

Vehicle Weight Safety Study (Assembly Bill 251) Draft Report to the Legislature

March 4, 2026



Agenda

- Legislative Requirements and Draft Report Development
- Draft Report Key Findings
- Feedback To-Date
- Draft Report Legislative Considerations
- Questions and Discussion
- Next Steps

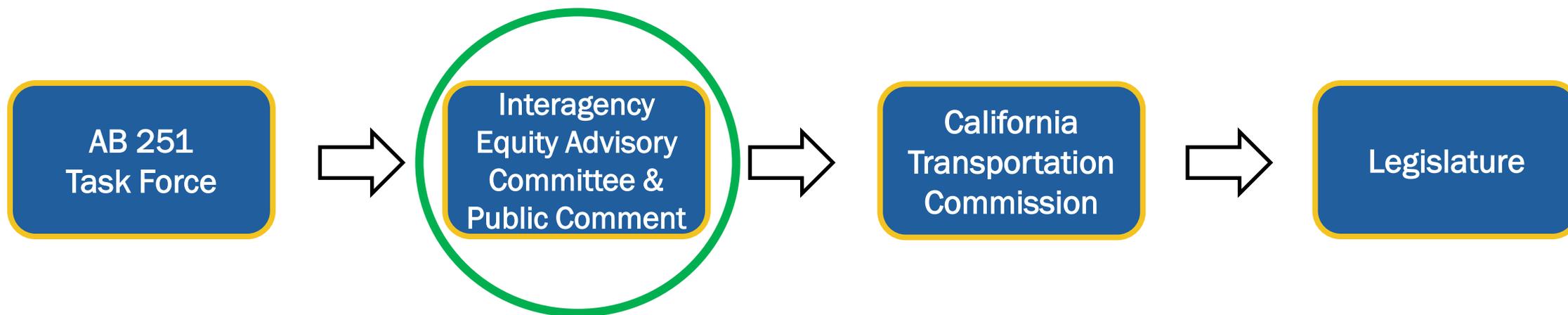
Legislative Requirements and Draft Report Development



Assembly Bill 251 Background

- AB 251 (Ward) requires the Commission to:
 - Convene a task force to study the relationship between vehicle weight and road user injuries and fatalities, and degradation of road infrastructure, equity considerations, and appropriate responses, including the potential costs and benefits of imposing a passenger vehicle weight fee.
 - Submit a report to the Legislature detailing the findings of the study and any legislative recommendations.

Process to Develop the Report to the Legislature



Task Force:

- Review research during 5 meetings
- Produce summary of findings

- *Planning and Program Guidance Subcommittee (EAC) presentation (Dec 12)*
- ***EAC Business Meeting Presentation (Today)***
- *Public comment period (Mar 2 – Apr 1)*
- *Draft report workshop (March 11)*

Commission Staff:

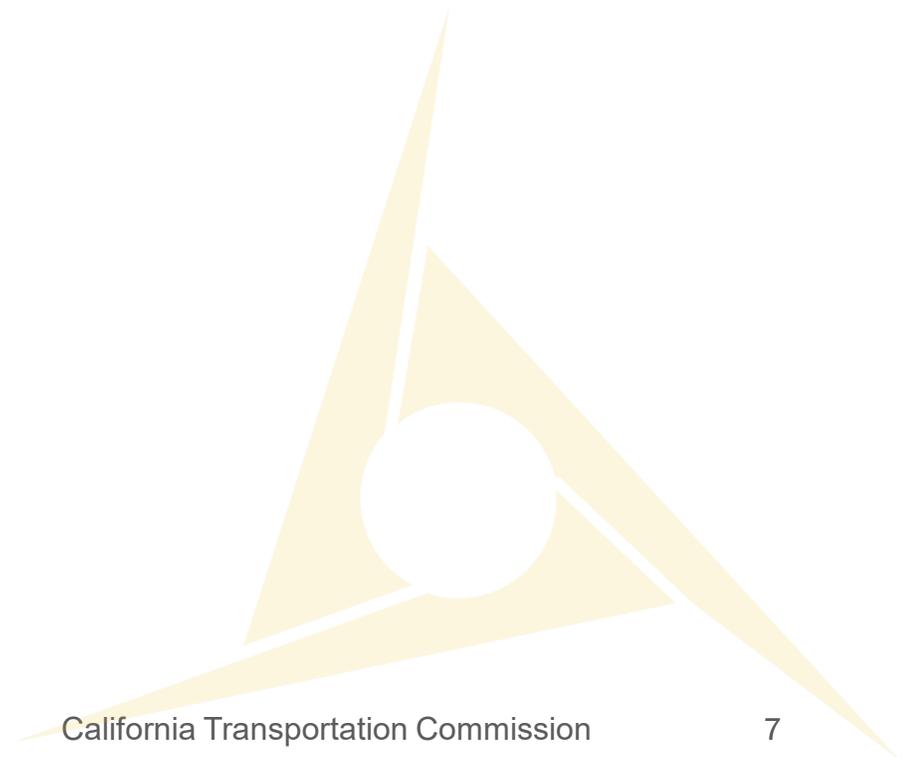
- *Finalize report to the Legislature based on public comment received*
- *Submit to Commission for approval and transmit to Legislature*

Draft Report: Report Overview

1. Introduction: Legislative background and study methodology
2. Academic Research Summary
3. Task Force Summary
4. Engagement and feedback (including EAC)
5. Draft Legislative Considerations

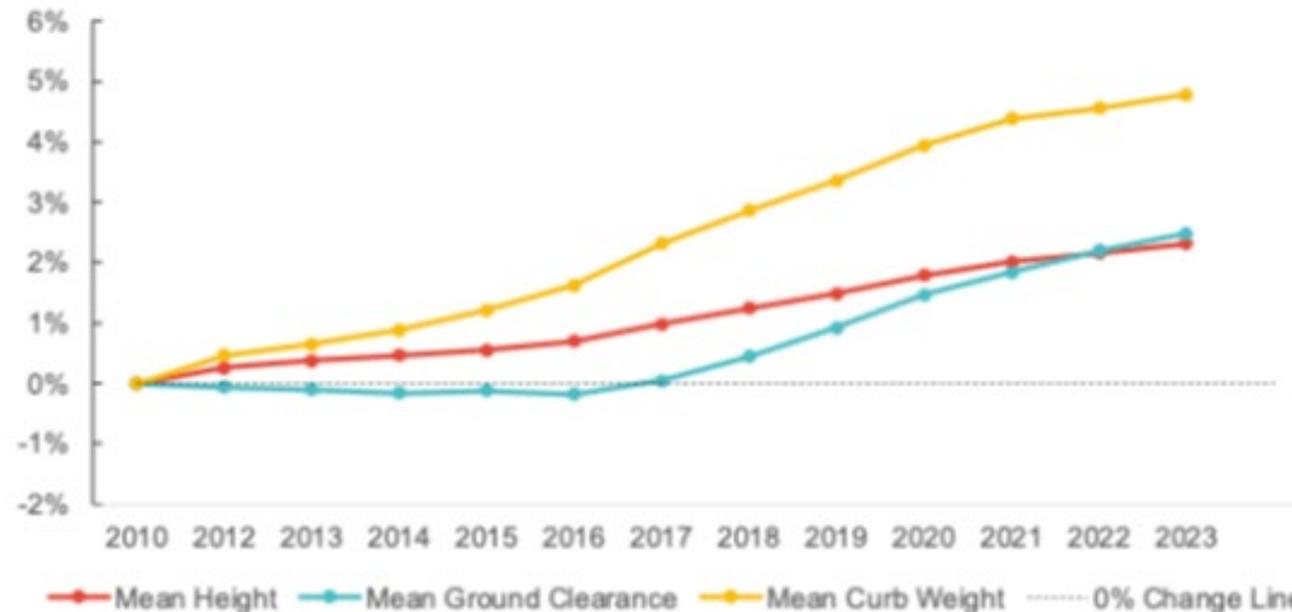
The Draft Report on the Commission's website and Attachment A of the agenda book item (Tab 6): <https://catc.ca.gov/programs/vehicle-weight-safety-study>

Draft Report Key Findings



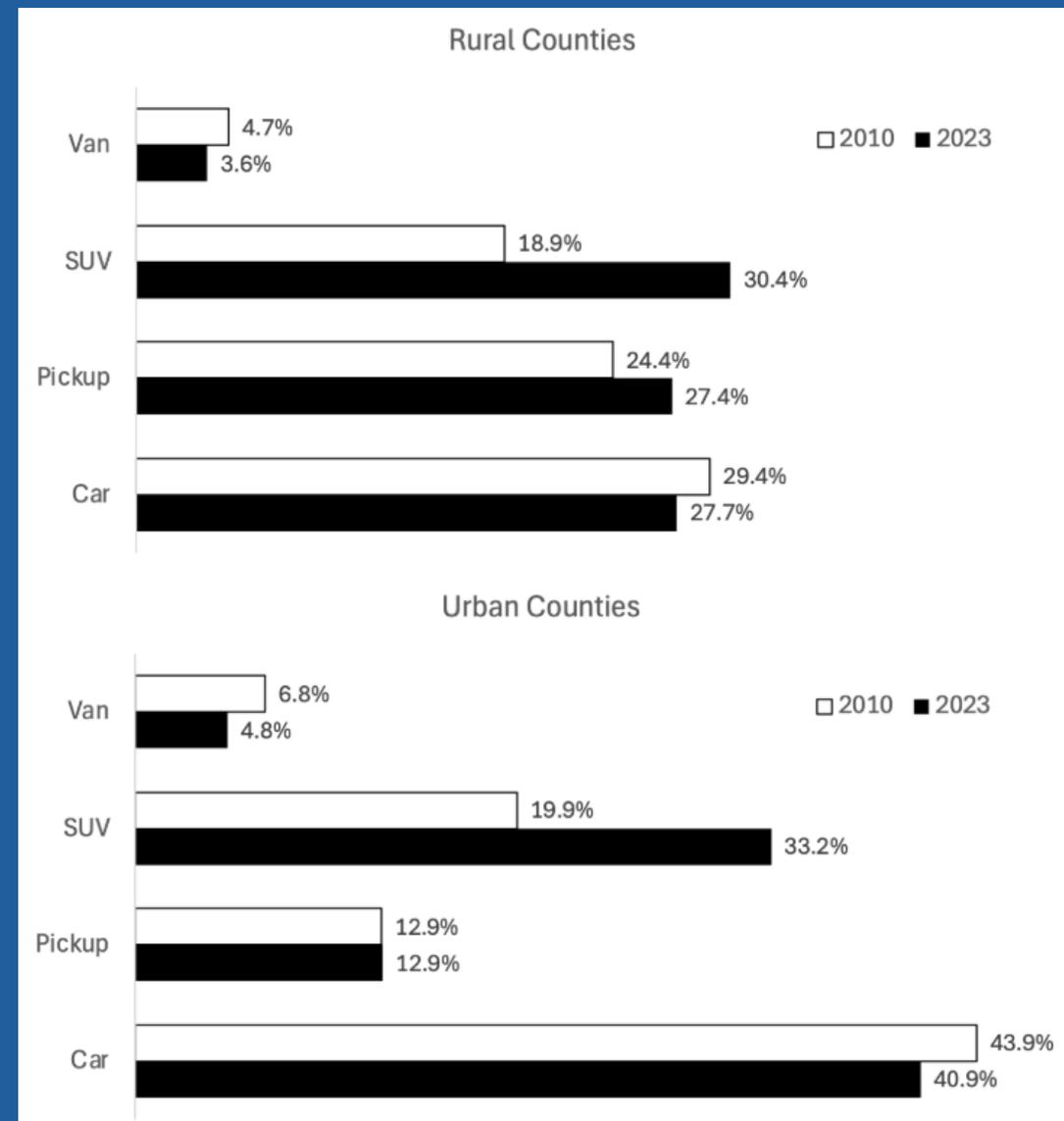
The size of passenger vehicles in the US has increased since the 1970s

- 1970s tailpipe emission standards partially incentivized production of larger vehicles.
- Production of sedans declined from 83.5% (1980) to 26.5% (2022).
- Americans hold onto their vehicles for an average of 12 years.



SUVs will soon be the most registered car in California

- Although sedans are still the most registered vehicle type in California, SUVs are the fastest growing vehicle type registered in California in urban and rural geographies.

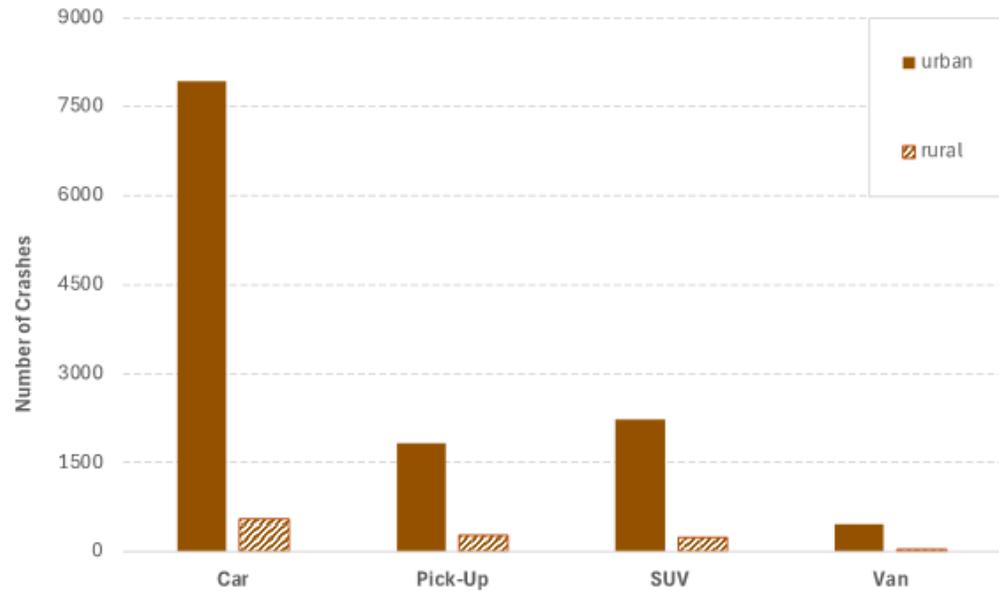


Bicyclist and pedestrian fatalities and serious injuries in California are increasing over time

- Sedans are the vehicle type most commonly involved in pedestrian and bicyclist fatal and serious injury crashes in all geographies, with the highest rates in urban areas.
- However, the share of pedestrian crashes involving an SUV is growing faster than all other vehicle types.
- Vehicle collisions trends with vulnerable road users from 2010 – 2022:

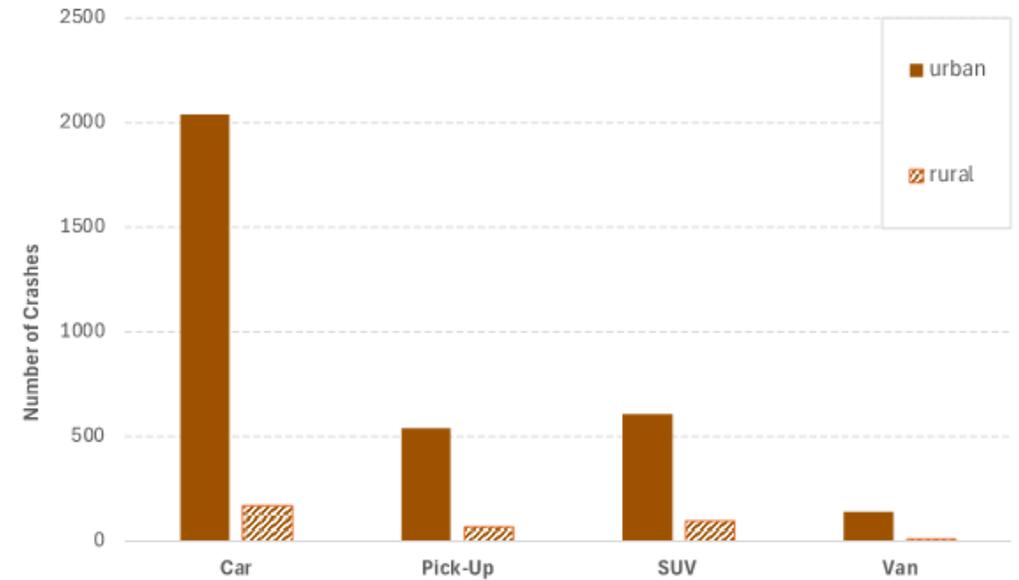
pedestrian fatalities +71% increase	pedestrian serious injuries +44% increase
bicyclist serious injuries +20% increase	bicyclist fatalities remain constant

Fatality or Serious Injury Crashes by Vehicle Type and Geography in California



Source: SWITRS 2018 - 2022, US DOT Equitable Transportation Community Explorer

Pedestrians



Source: SWITRS 2018 - 2022, US DOT Equitable Transportation Community Explorer

Bicyclists

Traffic fatalities impact youth and disadvantaged vulnerable road users most

- Traffic fatalities are the top cause of death for Californians aged 5 to 24.
 - 16% of these are vulnerable road users.
 - Child pedestrians are 82% more likely to be killed if struck by an SUV versus a sedan.
- Vulnerable road user crashes occurring in disadvantaged areas are nearly two-times as frequent compared to non-disadvantaged areas.
- Higher hood height causes higher fatality risk for vulnerable road users in a crash:
 - A blunt front-end hood height between 30-40 inches increased fatality risk by 26%.
 - Taller vehicles (sloped or blunt front-end) greater than 40 inches high increases fatality risk by 44%.

The federal government and states have different roles regulating passenger vehicles

- The federal government regulates vehicle design, which preempts state regulation.
- States have the authority to regulate and enforce how vehicles are purchased, maintained, and operated.
- Historically, Federal Motor Vehicle Safety Standards have focused on improving the safety of vehicle occupants as opposed to persons outside the vehicle.
- Countries similar to the U.S. require vehicle testing for pedestrian collision outcomes.

Vehicle regulations can have positive or negative effects on equity

- Vehicle design regulations may increase or decrease the equity of vehicle safety. If they apply to all vehicles, they may benefit all users. If they apply to only a subset of vehicles, there may be disparities in those who benefit such as those who can afford new vehicles and non-disadvantaged areas where more people buy newer vehicles.

Equitable investments in infrastructure and the Safe System Approach can reduce fatalities and serious injuries for all road users

- Risk and severity of crashes involving vulnerable road users could be reduced by emphasizing the safe system approach, effective roadway design, and investment in infrastructure.
- Barriers to infrastructure improvements that would benefit vulnerable road users include: limited funding, difficulty implementing projects at scale, and jurisdictional challenges.
- Inequities resulting from investments in the built environment may include less funding in disadvantaged or rural areas, and accelerated gentrification and displacement.

Vehicle fees can be assessed as an annual vehicle registration fee or as a one-time fee at the time of purchase (cont.)

- In California, some one-time taxes and fees are paid at point-of-sale or when transferring vehicle ownership for out of state purchases.
- California's sales tax is a uniform tax on the total purchase price of the vehicle (7.25%) plus an additional local sales tax of up to 2.5%.
- Other states determine tax rates based on vehicle characteristics. California could consider taxing vehicles based on characteristics such as vehicle weight.

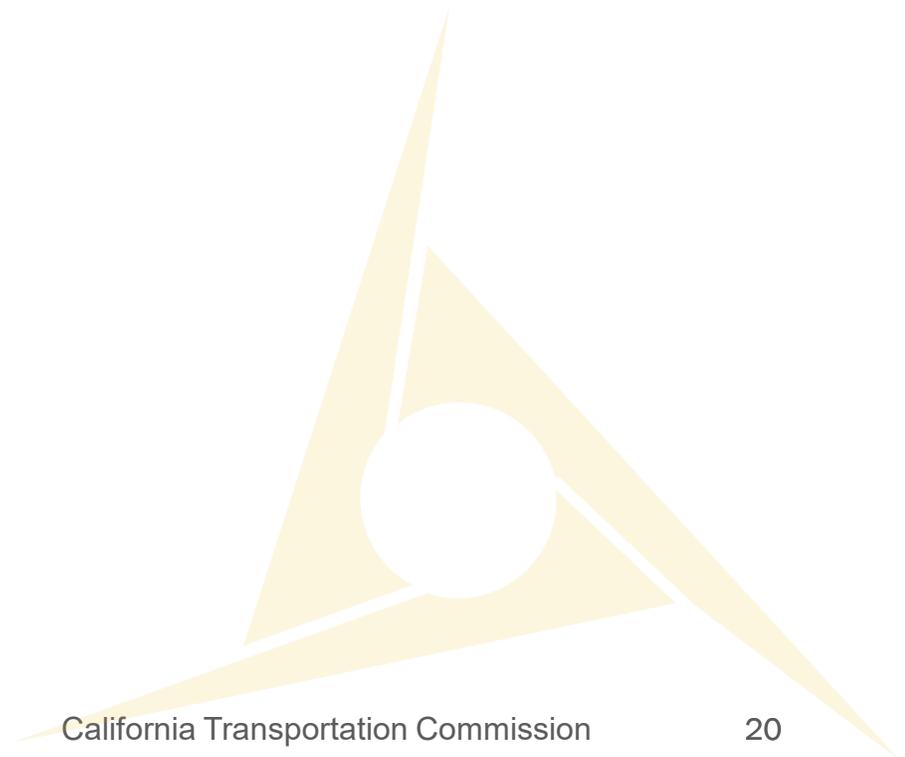
A higher weight-based sales tax could reduce purchase of heavier vehicles and generate more revenue compared to an annual registration fee

- A one-time weight-based fee (modeled at \$3,875) could reduce consumer demand for heavier weight vehicles across all fuel types and generate substantial revenue.
- Smaller weight-based annual registration fees (modeled at \$235) similar to other states (e.g., Texas, Maryland, others) would likely not reduce consumer demand for heavier passenger vehicles since the fee amount would be too low to influence consumer behavior.
- Any exemptions or discounts to a fee based on income, profession, disability, or for electric vehicles would generate less revenue.

Increasing passenger vehicle weight has little effect on roadway damage

- Axle loads and configurations, not gross vehicle weights, cause significantly more road degradation.
- Even the heaviest electric passenger vehicles or large pickups cause a negligible fraction (approximately 0.1%) of the damage caused by a fully loaded commercial freight truck.
- All passenger vehicles, including all fuel types (e.g. internal combustion engine, electric) are excluded from consideration in Caltrans' pavement damage calculations due to their negligible roadway damage compared to heavy commercial vehicles.

Feedback To-Date



Feedback from December 2025 Planning and Program Guidance Subcommittee of the EAC

“How will the report consider how to mitigate the effects of a fee for those who are disabled, low income, disadvantaged, other who may not be able to afford one more tax?”

Response: The Commission is not recommending a fee at this time. However, AB 251 does require an analysis of the equity considerations relating to different population groups in the state, including various demographic groups, regions, and persons with low incomes. The Draft Report outlines equity trade-offs of imposing a weight-based fee on heavier passenger vehicles if the Legislature were to implement one. The legislative considerations outline how undue cost burdens of a weight fee could be offset.

Feedback from December 2025 Planning and Program Guidance Subcommittee of the EAC

“Consider the design of vehicles, particularly larger vehicles, and the effect they have on road safety.”

Response: While AB 251 requires the Commission and the Task Force to study the relationship between vehicle weight and injuries and fatalities of vulnerable road users, the academic research found that all vehicle types have been and continue to grow in size (weight and height broadly). In particular, the larger the vehicle, the more likely that a crash will result in the fatality of vulnerable road users, particularly children.

Feedback from December 2025 Planning and Program Guidance Subcommittee of the EAC

“Why is there a lack of causal relationship between vehicle weight and serious injury trends meanwhile children pedestrians are more likely to be killed by an SUV?”

Response: A causal relationship could not be identified because vehicle weight could not be isolated from other factors in a collision with a vulnerable road user (such as speeding, roadway/weather conditions, distracted driving, and other road user behaviors).

However, the academic research does show that larger and heavier vehicles with higher and more blunt front ends transfer more kinetic energy in collisions and impact vulnerable road users with greater force, particularly shorter vulnerable road users (children in particular).

Feedback from December 2025 Planning and Program Guidance Subcommittee of the EAC

“Why is there an increasing trend in vulnerable road user injury and fatality rates?”

Response: The research did not identify vehicle weight as the sole factor causing increasing trends in fatalities and serious injuries of vulnerable road users. The academic research does explore other potential factors that could explain the increase trend in vulnerable road user injury and fatality trends (i.e., changes in driving behavior, speed, vehicle form factors, etc.).

Feedback from December 2025 Planning and Program Guidance Subcommittee of the EAC

“Have we gotten data at the national level to see what other states are doing regarding passenger vehicle weight and impacts to vulnerable road users, as well as a potential fee in response to these trends?”

Response: The academic research reviewed passenger vehicle and vulnerable road user trends at the national level and in the state of California. This includes weight-based fees that other states have imposed on passenger vehicles. This information was provided in slide 16 of this presentation.

Feedback from December 2025 Planning and Program Guidance Subcommittee of the EAC

“Will the report note whether the causes of accidents differ amongst geographic regions (i.e. rural versus urban areas)?”

Response: The academic research identified that sedans are the primary cause for pedestrian and bicyclist fatalities and serious injuries in both urban and rural areas. When controlling for population, fatalities and serious injuries are more likely to occur for pedestrians in rural areas with SUVs or pickup trucks (+10-40%).

Feedback from December 2025 Planning and Program Guidance Subcommittee of the EAC

“Consider roadway design and enforcement to improve safety for vulnerable road users.”

Response: While roadway design and enforcement were not identified as topics of study required by AB 251, Task Force members did discuss these topics and the draft report describes how the Legislature could consider a range of policy responses to enhance vulnerable road user safety.

Feedback from December 2025 Planning and Program Guidance Subcommittee of the EAC

“Will heavy-duty trucks be considered?”

Response: All pickup trucks, whether used for commercial or personal use, were considered in the study. However, the legislation specifically focuses on passenger vehicles, not heavy-duty vehicles (which already pay a commercial vehicle fee).

“Is one of the recommendations of the research that vehicle design testing should be done for pedestrian collisions (like in other countries)?”

Response: Yes, this is addressed in the legislative considerations described in the next part of our presentation today.

Feedback from December 2025 Planning and Program Guidance Subcommittee of the EAC

“What efforts have been made to coordinate with schools and consider safe routes to schools in this study?”

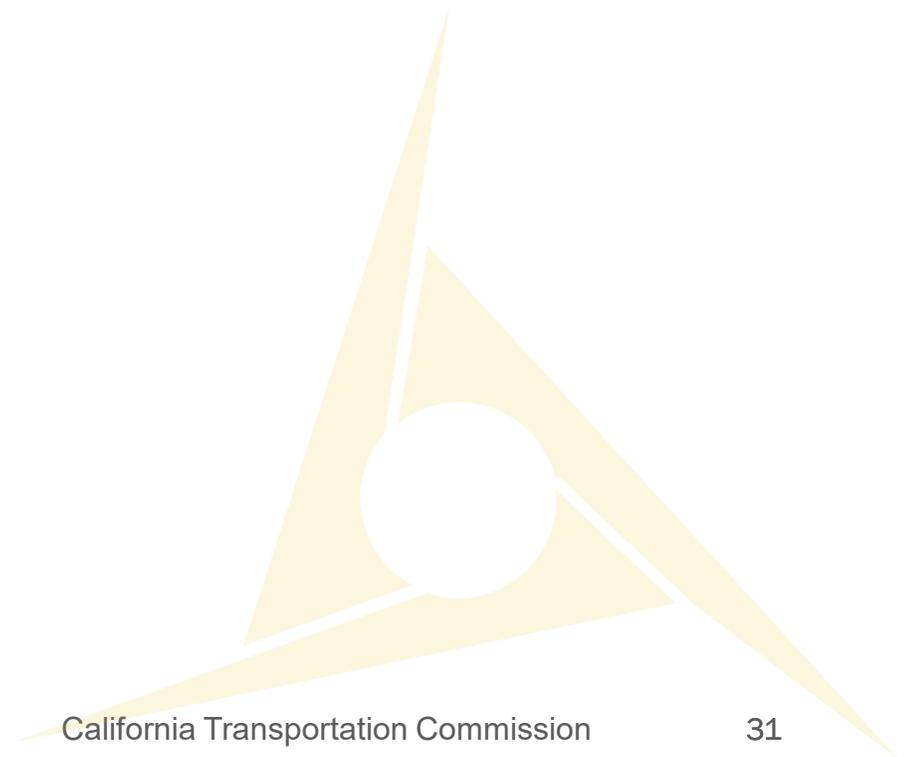
Response: In discussions with school staff who work on safe routes to schools efforts, infrastructure improvements have been identified as a top priority to address safety concerns (including infrastructure funding challenges, speeding vehicles, distracted driving, and e-bike safety).

Feedback from December 2025 Planning and Program Guidance Subcommittee of the EAC

“What consideration was given to consumers who may purchase heavier passenger vehicles (i.e., pickup trucks and SUVs) out of state to bypass a potential passenger weight-based fee?”

Response: This was discussed in the academic research and during Task Force meetings. Vehicles registered in California must pay all applicable taxes and fees.

Draft Legislative Considerations



Draft Report: Draft Legislative Considerations Overview

Potential Legislative Considerations:

- 1) Considerations for Weight-Based Fee for Passenger Vehicles
- 2) Motor Vehicle Nonoccupant Safety Assessment

Key Findings: Weight-Based Fee for Passenger Vehicles

- The report shows trends in growing vehicle size and weight and increases in vulnerable road user injuries and fatalities.
- Larger and heavier vehicles also transfer more kinetic energy in collisions and impact vulnerable road users with greater force.
- The research does not show a sole causal relationship between the two trends due to the difficulty in isolating vehicle weight from other crash factors (such as speeding, roadway/weather conditions, distracted driving, and other road user behaviors).
- Growing passenger vehicle weight is not expected to have a significant impact on roadway degradation.
- A passenger vehicle weight fee is unlikely to change consumer purchase behavior unless it were extremely large.

Draft Legislative Considerations: Weight-Based Fee for Passenger Vehicles

For the reasons listed in the previous slide, implementing a passenger vehicle weight fee is not being recommended at this time.

Draft Legislative Considerations: Weight-Based Fee for Passenger Vehicles

If the Legislature chooses to address these trends by imposing a passenger vehicle weight fee, it should consider:

- Calibrating the fee amount to differences in vehicle weight, while balancing against undue cost burdens for vehicle owners and administrative feasibility and cost.
 - Existing DMV programs and processes could potentially be leveraged to provide equity-based relief to vehicle owners (for example, using vehicle value or disabled person license plates as a factor in determining the fee amount).

Draft Legislative Considerations: Weight-Based Fee for Passenger Vehicles

If the Legislature chooses to address these trends by imposing a passenger vehicle weight fee, it should consider:

- Reinvesting revenues from a potential fee in existing programs that enhance roadway safety to provide benefits to all users, and vulnerable road users in particular, using the Safe System Approach (for example, the Active Transportation Program or programs focuses on behavioral factors, such as awareness campaigns and advertising).

Draft Legislative Considerations: Weight-Based Fee for Passenger Vehicles

If the Legislature chooses to address these trends by imposing a passenger vehicle weight fee, it should consider:

- Applying the fee annually at vehicle registration to minimize administrative costs.
- Setting a fee amount that accounts for engine type, to avoid disincentivizing adoption of zero-emission vehicles (e.g. battery electric and fuel cell vehicles), which tend to be heavier than internal combustion engine equivalents.

Draft Legislative Considerations: Weight-Based Fee for Passenger Vehicles

If the Legislature chooses to address these trends by imposing a passenger vehicle weight fee, it should consider:

- Considering a fee in the broader context of the state's need for a sustainable funding mechanism for transportation infrastructure, as described in the Commission's 2025 State and Local Transportation System Needs Assessment.
 - The Needs Assessment identifies a funding shortfall of \$215.7 billion over the next 10 years to adequately address California's transportation infrastructure needs, including bicycle and pedestrian facilities; local streets and roads; highways, bridges, and culverts; capital and operational needs of transit, commuter rail, and intercity rail systems; and costs related to system resiliency.
 - Developing a sustainable funding mechanism to comprehensively address this shortfall will allow for greater levels of investment in transportation infrastructure that enhances safety for users of all modes, including vulnerable road users.

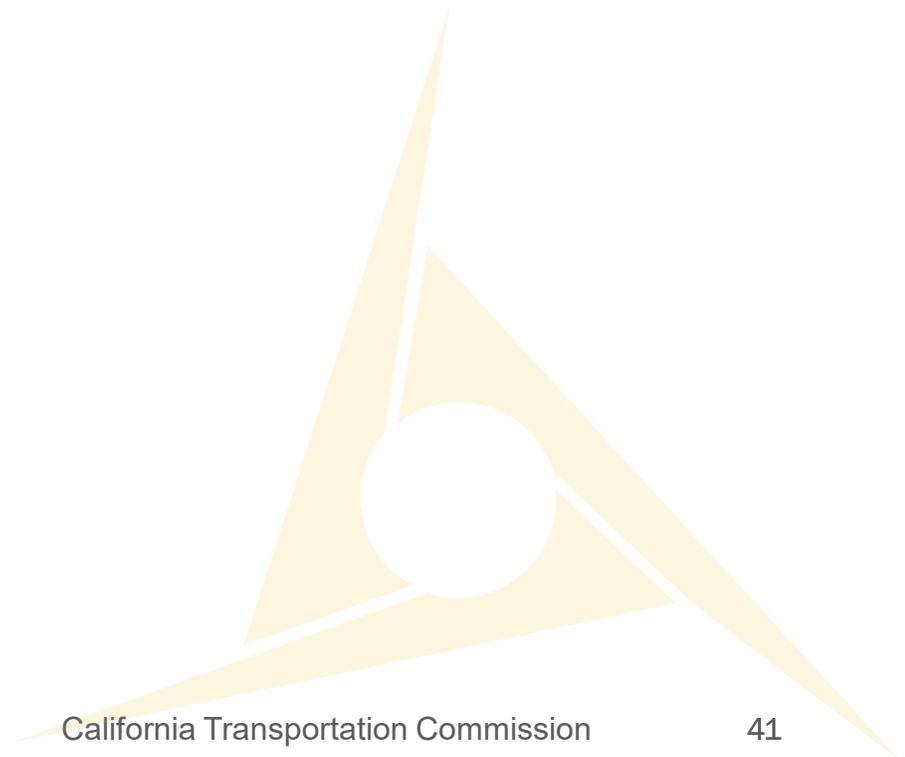
Key Findings: Motor Vehicle Nonoccupant Safety Assessment

- Historically, the focus of Federal Motor Vehicle Safety Standards (FMVSS) has been on improving safety of vehicle occupants as opposed to persons outside the vehicle. In contrast, countries similar to the United States require vehicle testing for pedestrian collision outcomes, such as the European New Car Assessment Programme.
- In addition to safety features mandated by FMVSS, the automotive industry has advanced integration of optional vehicle safety features, such as automatic emergency braking (AEB) preceding federal standards.

Draft Legislative Considerations: Motor Vehicle Nonoccupant Safety Assessment

- To provide more complete information to consumers about safety impacts to persons outside of a motor vehicle, **the Legislature could consider** establishing a voluntary motor vehicle safety rating program specific to vehicles sold in California that considers safety outcomes for occupants and nonoccupants, including vulnerable road users.
- This program could be administered through partnerships with private industry and the non-profit sector.
- Such a program would only apply to passenger vehicles with the intent of providing better information regarding safety features in passenger vehicles to potential buyers.
- Although administrative costs to implement such a program are unknown at this time, such a program should include appropriate incentives for manufacturers to choose to participate on a voluntary basis.

Questions & Feedback



Questions & Feedback

1. Do you have any questions or feedback on the information presented?
2. Do you have any questions or feedback on the legislative considerations?

Next Steps

- March 2 - April 1, 2026: Draft report public comment period. Submit comments to Cayla.mcdonell@catc.ca.gov
- March 11, 2026: Virtual Draft report workshop, 10am – 12pm PT ([register here](#))
- March 19-20, 2026: Draft report presented to the Commission
- Spring 2026: Final report presented to Commission for approval and transmittal to Legislature

Thank you

Cayla McDonell
Associate Deputy Director
Cayla.McDonell@catc.ca.gov

