

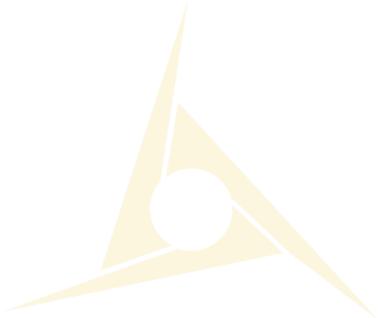
# Vehicle Weight Safety Study (Assembly Bill 251) Draft Report to the Legislature – Workshop

March 11, 2026



# WORKSHOP LOGISTICS

- Each attendee is registered with a unique webinar access link.
- **Do not** share your unique webinar link. It is associated with your individual registration and may result in access issues or confusion during the session.
- In the webinar control panel, there are two icons:
  - Use *Raise Hand* to make a public comment. Begin each comment by stating your name and organization.
  - Use *Q&A* to submit written comments. Commission staff will read the comment aloud during the meeting.



# Agenda

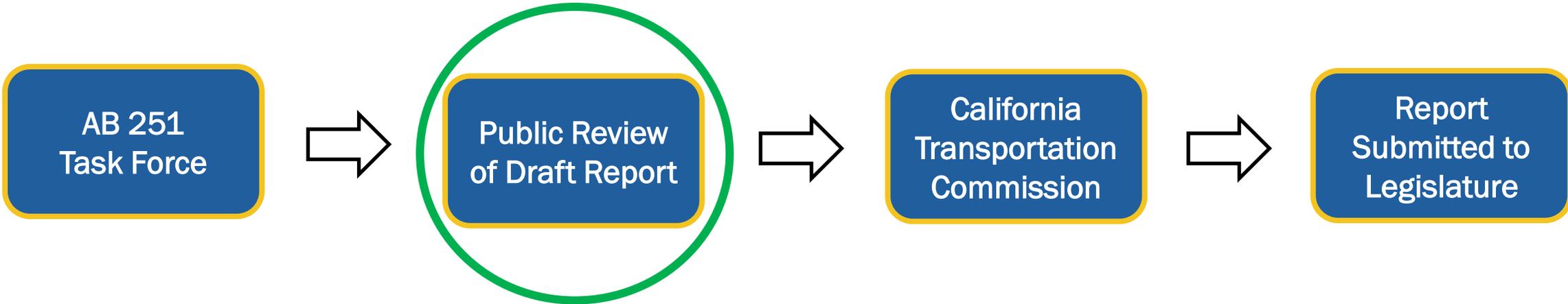
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- Draft Report Overview
- Draft Report Key Findings
  - Questions and Feedback
- Draft Report Legislative Considerations
  - Questions and Feedback
- Next Steps

# Draft Report Overview



# Process to Develop the Report to the Legislature



**Task Force Process:**

- *Review research during 5 meetings*
- *Produce summary of findings*

**Public Input on Draft Report:**

- *Public comment period (Mar 2 – Apr 1)*
- ***Public workshop (Today)***
- *Present draft report to EAC and Commission*

**Finalize Report to the Legislature:**

- *Finalize report based on public comments received.*
- *Submit to Commission for approval.*
- *Submit final report to Legislature.*

# Draft Report: Report Overview

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- 1. Introduction:** Legislative background, Study methodology, overview of draft legislative considerations
- 2. Academic Research:** Overview and summary of results
- 3. Task Force:** Legislative requirements, membership, process and key findings
- 4. Engagement and feedback:** Overview of engagement with the EAC, schools, stakeholders, and the public to develop the draft report
- 5. Draft Legislative Considerations**

## Assembly Bill 251 Background

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- Convene a task force, consisting 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 and prepare a report summarizing findings of the task force addressing the following topics:
  - 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.

## Assembly Bill 251 Background (cont'd)

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- Convene a task force and prepare a report summarizing findings of the task force addressing the following topics:
  - 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.

## Assembly Bill 251 Background (cont'd)

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- Consider the differences between internal combustion engines and zero-emission passenger vehicle weight, while considering existing incentives and environmental goals to promote zero-emission vehicle adoption.
- Submit a report to the Legislature detailing the findings of the study and any legislative recommendations.

# Passenger Vehicle Types and Average Weight

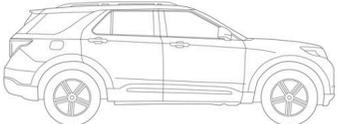
**SEDAN**

3,170 pounds



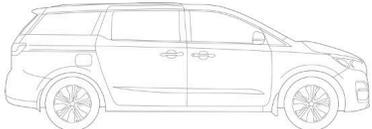
**SPORT-UTILITY VEHICLE  
(SUV)**

4,020 pounds



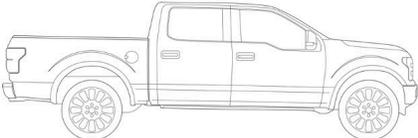
**VAN**

4,400 pounds



**PICKUP TRUCKS**

4,650 pounds



Data: California DMV, 2023

# Task Force Membership

Approved by the  
Commission in  
December 2024

\* Indicate  
required by  
AB 251

|    | ORGANIZATION                                   | TYPE                          |
|----|--|-------------------------------|
| 1  | California Office of Traffic Safety*           | State Agency                  |
| 2  | California Department of Motor Vehicles*       | State Agency                  |
| 3  | California Highway Patrol                      | State Agency                  |
| 4  | California City Transportation Initiative      | Local Agency Consortium       |
| 5  | California State Association of Counties       | Local Agency consortium       |
| 6  | Alliance for Automotive Innovation             | Automotive Industry           |
| 7  | California New Car Dealers Association         | Automotive Industry           |
| 8  | American Automobile Association (AAA)          | Automotive Industry           |
| 9  | Streets for All                                | Road User Safety Organization |
| 10 | American Association of Retired Persons (AARP) | Road User Safety Organization |
| 11 | Active San Gabriel Valley                      | Road User Safety Organization |
| 12 | National Federation of the Blind of California | Road User Safety Organization |
| 13 | Safe Streets Research                          | Research Organization         |
| 14 | California Farm Bureau                         | Business/Labor Organization   |
| 15 | United Contractors                             | Business/Labor Organization   |

# Task Force Process

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- 5 public Task Force meetings held in 2025
- Each Task Force Meeting included:
  - Presentation of UC Berkeley academic research (Appendix B of the Draft Report)
  - Task Force roundtable discussion of research key takeaways
  - Public comment
- Summary of Vehicle Weight Safety Study Task Force Findings produced (Appendix C of the Draft Report)

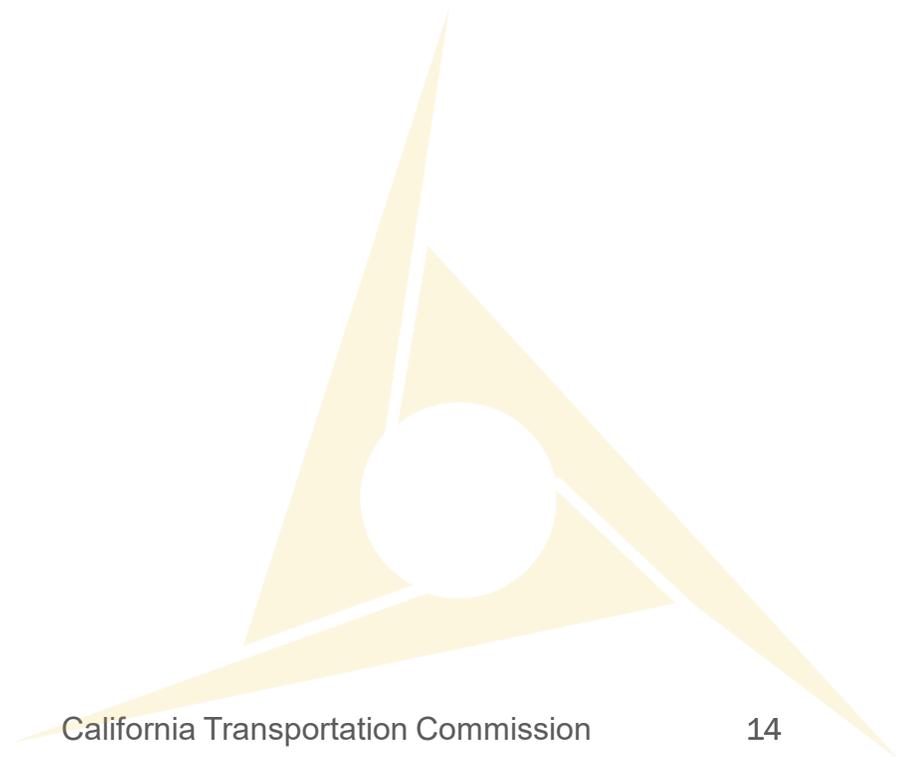
# Task Force Legislative Requirements

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**AB 251** requires the task force to cover the following topics:

- Relationship between passenger vehicle weight and vulnerable road user injuries and fatalities – *July Task Force Meeting*
- Relationship between passenger vehicle weight and degradation of road infrastructure – *September Task Force Meeting*
- How a fee might change driver behavior– *October Task Force Meeting*
- How to direct fee revenues to enhance road infrastructure that increases safety for vulnerable road users – *October Task Force Meeting*
- Equity considerations – *All Task Force Meetings*

# Draft Report Key Findings



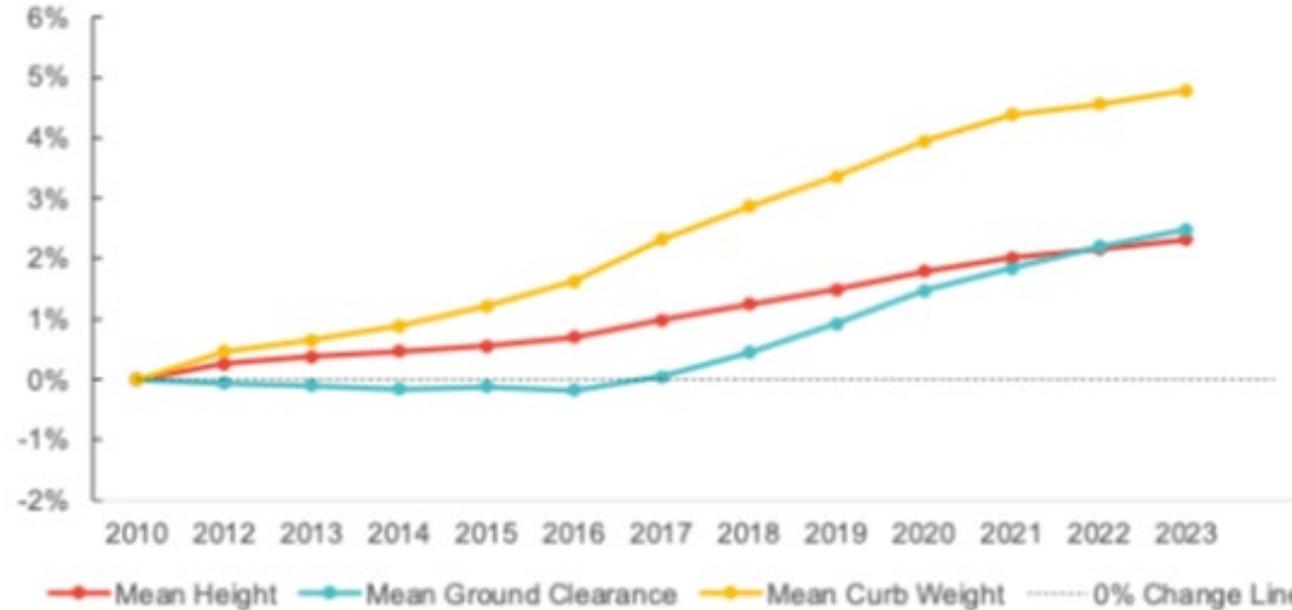
# Draft Report Key Findings

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- California was one of the first states to adopt the Safe System Approach as a policy mechanism to achieve zero fatalities and serious injuries by 2050. This is reflected in the California Transportation Plan 2050 and the State Highway System Management Plan, and further reinforced in the 2025 Joint Secretary's Policy on Road Safety (CalSTA and CalHHS).
- However, fatality and serious injury trends amongst vulnerable road users continue to trend upwards. In 2021, pedestrians accounted for 26% of all traffic deaths and bicyclist fatalities increased 32% from the previous year.
- In response to these trends, the Commission in its 2022 Annual Report recommended the Legislature authorize a study of how larger and heavier vehicles impact vulnerable road users, which was enacted in AB 251.

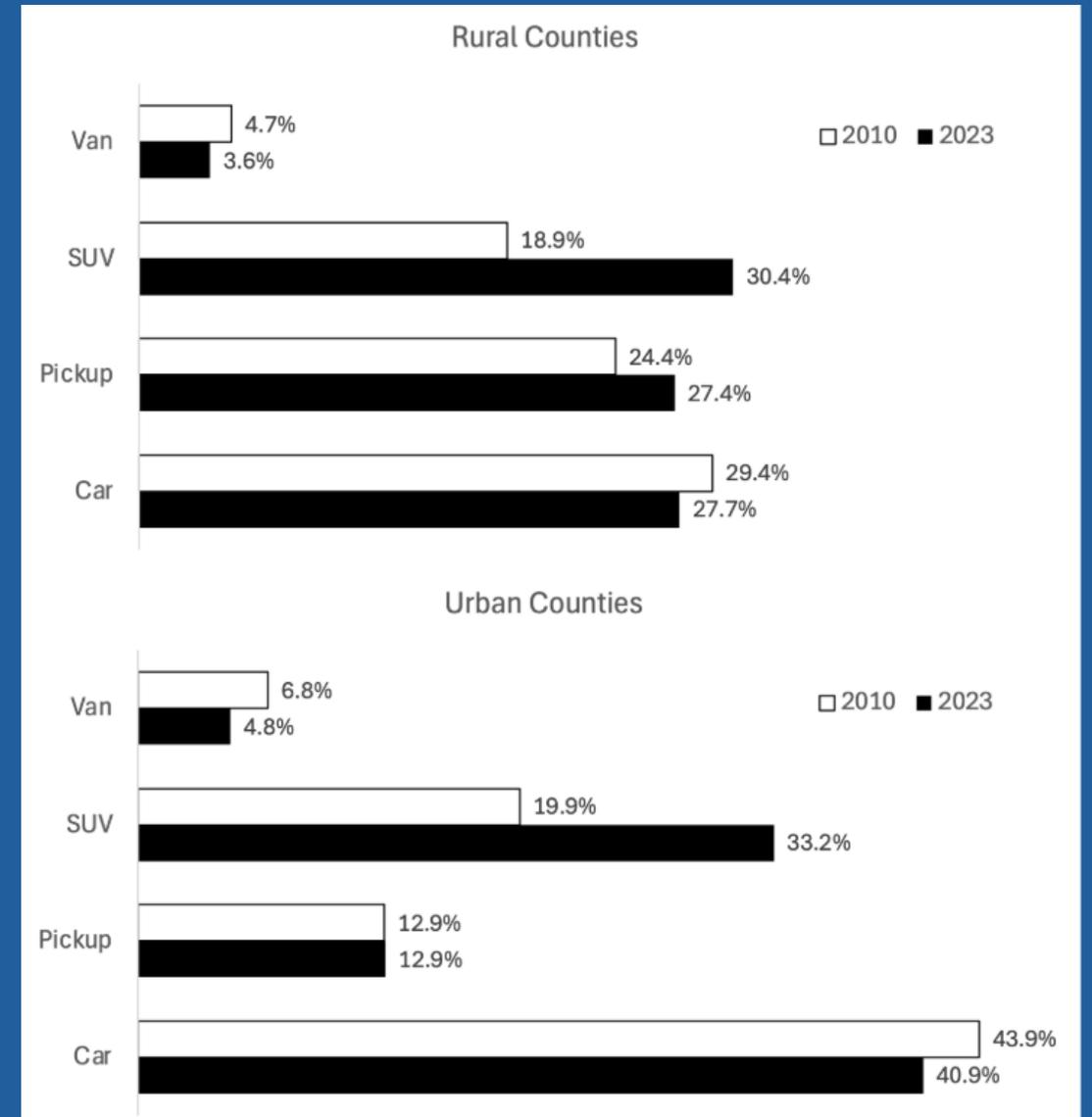
## The size of passenger vehicles in the US has increased since the 1970s

- 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.



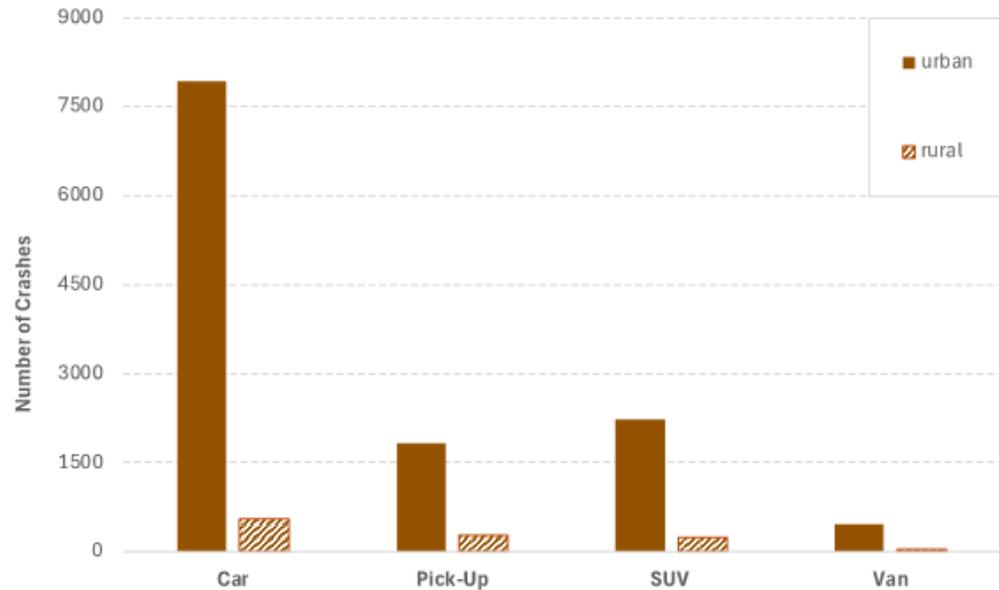
## Bicyclist and pedestrian fatalities and serious injuries in California are increasing over time

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- 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:

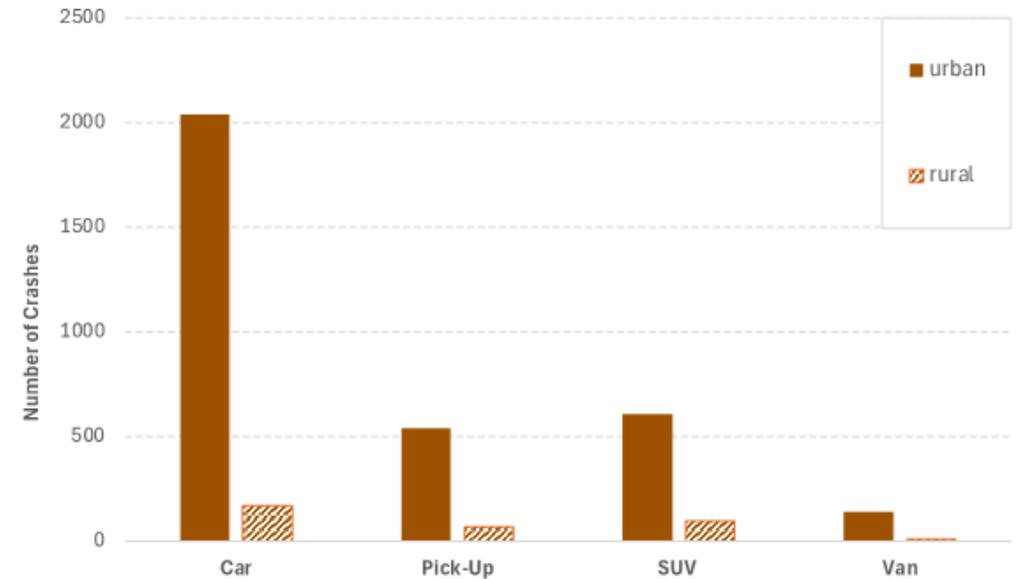
|   |  |
|---|--|
| pedestrian fatalities <b>+71% increase</b>      | pedestrian serious injuries <b>+44% increase</b> |
| bicyclist serious injuries <b>+20% increase</b> | bicyclist fatalities remain constant             |

# 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

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- 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

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- 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

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- 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

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- 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

- California collects annual vehicle fees using the vehicle's classification, age, value, and location. Revenues are distributed to government entities for specific purposes.
- California does not collect weight-based fees for most passenger vehicles, except for vehicles classified for commercial use.
- As of 2024, 25 states and Washington D.C. have vehicle registration fees tied to the vehicle's weight or size. Fee amounts differ from state to state.



States with Weight-based Fees for Passenger Vehicles, 2024

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

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- 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

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- 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

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- 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.

# Questions & Feedback on Report Findings

# Questions & Feedback on Report Findings

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Do you have any questions or feedback on the information presented so far?

# Draft Legislative Considerations



# Draft Report: Draft Legislative Considerations Overview

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## 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

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- 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 report also shows that a passenger vehicle weight fee is unlikely to change consumer purchase behavior unless it were extremely large.
- Although the research shows that growing vehicle size and weight are correlated with an increase in vulnerable road user injuries and fatalities, 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.

## Draft Legislative Considerations: Weight-Based Fee for Passenger Vehicles

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

# Draft Legislative Considerations: Weight-Based Fee for Passenger Vehicles

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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, depending on the Legislature's priorities (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

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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

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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

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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

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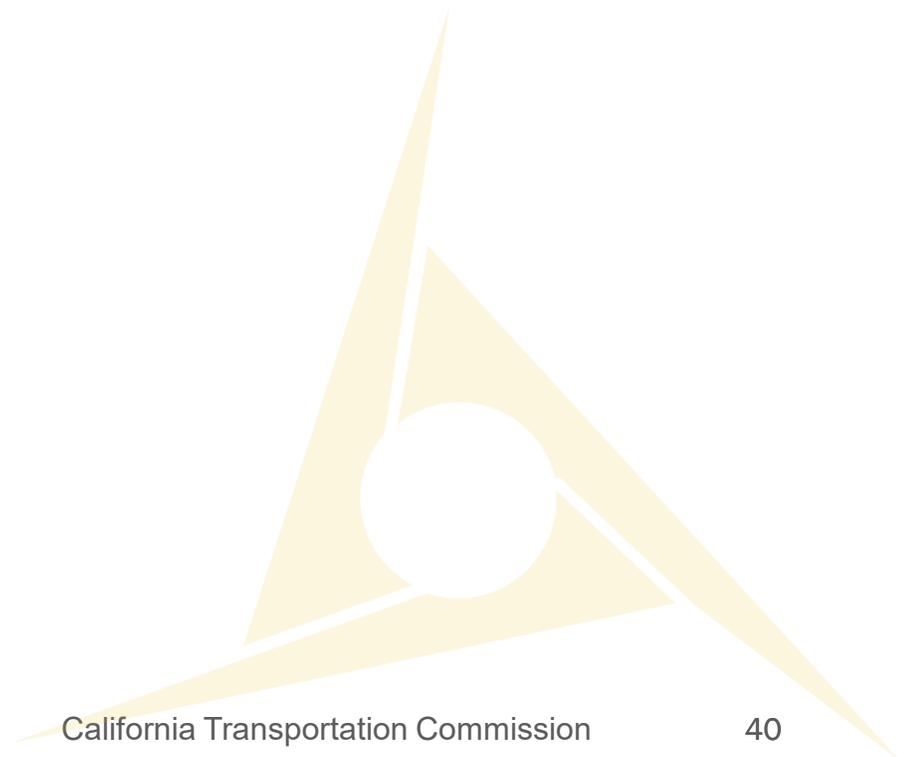
- Historically, the focus of Federal Motor Vehicle Safety Standards (FMVSS) has been on improving safety of vehicle occupants as opposed to persons outside the vehicle. In contrast, countries similar to the United States require vehicle testing for pedestrian collision outcomes, such as the European 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

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- 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 on Legislative Considerations



# Questions & Feedback on Legislative Considerations

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Do you have any questions or feedback on the legislative considerations?

## Next Steps

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- March 2 - April 1, 2026: Draft report public comment period
  - Draft report available here: [Vehicle Weight Safety Study \(Assembly Bill 251\) | CTC](#)
  - Submit comments by April 1 to [Cayla.mcdonell@catc.ca.gov](mailto:Cayla.mcdonell@catc.ca.gov)
- 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

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