and sharing parking have been recognized for many years, these practices are still rare. This paper identifies some of the reasons for this lack of progress. The pricing and sharing method of this paper has a natural transparency and ease of use that would reduce many of the concerns. This paper also suggests that those governments that have the necessary resources can take the lead role in developing and implementing the described systems. These governments will recover their investments, over time.

This paper describes how parking facilities could be tied together and operated in an optimum system, named Dividend Account Parking (DAP). The description of Dividend Account Parking (DAP) is sufficient to support a “Request for Proposal” process, leading to full implementation. There are two distinct parts to Dividend Account Parking (DAP). The first is how to set the price. The second is how to distribute the earnings. Briefly, the earnings go to the individuals in the group for whom the parking is built.

**Table 1** Eleven Cases of Pricing Impact on Parking Demand

<table>
<thead>
<tr>
<th>Location</th>
<th>Number of Workers @ Number of Firms</th>
<th>1995 S’s Per Mo.</th>
<th>Parking Use Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group A: Areas with poor public transportation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West Los Angeles</td>
<td>3500 @ 100+</td>
<td>$81</td>
<td>15%</td>
</tr>
<tr>
<td>Cornell University, Ithaca, NY</td>
<td>9000 Faculty &amp; Staff</td>
<td>$34</td>
<td>26%</td>
</tr>
<tr>
<td>San Fernando Valley, Los Angeles</td>
<td>850 @ 1</td>
<td>$37</td>
<td>30%</td>
</tr>
<tr>
<td>Costa Mesa, CA</td>
<td>Not Shown</td>
<td>$37</td>
<td>22%</td>
</tr>
<tr>
<td><strong>Average for Group</strong></td>
<td></td>
<td>$47</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Group B: Areas with fair public transportation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Los Angeles Civic Center</td>
<td>10,000+ @ “Several”</td>
<td>$125</td>
<td>36%</td>
</tr>
<tr>
<td>Mid-Wilshire Blvd, Los Angeles</td>
<td>1 “Mid-Size” Firm</td>
<td>$89</td>
<td>38%</td>
</tr>
<tr>
<td>Washington DC Suburbs</td>
<td>5,500 @ 3</td>
<td>$68</td>
<td>26%</td>
</tr>
<tr>
<td>Downtown Los Angeles</td>
<td>5,000 @ 118</td>
<td>$126</td>
<td>25%</td>
</tr>
<tr>
<td><strong>Average for Group</strong></td>
<td></td>
<td>$102</td>
<td>31%</td>
</tr>
<tr>
<td><strong>Group C: Areas with good public transportation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>U. of Washington, Seattle, WA</td>
<td>50,000 employees, students</td>
<td>$18</td>
<td>24%</td>
</tr>
<tr>
<td>Downtown Ottawa, Canada</td>
<td>3,500 government staff</td>
<td>$72</td>
<td>18%</td>
</tr>
<tr>
<td>Bellevue, WA</td>
<td>430 @ 1</td>
<td>$54</td>
<td>39%*</td>
</tr>
<tr>
<td><strong>Average for Group, except Bellevue, WA Case</strong></td>
<td></td>
<td>$45</td>
<td>21%</td>
</tr>
<tr>
<td><strong>Overall Average, Excluding Bellevue, WA Case</strong></td>
<td></td>
<td></td>
<td>25%</td>
</tr>
</tbody>
</table>
* Bellevue, WA case was not used in the averages because its walk/bike facilities also improved and those improvements could have caused part of the decrease in driving.

PERTINENT BACKGROUND INFORMATION

- Vehicle miles traveled (VMT) are a major cause of global warming and pollution\(^2,3\).
- California’s Metropolitan Planning Organizations (MPOs) will need to adopt strategies that reduce vehicle miles traveled (VMT), in order to meet SB375 GHG reduction targets, to be issued by the California Air Resources Board in late 2010, for years 2020 and 2035\(^2\).
- The appropriate pricing of parking is one of the least costly documented tools to reduce VMT.
- New technologies, such as sensors feeding computer-generated billing, offer the potential to efficiently bill drivers for parking and alert law enforcement of trespassers.
- Reformed parking policies can increase fairness, so that, for example, people who use transit or walk do not have to pay higher prices or suffer reduced wages, due to parking.
- Methods to unbundle parking cost are inefficient unless they support the spontaneous sharing of parking spaces. Shared parking with unbundled cost would ultimately allow cities to require significantly less parking.
- Typical systems of timed parking and metered parking are far from ideal. Parking has no automated record keeping, so it is difficult to know where there is too much or too little.
- Good policies will eventually let cities turn parking minimums into parking maximums.

A GLIMPSE INTO A POSSIBLE FUTURE

Jason is driving to work for the first time in several years. He has decided to save money by carrying home a new 3-D, big-screen computer, which he plans to purchase at a store near his office after work. He wanted to avoid paying delivery charges.

Things have been changing around his office development since they unbundled the cost of parking at the near-by train station. Many people who caught the early trains and lived close to the station stopped driving and parking in the best parking spaces; demand for housing close to the station went up; and wealthy riders, who insisted on driving, did so, confidant that they could always find parking as close to the platform as their schedules required, due to congestion pricing. Who would have guessed how much those people were willing to pay? It was shocking. Parking-lot earnings, paid to round-trip train riders, meant that the net cost to ride the train went significantly down. Ridership and neighborhood vitality both went significantly up. All Jason knew was that the price to park at his office had been going up yearly because of increased land values. His parking-lot earnings from his office had been increasing almost every month, due to the ripple effect of train riders parking off-site at cheaper parking. Some of them were using his office parking.

As he pulls out of his driveway, he tells his GPS navigation unit his work hours (it already knew his office location), the location of the store where he plans to buy the computer, and his estimated arrival and departure times at the store. He tells the GPS unit he wants to park once, park no more than 1 block from the store, walk no more than 1 mile total, and pay no more than an average of $2 per hour to park. He is not surprised to hear the GPS tell him that his request is
impossible. He tells the GPS he will pay an average of $3 per hour and learns that the GPS has located parking.

It guides him into a church parking lot. He hopes the church will use his money wisely. The GPS tells him the location of a bus stop he could use to get to work and the bus’s next arrival time at the stop. With automatic passenger identification and billing, the bus has become easy to use, except that it is often crowded. Jason gets out of the car and walks to work, with no action required regarding the parking.

Three weeks later, when Jason gets his monthly statement for his charges and income for automotive road use, transit use, parking charges, and parking earnings, he finds that the day’s parking did indeed cost about $30 for the 10 total hours that he parked. He notes that the parking-lot earnings for his office parking averaged about $10 per day that month. He then notices the parking lot earnings from the store, where he spent about $1000 dollars. He sees that the parking-lot earnings percent for the store that month was 1.7%, giving him about $17. So for the day, Jason only spent a net of about $3 on parking. Then he realized that he should have had the computer delivered after all. If he would have bicycled that day, as he usually did, he would have still gotten the $27 earnings from the two parking facilities and he would have paid nothing for parking. So the choice to drive cost him $30. He remembers that the delivery would have only been $25 dollars. Oh well. He enjoyed his before-work and after-work walks.

THE CASE FOR LESS PARKING

Less parking will support more compact development. This makes walking and biking more enjoyable and less time consuming. There would certainly be less “dead space”, which is how parking lots feel to people, whether they arrive by car or not, after they become pedestrians.

Since parking can be expensive, less parking can reduce overhead costs significantly, such as leasing expense and parking-lot maintenance cost. Less overhead means more profit and less expense for everyone. A need for less parking can create redevelopment opportunities at existing developments and reduce project cost at new developments.

At new developments, car-parking costs could prevent a project from getting built.

THE CASE FOR SHARED PARKING

Shared parking for mixed uses means that less parking is needed. For example, shared parking could be used mostly by employees during the day and mostly by residents at night.

Fully shared parking means that very little parking would be off limits to anyone. In a central business district with shared parking, drivers would be more likely to park one time per visit, even when going to several locations. Pedestrian activity adds vitality to any area.

THE CASE FOR APPROPRIATELY-PRICED PARKING

1 This is especially true of surface parking, which only accommodates 120 cars per acre.

2 On September 23, 2008, a panel of developers reviewed the Oceanside, Ca. “Coast Highway Vision” http://www.ci.oceanside.ca.us/pdf/chv_finalvisionsstrategicplan.pdf. Parts of this plan were described as smart growth.

At the review, developer Tom Wiegel said, “Parking is the number 1 reason to do nothing,” where “do nothing” meant “build no project.” The other developers at the meeting agreed.
To Reduce Driving Relative to Zero Pricing

Traditional Charging or Paying Cash-out Payments

As shown in the Introduction, this relationship (pricing parking reduces driving) is not new.\(^3\)

Using results like Table 1, at least one study\(^4\) has used an assumption of widespread pricing to show how driving reductions could help meet greenhouse gas (GHG) target reductions. Dr. Silva Send of EPIC [http://www.sandiego.edu/epic/ghgpolicy/](http://www.sandiego.edu/epic/ghgpolicy/) assumes that all work locations with 100 employees or more in San Diego County will implement cash-out, to result in 12% less driving to work. Currently, almost all employees in San Diego County “park for free”, unless they happen to work in a downtown core area.

Current, Best-Practice “Unbundling”

The “best-practice” use of the phrase, “unbundled parking cost”, is to describe the case where either the cost of parking, for the case of a condominium, or the rent for parking, for the case of an apartment, is separated from either the purchase price and common fees or the rent of the dwelling unit.

This gives the resident families the choice of selecting the number of parking spaces they would like to rent or buy, including the choice of zero. This would tend to reduce the average number of cars owned per dwelling unit and, in this way, would also tend to reduce driving. Its major drawback is that this method does not encourage sharing.

To Increase Fairness and Protect the US Economy

It is stated above that almost all employees in San Diego County “park for free”. Of course there is really no such thing as “parking for free”. So-called “free parking” always reduces wages or increases costs. At a work site, it reduces everyone’s wage, even those employees that never drive. At an apartment complex, so-called “free parking” increases the rent. Therefore, “free parking” at work or at apartments violates the fundamental rule of the free market, which is that people should pay for what they use and not be forced to pay for what they do not use. Parking should at least be priced to achieve fairness to non-drivers.

The US economy would also benefit. Reductions in driving would lead to reductions in oil imports, which would reduce the US trade deficit.\(^4\)

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\(^3\) For many years the Victoria Transport Policy Institute (VTPI) has been recognized as a source of reliable information on “Transportation Demand Management”, or TDM.


> Even a relatively small parking fee can cause significant travel impacts and provide significant TDM benefits. “TDM Benefits” refers to the many public and private benefits of having fewer people choosing to drive.


> “The U.S. trade deficit is a bigger threat to the domestic economy than either the federal budget deficit or consumer debt and could lead to political turmoil. Right now, the rest of the world owns $3 trillion more of us than we own of them.”
BARRIERS TO PROGRESS

Given all this, it might seem that the widespread pricing of parking should have happened by now. However there are barriers. In 2007, a majority of the City Council of Cupertino, Ca. indicated that they wanted their City Manager to negotiate reduced parking requirements with any company that would agree to pay sufficient cash-out payments. To this date, no company, including Apple Inc., has expressed an interest. Most companies probably perceive cash-out as expensive. Even if they realize they could get a reduced parking requirement in exchange for paying sufficient cash-out amounts and even if the economics worked in support of this action (quite possible where land is expensive), they want to stay focused on their core business, instead of getting involved in new approaches to parking, real estate, and redevelopment.

On the other hand, simply charging for parking and then giving all the employees a pay raise is probably going to run into opposition from the employees, who will feel that they would be losing a useful benefit.

In addition, neighbors fear the intrusion of parked cars on their streets. Permit parking, which could offer protection, is not always embraced. City Council members know that a sizable fraction of voting citizens believe that there can actually never be too much “free parking”, Professor Shoup’s famous book notwithstanding. Some Council members probably feel that way themselves.

It doesn’t help that current methods of charging for downtown parking are often very inefficient. For example, downtown Oceanside, California has parking meters that will only accept coins. Besides this, all their on-street, downtown parking is timed, with maximums from 10 minutes to 4 hours. These time limits are enforced by a city employee, who applies chalk from a tire to the street and then records the time. However, by watching the time and moving their car soon enough, drivers can avoid getting a ticket. Of course, they could instead drive to the mall and not have to worry about having coins or elapsed time since parking. It is not surprising that downtown merchants often object to charging for parking.

In summary, those that resist charging for parking, based on their perceptions, include

- Companies, who fear the complexity and expense of paying cash-out payments;
- Employees, who fear losing a current benefit;
- City leaders, who fear the political repercussions;
- Downtown patrons, who dislike the inconvenience and worry;
- Downtown business owners, who fear that it will drive away customers.

THE COST, VALUE, AND FAIR PRICE OF PARKING

Estimated and Actual Capital Cost

Surface Parking

One acre of surface parking will accommodate 120 cars. Land zoned for mixed use is sometimes expensive. At $1.2 million per acre, the land for a single parking space costs $10,000. Construction cost should be added to this to get the actual, as-built cost of each parking space.

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5 According to Bern Grush, Chief Scientist of Skymeter Corporation http://www.skymetercorp.com/cms/index.php, often two-thirds of the money collected from parking meters is used for collection and enforcement costs.
Estimated cost can be determined by using appraised land value and construction estimates. For new developments, after the parking is constructed, it is important to note the actual, as-built cost.

**Parking-Garage Parking**

One acre of parking-garage will accommodate considerably more than 120 cars. The construction cost of the garage and the value of its land can be added together to get the total cost. Dividing that total cost by the number of parking spaces yields the total, as-built cost of each parking space. Adding levels to a parking garage may seem like a way to cut the cost of each parking space, for the case of expensive land. However, there is a limit to the usefulness of this strategy because the taller the parking garage, the more massive the supporting structural members must be on the lower levels, which increases total cost. Parking-garage parking spaces are often said to cost between $20,000 and $40,000. The actual costs should be noted.

**Underground Parking**

In order to compute an estimate for the cost of a parking space that is under a building, it is necessary to get an estimate of the building cost with and without the underground parking. The difference, divided by the number of parking spaces, yields the cost of each parking space. The cost or value of land plays no role in the cost of this parking. However, it does not follow that this parking is cheap. Underground parking spaces are often said to cost between $60,000 and $90,000 dollars each. Although there will be an “as built” cost of the building with the parking, there will never be an “as built” cost of the building without the parking. However, after the construction is done, the estimate for the cost of the underground parking should be reconsidered and re-estimated if that is needed. The final, best-estimate cost should be noted.

**Value**

Initially, value and cost are the same. For surface parking and parking-garage parking, the value would initially be the same as the as-built cost. For underground parking, the value would initially be the same as the best-estimate cost. However, over time, the value must be updated. Both construction costs and land-value costs will change. The value assigned to a parking place should always be based on the current conditions.

**Fair Pricing**

Parking space “values”, as described above, must first be converted to a yearly price by using a reasonable conversion factor. This conversion factor could be based on either the “cost of money” or the “earnings potential of money”. It is expected that this conversion factor would be 2% to 5% during times of low interest rates and slow growth; but could be over 10% during times of high-interest and high growth. For example, if the surface parking value is $12,000 and it is agreed upon to use 5% as the conversion factor, then each parking spot should generate $600 per year, just to cover capital costs. The amount needed for operations, collection, maintenance, depreciation, and any special applicable tax is then added to the amount that covers capital cost. This sum is the amount that needs to be generated in a year, by the parking space.

The yearly amount of money to cover capital cost needs to be re-calculated every year or so, since both the value and the conversion factor will, in general, change each year. The cost of operations, collection, maintenance, depreciation, and any special applicable tax will also need to be reconsidered.

Once the amount generated per year is known, the base price, per unit year, can be computed by dividing it (the amount generated per year) by the estimated fraction of time that the space will
be occupied, over a year. For example, if a parking space needs to generate $900 per year but it will only be occupied 50% of the time, the time rate charge is $1800 per year. This charge rate per year can then be converted to an hourly or even a per-minute rate. The estimated fraction of time that the parking is occupied over a year will need to be reconsidered at least yearly.

**NEW DEFINITIONS TO PROMOTE AN OBJECTIVE VIEW OF PRICING**

- The “fair price” means the price that accounts for all costs.
- The “baseline amount of driving” means the driving that results from the application of the fair price.
- “Zero transportation demand management” (“zero TDM”) is the amount of demand management that results when the fair price is used. It will result in the baseline amount of driving.
- “Negative TDM” refers to the case where the price is set below the fair price. This will cause driving to exceed the baseline amount. Since TDM is commonly thought to be an action that reduces driving, it follows that negative TDM would have the opposite effect.
- “Positive TDM” refers to the case where the price is set above the fair price. This would cause the amount of driving to fall below the baseline amount.

Clearly, so-called “free parking” is an extreme case of negative TDM. The only way to further encourage driving would be to have a system that pays a driver for the time their car is parked.

**GOALS OF THE “DIVIDEND ACCOUNT PARKING” CAR-PARKING SYSTEM (FORMERLY “INTELLIGENT PARKING”)**

- There is only one third-party vendor (or several, collaborating so closely that users are unaffected compared to a single operator) operating all parking. (“All parking” does not include driveways and garages in single-family homes.) Dividend Account Parking is designed and installed by regional or state government, using low-bid contractors, with design and start-up costs covered by the overhead portion of collection fees.
- Nearly all parking is shared. Almost always, anyone can park anywhere. Those who want exclusive rights to parking will pay “24/7” (all day, every day).
- Parking is operated so that the potential users of parking will escape the expense of parking by choosing to not use the parking. This characteristic is named “unbundled” because the cost of parking is effectively unbundled from other costs.
- Parking is priced and marketed to eliminate the need to drive around looking for parking.
- Parking at any desired price is made as easy as possible to find and use.
- Records of the use of each parking space are kept, to facilitate decisions to either add or subtract parking spaces.
- The special needs of disabled drivers, the privacy of all drivers, and, if desired, the economic interests of low-income drivers are protected.

**DEFINITIONS & CONCEPTS OF DIVIDEND ACCOUNT PARKING (DAP)**

**Parking Beneficiary Groups**

There are at least 7 types of beneficiary groups. Note that in all cases, members of beneficiary groups must be old enough to drive.
1.) People who have already paid for the capital cost of parking. An example of this type of beneficiary group would be the owners of condominiums, where parking has been built and the cost is included in the price of the condominium. Note that although they have technically already paid for the parking, if they borrowed money to pay for some portion of the price, the cost is built into their monthly payment. This illustrates why the value of parking and the cost of borrowing money (rate of return on money) are key input variables to use to compute the appropriate base, hourly charge for parking.

2.) People who are incurring on-going costs of parking. An example of this type of beneficiary group is a set of office workers, where the cost of “their” parking is contained in either the building lease or the cost of the building. Either way, the parking costs are reducing the wages that can be paid to these employees.\(^6\)

3.) People who are purchasing or renting something where the cost of the parking is included in the price. Examples of this beneficiary group are people that rent hotel rooms, rent an apartment, buy items, or dine in establishments that have parking.

4.) People who own off-street parking as a business. They could be the individual investors or could be a government or government-formed entity.

5.) People who are said to benefit from parking, even though the money for the parking has been supplied by a source that may have very little relationship to those that are said to benefit. An example of this group would be train riders that make round trips from a station which has parking that is said to be “for riders”. Students at a school with parking would be another example.

6.) People who are considered by many to be the logical beneficiaries of on-street parking. Owners of single-family homes are the beneficiaries of the parking that is along the boundaries of their property. The same status is given to residents of multi-family housing.

7.) Governments. Since they build and maintain the streets, they should get a significant benefit from on-street parking.

**Unbundled Cost and Spontaneous Sharing**

“Unbundled cost” means those who use the parking can see exactly what it costs and those who don’t use the parking will either avoid its cost entirely or will get earnings to make up for the hidden parking cost they had to pay. This conforms to the usual rule of the free market where a person only pays for what they choose to use. Unbundled cost is fair.

“Spontaneous sharing” means that anyone can park anywhere at any time and for any length of time. Proper pricing makes this feasible.

**How to Unbundle**

The method of unbundling can be simply stated, using the concept of “beneficiary group” as discussed above. First, the fair price for the parking is charged. The resulting earnings\(^7\) amount is

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\(^6\) Such parking is often said to be “for the benefit of the employees”. Defining this beneficiary group will tend to make this statement true, as opposed to the common situation where the employees benefit only in proportion to their use of the parking.

\(^7\) The earnings amount is the revenue collected minus the collection cost and any other costs that will have to be paid due to the implementation of *Dividend Account Parking (DAP)*. The costs associated with the parking, paid before
given to the members of the beneficiary group in a manner that is fair to each member. Methods are described below.

**Why this Supports Sharing**

Members of a beneficiary group benefit financially when “their” parking is used. They will appreciate users increasing their earnings. They are also not obligated to park in “their” parking. If there is less-expensive parking within a reasonable distance, they might park there, to save money. This is fine, because all parking is included in the *Dividend Account Parking (DAP)* system.

**Computing the Earnings for Individuals**

*Dividend Account Parking (DAP)* must be rigorous in paying out earnings. For a mixed use, the total number of parking spaces must first be allocated to the various beneficiary groups. For example in an office/housing complex, 63.5% of the parking might have been sold with the office. If so, the housing portion must be paying for the other 36.5%. For this case, it would follow that the first step is to allocate 63.5% of the earnings to the workers and 36.5% to the residents.

How the monthly earnings are divided up among the members of the beneficiary group depends on the beneficiary group type. For each member, the group’s total monthly earnings amount is always multiplied by a quantity and divided by the sum (the sum is the denominator) of that quantity, for all members.

For example, for each employee, the multiplier is the number of hours that the employee worked over the month while the denominator is the total number of hours worked by all employees over the month. At a school, for each student, the numerator is the total time spent at the school, over the month, while the denominator is the sum of the same quantity, for all the students.

For a train station with parking being supplied for passengers that ride on round trips of one day or less, the numerator is the passenger’s monthly hours spent on such round trips, over the month; while the denominator is the total number of hours spent by all passengers on such round trips, over the month. Radio Frequency Identification (RFID) units on passengers could support an automated calculation of monthly charges for fares, as well as monthly hours on round trips.

At a shopping center, the numerator is the sum of the money spent by the shopper, over the month, while the denominator is the total amount of money spent by all shoppers over the month.

At a condominium, the numerator is the number of parking places that were paid for (directly or indirectly) by the resident family and the denominator is the total number of parking places at the condominium project; similarly, for apartment complexes.

**Where Earnings Are Low**

The goal is that if someone doesn’t park, they don’t pay, either directly or indirectly, because the earnings that they get will balance out their losses (like reduced wages, for example). However, charging for parking that few want to use will not sufficiently compensate the people that have been forced, or are being forced, to pay for such parking. The only remedy in this case is to redevelop the parking or lease the parking in some other way, for storage, for example. The

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the implementation of *Dividend Account Parking (DAP)*, should *not* be subtracted from the revenue because they will continue to be paid as they were before the implementation of *Dividend Account Parking (DAP)*. Therefore, these costs will continue to reduce wages and increase the prices of goods and services.
earnings from the new use should go to those that are in the beneficiary group that was associated with the low-performing parking.

**Why This Method of Unbundling Will Feel Familiar to Leaders**

Developers will still be required to provide parking and will still pass this cost on, as has been discussed. There will be no need to force an owner of an exiting office with parking to break his single business into two separate businesses (office and parking).

Parking beneficiaries are identified that conform to traditional ideas about who should benefit from parking.\(^8\)

**Unbundling the Cost of On-Street Parking**

The revenue from on-street parking in front of businesses will be split evenly between the city and the business’s parking beneficiaries. All of the earnings from on-street parking in front of apartments or single-family homes will be given to the resident families.\(^9\)

**Special Considerations for Condominiums**

Unbundling for a condominium owner means that, although their allocated amount of parking has added to their initial cost, their allocated amount of parking also earns money for them.

Unbundling for a condominium could also mean that an owner can choose to have control over a single or several parking places. Such parking spaces could be equipped with a red light and a green light. If the red light is lit, this will mean that the space is not available for parking, except for the person who is controlling the spot. If the green light is lit, it will mean that the space is available to anyone. A space that is being reserved with a red light is charged at the full price to the condominium owner that has control over the space. The owner that controls these spaces can change the state of the parking space (available or not available) by either a phone call, on line, or at any pay station system that might be in use for the system. After condominium owners experience the cost of reserving a space for themselves, they might give up on the idea of having their own, personal, unshared parking space; especially since *Dividend Account Parking (DAP)* will give most owners and their guests all the flexibility they need in terms of parking their cars.

Some people think that condominium parking should be gated, for security reasons. However, parking within parking garages needs to be patrolled at the same frequency level as on-street parking, which is enough to ensure that crime around either type of parking is very rare. Cameras can help make parking garages that are open to the public safe from criminal activity.

**Special Considerations for Renters**

Unbundling for renters means that, although their allocated amount of parking increases their rent, their allocated amount of parking also earns money for them. Therefore, their traditional rent (includes parking) is effectively reduced by the money earned by those parking spaces allocated to them. Renters will be motivated to either not own a car or to park in a cheaper

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\(^8\) Showing exactly where parking earnings go will reduce the political difficulties of adopting pay parking in a democracy where the high cost of parking is often hidden and rarely discussed.

\(^9\) Although governments own the streets, often, back in history, developers paid for them and this cost became embedded in property values. Admittedly, how to allocate on-street parking earnings is somewhat arbitrary. With congestion pricing and efficient methods, governments may earn significantly more than they are under current practices.
location. Parking in a cheaper location is not a problem because all parking is part of the Dividend Account Parking (DAP) system. Renters will welcome anyone to park in “their” parking, because it will increase their earnings.

Special Considerations for Employers

At first, companies may want the option of offering “free parking” to their employees so as to be able to compete with traditional job sites. This means giving employees that drive every single day an “add-in” amount of pay so that the sum of the add-in and their parking-lot earnings equals their charge, for any given monthly statement. The operator of the parking, which sends out statements, can pay out the “add in” amount, in accordance with the company’s instruction. The company will then be billed for these amounts. There could be no requirement for the company to provide any such “add-in” amount to the employees that don’t drive every day. This would allow the company to treat its every-day drivers better than other employees and so this would be a negative TDM. However, this economic discrimination would be substantially less than the current, status-quo, economic discrimination, where drivers get “free” parking and non-drivers get nothing.

Clusters of Parking

Clusters are a contiguous set of parking spaces that are nearly equal in desirability and thus can be assigned the same price. They should probably consist of from 20 to 40 spaces. For off-street parking, they could be on either side of the access lane to the parking spaces, so that an observer could see the 20 to 40 cars, and get a feel for the vacancy rate. At a train station, clusters will normally be organized so that their parking spaces are approximately an equal distance from the boarding area. On-street clusters would normally conform to our current understanding of what a block is, which is to say from one cross street to the next cross street. The width of the street and the length of the block should be taken into account in defining on-street clusters of parking and in deciding if the parking on either side of the street should or should not be in the same cluster of parking spaces.

Examples of Good and Bad Technology

Parking Meters or Pay Stations

Parking meters are a relic of an earlier period, before computers. Pay stations do not add enough usefulness to merit their inclusion in Dividend Account Parking (DAP), except as a bridge technology. Once good systems are set up, pay stations should cost additional money to use because of their expense. It would be best to devise an implementation strategy that will minimize their use when the system is first put into effect and will take them out of service as soon as possible.

Radio Frequency Identification Backed Up by Video-Based “Car Present” and License Recognition

Government will eventually enter into an RFID (Radio Frequency Identification) age. Organizers of large athletic events already have. Organizers that put on large open-water swims, foot races, and bike rides have routinely used RFID for many years. An RFID vendor in San Diego

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10 For example, over 20,000 people ran the 2008 Bay-to-Breakers foot race in San Francisco. Each runner had a “chip” in their shoe lace. Each runner’s start time and finish time were recorded and all results were available as soon as the last runner crossed the finish line.
states that passive RFID units cost less than $5, are reliable, are durable, and they could be used to identify cars as well as people. He also sees no problem in implementing most of the features of Dividend Account Parking (DAP).12

**Automatic Data Collection and Sending Out Statements**

Note that the “back end database” of Dr. Carta’s written statement12 refers to the ability to send statements of earnings and billing to students.13

**Putting it Together**

Certainly, government, and in particular transit agencies and parking agencies, could use RFID-based technology. For example, when a person with an RFID unit which is tied to a billable address or a credit card with an open account gets on a bus or a train, they should not have to pay at that time, visit a pay station, or “swipe a card” that has a positive balance. Utility customers that pay their bills are not required to pre-pay. The same courtesy should be extended to transit riders, people that drive on roads, people that get parking-lot earnings, and people that park cars. There should be one monthly bill or statement, for all four activities.

**Global Positioning Systems GPS**

An alternative model is to have GPS systems in cars that would detect the car’s parking location, that location’s current charge rate, and would perform all of the charging functions in the car. The only information the parking-lot-enforcement system would need is whether or not a car being parked is owned by a bill-paying owner. The car owner’s responsibility would be to pay the bills indicated by the box in the car. The box would need to process a signal that a bill had been paid. It would also need to process pricing signals.

**Not Picking Winners**

The purpose of this report is to describe what an ideal system would do, not how it is done. How a proposed system works is left to the systems, software, and hardware engineers that work together to submit a proposal based on this description of what an ideal system does.

11David R. Carta, PhD, CEO Telaeris Inc., 858-449-3454

12 Concerning a Final Environmental Impact Report-approved and funded new high school in Carlsbad, California, where the School Board has signed a Settlement Agreement to consider “unbundled parking”, “cash-out”, and “pricing”, Dr. Carta wrote, in a January 13th, 2010 written statement to the Board, I wanted to send a quick note discussing the technical feasibility of tracking cars into a lot without impacting students or requiring the need for gates. Mike Bullock and I have discussed this project; it can be accomplished straightforwardly by utilizing Radio Frequency Identification and/or Video Cameras integrated with automated license recognition systems. The cars would need to register with the system at the start, but it would be fairly painless for the users after the initial installation. The back end database system can also be implemented both straightforwardly and at a reasonable price. This is not necessarily a recommendation of the proposal for unbundled parking. Rather it is strictly an unbiased view of the technical feasibility of the proposal to easily and unobtrusively track cars, both registered and unregistered, into a fixed lot.

13 In an earlier email on this subject, Dr. Carta wrote, This is not too tough - we probably would integrate with a service that already sends physical mail from an electronic submission instead of re-inventing this wheel.
Privacy

Privacy means that no one can see where someone has parked, without a search warrant. Also, the level of the detail of information that appears on a bill is selected by the customer.  

Ease of Use for Drivers

For credit-worthy drivers that have followed the rules of the system, pay parking will not require any actions other than parking. Paying for all parking fees over a month is then done in response to a monthly billing statement. Parking will feel to the consumer like a service provided by a municipality, such as water, energy, or garbage. One important difference is that users belonging to a “beneficiary group” will get an earnings amount in their monthly statement. Those that earn more than what they are charged will receive a check for the difference. This ease of use will make all parking less stressful.

Base Price

Off-Street

Off-street parking is priced so that even if demand does not threaten to fill the parking beyond 85%, the money generated will at least equate to an agreed-upon return on the parking value and pay all yearly costs. Equation 1 shows the calculation of the hourly rate.

\[
\tau_{\text{Baseline Hourly}} = \frac{(\tau_{\text{Investment}} \times \nu_{\text{Parking}})^{1/C_{\text{YOPD}}}}{(n_{\text{Hours Per Year}} \times f_{\text{TO}})}
\]  

(Eq. 1)

where:

- \( \tau_{\text{Baseline Hourly}} \) = the computed baseline hourly rate to park
- \( \tau_{\text{Investment}} \) = yearly return on investment, such as .06
- \( \nu_{\text{Parking}} \) = value of a parking space, such as (parking garage) $40,000
- \( C_{\text{YOPD}} \) = yearly operations\(^1^5\) plus depreciation, per space, such as $100
- \( n_{\text{Hours Per Year}} \) = number of hours per year, 24 x 365 = 8760 Hours per Year
- \( f_{\text{TO}} \) = fraction of time occupied, such as 0.55.

For the example values given, the base hourly rate of parking, to cover the cost of the investment, operations\(^1^5\), and depreciation is $0.519 per hour. This could be rounded up to $0.52 per hour. This price could also be increased to result in positive TDM, to reduce driving more than the fair-price, zero-TDM amount.

On-Street

\(^1^4\) License plates that have no RFID tags fail to use the best technology to accomplish the primary purpose of license plates, which is to identify and help intercept cars used in a crime. Identifying cars is a legitimate government goal. Protecting privacy is also a legitimate goal. Both goals can be realized with good laws, good enforcement, and good systems engineering.

\(^1^5\) This includes money for policing, cleaning, maintenance, any applicable parking tax, and all collection costs. Collection costs will need to include an amount to recover the development and installation costs of Dividend Account Parking (DAP).
If on-street parking is located within walking distance (one-quarter mile) of off-street parking, its base price is set equal to the closest off-street parking’s base price. Otherwise, it is set to some agreed-upon value, like fifty cents per hour. However, on-street parking has a special meaning for downtown merchants and for neighborhoods, two powerful political forces in any city. Merchants that have few cars parking on their street, even though it is permitted, are probably failing in their businesses. They would like free parking to help draw visitors to their store front. Neighborhoods that are not impacted by parking would probably prefer no pricing. For these reasons, for any on-street parking cluster, no price is charged until the cluster occupancy reaches 50%. (Time of day is irrelevant.)

**Congestion Pricing**

The time-rate price of parking is dynamically set on each cluster of parking, to prevent the occupancy rate from exceeding 85% (to reduce the need to drive around looking for parking). An 85% occupancy rate (15% vacancy) results in just over one vacant parking space per city block. If the vacancy rate is above 30%, the price is left at the baseline hourly rate. If vacancies fall below 30%, the price can be calculated in a stair-step method, such as shown in Table 2.

Equation 2 is an alternative method.

In either case, the total charge is time parked, multiplied by the time-averaged, time-rate price. The base multiplier would be adjusted to be just large enough to keep the vacancy rate from falling below a desired level, such as 15%, so it is always easy to find parking.

### Table 2  Hourly Rates for 2 Base Multipliers and a Baseline Hourly Rate of $0.52

<table>
<thead>
<tr>
<th>Vacancy Rate</th>
<th>Base Multiplier = 2</th>
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<th>Base Multiplier = 2.5</th>
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<td></td>
<td>Multiplication Formula</td>
<td>Value</td>
<td>Hourly Rate</td>
<td>Multiplication Formula</td>
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<td>Above 30%</td>
<td>$b_0$</td>
<td>1</td>
<td>$0.52$</td>
<td>$b_0$</td>
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<td>$b_1$</td>
<td>2</td>
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<td>$b_1$</td>
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<td>20% to 25%</td>
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<td>$2.08$</td>
<td>$b_2$</td>
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<td>$8.32$</td>
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<td>Below 5%</td>
<td>$b_6$</td>
<td>64</td>
<td>$33.28$</td>
<td>$b_6$</td>
</tr>
</tbody>
</table>

\[ r_{\text{HourlyRate}} = r_{\text{BaselineHourly}} \times (B^{(30-V)/5}), \text{for } V < 30; \ r_{\text{BaselineHourly}}, \text{otherwise} \ (\text{Eq. 2}) \]

where:

- \( r_{\text{HourlyRate}} \) = the congestion-priced hourly rate to park
- \( r_{\text{BaselineHourly}} \) = the baseline hourly rate to park, such as $0.52 per hour (taken from Eq. 1.
- \( B \) = the base of the multiplier being computed, such as 2.50
For the example values given, the hourly rate of parking would be $9.88 per hour.

**Pricing Predictions and Notifications**

Drivers will develop strategies for their routine trips. The computer system that keeps records of parking use will also provide help for users. The *Dividend Account Parking (DAP)* website will direct a user to an appropriate cluster of parking if the user provides the destination location or locations, the time and date, and the hourly rate they wish to pay. If the walk is going to be long, the website could suggest using transit to get from the cheaply-priced parking to the destination. In such cases, the website may also suggest using transit for the entire trip.

Another user option is to specify the time, location, and the distance the user is willing to walk. In this case, the computer would give the cheapest cluster of parking available at the specified walk distance. The price prediction would be provided.

All price predictions would also have a probability of correctness associated with them. If a user can show that a computer has predicted a much lower price than what actually occurred, with a sufficiently high probability, it would be reasonable to charge the user the predicted price rather than the actual price.

Websites could routinely inform viewers when occupancy rates are expected to be unusually high, due to a special event (for example, a sporting event). The parking system website will always give current and predicted hourly rates for all locations. The hourly rates of parking will also be available at a phone number and possibly at pay stations. The base-price hourly rate, for any parking cluster, would be stable and could therefore be shown on signs. Parking garage entrances could have large video screens showing both predicted and existing price. Users will also learn to look at parking and judge whether congestion pricing applies, or could apply, while their car is parked. It would not be long before these capabilities are added into GPS navigation systems.

**Prepaid RFID**

To be inclusive, pay stations or convenience stores will offer a pre-paid RFID that can be set on the dashboard of a car. This will support drivers with poor credit or drivers who have not obtained the necessary equipment to support the normal, trouble-free methods. This will also work for drivers that do not trust the system to protect their privacy for a certain trip (by removing or disabling the permanent RFID) or for all trips. No billing would occur.

**Enforcement**

The system would notify the appropriate law enforcement agency if an unauthorized car was parked. Authorized cars would need either a pre-paid RFID or equipment indicating that their owners had *Dividend Account Parking (DAP)* accounts and were sufficiently paid up on their bills.

**IMPLEMENTATION**

This description of *Dividend Account Parking (DAP)* will help to implement efficient parking systems. Parking at train stations, schools, and government buildings could introduce many of these concepts. This description of *Dividend Account Parking (DAP)* is sufficient to support a “Request for Proposal” process, which could lead to full implementation. Widespread
installation should be done by a government agency, to minimize actions required on the part of the private sector. Laws would simply require the cooperation of all private-sector and government entities.

**SUMMARY**

A parking plan, *Dividend Account Parking (DAP)* has been described.

1. Technology will make it easy to use for most drivers.
2. Its parking is almost always shared, to support mixed uses.
3. It unbundles cost by charging and having earnings go to the parking beneficiaries.
4. Traditional groups, such as single-family home owners, employees, tenants, train riders, and students benefit from parking. The benefit is equal for drivers and non-drivers.
5. Baseline prices are computed primarily from the value of the parking and an agreed-upon rate of return. On-street parking is free until it is half full, at which time its base price often matches that of the closest off-street parking.
6. For all parking, price is dynamically increased to guarantee availability. Earnings are therefore only limited by what people are willing to pay.
7. Technology helps drivers find parking and decide if they want to drive or use transit.
8. Prepaid RFIDs provide service to those who have poor credit or don’t want to be billed.
9. Disabled and perhaps low-income drivers will have accounts that allow them to park at reduced prices and perhaps avoid congestion pricing. Specially designated spots might also be required for disabled drivers.
10. The system will provide reports showing where additional parking would be a good investment and where it would be wise to convert existing parking to some other use.
11. Privacy will be protected. Law enforcement officials would need a search warrant to see where someone’s car has been parked. The level of detail on billing would be selected by the car’s owner.
12. Implementations could begin in carefully selected locations and expand.

Global warming, air pollution, trade deficits, and fairness are some of the significant reasons that governments have a responsibility to implement *Dividend Account Parking (DAP)*.

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KEYWORDS

A&WMA, Parking, Unbundled, Shared, TDM, cash-out, pricing, beneficiary, greenhouse gas, GHG, GPS, RFID
Eliminating the Harm of Bundled-Cost or Bundled-Benefit Parking

- Definitions of Parking Systems
- New System: *Dividend-Account Parking*
  - Motivations for change
  - Definition and features
  - A demonstration project

Mike Bullock
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760-754-8025
A **Bundled-Cost** Parking System

The most common of all parking systems. Erroneously called “free”

The **cost** of the parking is hidden within some other payment, such as:

- Rent
- Train fare (at least 1 train station with so-called “free” parking)
- Price of consumer items, including food
A Bundled-Benefit Parking System

The 2\textsuperscript{nd} most common of all parking systems. Erroneously called “free”

The parking is part of a benefit package being provided, such as:

- Compensation for work
- Public or private education
Bundled-Cost and Bundled-Benefit systems take money from people without their knowledge or consent.

They increase the choice to drive alone.

Sierra Club California: Appropriate pricing of parking is the least costly way to reduce vehicle miles travelled.
Bundled-Cost or Bundled-Benefit systems should be replaced with the **DAP** Car-Parking system!

**Dividend Account Parking (DAP)**

*Brief System Definition*

1. Automated (nothing to do; just park)
2. Value-priced, with a congestion-pricing option
3. It generates earnings for those who are losing money because of the parking
4. Cars parked are associated with an Account
5. Parking is available to those having an Account (shared parking)
Cars and Light-duty vehicles (LDVs) emit the most GHG of any category
Motivation for Change, 2 of 4

• Fleet Efficiency Will Not Come Soon Enough, as shown in this peer-reviewed report:

2020 Air & Waste Management Association (AWMA) Report

Deriving Climate-Stabilizing Solution Sets of Fleet-Efficiency and Driving-Level Requirements, for California Light-Duty Vehicles*

*Available upon request from mike_bullock@earthlink.net
Motivation for Change, 3 of 4

Climate-Stabilizing Requirements, for Four Cases

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<td>14.76%</td>
</tr>
<tr>
<td>% ZEVs, Year 2023</td>
<td>55.0%</td>
<td>45.0%</td>
<td>99.0%</td>
<td>17.18%</td>
</tr>
<tr>
<td>% ZEVs, Year 2024</td>
<td>80.0%</td>
<td>70.0%</td>
<td>99.0%</td>
<td>19.59%</td>
</tr>
<tr>
<td>% ZEVs, Year 2025</td>
<td>94.0%</td>
<td>95.0%</td>
<td>99.0%</td>
<td>22.00%</td>
</tr>
<tr>
<td>% ZEVs, Year 2026</td>
<td>97.0%</td>
<td>97.0%</td>
<td>99.0%</td>
<td>37.60%</td>
</tr>
<tr>
<td>% ZEVs, Year 2027</td>
<td>98.0%</td>
<td>98.0%</td>
<td>99.0%</td>
<td>53.20%</td>
</tr>
<tr>
<td>% ZEVs, Year 2028</td>
<td>99.0%</td>
<td>99.0%</td>
<td>99.0%</td>
<td>68.80%</td>
</tr>
<tr>
<td>% ZEVs, Year 2029</td>
<td>99.0%</td>
<td>99.0%</td>
<td>99.0%</td>
<td>84.40%</td>
</tr>
<tr>
<td>% ZEVs, Year 2030</td>
<td>99.0%</td>
<td>99.0%</td>
<td>99.0%</td>
<td>100.00%</td>
</tr>
<tr>
<td>% Reduction in Per-Capita Driving With Respect to Year 2005</td>
<td>32.0%</td>
<td>32.0%</td>
<td>0.0%</td>
<td>50.5%</td>
</tr>
</tbody>
</table>

Driving as much as we did in 2005 might seem nice, but these % ZEV jumps are not possible.

Air Resources Board Mary Nichols has a nice electrification schedule but it would require a very difficult reduction in driving.
## Motivation for Change, 4 of 4

Requirements to Achieve the Needed **32% Reduction** in Per-Capita Driving, With Respect to 2005

<table>
<thead>
<tr>
<th>Driving-Reduction Requirements</th>
<th>Per-Cent Reduction</th>
<th>Factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legislated (SB 375) Plans to Reduce Driving</td>
<td>12%</td>
<td>0.88</td>
</tr>
<tr>
<td>Value-Priced Road Use Charge (RUC)</td>
<td>10%</td>
<td>0.90</td>
</tr>
<tr>
<td>Dividend Account Parking</td>
<td>8%</td>
<td>0.92</td>
</tr>
<tr>
<td>Transfer Highway Expansion Funds to Transit</td>
<td>2%</td>
<td>0.98</td>
</tr>
<tr>
<td>Increase Height &amp; Density by Transit Stations</td>
<td>2%</td>
<td>0.98</td>
</tr>
<tr>
<td>&quot;Complete Streets&quot;, &quot;Road Diet&quot; (walk/bike)</td>
<td>1%</td>
<td>0.99</td>
</tr>
<tr>
<td>Pay-to-Graduate Bicycle Traffic-Skills Class</td>
<td>1%</td>
<td>0.99</td>
</tr>
<tr>
<td>Bicycle Projects to Improve Access</td>
<td>1%</td>
<td>0.99</td>
</tr>
<tr>
<td><strong>Product of Factors</strong></td>
<td><strong>0.68</strong></td>
<td></td>
</tr>
<tr>
<td><strong>% Reduction</strong></td>
<td><strong>32%</strong></td>
<td></td>
</tr>
</tbody>
</table>
A Dividend-Account Parking System for Oceanside’s Civic Center Garage

A System to Eliminate the Harm of Bundled-Benefit Car Parking for City Employees
300 North Coast Highway

- Top-Level Outcome & Overview
- Some Top-Level Calculations
- Who gets to use the system
- Overcoming problems & perceptions
- Outcomes of a new incentive
- Cash flow (“Hey, where does the $$ come from?”)

EUEC 2021
Top-Level Outcomes

• Employees that drive every day, break even (Lose no money!)

• Employees get paid to not drive (Make more money!)

• Fewer employees drive, reducing Greenhouse Gas (GHG) emissions (Less GHG!)
Overview

• Fully-automated parking system, implemented by a 3\textsuperscript{rd}-party vendor (RFP selection process)
• operated for the financial gain of employees
  – Earnings = Money Generated Minus Vendor Earnings
  – Earnings go to employees
• Price is cost per minute
  – Such as 1.85 cents per minute (= $1.11 per hour = $10 per 9 hours at the workplace)
• An employee’s \textbf{Earnings} (“\textit{Dividend}”) is proportional to their time at the work site
Calculations of an Employee’s Earnings

- An employee’s earning is proportional to time spent at work (automatic collection of enter/exit times, using employee RFID)

### Definitions to Compute an Employee's Monthly Earnings

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>(T_{\text{Employee}})</td>
<td>The Employee's Monthly Time at the Work Site</td>
</tr>
<tr>
<td>(T_{\text{AllEmployees}})</td>
<td>Total Monthly Time at the Work Site, All Employees</td>
</tr>
<tr>
<td>(E_{\text{AllEmployees}})</td>
<td>Total Monthly Earnings from the Employee Parking</td>
</tr>
</tbody>
</table>

\[
\text{Employee Earnings} = E_{\text{AllEmployees}} \times \left( \frac{T_{\text{Employee}}}{T_{\text{AllEmployees}}} \right)
\]
“Add In” Payment so Those that Drive Every Day Will Lose No Money

Note: This is for an individual employee

The employee’s Parking Payment =
The employee’s Earnings – The employee’s parking charge + The employee’s “Add In”

“Add In” is zero, unless it must take on a positive value so that the employee loses nothing

“Add In” payments will be easily covered by Dividend Account Parking parkers that are not employees.
Charge, Earnings, & Add-In, Payment

For Each Employee

• **Charge**
  – Total Minutes Parked x Cost per Minute

• **Earnings**
  – As shown on earlier slide (proportional to employee’s time spent at work)

• **Add-In**
  – If Charge > Earnings, Add-In = Charge – Earnings
  – Otherwise, Add-In = zero

• **Payment** = Earnings – Charge + Add-In
Who Gets To Use Dividend-Account Parking

• **Anyone** (not necessarily an employee) driving a car registered in the system
  – There is a person with an account associated with the car
  – The car will be identified
    • License plate reader and/or
    • RFID tag not needed
  – Account can be established on the spot, in less than 5 minutes: credit card info and license number
Employees Must Park in Their Parking Lot if they Drive to Work

Measures to Reduce “Cheating” = Parking in the Neighborhood

• Soft, pre-emptive measure: messaging
  – Perceived integrity is every employee’s responsibility
  – Insufficient perceived integrity can cost employees
    • Reduced chance of promotion
    • Smaller pay raises
    • More chance of terminated employment
  – Parking free in the neighborhood will not be tolerated
  – The City wants to be a good neighbor: this is the reason for off-street parking ordinances
Employee Behavior 2 of 2

Employees Must Park in Their Parking Lot if they Drive to Work

Measures to Reduce “Cheating” = Parking in the Neighborhood

• Soft, pre-operational measure: data collection
  – Operate the system for a time, perhaps even a year, before actually collecting or distributing money
  – Self-identified non-drivers are recognized, thanked, and asked to provide details as to how they are getting to work without driving

• Soft, In-Operation Mode: New non-drivers are thanked and interrogated as to how they do it

• Hard: cameras or RFID sensors can identify employees walking into the work perimeter from the neighborhoods
Difficult-to-Not-Drive Example
Fictional, Simplified Case with Pricing and Payout Considered per Day, Page 1

• Employment Center (factory and office)
• Outside Hemet, California
• 100 employees; parking lot has 100 spaces
• No Transit, 110-degree temperature with poor roads for biking, culture of not car-pooling
• Before installing
  – 99 drive
  – 1 bikes
Difficult-to-Not-Drive Example
Fictional, Simplified Case with Pricing and Payout Considered per Day,

- Dividend-Account Parking charges $10/day
- After installing
  - 99 drive
  - 1 bikes
- Total collected each day: $990
- Each employee gets $9.90 earnings per day ($990/100)
- Each driver loses 10 cents per day
- The “crazy” bike rider gets $9.90 per day extra

Hey, isn’t this an improvement? I would say the “crazy” bike rider is earning his money!

If another employee bikes, the drivers would lose 20 cents per day and the bike riders would get $9.80 per day. If the company president rented out the 2 extra spaces for $10 per day, the drivers would lose nothing and the bike riders would get $10 per day. Biking would increase by 100%! What’s wrong with that?
Results of 3 Actions, Including Cash-out
Case (#1), Reference Patrick Siegman’s article in Bicycle Pedestrian Federation

- Company: CH2M Hill
  - Location: Bellevue, WA (Seattle suburb)
  - Engineering Firm with 430 employees
- Actions
  - $54/month (1995 $’s), to not drive
  - Improved Transit
  - Improved Bike/Ped facilities

<table>
<thead>
<tr>
<th>Mode</th>
<th>Before</th>
<th>After</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drive Alone</td>
<td>89%</td>
<td>54%</td>
</tr>
<tr>
<td>Carpool</td>
<td>9%</td>
<td>12%</td>
</tr>
<tr>
<td>Bus</td>
<td>1%</td>
<td>17%</td>
</tr>
<tr>
<td>Bike, Walk</td>
<td>1%</td>
<td>17%</td>
</tr>
</tbody>
</table>

100% 100%

Since these changes are brought about by more than just cash-out, this case is not used in the tabulation of cash-out results (next chart)
Cash-Out Results
(11 Locations, 3 Groups, 1995 Dollars)


- 3 Largest Responses
  - 38%, 36%, 31%

- 3 Smallest Responses
  - 15%, 18%, 24%

- Responses are the change; car vacancy rates would be larger

<table>
<thead>
<tr>
<th>Location</th>
<th>Scope</th>
<th>1995 dollars per mo.</th>
<th>Parking Use Decrease</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group A: Areas with little or no public transportation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Century City District, West Los Angeles</td>
<td>3500 employees at 100+ firms</td>
<td>$81</td>
<td>15%</td>
</tr>
<tr>
<td>Cornell University, Ithaca, NY</td>
<td>9000 faculty &amp; staff</td>
<td>$34</td>
<td>26%</td>
</tr>
<tr>
<td>San Fernando Valley, Los Angeles</td>
<td>1 employer, 850 employees</td>
<td>$37</td>
<td>30%</td>
</tr>
<tr>
<td>Costa Mesa, CA</td>
<td></td>
<td>$37</td>
<td>22%</td>
</tr>
<tr>
<td>Average for Group</td>
<td></td>
<td>$47</td>
<td>23%</td>
</tr>
<tr>
<td><strong>Group B: Areas with fair public transportation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Los Angeles Civic Center</td>
<td>10000+ employees, several firms</td>
<td>$125</td>
<td>36%</td>
</tr>
<tr>
<td>Mid-Wilshire Blvd., Los Angeles</td>
<td>1 mid-size firm</td>
<td>$89</td>
<td>38%</td>
</tr>
<tr>
<td>Washington DC Suburbs</td>
<td>5500 employees at 3 worksites</td>
<td>$68</td>
<td>26%</td>
</tr>
<tr>
<td>Downtown Los Angeles</td>
<td>5000 employees, 118 firms</td>
<td>$126</td>
<td>25%</td>
</tr>
<tr>
<td>Average for Group</td>
<td></td>
<td>$102</td>
<td>31%</td>
</tr>
<tr>
<td><strong>Group C: Areas with good public transportation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>University of Washington, Seattle Wa.</td>
<td>50,000 faculty, staff &amp; students</td>
<td>$18</td>
<td>24%</td>
</tr>
<tr>
<td>Downtown Ottawa, Canada</td>
<td>3500+ government staff</td>
<td>$72</td>
<td>18%</td>
</tr>
<tr>
<td>Bellevue, WA</td>
<td>1 firm with 430 employees</td>
<td>$54</td>
<td>39%</td>
</tr>
<tr>
<td>Average for Group, but not Bellevue Washington</td>
<td></td>
<td>$45</td>
<td>21%</td>
</tr>
<tr>
<td><strong>Over All Average, Excluding Bellevue Washington</strong></td>
<td></td>
<td>$45</td>
<td>21%</td>
</tr>
</tbody>
</table>

1 Parking vacancy would be higher! 2 Not used, since transit & walk/bike facilities also improved.
Dividend-Account Parking, Oceanside
Civic Center Parking Garage

Money Flow Calculations

Simplifying Assumptions:

1. Workers work 8 hours, with a one-hour lunch, for 9 total hours at the work location, each day they work
2. They only work from 8 AM to 5 PM
3. Evening hours, when parking can earn money from the public, are (only) from 5 PM to 9 PM
4. Week-end workers also work on weekdays, for a total of 7*9 = 63 hours, at the work location, per week
# Dividend-Account Parking

Money Flow Calculations

## Notation Conventions

<table>
<thead>
<tr>
<th>Letters</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Number</td>
</tr>
<tr>
<td>DAP</td>
<td>Dividend Account Parking</td>
</tr>
<tr>
<td>VP</td>
<td>Value Priced</td>
</tr>
<tr>
<td>WE</td>
<td>Week End</td>
</tr>
<tr>
<td>WD</td>
<td>Week Day</td>
</tr>
<tr>
<td>WH</td>
<td>Work Hours, Meaning 8 AM to 5 PM</td>
</tr>
<tr>
<td>AH</td>
<td>After Hours, Meaning 5 PM to 9 PM</td>
</tr>
</tbody>
</table>
**Dividend-Account Parking**

**Money Flow Calculations**

Assume This is the "Value-Price" of the Parking

Use $10 per 9 Hours at the Work Site

<table>
<thead>
<tr>
<th>Value</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.8519</td>
<td>Cents per Minute</td>
</tr>
<tr>
<td>1.11</td>
<td>Dollars per Hour</td>
</tr>
</tbody>
</table>
# Dividend-Account Parking

## Money Flow Calculations

### Assumed Values Used in the Following Performance Assessment

<table>
<thead>
<tr>
<th>Description</th>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of parking places</td>
<td>N_DAP</td>
<td>250</td>
</tr>
<tr>
<td>Number or employees</td>
<td>N_Emp</td>
<td>250</td>
</tr>
<tr>
<td>% employees that drive on week day &amp; week end</td>
<td>%Drive</td>
<td>80</td>
</tr>
<tr>
<td>Value-price to park, per 9 hours day (8 hours work + lunch)</td>
<td>VP_9Hrs</td>
<td>$10.00</td>
</tr>
<tr>
<td>% employees that work on Sat. and on Sun.</td>
<td>%WE</td>
<td>20</td>
</tr>
<tr>
<td>Yearly bonus paid to all workers</td>
<td>Y_Bonus</td>
<td>$100.00</td>
</tr>
</tbody>
</table>

### Non-Workers Use This Per-Cent of the Parking That Is Not Used by Workers

<table>
<thead>
<tr>
<th>Description</th>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week Day, Work Hours</td>
<td>%NonWrkWDWH</td>
<td>50</td>
</tr>
<tr>
<td>Week Day, After Hours (5 to 9)</td>
<td>%NonWrkWDAH</td>
<td>30</td>
</tr>
<tr>
<td>Week End, Work Hours</td>
<td>%NonWrkWEWH</td>
<td>50</td>
</tr>
<tr>
<td>Week End, After Hours (5 to 9)</td>
<td>%NonWrkWEAH</td>
<td>30</td>
</tr>
</tbody>
</table>
## Dividend-Account Parking

### Money Flow Calculations

Calculations to get the Weekly Earnings From Employees & the Weekly "AddIns" Required, per Employee

<table>
<thead>
<tr>
<th>Description</th>
<th>Formula</th>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Employees That Drive on a Week Day</td>
<td>N_Emp * %Drive / 100</td>
<td>N_DrWD</td>
<td>200</td>
</tr>
<tr>
<td>Money From Employees on a Week Day</td>
<td>VP_9Hrs * N_DrWD</td>
<td>$_AIIE_WD</td>
<td>$ 2,000</td>
</tr>
<tr>
<td>Number of Employees That Work on a Week End</td>
<td>N_Emp * %WE / 100</td>
<td>N_WrkWE</td>
<td>50</td>
</tr>
<tr>
<td>Number of Employees Driving on a Week-End Day</td>
<td>N_WrkWE * %Drive / 100</td>
<td>N_DrWE</td>
<td>40</td>
</tr>
<tr>
<td>Money From All Employees Each Week-End Day</td>
<td>VP_9Hrs * N_DrWE</td>
<td>$_AIIE</td>
<td>$ 400</td>
</tr>
<tr>
<td>Weekly Money From Employees From Both the Week End &amp; the Week Days</td>
<td>5 * $_AIIE_WD + 2 * $_AIIE</td>
<td>$_AIIE</td>
<td>$ 10,800</td>
</tr>
<tr>
<td>Total Hours at This Location Per Week</td>
<td>N_Emp * 9 * 5 + N_Emp * %WE / 100 * 9 * 2</td>
<td>HrsPerWeek</td>
<td>12150</td>
</tr>
<tr>
<td>Weekly Earnings for an Employee at the Location for 45 Hours</td>
<td>$_AIIE * 45 / HrsPerWeek</td>
<td>PerWeek45</td>
<td>$ 40.00</td>
</tr>
<tr>
<td>AddIn for an Employee at the Location for 45 Hours per Week</td>
<td>5 * VP_9Hrs - PerWeek45</td>
<td>AddIn45</td>
<td>$ 10.00</td>
</tr>
<tr>
<td>Weekly earnings for an employee at the location for 63 hours</td>
<td>$_AIIE * 63 / HrsPerWeek</td>
<td>PerWeek63</td>
<td>$ 56.00</td>
</tr>
<tr>
<td>Per Week AddIn for an Employee at the location for 63 Hours per week</td>
<td>7 * VP_9Hrs - PerWeek63</td>
<td>AddIn63</td>
<td>$ 14.00</td>
</tr>
</tbody>
</table>
### Calculation of the Weekly Amount Generated by Spaces Not Used by Workers, Week Day Work Hours (8 to 5)

<table>
<thead>
<tr>
<th>Description</th>
<th>Formula</th>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spaces Available for Non-Workers, Work Day, Work Hours</td>
<td>N_DAP - N_DrWD</td>
<td>S_4NW_WDWH</td>
<td>50</td>
</tr>
<tr>
<td>Spaces Used by Non-Workers, Work Day Work Hours</td>
<td>S_4NW_WDWH * %NonWrkWDWH / 100</td>
<td>SNW_WDWH</td>
<td>25</td>
</tr>
<tr>
<td>Money from Spaces Used by Non-Workers Per Day</td>
<td>SNW_WDWH * VP_9Hrs</td>
<td>$NW_WDWH</td>
<td>$250</td>
</tr>
<tr>
<td>Money from Spaces Used by Non-Workers Per Week</td>
<td>5 * $NW_WDWH</td>
<td>W$NW_WDWH</td>
<td>$1,250</td>
</tr>
</tbody>
</table>
### Dividend-Account Parking

**Money Flow Calculations**

**Calculation of the Weekly Amount Generated by Spaces Not Used by Workers, Week Day After Hours (5 to 9)**

<table>
<thead>
<tr>
<th>Spaces Available for Non-Workers, Work Day, 5 to 9, AKA After Hours</th>
<th>N_DAP</th>
<th>S_4NW_WDAH</th>
<th>250</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spaces Used by Non-Workers, Week Day After Hours</td>
<td>S_4NW_WDAH * %NonWrkWDAH / 100</td>
<td>SNW_WDAH</td>
<td>75</td>
</tr>
<tr>
<td>Money From Spaces Not Used by Workers, Week Day After Hours</td>
<td>(4/9) * VP_9Hrs * SNW_WDAH</td>
<td>$NW_WDAH</td>
<td>$333</td>
</tr>
<tr>
<td>Money per Week from Spaces Not Used by Workers, Week Day After Hours</td>
<td>5 * $NW_WDAH</td>
<td>W$NW_WDAH</td>
<td>$1,667</td>
</tr>
</tbody>
</table>
## Dividend-Account Parking

### Money Flow Calculations

<table>
<thead>
<tr>
<th>Calculation</th>
<th>Formula</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculation of the Weekly Amount Generated by Spaces Not Used by Workers, Week End Work Hours (8 to 5)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spaces Available for Non-Workers, Week End Work Hours</td>
<td>(N_{DAP} - N_{DrWE})</td>
<td>(S_{4NW_WEWH}) [210]</td>
</tr>
<tr>
<td>Spaces Used by Non-Workers, Week End Work Hours</td>
<td>(S_{4NW_WEWH} \times %\text{NonWrkWEWH} / 100)</td>
<td>(\text{SNW_WEWH}) [105]</td>
</tr>
<tr>
<td>Money From Spaces Used by Non-workers Per Week-End Day, Work Hours</td>
<td>(\text{SNW_WEWH} \times \text{VP_9Hrs})</td>
<td>(\text{NW_WEWH}) [1,050]</td>
</tr>
<tr>
<td>Money From Spaces Used by Non-workers On the Week End After Hours, Per Week</td>
<td>(2 \times \text{NW_WEWH})</td>
<td>(\text{W_NW_WEWH}) [2,100]</td>
</tr>
</tbody>
</table>
### Dividend-Account Parking
#### Money Flow Calculations

**Calculation of the Weekly Amount Generated by Spaces Not Used by Workers, Week End After Hours (5 to 9)**

<table>
<thead>
<tr>
<th>Description</th>
<th>Formula</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spaces Available for Non-Workers, Week End After Hours</td>
<td>N_DAP</td>
<td>250</td>
</tr>
<tr>
<td>Spaces Used by Non-Workers, Week End After Hours</td>
<td>S_4NW_WDAH*%NonWrk_WDAH/100</td>
<td>75</td>
</tr>
<tr>
<td>Money From Spaces Used by Non-workers Per Week-End Day After Hours</td>
<td>4/9 * SNW_WDAH * VP_9Hrs</td>
<td>$333</td>
</tr>
<tr>
<td>Money From Spaces Used by Non-workers on Week-End Days After Hours, Per Week</td>
<td>2 * $NW_WDAH</td>
<td>$667</td>
</tr>
</tbody>
</table>

**Notes:**
- N_DAP: Spaces Available for Non-Workers, Week End After Hours
- S_4NW_WDAH: Spaces Used by Non-Workers, Week End After Hours
- SNW_WDAH: Money From Spaces Used by Non-workers Per Week-End Day After Hours
- NW_WDAH: Money From Spaces Used by Non-workers on Week-End Days After Hours, Per Week
- VP_9Hrs: Value per Hour for Non-Workers
- %NonWrk: Percentage of Non-Workers

EUEC 2021
# Dividend-Account Parking

## Money Flow Calculations

The Weekly Earnings From Non-Employees, the Weekly "AddIns" Required, the Weekly Surplus Generated, the Yearly Surplus, and the Yearly Surplus After Giving Employees a $100 Per Year Bonus

<table>
<thead>
<tr>
<th>Description</th>
<th>Formula</th>
<th>Name</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weekly Money Earned by the spaces not taken by workers</td>
<td>W$NW_WDWH + W$NW_WDAH + W$NW_WEWH + W$NW_WEAH</td>
<td>W$NW</td>
<td>$5,683</td>
</tr>
<tr>
<td>Weekly Money Required to Pay All of the AddIn Amounts</td>
<td>N_DrWD * AddIn45 + N_DrWE * AddIn63</td>
<td>AddInPerWeek</td>
<td>$2,560</td>
</tr>
<tr>
<td>Weekly Money Left Over After Paying Add Ins</td>
<td>W$NW - AddInPerWeek</td>
<td>$PerWeek</td>
<td>$3,123</td>
</tr>
<tr>
<td>Yearly Money After Paying Add Ins From the Money From Non-Workers</td>
<td>52 * $PerWeek</td>
<td>$PerYear</td>
<td>$162,413</td>
</tr>
<tr>
<td>Yearly Money After Paying Add Ins and Also a $100 Bonus Per Year for Each Employee</td>
<td>$PerYear - $100 * N_Emp</td>
<td>$PerYear</td>
<td>$137,413</td>
</tr>
</tbody>
</table>
## Dividend-Account Parking

### Money Flow Calculations

<table>
<thead>
<tr>
<th>3 Cases of Dividend-Account Parking Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oceanside Civic Center Garage</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Baseline</th>
<th>Worse</th>
<th>Better</th>
</tr>
</thead>
<tbody>
<tr>
<td>% employees that drive on week day &amp; week end</td>
<td>80%</td>
<td>85%</td>
<td>75%</td>
</tr>
<tr>
<td>% employees that work on Sat. and on Sun.</td>
<td>20%</td>
<td>25%</td>
<td>15%</td>
</tr>
<tr>
<td>% Parking Not Used by Workers, That is Used by Non-Workers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Week Day, Work Hours</td>
<td>50%</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>Week Day, After Hours (5 to 9)</td>
<td>30%</td>
<td>25%</td>
<td>35%</td>
</tr>
<tr>
<td>Week End, Work Hours</td>
<td>50%</td>
<td>45%</td>
<td>55%</td>
</tr>
<tr>
<td>Week End, After Hours (5 to 9)</td>
<td>30%</td>
<td>25%</td>
<td>35%</td>
</tr>
<tr>
<td>Yearly Amount Left Over After Paying Add-Ins</td>
<td>$162,413</td>
<td>$125,242</td>
<td>$210,374</td>
</tr>
<tr>
<td>Amount Left After Paying Add-Ins &amp; $100 Bonus</td>
<td>$137,413</td>
<td>$100,242</td>
<td>$185,374</td>
</tr>
</tbody>
</table>
Conclusion 1

Given our climate emergency, we need this parking system to spread to all parking, to include offices, on-street, apartments, “big box”, shopping centers, and mixed use.
Conclusion 2

Society needs a corporation to specialize in managing and optimizing parking

Skills Needed Include:

1. Data collection, computing, marketing, archiving, transferring money, protecting privacy, and generating financial statements
2. Monetizing unused parking and data
3. Financing and building solar canopies, roof top solar, and charging stations
4. Selling electricity
Conclusion 3

This could be an enforceable mitigation measure in a city’s Climate Action Plan, to reduce driving, perhaps in its Transportation Demand Management (TDM) Section.
Back up Slides
Conclusion & Path Forward

• A big part of the needed 32% reduction needs to come from car-parking reform.
• The first step could be a demonstration project of a car-parking system, at a work location.
From the California Democratic Party (CDP) 2018 Platform


Transportation Sub-Plank Statement

• Work for shared, convenient, and value-priced parking, operated with a system that provides financial support to those paying higher costs or getting a reduced wage, due to the cost of providing the parking. \textit{Note: this is DAP!}
1500-Character Extended Abstract

The presentation starts with the definition of two commonly-used, car-parking systems: the bundled-price system and the bundled-cost system. The flaws of these systems are exposed. The Dividend Account Parking (DAP) parking system is introduced; with the motivation for its implementation: the importance of cars in reducing GHG and how DAP fits into a plan to ensure that cars support climate-stabilization.

The rest of the slides present a specific DAP proposal, in downtown Oceanside, CA, for city employees. Outcomes, an overview, and a definition of DAP are given. Charge & payout formulations are specified. Methods to prevent cheating are described. A brief, simplified example of a DAP implementation is shown, where it would be difficult to not drive to work, showing DAP to still be a good choice. Results from cases of car parking cash-out (where employees are paid to get to work without driving) are given, showing that if a price differential (between driving and not driving to work) is introduced (DAP does this), driving alone to work is significantly reduced.

Money cash flow calculations are presented, using reasonable simplifying assumptions and then reasonably-conservative assumptions of how much money could be earned from employee parking, whenever it is not being used by an employee. The results from three cases (“Baseline”, “Worse”, and “Better”) are shown.

Twenty six back up slides appear, but they are NOT part of the presentation.
Measures to Get 32%

• Predictions, Regional Transportation Plans
  
• Stop expanding most roads and all freeways
  – No need, Eliminate congestion with less driving
  
• Reallocate freeway-expansion $$$ to transit
  
• Payment methods, to increase fairness & choice
  – Demonstration projects: Dividend-Account Parking
  – Legislation
    • Replace Bundled-Cost or Bundled-Benefit Parking
    • Equitable and environmentally-sound road-use fees
  
• Smarter growth, complete streets, bike classes
Climate Literacy

THEREFORE BE IT RESOLVED, that the California Democratic Party reinforces the need for all high school students to know, before they graduate, and elected officials to know, acknowledge, and address, as soon as possible, (1) both the existence of and the reason for anthropogenic climate change; (2) its potential for harm; (3) the difference between stabilizing the climate at a livable level and destabilization; (4) science-based, climate-stabilizing, GHG reduction targets; (5) the primary variables and considerations in identifying those targets and (6) the approximate amount of life style and technology change required to achieve those climate-stabilizing targets.
XXX Implementation Example

The City could have the vendor operate the system, for the first 10 years. Over those years, the vendor would be motivated to debug the system and continue to look for operational efficiencies. The vendor could receive 10% of the revenue, for the first 5 years; 5% of the revenue, for the next 3 years; and 2%, for the final 2 years. If 600 cars are parked for 8 hours, 200 days per year, at 50 cents per hour, then the yearly revenue would be $480,000. The vendor would collect $240,000 over the first 5 years, $72,000 over the next 3 years, and $28,800 over the last two years.
Governor Brown to the Pope:

*Humanity must Reverse Course* or Face Extinction

* Must be quantified
Climate Data

- Keeling Curve:
  http://en.wikipedia.org/wiki/An_Inconvenient_Truth#Scientific_basis

Currently 400 PPM!

Atmospheric Carbon Dioxide
Measured at Mauna Loa, Hawaii

Burning a gallon of gasoline releases about 19 #'s of CO2!
Likewise
A barrel of oil, about 700 #'s
A ton of coal, about 3 tons
Etc.
Our Climate Crisis

- From: http://en.wikipedia.org/wiki/An_Inconvenient_Truth#Scientific_basis

S-3-05’s goal is to cap CO2 at 450 PPM

Current Level of CO2 is 400 PPM

S-3-05 Achievement Outcomes
- X% chance > 4 (Extinction?)
- 30% chance > 3 (very bad)
- 50% chance > 2 (bad)
Our Climate Crisis

- Earth & Space Research (ESR) website: http://www.esr.org/outreach/climate_change/mans_impact/man1.html

Current level = 400 PPM

S-3-05’s Goal is to cap CO2 at 450 PPM, which is off this chart.

Start of Industrial Revolution
Fixing the Problem

We must stabilize the value of the earth’s atmospheric $CO2_e$

CO$_2$$_e$ Emissions

$$E_N + E_A + E_{WFB}$$

- Natural: rotting, fire, digestion, respiration
- Anthropogenic: combustion of fossil fuel, methane, other
- Warming Feed Back: such as methane from melting permafrost

Sequestration (Photosynthesis)

- $>$ $\rightarrow$ Positive Slope
- $=$ $\rightarrow$ Zero Slope
- $<$ $\rightarrow$ Negative Slope

The Warming Feed Back term is the wild card. It must not become dominant.

If Anthropogenic emissions were to be sufficiently low (80% below 1990 levels has been allocated to developed countries), the slope would be zero, thus capping the value of the Earth’s atmospheric $CO2_e$. 

Growth of plants on Earth
Motivation for Change

• Fairness to individuals
  – Costs no longer hidden
  – Costs avoided or recovered, by not using parking

• Less driving, to reduce environmental harm
  – Motivates choosing alternative modes
  – Less driving to find parking

• Cost Effective Development
  – Less parking needed reduces land and building costs
Goals, 1 of 2

- One agency operates all parking
- Nearly all parking is shared
- Parking costs are effectively unbundled
  - From wages and rents
  - From costs of goods and services
- No change to how parking gets built
  - Generally, municipalities require & developers build
Goals, 2 of 2

• Priced right
  – Value Priced: Base price derived from costs
  – Driver demand determines a congestion price
• No need to search for parking
  – Directions to parking that meets user’s needs
  – Accurate price predictions
• Each parking space’s use is archived
  – Supports informed decisions
• Privacy and the needs of the disabled are supported
Definitions and Methods, 1 of 6

• Definition & Examples of *Parking Beneficiary Group*
  – Owners
    • Private investors or governments operating public parking
  – Those losing money due to provided parking
    • Employees
    • Apartment renters or condominium owners
    • Hotel or restaurant patrons
    • Shoppers
  – Those offered specific parking
    • Driving-age students at a school with parking
    • Driving-age train riders using a station with parking
Definitions and Methods 2 of 6

• How to Effectively Unbundle the Cost or the Benefit
  – Price charged per minute
    • Base price rate established to cover all costs
    • Congestion price rate
      – Dynamically set as a function of occupancy rate
      – Charge is time average, if rate changes, while car is parked
  – Parking generally available to all drivers
  – Earnings distributed to members of Beneficiary Group
    • Calculation of individual’s earnings depends on situation
Definitions and Methods, 3 of 6

• Calculation of monthly earnings
  – If parking is provided for several groups, each group’s portion of the earnings is proportional to its original contribution to cost (Mixed use case)
  – Each beneficiary group’s total is divided up among its members
    • Condominium owners: proportional to spaces effectively purchased
    • Renters: proportional to spaces effectively renting
    • Shoppers: proportional to money spent
    • Employees or students of driving age: proportional to time spent at work or school
    • Train riders of driving age: proportional to time spent on round trips
Definitions and Methods, 4 of 6

• For congestion pricing, define **Cluster of Parking**
  – 20 to 40 contiguous spaces nearly equal in desirability
  – Assigned the same price

• Pricing
  – Base price
    • Covers all costs
    • Report’s Page 13 & 14 provides details
  – Congestion price, for each cluster

\[ r_{\text{BaselineHourly}} = \frac{(r_{\text{Investment}} \times v_{\text{Parking}}) + c_{\text{YOPD}}}{(n_{\text{HoursPerYear}} \times f_{\text{TO}})} \]

\[ r_{\text{HourlyRate}} = r_{\text{BaselineHourly}} \times \left( B^{30-v}/5 \right), \text{for } V < 30; \quad r_{\text{BaselineHourly}}, \text{otherwise} \]

• \( B \) is nominally 2; adjusted to keep vacancy above 15%
• \( V \) is the vacancy % rate (Report’s Eq. 2, Table 2, Pages 14 & 15)
Definitions and Methods, 5 of 6

• Pricing predictions
  – For any set of dates, start times, durations, and destinations
  – Availability of predictions
    • Broadcast into navigational units
    • Website or phone

• Help to find desired parking
  – Driver gives times and locations and stipulates . . .
    • Max price, to get space at minimum walk distance
    • Max walk distance, to get space at minimum price
  – Voice-activated navigational system for ease and safety
Definitions and Methods, 6 of 6

• Monthly statements
  – All parking charges and earnings
    • First, within state
    • Then, within nation
    • Finally, within North and South America
  – Customer selects presentation detail
    • Less detail for ease and more privacy
    • More detail to know and adjust parking decisions
  – Packaged with other statements
    • All utilities, transit use, road use
Implementation Plan, 1 of 3

• Prototype design
  – Most likely a Climate Action Plan Mitigation Measure
• Requirements document to support request for proposal (RFP)
• Winning proposal leads to design
  – Hardware selection and design
  – Software generation
• Prototype installation
  – Most likely a Climate Action Plan Mitigation Measure
  – Debug
  – Adjustments to satisfy stakeholders
Implementation Plan, 2 of 3

• Government agency develops and executes full installation strategy
  – To minimize impact on institutions
  – To maximize early success and driving reductions
    • Large employment centers with “free” parking
    • Train stations with large, “free” parking lots
  – Supported by new law that requires cooperation but very little effort, from . . .
    • Private and public institutions
    • Individuals
Implementation Plan, 3 of 3

• Basis for a new law supporting installations
  – To provide equal protection of the law
    • Government has required parking for 50 years
    • Those driving less than average often lose money
  – Prototype will have demonstrated feasibility
  – Global warming considerations show subsidized parking to be a public nuisance
    • Global warming will likely cause a human catastrophe
    • Short term strategies are critical
    • Electric cars and getting most electricity from renewables will take decades
    • Properly pricing parking is relatively cheap and quick (5 years)
Unbundle Flow Diagram Definitions

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>$P_{INP}$</td>
<td>Company payroll if there were no parking costs</td>
</tr>
<tr>
<td>$P_{cost}$</td>
<td>Total parking cost. Price will be sized to recover this.</td>
</tr>
<tr>
<td>$P_{earned}$</td>
<td>Parking earnings equals parking cost minus collection cost</td>
</tr>
<tr>
<td>$v_i$</td>
<td>Employee value. Fraction of available pay. For the average employee, $1/n$</td>
</tr>
<tr>
<td>$c_i$</td>
<td>Fraction of parking cost paid. Zero, if the employee never parks.</td>
</tr>
<tr>
<td>$f$</td>
<td>Parking earnings divided by parking cost. Close to 1 for efficient collection</td>
</tr>
<tr>
<td>$w_i$</td>
<td>Time worked divided by total time worked of all employees. If average, this is $1/n$.</td>
</tr>
</tbody>
</table>
For the average $i$th employee, $v_i = 1/n$ and $w_i = 1/n$. If this employee never parks, their pay is $(1/n)P_{INP} - (1/n)P_{cost} (1-f)$. If $f = 1$, the pay is what it would be with no parking.
Mike Bullock, 1 of 2

• Personal
  – Married, two daughters, 3 grand daughters, 1 grandson
  • Daughter Laura Bullock White (Berkeley)
  • Heidi Bullock (Oceanside)
  – Moved from Cupertino to Oceanside in April 2007
  – Oceanside home (1800 Bayberry Dr) and 4-plex (506 N. Ditmar)
  – Swims with and competes for Oceanside Swim Masters
• Education
  – BSEE, Lamar University
  – MSE, University of Texas at El Paso
• Professional
  – Lockheed Martin Systems Engineer, 1971 to 2007
    • Last 2 years, Space Based Infrared System (SBIRS, satellite to detect and track missiles)
    • 10 Years previous: Milstar (communication satellite)
      – Verification of antenna pointing accuracy
      – Antenna pointing calibration
• Most Recent Activities
  – California Democratic Party
    • Delegate, 76TH AD
    • Elected member of the San Diego County Central Committee
    • CDP Resolutions and Platform
San Diego County’s Climate Action Plan Misadventures

- The Sierra Club proposed Dividend-Account parking, as a demonstration project for County employees

- The County argued it was infeasible

- Superior Court Judge Taylor ruled that the County failed to show it was infeasible

- The County appealed on a 3-2 vote

- This is the 2nd failed CAP for the County. The first was ordered rescinded on the same issue and resulted in a published Appellant Court Ruling
These entities or others may become interested in issuing a Request for Information as described herein

City of Encinitas in cooperation with the cities of Oceanside, Carlsbad, Solana Beach, and Del Mar, the United States Marine Corps Base at Camp Pendleton, and North County Transit District

REQUEST FOR INFORMATION (RFI)
OR A REQUEST FOR AN INDICATION OF INTEREST (RFIOI) IN RESPONDING TO AN RFI
Design, Install, and Operate a Dividend-Account Car Parking System at Selected Work Locations for Employees
CM RFI 18-XX

Date Issued: Month j, 2018 or 2019
Questions Due: Month k, 2018, 5:00 PM
Proposals Due: Month l, 2018, 2:00 PM

IF YOU DID NOT DOWNLOAD, OR DIRECTLY RECEIVE THIS DOCUMENT FROM THE XXX WEBSITE AT WWW.xxx.GOV/BIDS, YOU ARE NOT LISTED AS AN OFFICIAL DOCUMENT HOLDER FOR THIS SOLICITATION AND WILL NOT BE NOTIFIED BY THE CITY OF ADDENDA ISSUED. YOU MUST ACKNOWLEDGE ANY ADDENDA ISSUED IN YOUR SUBMITTAL OR RISK BEING CONSIDERED NON RESPONSIVE. PLEASE BE SURE TO VISIT THE WEBSITE ABOVE TO REGISTER AS A DOCUMENT HOLDER FOR THIS SOLICITATION.
I. INTRODUCTION

The City of Encinitas, or one of the other entities shown above, may want, at some future date, to request information that will aid in the selection of a vendor for a possible Dividend-Account Car-Parking System Demonstration pilot on behalf of the themselves and other entities, such as Oceanside, Carlsbad, Encinitas, Solana Beach, and Del Mar, the United States Marine Corps Base at Camp Pendleton, and the North County Transit District (collectively referred to as “Partners”). The Partners may seek to evaluate the benefits, effectiveness, and popularity of a Dividend-Account Car Parking System for employees in the north coastal region of San Diego County through the operation of a temporary pilot program lasting from twelve (12) to thirty-six (36) months. It could become the goal of the Partners to determine whether permanent Dividend-Account Car-Parking systems would be successful in our region based on the outcome of a pilot program. Partners may decide to be actively coordinating with the San Diego Association of Governments (SANDAG), the agency that may be leading regional Dividend-Account Car-Parking Systems coordination around topics including data collection and monitoring, public outreach, policy/regulations. The partners are more likely to want to proceed if there is an identified interest on the part of vendors to respond to an actual RFI. To save time, the rest of this document is written as if one of the Partners has already decided to issue an RFI. However, that is not currently the case. This document, perhaps best described as Request for Indication of Interest has been adapted from a dock-less bike share RFI. Thank you for considering this concept. Please indicate if you would be interested in designing and operating such a system.

Mike Bullock

Oceanside, CA 92054
760-754-8025; Cell: 760-421-9482

A. Location

The study area includes the cities of Oceanside, Carlsbad, Encinitas, Solana Beach, and Del Mar, and the United States Marine Corps Base at Camp Pendleton, all of which are located in northern San Diego County along the coast. The region has a mild climate with average temperatures ranging from the mid-60s in the winter to mid-80s in the summer. The terrain is relatively flat along the coast, particularly when traveling in the north-south directions. Each of the cities have dense urban centers of varying sizes with grid street plans and relatively flat terrain. Generally, most of the cities in the study area have more hilly terrain and a suburban layout east of Interstate 5 (I-5). The combined population of the cities is approximately 365,000 and the combined geographical area of the cities is approximately 106 square miles. Highway 101 runs along the coast through each of the cities for a contiguous distance of approximately 20 miles. Highway 101 is one of the most popular bicycling routes in the San Diego region. North County Transit District (NCTD) operates two rail lines and 34 bus routes throughout North County. Thirteen rail and/or bus transit centers are located within the study area. Total annual NCTD ridership is approximately 10.7 million passengers. The Camp Pendleton Marine Corps base is located just north of Oceanside and serves as a major employer for both enlisted and non-enlisted personnel. The southwest corner of the base adjacent to Oceanside Harbor and west of I-5 features relatively flat terrain and could benefit from increased biking connections.

Table 1: General information about the region
<table>
<thead>
<tr>
<th></th>
<th>Population¹</th>
<th>Employment²</th>
<th>Size (sq. mi.)</th>
<th>Coastline (mi.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oceanside</td>
<td>175,948</td>
<td>35,662</td>
<td>42</td>
<td>3.5</td>
</tr>
<tr>
<td>Carlsbad</td>
<td>112,930</td>
<td>66,596</td>
<td>39</td>
<td>6.3</td>
</tr>
<tr>
<td>Encinitas</td>
<td>61,928</td>
<td>22,443</td>
<td>20</td>
<td>6</td>
</tr>
<tr>
<td>Solana Beach</td>
<td>13,494</td>
<td>7,843</td>
<td>3.6</td>
<td>1.5</td>
</tr>
<tr>
<td>Del Mar</td>
<td>4,274</td>
<td>3,474</td>
<td>1.8</td>
<td>2.9</td>
</tr>
</tbody>
</table>

¹SANDAG Current Estimates, 2016
²U.S. Census Bureau, 2015

**B. Background**

The cities in the North County coastal region of San Diego County are increasingly aware of the need to reduce local greenhouse gas (GHG) emissions to limit the effects of climate change.
while offering viable transportation alternatives to driving alone. Many of the cities have adopted Climate Action Plans (CAPs) or are in the process of developing CAPs. CAPs establish environmental initiatives by which cities aim to achieve GHG emissions reduction goals and targets. Transportation, especially travel via single occupancy vehicle, is a major source of GHG emissions in North County. Facilitating safe, convenient, and affordable alternative transportation options is often a component of these plans and initiatives. Car parking systems that increase economic fairness and choice, compared to bundled-employee-benefit car parking systems (erroneously called “free parking”) at places of employment will reduce single occupancy vehicle (SOV) commuting and increase the need for first/last mile solutions. For this reason, this RFI will be provided to those firms that would benefit from increasing the demand for first/last mile solutions.

The Marine Corps Mobility Transformation Strategy calls for demonstration projects at installations like Camp Pendleton to meet official business mobility with capabilities that are smarter, more efficient, more accessible, and cheaper.

Partners will seek to coordinate with SANDAG on Dividend-Account Car-Parking Systems data analysis while ensuring the selected Dividend-Account Car-Parking Systems vendor can meet data sharing requirements that assist in quantifying the impacts of Dividend-Account Car-Parking Systems on vehicle miles traveled (VMT), access to transit, economic development, and other benefits.

Offering and promoting programs, like Dividend-Account Car-Parking Systems, that replace vehicle trips with active transportation and/or transit trips, is one of the ways the Partners can help to reduce emissions while offering more efficient and more affordable transportation modes for residents, employees, and visitors. A Dividend-Account Car-Parking System is a system which operates employee car parking for the financial gain of the employees by value-pricing the parking and distributing the earnings, which are the revenue minus a fair cost of operation, among employees. The earnings are provided in proportion to the time an employee spends on the work premises. There may also be an “add in” payment provided by either the employer or from a grant, such as a Greenhouse Gas Reduction Fund (GGRF) grant, sized so that an employee that continues to drive every day will lose no money under the system. This system will in effect pay each employee an additional amount of income for each day they get to work without relying on the single occupancy vehicle (SOV) mode. See Reference 1 for more details on the Dividend-Account Car Parking System. The References are listed at the end of Section II, Request for Information.

C. Purpose and Objectives of the RFI

The purpose of this Request for Information (RFI) is to identify vendors with the resources to pilot a Dividend-Account Car-Parking System program in the Partners’ jurisdictions, in accordance with the objectives set forth in this RFI.

The Partners seek a qualified vendor to design, establish, implement, operate, and maintain an innovative, valuable, and mutually-beneficial Dividend-Account Car-Parking System pilot program. The pilot should enable and encourage residents, employees, and visitors to affordably and conveniently travel by car pool, transit, active transportation or some combination of these modes. The pilot should also facilitate a decrease in vehicular parking demand, vehicular traffic, and (GHG) emissions, while promoting active and healthy transportation options.
Qualified vendors are invited to submit proposals based on the information provided in this RFI.

This RFI is a mechanism for gathering information and does not constitute a binding procurement process, however, selection of goods and/or services may result from information obtained through this RFI process, where deemed appropriate. The Partners, jointly or individually, are not obligated to make an award or issue a Request for Proposal as part of this process. In addition, the Partners, in their sole discretion, may decide to engage in direct question and answer sessions with one or more vendors and may decide to enter into an agreement or issue permits based upon those discussions/interviews or a resulting proposal.

If a single demonstration pilot project or multiple demonstration pilot projects were successful, given the severity of our anthropogenic climate change crisis, it is anticipated that other employers will decide to install Dividend-Account car-parking systems. Since municipal governments are required under CEQA to adopt General Plan Updates (GPUs) that include, perhaps using a Climate Action Plan, a set of enforceable measures that will achieve climate-stabilizing targets, and since cars and light-duty trucks (LDVs) are the largest category of GHG emissions, it is further anticipated that municipal governments will, over time, update their off-street parking ordinances to include requirements for Dividend-Account Car Parking systems. Reference 2 shows that this system is adaptable to all types of parking. A selected vendor would have access to a market of more than 365,000 residents living in the north coastal region, more than 135,000 employees that work in the region, and others that visit the region for leisure.

Potential Dividend-Account Car-Parking Systems program marketing opportunities may include, but are not limited to: being listed as a preferred vendor on the Partners websites, co-branded sustainability campaigns, signage, event sponsorship, press releases, and social media announcements.

D. Obtaining RFI Documents

The website for this RFI and related documents is: PlanetBids (http://www.encinitasca.gov/bids). All correspondence will be posted on the PlanetBids website. It is the responsibility of Proposers to check the website regularly for information updates and RFI clarifications, as well as any RFI addenda. To submit a proposal, a Proposer must be registered with the City of Encinitas as a vendor. To register as a vendor, go to the following link (http://www.encinitasca.gov/bids), and then proceed to the “New Vendor Registration” link. All addenda will be available on the PlanetBids website.

E. RFI Contact

The City of Encinitas will receive questions and information requests on this RFI up to 5:00 p.m. on some TBD Month “n”, 2018. All questions regarding the RFI documents shall be submitted through PlanetBids. All project correspondence will be posted on the PlanetBids website. It is the responsibility of the Proposers to check the website regularly for information updates, clarifications, and addenda.

II. REQUEST FOR INFORMATION or REQUEST FOR INDICATION OF INTEREST

This section describes the information being requested by the Partners to learn about prospective Dividend-Account Car-Parking System (“System”) vendors and optionally to select a vendor to operate in the Partners’ jurisdictions. Interested vendors must include all
information outlined below in a submitted proposal.

A. **Dividend-Account Car-Parking System ("System") Pilot Program Requirements**

Vendors responding to this RFI must describe their proposed system that is capable of providing the following services and shall describe these services in their submission:

1. System pilot program(s), as described in Reference 1, to include the following installed and maintained capabilities:

2. A capability to establish and maintain a database of System Vehicles, System Members, System Parking and System Accounts. A System Account includes the mailing name and address of a person that has agreed to receive payments and pay bills that are the result of the implementation of the System and the actions taken by the person, or some other person driving the System Vehicle or System Vehicles, as described herein. Such a person is a “System Member.” A “System Vehicle” is one that can be identified when it is parked in the System and one that is associated with a System Account and System Member. A System Member may take responsibility to pay for the cost of parking for multiple System Vehicles.

3. A capability to provide an easy method for Employees and others to become System Members by establishing a System Account with their chosen System Vehicles.

4. A capability to provide signage to designate System Parking areas well enough to prevent nearly all accidental entries by unauthorized vehicles, meaning vehicles that are not System Vehicles.

5. A capability to provide written materials to explain to employees and others that may want to become System Members how the System will work and why it is an important improvement to economic fairness and environmental outcomes, assuming a reasonable level of cooperation with the City and other affected groups, such as City vendors and sub-contractors.

6. A capability to operate the system for an agreed-upon amount of time, with no money exchanges, to establish a pre-install database of commute behavior including using questionnaires to determine how non-drivers say they are getting to work.

7. A capability to identify a System Vehicle within a minute of its being parked in a System Parking space and to store the System Vehicle identifier and the time it was recognized as being parked.

8. A capability to recognize when a System Vehicle exits a System Parking space, within a minute and to store the vehicle identifier and the recognized exit time.

9. A capability to identify vehicles that are NOT System Vehicles when they are in the System Parking area and are therefore trespassing, while they are in the System Parking area.

10. A capability to record the start time and end time of the trespassing vehicle’s trespassing, to within an accuracy of 1 minute, as well as its license plate image, sufficient to support a conviction of trespassing.

11. A capability to send the license plate of the trespassing vehicle and its start time and end time of its trespassing to law enforcement officials with 5 minutes of the recorded start time of the trespass.

12. A capability to provide notice and evidence of this trespassing in real time and as stored
information for law enforcement so that they can then ticket and prosecute the owners of any and all vehicles that have been illegally parked in a System Parking space. It is anticipated that this would include the capture and storage of the license plate numbers of the vehicles that are parked in the System Parking lot whenever it is the case that the vehicle is not a System Vehicle.

13. A capability to compute an instantaneous charge rate (cost per minute) for the case of an application of "congestion pricing", whereby an agreed-upon base price is increased by an agreed-upon congestion-pricing algorithm, designed to prevent the occupancy rate from exceeding an agreed-upon upper bound value, such as 90% occupied. An example of such an algorithm is in Reference 2.

14. A capability to compute and store the time that the charge rate changes, for the case of an application of a congestion-pricing algorithm. Note that this time is called the Rate Change Time. At these times, the rate could either increase, by the addition of a car being parked in a System Space or the rate could be decreased, by the subtraction of a car in a System Space.

15. A capability to accumulate a total charge for each System Member, where the total charge is the sum of the products of each parked duration time over which a fixed charge rate applies and the length of that time duration, for all the System Vehicles associated with the System Member, over a month. This total charge is called the System Member Monthly Charge (“SMMC”). Note that the Member may or may not be an employee.

16. A capability to compute the total charges, for all System Members over a month for the System. This amount is the Total System Monthly Charge (“TSMC”).

17. A capability to compute a Total System Monthly Earnings (“TSME”), which is the TSMC, reduced by a agree-to amount, such as 5%, where the 5% is taken out of the TSMC to cover the operator's expenses.

18. A capability to record all the times an employee enters and leaves the work premises. One way to do this is to require employees to have an RFID. There may also be an GPS or a license plate reading solution. Note that a privacy requirement will prevent this information from being shared, with the employer, for example, with the exception of providing it to a law enforcement person, in the event a warrant is signed by a presiding judge.

19. A capability to use the times an employee enters and leaves the work premises to compute the time, over a month, an employee has spent at or within the work premises. This time is known as the Employee Monthly Time (“EMT”).

20. A capability to compute the total time all employees spent at the premises over a month, to be known as the Total Employee Monthly Time (“TEMT”).

21. A capability to compute an Employee’s Monthly System Earnings (“EMSE”) as the Total System Monthly Earnings (“TSME”), multiplied by the employee’s Employee Monthly Time, EMT divided by the TEMT. This is also described in Reference 1.

22. A capability to compute an Employee’s Add-In “EAI”, as follows. If the employee's System Member Monthly Charge, SMMC, value is greater than the employee's earnings, TSME; then, for that case, the EAI is equal to the employee's SMMC minus the employee's TSME. If the employee's System Member Monthly Charge, SMMC value is not greater than the employee's earnings, TSME; then the employee's EAI is equal to zero. This is also described in Reference 1.

23. A capability to accept Employee’s Add-In, EAI money from the Employer, with the
expectation that the money would originate from a grant funded by, for example, the Greenhouse Gas Reduction Fund (GGRF), or could come from the Employer’s budget, as a Climate Action Plan (CAP) or other expense. It could also be generated by converting some “free” parking to be a different Account Parking System Parking (System Parking), thereby generating new money to the City.

24. A capability to compute an employee’s monthly payment (“EMP”), as follows: It is equal to the Employee’s Monthly System Earnings, EMSE plus the employee’s Add-In, EAI minus the System Member Monthly Charge, SMMC. This is also described in Reference 1.

25. A capability to automatically send out monthly statements to all System Members. System Members who are not employees will receive a bill if they have parked in the System parking during the month. The bill will then be for the member’s SMMC. Each employee will receive a statement showing SMMC, EMSE, and EAI. If the employee’s EAI is zero, then the employee will receive a payment in the form of cashable check for the employee’s EMP. This is also explained in Reference 1.

26. A capability to protect employee privacy where privacy means that the employee’s data will never be shared, with the sole exception of sharing with law enforcement officials in accordance with a valid court order requesting the data. For example, at no time will the data be shared with other employees, including those working in the management of the employer that is providing the employee parking that is the System Parking.

27. A capability to protect System Member privacy where privacy means that the System Member’s data will never be shared, with the sole exception of sharing with law enforcement officials in accordance with a valid court order requesting the data.

28. A capability to allow visitors, vendors, and others, that are identified by the Company management, to be treated as employees. There could also be “visitor” parking that is not associated with the System.

29. A capability to identify System Vehicles that are parked in the visitor parking or other inappropriate parking places, since it is expected that it will required as a part of City Policy that System Vehicles that are associated with employees will be required to be parked in the System Parking. Since employees are earning money from the System Parking, it would be inappropriate for them to not use the System Parking. This information would be shared with City Management, as soon as it is collected.

30. A capability to perform regular inspection, maintenance, and repair of all System Parking facilities and associated capabilities often enough to eliminate nearly all system failures.

31. A capability to perform vendor-managed methods of enforcement.

32. A capability to have demonstrated secured financial backing with the ability to operate at full capacity for the life of the pilot program and beyond with a sustainable business model.

33. A capability to provide close coordination with all Partners, including real-time sharing of System Parking data collected, active promotion of the Dividend-Account Car-Parking Systems program in coordination with each Partner, and timely response to any complaints received or requests made by the Partners and Dividend-Account Car-Parking Systems users. Describe the type of data that is collected and can be provided to the Partners. Promotion and advertisement of the Dividend-Account Car-Parking Systems program must comply with all Partners’ municipal codes and ordinances.

34. A capability to offer a Dividend-Account Car-Parking Systems program that can be deployed, operated, managed, and maintained by the vendor at no cost, except for the
possibility of the EAI payments, to the Partners and with minimal oversight needed from the Partners.

35. A capability to establish and operated multiple Dividend-Account Car-Parking Systems programs including for for cases other than employee parking, as described in Reference 2, that can be deployed, operated, managed, and maintained by the vendor at no cost, except for the EAI payment, for employee parking, to the Partners and with minimal oversight needed from the Partners.

36. A capability to conform to contract specifications, including general liability insurance, worker’s compensation, automobile liability insurance, indemnification, and termination clauses. Sample contract attached.

B. Proposal Elements

Vendors interested in responding to this RFI must prepare a proposal that includes the following information:

1. Describe how drivers can become System Members.

2. Provide a detailed System maintenance plan.

3. Describe the vendor’s capability to provide data and reports to the Partners, including raw and summarized data. Summarized data could include both user data (e.g., demographics, trip purpose, repeat usage, percent of trips starting and ending in close proximity to transit, mode shift, and transit usage) and trip data (e.g., average trip length, average trip time, trip start and end hotspots, trip path, estimated GHG emissions per trip). Ideally, this data should be provided via a publicly accessible API in your suggested General Dividend-Account Car-Parking Systems Feed Specification (GBFS) format. Describe vendor’s ability to collect quantitative and qualitative data and report out findings from users (e.g. in-app surveys).

4. Describe how the vendor will employ anti-theft and anti-vandalism measures to ensure Systems do not pose a nuisance to the community.

5. Since the establishment of Dividend-Account Parking systems will increase bike usage, describe how the vendor will address bicycle safety concerns, including helmet use, riding at night and other safety concerns that may or may not be regulated by state vehicle codes.

6. Describe how the Dividend-Account Car-Parking Systems program may operate in conjunction with existing bike rental businesses operating in the Partners’ cities.

7. Describe the vendor’s plans for future growth and expansion, including possible anticipated increases in demand for good car parking systems as the public becomes more aware of the threat of anthropogenic climate change and how good systems improve economic fairness, etc.

8. Provide an estimated timeline for a twelve-to-twenty-four-month pilot Dividend-Account Car-Parking System program, including any needed permitting, set-up, promotion, advertising, maintenance and servicing, data delivery to Partners, summary and reporting on the outcome of the pilot program and possible continuation of the program.
9. Describe a recommended minimum Dividend-Account Car-Parking Systems size for the North County Coastal operating area.

10. Describe strategies for effectively educating users on proper System Parking use and the reason that society needs to improve the way we pay for the use of car parking.

11. Describe any approach you would recommend to enhance access and fairness for disadvantaged communities.

12. Describe time required to deploy a Dividend-Account Car-Parking Systems pilot program if selected based on System Parking size, etc.

13. Describe an approach to increasing the use of Dividend-Account Parking to include most city car parking, then across City boundaries, and then across County, State, and international boundaries, with the final system being one wherein nearly all System Vehicles have a single, world-wide, System Account.

References Providing Additional Description

1. *Eliminating the Harm of Bundled-Cost or Bundled-Benefit Parking*, Presentation to the 2018 Energy Utility Environment Conference (EUEC), Mike Bullock, March 2018


3. *Oceanside Civic Center Garage Space Allocation*, EXCEL Spread Sheet, Bullock, based on a file provided by Oceanside staff, July 2018

III. INSTRUCTIONS

A. Proposal Due Date

Proposals must be submitted electronically no later than 5:00 p.m. on TBD Month 2018 or 2019. Proposals must be submitted electronically via the PlanetBids system used to download the RFI. The maximum file size for submittal is 50 megabytes, and the file type shall be Portable Document Format (PDF). The electronic system will close submissions exactly at the date and time set forth in the RFI or as changed by addenda.

B. Proposal Acceptance

Respondents are responsible for submitting and having their submittal accepted before the closing time set forth in this RFI or as changed by addenda. NOTE: Pushing the submit button on the electronic system may not be instantaneous; it may take time for the Respondent’s documents to upload and transmit before the submittal is accepted. It is the Respondent’s sole responsibility to ensure their document(s) are uploaded, transmitted, and arrive in time electronically. The City of Encinitas will have no responsibility for submittals that do not arrive in a timely manner, no matter what the reason.
C. Page Limit

No submissions exceeding twenty-five (25) pages will be accepted (excluding attachments). In addition, attachments may not exceed twenty-five (25) pages. The City of Encinitas discourages “padding” of proposals with brochures, extensive literature, and boilerplate material not applicable to a pilot Dividend-Account Car-Parking Systems program.

D. Proposal Format

Proposals must be organized in the following format and include the following content:

1. Letter of transmittal signed by an individual authorized to bind the proposing entity stating the firm has read and will comply with all terms and conditions of the RFI.

2. General information about the firm, including the size of the organization, location of offices, number of years in business, organizational chart, name of owners and principal parties, number and position titles of staff.

3. Qualifications of principals, project managers and key personnel who would be assigned to this project. Include their position in the firm, and types and amount of relevant experience operating a Dividend-Account Car-Parking Systems program or similar program. Identify the primary contact that will be the overall project manager. Resumes are not required, but may be included as attachments. The selected respondent may not substitute personnel without written authorization from the Partners.

4. A work plan that establishes the Respondent’s understanding of, and ability to satisfy Partners’ objectives. Respondent shall succinctly describe the proposed approach for implementing a Dividend-Account Car-Parking Systems program, outlining the activities, including innovative ideas that would be undertaken in completing the various tasks and specifying who would perform them.

5. A preliminary estimated schedule for deployment of a pilot Dividend-Account Car-Parking Systems program. Show all critical paths, major milestones, and decision points in pilot schedule.

6. A list of the municipal or other government agencies your firm has worked with during the past three years. Provide the following information for at least one operational system that has at least some of the similar components as would a Dividend-Account Car-Parking System program that is managed by the respondent:
   
   a) Name, address, and telephone number of the agency;
   b) Time period for the project;
   c) Brief description of the scope of the services provided;
   d) Identify the staff members on the project and their specific responsibilities; and
   e) Person and contact information for a reference.

IV. PROPOSAL EVALUATION

A. Proposal Evaluation
A review committee comprised of representatives from each of the potential Partner cities will judge the merit of proposals received in accordance with the general criteria defined herein. Failure of proposers to provide in their proposal any information requested in this RFI may result in disqualification of the proposal. The sole objective of the review committee will be to select the proposal that is most responsive to the Partners’ needs. The Partners reserve the right to elect to not proceed with a pilot Dividend-Account Car-Parking System program and reject all proposals received through this RFI process.

1. Experience of the vendor and proposed staff. Experience of project staff with similar scope of services. Level of education, training, licensing and certification of staff

2. Approach to the project. Demonstrated understanding of the Partners’ needs and solicitation requirements. Approach is well organized and presented in a clear, concise and logical manner.

3. Availability and proposed use of technology and methodologies. Quality control and thoroughness is well defined.

4. Capability to Perform. Ability to complete work within deadlines. Availability and continuity of staff during the course of the project, if selected. Unsatisfactory past performance with the City of Encinitas (or any of the Partner cities) may be considered as determined by the City of Encinitas (or any of the Partner cities) in their sole and absolute discretion.

5. Relevant Experience. Experience in performing similar services for organizations of similar size to the Partner cities. Experience with public agencies. Years of experience with these types of services.


B. Final Negotiation

As reflected above, vendor selection will be based on a combination of factors as determined to be in the best interest of the Partners. After evaluating the proposals and discussing them further with the finalists, or the tentatively selected vendor, the City of Encinitas reserves the right to further negotiate the proposed program.

V. CONDITIONS GOVERNING THIS PROCUREMENT

A. Scope Changes, Additions and Deletions

All changes in proposal documents shall be through written addendum and furnished to all proposers. Verbal information obtained otherwise will NOT be considered in the evaluation process.

B. Rejection of Proposals

The City of Encinitas reserves the right to reject any or all Proposals and to waive informalities and minor irregularities in Proposals received and to accept any portion of Proposal or all items of Proposal if deemed in the best interest of the City of Encinitas to do so.
C. Proprietary Information

Any restrictions on the use of data contained within a Proposal must be clearly stated in the Proposal itself. Proprietary information submitted in response to this RFI will be handled in accordance with applicable City of Encinitas Procurement Regulations and the California Public Records Act.

D. Response Materials Ownership

All materials submitted regarding this RFI become the property of the City of Encinitas. Responses may be reviewed by any person at Proposal opening time and after final selection has been made. The City of Encinitas has the right to use any or all ideas presented in reply to this request, subject to the limitations outlined in Proprietary Information above. Disqualification of a proposer does not eliminate this right.

E. Acceptance of Proposal Content

The contents of the Proposal of the successful proposer will become contractual obligations if contractual agreements action ensues. Failure of the successful proposer to accept these obligations in a permit to operate, purchase agreement, purchase order, contract, delivery order or similar acquisition instrument may result in cancellation of the award and such proposer may be removed from future solicitations.

F. Cost of Proposal Preparation

The City of Encinitas shall not be liable for any pre-contractual expenses incurred by any submitting vendor. Each submitting vendor shall protect, defend, indemnify, and hold harmless the City of Encinitas from any and all liability, claims or expenses whosoever incurred by, or on behalf of, the entity participating in the preparation of its response to this RFI. Pre-contractual expenses are defined as expenses incurred by vendors in:

1. Preparing the proposal in response to this RFI;
2. Cost to acquire a permit; and
3. All other expenses incurred by a vendor related to preparation of proposal or establishment of a Dividend-Account Car-Parking System program.

G. Interview

Interviews with the top respondents may be requested. The selection of vendors invited to interview will be solely based on the Partners’ discretion. The vendors asked to interview will be notified in advance.
ATTACHMENT 1

Sample License Agreement for Dividend-Account Parking Services

This License Agreement for Dividend-Account Car-Parking System Services ("Agreement") is made this the day of September 2017, by and between the City of Encinitas ("City") and ___ ("Dividend-Account Car-Parking System Vendor").

RECITALS

1. A goal of City is to provide safe and affordable multi-modal transportation options to all residents, reduce traffic congestion, and maximize carbon free mobility.

2. Dividend-Account Car-Parking System services are a component to help the City achieve its transportation goals and the City desires to make this System available to residents and those who work or otherwise drive and park in the City.

3. Dividend-Account Car-Parking System Vendor proposes to operate a Dividend-Account Car Parking program within the City at an agreed-to location with an agreed-to number of System parking spaces within the designated location or locations. As an example, based on Reference 3, there could be 239 spaces designated as System Parking, out of a total of 284 spaces in the Oceanside Civic Center Parking Garage. Note further, that if there are 259 employees that work for the City and are given parking spaces, there would be a need to establish 20 additional System Parking spaces outside of the Oceanside Civic Center Parking Garage.

4. Dividend-Account Car-Parking System Vendor will abide by all City ordinances and rules governing the use of public space.

5. Dividend-Account Car-Parking System Vendor possesses the technology necessary to install operate, maintain, and expand such a system and multiple systems as demand expands.

AGREEMENT

1. Initial Term. This Agreement is effective for twelve to eighteen months from the date of execution ("Initial Term, Phase 1"), which will include a duration of installation during which no money is exchanged so as to establish a baseline of modal splits for employee commuting, and then a year of full operation to document the modal split changes and an estimated amount of greenhouse gas (GHG) emissions saved by the program. At the conclusion of the Initial Term Phase 1, the Agreement may be extended by mutual written agreement of the parties for an additional two-year term (Initial Term, Phase 2), subject to any new terms agreed between the parties, unless either party notifies the other party of its intent not to continue with the Agreement no later than 30 days before the expiration of the Initial Term, Phase 1 and Phase 2.

2. Exclusive Operator. During the Initial Term’s Phase 1 and Phase 2, the City designates Dividend-Account Car-Parking Systems Vendor as the exclusive provider of the System services within its city limits. This designation is personal to Dividend-Account Car-Parking Systems Vendor and may not be assigned or transferred to any party. This exclusivity provision shall expire and not be renewed past the Initial Term’s Phase 1 and Phase 2 unless agreed in writing by the parties.
3. **Use of City Property.** City authorizes Dividend-Account Car-Parking Systems Vendor to use ("License") City property, including the public right-of-way and System Parking areas that are suitable, solely for the purposes set forth in Section 4 of this Agreement. This authorization is not a lease or an easement, and is not intended and shall not be construed to transfer any real property interest in City Property.

4. **Permitted Use.** Dividend-Account Car-Parking System’s System Members may use City Property solely for parking System Vehicles. The City Property is maintained by the City. Dividend-Account Car-Parking Systems Vendor may operate an agree-to amount of System Parking places on City Property as set forth in Exhibit A. If at any time during the term of the Agreement Dividend-Account Car-Parking Systems Vendor desires to place additional System Parking within the City limits, Dividend-Account Car-Parking Parking Systems Vendor must request and receive authorization from the city to do so in writing. The City may limit the number of System Parking places upon identifying a potential harm to public health or safety. Dividend-Account Car-Parking Systems Vendor shall not place or attach any personal property, fixtures, or structures to City Property without the prior written consent of City.

   a. Use of City Property and Dividend-Account Car-Parking Systems Vendor's operations within the City, shall, at a minimum: a) not adversely affect City Property or the City's streets, or sidewalks; b) not adversely affect the property of any third parties; c) not inhibit pedestrian or vehicular movement, as applicable, within City Property or along other property or rights-of-way owned or controlled by the City; d) not create conditions which are a threat to public safety and security. Dividend-Account Car-Parking Systems Vendor shall instruct its customers not to park or leave any System Vehicle where they would impede pedestrian or vehicular traffic.

   b. Upon termination of this Agreement by either party, Dividend-Account Car-Parking Systems Vendor shall, at its sole cost and expense, immediately restore City Property to a condition which is visually and structurally indistinguishable from the immediately surrounding area.

5. **System Parking.** The City, at its own discretion, may support the System with the installation of signs and painting to further the orderly operation of the System Parking.

6. **Condition of City Property**

   a. City makes City Property available to Dividend-Account Car-Parking Systems Vendor in an "as is" condition. City makes no representations or warranties concerning the condition of City Property or its suitability for use by Dividend-Account Car-Parking Systems Vendor or its customers, and assumes no duty to warn either Dividend-Account Car-Parking Systems Vendor or the System Members concerning conditions that exist now or may arise in the future.

   b. City assumes no liability for loss or damage to Dividend-Account Car-Parking Systems System Members. Dividend-Account Car-Parking Systems Vendor agrees that City is not responsible for providing security at any location where Dividend-Account Car-Parking Systems Vendor's System Vehicles are parked, and Dividend-Account Car-Parking Systems Vendor hereby waives any claim against City in the event Dividend-Account Car-Parking System’s System Vehicles or other property are lost, stolen, or damaged.

7. **Maintenance and Care of Portion of City Property;** Dividend-Account Car-Parking Systems Vendor shall be solely responsible for: (i) maintaining City Property to the City standards applicable for use by the Dividend-Account Car-Parking Systems Vendor as
permitted under Section 3; and (ii) obtaining from the City any applicable permits or approvals required by the City. Dividend-Account Car-Parking Systems Vendor shall exercise due care in the use of City Property and shall be responsible for maintaining City Property in good condition and repair. Dividend-Account Car-Parking Systems Vendor shall not act, or fail to act, in any way that result in excessive wear or damage to City Property. Dividend-Account Car-Parking Systems Vendor expressly agrees to repair, replace or otherwise restore any part or item of real or personal property that is damaged, lost or destroyed as a result of the Dividend-Account Car-Parking Systems Vendor's use of City Property. Should the Dividend-Account Car-Parking Systems Vendor fail to repair, replace or otherwise restore such real or personal property, Dividend-Account Car-Parking Systems Vendor expressly agrees to pay City's costs in making such repairs, replacements or restorations. The obligations under this Section apply to all City facilities, infrastructure, or appurtenances located on City Property.

8. Operations & Maintenance. Dividend-Account Car-Parking Systems Vendor will cover all maintenance costs for the System and maintenance to minimum level of service and reporting outlined in Exhibit A.

9. License Fee. The parties intend to agree to a license fee before the Agreement may be extended beyond the Initial Term.

10. Indemnification. Dividend-Account Car-Parking Systems Vendor shall defend, pay, indemnify and hold harmless City, its officers, officials, employees, agents, invitees, and volunteers (collectively "City Parties") from all claims, suits, actions, damages, demands, costs or expenses of any kind or nature by or in favor of anyone whomsoever and from and against any and all costs and expenses, including without limitation court costs and reasonable attorneys' fees, resulting from or in connection with loss of life, bodily or personal injury or property damage arising directly or indirectly out of or from or on account of:

   a. Any occurrence upon, at or from City Property or occasioned wholly or in part by the entry, use or presence upon City Property by Dividend-Account Car-Parking Systems Vendor or by anyone making use of City Property at the invitation or sufferance of Dividend-Account Car-Parking Systems Vendor, except such loss or damage which was caused by the sole negligence or willful misconduct of City.

   b. Use of Dividend-Account Car-Parking Systems Vendor's System Parking by any individual, regardless of whether such use was with or without the permission of Dividend-Account Car-Parking Systems Vendor.

11. Insurance. Dividend-Account Car-Parking Systems Vendor shall procure and maintain for the duration of this agreement insurance against claims for which Dividend-Account Car-Parking Systems Vendor has indemnified the City pursuant to Section 10 of this Agreement. Dividend-Account Car-Parking Systems Vendor shall maintain general liability and automobile liability insurance policies with limits of no less than one million dollars ($1,000,000.00) per occurrence for bodily injury or death, personal injury and property damage, and two million dollars ($2,000,000.00) aggregate. Each insurance policy shall name the City as an additional insured and it shall be endorsed to state that:

   (i) coverage shall not be suspended, voided, or cancelled by either party, or reduced in coverage or in limits except after thirty (30) calendar days prior written notice by certified mail, return receipt requested, has been given to City; and (ii) for any covered claims, the Dividend-Account Car-Parking Systems Vendor's insurance coverage shall be primary insurance as respects the City and any insurance or self-insurance maintained by the City shall be in excess of the Dividend-Account Car-Parking Systems Vendor's
insurance and shall not contribute with it. The insurance required to be provided herein, shall be procured by an insurance company approved by City, which approval shall not be unreasonably withheld. Additionally, before Dividend-Account Car-Parking Systems Vendor shall employ any person or persons in the performance of the Agreement, Dividend-Account Car-Parking Systems Vendor shall procure a policy of workers’ compensation insurance as required by the Labor Code of the State of California, or shall obtain a certificate of self-insurance from the Department of Industrial Relations.

12. **Compliance with Law.** Dividend-Account Car-Parking Systems Vendor at its own cost and expense, shall comply with all statutes, ordinances, regulations, and requirements of all governmental entities applicable to its use of City Property and the operation of its System program, including but not limited to laws governing operation of vehicles. If any license, permit, or other governmental authorization is required for Dividend-Account Car-Parking Systems Vendor's lawful use or occupancy of City Property or any portion thereof, Dividend-Account Car-Parking Systems Vendor shall procure and maintain such license, permit and/or governmental authorization throughout the term of this Agreement. City shall reasonably cooperate with Dividend-Account Car-Parking Systems Vendor, at no additional cost to City, such that Dividend-Account Car-Parking Systems Vendor can properly comply with this Section and be allowed to use City Property as specified in Section 4, above.

13. **Business License.** Dividend-Account Car-Parking Systems Vendor is required to obtain and maintain a City Business License during the duration of this Agreement.

14. **Required Reports.** Dividend-Account Car-Parking Systems Vendor shall provide reports to the City concerning utilization of its System Parking not less than monthly, and shall cooperate with the City in the collection and analysis of any aggregated data concerning its operations.

15. **No Joint Venture.** Nothing herein contained shall be in any way construed as expressing or implying that the parties hereto have joined together in any joint venture or liability company or in any manner have agreed to or are contemplating the sharing of profits and losses among themselves in relation to any matter relating to this Agreement.

16. **Termination.** This Agreement may be terminated prior to the expiration date set forth in Section 1, above, upon the occurrence of any of the following conditions:

   a. Upon delivery of written notice from City to the Dividend-Account Car-Parking Systems Vendor terminating this agreement for any reason, or for no reason, by giving at least sixty (60) days' notice to the Dividend-Account Car-Parking Systems Vendor of such termination.

   b. An attempt to transfer or assign this Agreement.

Dividend-Account Car-Parking Systems Vendor shall not terminate this Agreement without first by giving at least 180 days' written notice of plans for termination.

17. **Amendment.** This Agreement may be amended by mutual agreement of the parties. Such amendments shall only be effective if incorporated in written amendments to this agreement and executed by duly authorized representatives of the parties.

18. **Applicable Law and Venue.** The laws of the State of California shall govern the interpretation and enforcement of this Agreement. Any action to interpret or enforce the terms or conditions of this Agreement shall be brought in the Superior Court for the County of San Diego, or in the United States District Court for the Southern District of California. Dividend-Account Car-Parking Systems Vendor hereby waives any right to remove any such action from San Diego County as is otherwise permitted under
California Code of Civil Procedure Section 394.

19. Counterparts. This Agreement may be executed simultaneously or in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement.
IN WITNESS WHEREOF THE PARTIES HERETO have executed this Agreement on date first above written.

CITY OF ENCINITAS

__________________________
Karen Brust, City Manager

__________________________
[Title]

__________________________
Date

DIVIDEND-ACCOUNT CAR-PARKING SYSTEMS VENDOR

__________________________

__________________________

ATTEST:

__________________________
City Attorney
**Exhibit A**

**Description of Dividend-Account Car-Parking Systems Vendor’s Service Level Agreement**

The following performance indicators shall be met and reported to help the City measure our success serving its citizens and improving the livability and mobility of Encinitas. Dividend-Account Car-Parking Systems Vendor will maintain its System in an excellent state of functionality and repair, with a minimum of error-free operation 95% of the time.

<table>
<thead>
<tr>
<th>Performance Indicator</th>
<th>Description</th>
<th>Measurement Tool</th>
<th>Minimum Performance Standard</th>
<th>Reporting Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>App &amp; customer service support portal: phone and internet. The portal will support the establishment of an account and editing an account</td>
<td>A new account can be entered and audited. It can be edited and an audit can verify the edits. The time and method of the submissions can be retrieved</td>
<td>Tool to audit accounts either by name or unique account number</td>
<td>Accurate 99.5% uptime.</td>
<td>monthly</td>
</tr>
<tr>
<td>Ability to set the value price of the parking, a per minute value</td>
<td>The system can accept a “value price” and use the number as described in this report</td>
<td>Tool to audit the fact of and the proper use of the value price</td>
<td>Accurate 99.5% uptime.</td>
<td>monthly</td>
</tr>
<tr>
<td>Ability to set the base multiplier, which is used in the congestion pricing algorithm as shown in Table 2 of Reference 2. It is expected to be a number between 1.5 and 2.5. It can be adjusted upwards if the parking is getting too full too often</td>
<td>The system can accept a “base multiplier” and use the number as described in Table 2 of Reference 2.</td>
<td>Tool to audit the fact of and the proper use of the value base multiplier</td>
<td>99.5% of the time</td>
<td>monthly</td>
</tr>
<tr>
<td>Ability to report out monthly statements</td>
<td>A feature to display each statement that</td>
<td>Interface to allow a specification of</td>
<td>Statements can be viewed and verified for accuracy with an accuracy of 99.5%</td>
<td>monthly</td>
</tr>
<tr>
<td>Ability to accept money into an account and to pay earnings and “add-ins”, out of the account, as described in this report</td>
<td>Most of the money accepted will be car-parking charge but there will also money that is sent in to cover the “Add-in” payments. Most of the money will be via an automated transfer as is done for dockless bike rentals. However, an ability to accept a mailed check will also be required</td>
<td>Transactions will be put into a file that can be audited</td>
<td>Money transfers will occur and be observable with an accuracy of 99.5%</td>
<td>Monthly</td>
</tr>
<tr>
<td>Ability to report out the percent of employees at their work location that are using their allocated parking over any duration, from specific days to longer specified durations</td>
<td>This tool supports a request for the percent of employees that are at work without using car parking in the employee parking spaces</td>
<td>Software interface that will show the results on a screen and allows for the result file to be stored or printed</td>
<td>Functional 99.5% of the time</td>
<td>Monthly</td>
</tr>
<tr>
<td>Ability to report out the total amount charged to employees, paid to employees as earnings and, separately, as “add ins”, over any duration, from specific days to longer specified durations</td>
<td>This tool supports a request for the described data</td>
<td>Software interface that will show the results on a screen and allows for the result file to be stored or printed</td>
<td>Functional 99.5% of the time</td>
<td>monthly</td>
</tr>
<tr>
<td>---</td>
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<td>---</td>
</tr>
<tr>
<td>Parking spot usage rate</td>
<td>The monthly use rate is reported for any single parking place or for a set of parking places</td>
<td>The result can be viewed on screen or in a file that can be stored or printed</td>
<td>Data collection failure would be reported within two (2) hours during business hours between 8am to 8pm Monday through Friday except for State and Federal holidays. Direct 24/7 contact line for true emergencies, either by phone, text, and/or email. Failure outside of business hours reported within two hours (2) of start of business hours</td>
<td>Monthly</td>
</tr>
<tr>
<td>System failure detected or reported by a member</td>
<td>Error either automatically reported to the person responsible and their back-ups, as a text on their phones and an email to their computer, to include the error report time</td>
<td>A program collects the time of the data error recognition and the time of the correction</td>
<td>Within two (2) hours during business hours between 8am to 8pm Monday through Friday except for State and Federal holidays. Direct 24/7 contact line for true emergencies, either by phone, text, and/or email. For complaint outside of business hours, within two hours (2) of start of business hours</td>
<td>Monthly</td>
</tr>
</tbody>
</table>
Mike,

Happy Friday afternoon to you. Thank you for your thoughtful and well crafted response.

Yes, please feel free to share ACE's interest in participating in an opportunity to provide these parking solutions.

Have a great weekend,
Keith

Keith B. Jones
Owner | ACE Parking
ACE Parking
645 Ash Street
San Diego, CA 92101
T: 619.233.6624

On Sat, Mar 5, 2022 at 5:41 PM <mike_bullock@earthlink.net> wrote:

Keith,

Thank you so much for getting back to me.

No, there is no RFP.

However, the North County Transit District (NCTD), the agency doing the Transit Center project, has a representative on the Oceanside Bike-Ped Committee who seems interested. The Bike-Ped Committee supports the Dividend Account Parking (DAP) system. The Chair of the NCTD, Tony Krantz, who is an Encinitas Councilman, should be supportive, but I have not presented to him. I have presented to the Mayor of Encinitas.

I have put more work into this for the City of Oceanside, for their Civic Center
Parking Garage, which is supposed to be City Employee parking, but is also free to the public. On Thursdays, when Oceanside has its Farmers Market, late-arriving employees sometimes find no vacant parking and then park in the neighborhood. Oceanside is not planning to issue an RFP. However, I may be able to coax one out of them if they know you are interested. I need 3 votes and I estimate that I have only 1 right now. However, several on the Council have expressed interest in the Dividend Account Parking (DAP) system. At the Oceanside Climate Action Plan (CAP) meeting, where I was hoping to get three votes, only one Council Member expressed interest. If DAP were installed at the Civic Center Parking Garage, the Transit Center should follow. They are about 4 blocks away.

Most realize that our climate emergency is getting more acute. However, no city has ever done this, and it is tough to ask an elected official to do something new. Most Climate Action Plans have a Transportation Demand Management (TDM) ordinance, where DAP would fit.

Oceanside has parking meters and pay-station parking close to the Civic Center Parking Garage and close to the Transit Center. Both the parking meter parking and the pay-station parking could be automated with DAP, so the user could take their pick. I predict that younger people would tend to choose DAP; older drivers would tend to use the meters and the pay station. Over time, DAP would win out.

Regarding climate, humanity needs the private sector to do the design and operation of the needed systems (parking and roads.) (Where would we be without Elon Musk?)

Would it be OK for me to disclose your interest in submitting a proposal for a DAP system RFP? Your interest would be important, it seems to me. I have also raised this issue in Encinitas and Carlsbad. Barbara and I were strategizing on how to introduce this to San Diego, when the pandemic hit. San Diego is known to have a poor Climate Action Plan when it comes to driving. Driving is the category that emits the most GHG. A reduction of 10% at a location would be very significant and be a good verification of the system. And employees would have to be pleased with the new system.

The County might be interested, especially if they knew you were interested. DAP was ruled to be a feasible mitigation measure in the lawsuit against their first CAP. There are 3 members on the BOS who claim to be very concerned about climate. You have probably read about their “framework for decarbonization by 2035.” After
nearly 10 years of trying, the County still has no legal CAP.

Ukraine (Putin) has presented another argument for having meaningful TDM measures to reduce gasoline use. In any case, any measure adopted would need to increase choice and equity. DAP would do that.

Regards,

Mike Bullock
1800 Bayberry Drive
Oceanside, CA 92054
760-421-9482

Former California Democratic Party Delegate, 76th Assembly District
Former Elected (now Associate) Member of the San Diego County Democratic Party Central Committee

Satellite Systems Engineer, 36 years (Now Retired)

Air and Waste Management Association published and presented papers:

Author, *The Development of California Light-Duty Vehicle (LDV) Requirements to Support Climate Stabilization: Fleet-Emission Rates & Per-Capita Driving*

Author, *A Climate-Killing Regional Transportation Plan Winds Up in Court: Background and Remedies*

Co-author, *A Plan to Efficiently and Conveniently Unbundle Car Parking Cost*

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**From:** Keith B. Jones <kjones@aceparking.com>

**Sent:** Thursday, March 3, 2022 2:06 PM

**To:** mike_bullock@earthlink.net

**Subject:** Fwd: FW: Oceanside Transit Center: Housing Retail Office = need for an intelligent car-parking system
Mike,

Good afternoon. Barbara Bry sent me your email regarding Oceanside Transit Center. Is there an RFP for the car parking you suggest I respond to?

Thanks,

Keith

Keith B. Jones
Owner | ACE Parking
ACE Parking
645 Ash Street
San Diego, CA 92101
T: 619.233.6624

---------- Forwarded message ----------
From: Barbara Bry <bbry@blackbirdv.com>
Date: Sun, Feb 27, 2022 at 6:36 PM
Subject: FW: Oceanside Transit Center: Housing Retail Office = need for an intelligent car-parking system
To: Keith Jones <kjones@aceparking.com>

Fyi, from Mike Bullock, hope you’re having a great time visiting islands!
From: Mike Bullock <mike_bullock@earthlink.net>
Date: Sunday, February 27, 2022 at 4:24 PM
To: Barbara Bry <bbry@blackbirdv.com>
Subject: Oceanside Transit Center: Housing Retail Office = need for an intelligent car-parking system

Please forward this to Keith. Would he submit a response to an RFP if the NCTD issued one for a good car-parking system? This is a bit of a chicken and egg situation.

Putin gives us one more reason to stop using a car-parking system that incentivizes driving. Our climate emergency is all the reason we need.

We need a car parking vendor to take over the world of bad car-parking systems.

Mike
APPENDIX E
SUSTAINABLE AND EQUITABLE COMMUNITIES

Policy Framework to Advance Sustainable and Equitable Communities
1. Introduction

Californians deserve great places to live – inclusive urban, suburban, and rural communities throughout the many regions of California – that provide a range of affordable housing and transportation options, efficient access to a variety of jobs and services, clean air, opportunities to safely walk and bike, and open space and recreational opportunities. Current and future generations have the right to healthy environments, protected natural and working lands that support carbon sequestration and enhance climate resilience, and reduced overall demand for energy and other natural resources. These are the core characteristics of sustainable and equitable communities, and are achieved, in part, through the combination of more compact development and enhanced transportation options that together reduce individuals’ need to drive.

Building more sustainable and equitable communities in this way can help California address two of its greatest challenges. The first is meeting the State’s goal to achieve carbon neutrality no later than 2045 to prevent the most adverse impacts of climate change and provide Californians healthier air to breathe. The second challenge is building more inclusive and equitable places that prioritize providing low-income and Black, Indigenous, and People of Color (BIPOC) communities all the necessary opportunities to thrive and repairing the harms caused by decades of discriminatory transportation, land use, and housing policies and practices to people of low-income and BIPOC communities.

The next section of the appendix discusses impactful opportunities California can unlock by moving away from a cars-first model and building communities and infrastructure that enable a wider range of access and mobility choices. The third section of the appendix presents a policy framework across four strategy areas – transportation planning and funding, transportation system management, new mobility, and land use and development – for the State to create more sustainable and equitable communities that reduce driving. Each strategy area includes a vision, objectives, and potential actions developed by CARB and its State government partners, with the intent that the further development and implementation of each action would be subject to additional public processes and collaboration with key stakeholders. The framework of strategies discussed in this document does not and cannot mandate any specific action or create any legal obligations. This planning document provides a menu of critical potential actions and approaches that would need to be further developed through appropriate public processes.

While the State has taken steps in each of these strategy areas, this appendix presents ways to build on that work.

2. The Need for Sustainable and Equitable Communities

Many of California’s cities, towns, suburbs, and rural areas were designed and built primarily around car travel, and the legacy of that vision has been codified in public policies, business practices, and cultural expectations. For most communities in California, choices made in the past and bolstered for decades have delivered land use
patterns that place daily needs far from each other along streets designed for high-speed driving. For decades, California has widened highways and roadways in an effort to address traffic congestion. By doing so, it has facilitated more car dependence and, ironically, more congestion, with resulting increases in vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions.

Efforts to advance more sustainable and equitable communities that reduce the need to drive have been ongoing in California for many years, most prominently under the State’s 2008 Sustainable Communities and Climate Protection Act or Senate Bill (SB) 375 (Steinberg, Chapter 728, Statutes of 2008), under which Metropolitan Planning Organizations (MPOs) must show coordinated land use and transportation strategies to meet regional passenger vehicle GHG reduction targets. However, as CARB’s recent progress report on implementation of SB 375 indicates, individuals are driving more miles per day than ever before, and California is not on track to meet its associated climate goals under SB 375.¹

Beyond reducing driving, far too often in California’s history, new highway and major roadway infrastructure displaced BIPOC communities, increased divisions in communities, and intensified noise, traffic, and air pollution in already impacted communities. California can advance inclusive and efficient places to live if it breaks away from an entrenched policy and cultural status quo that has perpetuated car dependence and caused a significant share of California’s climate-changing GHG emissions.

2.1 Zero-emission vehicles are not enough to solve the climate crisis.

Contrary to popular belief, zero-emission vehicles (ZEV) alone are not enough to solve the climate crisis. The 2022 Scoping Plan illustrates that despite cleaner vehicles and low-carbon fuels, the path to carbon neutrality by 2045 also depends on reducing per capita VMT (the total passenger vehicle miles driven by an average person in California on any given day). To meet the carbon neutrality goal, the Scoping Plan proposes reducing VMT from 24.6 miles per day in 2019 to 18.4 miles by 2030 (a 25 percent reduction) and to 17.2 miles per day by 2045 (a 30 percent reduction).

Approximately 30 percent of light-duty vehicles on the road in 2045 will still burn fossil fuels even with all new car sales being ZEVs by 2035 through implementation of CARB’s Advanced Clean Cars II regulations.² Additionally, driving, regardless of vehicle technology, will also continue to produce particulate emissions from brake and tire wear.

Figure W depicts the reduction in VMT identified by the Scoping Plan as necessary to help achieve the State’s GHG reduction goals (green solid line), accompanied by a

¹ For more information on progress made toward achieving climate goals under SB 375 see: https://ww2.arb.ca.gov/resources/documents/tracking-progress
² For more information on the Advanced Clean Cars II regulations adopted by CARB’s board on August 25, 2022, see: https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii
trajectory whereby average per capita daily driving continues to increase at its historic average growth rate (red line with dashes and dots). The blue dotted line shows a trajectory where average per capita daily driving remains unchanged from 2019 levels. Substantial and immediate action is needed to reverse current trends in order to reduce VMT to support achieving carbon neutrality by 2045.

Figure W. VMT trajectories and California’s GHG goal

2.2 Sustainable and equitable communities reduce GHG emissions beyond the transportation sector, too.

Beyond having a direct impact on GHG emissions from cars, reducing individuals’ need to drive to fulfill daily needs can also support emissions reductions in other sectors. For example, more compact infill development generally generates lower emissions because attached building types and smaller residential unit sizes require fewer emissions to construct and less energy to heat and cool. Studies have estimated that infill development uses 10 to 20 percent less residential energy due to changes in unit types, sizes, and locations. Additional benefits include reduced heat island effects from paved areas.

3 There is considerable range in potential future VMT based on many exogenous, socioeconomic, and technological factors. This line represents historical VMT trends from 2001-2019 extended to 2045, normalized by the future forecasted population.

4 Elkind, E. N., Galante, C., Decker, N., Chapple, K., Martin, A., & Hanson, M. 2017. “Right Type, Right Place: Assessing the Environmental and Economic Impacts of Infill Residential Development through 2030.” Available at: https://ternercenter.berkeley.edu/research-and-policy/right-type-right-place/

surfaces like parking lots, which lowers long-term building energy use, and reduced emissions from the construction of infrastructure.⁶

In contrast, the conversion of natural and working lands to residential or commercial development causes emissions from loss of carbon stored in these systems, as well as reduces the capacity of these lands to sequester carbon from the atmosphere.⁷

The 2022 Scoping Plan Update calls for reductions in GHG emissions from these sectors. More sustainable and equitable development patterns and transportation choices will support these reductions.

### 2.3 Departing from the status quo would ease inequitable burdens on California’s low-income and BIPOC communities.

California can offer accessible, safe, and healthy communities for all by moving away from a legacy of transportation and land use decision-making that has marginalized all too many, but to a much greater extent BIPOC communities. California’s transportation agencies have acknowledged that racist policies and decisions made when building and expanding the transportation system divided communities of color and primarily benefited white suburban commuters.⁸ Discriminatory land use, lending, and real estate practices and policies also excluded and harmed BIPOC households and led to lasting inequality.

Some of these impacts have included less access to jobs and services, reduced household income and wealth generation, reduced social mobility, the burden of vehicle ownership, and the risk of job loss if a vehicle breaks down.

Rather than continuing these practices, California can make decisions that allow for integrated communities that are rich with services and culture. Shifting California’s development patterns and transportation systems is critical to address existing injustices by making livable, affordable homes with multi-modal connections to jobs, services, open space, and education available to all Californians, not just the white and the wealthy.

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⁷ California Air Resources Board. Accessed May 5, 2022. California Natural & Working Lands Inventory. Available at: [https://ww2.arb.ca.gov/nwl-inventory](https://ww2.arb.ca.gov/nwl-inventory).

The Burden of Housing and Transportation Costs

An example of these racial and social inequities is the unequal impact of housing and transportation costs. Low-income households pay a significantly higher portion of household income for housing and transportation. In California counties that have a median household income of $44,000 or less, housing and transportation cost the average household over 70 percent of their income, when the recommended affordability threshold is 45 percent (Figure X).\(^9\) Given the high cost of car ownership and operation, this housing and transportation cost burden has the highest impact on communities where people have few options but to drive.

Figure X. Percentage of Income Spent on Housing and Transportation in California by Median County Household Income

[Graph showing percentage of income spent on housing and transportation by median county household income.]

Source: H+T Index 2017, ACS 2015

2.4 Reducing the need to drive advances other quality of life outcomes and opportunities.

Communities with shorter driving distances and more options for active travel produce benefits beyond the environment and equity, including reduced financial burden, better access to opportunities, and improved public health.

- **Reduced financial burden:** Reducing the need to drive saves households substantial sums of money. U.S. households spent an average of nearly $10,000 in 2019 on vehicles and fuel.\(^10\) Driving fewer miles reduces fuel and maintenance expenses and may even allow a household to reduce the number of vehicles owned.

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• **Better access to opportunities:** Changes to the built environment that increase alternatives to driving give households more and affordable options to access services, jobs, and other activities, and thus expand economic and social opportunities. These changes empower people who do not own cars and people who cannot drive, such as seniors, children, and people with disabilities, protecting their ability to hold a job, run errands, or connect with others.

• **Economic efficiency:** A development pattern that enables the same level of economic interaction with less dependence on driving can sustain the economy at a far lower cost to the public by decreasing highway maintenance costs, which have ballooned to over $500 million per year in California. Infill development can also reduce road and utility line lengths, as well as the travel distances needed to provide public services like police, garbage collection, and emergency response. Across the U.S., congestion cost the equivalent of $190 billion in 2019 in fuel costs and lost time. Being able to access destinations more efficiently will reduce these effects on the economy.

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16 Texas A&M Transportation Institute. 2021 *Urban Mobility Report.* Available at: [https://mobility.tamu.edu/umr/report/](https://mobility.tamu.edu/umr/report/)
### People want to drive less!

While many Californians find traveling by car a necessity, many would in fact prefer to drive less. A survey in Santa Clara County in 2020, before the COVID-19 pandemic, showed that 89 percent of people believed they had to drive for daily needs, but fully half wanted to drive less. Twenty percent of respondents said owning a car was a financial strain, creating a burden on disadvantaged groups. Cars also created higher levels of stress, with 41 percent of drivers reporting that they find their daily travel stressful, but only 35 percent of bicyclists and 28 percent of transit riders feeling the same.

Furthermore, Public Policy Institute of California polls in 2019 and 2020 found that fully three quarters of respondents favored encouraging local governments to change land use and transportation planning so that people could drive less.  

### 3. Framework for Action

California’s predominant development patterns and transportation systems are not conducive to building sustainable and equitable communities with low VMT. Reversing the current VMT growth trend to achieve carbon neutrality requires immediate and decisive steps to address the core issues that give individuals no choice but to drive. Accordingly, the framework for action detailed in this section aims to offer a set of key policy objectives and actions that can be attained within the planning horizon of the 2022 Scoping Plan Update to effectively support more compact development and increase transportation options that reduce VMT no later than 2045.

There is no single or immediate solution to transform the ways California builds and connects communities; instead, as all available models demonstrate, reducing VMT requires a broad range of actions across all levels of government that achieve multisectoral synergies in transportation, land use, and housing.

This framework is structured around the following four strategy areas:

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17Fang, Kevin. 2020. “Surveying Silicon Valley on Cycling, Travel Behavior, and Travel Attitudes.” Mineta Transportation Institute. Available at: [https://transweb.sjsu.edu/research/1947-Survey-Silicon-Valley-Cycling](https://transweb.sjsu.edu/research/1947-Survey-Silicon-Valley-Cycling)


1. **Plan and invest in a sustainable transportation system.** Identify policies to address the way California plans, invests in, and funds its transportation system to reduce the need to drive and provide high-quality alternatives that are more convenient, efficient, and low-cost than driving.

2. **Manage the use of the transportation system to advance climate and equity goals.** Consider policies to optimize the use of California’s transportation infrastructure by prioritizing the movement of people over vehicles.

3. **Shape the deployment of new mobility options.** Explore policies to leverage the potential of new mobility options to increase transportation choices, enable car-light lifestyles, and mitigate inherent risks that could increase car travel.

4. **Improve alignment of land use planning and development with climate and equity goals.** Consider policies to accelerate infill development, affirmatively further fair housing, and increase natural and working lands protection, in furtherance of the State’s planning priorities.

For each strategy area, this framework offers: i) a vision for the year 2045 that would be consistent with meeting California’s carbon neutrality goal while advancing equity; ii) policy objectives that should be achieved to deliver the vision for that strategy area; and iii) selected actions that should be taken as quickly as possible, especially by the State, to implement those policy objectives.

### 3.1 Strategy Area 1: Plan and Invest in a Sustainable Transportation System

The institutional framework for planning and funding California’s transportation system has reflected and perpetuated a car-centric bias. For many decades, the majority of federal, State, and local transportation investments has been devoted to building, operating, and maintaining a network of highways, roads, and streets. While more recently other modes of transportation have received increased funding, the dominance of car-centric investments remains unchanged.\(^\text{21}\)

In order to help meet the State’s climate goals, the California Transportation Plan 2050 identifies the need to achieve a significant shift toward non-auto modes, amounting to 23 percent of trips occurring by bicycling, walking, transit, or other non-auto modes by 2050.\(^\text{22}\) Achieving carbon neutrality no later than 2045 requires a transportation system that works more efficiently for all Californians, regardless of their income, race, ability, or where they live. This vision offers a future in which most individuals have access to high-

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quality rail and public transit services and high-quality active transportation infrastructure, so that driving is a choice and not the only option.

However, this vision will not be possible without effecting a structural realignment of the State’s framework for planning and funding transportation to prioritize investing in rail, transit, active transportation, and building more sustainable communities.\(^{23}\) The quality of rail, public transit services, and active transportation infrastructure needs to be improved so that these modes become more time- and cost-competitive to driving.

3.1.1 Vision

To help meet the State’s carbon neutrality goal no later than 2045 and advance equity, the vision is for California to have:

A. Transportation planning and funding frameworks that are clearly aligned and prioritize the State’s climate, air quality, and equity goals at all levels of government.

B. Affordable, accessible, and integrated rail and transit networks that deliver equal or higher levels of accessibility to key destinations as private cars.

C. Complete networks of safe and accessible bicycle and pedestrian infrastructure that make active transportation the preferred travel mode for short distances.

3.1.2 Objectives

To achieve this vision, the State should lead efforts to:

1. **Reimagine roadway projects that increase VMT in a way that meets community needs and reduces the need to drive.** The most critical step of this realignment of the structure for planning and investing in the transportation system will be reimagining roadway projects that increase VMT in a way that meets community needs and reduces the need to drive. It has been long proven that adding highways, interchanges, and major roadways in densely populated, suburban, and rapidly growing areas only alleviates congestion in the short-term, while increasing VMT, congestion, low-density and car-oriented development, and GHG emissions in the long-term.\(^ {24,25} \) Another reason to re-envision investments in highway and major roadway projects that induce VMT is that such investments take away

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\(^{23}\) Governor Newsom’s Executive Order N-19-19 and the subsequent development of the Climate Action Plan for Transportation Infrastructure (CAPTI) call for this change and provide a general framework to achieve it, respectively. See California State Transportation Agency, *Climate Action Plan for Transportation Infrastructure*, available at: [https://calsta.ca.gov/-/media/calsta-media/documents/capti-july-2021-a11y.pdf](https://calsta.ca.gov/-/media/calsta-media/documents/capti-july-2021-a11y.pdf)


resources from investments in high-quality rail, transit, bicycling, and walking in both the short- and the long-term.\textsuperscript{26} In other words, beyond the direct impact of inducing VMT, such projects can limit government’s ability to improve transportation options that facilitate mode shift and help reduce VMT.

**Actions:**

- Adjust the present project pipeline of State transportation investments and reconfigure the California Department of Transportation’s (Caltrans) planning processes to rescope VMT and GHG-increasing projects. Caltrans and other State agencies have committed to working with stakeholders to evolve projects in their design and suite of investments to address access and connectivity challenges while ensuring their alignment with the State’s climate and equity goals and other key outcomes.

- Implement all the recommendations in the Climate Action Plan for Transportation Infrastructure (CAPTI)\textsuperscript{27} and apply the CAPTI framework to other transportation investments to prioritize allocation of transportation funding based on projects’ climate, equity, and safety impacts. This includes reviewing program eligibility criteria accordingly and advocating for legislation to support the CAPTI vision when necessary.

- Increase funding for State programs that are well-aligned with climate and equity goals, such as the Active Transportation Program (ATP), the Transit and Intercity Rail Capital Program (TIRCP), and the Low Carbon Transit Operations Program (LCTOP), as recommended in the Strategic Growth Council’s California Transportation Assessment.

**2. Double local transit capacity and service frequencies by 2030.** The CTP 2050 determined that, to reach the target mode shifts that deliver the State’s carbon neutrality goal, California needs to double the capacity and service frequencies of the existing local public transit networks. This type of expansion of transit services would be a massive undertaking in any time, but it is more so now given the loss of ridership and associated revenue during the COVID-19 pandemic, which forced transit service to contract. Transit’s fiscal crisis has only exacerbated the adverse equity impacts of the pandemic, considering people with low-income, people with disabilities, and BIPOC communities are all commonly transit dependent populations and the services available to them are now more limited. Accordingly, securing the necessary funding to return transit operations to pre-pandemic levels in the short term needs to be considered both a priority climate and equity action for the State. Increasing equitable transit investment should serve as the

\textsuperscript{26} Considering the budgetary impact of developing new highway infrastructure and the ensuing lifespan of operation and maintenance costs.

\textsuperscript{27} California State Transportation Agency. *Climate Action Plan for Transportation Infrastructure.* Available at: [https://calsta.ca.gov/-/media/calsta-media/documents/capti-july-2021-a11y.pdf](https://calsta.ca.gov/-/media/calsta-media/documents/capti-july-2021-a11y.pdf)
foundation for building a broader transit program that delivers the requisite doubling of capacity and frequencies by 2030. This type of improvement will amount to having transit stops much closer to where people need to go and offering (on average) 15-minute frequencies in urban areas, 30-minute frequencies in suburban areas, and 60-minute frequencies in rural areas for all services.

Actions:

- Secure the necessary funding to return transit operations to pre-pandemic levels in the short-term.
- Complete a new update of the State’s Transit Strategic Plan by 2023, fleshing out how the proposed transit service expansion would be implemented to optimize efficiency, accessibility, climate, and equity outcomes. This Plan should be developed in close collaboration with underserved communities across local jurisdictions to prioritize improvements where needs are greatest. Beyond increasing service, additional investments will need to be made to ensure affordability for low-income and other disadvantaged populations.
- Reduce the voter approval threshold for future locally funded transportation sales tax measures that exclusively fund investments in transit or active transportation.
- Explore the feasibility of introducing consultation and reporting requirements that enhance transparency and clarity around local tax measure climate and equity impacts and mitigation strategies prior to a ballot vote.
- Remove California Constitution Article XIX restrictions on using gas tax monies for transit operational funding or other sustainable transportation-related uses.

3. Complete the High-Speed Rail (HSR) System and other elements of the intercity rail network by 2040. Providing efficient, high-quality alternatives to the car for intercity travel is another important element for enabling car-free and car-light lifestyles that reduce VMT and advance equity for those who do not have the means to own a car and for those who can use their car less. The California Transportation Plan 2050 (CTP 2050) identified the completion of the full 2018 State Rail Plan vision by 2040 as a requirement to achieve the State’s carbon neutrality goal. This vision includes: the main HSR line connecting San Francisco, the Central Valley, and Los Angeles, and HSR extensions to Sacramento, the Inland Empire, and San Diego; the San Francisco Downtown Extension and a new Transbay tube; key corridor investments in the Los Angeles Basin; new regional

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services in the Central Valley, on the Central Coast, and in the North Bay; and an overall intensification of services, with more frequencies and higher speeds.\(^{30}\)

4. **Expand and complete planned networks of high-quality active transportation infrastructure.** The other piece of the puzzle to achieve the target mode shift away from car travel is supporting active transportation mode users, such as bicyclists and pedestrians. The vision is to ensure every city has fully realized networks of active transportation infrastructure that ensure coverage, connectivity, accessibility, and safety to all travelers, making active transportation the preferred choice for short distance travel, and improving access to public transit services. These improvements should be developed in collaboration with community-based organizations and local leaders to address the needs and priorities of historically marginalized and underserved communities.

**Actions:**

- Require complete street enhancements, including minimum space allocations for bicycle and pedestrian infrastructure, in all State-funded transportation investments.
- Expand State funding for active transportation projects to support a broader set of project types and investments than currently funded through the Active Transportation Program.

5. **Increase availability and affordability of bikes, e-bikes, scooters, and other alternatives to light-duty vehicles, prioritizing needs of underserved communities.** One key action to increase access to opportunities and overcome the financial burden of driving or using transit and new mobility services is to increase low-income people’s direct access to bikes, e-bikes, scooters, and other alternatives to light-duty vehicles. Similar to existing rebate programs for electric vehicles, the State and other levels of government could do more to subsidize discounts or the full purchase of these alternatives to light-duty vehicles, considering their potential contributions to both reducing VMT and advancing equity goals. As is the case with other objectives shared above, these programs should be developed in close collaboration with community-based organizations and community members to prioritize specific needs and priorities of low-income and disadvantaged communities at the local level.

**Actions:**

- Increase funding and expand eligibility of bikes, e-bikes, scooters, and other alternatives to light-duty vehicles in State incentive/rebate programs.

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\(^{30}\) The 2040 Vision projects 88 million daily passenger miles diverted to rail from highways, and an increase of 92 million daily passenger miles on rail as a result of the investments outlined in the California Department of Transportation’s California State Rail Plan, page 14, available at: [https://dot.ca.gov/programs/rail-and-mass-transportation/california-state-rail-plan](https://dot.ca.gov/programs/rail-and-mass-transportation/california-state-rail-plan)
6. **Shift revenue generation for transportation projects away from the gas tax into more durable sources by 2030.** The need to implement a replacement to the gas tax was identified by the Legislature in 2014 through SB 1077 (DeSaulnier, Chapter 835, Statutes of 2014), which described the gas tax as an “ineffective mechanism for meeting California’s long-term revenue needs.” SB 1077 appointed the CTC in consultation with CalSTA to form a technical advisory committee to study mileage-based fees, a system in which all drivers, regardless of the fuel used by their vehicles, pay their fair share for the road maintenance and repair needs associated with their VMT, as an alternative to the gas tax. Since then, the technical advisory committee has developed recommendations and implemented a first pilot; more pilot and demonstration work is scheduled for implementation in 2023. Implementing an alternative to the gas tax by 2030 is imperative to ensuring the viability of transportation funding that can be reinvested in sustainable transportation options.

**Actions:**
- Complete mileage-based fee pilots by 2025.

### 3.2 Strategy Area 2: Manage Use of the Transportation System to Advance Climate, Air Quality, and Equity Goals

In California, most of the highways, roads, and streets are utilized by single-occupancy vehicles (SOV), which take up the highest amount of road space of any transportation mode relative to the amount of people moved. Accordingly, the outcomes of this SOV-centric travel pattern are ever-growing levels of congestion, increasing VMT, economic inefficiency, and inequity in terms of who has easier access to jobs, services, and key destinations.

As detailed in Strategy Area 1, building more roadway lanes is not an answer to these problems. Instead, the solution requires reframing the use of California’s transportation infrastructure, and primarily its roadways, to maximize and prioritize getting more people where they need to go rather than prioritizing moving cars. For example, implementing

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31 Because over half of vehicles on the road by 2040 will be zero-emission vehicles that need not buy any gasoline, the Standardized Regulatory Impact Assessment (SRIA) for the Advanced Clean Cars II Regulations estimated cumulative losses through 2040 of $13.4 billion to local governments and $17.7 billion to the State. See Tables 55 and 56 on page SRIA-113 and SRIA-116 of the Advanced Clean Cars II SRIA (January 26, 2022).


33 This concept is best demonstrated through images comparing road space usage by mode. See a popular example developed by i-SUSTAIN for downtown Seattle, available at: [https://www.i-sustain.com/i-impact](https://www.i-sustain.com/i-impact). The National Association of City Transportation Officials makes a similar case comparing the carrying capacity of 10-foot lane by mode, as seen in their Transit Street Design Guide, available at: [https://nacto.org/publication/transit-street-design-guide/introduction/why/designing-move-people/](https://nacto.org/publication/transit-street-design-guide/introduction/why/designing-move-people/).

34 Namely, those who can afford cars for all members of the household or the cost of housing in high accessibility locations.
dedicated bus lanes, transit signal priority schemes, and other measures could enhance transit operations on major thoroughfares and other key corridors. Likewise, it is essential to prioritize the expansion of bike lanes, sidewalks, and other active transportation pathways to increase system capacity and improve accessibility for all, including people using wheelchairs and other types of mobility devices. This shift would be effectuated by leveraging the existing infrastructure to optimize for accessibility, equity, and climate outcomes through prioritizing the needs of more efficient modes of transportation, such as transit, bicycling, and walking.

3.2.1 Vision

To help meet the State’s carbon neutrality no later than 2045 and advance equity, the vision is for California to have:

A. A transportation system that clearly prioritizes the movement of people over cars.
B. Restructured pricing for all modes to clearly represent the costs and benefits that each mode represents to California.
C. The necessary road space for transit and active transportation to thrive and offer high-quality services.

3.2.2 Objectives

To achieve this vision, the State should lead efforts to:

1. Authorize and implement roadway pricing strategies and reallocate revenues to equitably improve transit, bicycling, and other sustainable transportation choices. Pricing strategies take many forms and can include fees for miles driven, cordon fees for operating vehicles in designated areas, parking fees, fees on congestion impact of ride-hailing services, and dynamic fees on highway lanes and other strategic roads to manage congestion.

Authorizing transportation pricing strategies is essential to promote more efficient use of cars and to further transit and active transportation improvements. Pricing strategies present an opportunity to fund the transportation system in a more equitable and fiscally sustainable way than current funding sources, promote more efficient functioning of existing infrastructure, and fund new transportation options, especially for those who do not own a vehicle or do not drive. Some recent analyses indicate California will not meet its climate goals without implementing equitable roadway pricing strategies as these strategies are projected to achieve up to 27 to 37 percent of the needed per capita VMT reduction. The four largest MPOs have included multiple pricing strategies in

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their adopted sustainable communities strategies (SCSs) to reduce regional GHG emissions.\textsuperscript{36}

Pricing strategies would need to be implemented with an emphasis to ensure equitable outcomes, and in accordance with local needs and context. In particular, pricing strategies need to consider the potential travel options available for low-income and other disadvantaged populations to ensure they are not unduly impacted by the strategy.

**Actions:**

- Permit implementation of a suite of roadway pricing strategies by 2025 in support of adopted SCSs.

2. **Prioritize addressing key transit bottlenecks and other infrastructure investments to improve transit operational efficiency over investments that increase VMT.** Offering high-quality transit services that represent a viable alternative to driving will require multiple coordinated efforts. The proposed investments to expand service capacity and increase frequencies (described in Strategy Area 1) will be ineffective if those transit vehicles end up stuck in traffic or have limited space to operate efficiently. Transit agencies and local jurisdictions across California should come together to identify, plan, and implement strategies to prioritize transit speeds and reliability over general roadway level of service and private car needs. Those strategies, which include capital investments in the strategic redistribution of the right-of-way, signaling, and supportive traffic regulations, should be prioritized in federal and State funding programs and local investment plans.

**Actions:**

- Permit the conversion of general-purpose lanes to transit-only lanes or toll lanes and full facility tolling of state-owned facilities.
- Establish requirements to demonstrate that addressing transit bottlenecks and other transit efficiency investments are a priority in local jurisdiction and transit agency investment plans, such as a prerequisite for overall transportation project funding eligibility.

3. **Develop and implement a statewide transportation demand management (TDM) framework with VMT mitigation requirements for large employers and large developments.** The goal of TDM is to provide people with information, incentives, and other support programs that help them utilize sustainable

\textsuperscript{36} These metropolitan planning organizations are the Metropolitan Transportation Commission (MTC), the Sacramento Area Council of Governments (SACOG), the San Diego Association of Governments (SANDAG), and the Southern California Association of Governments (SCAG).
transportation options such as transit, ridesharing, bicycling, and walking and rely less on cars. A strategic point of focus for TDM program implementation could be large employers (more than 100 employees), which often incentivize driving alone by offering free parking, gas stipends, and similar perks, and do not offer similar levels of support to employees to take transit, ride their bicycle, or walk. Employer-based TDM strategies are needed to achieve widespread implementation for the State to meet its climate goals, including commute trip reduction programs, ride-sharing programs, on-site bicycle facilities, vanpool and shuttle services, transit fare subsidies, and parking cash-out. Another strategic point of focus for TDM programs could be large developments, particularly new ones, that through decisions such as their location, design, transportation, parking infrastructure, and their treatment and general interaction with their surrounding environment ingrain high or low VMT travel patterns for decades to come.

**Actions:**

- End the State’s subsidies for employee parking and take additional actions to move away from subsidizing public spaces for car parking more generally while expanding efforts to promote pedestrian, bicycle, and transit travel. As the State of California employs over 200,000 people, it can expand its TDM programs, which currently vary by agency and employee union.

- Build on existing resources to further support the development and enforcement of local TDM ordinances and help begin developing a statewide TDM framework.  

### 3.3 Strategy Area 3: Shape the Deployment of New Mobility Options

In the last 20 years, California has been a hub for the development of new mobility services, new technologies, and new business models for how local transportation services can be both provided and consumed. These include, among others: shared-use mobility services such as car-share, ride-hailing, and micro-mobility services; app-based services for integrated trip planning, booking, and payment; and new travel technologies such as automated vehicles (AVs) and delivery robots and drones. These services have significantly improved mobility and access to opportunities for some people who do not own or want to rely on cars. However, without additional State actions these services could also increase VMT and GHG emissions and exacerbate equity issues related to access and costs.

Achieving carbon neutrality no later than 2045 will require leveraging the benefits of new mobility to offer high-quality alternatives to driving that reduce overall VMT, while

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mitigating its risks and negative impacts. For example, rather than competing with public transit, new mobility services should complement transit services, providing flexible options in locations and times of the day where and when fixed-route transit is not efficient, and facilitating trip planning, booking and payment for multimodal trips. No single mobility service alone is the answer for the diverse needs of any given community or individual; instead, the goal is to foster a rich ecosystem of strategically integrated mobility services, with transit playing the role of anchor mode, that together deliver high-quality solutions in accordance with travelers’ needs.

Another critical step is ensuring equitable access and equitable impact of new mobility options. So far, new mobility’s track record on equity is mixed. On the one hand, new mobility has made new forms of travel more readily available for numerous people, increasing access to key destinations for communities with limited transportation options. On the other hand, new mobility services have catered to more affluent customers and have been slow to offer special provisions for low-income customers, people with disabilities, and low-English proficiency populations, leaving many people unable to benefit.

3.3.1 Vision

To help meet the State’s carbon neutrality goal no later than 2045 and advance equity, the vision is for California to have:

A. A transportation system that leverages the combined potential of new mobility, transit, and active transportation to offer high-quality travel alternatives that enable car-free or car-light lifestyles for all.
B. Seamless integration in trip planning, booking, and payment systems across all mobility providers, both public and private.
C. A new mobility ecosystem that, as a whole, offers equitable access to all Californians regardless of race, income, age, disability, or language proficiency to live, work, and play with ease.

3.3.2 Objectives

To achieve this vision, the State should lead efforts to:

1. Prevent uncontrolled growth of autonomous vehicle (AV) VMT, particularly zero-passenger miles. A critical objective of achieving this vision will be managing and regulating the use of private AVs and AV-based taxi services. AVs could offer important access, safety, and network performance benefits, such as opening the use of cars for people who cannot drive. However, according to modeling conducted for the CTP 2050 and the University of California’s “Driving California’s Transportation Emissions to Zero” report, the arrival of AVs will be one of the main sources of VMT increase in California during the next 25 years – the only question is by how much. Because AVs eliminate the need for a dedicated driver, they eliminate the labor costs of taxis and ride-hail services and enable individuals to conduct any number of activities (from working to resting) while traveling. This could make car travel more convenient for those with access to AVs, cause people
to shift away from public transit and non-motorized modes, and encourage people to live further from their destinations. Whether privately owned or as taxi services, AVs will have the ability to drop off passengers and either return to their owner’s garage or roam around with zero occupants looking for new passengers, further increasing congestion and its adverse impacts. In response to this risk, the CTP 2050 recommends channeling the deployment of AVs to ensure that they are shared, electric, supportive of efficient land use, and aligned with key principles for healthy and sustainable communities. This will require decisive action by the State, working with industry, to implement regulations and policies, including pricing policies, that drive a more efficient use of AVs and limit their potential negative impacts.

**Actions:**

- Authorize pricing of empty/zero-passenger miles at higher rates than for other levels of occupancy.

2. **Channel new mobility services towards pooled use models, transit complementarity, and lower VMT outcomes.** The State has demonstrated leadership in this area by implementing Senate Bill 1014 (SB 1014) (Skinner, Chapter 369, Statutes of 2018) and its associated Clean Miles Standard and Incentive Program, which encourage ride-hail services to provide pooled services and enable connections to transit. Additional funding and synergistic policy initiatives could help strengthen those use cases through lower rates, integrated fares, and strategic fleet deployments. Providers of other new mobility options, such as carshare and micro-mobility services, among others, could also be encouraged to pursue partnerships with transit providers as well as to curb the VMT impact of their operations. Similarly, there could also be opportunities to optimize the VMT impact of delivery service providers while upholding service quality.

**Actions:**

- Develop and adopt regulations and incentive programs that encourage new mobility providers to prioritize higher occupancy use, transit partnerships, and lower VMT impact.

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40 Pooled is an industry term used to refer to when multiple passengers that are not traveling together share a ride-hail vehicle.
3. Establish an integrated statewide system for trip planning, booking, payment, and user accounts that enables efficient and equitable multimodal systems. While the arrival of new mobility services has increased access to destinations for certain populations, their potential to reduce VMT relies on their ability to operate in an integrated manner with public transit services as well as with each other. The foundation for this integration is customers’ ability to review schedules and availability, plan multimodal trips, book rides, pay fares, and access discounts in integrated platforms that bring together the universe of mobility services in any given region. Caltrans, through the California Integrated Travel Project (Cal-ITP), aims to develop a statewide system that enables those multimodal connections, while some transit agencies are also conducting their own pilots on this front.

Actions:

- Provide adequate resources to support State and transit agency initiatives to continue building integrated systems to ultimately break down existing silos between providers and regions, create a consistent statewide structure, and ensure easy access to a multimodal ecosystem of mobility services for all.

4. Provide financial support for low-income and disadvantaged Californians’ use of transit and new mobility services. Transit agencies throughout California offer reduced fares for low-income and other disadvantaged populations. However, no matter the location or the quality of the local public transit system, transit services cannot offer an efficient solution to all travel needs for every individual. This is particularly true for low-income people who often have less traditional work schedules or work or reside in places that do not have high-quality public transit services, and it commonly forces people to travel by car even though they cannot easily afford to. New mobility could be the solution for many of these people, given its extended service hours and potentially larger geographic reach.

Unfortunately, the cost of new mobility services can be prohibitive, especially if used frequently. The key to unlocking this potential will be to develop and scale up programs to subsidize free or reduced costs for new mobility services for low-income and disadvantaged Californians. Some jurisdictions in California are already piloting this idea by creating a “mobility wallet,” which provides a monthly budget that eligible users can apply to transit and new mobility services.

Actions:

- Increase funding to support low-income and disadvantaged Californians’ use of transit and new mobility services and streamlining its operational support for “mobility wallet” programs.

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5. **Expand universal design features for new mobility services.** There is a large community of Californians with disabilities who cannot drive, enter the passenger seat of a regular car without assistance, operate a regular bike, or use conventional smart phone applications, yet the new mobility industry, with some exceptions, seems to be growing without addressing the needs of these persons. For example, micro-mobility services lack inclusive alternatives such as tricycles, hand-pedaled cycles, or recumbent bicycles; ride-hail services do not offer equivalent quality of service on wheelchair accessible vehicles; and mobile phone apps may not be Americans with Disabilities Act (ADA) compliant. Addressing these issues and more is a crucial goal to advance equity and a more inclusive society and may also reduce reliance on often-strained paratransit services and costly private vehicles. New regulations, incentive programs, and pricing strategies could elevate universal design standards for new mobility providers, including support of and access to adaptive modes that are designed for people with disabilities and that can carry equipment like wheelchairs.

**Actions:**

- Require all new mobility providers to meet minimum fleet percentages of adaptive devices and placement requirements.

### 3.4 Strategy Area 4: Improve Alignment of Land Use Planning and Development with Climate and Equity Goals

Achieving carbon neutrality no later than 2045 requires land use planning and development activities that are consistent with and advance State planning priorities by significantly augmenting growth in transportation-efficient, resource-rich, accessible, and inclusive communities for all Californians. This vision is aligned with the CTP 2050’s and University of California researchers’ latest modeling and analyses, which indicated that California would not meet its climate goals without future growth in population and employment happening primarily within the state’s most densely populated areas and improving the balance of housing, employment, shopping, and other key services within the state.

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42 The State Planning Priorities generally include (1) promoting infill development, (2) protecting natural and working lands, and (3) encouraging efficient development patterns and investments that are consistent with adopted plans in areas appropriately planned for growth. The State Planning Priorities are “intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety in the state, including in urban, suburban, and rural communities” The full text of the State Planning Priorities is defined in California Government Code, § 65041.1. “Statewide Environmental Goals and Policy Report.” Available at: [https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=65041.1](https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=65041.1)

any given community. Although MPOs create SCSs that identify how each region may accommodate its growth in patterns that help meet GHG reduction targets set by CARB, these plans are not being fully implemented.\textsuperscript{44}

Implementing the land use strategies in SCSs and moving towards improved planning frameworks would address the fact that local land use policies and development practices across California have often favored low-density, single-family zoning, and car-oriented development patterns and carry the legacy of racist government policies, covenants, and lending practices from the past.\textsuperscript{45,46,47} These historic policies and practices have resulted in restricted infill development, limited access to opportunity, and disinvestment in existing neighborhoods for decades.\textsuperscript{48,49,50} As such, they have played a key role in furthering car dependence, rising GHG emissions, and growing inequity in California’s communities.

Barriers to infill development have been one factor fueling California’s housing crisis, now a half century in the making. After decades of underproduction, supply is far behind need, and purchase and rental costs are soaring. Today, more than a third of households in the state cannot afford their housing costs,\textsuperscript{51} forcing a growing number of households to either move to more remote locations with more affordable housing but more limited access to jobs, shopping, and other regular destinations, or to live in overcrowded conditions.

### 3.4.1 Vision

To help meet State’s carbon neutrality goal no later than 2045 and advance equity, the vision is for California to have:

\textsuperscript{44} California Air Resources Board. 2018 Progress Report: California’s Sustainable Communities and Climate Protection Act. Available at: https://ww2.arb.ca.gov/sites/default/files/2018-11/Final2018Report_SB150_112618_02_Report.pdf
\textsuperscript{46} California Environmental Protection Agency. 2021. Pollution and Prejudice: Redlining and Environmental Injustice in California. Available at: https://storymaps.arcgis.com/stories/f167b251809c43778a2f9f040f43d2f5.
\textsuperscript{51} One in three households in the state doesn’t earn enough money to meet their basic needs, per the Statewide Housing Plan. California Department of Housing and Community Development. 2022. Statewide Housing Plan. Available at: https://www.hcd.ca.gov/docs/statewide-housing-plan.pdf
A. Future growth focused on infill sites and other climate-friendly, transportation-efficient areas appropriately planned for growth.52
B. The ability for every Californian to live, work, and play in climate-smart, transportation-efficient communities that provide travel choices and access to opportunity.53

3.4.2 Objectives

To achieve this vision, the State should:

1. Accelerate infill development in existing transportation-efficient places and deploy strategic resources to create more transportation-efficient locations. Notwithstanding the recent passage of laws that expand property owners’ ability to create multiple units on single-family lots and limit local governments’ ability to block new housing in certain circumstances, many barriers to infill development remain in place, discouraging this important development type in ways that need to be addressed. One critical barrier is the high cost of infill development, including the high cost of urban land, parking requirements, construction costs, and the necessary infrastructure upgrades to make sites development-ready.54 Since the elimination of redevelopment agencies in California,55 there is often not the fiscal capacity to take on these costs at the required scale. Also, insufficient land may be zoned for housing, and developers may have to navigate numerous and opaque regulatory hurdles and fees in the local approval process.56 Implicit biases in real estate practices and deliberate action from current residents who are resistant to the addition of new residents and to neighborhood change also represent important obstacles to infill development and perpetuate present-day neighborhood disparities rooted in historic discriminatory housing and land use practices such as redlining.57,58

52 Building on the State’s Planning Priorities as defined in California Government Code, § 65041.1. “Statewide Environmental Goals and Policy Report.” Available at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV&sectionNum=65041.1
53 Building on California Department of Housing and Community Development’s vision statement. Available at: https://www.hcd.ca.gov/about/mission.shtml.
54 California Department of Housing and Community Development. 2022. Statewide Housing Plan. Available at: https://www.hcd.ca.gov/docs/statewide-housing-plan.pdf
55 There are replacements to redevelopment, such as Enhanced Infrastructure Financing Districts (EIFDs), the Infill Infrastructure Grant Program (IIG), and impact fees; they are just much smaller, not widely utilized, and may offer their own barriers.
56 California Department of Housing and Community Development. 2022. Statewide Housing Plan. Available at: https://www.hcd.ca.gov/docs/statewide-housing-plan.pdf
To increase investment in under-resourced communities and expand access to high-resource neighborhoods, the State should pursue a combination of the following actions: i) providing financial and educational tools, resources, and incentives; ii) streamlining review processes; iii) strengthening protections for natural and working lands; iv) facilitating collaboration with key partners; and v) providing and requiring anti-displacement protections for existing residents and businesses.

**Actions:**

- Continue to commit State funding for existing and new programs supporting predevelopment work and infrastructure improvements that accelerate climate-smart and equitable infill development.
- Eliminate State funding of infrastructure, development, or leases outside of infill areas in locations that do not demonstrate clear alignment with State guidelines on VMT, climate, and equity outcomes. (For examples of this, see Appendix D on Local Actions).
- Expand tax increment financing options and other financing tools for infill-supportive infrastructure (e.g., water, sewer, electrical, telecommunications, active transportation, urban greening, and parks). Direct these financing tools to support affordable housing, local businesses, neighborhood services and amenities, and other community-identified priority projects with a focus on under-resourced and disinvested communities.
- Continue to encourage the utilization of underutilized public sites for mixed-use development, and expand opportunities for multi-modal transportation facilities.
- Establish guidance for regional and local agencies on how to administer SB 743 mitigation banking or exchanges and how revenue should be spent to support projects that reduce VMT.

2. **Encourage alignment in land use, housing, transportation, and conservation planning in adopted regional plans (RTP/SCS and RHNA) and local plans (e.g., general plans, zoning, and local transportation plans).** SCSs illustrate future land use and transportation changes that would lead to reductions in VMT and GHG emissions to meet the regional GHG emission reduction targets set by CARB. However, as noted earlier, SCS implementation is lagging significantly across the state. As detailed in the California Transportation Assessment Report (pursuant to AB 285 (Friedman, Chapter 605, Statutes of 2019)), MPOs, which develop the SCS plans, do not have adequate instruments to implement them and do not have the authority to ensure alignment of local land use decisions – as reflected in cities and counties’ general plans – with the SCSs. The goal of this objective is to strengthen regional plan implementation and funding and the ability of regional plans to achieve regional GHG targets. Advancing California regions’ visions for accelerating infill development and climate-smart housing production will require a collective discussion about establishing more coordinated MPO-local
government relationships that lead to codifying those regional visions into land use plans and ordinances at the local level.\(^59\)

**Actions:**

- Establish a requirement that all local general plans demonstrate consistency with the assumptions and growth allocations in regional RTP/SCSs at least every 8 years consistent with existing RHNA and housing element update timelines.
- Explore measures to ensure or require greater consistency and alignment between regional RHNA allocations, SCSs, and regional plans such as strategic planning that prioritizes green space and conservation and encourage greater integration of state housing and conservation policy priorities to minimize/prevent conflict.

3. **Accelerate production of affordable housing in forms and locations that reduce VMT and affirmatively further fair housing policy objectives.** Another critical objective is to accelerate production of a greater diversity of housing types in climate-smart locations. According to the latest Statewide Housing Plan (SHP), California must build at least 2.5 million new homes in the current eight-year housing need cycle and no fewer than one million of those homes must meet the needs of lower-income households.\(^60\) The State’s vision, as articulated in the SHP, is to provide these homes in climate-smart areas, areas with high access to opportunities and services that reduce the need to drive and mitigate climate change while also reducing costs to government in infrastructure development, operations, and maintenance. Efforts to accelerate housing production should be complemented with bold initiatives to preserve existing affordable housing and protect vulnerable residents through continuation of expiring affordability covenants, anti-displacement and tenant protection services and resources, and climate adaptation upgrades to existing affordable housing.\(^61\)

Key actions are needed across multiple fronts including easing local and State barriers to increasing density and encouraging greater diversity of housing types in existing neighborhoods. Although research has shown that the California

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\(^{59}\) This type of coordination would also address the need for continued accountability in existing housing laws regarding additional density, affordability, and infill under the purview of California Housing and Community Development Department’s Housing Accountability Unit or the Department of Justice.

\(^{60}\) California Department of Housing and Community Development. 2022. Statewide Housing Plan. Available at: [https://www.hcd.ca.gov/docs/statewide-housing-plan.pdf](https://www.hcd.ca.gov/docs/statewide-housing-plan.pdf)

\(^{61}\) Potential conversion of affordable housing to market-rate housing is an ongoing and critical statewide problem. In California, there are approximately 149,000 units of privately owned, federally assisted, multifamily rental housing, plus additional tax-credit and mortgage-revenue bond properties, many with project-based rental assistance. A large percentage of these units may convert to market rate as subsidy contracts or regulatory agreements expire. These at-risk units are home to seniors and families with lower incomes who cannot afford to pay market-rate rents and who could be displaced if the developments convert. More info: [https://www.hcd.ca.gov/policy-research/preserving-existing-affordable-housing.shtml](https://www.hcd.ca.gov/policy-research/preserving-existing-affordable-housing.shtml).
Environmental Quality Act (CEQA) is not a primary barrier to infill housing relative to other challenges, further attention to issues in its implementation can help resolve any challenges it does pose. Affordable housing should be prioritized in many types of communities, including those that are already resource-rich and transportation-efficient. Additionally, affordable housing should be coordinated with supportive community investments in under-resourced communities.

**Actions:**

- Further ease local regulatory and California Environmental Quality Act (CEQA) barriers to increasing density and affordable housing development, especially in transportation-efficient areas, and establish protections in the law against tactics to obstruct developments that advance State equity and climate goals.
- Increase funding for affordable housing and infill-supportive developments that accelerate VMT-reducing housing production in alignment with the SCS through programs such as Regional Early Action Planning of 2021 (REAP 2.0), Affordable Housing and Sustainable Communities (AHSC), and Transformative Climate Communities (TCC).
- Scale up factory-built housing production, including investing in workforce development, boosting participation in the construction industry, and establishing labor standards, to reduce the time and cost of delivering multifamily infill housing and accelerate the infill housing pipeline.
- Leverage the State’s Prohousing designation by expanding incentives in State funding programs – including transportation and other non-housing programs – for local jurisdictions to adopt pro-housing policies, especially in ways that increase infill housing and reduce VMT.
- Support programs and policies to enable different housing ownership models to expand housing access such as through community land trusts, mutual housing, and cooperative ownership models.
- Incentivize conversion of a broader array of opportunity sites for affordable housing construction including redevelopment of aging malls, office parks, and other major reuse sites.

4. **Reduce or eliminate parking requirements (and/or enact parking maximums, as appropriate) and promote redevelopment of excess parking, especially in infill locations.** Building parking for infill development makes construction costs more prohibitive, considering parking can cost up to $100,000 per stall, which takes away both physical space and budget from the construction of housing and other needed services and amenities. Yet minimum requirements for parking in new developments are regularly set by local jurisdictions, financers, or others.

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Particularly where viable transportation alternatives are available, eliminating parking requirements and/or providing a “cap” on allowable parking can make infill development more financially feasible and is more conducive to lowering VMT. Measures to reduce parking in new developments can also be paired with funding or incentives for car share, electric vehicles, electric bikes and scooters, and other driving alternatives. AB 2097 (Friedman, Chapter 459, Statutes of 2022)\(^\text{63}\) will help with this in certain areas, but there is still work to be done.

**Actions:**

- Develop financing and incentives programs that facilitate conversion of excess parking to housing and other strategic uses for communities.
- Enact parking maximums (caps).

5. **Preserve and protect existing affordable housing stock and protect existing residents and businesses from displacement and climate risk.** Identifying and preserving the existing affordable housing stock – both subsidized and “naturally occurring” affordable housing – is key to maintaining the economic accessibility and vitality of existing communities while investing in new development and ensuring that low-income residents are not displaced when new infill development occurs. Additionally, preserving all types of affordable housing requires climate mitigation and adaptation improvements to ensure the future safety and viability of those residences. One action the State could undertake could be to identify potential changes to federal and State policies to increase incentives to preserve existing affordable housing, implement climate adaptation improvements to existing affordable housing, and reduce and mitigate displacement of existing low-income residents.

**Actions:**

- Identify potential changes to federal and State policies to increase incentives to preserve existing affordable housing, implement climate adaptation improvements to existing affordable housing, and reduce and mitigate displacement of existing low-income residents.