

## **Appendix C-2**

# **Summary and Response to Department of Finance Comments on the Standardized Regulatory Impact Assessment**

## **Proposed Clean Miles Standard Regulation**

Date of Release: March 30, 2021

Date of Hearing: May 20, 2021

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## Summary and Response to Department of Finance Comments on the Standardized Regulatory Impact Assessment

1. Benefits and costs must be reported separately for each year without netting for transparency and disclosure of impacts. The annual valuation of health benefits of the proposed regulation was also not reported.

The SRIA presented costs and benefits to the TNC industry, without netting, for the Proposed Regulation and each of the Alternatives in Figures 10, 16, 23, and 39. The following tables present the numeric values of the total costs and total benefits to the TNC industry in each calendar year, followed by a table presenting the year by year value of monetized health benefits for the proposed regulation.

Table 1: Costs in Millions of Dollars for TNC Industry to Comply with Proposed Regulation

Year	Vehicle Purchase	BEV Barriers	Home Charger	Electricity	Gasoline	Maintenance	Reporting Costs	Net Cost	Costs Only	Savings Only
2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.00
2023	1.17	0.64	0.24	1.99	-2.99	-1.06	0.06	0.05	4.10	-4.05
2024	2.24	3.41	1.51	8.84	-12.18	-4.93	0.05	-1.06	16.05	-17.11
2025	3.95	9.06	4.47	21.78	-29.78	-13.01	0.03	-3.49	39.29	-42.79
2026	-4.16	24.47	14.53	51.80	-71.39	-33.66	0.05	-18.36	90.85	-109.21
2027	-8.19	35.47	25.13	79.74	-109.65	-52.38	0.03	-29.85	140.38	-170.23
2028	-78.96	49.00	51.71	113.11	-153.74	-75.22	0.05	-94.04	213.88	-307.92
2029	-85.08	54.49	65.33	143.17	-198.03	-96.11	0.03	-116.21	263.02	-379.23
2030	-192.81	60.61	101.83	179.18	-246.59	-121.36	0.03	-219.10	341.66	-560.76
2031	-287.45	61.15	103.11	177.40	-247.16	-121.77	0.03	-314.69	341.69	-656.38
Total	-649.30	298.29	367.87	777.02	-	1,071.52	-519.49	0.40	-796.71	
Total Costs Only	7.36	298.29	367.87	777.02	0.00	0.00	0.40		1,450.95	
Total Savings Only	-656.66	0.00	0.00	0.00	-	1,071.52	-519.49	0.00		-
										2,247.66

Table 2: Costs in Millions of Dollars for TNC Industry to Comply with Alternative 1

Year	Vehicle Purchase	BEV Barriers	Home Charger	Electricity	Gasoline	Maintenance	Reporting Costs	Net Cost	Costs Only	Savings Only
2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.00
2023	6.51	3.74	1.49	9.78	-13.11	-5.13	0.06	3.34	21.58	-18.24
2024	23.49	28.52	14.88	56.26	-69.27	-31.12	0.05	22.82	123.20	-100.39
2025	49.52	59.70	35.56	111.12	-138.92	-65.46	0.03	51.57	255.94	-204.38
2026	17.88	94.85	76.27	161.09	-211.55	-102.51	0.05	36.07	350.13	-314.06
2027	62.03	120.83	106.15	218.83	-288.32	-139.88	0.03	79.67	507.87	-428.19
2028	-19.53	130.97	148.25	252.30	-333.74	-162.75	0.05	15.54	531.56	-516.02
2029	28.60	131.53	180.19	282.89	-384.77	-183.97	0.03	54.49	623.24	-568.74
2030	141.41	133.35	324.58	310.31	-425.21	-203.50	0.03	280.97	909.69	-628.71
2031	-113.18	133.54	318.22	307.92	-423.04	-204.01	0.03	19.48	759.71	-740.23
Total	196.73	837.02	1,205.58	1,710.49	2,287.92	-1,098.32	0.40	563.99		
Total Costs Only	329.45	837.02	1,205.58	1,710.49	0.00	0.00	0.40		4,082.95	
Total Savings Only	-132.71	0.00	0.00	0.00	-	-1,098.32	0.00			-3,518.96

Table 3: Costs in Millions of Dollars for TNC Industry to Comply with Alternative 2

Year	Vehicle Purchase	BEV Barriers	Home Charger	Electricity	Gasoline	Maintenance	Reporting Costs	Net Cost	Costs Only	Savings Only
2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.00
2023	1.17	0.64	0.24	1.99	-2.99	-1.06	0.06	0.05	4.10	-4.05
2024	0.22	0.26	0.11	0.87	-1.40	-0.48	0.05	-0.37	1.51	-1.88
2025	1.12	2.29	1.06	6.61	-9.63	-3.94	0.03	-2.45	11.11	-13.56
2026	-0.49	6.85	3.63	18.06	-26.36	-11.71	0.05	-9.97	28.59	-38.56
2027	-1.46	10.66	6.45	29.82	-43.28	-19.59	0.03	-17.37	46.96	-64.33
2028	-19.87	19.14	14.39	53.71	-75.93	-35.87	0.05	-44.37	87.29	-131.67
2029	-30.14	23.66	21.93	74.49	-106.28	-50.27	0.03	-66.59	120.10	-186.69
2030	-124.13	33.51	49.95	113.48	-159.10	-77.49	0.03	-	163.76	196.96
2031	-170.61	33.57	48.83	111.91	-158.80	-77.49	0.03	-	212.55	194.34
Total	-344.18	130.57	146.58	410.94	-583.76	-277.91	0.40	-	517.35	
Total Costs Only	2.51	130.57	146.58	410.94	0.00	0.00	0.40		691.01	
Total Savings Only	-346.70	0.00	0.00	0.00	-583.76	-277.91	0.00			-
										1,208.36

Table 4: Costs in Millions of Dollars for TNC Industry to Comply with Proposed Regulation under the Delayed Growth Scenario

Year	Vehicle Purchase	BEV Barriers	Home Charger	Electricity	Gasoline	Maintenance	Reporting Costs	Net Cost	Costs Only	Savings Only	
2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2022	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.00	
2023	0.81	0.47	0.18	1.48	-2.19	-0.78	0.06	0.03	3.00	-2.97	
2024	1.76	2.92	1.31	7.43	-10.14	-4.14	0.05	-0.80	13.48	-14.28	
2025	3.45	8.21	4.08	19.81	-26.92	-11.83	0.03	-3.16	35.59	-38.75	
2026	-3.71	23.06	13.75	48.97	-67.43	-31.84	0.05	-17.14	85.84	-102.99	
2027	-8.74	34.67	25.07	76.83	-105.42	-50.54	0.03	-28.10	136.60	-164.70	
2028	-75.92	47.68	50.50	109.75	-148.98	-73.02	0.05	-89.94	207.98	-297.92	
2029	-81.22	53.53	64.41	140.17	-193.64	-94.13	0.03	-	110.85	258.14	-368.99
2030	-184.72	59.25	99.99	175.25	-240.80	-118.79	0.03	-	209.79	334.53	-544.32
2031	-278.27	60.12	101.64	173.36	-241.30	-119.07	0.03	-	303.49	335.15	-638.64
Total	-626.56	289.91	360.93	753.05	1,036.83	-504.13	0.42	-	763.21		
Total Costs Only	6.03	289.91	360.93	753.05	0.00	0.00	0.42		1,410.34		
Total Savings Only	-632.59	0.00	0.00	0.00	-	1,036.83	-504.13	0.00			-
											2,173.55

Table 5: Year by Year Avoided Mortality and Morbidity Incidents from 2023 to 2031 under the Proposed Regulation

Year	Cardiopulmonary mortality	Hospitalizations for cardiovascular illness	Hospitalizations for respiratory illness	Emergency room visits	Benefit*
2023	0.00	0.00	0.00	0.00	0.63
2024	0.00	0.00	0.00	0.00	2.71
2025	1.00	0.00	0.00	0.00	6.45
2026	2.00	0.00	0.00	1.00	14.55
2027	2.00	0.00	0.00	1.00	21.61
2028	3.00	0.00	1.00	2.00	28.88
2029	4.00	1.00	1.00	2.00	35.45
2030	4.00	1.00	1.00	2.00	42.04
2031	4.00	1.00	1.00	2.00	42.62

\* Incident values rounded to the nearest whole number while benefit valuation estimated based off of fractional values. Benefits reported in millions of dollars.

2. The baseline must reflect current laws as well as economic assumptions consistent with the current recession and its aftermaths. Currently, the baseline does not estimate changes due to AB 5 and assumes that the regulated market will continue to grow at pre-pandemic rates. Compliance with AB 5 and lower demand for passenger services due to low economic activity and public health concerns likely mean the baseline will reflect fewer vehicles and passenger miles traveled. CARB should formulate assumptions to evaluate impacts based on the proper baseline. The SRIA may then include a sensitivity analysis to address uncertainties and to assess impacts under scenarios that deviate from the baseline.

The baseline used by CARB assumes compliance with AB 5. CARB estimates that, on balance, the effects of AB 5 may be neutral with regard to TNC growth and TNC labor supply. CARB is not aware of any data that points to the medium- and long-run impacts of AB 5 that contradicts its estimate.

AB 5 requires TNCs to classify drivers as employees. Some of the implications of this change in classification will decrease the number of drivers willing and able to work for TNCs while other impacts of the change in classification would increase the number of drivers willing to work for TNCs. For example, AB 5 could decrease the flexibility that drivers previously had by only allowing drivers to provide services based on pre-planned scheduling and could also result in drivers being prevented from working for multiple companies. These actions could result in a decrease in the supply of TNC drivers. On the other hand, AB 5 requires that drivers at least get minimum wage and are reimbursed for mileage. Increased average wages increase the number of drivers willing to provide services to the platform. While imposing a price floor on wages decreases TNC labor demand, the equilibrium impacts of all these changes on TNC labor is ambiguous.

In the baseline, CARB considers the effects of the current pandemic and economic recession. The SRIA baseline assumes a much lower average annual growth rate from 2020 to 2023 than the historical average for the industry. These assumptions result in statewide market growth for the TNC industry relative to the 2018 base year of 37 percent by 2023. However, the majority of the growth occurred prior to 2020, with year-over-year growth of 16 percent and 9 percent for calendar years 2019 and 2020, respectively, and 3 percent for 2021 to 2023.

The growth projections used in the SRIA baseline are slightly lower than the growth projected for the broader transportation and warehousing industry in the coming years. For example, California Department of Finance forecasts prepared in April 2020 project an average annual growth rate, between 2021 and 2023, for the transportation and warehousing industry of 4.9 percent for employment and 9.3 percent growth for

personal income.<sup>1</sup> Given that the baseline growth projection for the TNC industry used in the SRIA is lower than the growth projected by California Department of Finance for the broader transportation and warehousing industry, the lack of data that points to substantive medium- and long-run impacts of the COVID-19 pandemic on the ride hailing sector, and the uncertainty surrounding the impacts of AB 5 on equilibrium labor supply and demand in the TNC industry, Staff believes that the growth projection used in the SRIA is a proper baseline.

Thus, CARB acknowledges in its baseline that the economic recession and COVID-19 pandemic have had significant short-term impacts on the ride hailing industry. TNCs have temporarily discontinued pooling services and ridership has suffered. As a result, CARB has not included assumptions about occupancy increases in the baseline or in the compliance scenario. Additionally, CARB is proposing a regulatory flexibility where TNCs can bank over-compliance credits for use in future years. This could be especially beneficial if a future year has an unexpected market down-turn such as another recession.

However, there is no data available that points to the broader medium- and long-run impacts of these two events on the ride hailing sector. While U.S. ridership is still down, some markets that were early success stories when fighting the pandemic have already exceeded their pre-pandemic ridership.<sup>2</sup> Uber executives state that the company has not identified any larger patterns from the pandemic that would permanently change the business, and that recovery is just a matter of cities loosening their restrictions.<sup>3</sup>

Due to the uncertainty surrounding these events, the SRIA included a sensitivity analysis of the Proposed Regulation (Appendix H of the SRIA) to explore the potential range of economic impacts that could result. The following tables describe the costs and benefits to the TNC industry that would result from compliance with Alternative 1 and Alternative 2 under the delayed growth scenario to better understand the impact of the sensitivity analysis on a variety of scenarios. In addition, staff have incorporated additional flexibilities and crediting structures into the proposed regulation, such as the banking of over-compliance credits noted above, which could serve as a compliance buffer for a TNC if a future year market condition is challenging.

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<sup>1</sup> California Department of Finance, California Economic Forecasts Prepared in April 2020. Accessed September 16, 2020.

[http://www.dof.ca.gov/Forecasting/Economics/Eco\\_Forecasts\\_Us\\_Ca/documents/California%20Economic%20Forecast%20MR%202020-21.xlsx](http://www.dof.ca.gov/Forecasting/Economics/Eco_Forecasts_Us_Ca/documents/California%20Economic%20Forecast%20MR%202020-21.xlsx)

<sup>2</sup> Faiz Siddiqui, "Uber ridership has cratered and no one knows when it'll come back," The Washington Post, August 10, 2020. Accessed September 16, 2020.

<sup>3</sup> Faiz Siddiqui, "Uber ridership has cratered and no one knows when it'll come back," The Washington Post, August 10, 2020. Accessed September 16, 2020.

Table 6: Costs in Millions of Dollars for TNC Industry to Comply with Alternative 1 under the Delayed Growth Scenario

Year	Vehicle Purchase	BEV Barriers	Home Charger	Electricity	Gasoline	Maintenance	Reporting Costs	Net Cost	Costs Only	Savings Only
2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.00
2023	3.72	2.64	0.36	5.14	-8.19	-3.10	0.06	0.63	11.91	-11.28
2024	23.08	31.32	5.91	44.84	-65.10	-29.08	0.05	11.02	105.19	-94.17
2025	26.60	62.57	14.20	81.38	-121.72	-57.26	0.03	5.79	184.77	-178.97
2026	32.17	122.42	32.35	143.39	-224.79	-108.70	0.05	-3.11	330.39	-333.49
2027	-2.16	133.01	41.56	166.79	-265.79	-129.51	0.03	-56.07	341.39	-397.46
2028	-22.68	148.72	56.77	203.99	-329.24	-160.67	0.05	-103.06	409.53	-512.59
2029	-59.46	132.93	64.88	218.62	-365.28	-175.62	0.03	-183.89	416.46	-600.35
2030	-67.16	133.35	152.76	248.52	-425.21	-203.50	0.03	-161.22	534.66	-695.88
2031	-257.97	133.54	149.76	246.60	-423.04	-204.01	0.03	-355.08	529.93	-885.02
Total	-323.87	900.50	518.55	1,359.26	-2,228.35	-1,071.43	0.40	-844.95		
Total Costs Only	85.56	900.50	518.55	1,359.26	0.00	0.00	0.40		2,864.27	
Total Savings Only	-409.44	0.00	0.00	0.00	-2,228.35	-1,071.43	0.00			-
										3,709.22

Table 7: Costs in Millions of Dollars for TNC Industry to Comply with Alternative 2 under the Delayed Growth Scenario

Year	Vehicle Purchase	BEV Barriers	Home Charger	Electricity	Gasoline	Maintenance	Reporting Costs	Net Cost	Costs Only	Savings Only
2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	0.00
2023	1.11	0.83	0.11	1.75	-2.96	-1.06	0.06	-0.16	3.86	-4.02
2024	2.18	4.33	0.77	7.54	-12.25	-4.93	0.05	-2.30	14.88	-17.18
2025	2.75	11.11	2.12	18.35	-29.97	-13.01	0.03	-8.62	34.36	-42.98
2026	-9.30	29.80	7.94	43.36	-71.88	-33.66	0.05	-33.68	81.16	-114.84
2027	-18.35	41.04	12.01	66.03	-109.98	-52.38	0.03	-61.60	119.11	-180.71
2028	-50.84	53.32	18.76	92.82	-154.48	-75.22	0.05	-115.58	164.96	-280.53
2029	-84.81	57.09	25.86	116.07	-197.79	-96.11	0.03	-179.65	199.06	-378.71
2030	-132.97	56.00	35.12	143.79	-246.27	-121.36	0.03	-265.66	234.94	-500.60
2031	-171.17	55.74	33.54	142.53	-247.13	-121.77	0.03	-308.23	231.84	-540.07
Total	-461.40	309.27	136.24	632.23	-1,072.72	-519.49	0.40	-975.46		
Total Costs Only	6.04	309.27	136.24	632.23	0.00	0.00	0.40		1,084.19	
Total Savings Only	-467.44	0.00	0.00	0.00	-1,072.72	-519.49	0.00			-2,059.65