



SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

FINAL

November 19, 2025

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I. INTRODUCTION

1. Background on Assembly Bill 251

[Assembly Bill \(AB\) 251\(Ward, Chapter 320, Statutes of 2023\)](#) added California Government Code Section 14527.3 (Appendix A), which requires the California Transportation Commission (Commission) to convene a task force to study the relationship between vehicle weight and injuries to vulnerable road users (such as pedestrians and cyclists) and degradation to roads, and to study the costs and benefits of imposing a passenger vehicle weight fee.

AB 251 requires the Task Force to prepare a report summarizing its findings, which will inform the Commission's forthcoming report to the Legislature. The findings included in this report are described in Chapter 2 and cover the following topics identified in the legislation:

- An analysis of the relationship between passenger vehicle weight and vulnerable road user injuries and fatalities
- An analysis of the relationship between passenger vehicle weight and degradation of road infrastructure
- A discussion of how a passenger vehicle weight fee may change driver behavior
- A discussion of how any revenues generated by the imposition of a passenger vehicle weight fee could be directed to enhance road infrastructure that increases safety for pedestrians, bicyclists, and other vulnerable road users
- An analysis of the equity considerations relating to different population groups in the state, including persons of various demographic groups, persons residing in various regions of the state, persons with low incomes, and persons using a vehicle for commercial use versus personal use, and any appropriate adjustments for these considerations

2. About the Task Force

2.1 Membership

AB 251 specifies that the Task Force shall consist of state agencies, including the Office of Traffic Safety and the Department of Motor Vehicles, local transportation agencies, safety advocates, and representatives from the automobile industry. The Commission approved the Task Force membership listed in Table 1 below.

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Table 1: List of Task Force Members for the Vehicle Weight Safety Study

Task Force membership list as approved by the California Transportation Commission, December 2024.

NO.	ORGANIZATION	TYPE
1	Alliance for Automotive Innovation	Automotive Industry
2	American Automobile Association	Automotive Industry
3	California New Car Dealers Association	Automotive Industry
4	California Farm Bureau	Business/Labor Organization
5	United Contractors	Business/Labor Organization
6	California City Transportation Initiative	Local Agency Consortium
7	California State Association of Counties	Local Agency Consortium
8	Safe Streets Research & Consulting	Research Organization
9	Active San Gabriel Valley	Road User Safety Organization
10	American Association of Retired Persons	Road User Safety Organization
11	National Federation of the Blind, CA	Road User Safety Organization
12	Streets for All	Road User Safety Organization
13	California Department of Motor Vehicles	State Agency
14	California Highway Patrol	State Agency
15	California Office of Traffic Safety	State Agency

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3. Purpose and Scope

Task Force members are representative of experts in the field of transportation, industries and those potentially impacted by the scope of AB 251 across the State. Therefore, the Task Force is intended to illuminate diverse viewpoints to ensure that the legislative requirements are addressed from a broad representation of stakeholders, particularly those who stand to be most impacted by the recommendations in the Commission's report to the Legislature on the Vehicle Weight Safety Study. Table 2 below provides further information about the scope and timeline of the Vehicle Weight Safety Study.

Table 2: Anticipated Timeline for the Vehicle Weight Safety Study

The anticipated timeline for the Vehicle Weight Safety Study includes legislatively mandated activities (such as convening the Task Force and the development of a Summary of Task Force Findings) and other activities, culminating in the submission of the final Vehicle Weight Safety Study to the legislature.

MILESTONE	TIMING
University of California, Berkeley Academic Research Study	August 2024 - December 2025
Task Force Public Meetings (5 in total)	June - November 2025
Summary of Task Force Findings	November 2025
Presentations to the Interagency Equity Advisory Committee (EAC) and Commission on the Task Force Findings Summary	December 2025
Draft Vehicle Weight Safety Study Report Public Workshop	Early 2026 (tentative)
30-Day Public Comment Period on the Draft Vehicle Weight Safety Study Report	Early 2026 (tentative)
Presentations to the EAC and Commission on the Draft Vehicle Weight Safety Study Report	Spring 2026 (tentative)
Adoption of the final Vehicle Weight Safety Study Report and Submission to the Legislature	Spring 2026 (tentative)

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Five (5) Task Force meetings were held between June and November 2025. Task Force meetings were held compliant with the Bagley-Keene Open Meeting Act. Generally, Task Force meetings followed a similar format, including an item summarizing feedback from Task Force members from the previous meeting, followed by a presentation from Commission staff and the UC Berkeley Research Team with information about the research findings, key takeaways, and questions to solicit feedback aimed at responding to the legislative requirements. Meeting materials were shared in advance of Task Force meetings with Task Force members and the public. After each Task Force meeting, a recording of the meeting was posted on the [Commission's website](#). Feedback received during the Task Force meetings is described in Chapter 2, Task Force Findings. The meeting schedule and topics are included in Table 3 below.

Table 3: Vehicle Weight Safety Study Task Force Meeting Dates and Topics

The Task Force held five public meetings throughout 2025, covering all topics mandated by AB 251.

NO.	ORGANIZATION	TYPE
1	Kick-Off and Introduction to the Vehicle Weight Safety Study	June 13, 2025
2	Trends in Vehicle Fleet and Road Users Injuries and Fatalities	July 16, 2025
3	Introduction to Potential Policy Solutions and Road Degradation	September 9, 2025
4	Potential Policy Solutions: Vehicle Weight Fee and Consumer Behavior Response	October 29, 2025
5	Task Force Wrap-up	November 13, 2025

II. TASK FORCE FINDINGS

The key takeaways below were derived from the research literature and academic findings presented during Task Force meeting, with feedback and additional perspectives offered by Task Force members. Task Force members feedback was in response to academic presentations with topics covering the legislative requirements (see Chapter 1, Section 1. for legislative requirements). Those presentations and meeting materials, including agendas and staff reports, are included in Appendix B. Task Force member feedback is included throughout this chapter.

Feedback received from Task Force members and the public included a range of perspectives and additional questions for further consideration. Any feedback received by Task Force members outside of the scope of the legislation is detailed in Chapter 3. All findings outlined in this chapter will be considered by the Commission in its report on the Vehicle Weight Safety Study submitted to the Legislature.

The findings presented in this summary are intended to capture the breadth of the Task Force's discussion on the various topics presented. They do not imply consensus or agreement on all topics and are intended to demonstrate where Task Force members' perspectives differ. The variety of perspectives reflected in these findings will be considered by the Commission in its report on the Vehicle Weight Safety Study submitted to the Legislature.

1. Key Takeaways: California Vehicle Fleet Trends

The key takeaways for California Vehicle Fleet Trends are listed below:

1.1 The weight of new passenger vehicles manufactured since the 1980s has continued to increase.

1.2 Over the next decade, SUVs are expected to overtake sedans as the most registered type of vehicle in California. SUVs are the fastest growing vehicle type registered in both rural and urban counties.

1.3 While SUVs are smaller than they were in the past, the average SUVs are 27% heavier, 19% taller and have 42% higher ground clearance than the average sedan.

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1.4 Half of U.S. States have a weight-based fee for passenger vehicles for various purposes. California charges a weight fee for all commercial vehicles, which includes all pickup trucks (regardless of whether a pickup truck is registered for personal or commercial use).

1.5 The average size (curb weight, height, ground clearance) of registered pickup trucks is growing faster than any other vehicle type. The average pickup truck registered in California is 47% heavier, 26% taller, and has 59% higher ground clearance than the average sedan.

1.6 Pickup trucks are 50% more prevalent in rural counties than urban counties.

1.7 Vehicle owners in the United States are holding on to their vehicles longer (12.6 years in 2024 v. 10.4 years in 2008) lengthening the time of the adoption of new vehicles with more safety features.

1.8 Hybrid and electric vehicles are heavier than standard internal combustion engine vehicles, with electric vehicles being the heaviest of the three. Their share of registrations is small but increasing, with hybrids making up 6.5% of registrations and electric vehicles making up 5% of registrations.

Additional Task Force Feedback

Task Force members identified the following areas for further consideration:

- How federal safety regulations may have impacted vehicle weight and form over the past few decades.
- What factors contribute to Californians holding on to their vehicles for longer, how this might impact safety outcomes in different communities, and how this delays the adoption of safety features that might otherwise improve safety outcomes for vulnerable road users (such as advanced driver assistance systems) and whether a vehicle weight fee might increase the amount of time Californians hold on to their vehicles.
- Whether there are fewer smaller vehicles available to California consumers when compared to larger and heavier vehicles and what could be done to increase the supply and demand for smaller vehicles.
- In part, vehicle composition trends presented here are in response to changing consumer demands and mobility needs.

2. Key Takeaways: California Injury and Fatality Trends

The key takeaways for California Injury and Fatality Trends are listed below:

2.1 (a) Vehicle collisions resulting in fatalities and serious injuries of vulnerable road users have increased.

2.1 (b) Vehicle registrations in California show that vehicles purchased are increasingly heavier, taller, and higher.

2.1 (c) Sedans, SUVs, and pickups are all more frequently involved in crashes resulting in fatalities and serious injuries to pedestrians and bicyclists in both urban and rural areas. SUVs are the fastest growing vehicle type involved in crashes (197% ped, 171% bike) followed by sedans (183% ped, 171% bike) and pickup trucks (166% ped, 152% bike) (2010 – 2022).

2.1 (d) However, UC Berkeley's research only shows correlation between these factors, not causation. Vehicle weight could not be isolated amongst other factors that may have influenced a collision with a vulnerable road user.

- This is due to the challenge of isolating vehicle weight from other factors (i.e., speed, vehicle features such as curb height, other factors redacted or not captured from crash reports, and more) involved in crashes, as well as other data limitations.

2.2 In both urban and rural areas, the majority of pedestrian and bicyclist fatalities and serious injuries are caused by sedans, which are the most registered vehicle type in California.

2.3 When controlling for population, pedestrian fatalities and serious injuries are more common in urban than rural areas.

2.4 When controlling for population, bicyclist fatalities and serious injuries are more common in urban than rural areas.

2.5 Fatalities for pedestrians have increased 71% since 2010.

2.6 Fatalities for bicyclists have remained steady since 2010.

2.7 Serious injuries for pedestrians have increased 44% since 2010.

2.8 Serious injuries for bicyclists have increased 20% since 2010.

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2.9 Children pedestrians are 82% more likely to be killed if struck by a SUV versus a sedan.

2.10 When adjusting for population, pedestrian fatalities and serious injuries in disadvantaged areas are approximately 50% higher for all vehicle types.

2.11 Vehicle collisions involving pedestrians are more likely to occur at night and outside of intersections.

Additional Task Force Feedback

Task Force members identified the following areas for further consideration:

- How behaviors of both vulnerable road users and drivers, including speeding, inattention, impairment, and the unsafe use of in-vehicle entertainment contribute to collisions.
- Improve quality and scope of crash data in crash reporting and make more information available for similar studies such as whether a driver was distracted, impaired, how long since their license was renewed, the time of day of the collision, and other environmental and roadway conditions.
- Opportunities to further understand how many vulnerable road users interact with motor vehicles and the environment in which they interact (i.e., type of built environment, geographic location, etc.) to determine the possible risk to vulnerable road users.
- How California's vulnerable road user fatality and serious injury trends data compare to other states and other countries with stricter driving standards and whether California's driving regulations should be updated.
- How older vehicles may factor into collision trends presented, especially given that Californians hold on to their vehicles longer.
- How distractions and other behaviors exhibited by both drivers and vulnerable road users, current licensing standards, older vehicles, rideshare services, autonomous vehicles, and heavier hybrid electric and battery electric vehicles play into collision trends presented.
- How rideshare services and autonomous vehicles factor into collision trends presented.
- How effective are new National Highway Traffic Safety Administration (NHTSA) rulemaking, updates to the New Car Assessment Program, and more recent industry-wide standards aimed at improving safety outcomes for vulnerable road users when deployed in new vehicles.

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- How electric vehicles compare to vehicles with internal combustion engines, which are heavier regardless of vehicle type (i.e., sedan, SUV, etc.), and whether the increased weight of electric vehicles as well as other factors such as acceleration and braking may have a negative impact on safety outcomes of vulnerable road users.
- Based on the research presented, SUVs and trucks do not conclusively encounter more collisions with vulnerable road users. However, research from the Insurance Institute for Highway Safety shows that collisions between larger vehicles and vulnerable road users are significant and more likely to result in a fatalities and serious injuries for vulnerable road users.
- In addition to safety for vulnerable road users, it is important to ensure the safety of people inside vehicles.

3. Key Takeaways: Potential Regulatory Responses

The key takeaways for Potential Regulatory Responses are listed below:

3.1 The federal government regulates how vehicles are designed (e.g., the inclusion of turn signals, airbags, and automatic emergency braking) and leads the testing and rating of the safety of new passenger vehicles on the market.

3.2 States can regulate how vehicles are maintained and operated by individuals (e.g., wearing a seatbelt, Smog Checks, and speed limits) where not preempted by federal law or regulation.

3.3 In the United States, motor vehicle safety is regulated by Federal Motor Vehicle Safety Standards. Historically, the focus of these standards have been on improving safety advancements have tended to focus on the safety of vehicle occupants as opposed to those outside the vehicle. This regulatory context has evolved recently, with the Biden Administration identifying the safety of those outside the vehicle as a priority for testing.

3.4 Other similar countries require vehicle testing for pedestrian collision outcomes.

Additional Task Force Feedback

Task Force members identified the following areas for further consideration:

- Whether other states or countries have implemented stricter licensing requirements to operate larger passenger vehicles.

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- Whether there may be higher collision or severe injury risk for people outside of a motor vehicle related to drivers using less caution and over-relying on safety features when driving newer vehicles with those safety features.
- Whether the role of traffic enforcement, or lack thereof, influences the rate of serious injuries and fatalities of vulnerable road users.
- To what degree funding and jurisdictional challenges faced by local agencies influence safety improvements to the built environment to reduce fatalities and serious injury rates of vulnerable road users.
- Whether prioritizing improvements to various elements of the safe systems approach might be more effective at reducing fatalities and serious injuries of vulnerable road users compared to a fee-based approach.
- Whether data-driven infrastructure investment, improved driver licensing standards and education, improvements to traffic safety laws and enforcement can better address safety for all road users rather than a fee based on vehicle size.
- Consider high visibility enforcement to reduce vehicle speeds as a countermeasure to improve safety outcomes for vulnerable road users.
- Consider educational campaigns for drivers, pedestrians, bicyclists, and other vulnerable road users to improve safety outcomes.

4. Key Takeaways: Potential Built Environment Responses

The key takeaways for Potential Built Environment Responses are listed below:

4.1 The Safe System Approach aims to eliminate fatal and serious injuries for all road users by accommodating for human mistakes, taking a proactive approach to identifying and addressing risks, and promoting shared responsibility for road safety. The Safe System Approach creates redundant layers of protection by strengthening all elements of the system, including: all road users act in a safe manner, vehicles are designed and regulated to minimize crashes and harm for all road users, speeds are managed so impact forces experienced by road users are not beyond their physical tolerances, infrastructure and roadway design prioritizes safety for all road users, and expediency of post-crash care.

4.2 As part of the Safe System Approach, effective roadway design and infrastructure that prioritizes safety for all (e.g., roadway lighting, crosswalk enhancements, traffic calming measures, and separated bicyclist and pedestrian infrastructure) are associated with significant reductions in the risk and severity of crashes involving vulnerable road users.

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4.3 The primary barriers to implementing infrastructure improvements that improve safety for vulnerable road users include: limited funding availability, implementing projects at scale, and jurisdictional challenges.

4.4 Improvements to the built environment may result in and reveal inequities such as:

- Funding for local improvements is dependent largely upon the local tax base and regional formulaic funds, therefore improvements are more likely to occur in more affluent areas. However, improvements are also needed in low-income, rural, or areas where deaths, injuries, and worse health outcomes are more common due to the poor condition of the built environment.
- Investment in the built environment in less affluent areas could potentially accelerate gentrification and displacement.

Additional Task Force Feedback

Task Force members identified the following areas for further consideration:

- The role of land use in traffic safety.
- Understanding that mode deconfliction may be a more reliable infrastructure investment to improve safety outcomes for vulnerable road users.
- Consider comparing current roadway design practices and associated safety outcomes for vulnerable road users to identify areas where improvements to current roadway design practices could be made.

5. Key Takeaways: Vehicle Weight and Road Degradation

The key takeaways for Vehicle Weight and Road Degradation are listed below:

5.1 Passenger vehicles and smaller pickup trucks, including battery electric and fuel cell vehicles, have a very minor effect on pavement damage and rehabilitation costs - so much so that they are excluded from consideration from pavement damage calculations.

5.2 Road degradation changes exponentially (to the 4th power) with axle load. Compared to the 20,000 lb maximum legal single axle load (California), a 2,000 lb axle causes 0.01% of the damage, which is the approximate axle load distribution of both typical internal combustion engine and zero emission vehicles, a 5,000 lb axle causes 0.39% of the damage, which is the approximate axel load distribution of a heavier pickup truck and zero emission vehicle, a 10,000 lb load causes 6.25% of the damage, and a 25,000 lb load (not legal in California) causes 244% of the damage.

5.3 Incremental increases in passenger vehicle weight are not anticipated to have a significant impact on road degradation.

6. Key Takeaways: Potential Weight-Based Fee Responses

The key takeaways for Potential Weight-Based Fee Responses are listed below:

6.1 Local and regional government bodies are responsible for managing local roads and the built environment in which their road users interact and can contribute to local infrastructure improvements through local taxes and other funding sources.

6.2 According to UC Berkeley, weight-based passenger vehicle fees could be conceptualized through the following policy mechanisms;

- Passenger vehicle registration fees
- Passenger vehicle sales taxes
- Tolls
- Road usage charges
- Parking fees

6.3 If it were implemented, a weight-based passenger vehicle fee could be imposed as part of annual vehicle registration or to vehicle sales at the point-of-purchase.

6.4 Depending on the design of the fee, it could apply uniformly across all vehicles or assign differential fee amounts based on a variety of factors (e.g. class, weight, fuel type).

6.5 Fee exemptions could include professional occupation, income, fuel type, and other factors for the purposes of ensuring that a fee (if implemented) would be equitable and be in alignment with state priorities. However, further research could clarify how a weight-based passenger vehicle fee could adversely impact other user groups and other statewide goals not considered here.

6.6 Weight-based toll fees may be challenging to implement when compared to vehicle registration fee or a point-of-sale fee. This is due to federal limitations restricting the development and operation of toll facilities and the allowable expenditures of toll revenues. Currently no states impose weight-based toll fees.

6.7 A road usage charge developed to replace the state fuel excise tax could include considerations such as passenger vehicle weight, if such a program were implemented.

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6.8 To address the decrease in available parking due to the increase in average vehicle size and safety risks to vulnerable road users on local roads, local governments could enact weight-based parking fees (at the discretion of the local agency). Several U.S. cities either restrict parking permits to smaller vehicles or have implemented weight-based vehicle sticker fees.

6.9 There are potential equity impacts and positive and negative trade-offs associated with imposing a weight-based fee on heavier passenger vehicles. Positive outcomes could include incentivizing lighter weight vehicles and generating funding for improvements to infrastructure for vulnerable road users. Negative outcomes could include an increase in price for motor vehicles, particularly those that are heavier and may be required for larger families, for certain professions, or those with disabilities that cannot purchase a smaller, lighter weight vehicle.

6.10 Other states impose vehicle weight fees using various fee structures, weight classifications, and other variables (such as fuel type) to determine the fee amount.

6.11 In California, revenues from passenger vehicle registration fees are currently distributed to state agencies and local governments for the administration and operation of California's transportation system and to fund transportation infrastructure improvements.

Additional Task Force Feedback

Task Force members identified the following areas for further consideration:

- Task Force members provided different perspectives on whether the State should implement a passenger vehicle weight fee. Some Task Force members articulated a desire for more evidence linking specific vehicle features (e.g., vehicle weight, size, or hood design) to safety outcomes. Some Task Force members also expressed concerns about the cost burden given rising vehicle costs and the high cost of living in California. This is discussed in more detail in the key takeaways in Chapter 2, Section 6, above. Others noted the research evidence that larger vehicles that are involved in a collision are correlated with a higher severity of injuries and that waiting for additional research would delay important policy benefits. Despite these different perspectives, multiple Task Force members expressed the importance of investment in transportation infrastructure to promote safety for all users in all regions statewide including urban, suburban, and rural areas in response to current safety trends (see key takeaway 2.2 in Chapter 2, Section 2, above) if a passenger weight-based fee would be imposed.

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- Whether regulating or imposing a fee based on passenger vehicle weight is an effective way to improve safety outcomes for vulnerable road users. Other proxies might directly improve safety outcomes such as reducing roadway speeds, etc.
- If a passenger vehicle weight-based fee were implemented, some Task Force members indicated that revenues should be invested in projects that directly address the safety impacts of heavier vehicles and improve outcomes for vulnerable road users in all regions statewide as well as urban, rural, and suburban areas. Specifically, the fee should be a dedicated revenue stream used to fund safety projects which directly address improving safety for vulnerable road users (e.g., mode deconfliction, walking and bicycling facilities, and enhancing the built environment to reduce serious injuries and fatalities of road users). Examples of such programs include the Road Maintenance and Rehabilitation Account programs, the Active Transportation Program, the Office of Traffic Safety programs, or similar.
- Task Force members discussed policy approaches that would target unsafe driving behavior and monitoring the competency of those licensed to drive a passenger vehicle, particularly those operating heavier passenger vehicles.
- Given that the legislation directs the Task Force to study a vehicle weight fee, a member of the Task Force suggested that such a fee might better meet the legal definition of a tax. How a potential cost associated with vehicle weight is constructed legislatively will inform if it meets the legal requirements of a tax or a fee.
- Task force members noted that fee-based policy solutions could work by incentivizing smaller, lighter vehicles, disincentivizing larger, heavier vehicles, or doing both simultaneously. Relatedly, fee-based policy solutions could target different objectives, including changing California's fleet makeup or generating revenue for safety investment.
- Task Force member perspectives differ regarding whether advanced driver assistance systems and crash avoidance features in newer vehicles are effective in reducing fatalities and serious injuries amongst vulnerable road users. Furthermore, UC Berkeley cited various academic studies indicating a wide range in the efficacy of these features and that these features may be more effective for lighter than heavier vehicles.
- How other state or federal tax provisions may incentivize consumers to purchase heavier vehicles.
- Increased fees for passenger vehicles may be politically challenging to implement, particularly if they are large upfront costs.
- Although vehicle weight is an imperfect proxy for safety, policies to reduce vehicle weight may save lives.

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- A member of the Task Force suggested that additional information should be considered to determine potential challenges implementing a weight-based passenger vehicle fee on tolling facilities such as:
 - Equity impacts and limitations to the goals of some tolling facilities that incentivize high-occupancy vehicles. How would the additional fee impact heavier high-occupancy passenger vehicles such as vanpools and those that require heavier vehicles for certain professions.
 - Shift travel onto local roads, impacting local traffic patterns and congestion, local infrastructure, and fatalities and serious injury rates amongst vulnerable road users.
 - Associated tolling infrastructure and administrative costs.
 - Define the goal of weight-based tolling. There are few vulnerable road users on highways where tolling facilities exist and limitations to use of toll funds for safety improvements where vulnerable road users would see a benefit.
- Concern regarding decoupling a weight fee from commercial vehicle status and applying a fee based on other factors. Consider continuation of the existing commercial weight fee separate from a weight-based passenger vehicle fee since commercial vehicles having different uses compared to passenger vehicles.
- Whether a weight-based fee will further exacerbate the delay in adoption of newer vehicles (due to increased cost from a new weight-based fee), thus delaying adoption of vehicles with improved safety standards and whether this could result in an improvement in current vulnerable road user injury and fatality trends presented.
- Whether a weight-based fee added to a mileage-based road user charge (if implemented) may exacerbate the financial burden of those who have the longest commutes. Equity impacts may include higher fees on those who must travel long distances with heavier vehicles for work, family, or disability needs.

7. Key Takeaways: Consumer Behavior Response

The key takeaways for Consumer Behavior Response are listed below:

7.1 Modeling potential passenger vehicle weight fees suggests that the change in passenger vehicle purchase behavior would be dependent on the amount of the fee.

7.2 Revenue generated by the fee would also depend on the amount of the fee.

7.3 Depending on which vehicles are subject to a fee, there may be trade-offs between state priorities. Exemptions for certain vehicles could result in less revenue than uniform fees.

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7.4 If heavier vehicles become more expensive to purchase and/or operate, people may be encouraged to switch to lighter ones.

7.5 If fees only apply to new vehicles, then people may switch to used vehicles and/or keep their existing vehicles longer. This may change used car prices.

7.6 Vehicles are expensive and last a long time, so consumers may take many years to respond to new fees.

7.7 If a weight-based passenger vehicle fee were imposed, consumer choice may be impacted by the higher fees and consumers may be less willing to purchase heavier vehicles. This could result in less revenue than predicted, but a larger reduction in the weight of vehicles on the road.

7.8 A lower fee would likely have a less significant impact on purchase behavior and generate less revenue.

7.9 With a one-time vehicle weight fee for all new passenger vehicles above 3,800 lbs set between 0% and 20% of the purchase price of a new vehicle, on a sliding scale by weight, modeling suggests the following outcomes by 2040:

- Heaviest 10% of vehicle weights would decline 2.5%
- Mean weight of all vehicles on the road would decline 1.2%
- Number of large SUVs would decline by 17%
- Number of heavy and standard pickup trucks would decline by 10.5%
- Annual revenues of \$4.6 billion
- Number of electric vehicles would decline by 2.3%
- Number of plug-in hybrid vehicles would decline by 4.3%
- Exempting electric vehicles and plug-in hybrid vehicles in this scenario would result in increased numbers of those vehicle types, offsetting the projected decline in average passenger vehicle weight and also substantially reducing projected annual revenues
- The expected one-time cost to the consumer would be \$3,871 on average (based on the average MSRP of \$55,600 for a passenger vehicle in 2024), with the maximum fee of \$19,500 for the heaviest and most expensive passenger vehicle

Note: the DynaSim model uses current 2024 model year data only and results do not reflect actual outcomes. The information presented here is for illustrative purposes only and is not a specific policy proposal for consideration.

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7.10 With an annual vehicle weight fee for all registered passenger vehicles above 3,800 lbs set at \$.10/lb. (the approximate mean weight of all vehicles registered in 2024), modeling suggests the following outcomes by 2040:

- Mean weight of all vehicles on the road would decline 0.26%
- Number of large SUVs would decline by 4%
- Number of heavy and standard pickup trucks would decline by 3%
- Annual revenues of \$1.45 billion
- Number of electric vehicles would decline by 0.4%
- Number of plug-in hybrid vehicles would decline by 1%
- On an annual basis, the expected mean cost to the consumer would be \$77, with a maximum fee of \$390 for the heaviest and most expensive passenger vehicle

Note: the DynaSim model uses current 2024 model year data only and results do not reflect actual outcomes. The information presented here is for illustrative purposes only and is not a specific policy proposal for consideration.

7.11 While the two models cannot be directly compared, they suggest that consumers would have a stronger reaction to one-time point-of-sale fees for new vehicle purchases when compared to annual fees due to the perception that future costs (such as annual fees) may change and therefore are perceived as uncertain (hyperbolic discounting theory).

Additional Task Force Feedback

Task Force members identified the following areas for further consideration:

- Passenger vehicle weight fees might incentivize consumers holding on to older vehicles longer and delaying the purchase of newer vehicles, which are expected to have better safety technology features.
- Consider a revenue-neutral passenger vehicle weight fee on heavier vehicles, which could potentially decrease the weight of those vehicles over time and incentivize lighter vehicles.
- Consider a fee on higher weight passenger vehicles (with the possibility of differentiating the fee on heavier battery electric and hybrid electric vehicles). Revenues from the fee could be used as a rebate for the lowest weight passenger vehicles and forms of transportation that encourage mode shift including electric bicycles, transit, etc.
- Consumer behavior modeling analysis is limited and does not fully assess the potential safety and economic impacts. It is intended as a tool to understand potential consumer responses to policy changes.

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- Assess more detailed information about fee structures from other states that have imposed a passenger vehicle weight fee such as: vehicle features and capabilities such as but not limited to towing capacity.
- Assess programmatic goals and actual outcomes from other states that have imposed a passenger vehicle weight fee such as: the intent of the fee and what the fee revenues are used for, consumer behavior response, safety outcomes for vulnerable road users, how fees are being allocated, etc.
- Determine the goal or goals of California's passenger vehicle fee – whether that is to change purchasing behavior (i.e., reduce the weight of vehicles purchased), generate revenue to invest in improving safety outcomes for vulnerable road users, and/or other goals.
- Why consumers are choosing certain vehicles, including whether consumers know about the associated fees before they purchase a vehicle.
- Whether a passenger vehicle weight fee would have unintended impacts such as encouraging older vehicles to remain on the road longer, shifting vehicle registration to other states that either have a minor or no vehicle weight fee, or resulting in mode shift due to consumers opting not to own and drive vehicles.
- Consider incentives to encourage manufacturing and purchasing lower weight passenger vehicles rather than penalizing heavier vehicles with a fee.
- There are limits to how much automotive manufactures can reduce the weight of vehicles due to vehicle safety and fuel economy standards.
- Whether directing revenue from a weight fee to improve infrastructure and roadway safety for all road users will result in fewer collisions and make roadways safer.
- Applying weight fees to new vehicle sales will not address the current fleet, nor will they address behaviors exhibited by both drivers and vulnerable road users that may contribute to vulnerable road user injuries and fatalities trends presented.
- Given that the average price of a new vehicle now exceeds \$50,000, any increase in vehicle cost could disincentivize new vehicles purchases in California. This could hinder the state's efforts toward promoting adoption of battery electric vehicles and improving vehicle emissions standards, and delay adoption of features in newer vehicles that could reduce impacts to vulnerable road users such as advanced driver assistance systems and other crash avoidance features. Furthermore, the more exorbitant fee modeled could have an even more adverse impact on consumers.
- If a fee were based on the annual fee (nominal fee) modeled, it does not demonstrate that it will have any significant change on consumer demand. Both the annual fee and point-of-sale (one-time) fee do not demonstrate how it will improve safety outcomes for vulnerable road users.

SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

- Further study the impact of a vehicle weight fee levied at point-of sale (one-time fee) or annually as part of the schedule of registration fees on affordability, equity, and consumer choice. The structure and applicability of one-time or annual fees would need to be further defined. Whether a one-time fee be levied for each sales transaction, for vehicles coming out of state and/or only be applied to new vehicles. Whether the fee for vehicles imported into California would conflict with interstate commerce or taxed twice.
- Conduct an analysis regarding how, if at all, this fee would affect commercial or occupational fleets and whether those fleets pay existing commercial weight fees. Determine how a weight-based passenger fee would be separate from and/or overlap with the existing commercial vehicle weight fees.
- Assess safety outcomes for vulnerable road users and socio-economic impacts for both the proposed fee structure(s) and proposed fee mechanism(s) modeled.

III. OTHER TOPICS IDENTIFIED BY TASK FORCE MEMBERS FOR FURTHER CONSIDERATION

Other topics identified by Task Force members outside of the scope of UC Berkeley's research and the Task Force process are included below for further consideration in the Commission's report to the legislature.

Insurance: Task Force members discussed the topic of automobile insurance. Larger vehicles typically have higher insurance premiums, but because this information is proprietary, there is no shared understanding regarding how rates are determined and the average cost to insure a heavier vehicle more broadly.

Motor Vehicle Nonoccupant Safety Rating: Given the existing motor vehicle occupant safety standards and rating system, Task Force members discussed the pros and cons of developing a safety rating for both occupants of other motor vehicles and those outside of a motor vehicle. A nonoccupant safety rating may require that vehicles manufactured and sold are safer for those outside of a vehicle, whereas it could be difficult and costly to develop and run due to the difficulty identifying prevailing factors that contribute to collisions. We acknowledge that the National Highway Traffic Safety Administration has made strides to address this concern in its Final Decision Notice to add the Crashworthiness Pedestrian Protection Program to its New Car Assessment Program, with implementation postponed until 2027 model year vehicles are manufactured.

Perceptions of Safety: Task Force members discussed the topic of perceptions of safety. Task Force members wondered if the perception of vehicles becoming larger results in decreased feelings of safety for road users. Older adults, some of whom may be unable to drive, were brought up in this discussion.

APPENDICES

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Appendix A – Assembly Bill (AB) 251 (Ward, Chapter 320, Statutes of 2023) Government Code Section 14527.3

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Appendix B – Task Force Meeting Materials

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Appendix C – Task Force Supplementary Comments

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