State of California
Air Resources Board

# Addendum to the Final Statement of Reasons for Rulemaking

## Public Hearing to Consider the Clean Miles Standard Regulation

Public Hearing Date: May 20, 2021
Agenda Item No.: 21-4-1
Addendum Prepared: August 19, 2022

## I. General Discussion

This addendum to the Final Statement of Reasons (FSOR) for the rulemaking action entitled "Public Hearing to Consider the Clean Miles Standard Regulation" updates the original FSOR that the California Air Resources Board (CARB) submitted to the Office of Administrative Law (OAL) on March 8, 2022.

## II. Consideration of Alternatives

For the reasons set forth in the Staff Report, in staff's comments and responses at the hearing, and in the FSOR, the Board determined that no alternative considered by the agency would be more effective in carrying out the purpose for which the regulatory action was proposed, or would be as effective and less burdensome to affected private persons, or would be more cost-effective to affected private persons and equally effective in implementing the statutory policy or other provisions of law than the action taken by the Board.

## III. Non-Substantial Modifications

The non-substantial modifications described below clarify and do not materially alter the requirements, rights, responsibilities, conditions, or prescriptions contained in the Proposed Amendments, as approved for adoption by CARB. (See Cal. Code Regs., tit. 1, § 40). These modifications only correct punctuation errors, identify the correct references, or revise the order of text to ensure clarity in the regulation.

After the March 8, 2022, submittal of the FSOR to OAL, the following non-substantial modifications were made to the Final Regulation Order:

- In subsection 2490(b) "Hybrid Electric Vehicle," added a space between "device" and "such" for improved punctuation.
- In subsection 2490(b) "Transportation network company," added a space between "provided" and "in" for improved punctuation.
- In the Authority and Reference Note for section 2490, struck out reference to sections of the California Code of Regulations.
- In subsection 2490.1(c)(6), updated the referenced section from subsection (b)(2) to (c)(3) to point to exactly where the equation is located in order to correctly determine the total calculated grams CO2/PMT (and not just where "PMT" is defined).
- In subsection 2490.1(d)(3), updated the referenced section from subsection (c) to (c)(3) to further specify that we are pointing to the equation where gCO2/PMT is calculated.
- In subsection 2490.1(d)(4), updated numbers in narrative example to be consistent with the numbers in the Table 5 example.
- In subsection 2490.1(e), updated subsection numbers to delete subsection "(3)" that was erroneously added in front of "Equation 2;" this was a typographic error as "Equation 2" and its text below should have been part of subsection (2). Updated previous subsection (4) to now be renumbered to subsection (3) accordingly.
- In subsection 2490.2(c), updated the referenced subsections from subsections "2490.2(c) and(d)" to "(d) and (e)" to further specify the subsections where the generations of credits are explained.
- In subsection 2490.2(d), updated language to accurately reference "bicycle transportation plan" instead of "Bicycle Master Plan" (as originally stated) to be consistent with the language used in California Streets and Highways Code section 891.2. Also, added a space between "Code" and "section" (regarding "California Streets and Highways Code section 891.2") for improved punctuation.
- In subsection 2490.4(a) "Transportation network company," added a space between "provided" and "in" for improved punctuation.

## IV. Supplemental Rationale/Necessity for the Initial Statement of Reasons (ISOR)

- In subsection 2490.1(c)(1), Table 1. Annual GHG Targets provides the annual greenhouse gas targets in grams of $CO_2$ per passenger-mile-traveled for individual TNCs and their statewide activities. The GHG targets are intended to allow TNCs to use various strategies beyond the minimum electrification compliance (i.e., reducing VMT by increasing shared rides or reducing deadhead miles, earning $CO_2$ credits such as by investing in active transportation infrastructure or connecting to mass transit, or improving fleetwide GHG performance with lower GHG-emitting vehicles). The GHG

targets were set approximately 10 percent above the GHG levels that would occur from meeting the minimum electrification requirement by 2030 as specified in Table 6. Annual Electric Vehicle Miles Traveled Targets in subsection 2490.1(e)(1). The GHG targets year by year is a gradual curve that follows the electrification target curve. The GHG targets therefore reduce annually over the period of the regulation and are held constant at 0 g $CO_2$/PMT from 2030 onward. This concept was presented at a public workshop in November 2020. Furthermore, these targets are consistent with the electrification commitments made by both Lyft and Uber. The GHG targets are in the metric of grams of carbon dioxide- equivalent tailpipe emissions per passenger mile traveled (g $CO_2$/PMT). Emissions related to fuel production and distribution were not considered when setting the targets because only tailpipe $CO_2$ is specified in SB 1014 and there is significant complexity in projecting varying fuel carbon intensity for varying future compliance years.

- In subsection 2490.1(c)(4), $CO_2$ emission rates were determined for five vehicle technology categories for both passenger cars (PCs) and light trucks (LTs), with a $CO_2$ emission rate provided for each model year (MY) from 2008 to 2030 and beyond (2031+). The five vehicle categories include: gasoline and flex fuel vehicles, diesel vehicles, hybrid electric vehicles, plug-in hybrid electric vehicles, and compressed natural gas vehicles. The $CO_2$ emission rates shown in Tables 2 and 3 for historic years were calculated based on the 2-cycle city fuel economy data from fueleconomy.gov. The average $CO_2$ per mile rate for each category under passenger car and light truck was determined for each model year. CARB staff then applied a speed correction factor to the $CO_2$ per mile rate to reflect a more real-world fuel consumption for TNC service miles. The speed correction factor was derived by a test program conducted in 2019 where CARB collected real-time vehicle and engine data from 31 TNC vehicles equipped with data-loggers. Details of the test program and how the speed correction factor was derived can be found in the 2018 Base Year Inventory Report. $CO_2$ emission rates were projected for future years through 2030 based on EMFAC 2017. The $CO_2$ emission rate look-up tables were developed by CARB staff to simplify and streamline the compliance calculation process and are to be used in the calculation of g $CO_2$/PMT in Equation 1 of subsection 2490.1(c)(3). The $CO_2$ emission factor tables represent $CO_2$ emissions in grams of $CO_2$ per mile for vehicle categories (outside of ZEVs) and model years that are anticipated to be used for TNC service over the lifetime of the proposed regulation

## IV. Modifications to the Original Summary of Comments and Agency Responses in the FSOR

The following comments and agency responses are additions or modifications to the FSOR. The same comment categories and numbering are captured here, and new responses extend the numbering in each category from the FSOR.

### A. $CO_2$ Credits

5. ***Comment:*** Commenter suggests that credits from TNC connections to transit should allow for other methods of verifying the transit connection, as integrated fare payment systems are not always feasible. Relatedly, commenter requests that credits be available for TNCs to earn by simply offering a transit option in the app. [B-2, T-1, T-12]

   ***Agency Response:*** Based on feedback during the comment period and Board deliberation, CARB has modified the credit provision for transit connected trips to allow for other methods of verifying that the TNC trip was connected to a transit trip, without explicitly requiring an integrated fare payment system. In subsection 2490.2(e), language was modified to remove the requirement that a payment transaction was made using an integrated fare payment system and language was added to allow for purchase of a mass transit ticket from a TNC app or other methods from which verified TNC-to-mass-transit trip data can be collected and submitted. In subsection 2490(b), the term "integrated fare payment" was deleted, as this term is no longer used in the text of the proposed regulation. In subsection 2490.3(b)(8), the term "integrated fare payment" was removed. This and other modifications were released to the public on September 14, 2021, in the Notice of Public Availability of Modified Text (15-Day Notice).

8. ***Comment:*** Commenter requests that CARB review and clarify the bikeway and sidewalk infrastructure credit provision. [OP-7]

   ***Agency Response:*** Based on comments, staff have reviewed the bikeway and sidewalk infrastructure credit provision and have provided modifications in the regulation language to clarify how this credit provision can be used. In subsection 2490.2(d)(5), language was added to clarify that credits may only be earned beginning in the year the project becomes operational and can only be applied during the project life. The modifications were released to the public on September 14, 2021, in the 15-Day Notice. Staff believe these changes clarify the provision and address the comments.

10. ***Comment:*** Commenter requests that CARB clarify that with respect to bikeway and sidewalk infrastructure, "operational" means that the facility is available for public use, and that credits be given only when the investment dollars are fully paid to the agency leading the project. [OP-16]

***Agency Response:*** The recent modifications released on September 14, 2021, explain that the term "operational" means the length of the project life. The use of the term "project life" is consistent with terms used by local planning agencies and is most relevant to defining how the $CO_2$ credits in the proposed regulation are given. To emphasize what the proposed regulation states, all investment projects must be public projects and the $CO_2$ credits may only be issued for the length of the project life, which is an adequate restriction on the terms of the credit provision without further needing to restrict it to the after the TNC's investment dollars are fully paid toward the project. Staff believes a likely scenario is that the project life years will begin after the TNC investment is made anyway. In subsection 2490.2(d), the term "project life" was added in parentheses to further define and clarify what is meant by the year the project is operational. The parenthetical was also added to subsection 2490.3(b)(7) for the same reason. Additionally, in subsection 2490.2(d)(5), language was added to clarify that credits may only be earned beginning in the year the project becomes operational and can only be applied during the project life.

## C. Driver Impacts

1. ***Comment:*** Commenter recommends that more data related to driver impacts should be reported. Commenter also urges that the burden of compliance should fall only on the companies, and that drivers should not have to be financially impacted by this regulation. CARB should push TNCs to demonstrate that they are supporting their drivers. [OP-8, T-9, T-10]

   ***Agency Response:*** CARB has added modifications to the regulation to require additional data related to driver revenue, to evaluate changes in driver revenue on a per-hour and per-mile basis over the course of the regulation. Attachment 2 was added, and referenced in section 2490.3(a)(3), which adds new driver-related data fields that TNCs are required to report. This includes trip revenue and total revenue, ZEV subsidies given to the driver, total engaged time that the driver spends in Periods 2 and 3, and total annual miles. Additionally, in Attachment 1, the data fields "Total amount paid" and "Tip" were added. The modified language was released to the public on September 14, 2021, in the 15-Day Notice. CARB is also pursuing a third-party survey contract to acquire additional driver information before and after the proposed regulation takes effect. The survey would include information that cannot be collected or disclosed by the TNCs, including household income, access to home charging, and others. Based on comments and Board direction, CARB is committed to monitoring impacts of the regulation on drivers.

## E. GHG and EVMT Targets

5. ***Comment:*** Various commenters suggested that ARB include FFVs and E85 as means to reduce GHG rather than to limit the regs to EVs. Various commenters point out that the regulations favor electric vs. biofuel technologies. [OP-1, OP-6, T-4, T-7, T-11]

***Agency response***: SB 1014 was explicit in prioritizing electric vehicles for compliance in the Clean Miles Standard, and directed CARB to establish eVMT targets. The adopted regulation does not preclude drivers from using flex-fueled vehicles (FFVs) with high blend ethanol fuel (E85), but the regulation does not provide additional regulatory incentives to do so. Beyond the eVMT target, if staff had proposed regulatory incentives for FFVs, it would have diluted other actions needed for the GHG required target, such as VMT reduction, higher occupancy in vehicles, and connections to transit, all of which were identified in SB 1014 as important.

**F. Feasibility**

2. ***Comment:*** Commenter states CARB cost modeling assumptions are too conservative, including the lack of a Federal EV tax credit, gasoline prices, home charging installation costs, and vehicle depreciation. Additionally, the commenter states some costs to TNC drivers are not taken into account in the cost modeling. [OP-10]

   ***Agency response***: Staff believe the cost analysis is not too conservative and accounted for cost assumptions that are reasonable and with data sources that are available. Although many drivers will benefit from the Federal EV tax incentive, many drivers will not depending on which automaker has exceed the IRS defined cap, and how long the tax incentive lasts. Gasoline price projections were used from the California Energy Commission, consistent with other CARB rulemaking methodologies, and the prices reflect the current projections as of the time of the analysis for this rulemaking. Home charging equipment costs were included for all drivers given it was not feasible to dictate which specific vehicles in the model would and would not pay for a charger. However, spread out the costs over several years (amortization) such that the impact on the cost optimization model was reduced. Finally, staff set vehicle depreciation rates the same for all technology types, knowing that in future years as electric vehicles are more full function, their depreciation will become closer to conventional vehicles.

   Staff do not believe the identified missing driver costs could have been accounted for. The commenter noted some drivers will have an existing more efficient hybrid vehicle and therefore their fuel savings when switching to an electric vehicle will be less. It was not feasible for staff to set different baseline vehicles for various drivers, given the size and variations of vehicles in the TNC fleet. Finally, staff did not include an explicit cost factor for lost time due to charging an electric vehicle, given the lack of reliable data to inform this assumption. However, staff include a general EV barriers factor to account for

unknown costs, and sought stakeholder feedback on this variable during public workshops.

**J. Other**

3. ***Comment:*** Commenter recommends that Uber vehicles need bike racks. [T-19]

   ***Agency response***: The Clean Miles Standard sets electrification and GHG emission reduction targets, but does not explicitly dictate how TNCs should comply. If a TNC provides bike racks for their drivers it can enable reduced vehicle miles traveled by encouraging trip connections with bicycles. But the regulation does not direct that type of activity.

4. ***Comment:*** There should be a penalty for noncompliance with the regulations. [OP-10]

   ***Agency response***: Per SB 1014, the CPUC has the authority to implement the Clean Miles Standard. In that capacity, the CPUC will establish penalties for non-compliance.