



# SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

**FINAL**

November 19, 2025

# TABLE OF CONTENTS

<b>I. INTRODUCTION</b>	<b>3</b>
1. Background on Assembly Bill 251	3
2. About the Task Force	3
3. Purpose and Scope	5
<b>II. TASK FORCE FINDINGS</b>	<b>7</b>
1. Key Takeaways: California Vehicle Fleet Trends	7
2. Key Takeaways: California Injury and Fatality Trends	9
3. Key Takeaways: Potential Regulatory Responses	11
4. Key Takeaways: Potential Built Environment Responses	12
5. Key Takeaways: Vehicle Weight and Road Degradation	13
6. Key Takeaways: Potential Weight-Based Fee Responses	14
7. Key Takeaways: Consumer Behavior Response	17
<b>III. OTHER TOPICS IDENTIFIED BY TASK FORCE MEMBERS FOR FURTHER CONSIDERATION</b>	<b>22</b>
<b>IV. APPENDICES</b>	<b>23</b>
<b>APPENDIX A – ASSEMBLY BILL (AB) 251 (WARD, CHAPTER 320, STATUTES OF 2023) GOVERNMENT CODE SECTION 14527.3</b>	<b>24</b>
<b>APPENDIX B – TASK FORCE MEETING MATERIALS</b>	<b>25</b>
<b>APPENDIX C - TASK FORCE SUPPLEMENTARY COMMENTS</b>	<b>26</b>

# 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.

## SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

**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

## SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

### 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)

**SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS**

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.

## SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

**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.

## SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

**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.

## SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

- 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.

- 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.

## SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

**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.

## SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

**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.

## SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

- 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.

## SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

- 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.

## SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

**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.

## SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

**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.

## SUMMARY OF VEHICLE WEIGHT SAFETY STUDY TASK FORCE FINDINGS

- 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

<b>APPENDIX A – ASSEMBLY BILL (AB) 251 (WARD, CHAPTER 320, STATUTES OF 2023) GOVERNMENT CODE SECTION 14527.3</b>	<b>24</b>
<b>APPENDIX B – TASK FORCE MEETING MATERIALS</b>	<b>25</b>
<b>APPENDIX C - TASK FORCE SUPPLEMENTARY COMMENTS</b>	<b>26</b>

## Appendix A

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

(Page Intentionally Left Blank)

**Assembly Bill No. 251**

CHAPTER 320

An act to add and repeal Section 14527.3 of the Government Code, relating to the California Transportation Commission.

[Approved by Governor October 7, 2023. Filed with Secretary of State October 7, 2023.]

LEGISLATIVE COUNSEL'S DIGEST

AB 251, Ward. California Transportation Commission: vehicle weight safety study.

Existing law establishes the California Transportation Commission (CTC) to advise and assist the Secretary of Transportation and the Legislature in formulating and evaluating state policies and plans for transportation programs in the state. Existing law tasks the CTC with various transportation-related studies and reports to the Legislature.

This bill would require the CTC 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 to include consideration of vehicle weight. The bill would require the CTC, by no later than January 1, 2026, to prepare and submit a report to the Legislature, as specified.

*The people of the State of California do enact as follows:*

SECTION 1. Section 14527.3 is added to the Government Code, to read:

14527.3. (a) The commission shall convene a task force to study the relationship between vehicle weight and road user injuries and fatalities, and degradation of road infrastructure, and appropriate responses, including the potential costs and benefits of imposing a passenger vehicle weight fee to factor in passenger vehicle weight to offset unreasonable impacts.

(b) 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.

(c) The task force shall prepare a report summarizing its findings that includes the following topics:

(1) An analysis of the relationship between passenger vehicle weight and vulnerable road user injuries and fatalities.

(2) An analysis of the relationship between passenger vehicle weight and degradation of road infrastructure.

(3) A discussion of how a passenger vehicle weight fee may change driver behavior.

(4) 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.

(5) 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.

(d) The commission shall, in consultation with relevant agencies, take into consideration the differential weights of comparable zero-emission vehicles and internal combustion engine vehicles and the existing incentives and environmental goals to promote zero-emission vehicle adoption.

(e) The commission shall, by no later than January 1, 2026, prepare and submit a report to the Legislature detailing the findings of the study and including any legislative recommendations.

(f) The report required by this section shall be submitted in compliance with Section 9795.

(g) This section shall remain in effect only until January 1, 2027, and as of that date is repealed.

## Appendix B

### Task Force Meeting Materials

(Page Intentionally Left Blank)

# AGENDA

## CALIFORNIA TRANSPORTATION COMMISSION VEHICLE WEIGHT SAFETY STUDY TASK FORCE MEETING June 13, 2025

Friday, June 13, 2025

**11:00 AM Vehicle Weight Safety Study Task Force Meeting  
Sacramento Regional Transit District  
1102 Q Street  
Sacramento, California 95811  
4<sup>th</sup> Floor, Suite 4600, Boardroom**  
\*Option to join via Zoom or Teleconference, per SB 544

**To register to participate in the meeting remotely:**

[https://zoom.us/webinar/register/WN\\_0\\_rx-gMUT\\_mL6InG2cXD8Q](https://zoom.us/webinar/register/WN_0_rx-gMUT_mL6InG2cXD8Q)

**To join by phone:** (669) 900-9128

Webinar ID: 976 5531 0605 and Passcode: 832492

\*On September 22, 2023, Governor Newsom signed [SB 544](#). This legislation temporarily waives the Bagley-Keene Open Meeting Act requirement that locations of remote committee members be noticed on the agenda until January 1, 2026, if members of the public can also participate remotely.

**NOTICE:** We welcome comments from the public as a part of each item at this meeting. The Committee has the discretion to take up agenda items out of sequence. The Committee may adjourn earlier than estimated.

Unless otherwise noticed in the specified book item, a copy of this agenda, and related book items will be posted 10 calendar days prior to the meeting on the California Transportation Commission (Commission) Website: [www.catc.ca.gov](http://www.catc.ca.gov). Questions or inquiries about this meeting may be directed to the Commission staff at (916) 654-4245, 1120 N Street (MS-52), Sacramento, CA 95814. Committee staff will provide assistive services including translation and interpretation in multiple languages, real-time captioning, transcription, large print, digital audio and/or video recordings, as well as Committee meeting materials in an accessible format for the visually impaired. To obtain services or copies in one of these alternate formats or languages, please contact us at (916) 654-4245 or [ctc@catc.ca.gov](mailto:ctc@catc.ca.gov). Arrangements should be made as soon as possible but no later than at least five working days prior to the scheduled meeting.” (Las solicitudes de acomodación especial o servicios de interpretación deben hacerse tan pronto como sea posible o por lo menos cinco días antes de la reunión programada.)

Improper comments and disorderly conduct are not permitted. In the event that the meeting conducted by Commission staff is willfully interrupted or disrupted by a person or by a group so as to render the orderly conduct of the meeting infeasible, Commission staff may order the removal of those individuals who are willfully disrupting the meeting.

\*“A” denotes an “Action” item; “I” denotes an “Information” item.

For a glossary of frequently used terms and acronyms please visit the Commission website at: [https://catc.ca.gov/-/media/ctc-media/documents/about\\_ctc/acronyms-11-04-21-a11y.pdf](https://catc.ca.gov/-/media/ctc-media/documents/about_ctc/acronyms-11-04-21-a11y.pdf)

**NEXT REGULARLY SCHEDULED TASK FORCE MEETING (Subject to Change):  
Vehicle Weight Safety Study Task Force Meeting – July 2025**

**GENERAL BUSINESS**

Tab	Item Description	Presenter	Type*
1	Roll Call & Webinar Logistics	Justin Hall (CTC)	I
2	California Transportation Commission Executive Director Remarks & Welcome	Tanisha Taylor (CTC)	I

**INFORMATION ITEMS**

Tab	Item Description	Presenter	Type*
3	Overview of Task Force Process & Proposed Meeting Schedule	Cayla McDonell (CTC)	I
4	Roundtable Discussion on Task Force Member Perspectives	Cayla McDonell (CTC)	I

**OTHER MATTERS**

Tab	Item Description	Presenter	Type*
5	Public Comment	Cayla McDonell (CTC)	I

**ADJOURN**

# Memorandum

To: TASK FORCE MEMBERS

Vehicle Weight Safety Study  
Task Force Meeting:  
June 13, 2025

From: TANISHA TAYLOR, Executive Director

Reference Number: Tab 3, Information

Prepared By: Cayla McDonell  
Associate Deputy Director

Published Date: May 30, 2025

Subject: Overview of Task Force Process & Proposed Meeting Schedule

## **Summary:**

At its December 2024 meeting, the California Transportation Commission (Commission) approved membership for the Vehicle Weight Safety Study Task Force (Task Force) pursuant to Government Code Section 14527.3 and directed staff to convene meetings of the Task Force as necessary. A roster of Task Force members is included as Attachment A.

Commission staff intends to convene the Task Force on a monthly basis through October 2025 beginning with this kick-off meeting. During each meeting, Commission staff will present research findings from the University of California, Berkeley (UC Berkeley) and collect and summarize feedback from Task Force members and the public.

At the final Task Force meeting, a summary of findings from cumulative Task Force meetings will be compiled and submitted to the Commission for its consideration.

Commission staff will present an overview of the Task Force process and the proposed schedule of topics to be presented to the Task Force.

## **Background:**

Government Code Section 14527.3 requires the 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 that considers vehicle weight ([Assembly Bill 251](#), Ward, Chapter 320, Statutes of 2023). The Task Force is required to consist of state agencies, local transportation agencies, safety advocates, and representatives from the automobile industry.

Section 14527.3 requires the Task Force to prepare a report summarizing its findings on the following topics:

- 1) An analysis of the relationship between passenger vehicle weight and vulnerable road user injuries and fatalities.
- 2) An analysis of the relationship between passenger vehicle weight and degradation of road infrastructure.
- 3) A discussion of how a passenger vehicle weight fee may change driver behavior.
- 4) 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.
- 5) 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.

The Commission is required to report on the findings of the Task Force and provide any recommendations to the Legislature by January 1, 2026.

The Commission has contracted with UC Berkeley to compile relevant research literature, passenger vehicle data, and other sources, and summarize findings to inform the development of the Vehicle Weight Safety Study. UC Berkeley will report to the Task Force on the following topics:

- Trends in fatalities and serious injuries, particularly vulnerable road users in California
- Trends in vehicle registration and fleet composition
- Potential policy solutions to address road user injuries and fatalities
- Relationship between vehicle weight and road degradation
- Impacts of a potential vehicle weight fee on driver behavior
- Possible uses of potential vehicle weight fee revenues, particularly to enhance road infrastructure that increases safety for vulnerable road users
- An analysis of equity considerations (e.g., demographic, regional, income, and other considerations).

Attachments:

- Attachment A: Vehicle Weight Safety Study Task Force Member Roster

## Vehicle Weight Safety Study Task Force Member Roster

### State Agencies

1. California Office of Traffic Safety
2. California Department of Motor Vehicles
3. California Highway Patrol

### Local Agency Consortia

4. California City Transportation Initiative
5. California State Association of Counties

### Automotive Industry

6. Alliance for Automotive Innovation
7. California New Car Dealers Association
8. American Automobile Association (AAA)

### Road User Safety Organizations

9. Streets for All
10. American Association of Retired Persons (AARP) California
11. Active San Gabriel Valley
12. National Federation of the Blind of California

### Research Organization

13. Safe Streets Research

### Business and Labor Organizations

14. California Farm Bureau
15. United Contractors

# Vehicle Weight Safety Study Task Force Meeting

June 13, 2026



# AGENDA – June 13, 2025

---

## GENERAL BUSINESS

Tab	Item Description	Presenter	Type	Agency
1	Roll Call & Webinar Logistics	Dylan Jimenez	I	C
2	California Transportation Commission Executive Director Remarks	Tanisha Taylor	I	C

## INFORMATION ITEMS

3	Overview of Task Force Process & Proposed Meeting Schedule	Cayla McDonell	I	C
4	Roundtable Discussion on Task Force Member Perspectives	Cayla McDonell	I	C

## OTHER MATTERS

5	Public Comment	Cayla McDonell	I	C
---	----------------	----------------	---	---

# AGENDA – June 13, 2025

---

## GENERAL BUSINESS

Tab	Item Description	Presenter	Type	Agency
1	Roll Call & Webinar Logistics	Dylan Jimenez	I	C

# AGENDA – June 13, 2025

---

The Commission's meeting agenda is located on our website at [www.catc.ca.gov](http://www.catc.ca.gov).

All documents on the CTC website can be translated into any language you need. Simply e-mail us at [ctc@catc.ca.gov](mailto:ctc@catc.ca.gov) and we will have them returned to you as quickly as possible.

# AGENDA – June 13, 2025

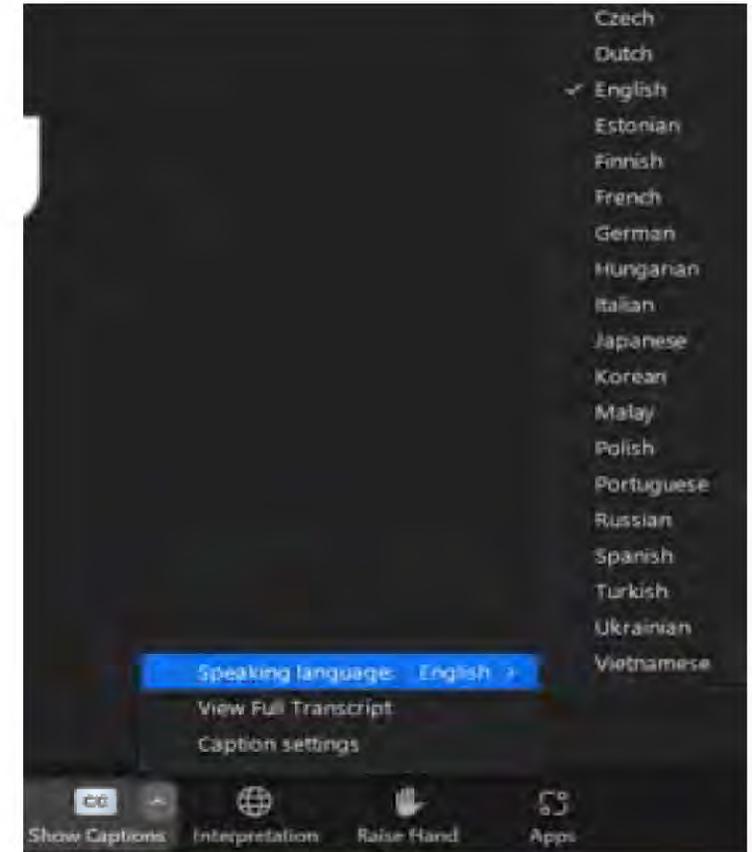
American Sign Language translations are being provided for this meeting. You can access these services through the interpretation tab at the bottom of the screen. You will need to select which translation service you need. Please use the Q&A tab if you have questions about this.



# AGENDA – June 13, 2025

---

Live closed captioning is also available. Please select the show captions tab at the bottom of your screen. There are a number of language options available there to choose from.



# AGENDA – June 13, 2025

---

## Presenters:

- ❖ If you are on the agenda to make a presentation, please do your best to be succinct.
- ❖ Please remember to speak at a steady pace to allow our translating service adequate time for accurate translations.
- ❖ If you are presenting remotely, we hope that you will turn on your camera during your presentation, if you have one.

# AGENDA – June 13, 2025

---

We welcome comments from the public as a part of each item at this meeting.

For those attending in person please submit a speaker slip to the clerk at the front of the room to let us know you want to comment on an item.

You should see the webinar control panel, likely located on the bottom of your screen. There you will find the Raise Hand and Q&A tabs.



We encourage you to use the raise hand feature as early into the item as you can to give the system time to acknowledge you.

Alternately, you may use the Q&A tab to submit your comment. Please be sure to include the agenda item number you are commenting on. Commission staff will read the comment on your behalf.

As a reminder, each registered attendee is provided a unique link and phone number to access the webinar. These should not be shared with other participants, as they are registered to a specific attendee and can create confusion for staff when making comments.

# AGENDA – June 13, 2025

---

## For all Meeting Attendees:

Please do your best to be concise.

Please make sure that your comments add new information. If you agree with the comments of a previous speaker, simply make that statement.

Please remember to speak at a steady pace to allow our translating services adequate time for accurate translations.

Since we often have many speakers, we ask that you make your point in 3 minutes or less. If, for some reason, we have many speakers on a topic, we reserve the right to limit comments to 1 minute if needed.

# AGENDA – June 13, 2025

---

## GENERAL BUSINESS

Tab	Item Description	Presenter	Type	Agency
1	Roll Call & Webinar Logistics	Dylan Jimenez	I	C

# AGENDA – June 13, 2025

---

## GENERAL BUSINESS

Tab	Item Description	Presenter	Type	Agency
2	California Transportation Commission Executive Director Remarks	Tanisha Taylor	I	C

# Task Force Membership

	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

# AGENDA – June 13, 2025

---

## GENERAL BUSINESS

Tab	Item Description	Presenter	Type	Agency
2	California Transportation Commission Executive Director Remarks	Tanisha Taylor	I	C

# AGENDA – June 13, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
3	Overview of Task Force Process & Proposed Meeting Schedule	Cayla McDonell	I	C

# Overview of Discussion

---

- About the study, UC Berkeley's academic research, and the Task Force (Tab 3)
- Timeline to develop the study (Tab 3)
- Timeline and content for Task Force meetings (Tab 3)
- Hear from you – Comments from Task Force Members and the Public (Tab 4)

# About the Vehicle Weight Safety Study

---

**Government Code Section 14527.3** (AB 251, Ward) directs the Commission to convene a task force to study the relationship between vehicle weight and:

- Injuries and fatalities to vulnerable road users;
- Degradation to roads;
- Cost-benefit analysis of imposing a fee based on vehicle weight; and,
- Equity considerations

# University of California Partnership

---

University of California is developing Vehicle Weight Safety Study Academic Report

The Academic Report will inform the discussion during Task Force meetings and the Commission's report to the Legislature

- Academic Report includes analysis on the following:
  - CA Fatalities and Serious Injuries Trends (UC Berkeley)
  - CA Vehicle Fleet Trends (UC Berkeley)
  - Vehicle Weight Policy Landscape (UC Berkeley)
  - Vehicle Weight and Road Degradation (UC Davis)
  - Vehicle Weight Fee and Consumer Behavior (UC Irvine)
  - Equity Considerations (UC Berkeley)

# UC Berkeley Study & Task Force Process

---

- Commission staff will use UC Berkeley's academic study report as a discussion point during Task Force meetings.
- Commission staff will create a summary of findings from each Task Force meeting and prepare a final findings report for adoption by the Task Force at the last meeting in October 2025.
- Both UC Berkeley's academic study and the findings report adopted by the Task Force will be used by Commission staff to develop the final report to the legislature.

# Vehicle Weight Safety Study Timeline

DATE	MILESTONE
Now – October 2025	Monthly Task Force meetings
October 2025	Task Force findings finalized
Late 2025	Staff presents Task Force findings to: <ul style="list-style-type: none"> <li>• Interagency Equity Advisory Committee; and,</li> <li>• California Transportation Commission</li> </ul>
Late 2025	Public workshop on draft report

# Vehicle Weight Safety Study Timeline Cont'd

DATE	MILESTONE
Late 2025 - Early 2026	California Transportation Commission staff prepare draft report based on: <ul style="list-style-type: none"> <li>• Task Force findings and,</li> <li>• UC Berkeley academic study</li> </ul>
Early 2026	Public review period of draft report prepared by California Transportation Commission staff
Early 2026	Staff presents draft report to: <ul style="list-style-type: none"> <li>• Interagency Equity Advisory Committee; and,</li> <li>• California Transportation Commission</li> </ul>
Spring 2026	Staff presents final report to California Transportation Commission for approval
Spring 2026	Final report submitted to the California Legislature

# Proposed Task Force Meetings Timeline & Topics

DATE	TENTATIVE TOPICS (SUBJECT TO CHANGE)
June 13, 2025	Kick-Off Task Force Meeting – <i>Thank you for being here!</i>
July 16, 2025	Trends in Vehicle Fleet & Trends in Road User Injuries and Fatalities
August 20, 2025	Impacts of Vehicle Weight on Road Degradation
September 9, 2025	Consumer Behavior & Potential Policy Responses
October 29, 2025	Finalize Task Force Findings

# AGENDA – June 13, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
3	Overview of Task Force Process & Proposed Meeting Schedule	Cayla McDonell	I	C

# AGENDA – June 13, 2025

---

**15 MIN BREAK**

# AGENDA – June 13, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
4	Roundtable Discussion on Task Force Member Perspectives	Cayla McDonell	I	C

# Questions:

---

- 1) What are the key factors the state should consider when evaluating potential policy solutions to improve safety for vulnerable road users?
- 2) What should the Commission and the State consider to ensure that equity is addressed in this study?
- 3) What perspective do you hope we take away at the conclusion of the Task Force meetings?

---

# Question 1:

What are the key factors the state should consider when evaluating potential policy solutions to improve safety for vulnerable road users?

---

# Question 2:

What should the Commission and the State consider to ensure that equity is addressed in this study?

---

# Question 3:

What perspective do you hope we take away at the conclusion of the Task Force meetings?

# Questions:

---

- 1) What are the key factors the state should consider when evaluating potential policy solutions to improve safety for vulnerable road users?
- 2) What should the Commission and the State consider to ensure that equity is addressed in this study?
- 3) What perspective do you hope we take away at the conclusion of the Task Force meetings?

# AGENDA – June 13, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
4	Roundtable Discussion on Task Force Member Perspectives	Cayla McDonell	I	C

# AGENDA – June 13, 2025

---

## OTHER MATTERS

Tab	Item Description	Presenter	Type	Agency
5	Public Comment	Cayla McDonell	I	C

# AGENDA – June 13, 2025

---

## OTHER MATTERS

Tab	Item Description	Presenter	Type	Agency
5	Public Comment	Cayla McDonell	I	C

# AGENDA – June 13, 2025

---

ADJOURN

Thank you

Cayla McDonell  
Associate Deputy Director  
[Cayla.McDonell@catc.ca.gov](mailto:Cayla.McDonell@catc.ca.gov)



# **AGENDA**

## **CALIFORNIA TRANSPORTATION COMMISSION VEHICLE WEIGHT SAFETY STUDY TASK FORCE MEETING July 16, 2025**

**Wednesday, July 16, 2025**

**11:00 AM Vehicle Weight Safety Study Task Force Meeting**

*\*Virtual via Zoom or Teleconference only, per SB 544*

**To register to participate in the meeting remotely:**

[https://zoom.us/webinar/register/WN\\_D6v7rTCbTeS4XKmsl2kb9g](https://zoom.us/webinar/register/WN_D6v7rTCbTeS4XKmsl2kb9g)

**To join by phone:** (669) 900-9128

Webinar ID: 955 6332 0769 and Passcode: 231742

\*On September 22, 2023, Governor Newsom signed [SB 544](#). This legislation temporarily waives the Bagley-Keene Open Meeting Act requirement that locations of remote committee members be noticed on the agenda until January 1, 2026, if members of the public can also participate remotely.

**NOTICE:** We welcome comments from the public as a part of each item at this meeting. Commission staff has the discretion to take up agenda items out of sequence. Commission staff may adjourn earlier than estimated.

Unless otherwise noticed in the specified book item, a copy of this agenda, and related book items will be posted 10 calendar days prior to the meeting on the California Transportation Commission (Commission) Website: [www.catc.ca.gov](http://www.catc.ca.gov). Questions or inquiries about this meeting may be directed to the Commission staff at (916) 654-4245, 1120 N Street (MS-52), Sacramento, CA 95814. Commission staff will provide assistive services including translation and interpretation in multiple languages, real-time captioning, transcription, large print, digital audio and/or video recordings, as well as Task Force meeting materials in an accessible format for the visually impaired. To obtain services or copies in one of these alternate formats or languages, please contact us at (916) 654-4245 or [ctc@catc.ca.gov](mailto:ctc@catc.ca.gov). Arrangements should be made as soon as possible but no later than at least five working days prior to the scheduled meeting.” (Las solicitudes de acomodación especial o servicios de interpretación deben hacerse tan pronto como sea posible o por lo menos cinco días antes de la reunión programada.)

Improper comments and disorderly conduct are not permitted. In the event that the meeting conducted by Commission staff is willfully interrupted or disrupted by a person or by a group so as to render the orderly conduct of the meeting infeasible, Commission staff may order the removal of those individuals who are willfully disrupting the meeting.

\*“A” denotes an “Action” item; “I” denotes an “Information” item.

For a glossary of frequently used terms and acronyms please visit the Commission website at: [https://catc.ca.gov/-/media/ctc-media/documents/about\\_ctc/acronyms-11-04-21-a11y.pdf](https://catc.ca.gov/-/media/ctc-media/documents/about_ctc/acronyms-11-04-21-a11y.pdf)

**NEXT REGULARLY SCHEDULED TASK FORCE MEETING (Subject to Change):  
Vehicle Weight Safety Study Task Force Meeting – August 20, 2025**

**GENERAL BUSINESS**

Tab	Item Description	Presenter	Type*
1	Roll Call & Webinar Logistics	Dylan Jimenez (CTC)	I

**INFORMATION ITEMS**

Tab	Item Description	Presenter	Type*
2	Summary of June 13 Task Force Meeting	Cayla McDonell (CTC)	I
3	Trends in Vehicle Fleet, Road User Injuries and Fatalities	Cayla McDonell (CTC) Matthew Raifman (UC Berkeley)	I
4	Roundtable Discussion with Task Force Members	Cayla McDonell (CTC)	I

**OTHER MATTERS**

Tab	Item Description	Presenter	Type*
5	Public Comment	Cayla McDonell (CTC)	I

**ADJOURN**

# Memorandum

**To:** TASK FORCE MEMBERS

**Vehicle Weight Safety Study  
Task Force Meeting:  
July 16, 2025**

**From:** TANISHA TAYLOR, Executive Director

**Reference Number:** Tab 2, Information

**Prepared By:** Cayla McDonell  
Associate Deputy Director

**Published Date:** July 2, 2025

**Subject:** Summary of June 13 Task Force Meeting

## **Summary:**

Pursuant to Government Code Section 14527, the first meeting of the Vehicle Weight Safety Study Task Force (Task Force) took place on June 13, 2025. California Transportation Commission (Commission) staff provided an overview of the legislative requirements for the Vehicle Weight Safety Study, the goals of the University of California, Berkeley academic report, the timeline to develop the Vehicle Weight Safety Study, and the timeline and tentative topics for future Task Force meetings.

The proposed meeting schedule for future Task Force meetings is as follows:

- **July 16, 2025:** Trends in Vehicle Fleet & Trends in Road User Injuries and Fatalities
- **August 20, 2025:** Impacts of Vehicle Weight on Road Degradation
- **September 9, 2025:** Consumer Behavior & Potential Policy Responses
- **October 29, 2025:** Finalize Task Force Findings

The Task Force meeting closed out with Task Force members and the public responding to three roundtable discussion questions. A summary of responses received for each discussion question is provided below:

**Question 1:** What are key factors the State should consider when evaluating potential policy solutions to improve safety for vulnerable road users?

## **Responses to Question 1:**

- National Federation of the Blind California (NFB): Sound and hearing are important for helping to navigate and move independently. Vehicles, including electric vehicles,

should make an audible sound while avoiding loud sounds that can disorient someone who is visually impaired.

- California City Transportation Initiative (CaCTI): The Task Force's focus should include modes beyond just pedestrians. The Task Force should consider how policy solutions can mitigate impacts of larger vehicles beyond infrastructure, for example with lower speed limits. Cities face pressure to take on more traffic enforcement and costs associated with traffic calming infrastructure improvements. While the state helps by providing funds to kick-start improvements, state agencies are often excluded from new requirements. For example, Caltrans right-of-way was excluded from the speed camera pilot bill, and DMV role in traffic enforcement could be strengthened. Would like to see the role of state agencies increase to help ease the role of the cities.
- Streets for All: The state should be considering infrastructure, technology, and regulatory solutions to address the vehicle weight safety issue. However, the Task Force should focus on addressing the requirements of the legislation.
- Alliance for Automotive Innovation: The automotive industry is making investments in crash avoidance and pedestrian safety. However, changes in vehicle fleet take time. Supportive of a safe system approach; safer roads and speeds and improving traffic safety awareness.
- American Automobile Association (AAA): A better understanding of safety data and statistics is needed. For example, it is important to know not just how heavy vehicles are and how many fatalities result from crashes, but also how many heavy vehicles are involved in fatalities. Additionally, it would be good to understand how effective vehicle safety features are at reducing fatalities and serious injuries of vulnerable road users.
- American Association of Retired Persons California (AARP): Older adults are particularly vulnerable. AARP members want to drive less, walk, and be active without worrying about vehicles potentially hitting them. As the number of active older adults increases, age becomes a major priority for potential solutions.
- California New Car Dealers Association (CNCDA): Generally there needs to be better solutions that improve the safety of vulnerable road users. Should consider how vehicle weight interplays with various factors to influence vehicle safety.
- United Contractors (UCONN): The Task Force should recognize the unique role of vehicles used by construction industry workers, which operate at jobs sites and in many other areas.

California Office of Traffic Safety (OTS): The Task Force should ensure that the definition of vulnerable road user is inclusive of those who bike, walk and roll. We should consider how to improve safety for vulnerable road users during future Task Force meetings, which should be informed by the research including potential factors that contribute to fatalities and series injuries and other negative safety outcomes as well as current fleet trends and what vehicles will look like in future years.

**Question 2:** What should the Commission and the State consider to ensure that equity is addressed in this Study?

**Responses to Question 2:**

- Streets for All: The population is living seven years past their ability to drive, so it is important to consider the aging population.
- AARP: Equity should be fully baked into the report and research, with a focus on what is affecting people now.
- NFB: Blind people and those with low vision don't qualify for driver's licenses, which highlights the importance of addressing fully autonomous vehicles, specifically how they are involved in fatalities and injuries of vulnerable road users.
- Alliance for Automotive Innovation: The Task Force should consider larger families who don't have other alternatives to larger vehicles in the equity analysis.

**Question 3:** What perspective do you hope we take away at the conclusion of the Task Force meetings?

**Responses to Question 3:**

- California Highway Patrol (CHP): CHP has a unique perspective on crashes and is looking forward to seeing how other Task Force members view crash data presented at future meetings.
- AAA: The Task Force should consider other factors that lead to collisions other than just vehicle weight, and there should be a clear path forward at the conclusion of the Task Force process.
- California State Association of Counties (CSAC): This issue is complex. There's the traditional way of approaching road improvements that cities manage. Then the other approach is to have vulnerable road users separated from the roadways. Roads are going to degrade faster as vehicle weights increase.
- Streets for All: Heavier vehicle weights result in greater degradation of the roadway and significant costs to repair them, the burden of which falls on cities and counties. It is an important perspective to keep in mind since the local governments are required to

maintain the roads while advocates are looking to improve roadways in an innovative manner, but there is a funding gap to address infrastructure. Alternative modes of transportation are used largely by underserved community members.

- AARP: When driving a larger vehicle, there is a responsibility to be safe. Driving is a privilege. Larger vehicle drivers need to be more aware of how their vehicle operates in a different way than a smaller vehicle would. Given the rising costs of insurance, should the Task Force consider insurance?
- NFB: Members are dependent on sounds in the environment to travel safely. Improvements that could serve those experiencing disabilities also serve the general public; the Task Force should consider that a minority view might be extremely beneficial to the larger audience, as in the case of using curb cuts.
- CaCTI: What effect do larger vehicle weights and sizes have on the transportation system? In order to get closer to achieving a safe system approach, other issues with the greater transportation system must also be addressed. Additionally, there is a lot of variability in the age and rate of wear on existing infrastructure. The Task Force should take into account the effort to rebuild existing degraded infrastructure.
- OTS: Need to understand the underlying context of the trends that are driving fatalities and severe injuries of vulnerable road users. How are we holistically addressing the traffic safety problems of the entire transportation system?
- Alliance for Automotive Innovation: Task Force can collectively learn from each other and looks forward to future discussions.

Additionally, the California State Transportation Agency indicated that a safe system approach is grounded in science and a mechanical approach to crashes. For example, if the mass of vehicles is increasing, potential solutions should attempt to decrease the impact on a human body.

The feedback provided by Task Force members and the public will inform future Task Force presentations and findings.

# Memorandum

**To:** TASK FORCE MEMBERS

**Vehicle Weight Safety Study  
Task Force Meeting:  
July 16, 2025**

**From:** TANISHA TAYLOR, Executive Director

**Reference Number:** Tab 3, Information

**Prepared By:** Cayla McDonell  
Associate Deputy Director

**Published Date:** July 2, 2025

**Subject:** Trends in Vehicle Fleet, Road User Injuries and Fatalities

## **Summary:**

During this July 16 Task Force meeting, the California Transportation Commission (Commission) and University of California, Berkeley (UC Berkeley) staff will present UC Berkeley's research on National and California-level trends in vehicle registration and fleet composition and trends in fatalities and serious injuries in California, particularly vulnerable road users. Questions will be asked during and after the presentation. The draft summary of UC Berkeley's research will be posted on the [Vehicle Weight Safety Study website](#).

Commission staff intends to convene the Task Force on a monthly basis through October 2025. During each meeting, staff will present research findings from UC Berkeley and collect and summarize feedback from Task Force members and the public.

## **Background:**

Government Code Section 14527.3 requires the 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 that considers vehicle weight ([Assembly Bill 251](#), Ward, Chapter 320, Statutes of 2023).

The Commission has contracted with UC Berkeley to compile relevant research literature, passenger vehicle data, and other sources, and summarize findings to inform the development of the Vehicle Weight Safety Study. UC Berkeley will report to the Task Force on the following topics:

- Trends in vehicle registration and fleet composition
- Trends in fatalities and serious injuries, particularly vulnerable road users in California
- Potential policy solutions to address road user injuries and fatalities
- Relationship between vehicle weight and road degradation
- Impacts of a potential vehicle weight fee on driver behavior
- Possible uses of potential vehicle weight fee revenues, particularly to enhance road infrastructure that increases safety for vulnerable road users
- An analysis of equity considerations (e.g., demographic, regional, income, and other considerations).

# Vehicle Weight Safety Study Task Force Meeting

July 16, 2025



# AGENDA – July 16, 2025

Tab	Item Description	Presenter	Type	Agency
<b>GENERAL BUSINESS</b>				
1	Roll Call & Webinar Logistics	Dylan Jimenez (CTC)	I	C
<b>INFORMATION ITEMS</b>				
2	Summary of June 13 Task Force Meeting	Cayla McDonell (CTC)	I	C
3	Trends in Vehicle Fleet, Road User Injuries and Fatalities	Cayla McDonell (CTC) Matthew Raifman (UC Berkeley)	I	C
4	Roundtable Discussion with Task Force Members	Cayla McDonell (CTC)	I	C
<b>OTHER MATTERS</b>				
5	Public Comment	Cayla McDonell	I	C

# AGENDA – July 16, 2025

---

## GENERAL BUSINESS

Tab	Item Description	Presenter	Type	Agency
1	Roll Call & Webinar Logistics	Dylan Jimenez	I	C

## AGENDA – July 16, 2025

---

The Commission's meeting agenda is located on our website at [www.catc.ca.gov](http://www.catc.ca.gov).

All documents on the CTC website can be translated into any language you need. Simply e-mail us at [ctc@catc.ca.gov](mailto:ctc@catc.ca.gov) and we will have them returned to you as quickly as possible.

## AGENDA – July 16, 2025

---

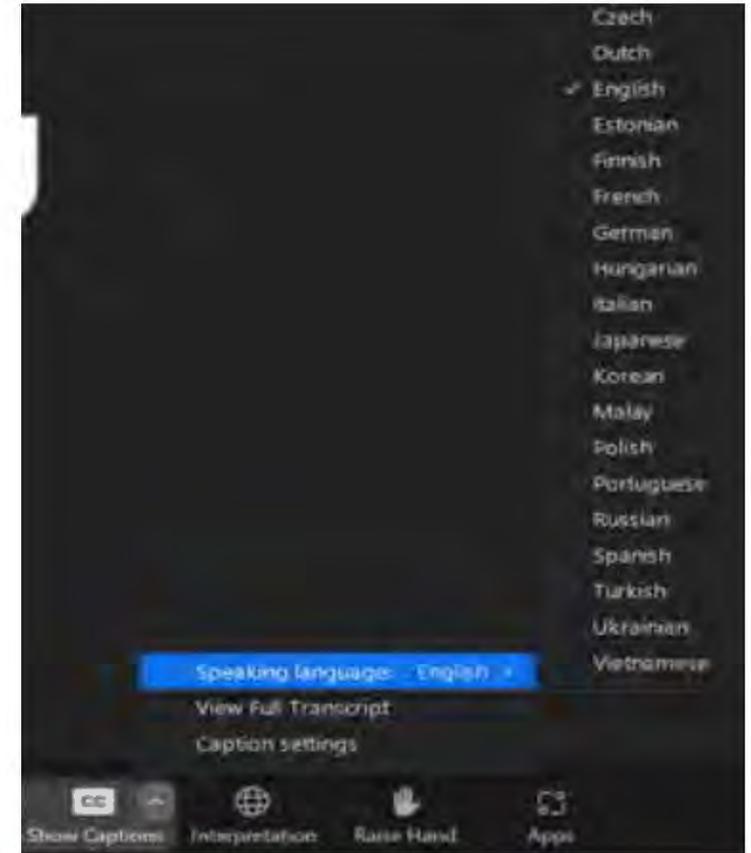
American Sign Language translations are being provided for this meeting. You can access these services through the interpretation tab at the bottom of the screen. You will need to select which translation service you need. Please use the Q&A tab if you have questions about this.



# AGENDA – July 16, 2025

---

Live closed captioning is also available. Please select the show captions tab at the bottom of your screen. There are a number of language options available there to choose from.



# AGENDA – July 16, 2025

---

## Presenters:

- ❖ If you are on the agenda to make a presentation, please do your best to be succinct.
- ❖ Please remember to speak at a steady pace to allow our translating service adequate time for accurate translations.
- ❖ If you are presenting remotely, we hope that you will turn on your camera during your presentation, if you have one.

# AGENDA – July 16, 2025

---

We welcome comments from the public as a part of each item at this meeting.

For those attending in person please submit a speaker slip to the clerk at the front of the room to let us know you want to comment on an item.

You should see the webinar control panel, likely located on the bottom of your screen. There you will find the Raise Hand and Q&A tabs.



We encourage you to use the raise hand feature as early into the item as you can to give the system time to acknowledge you.

Alternately, you may use the Q&A tab to submit your comment. Please be sure to include the agenda item number you are commenting on. Commission staff will read the comment on your behalf.

As a reminder, each registered attendee is provided a unique link and phone number to access the webinar. These should not be shared with other participants, as they are registered to a specific attendee and can create confusion for staff when making comments.

# AGENDA – July 16, 2025

---

## For all Meeting Attendees:

Please do your best to be concise.

Please make sure that your comments add new information. If you agree with the comments of a previous speaker, simply make that statement.

Please remember to speak at a steady pace to allow our translating services adequate time for accurate translations.

Since we often have many speakers, we ask that you make your point in 3 minutes or less. If, for some reason, we have many speakers on a topic, we reserve the right to limit comments to 1 minute if needed.

# AGENDA – July 16, 2025

---

## GENERAL BUSINESS

Tab	Item Description	Presenter	Type	Agency
1	Roll Call & Webinar Logistics	Dylan Jimenez	I	C

# AGENDA – July 16, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
2	Summary of June 13 Task Force Meeting	Cayla McDonell	I	C

# AGENDA – July 16, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
2	Summary of June 13 Task Force Meeting	Cayla McDonell	I	C

# AGENDA – July 16, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
3	Trends in Vehicle Fleet, Road User Injuries and Fatalities	Cayla McDonell Matthew Raifman	I	C

# Trends in Road User Injuries and Vehicle Fleet Characteristics

Vehicle Weight Safety Study Academic Report

## Today's Agenda

---

	Summary of trends in passenger vehicle size
	Current vehicle weight fee landscape
	Adoption of vehicle safety technology
	California's registered vehicle fleet
	Summary of trends in road user injuries
	Relationship between vehicle size and injury risk

## Today's Goals

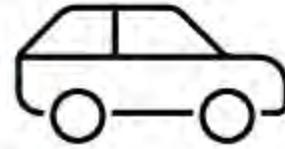
---

- |   |  |
|---|--|
| 1 | Provide data to inform the discussion    |
| 2 | Stay within the bounds of the science    |
| 3 | Catalyze the conversation, not direct it |

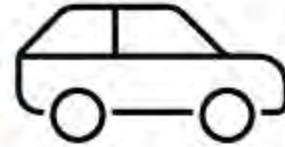
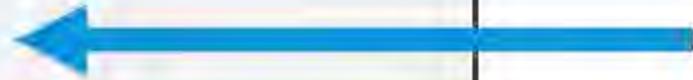
---

# Summary of Trends in Passenger Vehicle Weight

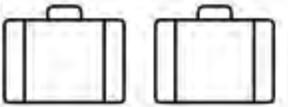
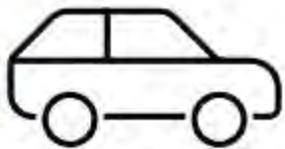
Unladen Weight



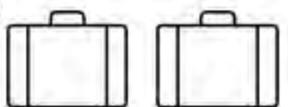
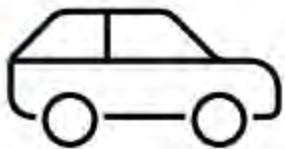
Curb Weight



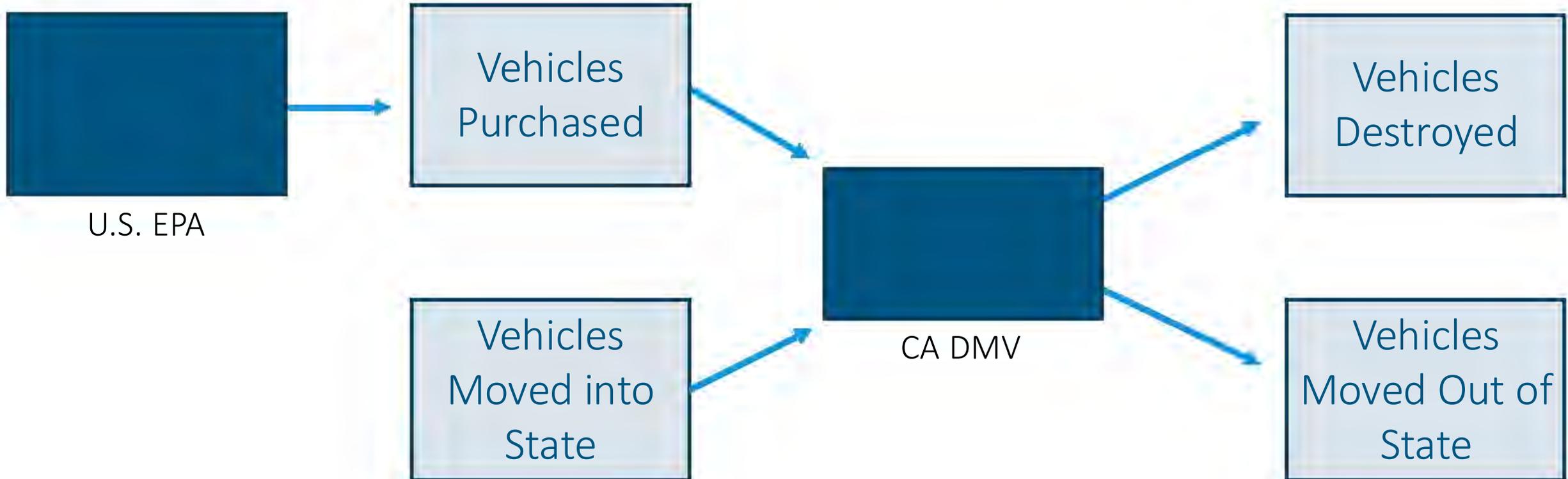
Gross Vehicle Weight



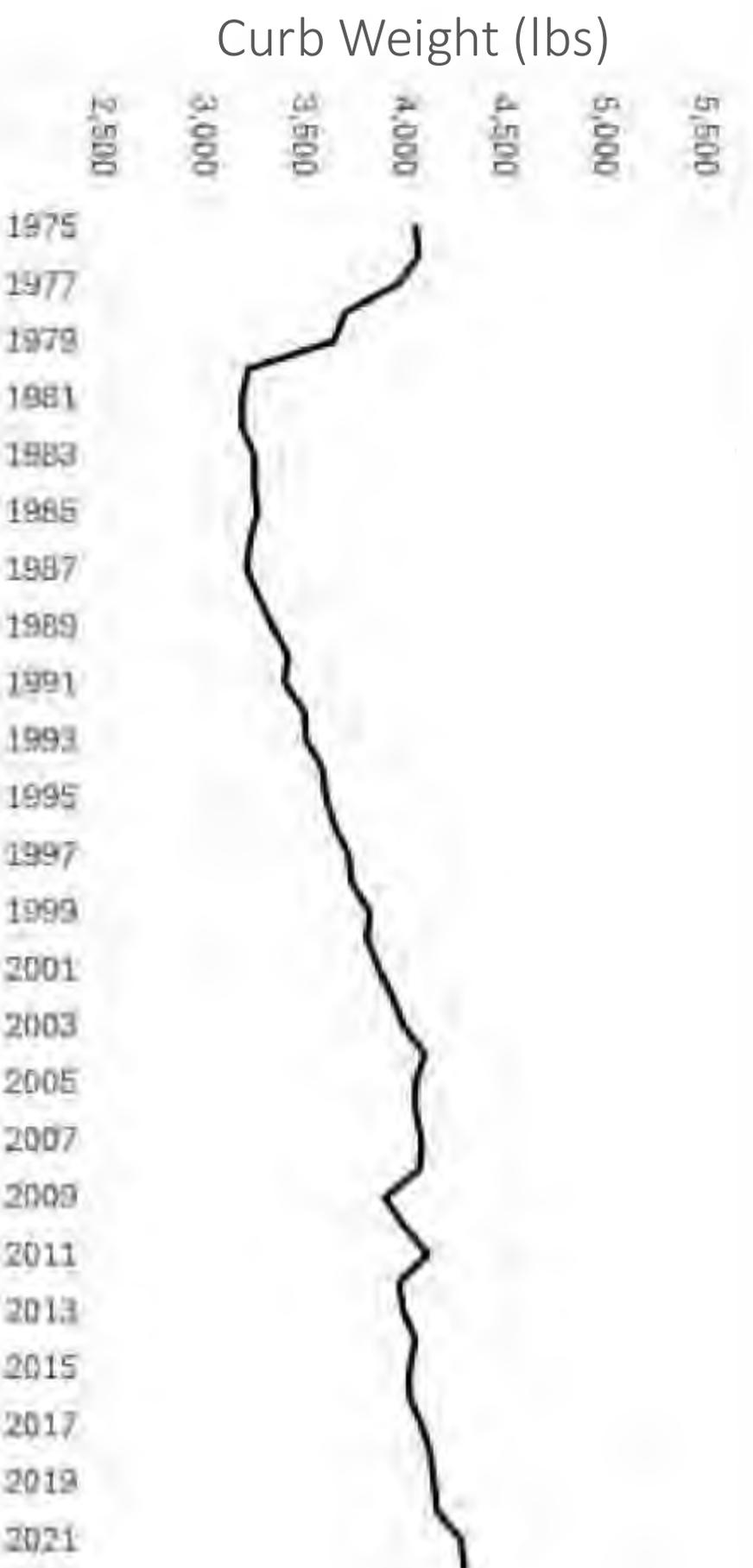
Gross Vehicle Weight Rating



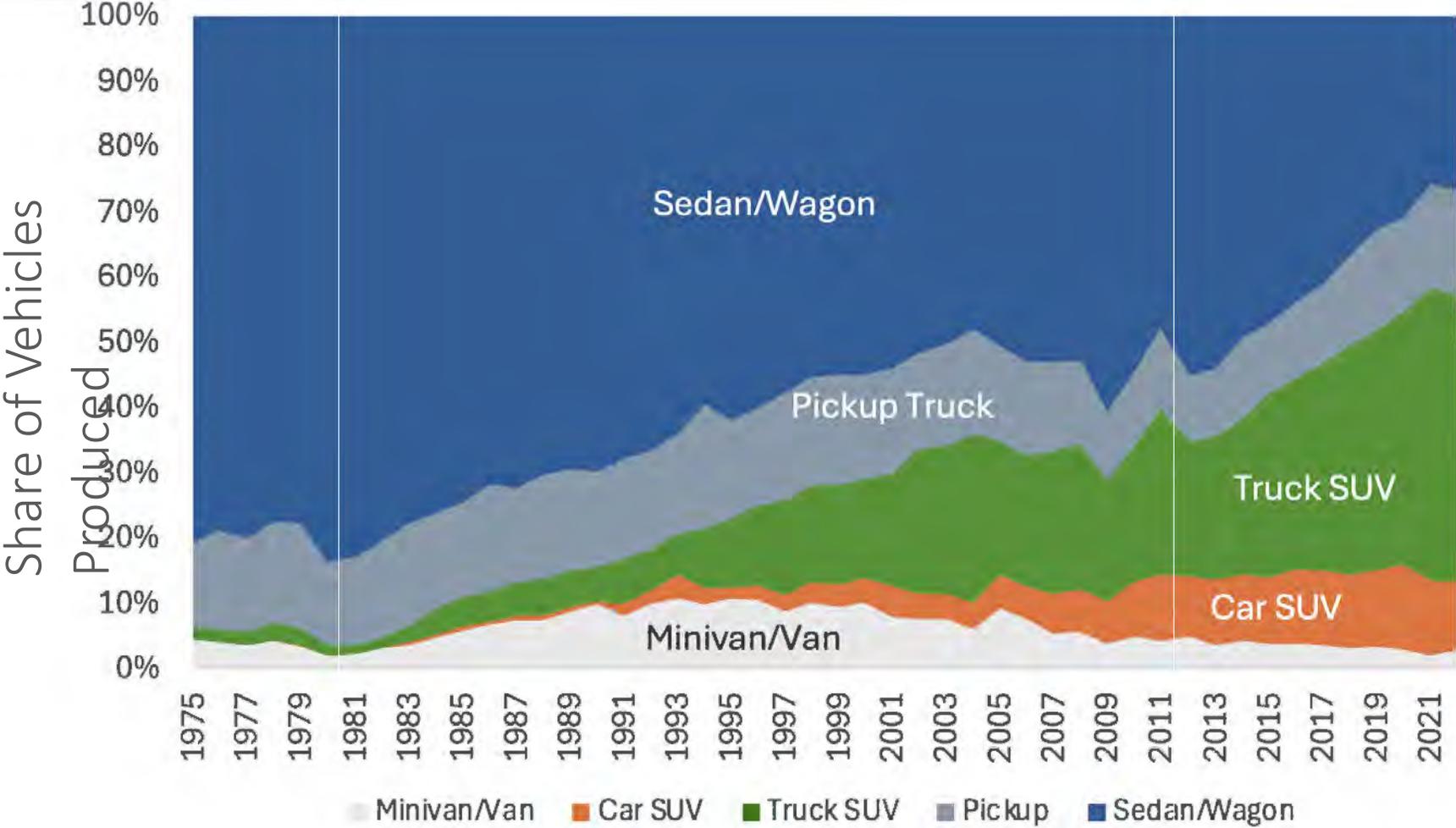
# Vehicles Produced vs Vehicles Registered



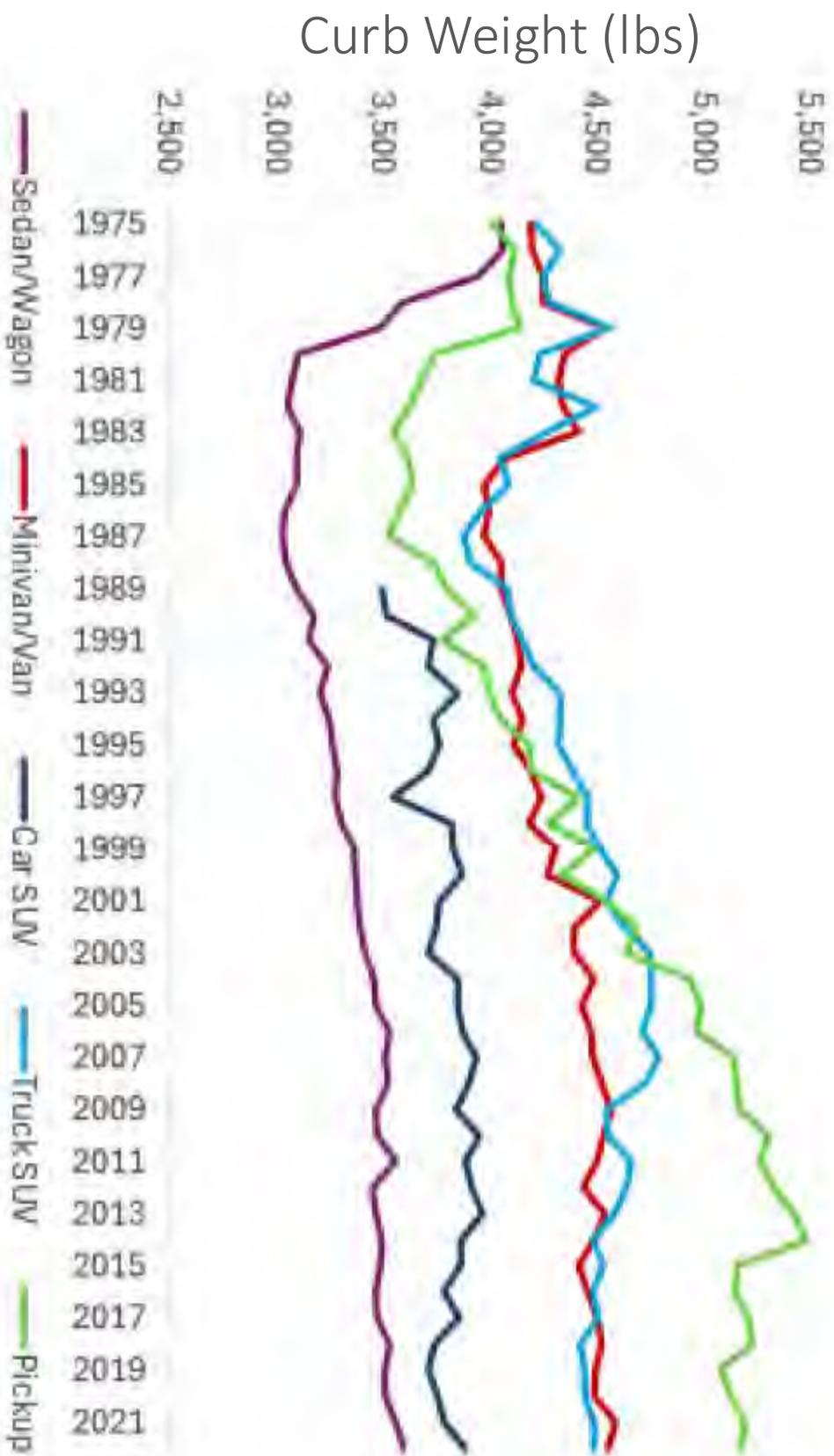
## New model year curb weight is now higher than before CAFE standards were implemented



# Sedans and vans are being replaced with SUVs



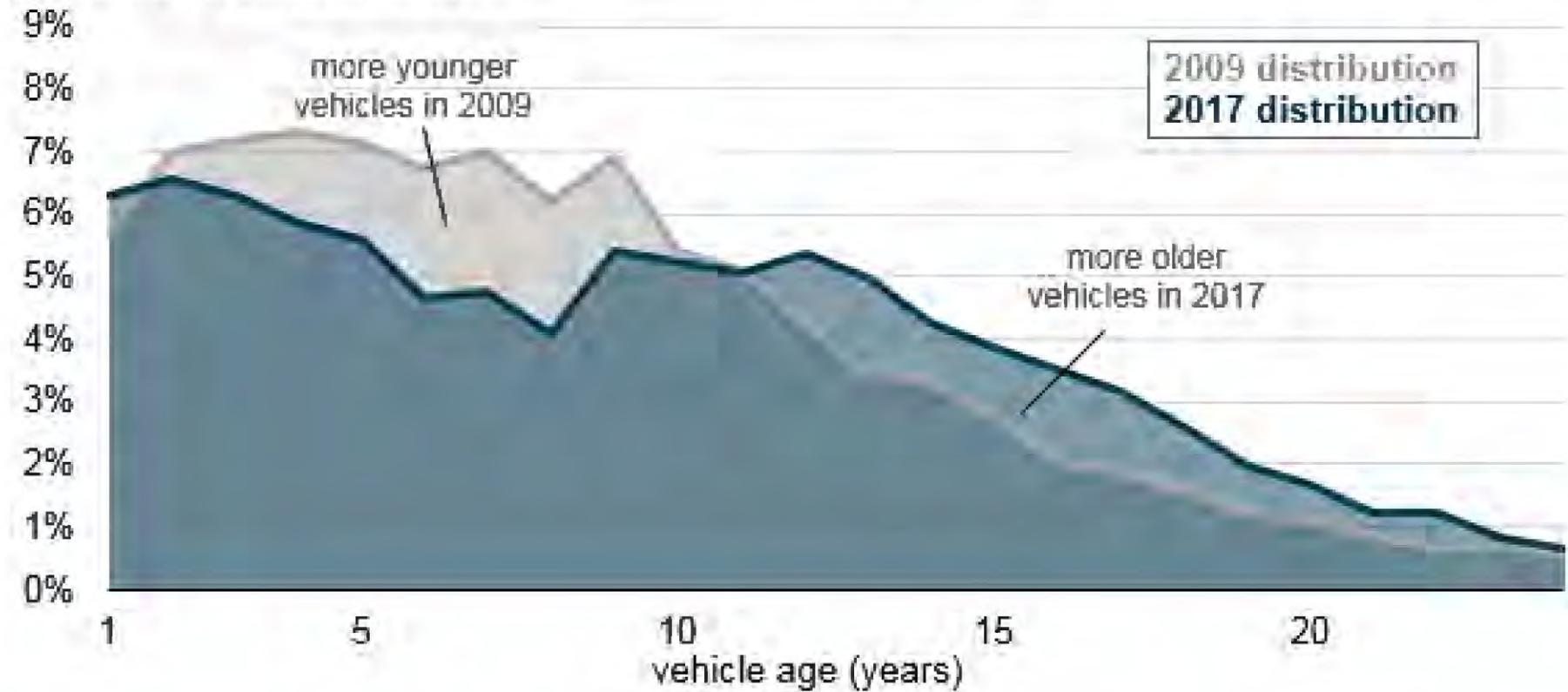
# All vehicle body class types are getting heavier



# Americans are holding onto their vehicles longer

2024:  
12.6 years\*

U.S. household vehicle age distribution (2009 and 2017)  
percent of household vehicles

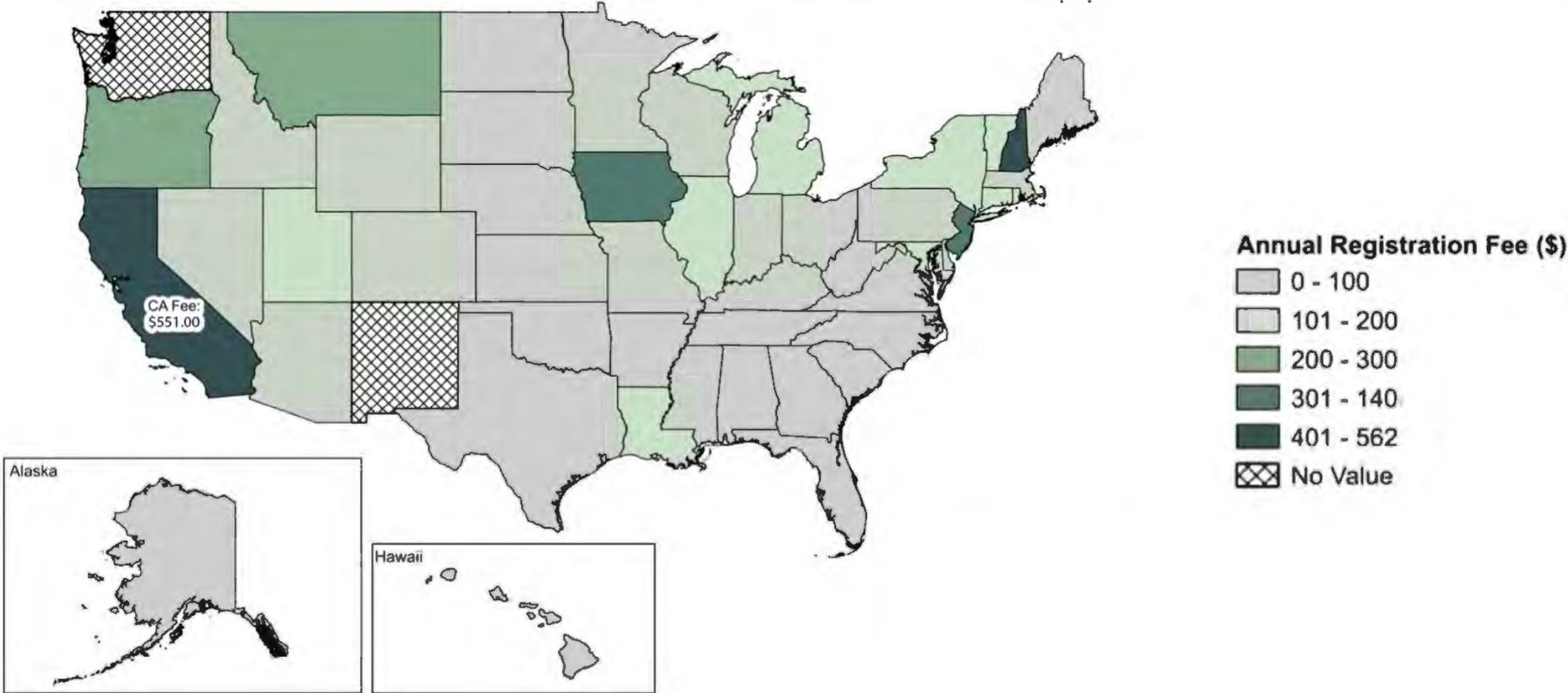


---

# Current Vehicle Weight Fee Landscape



# Fees due at registration vary by state for a Ford F-150

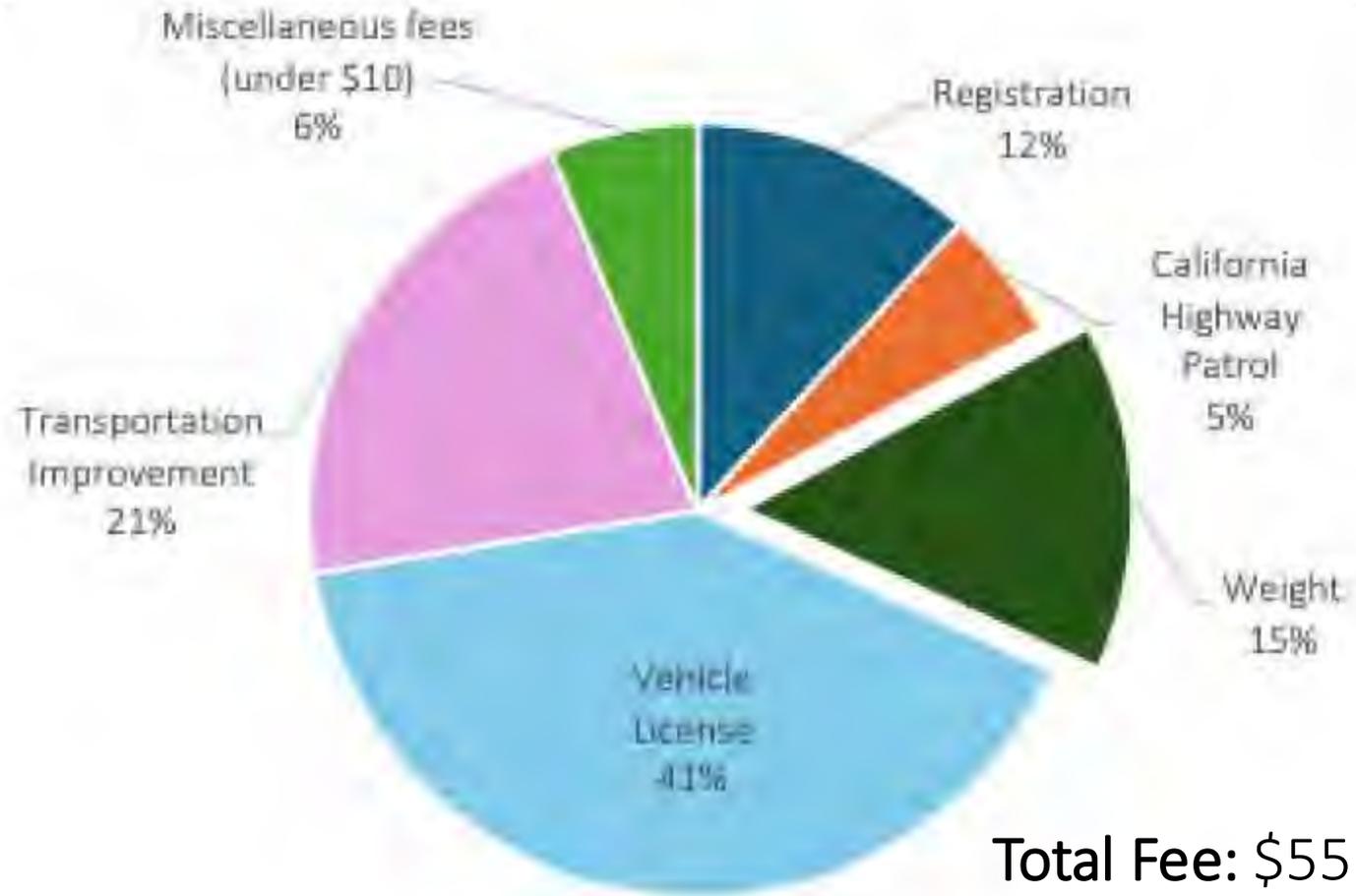


# Commercial vehicles (and pickups) have a weight fee in CA

<b>Commercial Motor Vehicles with Two Axels or Fewer</b>	
<b>Unladen Weight (lbs)</b>	<b>Annual Supplemental Fee</b>
0 - 1,999	\$8
2,000 - 2,999	\$8
3,000 - 4,000	\$24
4,001 - 5,000	\$80
5,001 - 6,000	\$154
6,001 - 7,000	\$204
7,001 - 8,000	\$257
8,001 - 9,000	\$308
9,001 - 10,000	\$360

<b>Commerical Electric Vehicles</b>	
<b>Unladen Weight (lbs)</b>	<b>Annual Supplemental Fee</b>
0 - 5,999	\$87
6,000 - 9,999	\$266
10,000 or more	\$358

## There are many fees due at vehicle registration in CA

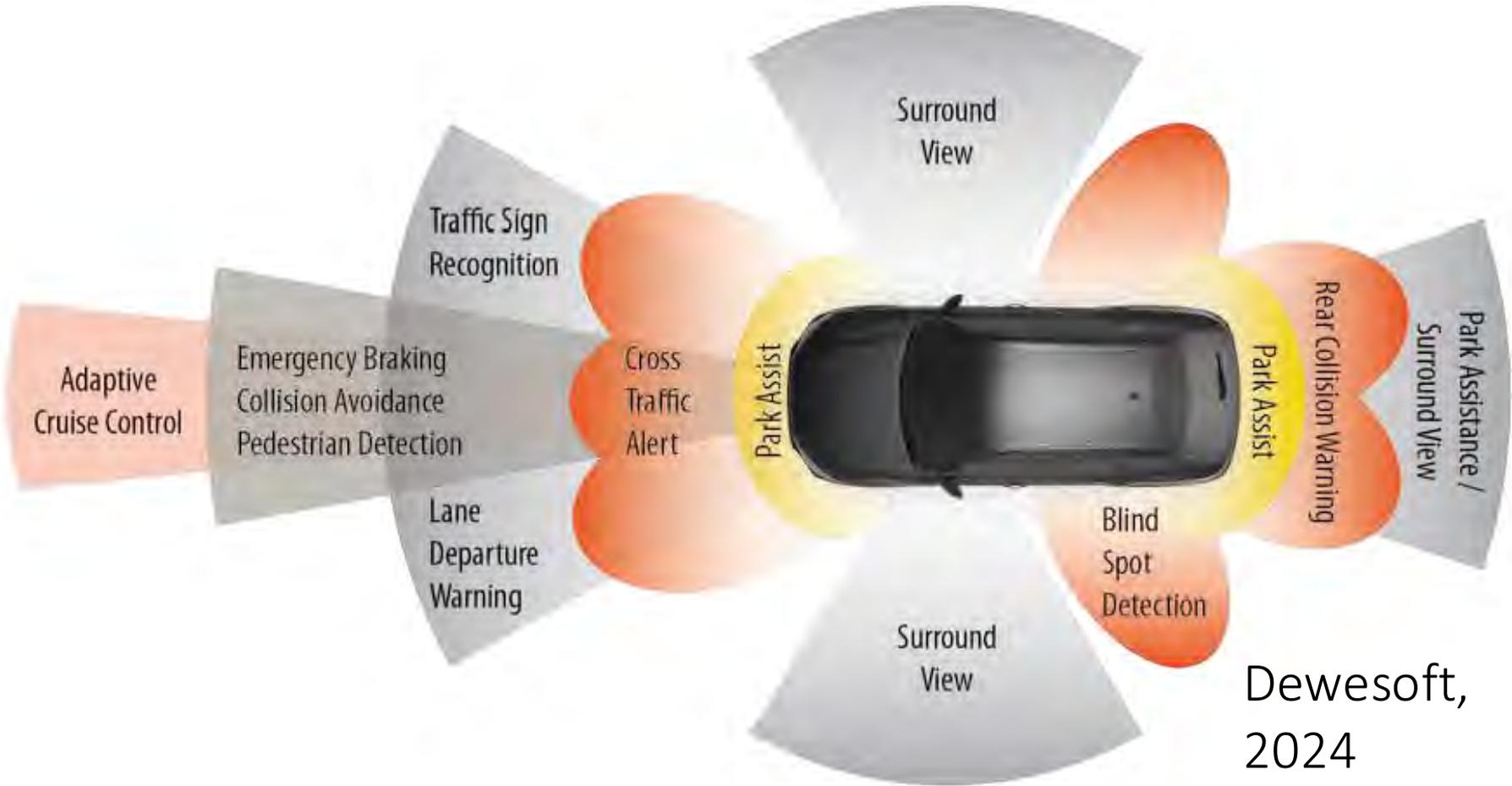


2023 Ford F-150 Pickup XL (4,021 lbs)  
Registered in Sacramento, California

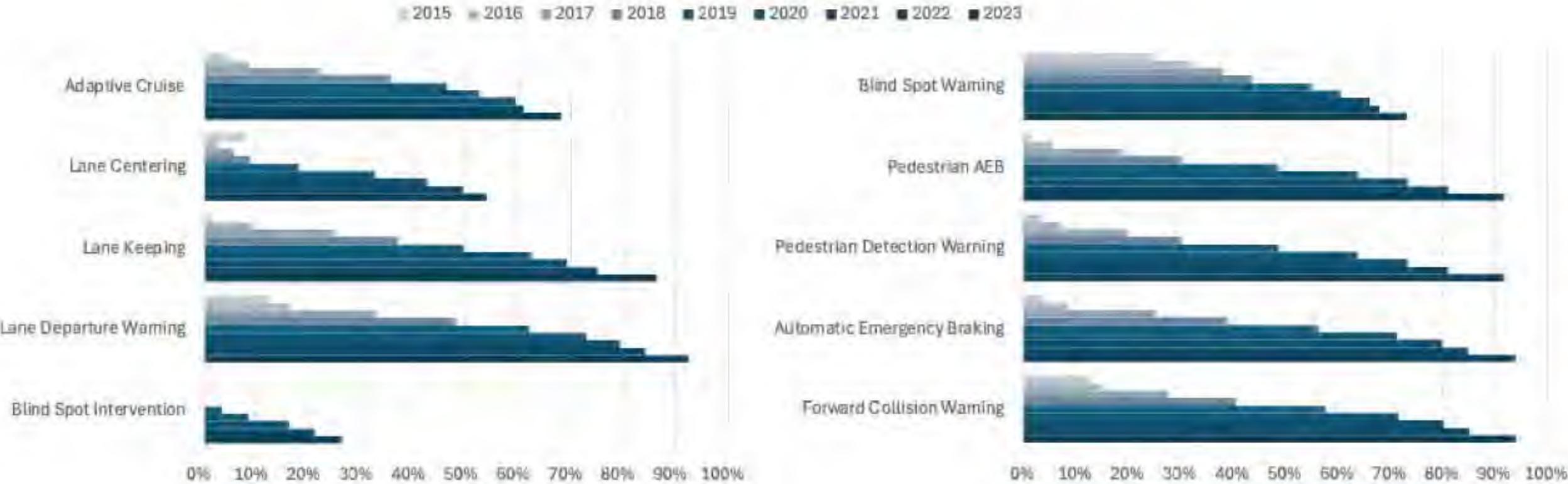
---

# Adoption of Vehicle Safety Technology

# Advanced driver assistance systems can provide both passive and active interventions to improve safety



# Many ADAS are now included in new model year vehicles



# AEB improving, but may be more effective for lighter vehicles

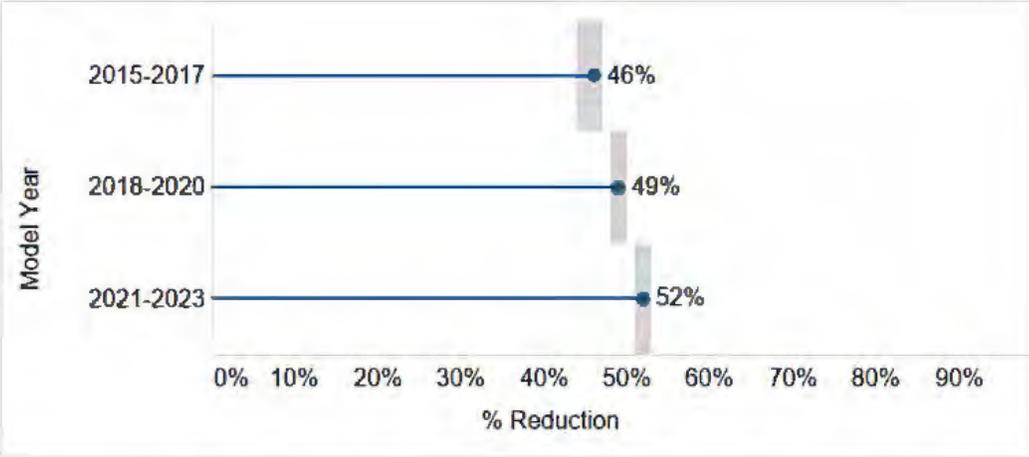


Figure 14. AEB Estimated Effectiveness Over Time (by subsets of Model Years) with 95% Confidence Intervals

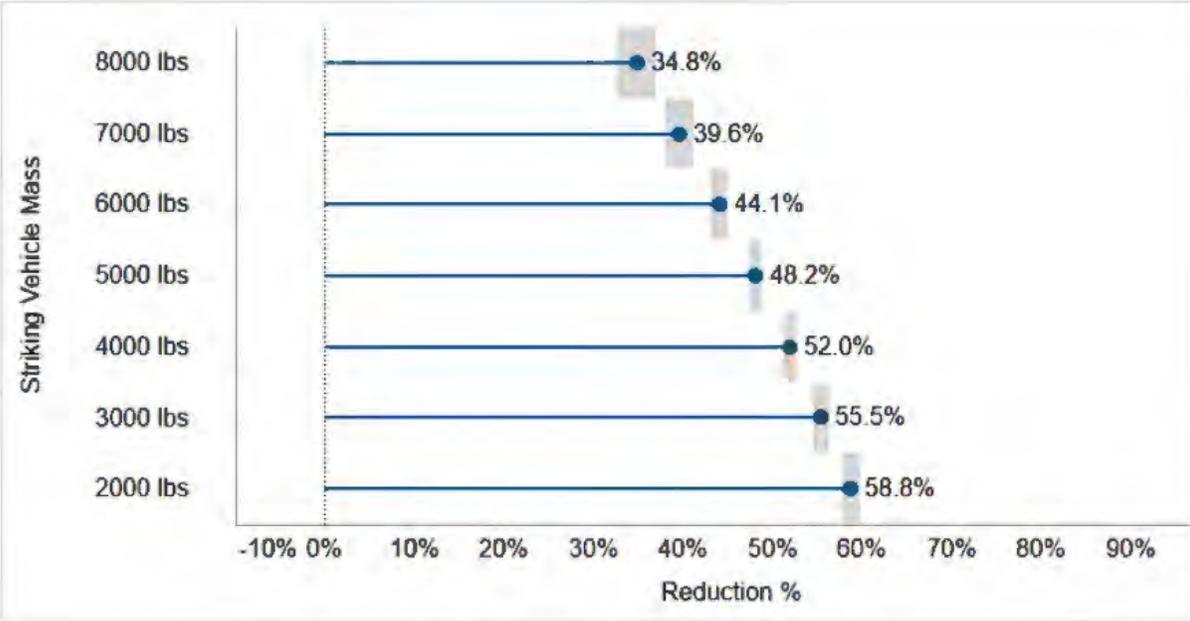
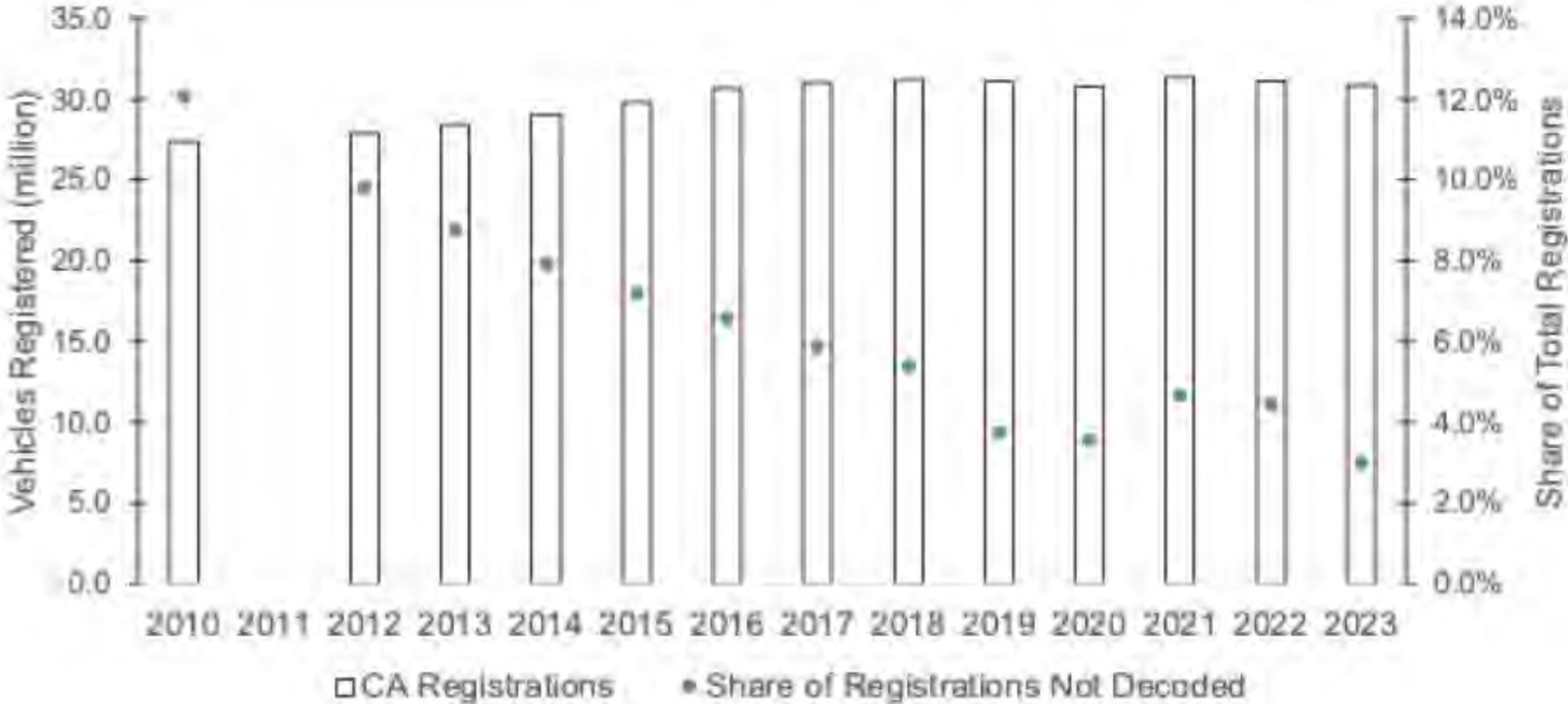


Figure 15. AEB Effectiveness by Striking Vehicle Weight

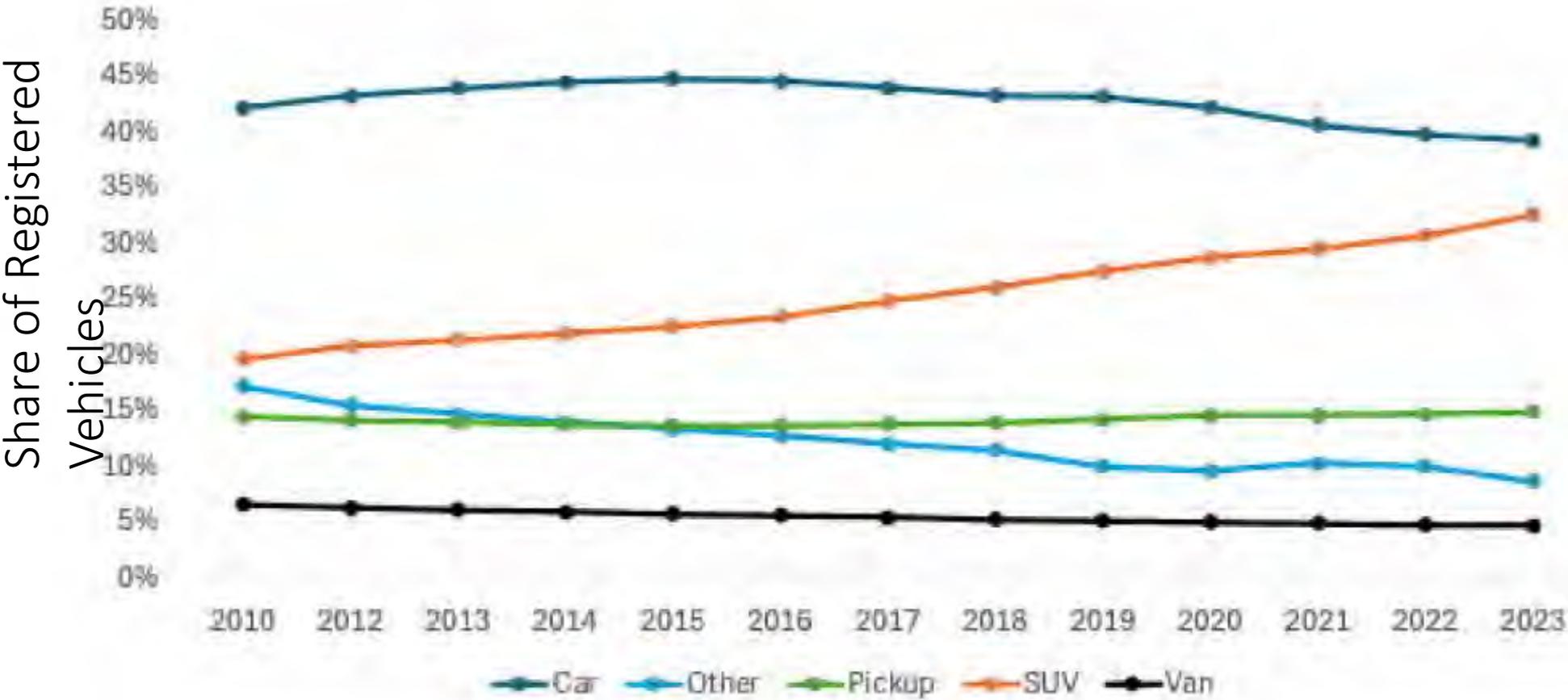
---

# California's Registered Vehicle Fleet

# About 30 million vehicles are registered in CA every year

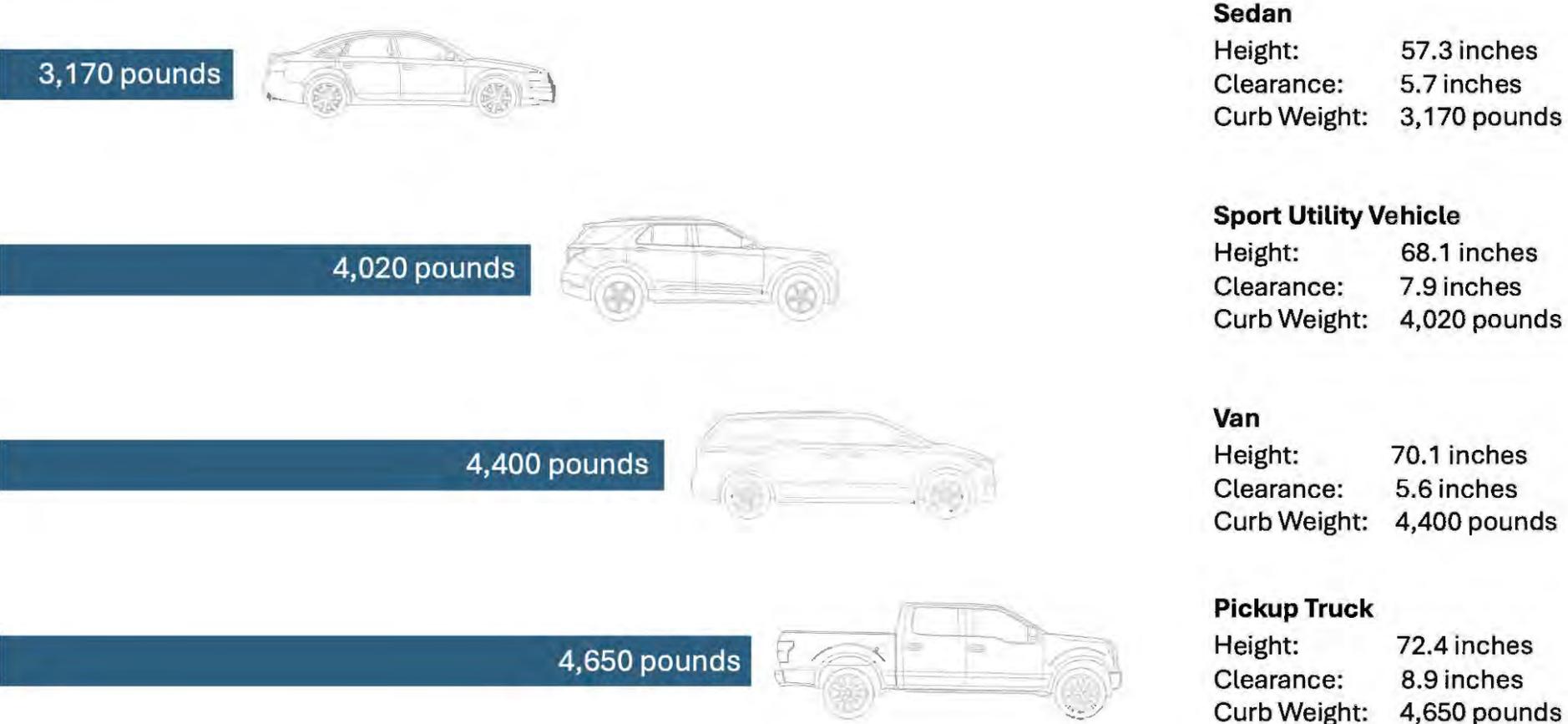


# SUVs are poised to overtake sedans as the most common vehicle on the road in CA



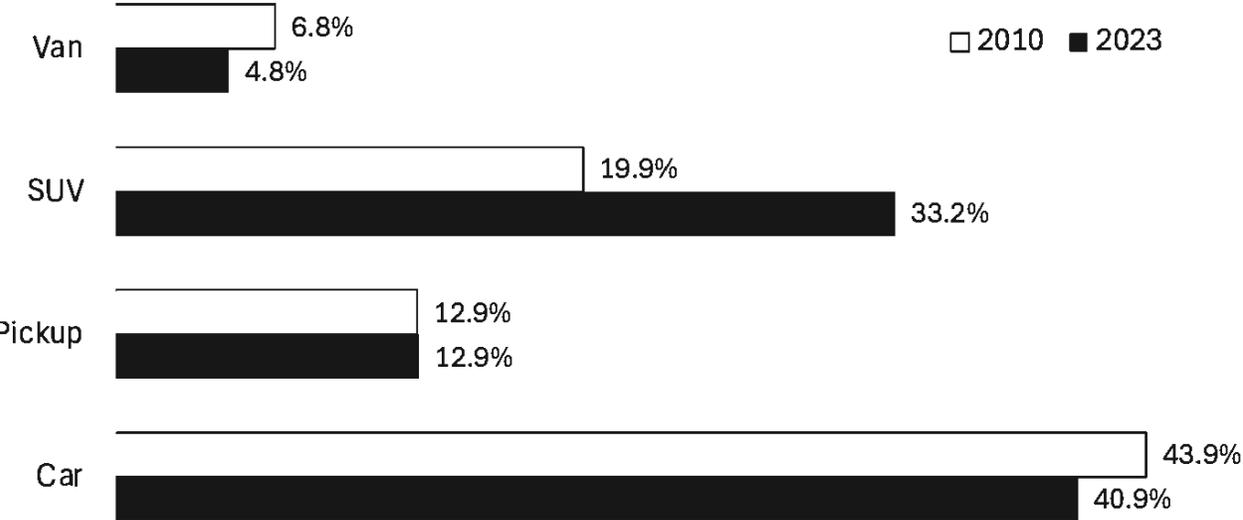
Data: California DMV

# In 2023, SUVs were 26% heavier than sedans in CA

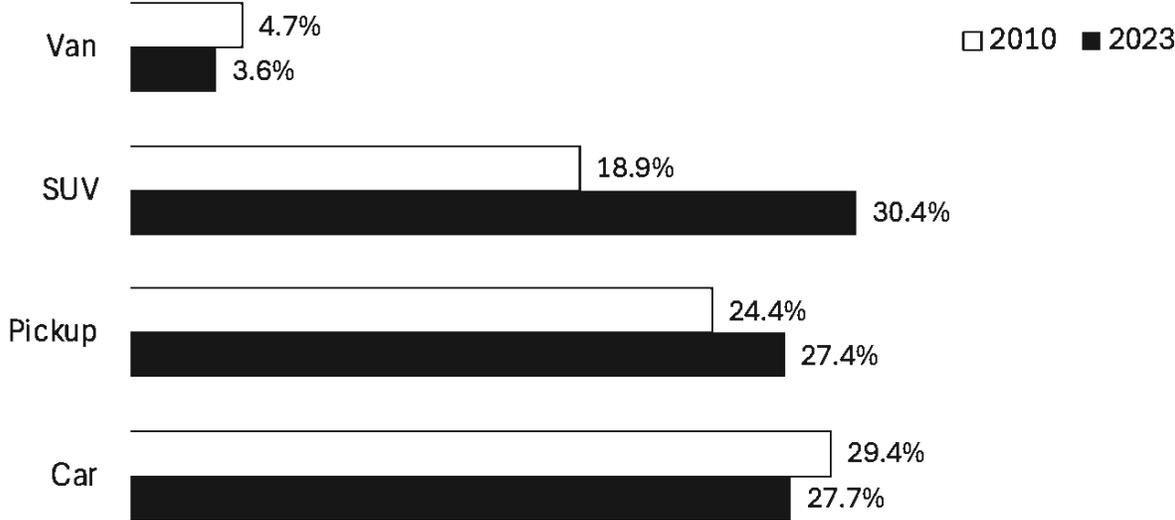


# SUVs are growing in popularity in rural and urban areas

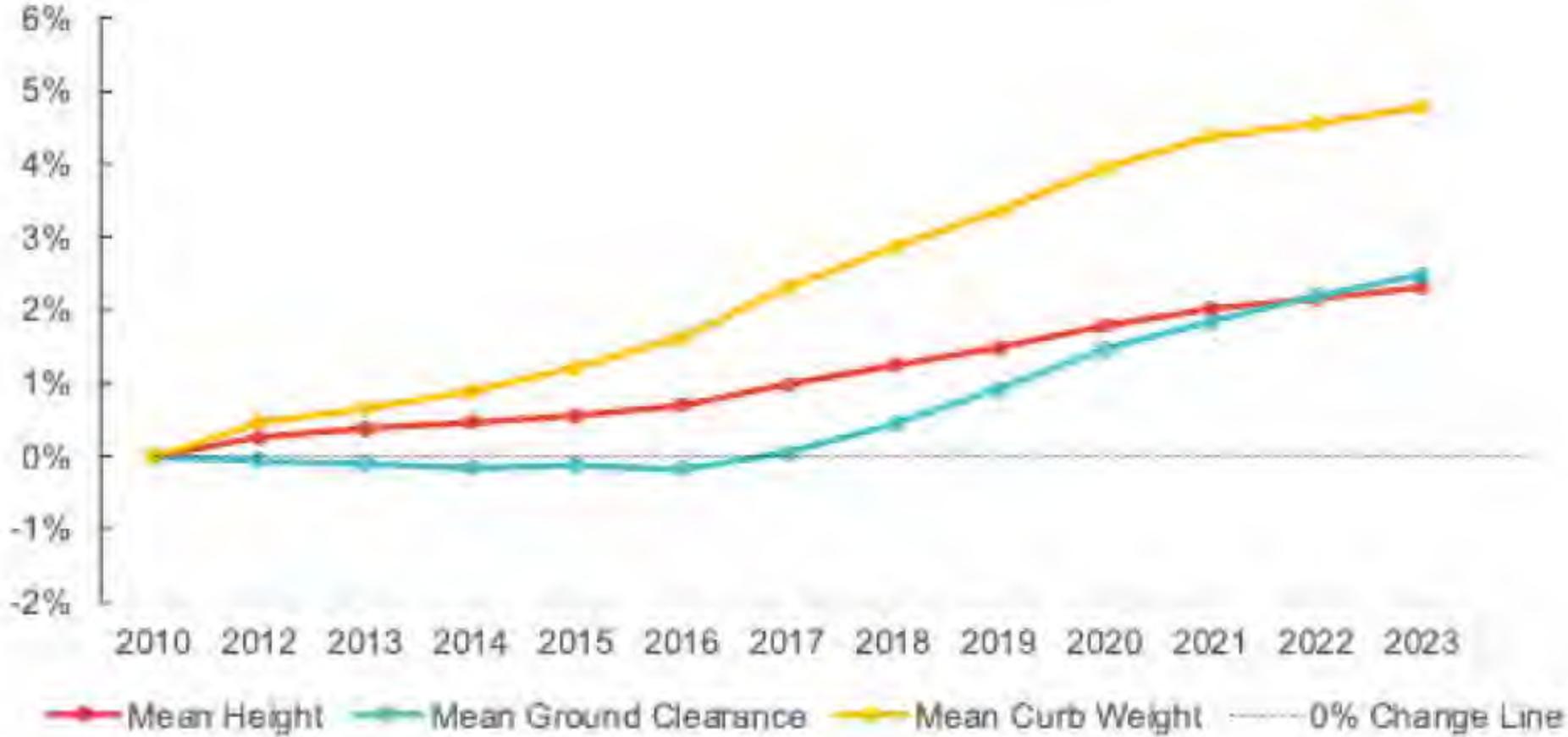
Urban Counties



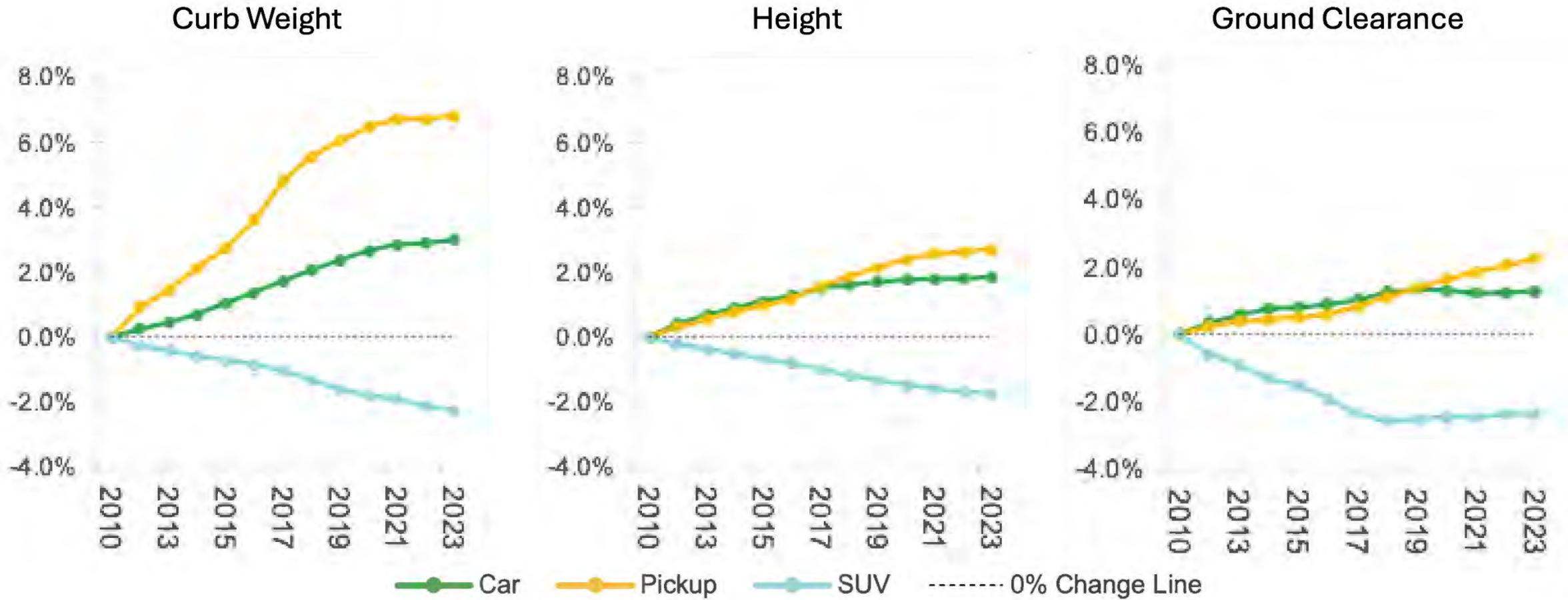
Rural Counties



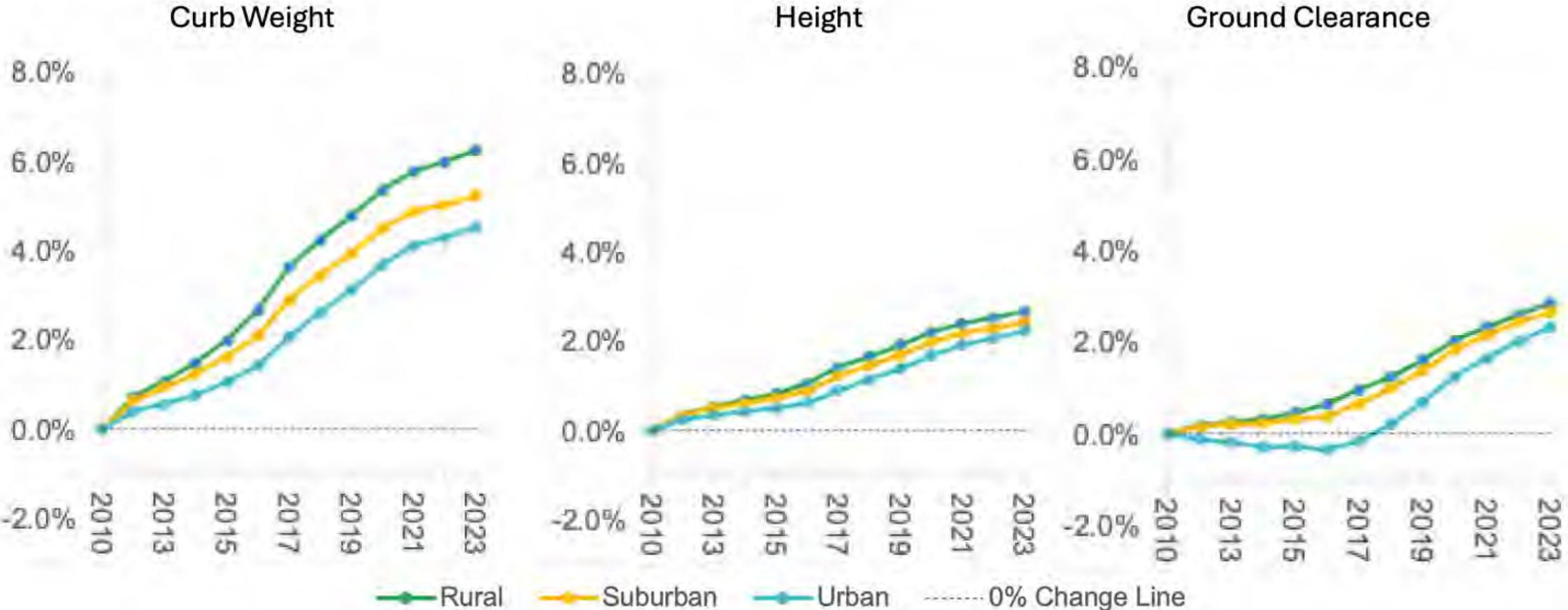
# Vehicle weight, height, and clearance have all increased



# Pickups in CA are growing faster than SUVs or sedans

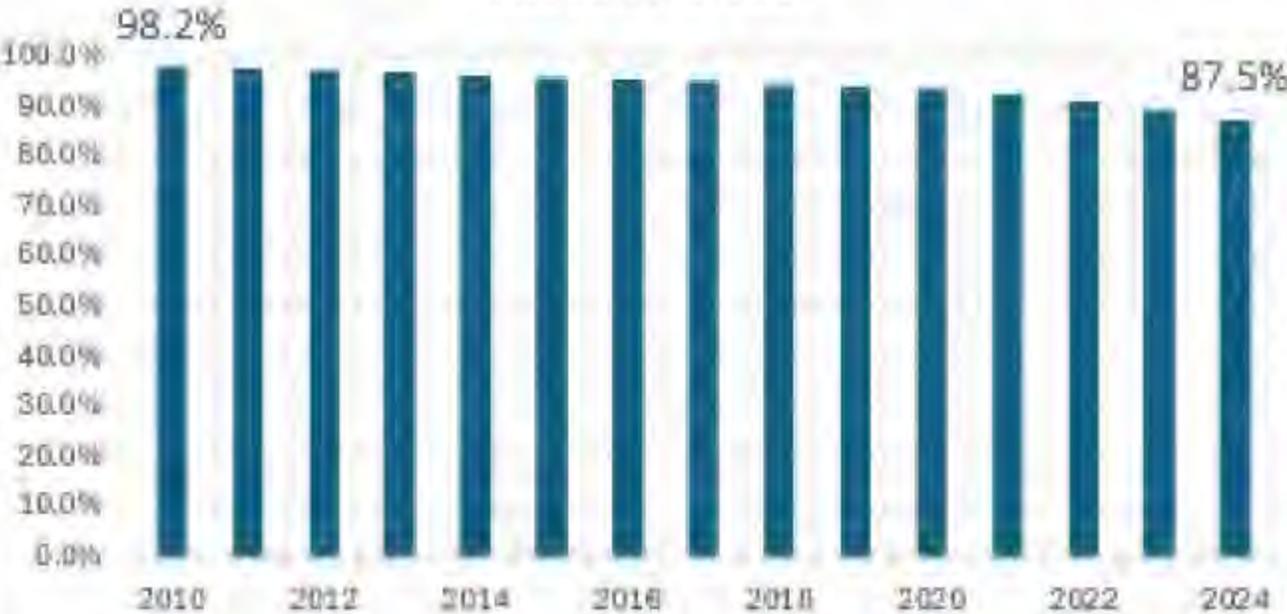


# Vehicles registered in rural areas getting larger, faster

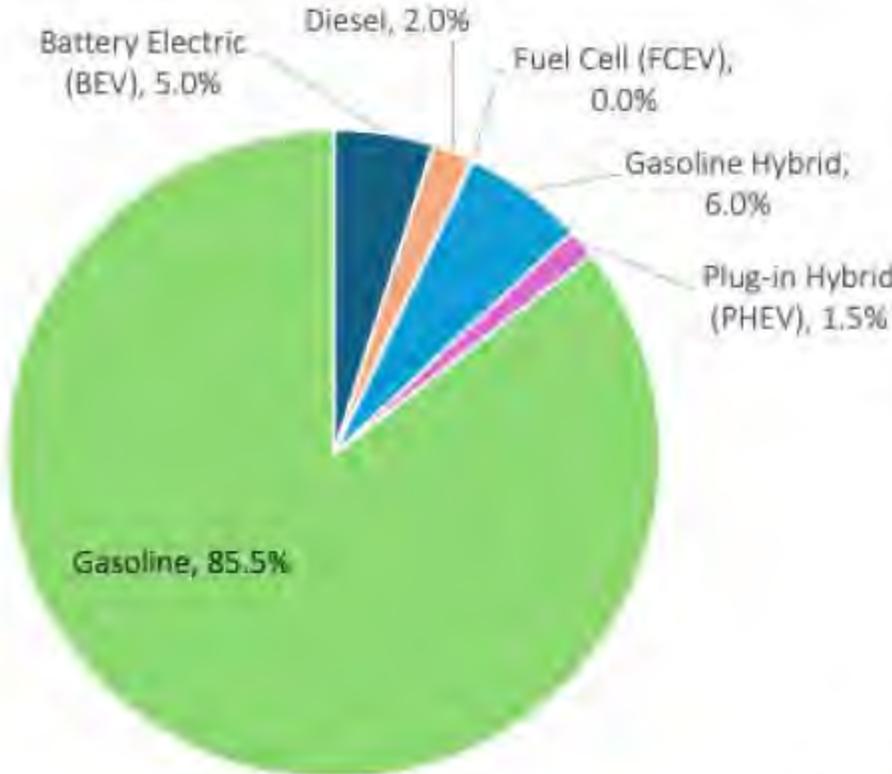


# Despite shift towards EVs, most of the vehicles on the road in California is still gasoline or diesel-powered

Share of California Registered vehicles, Gasoline/Diesel



2024 Vehicle Registrations by Fuel Type, California



Data: California CPUC

## EVs are heavier than their hybrid or gas variants

---

### 2019 VW Golf



Gas: 2,945 lbs

BEV: 3,459 lbs

### 2020 Toyota RAV4



Gas: 3,370 lbs

Hybrid: 3,710 lbs

PHEV: 4,190 lbs

### 2024 Ford F-150



Gas: 4,940 lbs

Hybrid: 5,540 lbs

BEV: 6,360 lbs

## Questions?

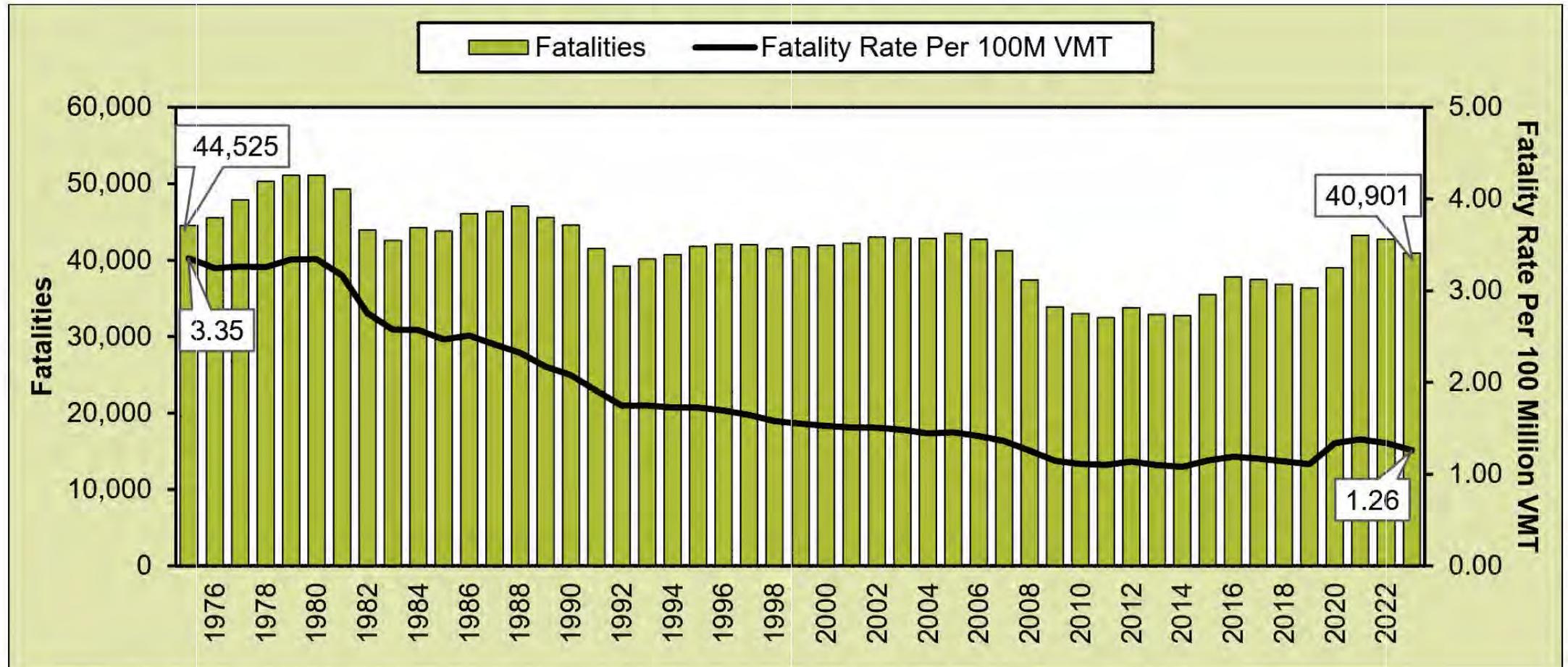
---

Do you have any questions about the data presented thus far?

---

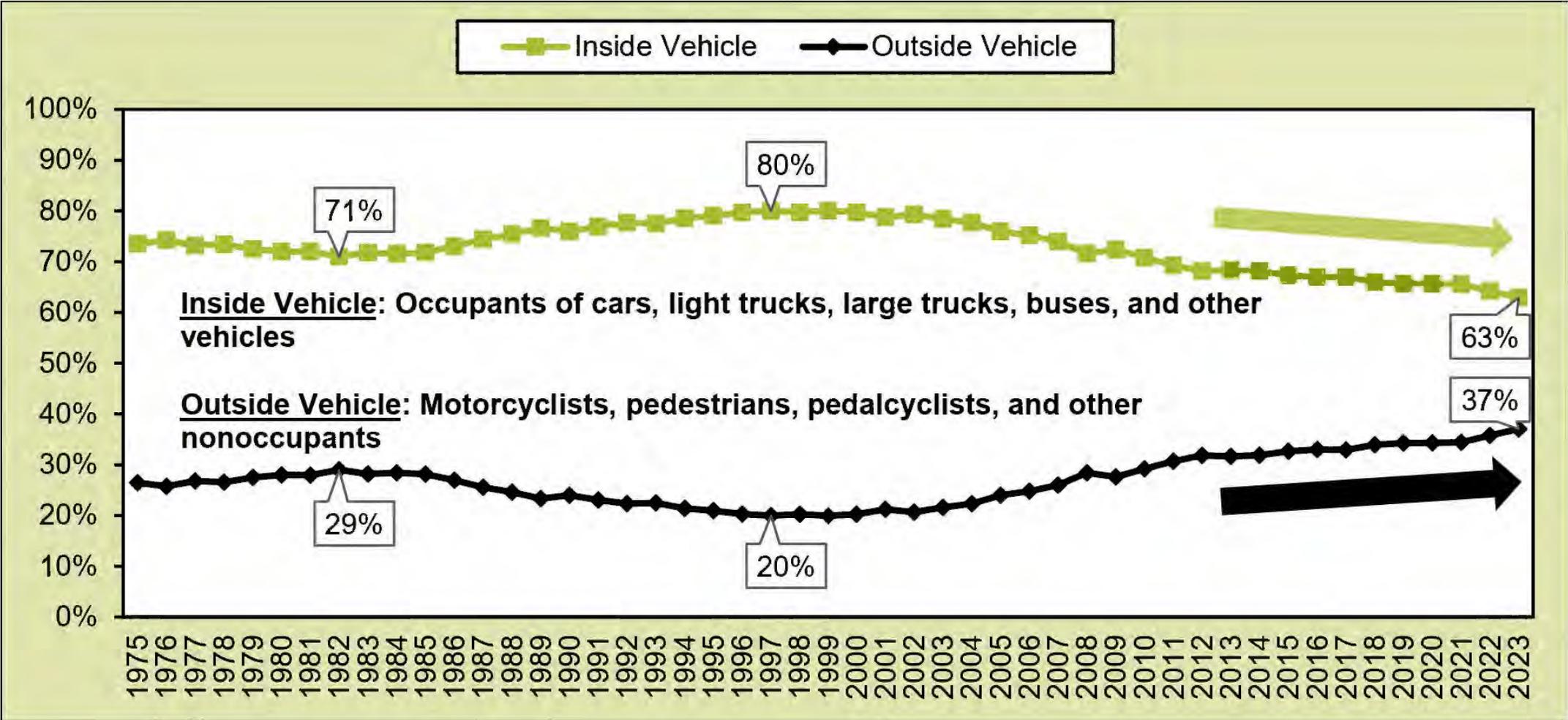
# Summary of trends in road user injuries

# After many years of decreasing, traffic fatalities have increased in U.S. 24% since 2010



Sources: FARS 1975-2022 Final File, 2023 ARF; 1975-2023 VMT – FHWA’s Annual Highway Statistics

# Increasing share of fatalities occurring outside of vehicles



Source: FARS 1975-2022 Final File, 2023 ARF

# Road injury is a top 10 cause of death in California

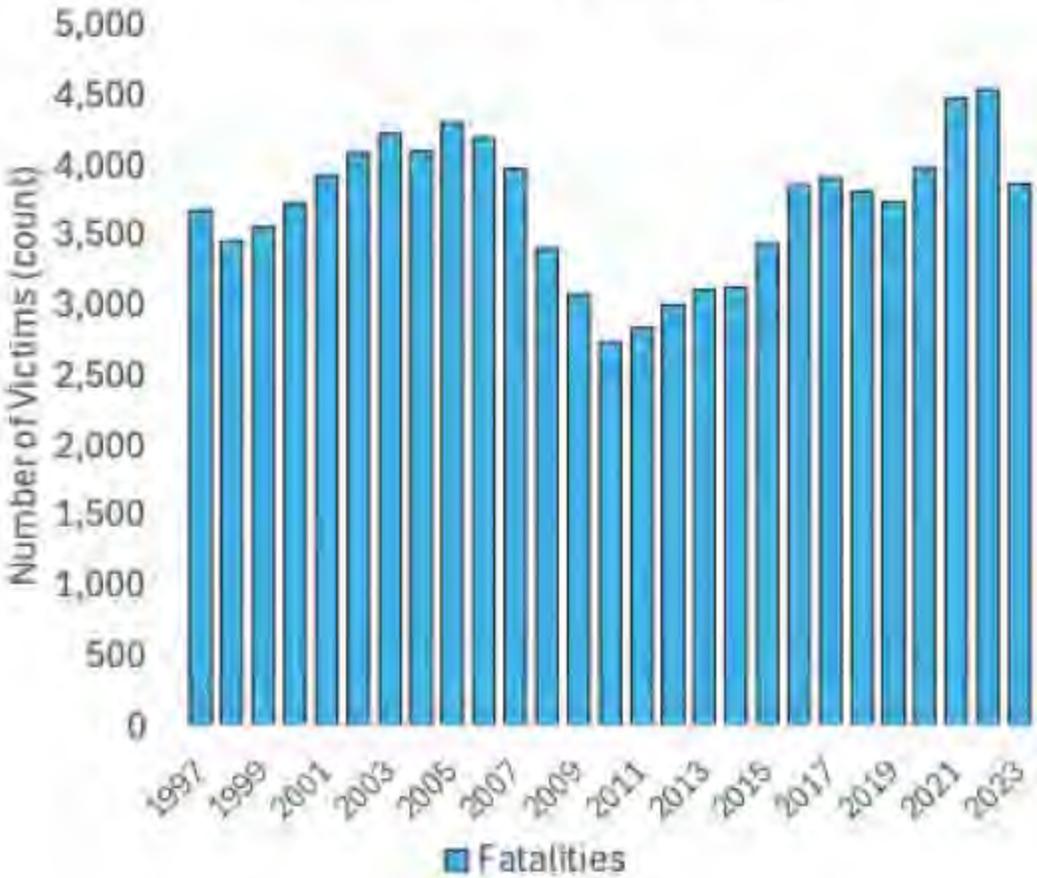
Rank	Ages 0 - 4	Ages 5 - 14	Ages 15 - 24	Ages 25 - 34	Ages 35 - 44	Ages 45 - 54	Ages 55 - 64	Ages 65 - 74	Ages 75 - 84	Ages 85+
1	Neonatal conditions 1,002 <small>(o)</small>	<b>Road injury</b> 80 <small>(&gt;)</small>	<b>Road injury</b> 765 <small>(&gt;)</small>	Drug overdose 2,309 <small>(&gt;)</small>	Drug overdose 2,382 <small>(&gt;)</small>	Drug overdose 2,072 <small>(&gt;)</small>	Ischemic heart disease 4,631 <small>(o)</small>	Ischemic heart disease 8,190 <small>(o)</small>	Ischemic heart disease 9,672 <small>(o)</small>	Alzheimer's disease 20,246 <small>(c)</small>
2	Congenital anomalies 423 <small>(c)</small>	Congenital anomalies 45 <small>(c)</small>	Drug overdose 723 <small>(&gt;)</small>	<b>Road injury</b> 1,088 <small>(&gt;)</small>	Alcohol-related 995 <small>(&gt;)</small>	Alcohol-related 1,467 <small>(&gt;)</small>	COVID-19 2,279 <small>(v)</small>	COVID-19 3,635 <small>(v)</small>	Alzheimer's disease 7,371 <small>(c)</small>	Ischemic heart disease 13,073 <small>(o)</small>
3	Other un-intentional injuries 97 <small>(&gt;)</small>	Brain & nervous system cancers 44 <small>(n)</small>	Homicide 480 <small>(&gt;)</small>	Suicide 724 <small>(&gt;)</small>	<b>Road injury</b> 827 <small>(&gt;)</small>	Ischemic heart disease 1,433 <small>(o)</small>	Drug overdose 2,254 <small>(&gt;)</small>	Lung Cancer 3,034 <small>(n)</small>	Stroke 4,625 <small>(o)</small>	Stroke 8,347 <small>(o)</small>
4	Other Infections or Nutrition 39 <small>(v)</small>	Suicide 38 <small>(&gt;)</small>	Suicide 441 <small>(&gt;)</small>	Homicide 668 <small>(&gt;)</small>	Suicide 654 <small>(&gt;)</small>	COVID-19 977 <small>(v)</small>	Alcohol-related 2,065 <small>(&gt;)</small>	Stroke 2,865 <small>(o)</small>	COVID-19 4,325 <small>(v)</small>	Hypertensive heart disease 6,678 <small>(n)</small>
5	Endo., blood, immune dis. 37 <small>(c)</small>	Other neurological 34 <small>(c)</small>	Other neurological 104 <small>(c)</small>	Alcohol-related 408 <small>(&gt;)</small>	Homicide 506 <small>(&gt;)</small>	Hypertensive heart disease 757 <small>(o)</small>	Hypertensive heart disease 1,768 <small>(o)</small>	Hypertensive heart disease 2,581 <small>(o)</small>	COPD 3,891 <small>(c)</small>	COVID-19 5,409 <small>(v)</small>

**Broad Condition Group**

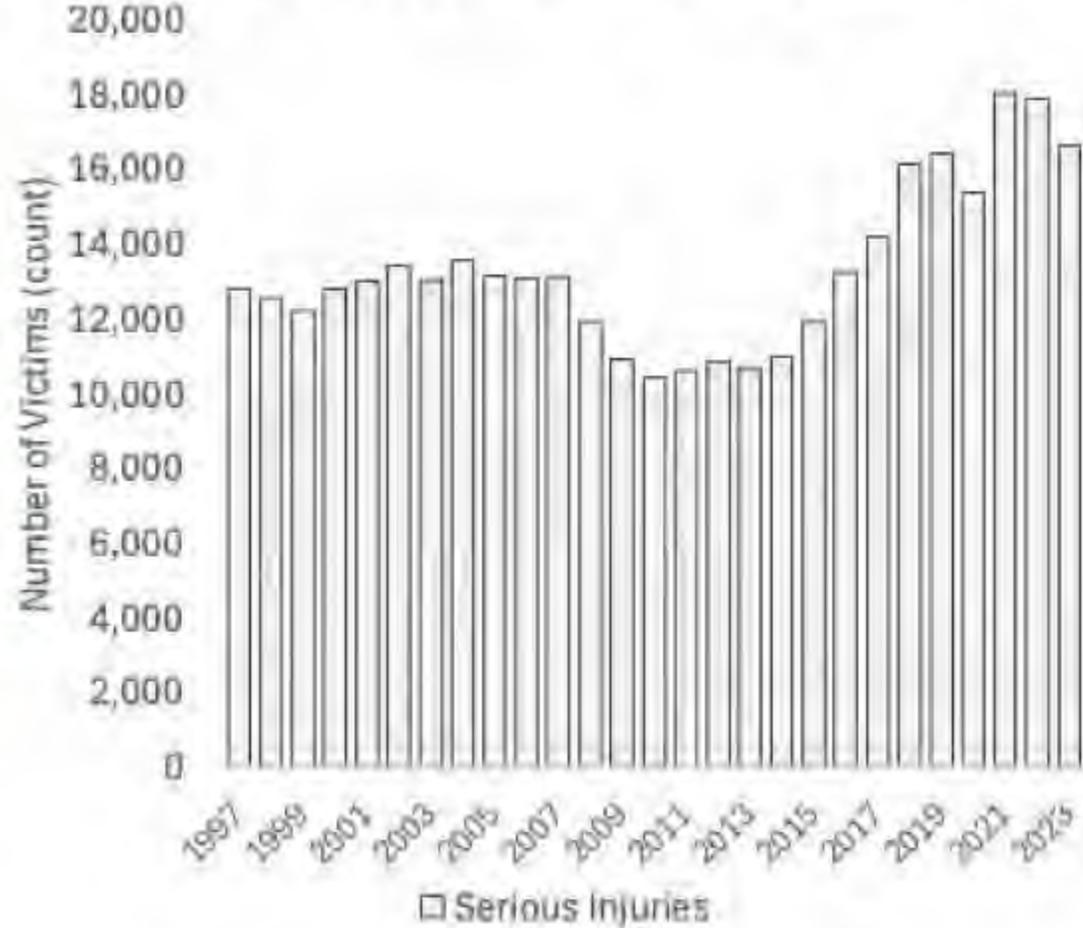
<small>(v)</small> Communicable	<small>(n)</small> Cancer	<small>(o)</small> Cardiovascular
<small>(c)</small> Other Chronic	<small>(&gt;)</small> Injury	<small>(o)</small> Perinatal

# Fatalities and serious injuries are also both up in CA

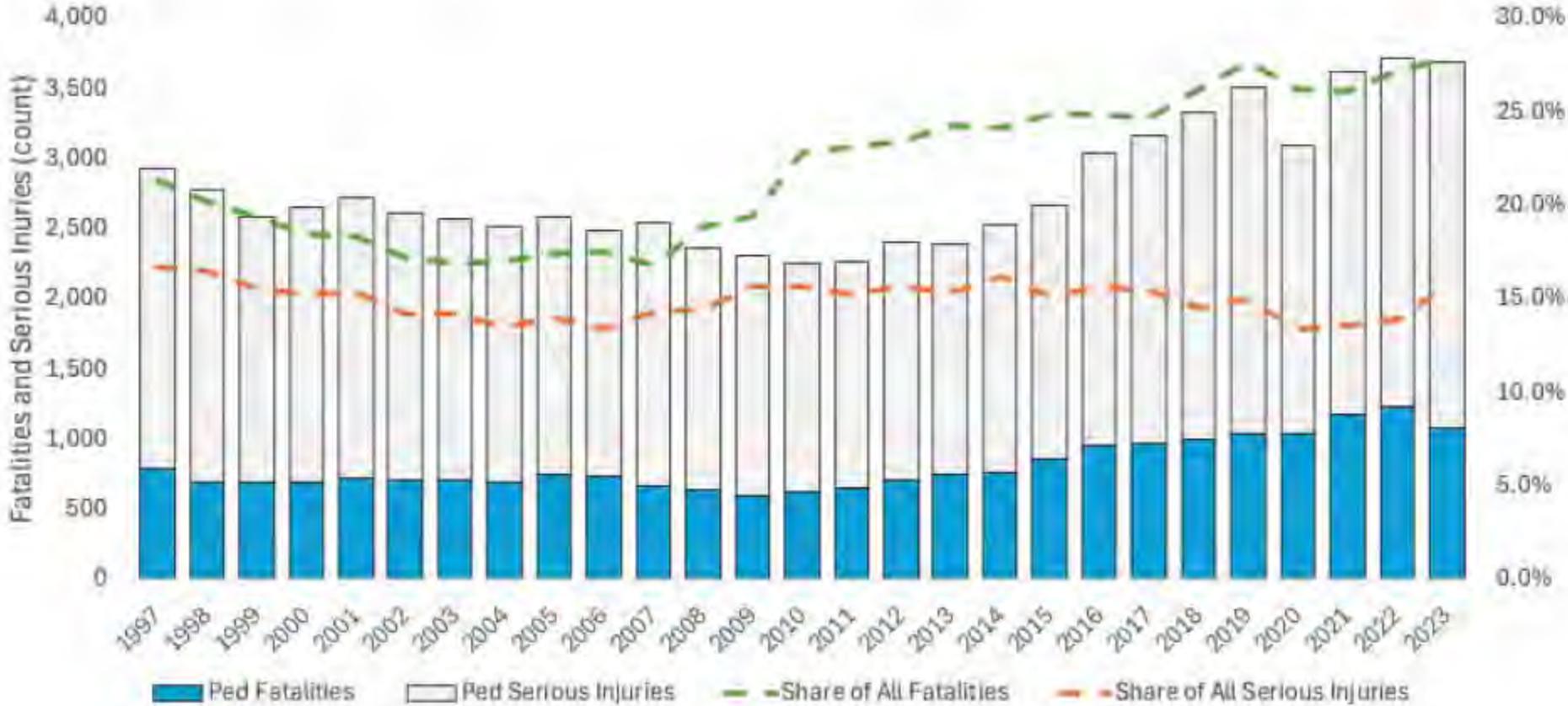
Fatalities (1997-2023)



Serious Injuries (1997-2023)

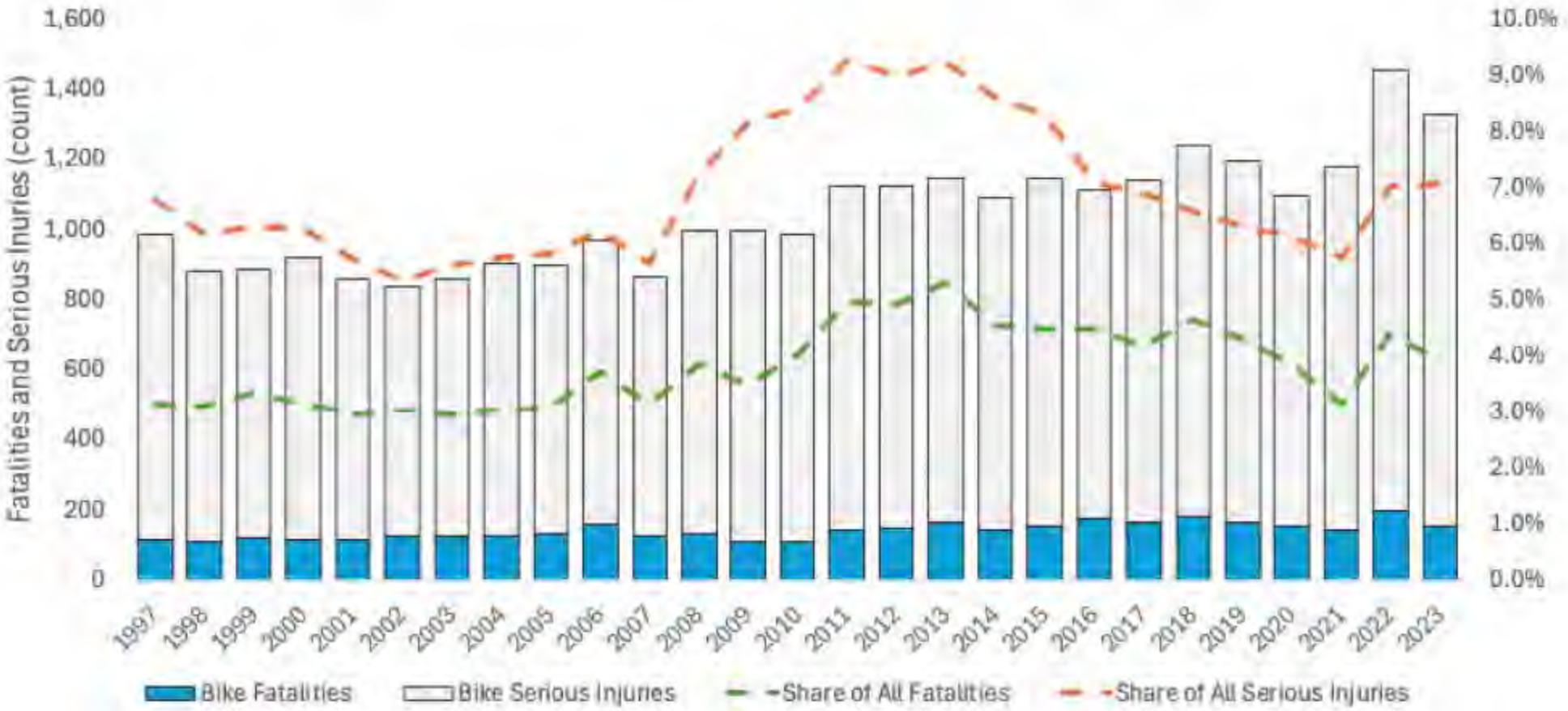


# Pedestrian share of fatalities is increasing



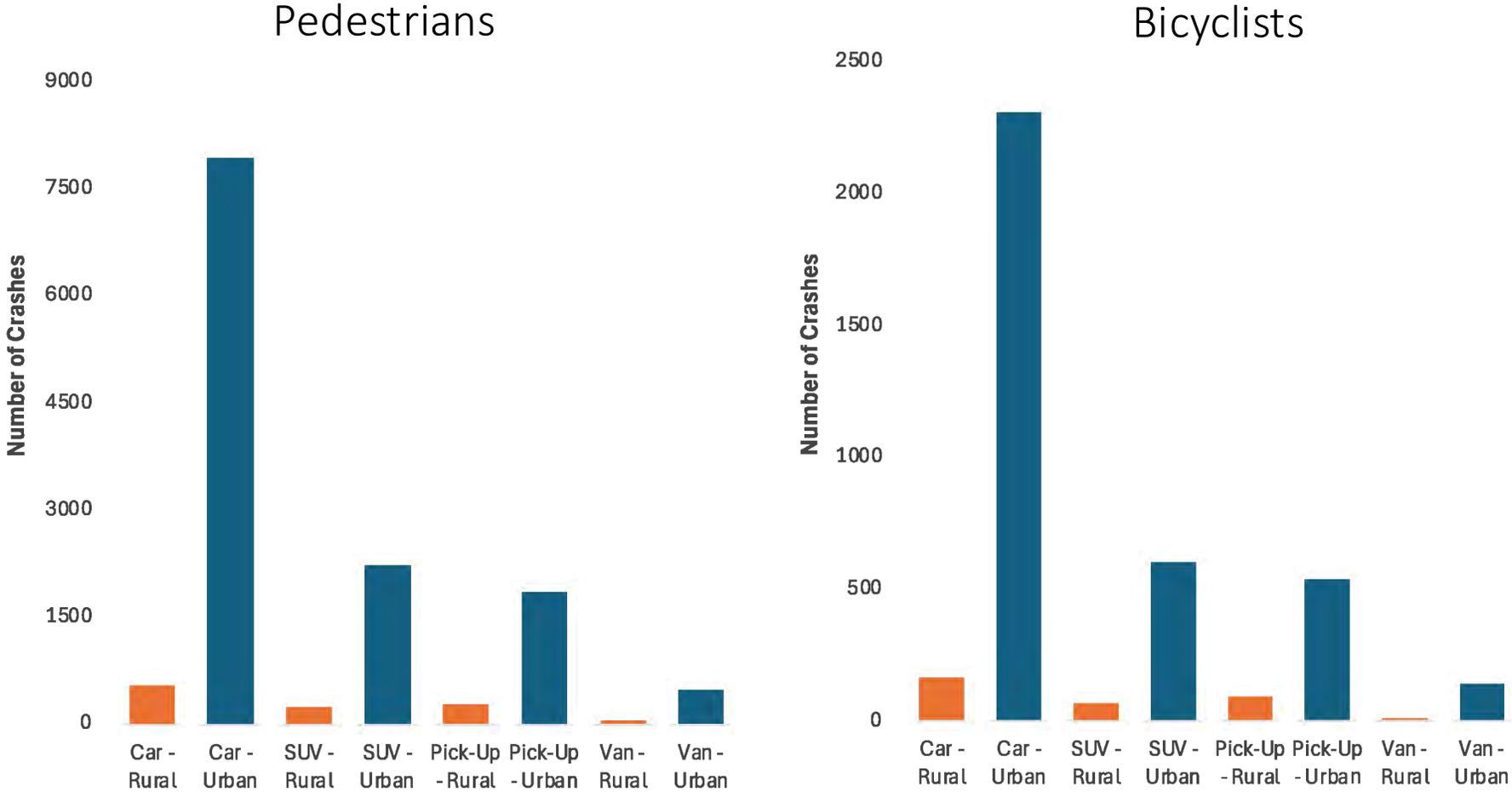
Data: California iSWITRS

# Bicyclist share of fatalities and injuries is relatively constant as both have increased



Data: California iSWITRS

# Most pedestrian and bicyclist fatality and serious injury crashes occur in urban areas and involve sedans



Data: California iSWITRS, 2018-2022

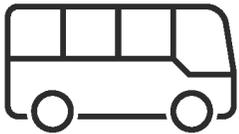
# Adjusted for population, pedestrian fatality and serious injury crash risk is higher for SUVs/pickups in rural areas

---

Car	22.09	15.99
SUV	6.19	6.95
Pick Up	5.12	8.28
Van	1.32	1.22

# USDOT Historically Disadvantaged Communities

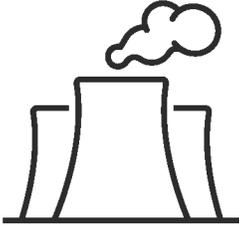
---



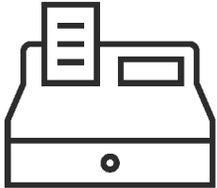
Transportation  
Access



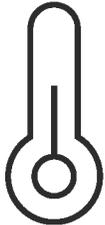
Health



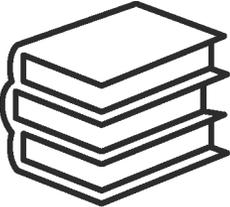
Environment



Economic



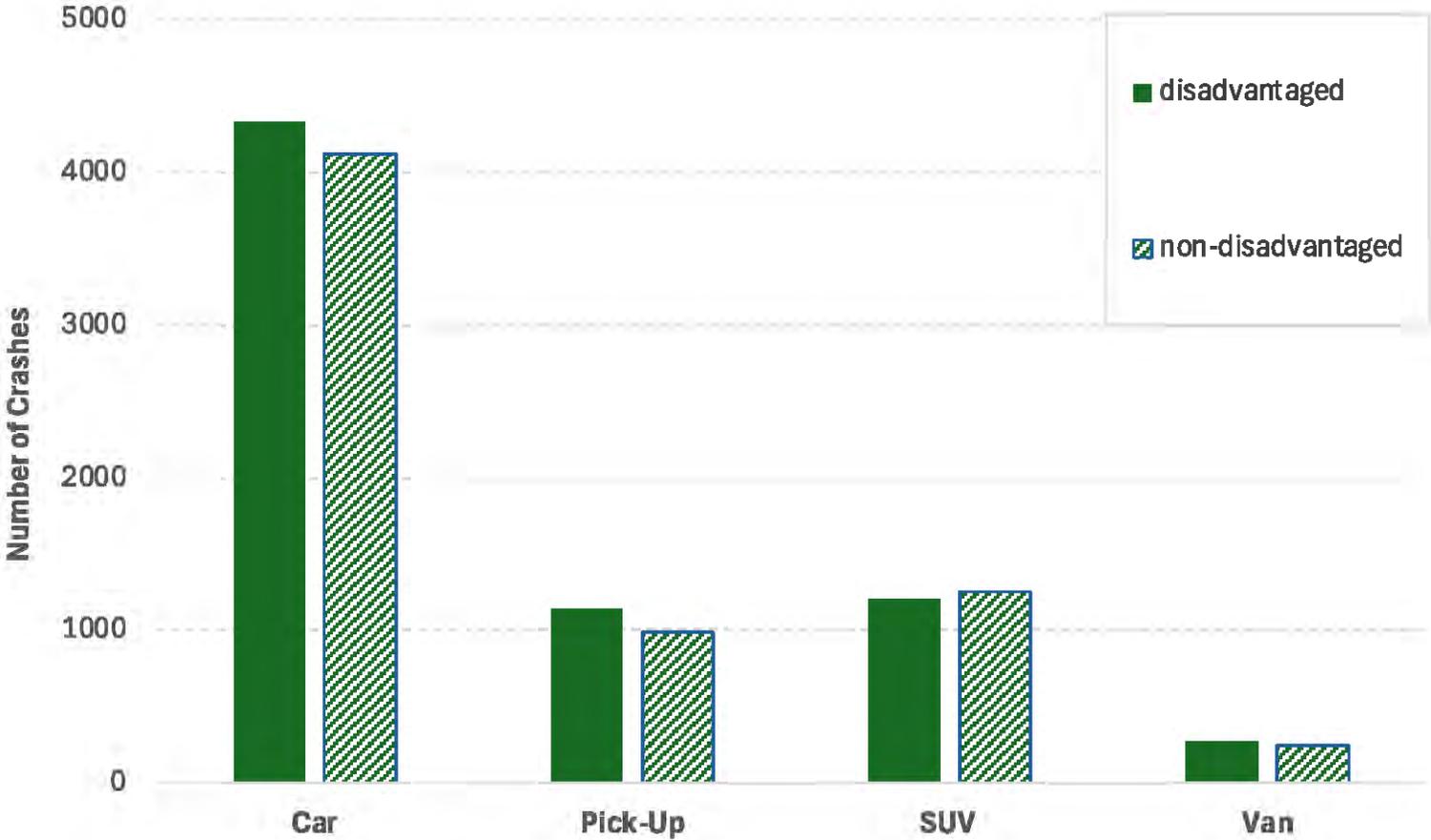
Climate Change  
Resilience



Language  
Equity



# Pedestrian fatality and serious injury crashes are split between disadvantaged and non-disadvantaged areas



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

# Adjusted for population, pedestrian fatality and serious injury crash risk is higher in disadvantaged areas

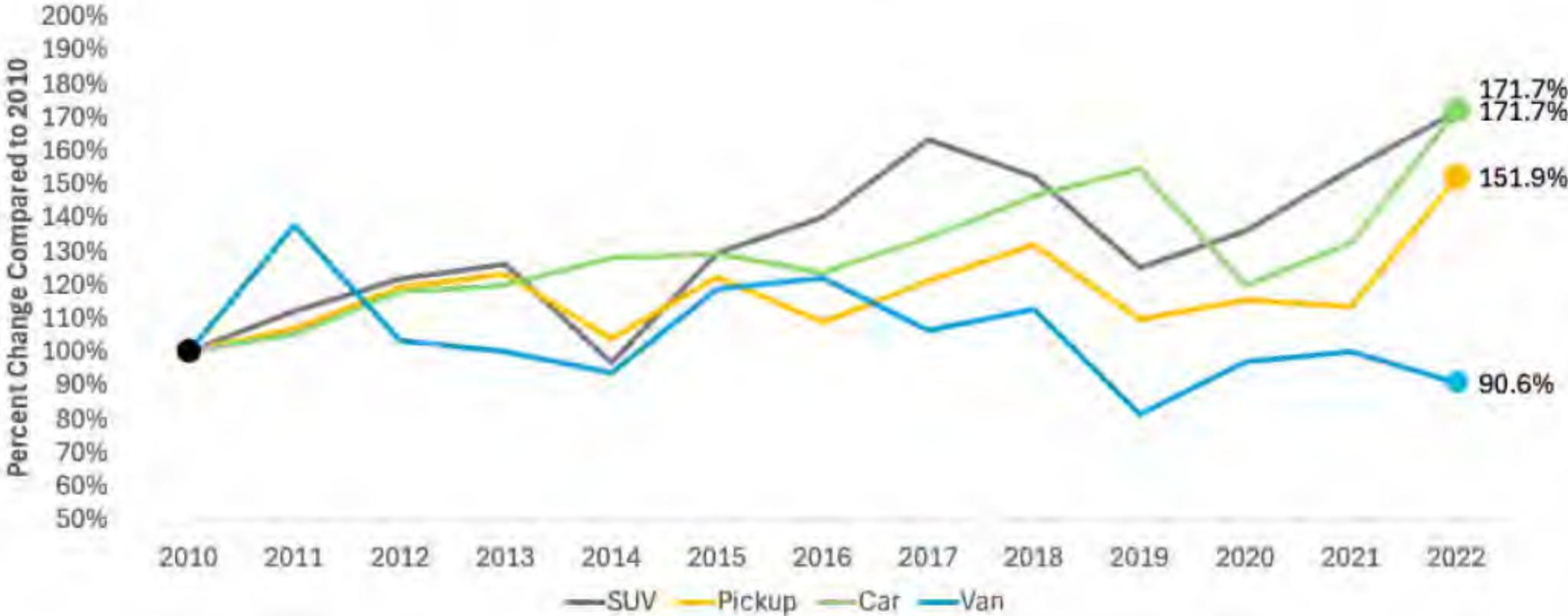
---

Car	31.68	16.08
SUV	8.82	4.87
Pick Up	5.12	3.82
Van	1.32	0.93

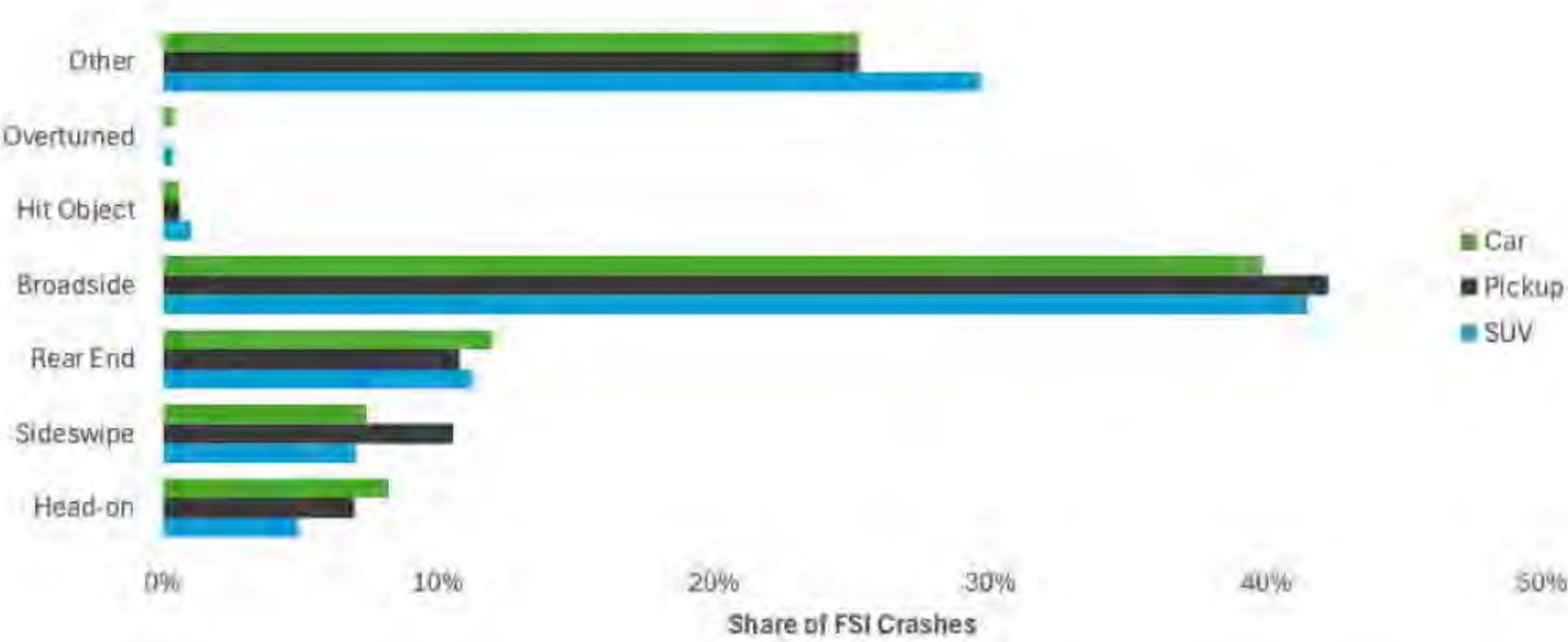
# Pedestrian fatality and serious injury crashes involving an SUV have grown at the fastest rate of all vehicle types



# Bicyclist fatality and serious injury crashes involving an SUV have grown at the same rate as those involving a car

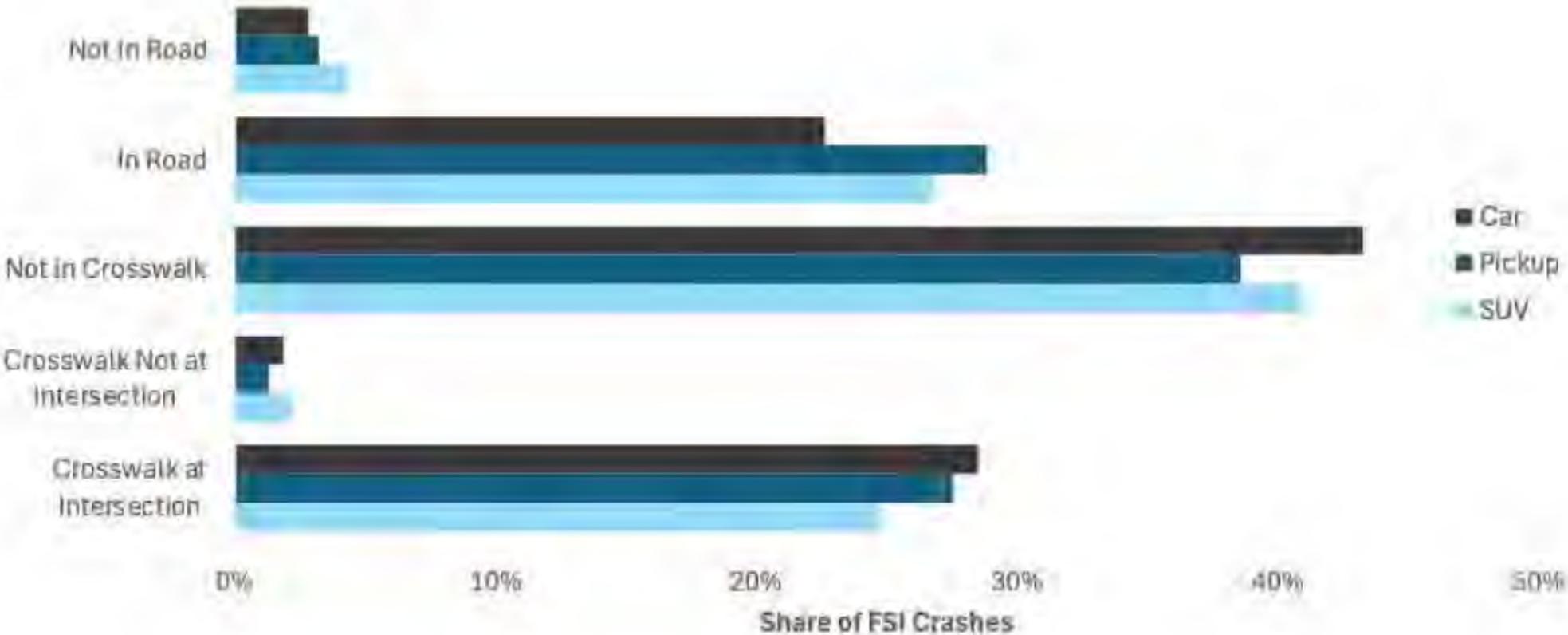


# Broadside crashes are the most common crash type resulting in a bicyclist fatality or serious injury



Data: California iSWITRS, 2018-2022

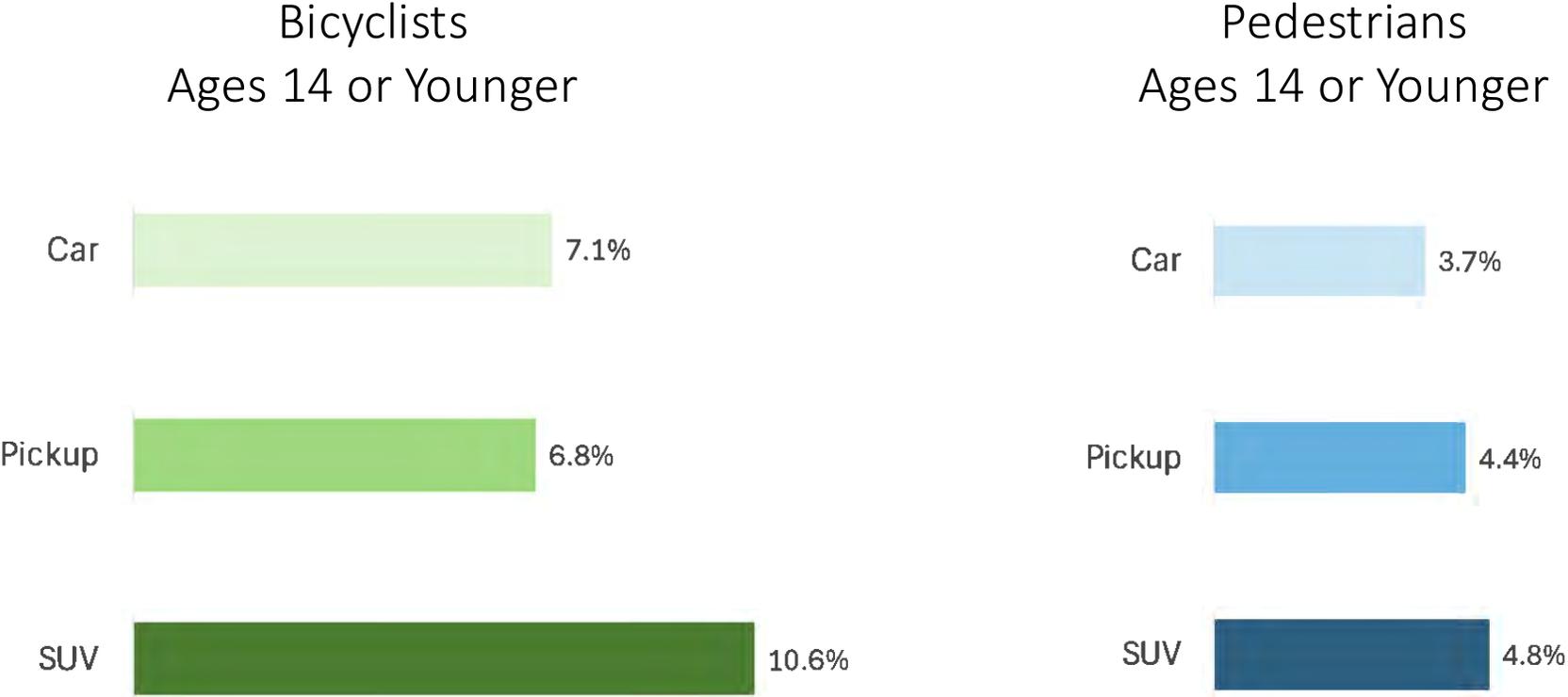
# When a pedestrian is struck by a larger vehicle resulting in a fatality or serious injury, it tends to be in the roadway



Data: California iSWITRS, 2018-2022

# A higher share of SUV VRU victims are children compared to other vehicle types

---



Data: California  
iSWITRS, 2018-2022



---

# Relationship between vehicle size and injury risk

## Trend analysis is not the same as casual analysis

---

We describe:

- Trends in vehicle size
- Trends in traffic fatalities and serious injuries

What “we” would like to understand:

- The causal relationship between these two trends

This is challenging for several reasons

# Crash data is particularly challenging

---

## **Inherent challenges for crash data collection:**

- Speed
- Distraction
- Substance use
- Cannot interview VRU fatal victims

## **Opportunities for improved data collection and sharing:**

- Share redacted crash narratives
  - Share truncated VINs for all vehicles
- 

## Impact force in a crash

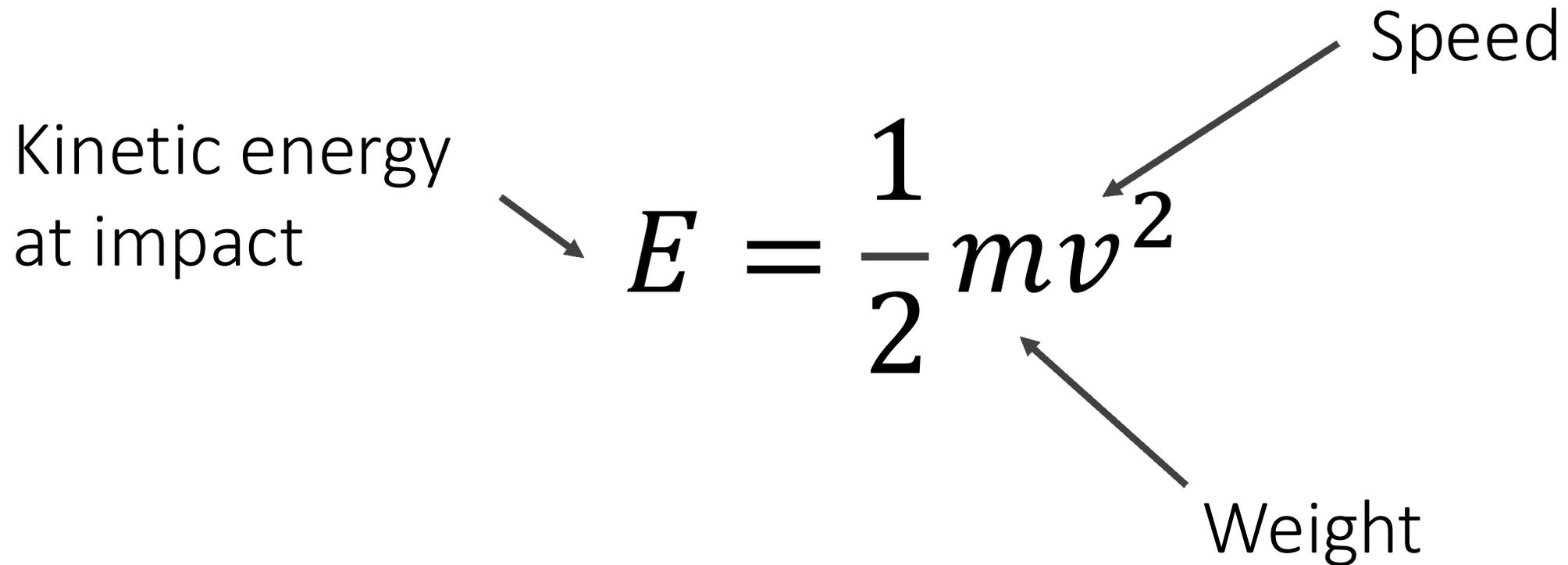
---

Kinetic energy  
at impact

$$E = \frac{1}{2}mv^2$$

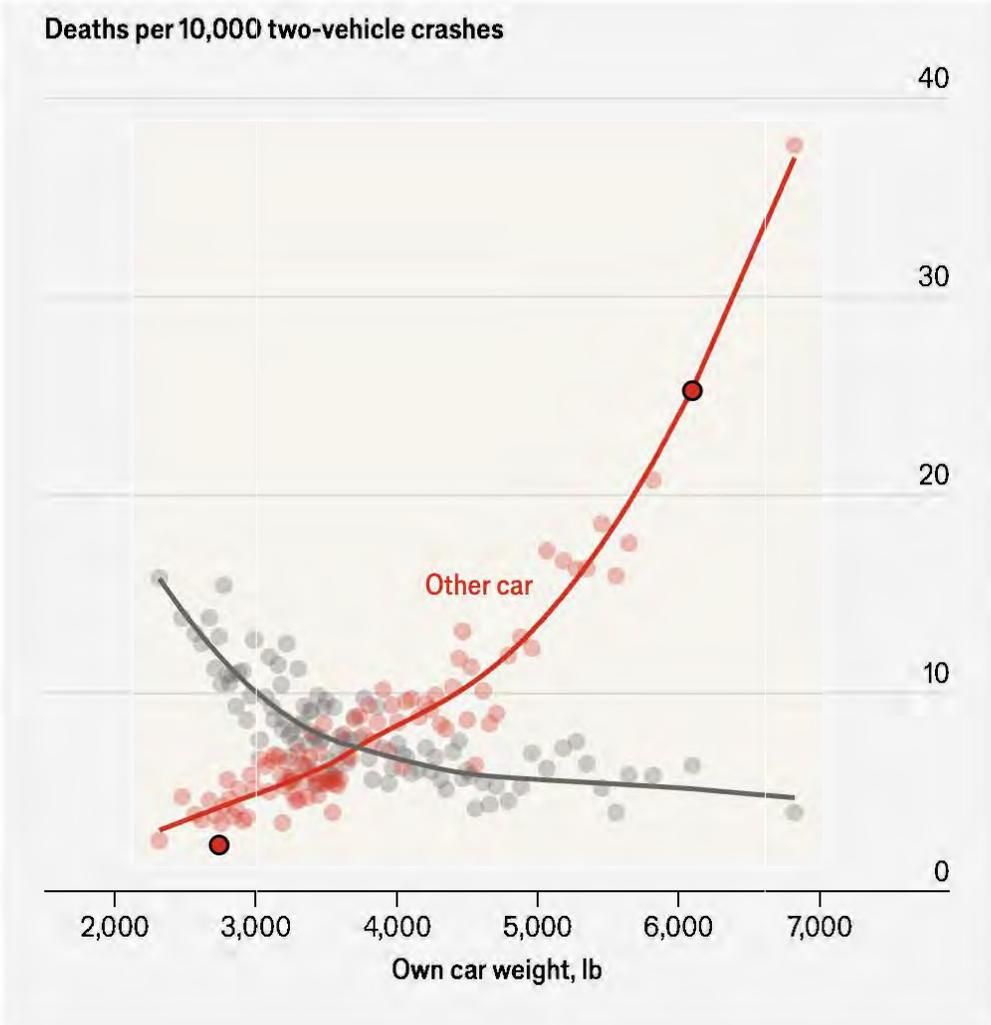
Speed

Weight



Severity of injury is further mediated by  
vehicle height and angle of impact

# Fatality rate increases with weight of the striking vehicle



*The Economist, 2024*

# Higher the hood height, the higher the VRU fatality risk

**BASELINE: low/sloped**

Low/blunt: similar risk

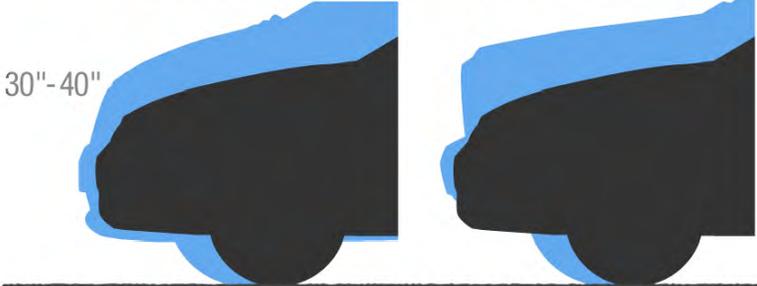
≤30"



Medium/sloped: similar risk

Medium/blunt: +26%

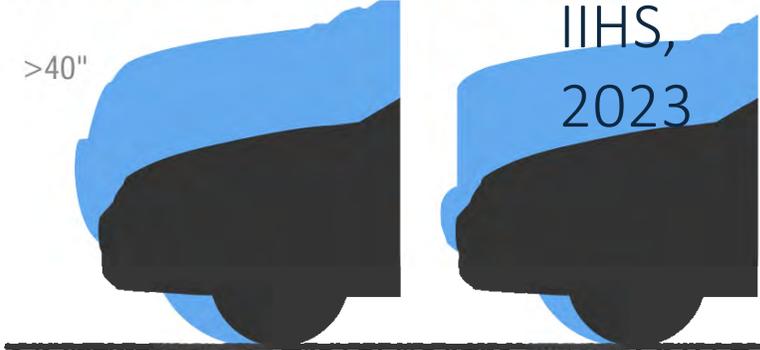
30"-40"



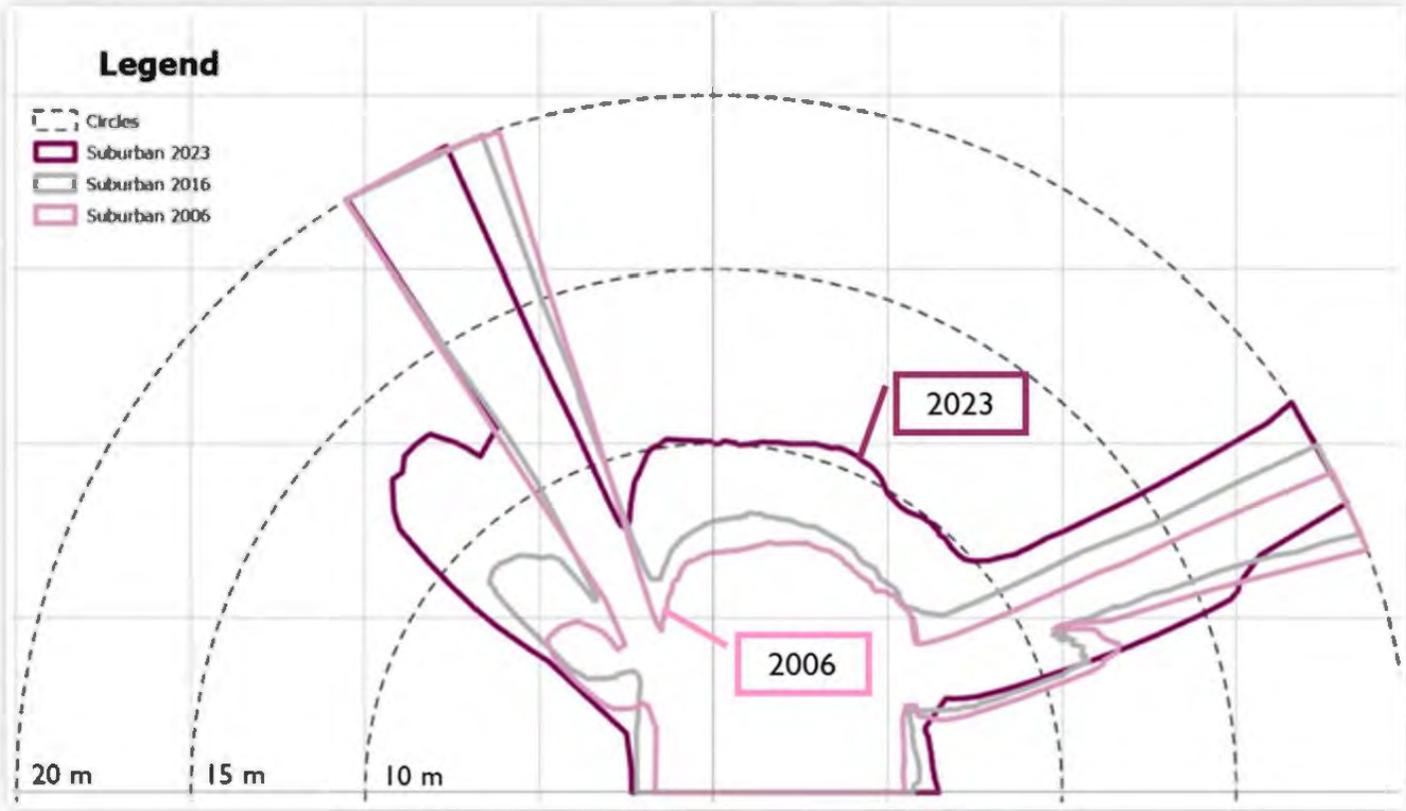
Tall/sloped: +45%

Tall/blunt: +44%

>40"



# Driver visibility has declined over the past 20 years

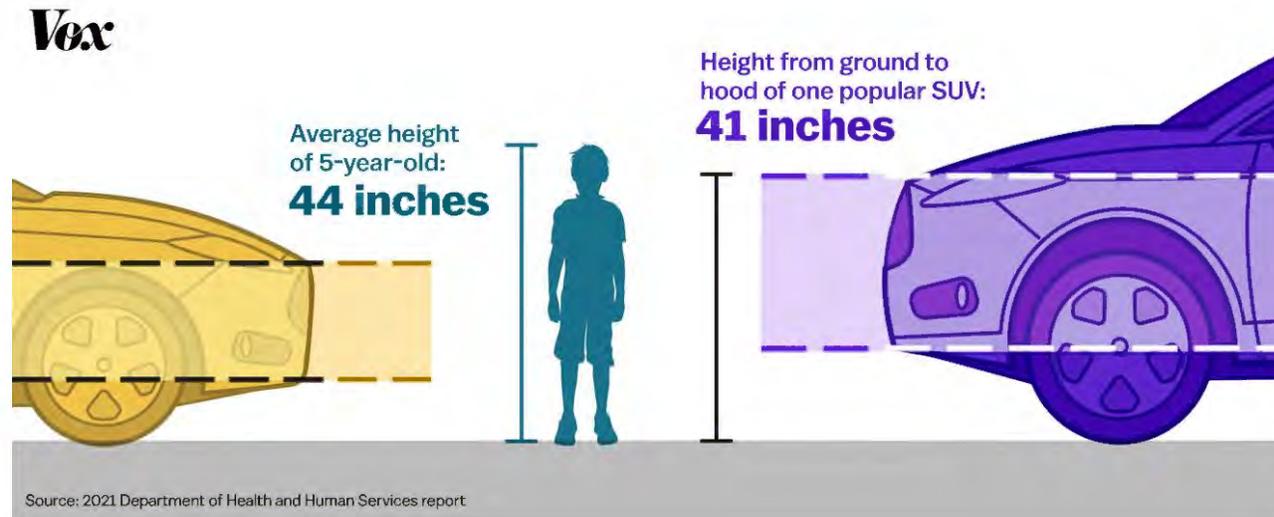


2025 US DOT Office of the Assistant Secretary for Research and Technology and US DOT Volpe National Transportation Systems Center

IIHS, 2025

## Children are more likely to die if struck by a larger vehicle

- Children are eight times more likely to die when struck by a SUV compared to children struck by a passenger car (Edwards & Leonard, 2021)
- Child pedestrians are 82% more likely to be killed if struck by an SUV vs a passenger car (Robinson et al, 2024)



## Safer for whom?

---

- Heavier and larger vehicles are safer for their occupants in a crash...
- ...but they are more dangerous for occupants of smaller vehicles and vulnerable road users
- A fleet of small, similarly sized vehicles in California would likely reduce injury risk for both vehicle-to-vehicle and vulnerable road user crashes



# AGENDA – July 16, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
3	Trends in Vehicle Fleet, Road User Injuries and Fatalities	Cayla McDonell Matthew Raifman	I	C

# 15 MIN BREAK

# AGENDA – July 16, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
4	Roundtable Discussion with Task Force Members	Cayla McDonell	I	C

## AGENDA – July 16, 2025

---

# Key Takeaways from UC Berkeley Research & Discussion Questions

## Key Takeaways: California Vehicle Fleet Trends

---

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 42% higher ground clearance than the average sedan.

## Key Takeaways: California Vehicle Fleet Trends (Continued)

---

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 59% higher ground clearance than the average sedan.

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

## Key Takeaways: California Vehicle Fleet Trends (Continued)

---

1.7 Americans are holding onto 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. However, their share of registrations is small but increasing, with hybrids made up 6.5% of registrations and electric vehicles make up 5% of registrations.

## Roundtable Discussion Questions: California Vehicle Trends

---

- 1) What are your key takeaways from the information presented here?
- 2) What vehicle fleet trends do you find most notable?
- 3) What questions do you have about this information?

## Key Takeaways: California Injury and Fatality Trends

---

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) SUVs, pickups, and sedans 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.

- This is due to the challenge of isolating vehicle weight from other factors (ie., 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.

## Key Takeaways: California Injury and Fatality Trends (Continued)

---

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.

## Roundtable Discussion Questions: California Injury and Fatality Trends

---

- 1) What are your key takeaways from the data presented on California injury and fatality trends?
- 2) What questions do you have on this data?

## Key Takeaways: California Injury and Fatality Trends (Continued)

---

- 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
- 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 fatality and serious injuries for disadvantaged areas is approximately 50% higher for all vehicle types.

## Roundtable Discussion Questions: California Injury and Fatality Trends

---

- 1) What are your key takeaways from the data presented on pedestrian and bicyclist fatalities and serious injuries trends in California? As it relates to children and disadvantaged areas?
- 2) What questions do you have on this data?

## AGENDA – July 16, 2025

---

Are there any other comments or questions  
from Task Force members?

# AGENDA – July 16, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
4	Roundtable Discussion with Task Force Members	Cayla McDonell	I	C

# AGENDA – July 16, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
5	Public Comment	Cayla McDonell	I	C

# AGENDA – July 16, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
5	Public Comment	Cayla McDonell	I	C

# AGENDA – July 16, 2025

---

ADJOURN

Thank you

Cayla McDonell  
Associate Deputy Director  
[Cayla.McDonell@catc.ca.gov](mailto:Cayla.McDonell@catc.ca.gov)



# **AGENDA**

## **CALIFORNIA TRANSPORTATION COMMISSION VEHICLE WEIGHT SAFETY STUDY TASK FORCE MEETING September 9, 2025**

**Wednesday, September 9, 2025**

**9:30 AM Vehicle Weight Safety Study  
Task Force Meeting**

*\*Virtual via Zoom or Teleconference only, per SB 544*

**To register to participate in the meeting remotely:**

[https://zoom.us/webinar/register/WN\\_oy6tQiCCQga63NrdZuZaXw](https://zoom.us/webinar/register/WN_oy6tQiCCQga63NrdZuZaXw)

**To join by phone:** (669) 900-9128

Webinar ID: 941 8566 5617 and Passcode: 802910

\*On September 22, 2023, Governor Newsom signed [SB 544](#). This legislation temporarily waives the Bagley-Keene Open Meeting Act requirement that locations of remote Task Force members be noticed on the agenda until January 1, 2026, if members of the public can also participate remotely.

**NOTICE:** We welcome comments from the public as a part of each item at this meeting. Commission staff has the discretion to take up agenda items out of sequence. Commission staff may adjourn earlier than estimated.

Unless otherwise noticed in the specified book item, a copy of this agenda, and related book items will be posted 10 calendar days prior to the meeting on the California Transportation Commission (Commission) Website: [www.catc.ca.gov](http://www.catc.ca.gov). Questions or inquiries about this meeting may be directed to the Commission staff at (916) 654-4245, 1120 N Street (MS-52), Sacramento, CA 95814. Commission staff will provide assistive services including translation and interpretation in multiple languages, real-time captioning, transcription, large print, digital audio and/or video recordings, as well as Task Force meeting materials in an accessible format for the visually impaired. To obtain services or copies in one of these alternate formats or languages, please contact us at (916) 654-4245 or [ctc@catc.ca.gov](mailto:ctc@catc.ca.gov). Arrangements should be made as soon as possible but no later than at least five working days prior to the scheduled meeting." (Las solicitudes de acomodación especial o servicios de interpretación deben hacerse tan pronto como sea posible o por lo menos cinco días antes de la reunión programada.)

Improper comments and disorderly conduct are not permitted. In the event that the meeting conducted by Commission staff is willfully interrupted or disrupted by a person or by a group so as to render the orderly conduct of the meeting infeasible, Commission staff may order the removal of those individuals who are willfully disrupting the meeting.

\*"A" denotes an "Action" item; "I" denotes an "Information" item.

For a glossary of frequently used terms and acronyms please visit the Commission website at: [https://catc.ca.gov/-/media/ctc-media/documents/about\\_ctc/acronyms-11-04-21-a11y.pdf](https://catc.ca.gov/-/media/ctc-media/documents/about_ctc/acronyms-11-04-21-a11y.pdf)

**NEXT REGULARLY SCHEDULED TASK FORCE MEETING (Subject to Change):  
Vehicle Weight Safety Study Task Force Meeting – October 29, 2025**

**GENERAL BUSINESS**

Tab	Item Description	Presenter	Type*
1	Roll Call & Webinar Logistics	Dylan Jimenez (CTC)	I

**INFORMATION ITEMS**

Tab	Item Description	Presenter	Type*
2	Summary of July 16 Task Force Meeting	Cayla McDonell (CTC)	I
3	Safe Systems Approach Overview	Dr. Julia Griswold (UC Berkeley)	I
4	Introduction to Potential Policy Solutions	Dr. Matthew Raifman (UC Berkeley)	I
5	Vehicle Weight and Roadway Degradation	Dr. John Harvey (UC Davis)	I
6	Key Takeaways and Roundtable Discussion with Task Force Members	Cayla McDonell (CTC)	I

**OTHER MATTERS**

Tab	Item Description	Presenter	Type*
7	Public Comment	Cayla McDonell (CTC)	I

**ADJOURN**

# Memorandum

To: TASK FORCE MEMBERS

**Vehicle Weight Safety Study  
Task Force Meeting:  
September 9, 2025**

**From:** TANISHA TAYLOR, Executive Director

**Reference Number:** Tab 2, Information

**Prepared By:** Cayla McDonell  
Associate Deputy Director

**Published Date:** August 26, 2025

**Subject:** Summary of July 16 Task Force Meeting

## **Summary:**

Pursuant to Government Code Section 14527, the second meeting of the Vehicle Weight Safety Study (Task Force) took place on July 16, 2025. A presentation was given by Dr. Matthew Raifman, University of California, Berkeley (UC Berkeley), regarding trends in vehicle fleets and vulnerable road user injuries and fatalities. Following the presentation, California Transportation Commission (Commission) staff presented key takeaways from UC Berkeley's presentation and discussion questions for feedback from Task Force members and the public. One comment from a member of the public was received after the conclusion of the Task Force meeting. No public comments were received during the Task Force meeting.

Below includes summaries of Commission staff key takeaways from UC Berkeley's research, key takeaways from Task Force members to date, and Task Force member's feedback received in response to the July 16 Task Force presentation.

## **Draft Task Force Findings from UC Berkeley's Presentation on 'Trends in Vehicle Fleets, Vulnerable Road User Injuries and Fatalities':**

### **1. California Vehicle Fleet Trends**

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

1.2 Over the next decade, sport utility vehicles (SUV) 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.

Task Force Comments:

- Whether there are fewer smaller vehicles available for purchase, resulting in the increase in purchase of SUVs and larger vehicles generally, should be further evaluated. (Streets for All)

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

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).

Task Force Comments:

- Identify outcomes from other states which have imposed a passenger vehicle weight fee, such as changes to consumer behavior, safety outcomes, and other outcomes. (American Automobile Association)

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.

1.7 Americans are holding onto their vehicles longer (vehicles are 12.6 years old in 2024 v. 10.4 years old in 2008) lengthening the time of the adoption of new vehicles with more safety features.

Task Force Comments:

- Fees will encourage people to hold on to their cars longer due to the increased cost of purchasing a newer vehicle. This will result in slower fleet turnover and thus slower adoption of advanced driver assistance systems and safer vehicle features generally. (California Farm Bureau)

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

Task Force Comments

- Evaluate how to treat electric vehicles compared 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 has a negative impact on safety outcomes of vulnerable road users. (California Farm Bureau, California New Car Dealers Association)

Other Comments from Task Force Members:

- Vehicle Safety Information Sharing:
  - The National Highway Traffic Safety Administration (NHTSA) requires certain vehicles to store data in a black box (which should include speed data) so that collision information can be analyzed after a collision occurs. (California Highway Patrol (CHP))
  - Suggest that other data be used to illuminate vehicle weight impacts in addition to crash incident reports. (Streets for All)
  
- Safety Feature Regulations:
  - In 2016, the automotive industry agreed to standardize the installation of automatic emergency braking in new vehicles. Additionally, vehicle form is standardized across all fuel types for each vehicle model. (Alliance for Automotive Innovation)
  - NHTSA proposed a rule in 2024 to alleviate pedestrian head and lower leg impacts. The industry expects this rule will affect vehicle design and regulations and automatic emergency braking is expected to be more effective than it is today. (Alliance for Automotive Innovation)
  - It will be difficult for regulators and the automotive industry to create a vehicle fleet that meets the needs of all interest groups due to the various consumer needs of vehicles. Instead, we should encourage development of a vehicle fleet which balances various needs including affordability and safety. (Alliance for Automotive Innovation)
  - Autonomous vehicles and speed assistance devices used for advanced driver assistance systems and how they impact vulnerable road users should be considered further. (Streets for All)
  
- Vehicle Choice Considerations:
  - Why consumers are choosing certain vehicles, including whether consumers know about the associated fees before they purchase a vehicle, should be studied further. (Streets for All)

**2. California Vulnerable Road User Fatality and Serious Injury Trends**

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

Task Force Comments:

- How California vulnerable road user fatality and serious injury trends data compare to other states and other countries with stricter driving standards should be considered further. Driving behavior is often very poor in California and poor driving has nothing to do with the car being driven. (California Farm Bureau)

- A lot of data was presented about vehicles trends but not about the person behind the wheel. More data about the last time a driver took a driver's test, renewed their license, their age, etc., is warranted to determine if drivers who meet minimum driving standards are being licensed before we start looking at the cars alone as culprits for the trends presented. (California Farm Bureau)

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

2.1 (c) SUVs, pickups, and sedans 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).

Task Force Comments:

- While SUV registration rates have increased, there is not a significant difference in SUV collisions with vulnerable road users compared to sedans or pickup trucks. Ultimately, sedans are the primary culprit for fatalities and serious injuries with vulnerable road users. (AAA)
- SUV involved crashes with serious injuries or fatalities are said to grow at the fastest rate, which is related to SUVs growing at the fastest rate of vehicles registered in California. (California Farm Bureau)
  - Based on the research presented, we can't conclude that SUVs and trucks result in more collisions with vulnerable road users. However, the data does show that vulnerable road users that collide with larger vehicles does make it more likely that the collision will result in a fatality or serious injury. (Safe Streets Research)

2.1 (d) UC Berkeley's research only shows correlation between these factors, not causation.

- 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.

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

Task Force Comments:

- The research presented indicates that children are more likely to be killed or seriously injured by larger vehicles, such as SUVs. What are the most prevalent vehicles used by families with children and the difference between fatalities and serious injury rates to children between an SUV, pickup truck or minivan? (Streets for All)

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

Task Force Comments:

- Whether disadvantaged areas have more dangerous roadways should be considered. (Safe Streets Research, Streets for All)

Other Comments from Task Force Members:

- The Built Environment and Fatality and Serious Injury Trends of Vulnerable Road Users:
  - The proportion of collisions occurring at night and outside of marked biking and walking facilities should be considered. (Alliance for Automotive Innovation)
  - How behaviors exhibited by bicyclists and pedestrians factor into the fatality and serious injury trends presented and what infrastructure can prevent or discourage unsafe behaviors exhibited by bicyclists and pedestrians should be considered. (California State Association of Counties, Safe Streets Research)
- Other Factors for Consideration Related to Fatality and Serious Injury Trends and Vulnerable Road Users:
  - Whether older cars are more likely to be involved in collisions should be considered. (California Farm Bureau)
  - Whether the increase in rideshare services has a negative impact on safety outcomes of vulnerable road users should be considered. (Safe Streets Research)
  - Vehicle features which make vehicle operation more 'comfortable' for a passenger (i.e., vehicle entertainment systems, phone projection applications, etc.), might influence whether a driver can hear emergency vehicles or see vulnerable road users should be considered. (Streets for All)
- Perceptions of Road Safety Detract from Further Adoption of Walking and Biking:
  - The impact of perceived safety concerns on an individual's decision to walk, bike, or drive should be considered further. There is a perception that vehicles are becoming larger and therefore transportation networks are less safe. This negative perception of safety on our roadways has ramifications for social isolation, mental health, and economic impacts. (American Association of Retired Persons, Safe Streets Research)

- Fee versus Tax:
  - A fee is paid for a specific service. The fee directly relates to the service provided. Any discussion of a cost associated with vehicle weight should be appropriately called a tax. A fee may be an inappropriate description of this assessment. (California Farm Bureau)
- Equitable Use of a Fee, if Imposed
  - Investment from any fee should support both urban and rural investments in safe transportation systems with adequate bike and walking facilities and improvements that supports mode deconfliction (where possible) and prioritize more appropriate modes of travel depending on the context (i.e., bicycling infrastructure might be more appropriate for rural communities or for certain types of streets or other conditions, etc.). Additionally, urban and disadvantaged communities are obvious places to prioritize investment, but if we want to build a safer system, investment in rural and suburban areas is also necessary. (California State Association of Counties)
- Data Limitations:
  - The policy recommendations identified in the Study should note the limitations of the available data used to compile the research findings and document topics identified by the Task Force that are outside of the purview of the legislative requirements for further consideration. (Office of Traffic Safety, Alliance for Automotive Innovation)

Comments from Members of the Public:

- Howard Chapman: Consider an exception to the vehicle weight fee for those who are disabled, for United States military veterans, and those with low incomes, such as those on Medicaid.

# Vehicle Weight Safety Study Task Force Meeting

September 9, 2025



# AGENDA – September 9, 2025

Tab	Item Description	Presenter	Type	Agency
<b>GENERAL BUSINESS</b>				
1	Roll Call & Webinar Logistics	Dylan Jimenez (CTC)	I	C
<b>INFORMATION ITEMS</b>				
2	Summary of July 16 Task Force Meeting	Cayla McDonell (CTC)	I	C
3	Safe Systems Approach Overview	Dr. Julia Griswold (UC Berkeley)	I	C
4	Introduction to Potential Policy Solutions	Dr. Matthew Raifman (UC Berkeley)	I	C
5	Vehicle Weight and Roadway Degradation	Dr. John T. Harvey (UC Davis)	I	C
6	Key Takeaways and Roundtable Discussion with Task Force Members	Cayla McDonell (CTC)	I	C
<b>OTHER MATTERS</b>				
7	Public Comment	Cayla McDonell	I	C

# AGENDA – September 9, 2025

---

## GENERAL BUSINESS

Tab	Item Description	Presenter	Type	Agency
1	Roll Call & Webinar Logistics	Dylan Jimenez	I	C

## AGENDA – September 9, 2025

---

The Task Force's meeting agenda is located on our website at <https://catc.ca.gov/programs/vehicle-weight-safety-study>.

All documents on the CTC website can be translated into any language you need. Simply e-mail us at [ctc@catc.ca.gov](mailto:ctc@catc.ca.gov) and we will have them returned to you as quickly as possible.

## AGENDA – September 9, 2025

---

American Sign Language translations is being provided for this meeting. You should see the translators on the screen.

Live closed captioning is also available. Please select the show captions tab at the bottom of your screen. There are a number of language options available there to choose from.

# AGENDA – September 9, 2025

---

## **Presenters:**

- ❖ If you are on the agenda to make a presentation, please do your best to be succinct.
- ❖ Please remember to speak at a steady pace to allow our translating service adequate time for accurate translations.
- ❖ We hope that you will turn on your camera during your presentation, if you have one.

## AGENDA – September 9, 2025

---

We welcome comments from the public as a part of each item at this meeting.

You should see the webinar control panel, likely located on the bottom of your screen. There you will find the Raise Hand and Q&A tabs.



We encourage you to use the raise hand feature as early into the item as you can to give the system time to acknowledge you.

Alternately, you may use the Q&A tab to submit your comment. Please be sure to include the agenda item number you are commenting on. Commission staff will read the comment on your behalf.

As a reminder, each registered attendee is provided a unique link and phone number to access the webinar. These should not be shared with other participants, as they are registered to a specific attendee and can create confusion for staff when making comments.

# AGENDA – September 9, 2025

---

## For all Meeting Attendees:

Please do your best to be concise.

Please make sure that your comments add new information. If you agree with the comments of a previous speaker, simply make that statement.

Please remember to speak at a steady pace to allow our translating services adequate time for accurate translations.

Since we often have many speakers, we ask that you make your point in 3 minutes or less. If, for some reason, we have many speakers on a topic, we reserve the right to limit comments to 1 minute if needed.

# AGENDA – September 9, 2025

---

## GENERAL BUSINESS

Tab	Item Description	Presenter	Type	Agency
1	Roll Call & Webinar Logistics	Dylan Jimenez	I	C

# AGENDA – September 9, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
2	Summary of July 16 Task Force Meeting	Cayla McDonell	I	C

# AGENDA – September 9, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
2	Summary of July 16 Task Force Meeting	Cayla McDonell	I	C

# AGENDA – September 9, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
3	Safe Systems Approach Overview	Dr. Julia Griswold (UC Berkeley)	I	C

# Safe Systems Approach Overview

Vehicle Weight Safety Study Academic Report

Julia Griswold, PhD

# What is the Safe System Approach?

*“A **guiding principle** to address the safety of all road users. It involves a **paradigm shift to improve safety culture**, increase **collaboration** across all safety stakeholders, and refocus transportation system design and operation on **anticipating human mistakes** and **lessening impact forces** to reduce crash severity and save lives.”*



Image Source: FHWA

## References:

<https://www.transportation.gov/NRSS/SafeSystem>  
[www.transportation.gov/grants/ss4a/nofo](http://www.transportation.gov/grants/ss4a/nofo)

# Top Takeaways

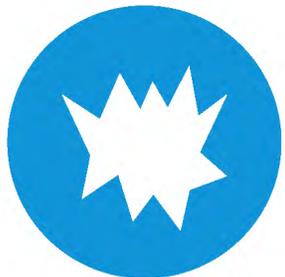
- The Safe System Approach is “Principles Based”
- Achieving a Safe System requires all five elements to be strengthened

# A New Paradigm

The Safe System approach aims to eliminate fatal and serious injuries for all road users by:



**Accommodating human mistakes**



**Keeping impacts on the human body at tolerable levels**

# The Safe System Approach



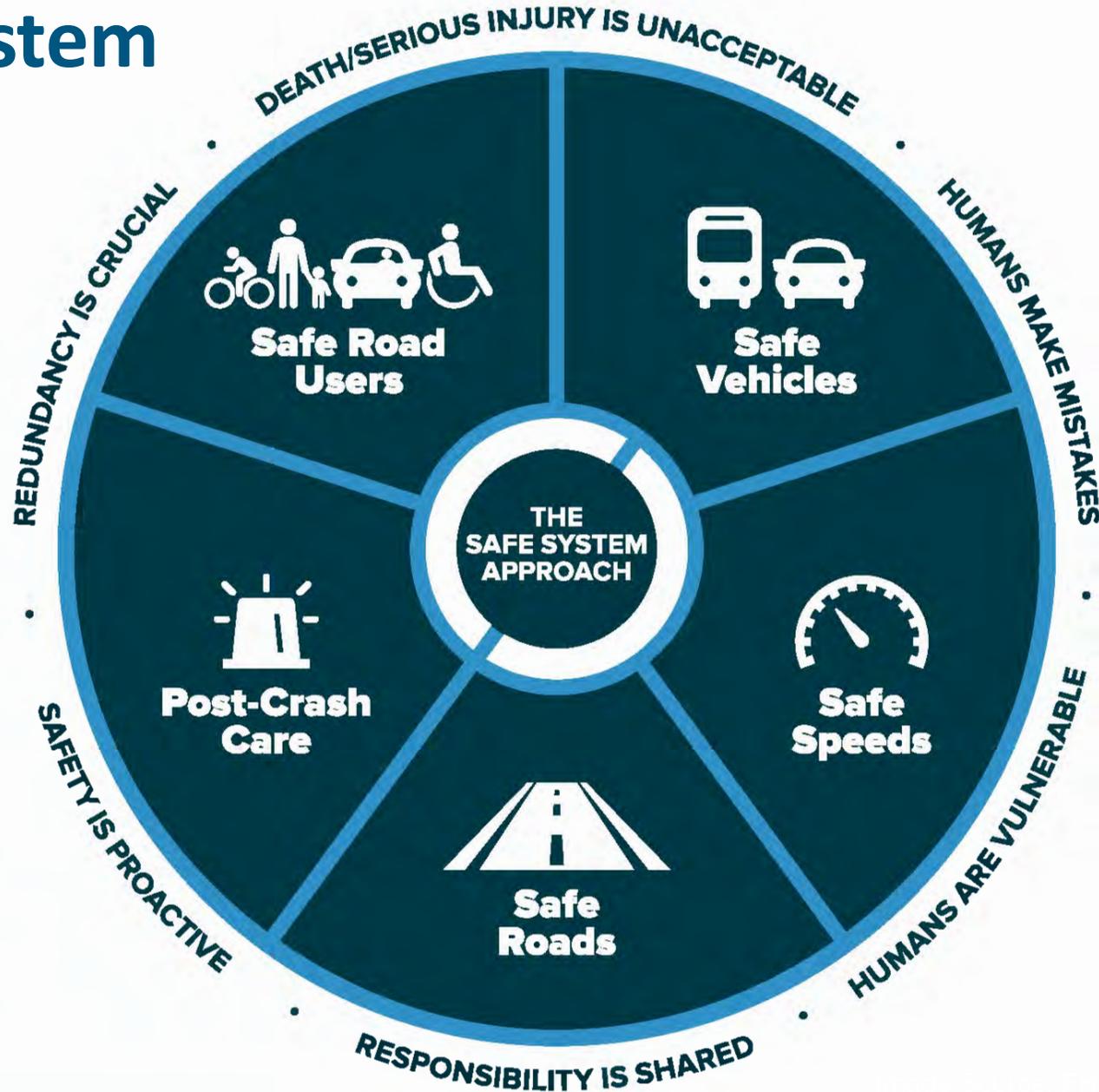
Death/serious injury is unacceptable



Humans make mistakes



Humans are vulnerable



Responsibility is shared



Safety is proactive



Redundancy is crucial

# The Safe System Approach



Death/serious injury is unacceptable



Humans make mistakes



Humans are vulnerable

# Principles <sup>Tab 3</sup>



Responsibility is shared



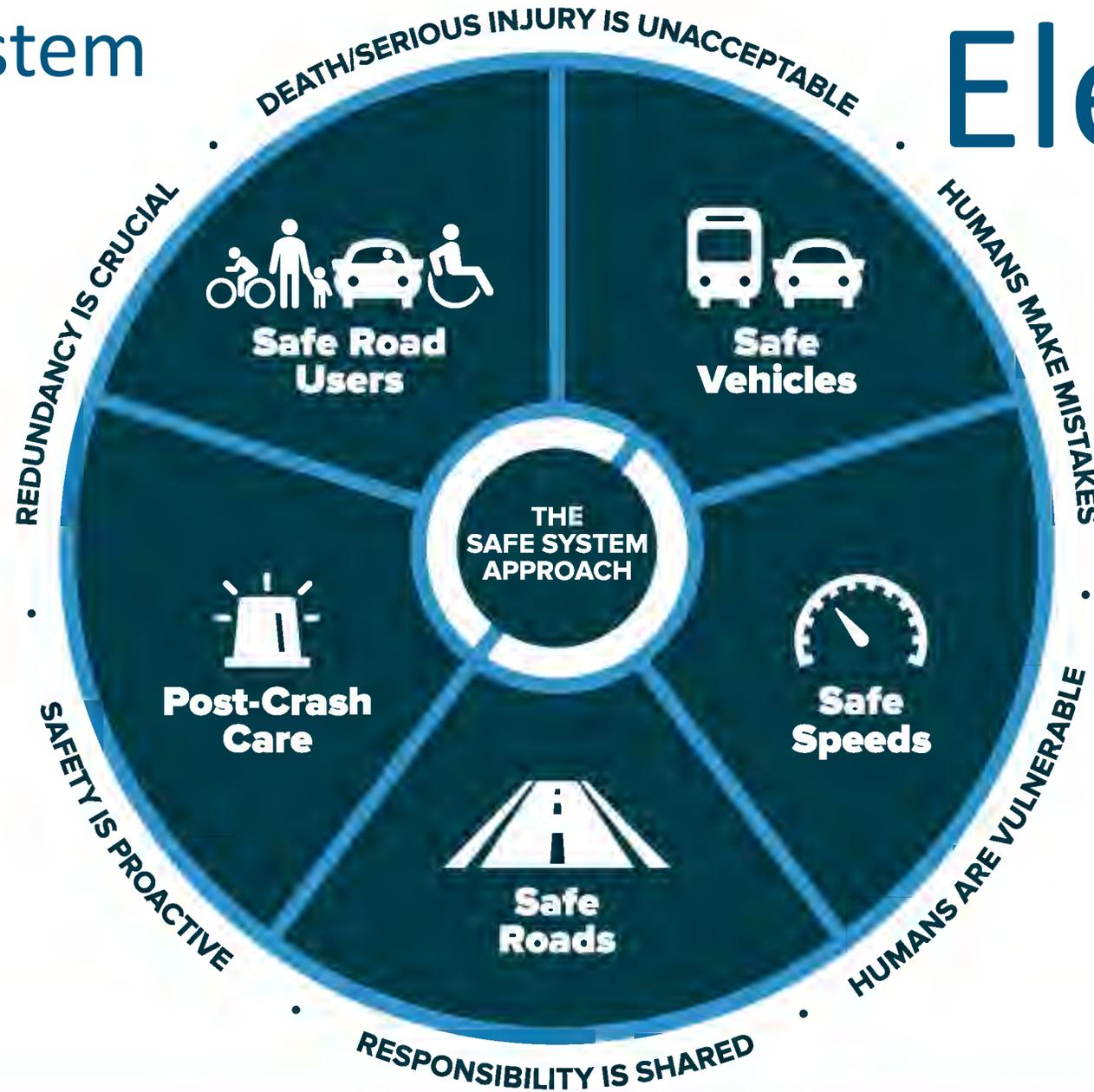
Safety is proactive



Redundancy is crucial

# The Safe System Approach

# Elements



# The 5 Safe System Elements Create Redundancy

The “Swiss Cheese Model” of redundancy creates layers of protection



Death and serious injury only occurs when the layers fail to prevent adequate redundancy against the risks

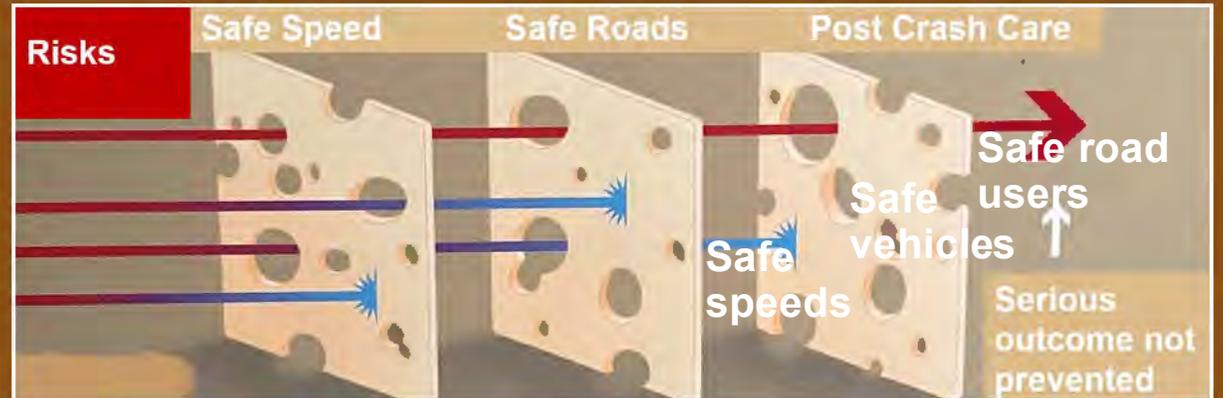
Safe road users  
Safe vehicles  
Safe speeds

# The 5 Safe System Elements Create Redundancy

The “Swiss Cheese Model” of redundancy creates layers of protection



Death and serious injury only occurs when the layers fail to prevent adequate redundancy against the risks



# What's Different?

## Traditional Road Safety Practices

Prevent crashes 

Improve human behavior 

Control speeding 

Individuals are responsible 

React based on crash history 

## Safe System Approach

Prevent deaths and serious injuries

Design for human mistakes

Reduce system kinetic energy

Share responsibility

Proactively identify and address risks

# The Safe System Approach



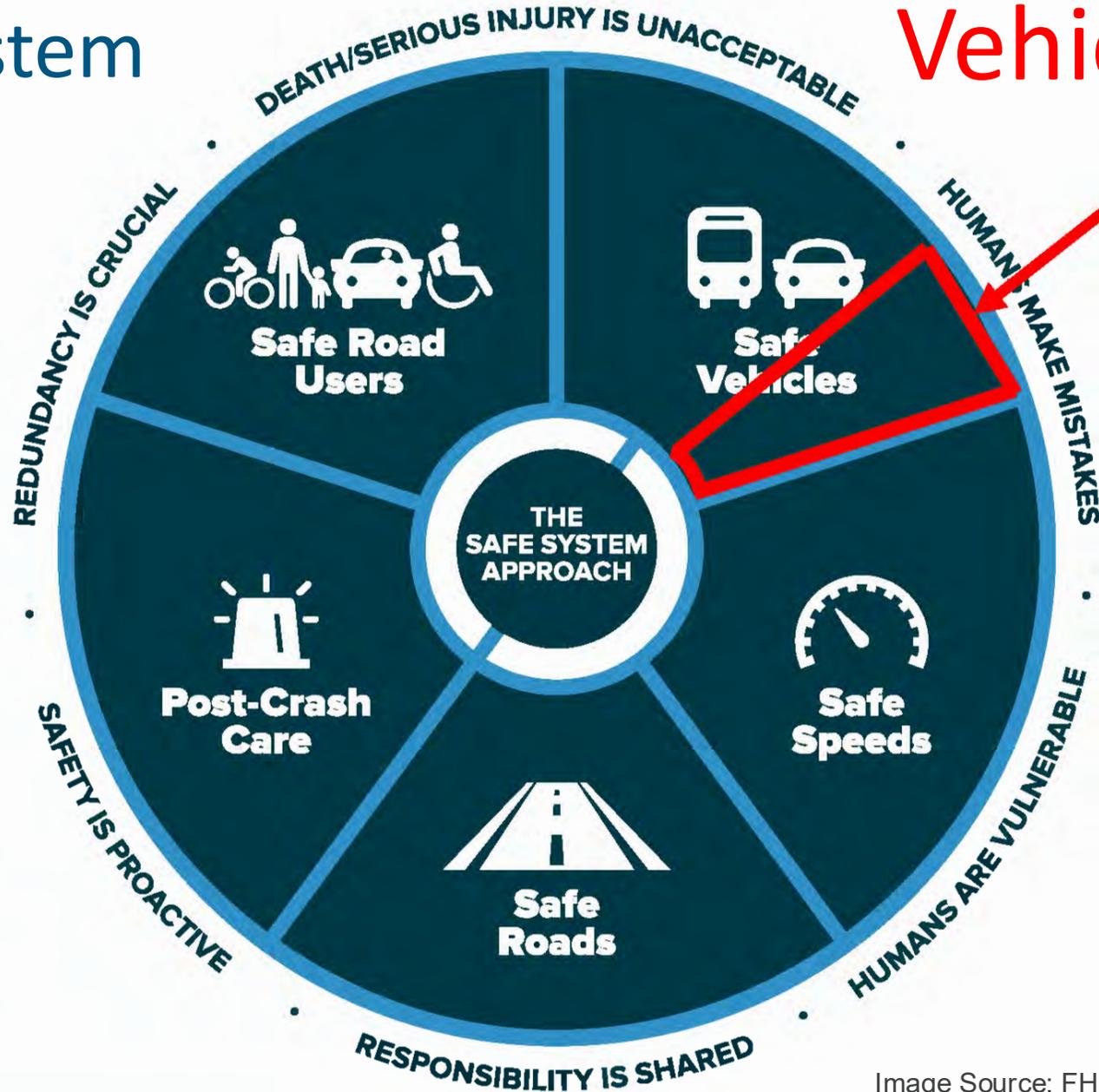
Death/serious injury is unacceptable



Humans make mistakes



Humans are vulnerable



## Vehicle Weight Policies

Tab 3



Responsibility is shared



Safety is proactive



Redundancy is crucial

# Thank you

Julia Griswold, PhD

# AGENDA – September 9, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
3	Safe Systems Approach Overview	Dr. Julia Griswold (UC Berkeley)	I	C

# AGENDA – September 9, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
4	Introduction to Potential Policy Solutions	Dr. Matthew Raifman (UC Berkeley)	I	C

# Landscape of policy solutions for road user injuries and fatalities

Vehicle Weight Safety Study Academic Report

Matthew Raifman, PhD, MPP

## Today's Agenda

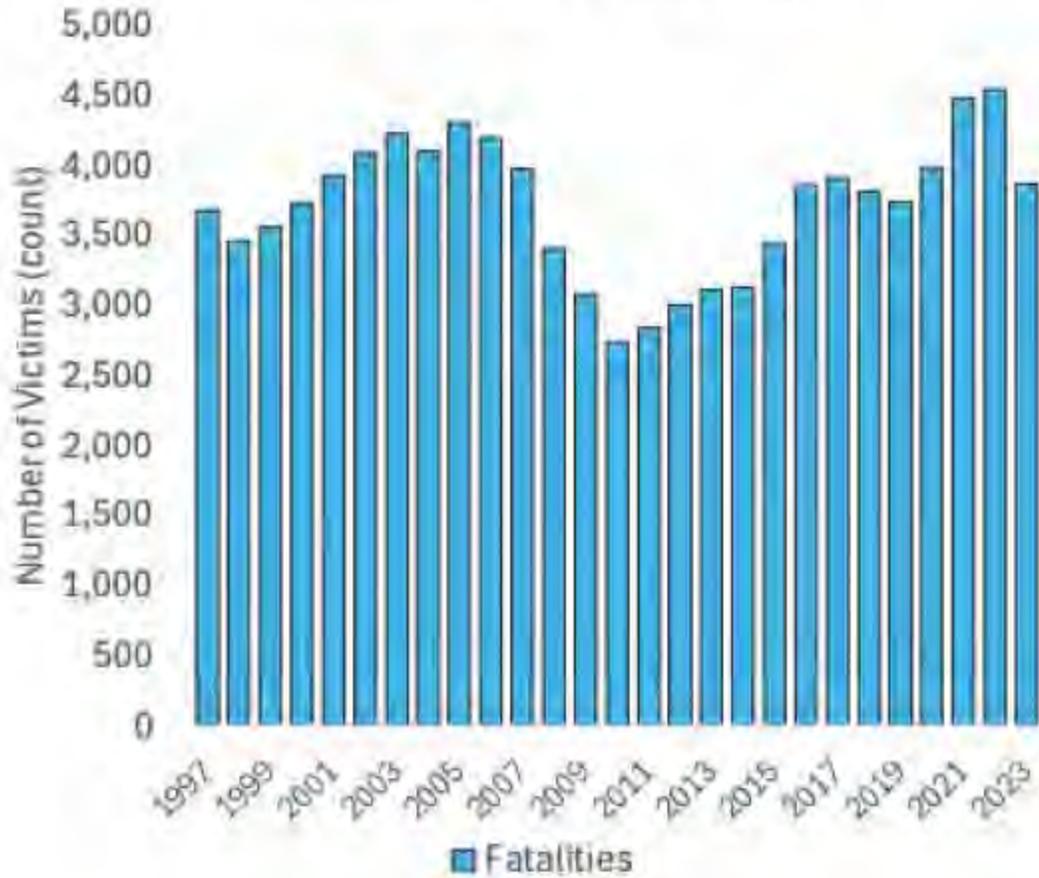
1	Potential Policy Solutions
2	Policy Solutions: Regulations
3	Policy Solutions: Investment in the built environment

## Today's Goals

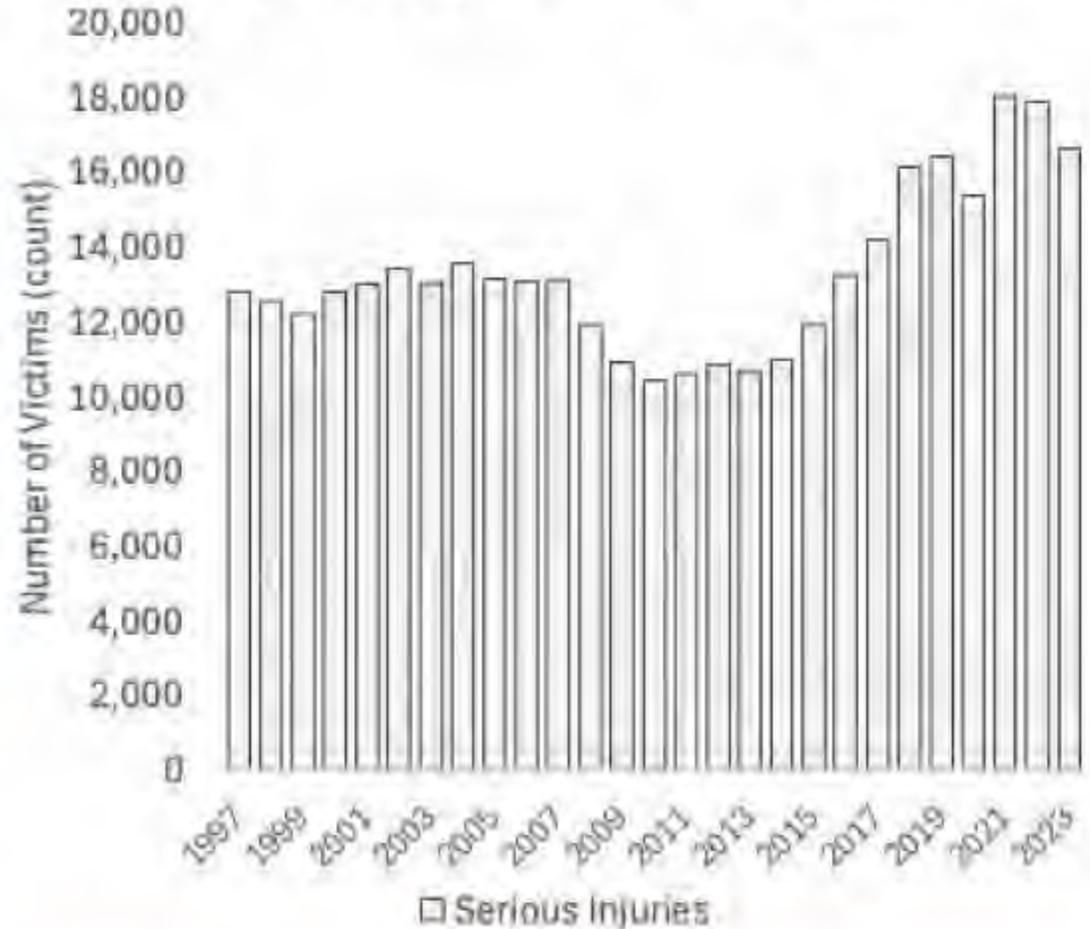
1	Focus on vehicle weight and passenger vehicles
2	Overview scan of the landscape for examples
3	Catalyze the conversation, not direct it

# The Challenge: Our Roads are Unsafe

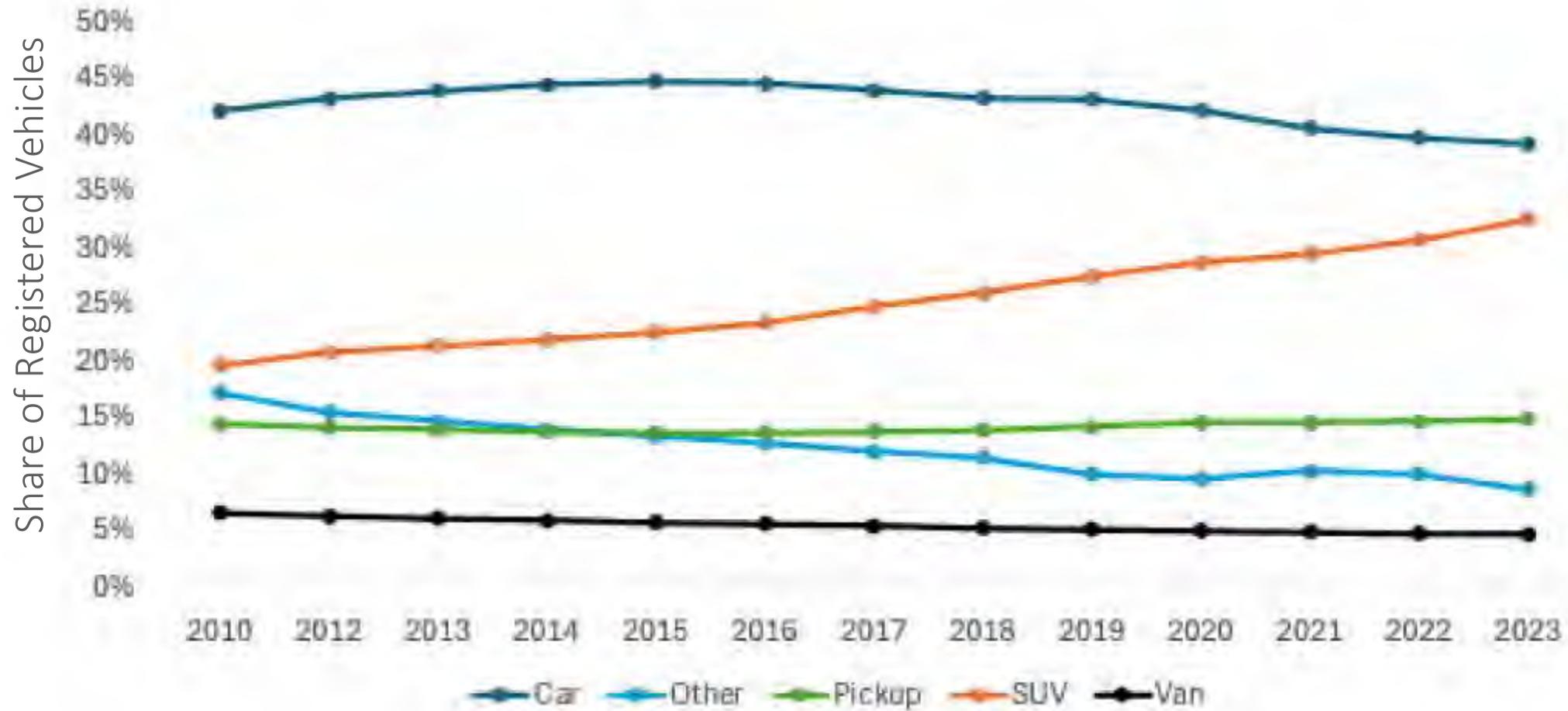
### Fatalities (1997-2023)



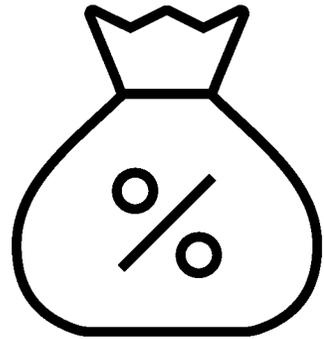
### Serious Injuries (1997-2023)



# The Challenge: A Shift to Larger Vehicles



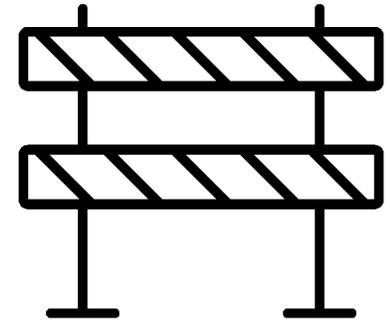
# Potential Policy Solutions



Fees and Taxes  
*(Oct. Meeting)*



Regulations



Built Environment

# Regulatory Solutions

# Vehicle Design Standards

## Definition

- Rules and standards for designing and manufacturing vehicles in the US.

## Existing Use in CA

- Not applicable as vehicle design standards are specified at the federal level under the Federal Motor Vehicle Safety Standards (FMVSS)

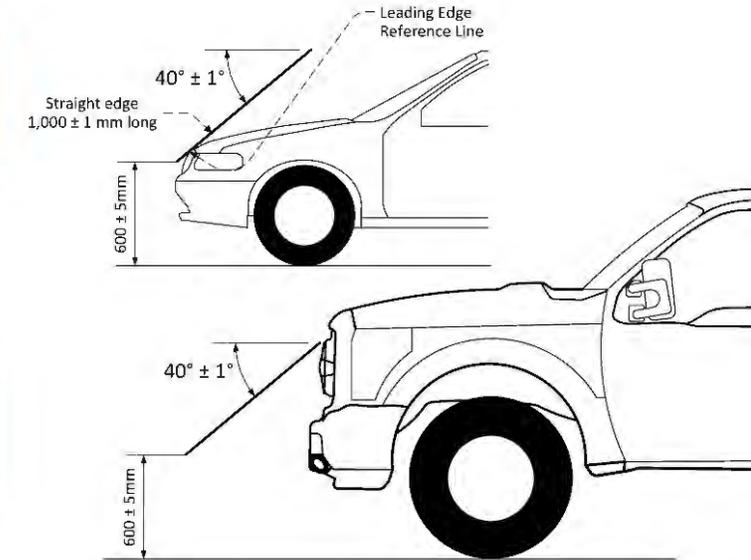


Figure VI.16. Hood Marking of Passenger Car Compared to High Front Vehicle.  
For illustration purposes only.

[Image source](#)

# Vehicle Design Standards

## Opportunities

- Proposed Rule Docket (NHTSA-2024-0057) vehicles designed to mitigate the risk of serious to fatal injury in child and adult pedestrian crashes (head to hood)
- FMVSS No. 127 (Automatic Emergency Braking, Pedestrian Automatic Emergency Braking, and Forward Collision Warning) by 2029

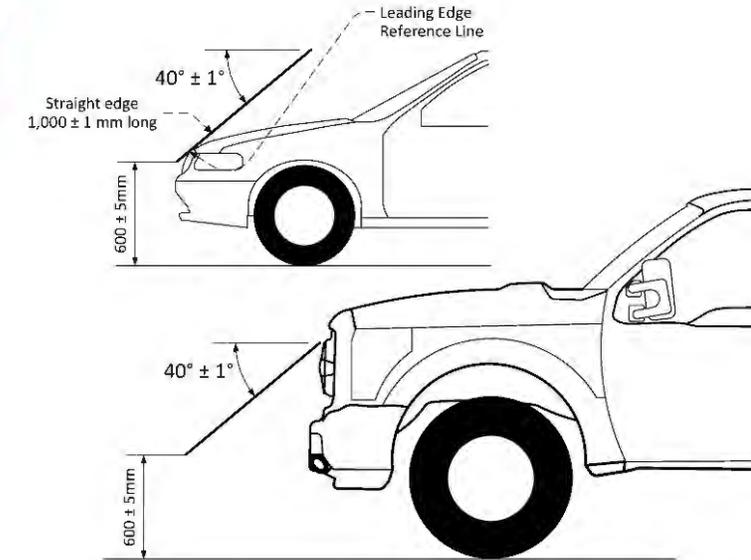


Figure VI.16. Hood Marking of Passenger Car Compared to High Front Vehicle.  
For illustration purposes only.

[Image source](#)

# Vehicle Crashworthiness Testing

- Vehicle crash test ratings developed from physical crash tests on vehicles

- No state-specific testing ongoing
- Testing completed separately by federal NHTSA New Car Assessment Program and independent Insurance Institute for Highway Safety



[Image source](#)

# Vehicle Crashworthiness Testing

- Consider a road safety-based fee/tax policy option
- Use existing safety ratings or develop new state-level safety rating

- NHTSA NCAP expected to consider ped. Protection starting in 2026 (2024-27446)
- Unclear how to combine safety for occupants and non-occupants into a single safety rating



[Image source](#)

# Regulatory Solutions– Equity Considerations

1. Regulations can be applied to all new vehicles
2. Make vehicle fleet safer by design rather than shift demand with fee/taxes
3. Turnover time for fleet prolongs deployment of vehicles
4. More directly targeted as safety than a weight-based policy
5. Some drivers may only have access to vehicles that pose greater safety risk
6. Some professions may require the use of relatively less safe vehicles

# Built Environment

# Built Environment Interventions

1. Lighting Improvements
2. Traffic Calming
3. Pedestrian Crossings
4. Bicycling Infrastructure
5. Safety Infrastructure



[Image source](#)

# Lighting Improvements

- Over 75% of pedestrian fatalities occur at night
- Illumination can reduce pedestrian deaths 5-40%

- Streetlights
- High-visibility crosswalks
- Road striping
- Advance yield or stop markings



[Image source](#)

# Traffic Calming

## Challenge

- Risk of injury increasing exponentially with speed
- Excess speed is a factor in a larger share of fatal crashes in CA compared to nation

## Solutions

- Speed bumps, humps, and tables
- Traffic circles
- Chicanes
- Lane narrowing
- Complete Streets investment



[Image source](#)

# Pedestrian Crossings

- Pedestrian share of CA fatalities/serious injuries is increasing
- Heavier vehicles potentially pose increased risk

- Zebra striping
- Raised crosswalks
- Curb extensions
- Manage vehicle speed
- ADA compliance



[Image source](#)

# Bicycling Infrastructure

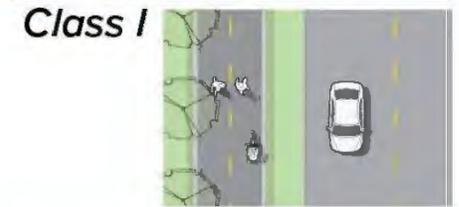
## Challenge

- Bicyclist share of CA serious injuries is increasing
- Heavier vehicles potentially pose increased risk

## Solutions

- Deconflict bicyclists and vehicles
- Separated and protected bike lanes; greenways
- Manage vehicle speed
- Signal timing and prioritization

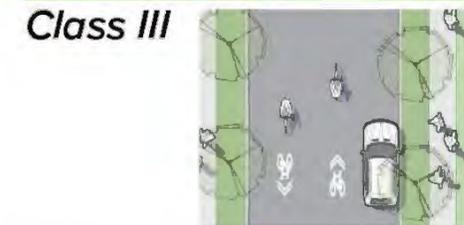
Multi-Use Path Tab 4



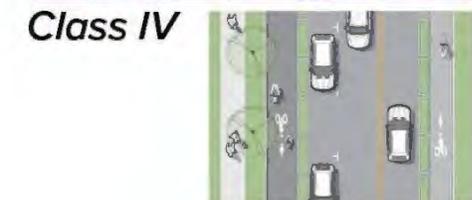
Bike Lane



Bike Route



Cycle Track



[Image source](#)

# Road Infrastructure

## Challenge

- Roadways may not be designed for the changing vehicle fleet
- Guardrails may be inadequate
- Bridge degradation and road weight restrictions

## Solutions

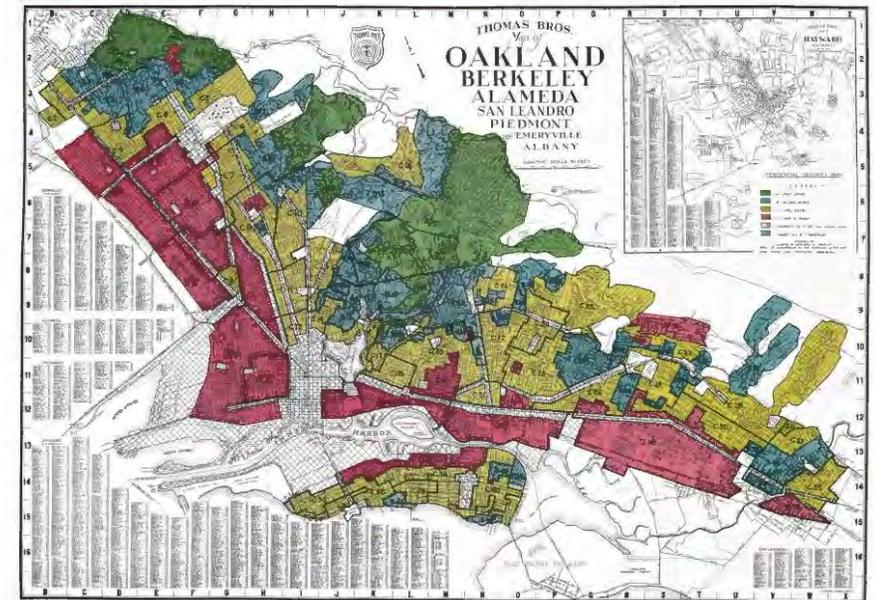
- Inventory infrastructure with weight restrictions
- Upgrade infrastructure for improved safety
- Manage vehicle speed



[Image source](#)

# Regulatory Solutions– Equity Considerations

1. Largescale investment is needed
2. Urban and rural investments may differ in scale and impact
3. Risk that improvements accelerate gentrification
4. Historic disparities in access to safe infrastructure



# Big Picture Questions and Considerations

1. Is it necessary to use weight as a proxy for safety?
2. How might one consider both occupant vs non-occupant vehicle safety?

# Thank you

Matthew Raifman, PhD, MPP

# AGENDA – September 9, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
4	Introduction to Potential Policy Solutions	Dr. Matthew Raifman (UC Berkeley)	I	C

## AGENDA – September 9, 2025

---

**15 MIN BREAK**

# AGENDA – September 9, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
5	Vehicle Weight and Roadway Degradation	Dr. John T. Harvey (UC Irvine)	I	C

## AGENDA – September 9, 2025

---

# Vehicle Weight and Roadway Degradation

John T. Harvey, PhD

## Vehicle Weight and Road Degradation

---

Question posed in the legislative requirements:

What is the relationship between passenger vehicle weight (and, if relevant, vehicle weight distribution) and degradation of road infrastructure, including but not limited to pavement impacts?

## Vehicle Weight and Road Degradation

---

Response to the legislative requirement:

Heavier cars and light trucks (defined as including  $\frac{3}{4}$  ton pickups), including battery electric and fuel cell vehicles, have little effect on bridges and roadway infrastructure.

## Vehicle Weight and Road Degradation - History

---

The effects on pavements of vehicles of different weights have been studied since the 1920s, with California at the forefront of this research and its implementation ever since.

In the 1950s and 1960s it was determined that axle loads and configurations, *not gross vehicle weights* are what cause damage.

- Initial quantification was done by driving different kinds of trucks (pickups to the largest trucks) around test tracks that had different types of pavement structure.
- Damage (cracking, rutting, etc) per pass of each axle load was quantified relative to damage caused by a “reference” axle.

# Vehicle Weight and Road Degradation – Weight Calculation

---

The results of the test tracks can be grossly simplified into the “4<sup>th</sup> power law”

$$\text{Damaging effect of an axle load} = \left( \frac{\text{Load}}{\text{Reference Load}} \right)^4$$

- How does this math work?
  - Twice the axle load causes 16 times the damage per pass relative to one pass of the reference load
  - $2 \times 2 \times 2 \times 2 = 16$
  - Half the axle load causes 6.3% of the damage per pass relative to one pass of the reference load
  - $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} \times \frac{1}{2} = 0.0625$
- The actual effect varies depending on axle type (single, dual, etc), tire pressure, pavement structure, climate, truck speed, etc. **BUT this equation is still generally applicable**

## Vehicle Weight and Road Degradation – Weight Calculation continued

---

Calculations using current Caltrans asphalt pavement design program

- Much more sophisticated calculations
  - Method was recently recalibrated using Caltrans network data from 1978 to 2018
- A pavement designed for 6,340 lb F250 rear axle to last 40 years, will last:
  - 8 years if a 10,000 lb truck axle replaces the F250 axle
  - 0.5 years if a 20,000 truck axle replaces the F250 axle

## Vehicle Weight and Road Degradation - Results

---

- It takes about 1,255 passes of the one axle on the heaviest Tesla car to cause same damage as one pass of a large truck single axle that has the maximum legal load on it
- It takes about 99 passes of a fully loaded  $\frac{3}{4}$  ton pickup's rear axle to cause same damage as one pass of a large truck single axle that has the maximum legal load on it
- Based on these relative amounts of damage compared to heavier trucks, cars and up to  $\frac{3}{4}$  ton pickup trucks are not considered in pavement damage calculations

## Vehicle Weight and Road Degradation

---

### Bottom Line....

- It is expected that heavier cars and light trucks, including those with electric batteries and fuel cells, will continue to have a very minor effect on pavement damage and pavement maintenance and rehabilitation costs
- They are expected to have even less effect on bridges and roadway infrastructure (culverts)

# AGENDA – September 9, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
5	Vehicle Weight and Roadway Degradation	Dr. John T. Harvey (UC Irvine)	I	C

# AGENDA – September 9, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
6	Key Takeaways and Roundtable Discussion with Task Force Members	Cayla McDonell	I	C

## AGENDA – September 9, 2025

---

# Key Takeaways from UC Berkeley and UC Davis Research & Discussion Questions

## Key Takeaways: Potential Regulatory Responses

---

- 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, safety advancements have tended to focus on the safety of vehicle occupants as opposed to those outside the vehicle.
- 3.4 Other similar countries require vehicle testing for pedestrian collision outcomes.

## Key Takeaways: Potential Built Environment Responses

---

- 4.1 In general, the design of vehicle, bicyclist, and pedestrian infrastructure influences the risk of crashes for all road users. Increased roadway lighting, crosswalk enhancements, traffic calming measures, and separated bicyclist infrastructure are associated with significant reductions in the risk and severity of crashes involving vulnerable road users.
- 4.2 The primary barriers to implementing infrastructure improvements that improve safety for vulnerable road users include; funding availability, implementing projects at scale, and jurisdictional challenges.

## Key Takeaways: Potential Built Environment Responses

---

- 4.3 Improvements to the built environment generally 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.

## Roundtable Discussion Questions

---

- 1) What are your key takeaways from the information presented?
- 2) What questions do you have on these key takeaways?

## Key Takeaways: Vehicle Weight and Road Degradation

---

- 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 4<sup>th</sup> power) with axle load. Compared to the 20,000 lb maximum legal single axle load, 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) causes 244% of the damage.
- 5.3 Incremental increases in passenger vehicle weight are not anticipated to have a significant impact on road degradation.

## Roundtable Discussion Questions

---

- 1) What are your key takeaways from the information presented?
- 2) What questions do you have on these key takeaways?

## AGENDA – September 9, 2025

---

Are there any other comments or questions  
from Task Force members?

# AGENDA – September 9, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
6	Key Takeaways and Roundtable Discussion with Task Force Members	Cayla McDonell	I	C

# AGENDA – September 9, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
7	Public Comment	Cayla McDonell	I	C

# AGENDA – September 9, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
7	Public Comment	Cayla McDonell	I	C

# AGENDA – September 9, 2025

---

ADJOURN

Thank you

Cayla McDonell  
Associate Deputy Director  
[Cayla.McDonell@catc.ca.gov](mailto:Cayla.McDonell@catc.ca.gov)



# **AGENDA**

## **CALIFORNIA TRANSPORTATION COMMISSION VEHICLE WEIGHT SAFETY STUDY TASK FORCE MEETING October 29, 2025**

**Wednesday, October 29, 2025**

**11:00 AM Vehicle Weight Safety Study Task Force Meeting**

*\*Virtual via Zoom or Teleconference only, per SB 544*

**To register to participate in the meeting remotely:**

[https://zoom.us/webinar/register/WN\\_horol4neTumurPUoZ2rtsw](https://zoom.us/webinar/register/WN_horol4neTumurPUoZ2rtsw)

**To join by phone:** (669) 900-9128

Webinar ID: 960 9432 2677 and Passcode: 940391

\*On September 22, 2023, Governor Newsom signed [SB 544](#). This legislation temporarily waives the Bagley-Keene Open Meeting Act requirement that locations of remote Task Force members be noticed on the agenda until January 1, 2026, if members of the public can also participate remotely.

**NOTICE:** We welcome comments from the public as a part of each item at this meeting. Commission staff has the discretion to take up agenda items out of sequence. Commission staff may adjourn earlier than estimated.

Unless otherwise noticed in the specified book item, a copy of this agenda, and related book items will be posted 10 calendar days prior to the meeting on the California Transportation Commission (Commission) Website: [www.catc.ca.gov](http://www.catc.ca.gov). Questions or inquiries about this meeting may be directed to the Commission staff at (916) 654-4245, 1120 N Street (MS-52), Sacramento, CA 95814. Commission staff will provide assistive services including translation and interpretation in multiple languages, real-time captioning, transcription, large print, digital audio and/or video recordings, as well as Task Force meeting materials in an accessible format for the visually impaired. To obtain services or copies in one of these alternate formats or languages, please contact us at (916) 654-4245 or [ctc@catc.ca.gov](mailto:ctc@catc.ca.gov). Arrangements should be made as soon as possible but no later than at least five working days prior to the scheduled meeting.” (Las solicitudes de acomodación especial o servicios de interpretación deben hacerse tan pronto como sea posible o por lo menos cinco días antes de la reunión programada.)

Improper comments and disorderly conduct are not permitted. In the event that the meeting conducted by Commission staff is willfully interrupted or disrupted by a person or by a group so as to render the orderly conduct of the meeting infeasible, Commission staff may order the removal of those individuals who are willfully disrupting the meeting.

\*“A” denotes an “Action” item; “I” denotes an “Information” item.

For a glossary of frequently used terms and acronyms please visit the Commission website at: [https://catc.ca.gov/-/media/ctc-media/documents/about\\_ctc/acronyms-11-04-21-a11y.pdf](https://catc.ca.gov/-/media/ctc-media/documents/about_ctc/acronyms-11-04-21-a11y.pdf)

**LAST SCHEDULED TASK FORCE MEETING (Subject to Change):  
Vehicle Weight Safety Study Task Force Meeting – November 13, 2025**

**GENERAL BUSINESS**

<b>Tab</b>	<b>Item Description</b>	<b>Presenter</b>	<b>Type*</b>
1	Roll Call & Webinar Logistics	Dylan Jimenez (CTC)	I

**INFORMATION ITEMS**

<b>Tab</b>	<b>Item Description</b>	<b>Presenter</b>	<b>Type*</b>
2	Summary of Task Force Meetings To-Date	Cayla McDonell (CTC)	I
3	Potential Policy Solutions: Vehicle Weight Fee and Consumer Response	Matthew Raifman (UC Berkeley) David Brownstone (UC Irvine)	I
4	Key Takeaways and Roundtable Discussion with Task Force Members	Cayla McDonell (CTC)	I

**OTHER MATTERS**

<b>Tab</b>	<b>Item Description</b>	<b>Presenter</b>	<b>Type*</b>
5	Public Comment	Cayla McDonell (CTC)	I

**ADJOURN**

# Memorandum

To: TASK FORCE MEMBERS

Vehicle Weight Safety Study  
Task Force Meeting:  
October 29, 2025

From: TANISHA TAYLOR, Executive Director

Reference Number: Tab 2, Information

Prepared By: Cayla McDonell  
Associate Deputy Director

Published Date: October 10, 2025

Subject: Summary of Task Force Meetings To-Date

## **Summary:**

Pursuant to Government Code Section 14527, the third meeting of the Vehicle Weight Safety Study (Task Force) took place on September 9, 2025. Presentations included an overview of the Safe Systems Approach by Dr. Julia Griswold from the University of California, Berkeley (UC Berkeley); an introduction to potential policy solutions including regulations and built environment solutions to address impacts of vehicle weight, presented by Dr. Matthew Raifman (UC Berkeley), and; a discussion of the relationship between vehicle weight and road degradation presented by Dr. John T. Harvey from the University of California, Davis (UC Davis). Following the presentations, California Transportation Commission (Commission) staff presented key takeaways from UC Berkeley and UC Davis' presentation and discussion questions for feedback from Task Force members and the public.

Below includes summaries of Commission staff key takeaways from the research conducted by UC Berkeley and UC Davis and key takeaways from Task Force members from all Task Force meetings to-date (June 13, 2025, July 16, 2025, and September 9, 2025 Task Force meetings).

## **1. California Vehicle Fleet Trends**

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

1.2 Over the next decade, sport utility vehicles (SUV) 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.

Task Force Comments:

- Whether there are fewer smaller vehicles available for purchase, resulting in the increase in purchase of SUVs and larger vehicles generally, should be further evaluated. (Streets for All)

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

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).

Task Force Comments:

- Identify outcomes from other states which have imposed a passenger vehicle weight fee, such as changes to consumer behavior, safety outcomes, and other outcomes. (American Automobile Association)

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.

1.7 Americans are holding onto their vehicles longer (vehicles are 12.6 years old in 2024 v. 10.4 years old in 2008) lengthening the time of the adoption of new vehicles with more safety features.

Task Force Comments:

- Fees will encourage people to hold on to their cars longer due to the increased cost of purchasing a newer vehicle. This will result in slower fleet turnover and thus slower adoption of advanced driver assistance systems and safer vehicle features generally. (California Farm Bureau)

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

Task Force Comments

Evaluate how to treat electric vehicles compared 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 has a negative impact on safety outcomes of vulnerable road users. (California Farm Bureau, California New Car Dealers Association)

Other Comments from Task Force Members:

- Vehicle Safety Information Sharing:
  - The National Highway Traffic Safety Administration (NHTSA) requires certain vehicles to store data in a black box (which should include speed data) so that

- collision information can be analyzed after a collision occurs. (California Highway Patrol (CHP))
- Suggest that other data be used to illuminate vehicle weight impacts in addition to crash incident reports. (Streets for All)
  - Safety Feature Regulations:
    - In 2016, the automotive industry agreed to standardize the installation of automatic emergency braking in new vehicles. Additionally, vehicle form is standardized across all fuel types for each vehicle model. (Alliance for Automotive Innovation)
    - NHTSA proposed a rule in 2024 to alleviate pedestrian head and lower leg impacts. The industry expects this rule will affect vehicle design and regulations and automatic emergency braking is expected to be more effective than it is today. (Alliance for Automotive Innovation)
    - It will be difficult for regulators and the automotive industry to create a vehicle fleet that meets the needs of all interest groups due to the various consumer needs of vehicles. Instead, we should encourage development of a vehicle fleet which balances various needs including affordability and safety. (Alliance for Automotive Innovation)
    - Autonomous vehicles and speed assistance devices used for advanced driver assistance systems and how they impact vulnerable road users should be considered further. (Streets for All)
  - Vehicle Choice Considerations:
    - Why consumers are choosing certain vehicles, including whether consumers know about the associated fees before they purchase a vehicle, should be studied further. (Streets for All)

## **2. California Vulnerable Road User Fatality and Serious Injury Trends**

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

### Task Force Comments:

- How California vulnerable road user fatality and serious injury trends data compare to other states and other countries with stricter driving standards should be considered further. Driving behavior is often very poor in California and poor driving has nothing to do with the car being driven. (California Farm Bureau)
- A lot of data was presented about vehicles trends but not about the person behind the wheel. More data about the last time a driver took a driver's test, renewed their license, their age, etc., is warranted to determine if drivers who meet minimum driving standards are being licensed before we start looking at the cars alone as culprits for the trends presented. (California Farm Bureau)

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

2.1 (c) SUVs, pickups, and sedans 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).

Task Force Comments:

- While SUV registration rates have increased, there is not a significant difference in SUV collisions with vulnerable road users compared to sedans or pickup trucks. Ultimately, sedans are the primary culprit for fatalities and serious injuries with vulnerable road users. (AAA)
- SUV involved crashes with serious injuries or fatalities are said to grow at the fastest rate, which is related to SUVs growing at the fastest rate of vehicles registered in California. (California Farm Bureau)
  - Based on the research presented, we can't conclude that SUVs and trucks result in more collisions with vulnerable road users. However, the data does show that vulnerable road users that collide with larger vehicles does make it more likely that the collision will result in a fatality or serious injury. (Safe Streets Research)

2.1 (d) UC Berkeley's research only shows correlation between these factors, not causation.

- 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.

Task Force Comments:

- Motor vehicle weight plays a role in fatality and serious injury outcomes for vulnerable road users involved in a collision with a motor vehicle, but it cannot be described as a standalone or even a prevailing cause. There are many other factors and both the relationship and degree to which these factors influence vulnerable road user fatality and serious injury outcomes is unknown (Alliance for Automotive Innovation).
- Of the motor vehicles on our roadways, lighter vehicles are the prevailing cause for fatalities and serious injuries for vulnerable road users. We cannot say that heavier vehicles cause more harm. (California Farm Bureau).

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.

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

Task Force Comments:

- The research presented indicates that children are more likely to be killed or seriously injured by larger vehicles, such as SUVs. What are the most prevalent vehicles used by families with children and the difference between fatalities and serious injury rates to children between an SUV, pickup truck or minivan? (Streets for All)

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

Task Force Comments:

- Whether disadvantaged areas have more dangerous roadways should be considered. (Safe Streets Research, Streets for All)

Other Comments from Task Force Members:

- The Built Environment and Fatality and Serious Injury Trends of Vulnerable Road Users:
  - The proportion of collisions occurring at night and outside of marked biking and walking facilities should be considered. (Alliance for Automotive Innovation)
  - How behaviors exhibited by bicyclists and pedestrians factor into the fatality and serious injury trends presented and what infrastructure can prevent or discourage unsafe behaviors exhibited by bicyclists and pedestrians should be considered. (California State Association of Counties, Safe Streets Research)
- Other Factors for Consideration Related to Fatality and Serious Injury Trends and Vulnerable Road Users:
  - Whether older cars are more likely to be involved in collisions should be considered. (California Farm Bureau)
  - Whether the increase in rideshare services has a negative impact on safety outcomes of vulnerable road users should be considered. (Safe Streets Research)
  - Vehicle features which make vehicle operation more 'comfortable' for a passenger (i.e., vehicle entertainment systems, phone projection applications, etc.), might influence whether a driver can hear emergency vehicles or see vulnerable road users should be considered. (Streets for All)
- Perceptions of Road Safety Detract from Further Adoption of Walking and Biking:
  - The impact of perceived safety concerns on an individual's decision to walk, bike, or drive should be considered further. There is a perception that vehicles are becoming larger and therefore transportation networks are less safe. This negative perception of safety on our roadways has ramifications for social isolation, mental health, and economic impacts. (American Association of Retired Persons, Safe Streets Research)
- Fee versus Tax:

- A fee is paid for a specific service. The fee directly relates to the service provided. Any discussion of a cost associated with vehicle weight should be appropriately called a tax. A fee may be an inappropriate description of this assessment. (California Farm Bureau)
- Equitable Use of a Fee, if Imposed
  - Investment from any fee should support both urban and rural investments in safe transportation systems with adequate bike and walking facilities and improvements that supports mode deconfliction (where possible) and prioritize more appropriate modes of travel depending on the context (i.e., bicycling infrastructure might be more appropriate for rural communities or for certain types of streets or other conditions, etc.). Additionally, urban and disadvantaged communities are obvious places to prioritize investment, but if we want to build a safer system, investment in rural and suburban areas is also necessary. (California State Association of Counties)
- Data Limitations:
  - The policy recommendations identified in the Study should note the limitations of the available data used to compile the research findings and document topics identified by the Task Force that are outside of the purview of the legislative requirements for further consideration. (Office of Traffic Safety, Alliance for Automotive Innovation)

### **3. Potential Regulatory Responses**

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.

#### **Task Force Comments:**

- Improved monitoring of the competency of those licensed to drive a motor vehicle should be prioritized to improve safety outcomes for vulnerable road users (California Farm Bureau).

3.3 In the United States, safety advancements have tended to focus on the safety of vehicle occupants as opposed to those outside the vehicle.

#### **Task Force Comments:**

- In recent years, the automotive industry has developed and deployed safety features before being required to do so by federal regulations, including features intended to enhance safety for those outside of the equipped motor vehicle including pedestrian emergency braking and improved vehicle-to-vehicle collision outcomes where multiple vehicles involved in a collision are vastly different in size. Additionally,

recent updates to the New Car Assessment Program further accounts for pedestrians in collision safety features (Alliance for Automotive Innovation).

- Motor vehicle safety standards are still largely geared toward protecting motor vehicle occupants as opposed to those outside of a motor vehicle. Only more recently has the automotive industry worked toward ensuring safer outcomes for those outside of a vehicle who are in a collision with a motor vehicle (Safe Streets Research).
- After implementation of new safety features in motor vehicles (i.e. seatbelt standards, other features), drivers may drive with less caution due to the greater inherent safety of the vehicle. While these features have a net benefit for drivers and passengers, they may contribute to higher risk for people outside of the car if drivers use less caution (Safe Streets Research).
- Developing a motor vehicle nonoccupant safety rating is difficult given there are many factors that contribute to a collision. Furthermore, the cost to develop and run this system would be substantial. Instead, consider other opportunities to improve outcomes for vulnerable road users such as investments in the built environment and a driver safety awareness campaign aimed at improving driver culture and behavior, particularly for drivers of larger vehicles (Alliance for Automotive Innovation).

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

#### **4. Potential Built Environment Responses**

4.1 In general, the design of vehicle, bicyclist, and pedestrian infrastructure influences the risk of crashes for all road users. Increased roadway lighting, crosswalk enhancements, traffic calming measures, and separated bicyclist infrastructure are associated with significant reductions in the risk and severity of crashes involving vulnerable road users.

##### **Task Force Comments:**

- Built environment recommendations which are most effective for implementation should be prioritized in the final recommendations (California Farm Bureau).
- The effectiveness of countermeasures (i.e. built environment responses listed in 4.1) is dependent upon the speed in which motor vehicles encounter said countermeasures. The faster a motor vehicle is driving, the less effective a countermeasure is at reducing fatalities and serious injuries of vulnerable road users. Furthermore, it is difficult to determine the effectiveness of any countermeasure as the speed, size and weight of a motor vehicle increases – an increase of any one of these factors greatly undermines not only the effectiveness of the countermeasure, but also any investment in road safety (Safe Streets Research).
- Regarding the countermeasures presented, lane narrowing is not as effective as reducing the number of lanes to reduce fatalities and serious injuries of vulnerable road users (Safe Streets Research).

- Mode deconfliction is crucial to improve safer outcomes for vulnerable road users (California State Association of Counties).

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

Task Force Comments:

- Traffic enforcement, or lack thereof, needs to be further evaluated as a factor which influences the rate of serious injuries and fatalities of vulnerable road users (California City Transportation Initiative).

4.3 Improvements to the built environment generally 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.

## **5. Vehicle Weight and Road Degradation**

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, 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) causes 244% of the damage.

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

Task Force Comments:

- No comments were received from the Task Force for key takeaways 5.1 through 5.3.

Other Task Force Comments:

- Potential Incentive for Smaller and Lighter Motor Vehicles:
  - Consider incentivizing the purchase of smaller motor vehicles rather than levying a fee on heavier vehicles (California Farm Bureau).

Comments from Members of the Public:

- After June 13 Task Force Meeting: Howard Chapman: Consider an exception to the vehicle weight fee for those who are disabled, for United States military veterans, and those with low incomes, such as those on Medicaid.

# Vehicle Weight Safety Study Task Force Meeting

October 29, 2025



# AGENDA – October 29, 2025

Tab	Item Description	Presenter	Type	Agency
<b>GENERAL BUSINESS</b>				
1	Roll Call & Webinar Logistics	Dylan Jimenez (CTC)	I	C
<b>INFORMATION ITEMS</b>				
2	Summary of Task Force Meetings To-Date	Cayla McDonell (CTC)	I	C
3	Potential Policy Solutions: Vehicle Weight Fee and Consumer Behavior Response	Dr. Matthew Raifman (UC Berkeley) Dr. David Brownstone (UC Irvine)	I	C
4	Key Takeaways and Roundtable Discussion with Task Force Members	Cayla McDonell (CTC)	I	C
<b>OTHER MATTERS</b>				
5	Public Comment	Cayla McDonell	I	C

# AGENDA – October 29, 2025

---

## GENERAL BUSINESS

Tab	Item Description	Presenter	Type	Agency
1	Roll Call & Webinar Logistics	Dylan Jimenez	I	C

## AGENDA – October 29, 2025

---

The Task Force's meeting agenda is located on our website at <https://catc.ca.gov/programs/vehicle-weight-safety-study>.

All documents on the CTC website can be translated into any language you need. Simply e-mail us at [ctc@catc.ca.gov](mailto:ctc@catc.ca.gov) and we will have them returned to you as quickly as possible.

## AGENDA – October 29, 2025

---

American Sign Language translations is being provided for this meeting. You should see the translators on the screen.

Live closed captioning is also available. Please select the show captions tab at the bottom of your screen. There are a number of language options available there to choose from.

## AGENDA – October 29, 2025

---

We welcome comments from the public as a part of each item at this meeting.

You should see the webinar control panel, likely located on the bottom of your screen. There you will find the Raise Hand and Q&A tabs.



We encourage you to use the raise hand feature as early into the item as you can to give the system time to acknowledge you.

Alternately, you may use the Q&A tab to submit your comment. Please be sure to include the agenda item number you are commenting on. Commission staff will read the comment on your behalf.

As a reminder, each registered attendee is provided a unique link and phone number to access the webinar. These should not be shared with other participants, as they are registered to a specific attendee and can create confusion for staff when making comments.

# AGENDA – October 29, 2025

---

## **For Presenters:**

If you are on the agenda to make a presentation, please do your best to be succinct.

Please remember to speak at a steady pace to allow our translating service adequate time for accurate translations.

We hope that you will turn on your camera during your presentation, if you have one.

# AGENDA – October 29, 2025

---

## For All Meeting Attendees:

Please do your best to be concise.

Please make sure that your comments add new information. If you agree with the comments of a previous speaker, simply make that statement.

Please remember to speak at a steady pace to allow our translating services adequate time for accurate translations.

Since we often have many speakers, we ask that you make your point in 2 minutes or less. If, for some reason, we have many speakers on a topic, we reserve the right to limit comments to 1 minute if needed.

# AGENDA – October 29, 2025

---

## GENERAL BUSINESS

Tab	Item Description	Presenter	Type	Agency
1	Roll Call & Webinar Logistics	Dylan Jimenez	I	C

# AGENDA – October 29, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
2	Summary of Task Force Meetings To-Date	Cayla McDonell	I	C

# AGENDA – October 29, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
2	Summary of Task Force Meetings To-Date	Cayla McDonell	I	C

# AGENDA – October 29, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
3	Potential Policy Solutions: Vehicle Weight Fee and Consumer Response	Dr. Matthew Raifman (UC Berkeley) Dr. David Brownstone (UC Irvine)	I	C

# Potential policy solutions Vehicle Weight Fee

Vehicle Weight Safety Study Academic Report

Matthew Raifman, PhD, MPP

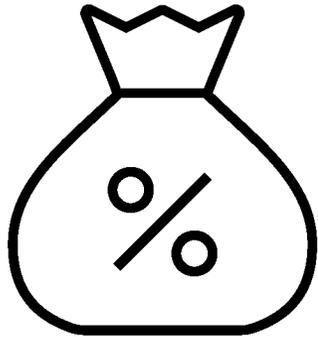
## Today's Agenda

1	Potential Policy Solutions
2	Policy Solutions: Fees and Taxes
3	Additional Considerations

## Today's Goals

1	Focus on vehicle weight and passenger vehicles
2	Overview scan of the landscape for examples
3	Catalyze the conversation, not direct it

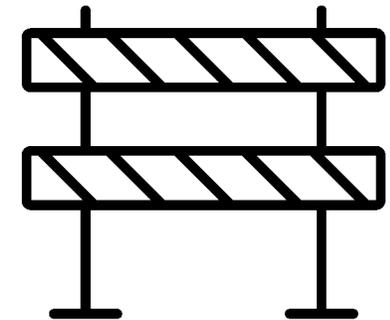
# Potential Policy Solutions



Fees and Taxes  
*(Today)*



Regulations  
*(9/9 Meeting)*



Built Environment  
*(9/9 Meeting)*

# Weight-Based Fees and Taxes

## Weight-Based Fees and Taxes Can Take Different Forms

1. Passenger Vehicle Fees due at Registration
2. Passenger Vehicle Sales Taxes
3. Tolls and Cordon Pricing
4. Mileage Based User Fees
5. Parking Fees

The following examples are conceptual policy options, but not specific proposals for implementation.



# Concept #1: Weight Fee due at Registration

## Definition

- A weight-based fee collected at registration

## Existing Use in CA

- All commercial vehicles are charged a separate weight-based fee at registration
- California's commercial vehicle weight fee pays debt service on transportation bonds
- Different fee structure for EVs and non-EVs
- All pickup trucks are treated as commercial vehicles



[Image source](#)



[Image source](#)

# Weight Fee due at Registration

Commercial Motor Vehicles with Two Axels or Fewer	
Unladen Weight (lbs)	Annual Supplemental Fee
0 - 1,999	\$8
2,000 - 2,999	\$8
3,000 - 4,000	\$24
4,001 - 5,000	\$80
5,001 - 6,000	\$154
6,001 - 7,000	\$204
7,001 - 8,000	\$257
8,001 - 9,000	\$308
9,001 - 10,000	\$360

An electric 6,500 pound pick-up has a higher weight fee due at registration than a comparable gas pickup

Commerical Electric Vehicles	
Unladen Weight (lbs)	Annual Supplemental Fee
0 - 5,999	\$87
6,000 - 9,999	\$266
10,000 or more	\$358

# Concept #1: Weight Fee due at Registration

## Opportunities

- Decouple weight from commercial vehicle status
- Apply current commercial vehicle weight-based fee to all registered vehicles
- Create a new weight-based fee at registration

## Considerations

- Do recurring fees influence purchasing decisions?
- Unclear relationship between vehicle weight and household income
- Would exceptions be made for certain professions, family sizes, disability status, income...?



[Image source](#)

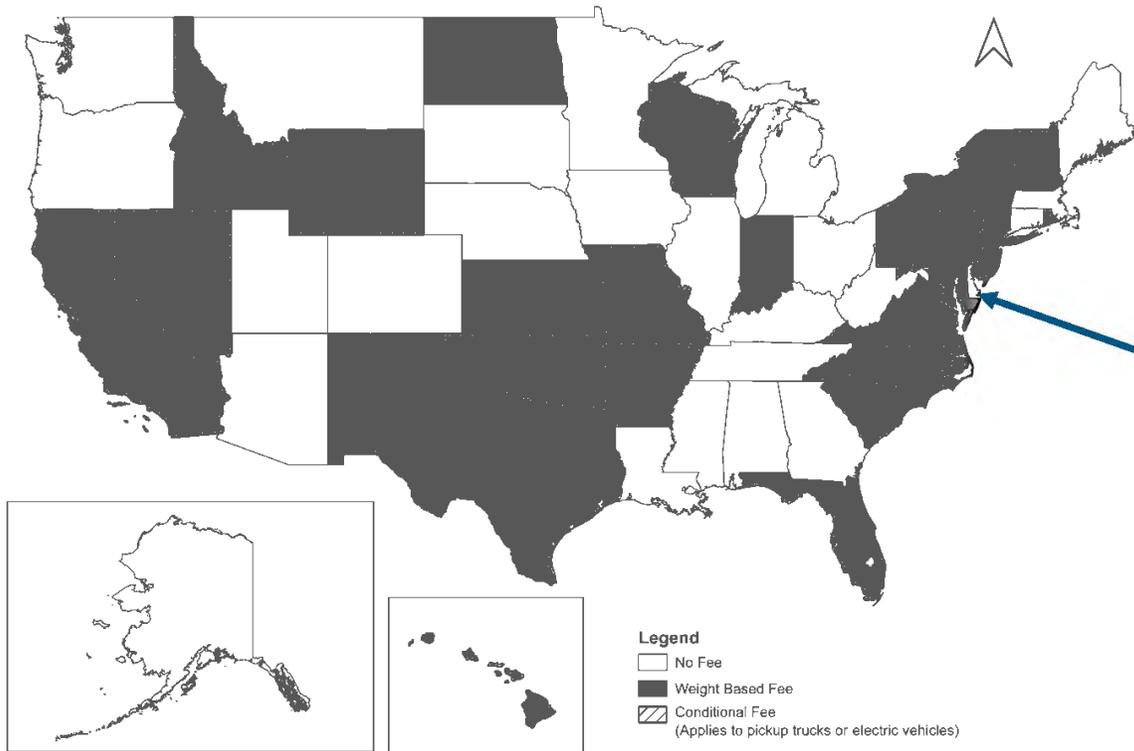


[Image source](#)



# About half of U.S. states have a weight-based vehicle fee

## Maryland



Veh. Class	Weight	Veh. Reg. Fee
A (Cars)*	Up to 3,500 lbs	\$120.50
A (Cars)	3,501-3,700 lbs	\$125.50
A (Cars)	Over 3,700 lbs	\$191.50
E (Trucks)^	Up to 3,500 lbs	\$133.75
E (Trucks)	3,501-5,000 lbs	\$138.75
E (Trucks)	Over 5,000 lbs	\$178.75

\* Shipping weight

^ GVW

# About half of U.S. states have a weight-based vehicle fee

## Florida



Veh. Class	Weight	Veh. Reg. Fee
Car*	Up to 2,499 lbs	\$14.50
Car	2,500-3,499 lbs	\$22.50
Car	3,500 lbs +	\$32.50
Heavy Truck	5,001- 5,999	\$60.75
Heavy Truck	6,000-7,999	\$87.75
Heavy Truck	8,000-9,999	\$103.00
Heavy Truck	10,000-14,999	\$118.00

\* Trucks under 5,001 treated similarly

# About half of U.S. states have a weight-based vehicle fee

Washington, DC



Veh. Class	Weight	Veh. Reg. Fee
Passenger 1	Up to 3,499	\$72.00
Passenger 2	3,500-4,999	\$175.00
Passenger 3	5,000-5,999	\$250.00
Passenger 4	6000 or more	\$500
Passenger EV*	Less than 5000	\$36.00

\* Applies for first two years then reverts to standard schedule

# About half of U.S. states have a weight-based vehicle fee

## Hawaii



Veh. Class	Weight	Veh. Reg. Fee
Passenger 1	Up to 4,000	\$0.0175 per lb
Passenger 2	4,000-7,000	\$0.0200 per lb
Passenger 3	7,000-10,000	\$0.0225 per lb
Passenger 4	Over 10,000lbs	\$300

Example:  
 A 5,400 lb Chevy Tahoe SUV would cost \$0.02  
 \* 5,400 = \$108 to register in Hawaii

# Concept #2 Passenger Vehicle Weight-based Sales Taxes

## Definition

- One-time taxes imposed at the vehicle point of sale or when a vehicle is imported into the state

## Existing Use in CA

- No weight-based sales tax in effect - Texas and Virginia have a weight-based sales tax for larger vehicles (14,000 or more in Texas and 26,000 lbs in VA)
- Existing 7.5% sales tax with up to 2.5% more at county level.



[Image source](#)

# Concept #2 Passenger Vehicle Weight-based Sales Taxes

## Opportunities

- Create a weight-based one-time sales tax collected at purchase or upon import to CA

## Considerations

- What is the price elasticity of demand for vehicles?
- Unclear relationship between vehicle weight and household income.
- Would exceptions be made?



[Image source](#)

# Concept #3: Weight-based Tolling

## Definition

- A fee levied on road users for access to infrastructure

## Existing Use

- No weight-based tolls for passenger vehicles
- Differential fees for access to bridges and express lanes by fuel type, number of axles, and vehicle occupancy sometimes variable on time of day



[Image source](#)

# Concept #3: Weight-based Tolling

## Opportunities

- Create differential toll rates by curb vehicle weight
- Possibly implement on bridges, toll roads, and express lanes

## Considerations

- Existing electronic tolling infrastructure exists
- Technological improvements needed to differentiate vehicle type/weight in tolling systems
- Federal limitations on development and operation of toll facilities and use of toll revenues
- Not all vehicles use toll lanes



[Image source](#)

# Concept #4: Weight-based Cordon Pricing

## Definition

- A fee applied to drivers for entering a specific geographic area (typically city centers)

## Existing Use

- No cordon pricing in California
- Examples of congestion pricing in NYC and abroad (London, Stockholm, and Singapore) and low-emissions zones in Europe, but not weight-based



[Image source](#)

# Concept #4: Weight-based Cordon Pricing

## Opportunities

- Create weight-based cordon pricing for access to urban centers in California

## Considerations

- Typically applies only to urban areas, where risk of vehicle-VRU conflict is highest
- Only affects subset of vehicles entering urban areas
- Additional affects on congestion and pollution
- Unclear regressive implications
- Potential to implement means-based pricing
- If the state were to authorize cordon pricing, it likely would primarily be to address other factors (e.g. congestion) and weight would likely be a secondary factor.



[Image source](#)

# Concept #4: Mileage-Based Road User Charges

## Definition

- A fee applied to vehicles based on miles-traveled

## Existing Use

- No current applications in California
- The Road Charge Collection Pilot just completed by Caltrans as potential replacement for gas tax
- Oregon, Utah, and Virginia have voluntary mileage-based road user fee programs not by weight
- Hawaii RUC program went into effect in 2025 for EVs with expected rollout to all vehicles in 2033



[Image source](#)

# Concept #4: Mileage-Based Road User Charges

## Opportunities

- Implement a road usage charge with differential pricing by vehicle weight
- Subsidize lighter vehicles with rebate

## Considerations

- Interaction between VMT and income is unclear
- Interaction between VMT and weight is unclear
- Complicated to simultaneously consider VMT and weight as a policy consideration
- Addressing vehicle weight through a road charge would be in addition to primary purpose of replacing fuel taxes.



[Image source](#)

# Concept #5: Weight-based Parking Fees

## Definition

- Fees assessed for vehicles parking in public spaces based on vehicle weight or footprint

## Existing Use

- San Francisco does not issue residential parking permits for GVWR in excess of 6,000 pounds
- Lyon, France differentiates by fuel type and vehicle size for parking fees
- Paris, France has additional fee for heavier vehicles
- Chicago vehicle sticker prices differ by weight

# Concept #5: Weight-based Parking Fees

## Opportunities

- Local government weight-based parking permits
- Convene local governments around weight-based parking fees

## Considerations

- Parking policy tends to be local and urban and subject to the discretion of local agencies to implement
- Aligning state requirements with local control could be challenging
- Co-benefits for congestion, pollution, space efficiency, and safety
- Means-based pricing is possible but challenging

# Fees and Taxes – Equity Considerations

1. Rural vs Urban
2. Equity is complicated (vehicle, trips, mileage, location)
3. Exemptions may be considered for specific professions, income, disability status, electric vehicles, etc.
4. Income-based taxes/fees are challenging to implement but more equitable

# Follow-up: Trade Offs with Larger Vehicles

- The economic cost of U.S. crash fatalities is \$340 billion yearly; \$29 billion in California alone (NHTSA, 2023)
- Larger and heavier vehicles are safer for their occupants but much less safe for smaller vehicles and VRUs (Anderson et al. 2014, The Economist 2024, White 2004)
- The “arms race” to ever larger vehicles costs ~\$3,500 (2024 USD) in accident externalities per light-duty truck (Li, 2012)

# Follow-up: Insurance Premiums

Q: Do higher risk individuals or higher risk vehicles pay higher insurance premiums?

Q: Is the insurance market solving the road safety problem already?

# Fatalities and serious injuries are also both up in CA

## Follow-up: Insurance Premiums

1. Premiums reflect the risk of insurance payout, but that is not the same as the risk of a traffic fatality.
2. With some exceptions, insurance policy coverage is limited and does not account for social costs.

Insurance premiums do not fully internalize the road safety externalities associated with larger vehicles

# Big Picture Questions for Further Consideration

1. How would revenues from any new fees or taxes be invested?
2. Is vehicle weight an appropriate proxy for vehicle safety?
3. Are there sufficient lighter vehicles to substitute for heavier vehicles in the current marketplace?
4. Should electric vehicles have different weight-based fees than their gas-powered alternatives?

# Thank you

Matthew Raifman, PhD, MPP

# Weight Fees and Consumer Behavior

David Brownstone (UC Irvine Institute of Transportation Studies (ITS))

David Bunch (UC Davis ITS)

With help from Aniss Bahreinian and Jesse Gage (CEC), Jiawei Chen, Cassie Zhang, and Farzana Khatoun (UCI)

# What is the problem?



- Heavy and tall vehicles cause more damage when they hit smaller vehicles, bicyclists, or pedestrians.
- Current CA insurance rates and registration fees do not fully account for these safety externalities.
- From an economic perspective, the efficient solution would be to charge heavy and/or tall vehicles a per mile fee based on time and location. For example, the risk to pedestrians is minimal on freeways.
- This presentation looks at second (or third) best solutions – levying a fee on heavy vehicles at purchase or levying an annual registration fee based on weight (and/or body type).

# Key Questions

- How high do fees need to be to get substantial changes in vehicle purchase behavior?
- How much revenue can be raised by imposing fees?
- What is the best way to spend the fee revenue?
- Do these fees conflict with other policy goals (e.g. reducing greenhouse gas emissions)?
- Is it possible to design fees that accomplish the policy objectives without imposing undue burden on some locations and consumer groups?

# Modeling Vehicle Weight Fees

- In 2024 there were 15,681 unique combinations of Make, Model, fuel type, and year registered in California for a total of 29.4 million vehicles.
- If we knew the weight of each of these vehicles we could calculate the revenue from any weight-based fee using a spreadsheet.
- These results would only be valid if we assume that consumers do not change their purchase behavior in response to the fees.

# Consumer response to weight fees

- If heavier vehicles become more expensive to purchase and/or operate, people will switch to lighter ones.
- If fees only apply to new vehicles, then people will switch to used vehicles and/or keep their existing vehicles longer. **This may change used car prices.**
- Vehicles are expensive and last a long time, so consumers will take many years to adjust to new fees.
  - About 25% of registered vehicles in California are more than 14 years old
  - About 50% are more than 9 years old
  - About 10% are new vehicles
- **Manufacturers can also respond by making new vehicles lighter**

# Vehicle Purchase Modeling Issues

- 91% of vehicles are purchased by households, and 6.5% are purchased by commercial entities. **We are only modeling households.**
- Vehicle purchase decisions are made by households. It is very hard to get accurate information about all adults in a household (unless there is only one adult).
- Important vehicle attributes (e.g. price and repair costs) are uncertain to both households and modelers.
- Much of the required data are not publicly available or are very expensive to purchase.

# DynaSim – California Energy Commission (CEC) model for the California Vehicle market used for our analysis

- Predicts the number (and types) of vehicles and fuel usage. We will use the personal vehicle model with base year 2023 and predictions from 2024 through 2050.
- CEC has been developing and using DynaSim for decades and carries out specialized surveys ([California Vehicle Survey](#)) of California households and commercial establishments every 2-3 years to update model.
- CEC also processes snapshots of the CA DMV registration files to produce base year vehicle population counts.

# DynaSim - Continued

- Vehicles are grouped into 27 classes, 8 fuel types, and vintages going back to 1983. There are 1425 groups in 2024.
- The CEC has data on vehicle characteristics for each of these vehicle groups for each model year back to 1983.
- CEC purchases predictions of vehicle characteristics for future years (2024 – 2050), and these characteristics do not change for different modeled policies.
- Personal vehicle model depends on household income and household composition. Values and future forecasts come from the California Department of Finance.
- CEC develops forecasts for future fuel prices.

# Consumer Behavior Scenario Forecasting

- We will use the CEC baseline estimates of future vehicle and household attributes and compare results from simulations of various vehicle weight fees. We assume that the weights of future vehicles are the same as in 2024.
- Note that although vehicle prices and other attributes vary within the CEC classes, DynaSim only allows one price and annual maintenance fee for each vehicle class.
- DynaSim assumes that used vehicle prices are given by new vehicle prices multiplied by a fixed depreciation factor.
- DynaSim assumes manufacturers (and other states) will make as many vehicles as demanded by the model.

# DynaSim Baseline Weight Distributions Show Increasing Vehicle Weight

Size class	2024					Fuel Type	2024				
	2024 Mean	Std. Dev.	2040 Mean	24 – 40% increase	2024 Count		2024 Mean	Std. Dev.	2040 Mean	24-40% increase	2024 Count
Compact	3463	542	3924	13%	39%	diesel	5885	878	6152	4.6%	1.5%
Heavy	5879	706	6479	10%	2%	electric	4317	606	4423	2.5%	5.4%
Large	4793	798	5189	8%	6%	ethanol	4642	913	4918	6.0%	2.8%
Midsize	3749	554	4004	7%	31%	gasoline	3697	738	3855	4.3%	82.7%
Minivan	4359	224	4612	6%	3%	hybrid	3513	572	3763	7.1%	6.1%
Sport	3481	263	3531	1%	3%	plug-in hybrid	4168	668	4716	13.2%	1.5%
Std	4878	436	5353	10%	8%						
Subcompact	2986	412	3357	12%	8%						
Total	3784	802	4115	9%							

# New Purchase Fees Model #1

- Easiest to collect and only impact new car buyers. However, DynaSim assumes that buyers of the impacted vehicles will also see higher prices when purchased as used vehicles.
- We charge \$5/lb on the portion of vehicle weight exceeding 3,800 lbs (the approximate mean weight of all vehicles registered in 2024). This is the only policy we simulated that resulted in a meaningful reduction in the weight distribution of vehicles on the road in 2040.
- DynaSim only allows taxing all vehicles in a vehicle class/fuel type/vintage cell by the same amount, so we are simulating a fee on all vehicles in a group with mean weight greater than 3800 lbs.

# Purchase fee example Model #1 Results

- Under this scenario, about 60% of new car buyers in 2024 will have a weight fee.
- The mean fee for those paying it in 2024 is 7% of the purchase price (\$3,871 corresponding to an average MSRP of \$55,600), and the maximum fee is 20% of the purchase price (\$19,500)
  - The model has identified these fee amounts based are on a sliding fee scale that increases with weight and vehicle MSRP.
  - The highest fee is for Premium Electric Heavy Pickups with an average 2024 MSRP of \$100,000. The average weight for this group is 8660 lbs.
  - Buyers of premium vehicles who pay the fee will pay \$4017 corresponding to a mean MSRP of \$67000 (6%)
  - Buyers of standard vehicles who pay the fee will pay \$3768 corresponding to a mean MSRP of \$47600 (7.9%)

# Purchase fee example Model #1 Results

- Small shift in the distribution of weights of all vehicles on the road.
  - In 2040 90<sup>th</sup> percentile of weight declines 2.5%
  - In 2040 mean weight declines 1.2%, number of large SUVs drops 17%, and the number of heavy and standard pickup trucks declines 10.5%
- But generates substantial fee revenue
  - \$3.17 billion in 2024 (\$3.98 billion if no behavioral response)
  - \$4.59 billion in 2040 (\$5.3 billion if no behavioral response)
- **Manufacturer reactions to these fees imply larger decline in vehicle weights and lower fee revenue.**
- This revenue could be used for safety improvements and/or funding key state initiatives (2024 CA revenue was about \$240 billion)

# What about electric vehicles? Model #1 Results

- Purchase fee example predicts 2.3% fewer electric and 4.3% fewer plug-in hybrid vehicles in 2040 compared to baseline.
- We ran scenarios exempting just electric and both electric and plug-in hybrids from the purchase fee.
  - Just exempting electric vehicles implies a 3.7% increase in electric vehicles and an 8.4% decrease in plug-in hybrid vehicles
  - Exempting both electric and plug-in hybrids implies a 2.7% increase in electric and a 2.5% increase in plug-in hybrid vehicles.
  - Predicted 2040 revenues dropped from \$4.6 billion/year to \$1.8 billion/year (just electric) and to \$1.3 billion/year (both electric and plug-in hybrids)
  - **Either exemption results in no change in the overall weight distribution**

# New Annual Fees Model #2

- Can be collected through annual registration fees.
- We charge \$.10/lb on the portion of vehicle weight exceeding 3,800 lbs (the approximate mean weight of all vehicles registered in 2024).
  - Apply to all registered vehicles beginning in 2024
  - OR
  - Apply to all registered vehicles with model year 2024 or newer beginning in 2024
- DynaSim only assigns all vehicles in a vehicle class/fuel type/vintage cell by the same annual fee amount, so we are simulating a fee on all vehicles in a group with mean weight greater than 3800 lbs.

# Annual fee example Model #2 Results

- About 40% of all registered vehicles in 2024 will have no weight fee.
- The mean annual fee for those paying it is \$77, and the maximum fee is \$390.
- This fee is higher than Florida's but lower than Washington DC.
- California annual car registration fees vary depending on various factors (including vehicle value, additional state and local fees, etc.). For example, California's average annual registration fee for a 2023 Ford F-150 is \$551, while other states range from less than \$100-\$400 for the same vehicle.

# Annual fee example Model #2 Results

- Almost no change in the distribution of vehicle weights
  - In 2040 mean weight declines 0.26%, number of large SUV drops 4%, and the number of heavy and standard pickup trucks declines 3%
- But generates substantial fee revenue
  - \$850 million in 2024 (\$78 million if only applied to 2024 and newer)
  - \$1.45 billion in 2040 (\$1.2 billion if only applied to 2024 and newer)
- **Manufacturer reactions to these fees imply larger decline in vehicle weights and lower fee revenue.**
- This revenue could be used for safety improvements and/or funding key state initiatives (2024 CA revenue was about \$240 billion)

# Summary of forecast percentage changes in vehicle counts versus no fee scenario in 2040

Class	Purchase Fee	Purchase Fee except EV	Purchase Fee except EV & PHEV	Annual Fee	Annual Fee newer than 2023
Compact	3.0	1.9	1.6	0.5	0.3
Heavy	-7.7	-3.4	-3.9	-7.0	-0.6
Large	-13.1	-6.7	-6.1	-2.2	-2.0
Midsized	2.7	-0.5	-0.2	0.4	0.3
Minivan	-7.9	-9.3	-8.2	-1.0	-0.7
Sport	8.3	4.2	3.2	0.9	0.8
Std	-10.7	-5.7	-5.1	-2.8	-1.8
Subcompact	-8.6	4.1	3.0	1.1	0.8

# Summary of forecast percentage changes in vehicle counts versus no fee scenario in 2040

Fuel	Purchase Fee	Purchase Fee except EV	Purchase Fee except EV & PHEV	Annual Fee	Annual Fee newer than 2023
diesel	-2.3	-4.9	-5.3	-5.4	0.1
electric	-2.3	3.7	2.7	-0.4	-0.5
ethanol	3.4	1.4	1.0	-2.4	0.9
gasoline	3.0	-1.3	-2.1	0.4	0.4
hybrid	-3.0	0.7	-0.3	0.9	0.7
hydrogen	0.0	-8.4	-9.8	0.0	-0.2
plug-in hybrid	-4.3	-8.4	2.5	-1.0	-1.2

# AGENDA – October 29, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
3	Potential Policy Solutions: Vehicle Weight Fee and Consumer Response	Dr. Matthew Raifman (UC Berkeley) Dr. David Brownstone (UC Irvine)	I	C

# 15 MIN BREAK

# AGENDA – October 29, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
4	Key Takeaways and Roundtable Discussion with Task Force Members	Cayla McDonell	I	C

## AGENDA – October 29, 2025

---

# Key Takeaways from UC Berkeley and UC Irvine Research & Discussion Questions

## Key Takeaways: Potential Vehicle Weight Fee

---

- 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. *[September Task Force meeting]*
- 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. *[September Task Force meeting]*
- 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.

## Key Takeaways: Potential Vehicle Weight Fee

---

- 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; and,
  - Parking fees.

## Key Takeaways: Potential Vehicle Weight Fee

---

- 6.3: 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: A weight-based fee could apply uniformly across all vehicles or assign differential fees 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.

## Key Takeaways: Potential Vehicle Weight Fee

---

- 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 system were implemented.
- 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. Several U.S. cities either restrict parking permits to smaller vehicles or have implemented weight-based vehicle sticker fees.

## Key Takeaways: Potential Vehicle Weight Fee

---

- 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.

## Key Takeaways: Potential Vehicle Weight Fee

---

- 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.

## Roundtable Discussion Questions

---

- 1) What are your key takeaways from the information presented?
- 2) What equity considerations should be taken into account based on the concepts presented?
- 3) What questions do you have on these key takeaways?

## Key Takeaways: Consumer Behavior Response to Potential Vehicle Weight Fee

---

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

## Key Takeaways: Consumer Behavior Response to Potential Vehicle Weight Fee

---

- 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: Manufacturers could potentially respond to higher fees on heavier vehicles by lowering the weight of new 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.

## Key Takeaways: Consumer Behavior Response to Potential Vehicle Weight Fee

---

- 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

## Key Takeaways: Consumer Behavior Response to Potential Vehicle Weight Fee

---

- **7.9 Continued:** With a **one-time** vehicle weight fee for all new passenger vehicles above 3,800 lbs set averaging 7% of the purchase price of a new vehicle, modeling suggests the following outcomes by 2040:
  - 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.

## Key Takeaways: Consumer Behavior Response to Potential Vehicle Weight Fee

---

- 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

## Key Takeaways: Consumer Behavior Response to Potential Vehicle Weight Fee

---

- **7.10 Continued:** With an **annual** vehicle weight fee for all registered passenger vehicles above 3,800 lbs set at \$.10/lb., modeling suggests the following outcomes by 2040:
  - Number of electric vehicles would decline by 0.4%
  - Number of plug-in hybrid vehicles would decline by 1%

## Key Takeaways: Consumer Behavior Response to Potential Vehicle Weight Fee

---

- 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).

## Roundtable Discussion Questions

---

- 1) What are your key takeaways from the information presented?
- 2) What trade-offs should be considered when looking at the two modeled fee mechanisms (i.e., one-time and annual fees)?
- 3) If a vehicle weight fee were enacted, how could it be used to enhance road infrastructure to increase safety for pedestrians, bicyclists, and other vulnerable road users?
- 4) What questions do you have on these key takeaways?

## AGENDA – October 29, 2025

---

Are there any other comments or questions  
from Task Force members?

# AGENDA – October 29, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
4	Key Takeaways and Roundtable Discussion with Task Force Members	Cayla McDonell	I	C

# AGENDA – October 29, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
5	Public Comment	Cayla McDonell	I	C

# AGENDA – October 29, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
5	Public Comment	Cayla McDonell	I	C

# AGENDA – October 29, 2025

---

ADJOURN

Thank you

Cayla McDonell  
Associate Deputy Director  
[Cayla.McDonell@catc.ca.gov](mailto:Cayla.McDonell@catc.ca.gov)



# **AGENDA**

## **CALIFORNIA TRANSPORTATION COMMISSION VEHICLE WEIGHT SAFETY STUDY TASK FORCE MEETING November 13, 2025**

**Thursday, November 13, 2025**

**11:00 AM Vehicle Weight Safety Study Task Force Meeting**

*\*Virtual via Zoom or Teleconference only, per SB 544*

**To register to participate in the meeting remotely:**

[https://zoom.us/webinar/register/WN\\_56v-7qLESVC1D27ToW8phq](https://zoom.us/webinar/register/WN_56v-7qLESVC1D27ToW8phq)

**To join by phone:** (669) 900-9128

Webinar ID: 912 2142 4902 and Passcode: 673563

\*On September 22, 2023, Governor Newsom signed [SB 544](#). This legislation temporarily waives the Bagley-Keene Open Meeting Act requirement that locations of remote Task Force members be noticed on the agenda until January 1, 2026, if members of the public can also participate remotely.

**NOTICE:** We welcome comments from the public as a part of each item at this meeting. Commission staff has the discretion to take up agenda items out of sequence. California Transportation Commission (Commission) staff may adjourn earlier than estimated.

Unless otherwise noticed in the specified book item, a copy of this agenda, and related book items will be posted 10 calendar days prior to the meeting on the Commission Website: [www.catc.ca.gov](http://www.catc.ca.gov). Questions or inquiries about this meeting may be directed to the Commission staff at (916) 654-4245, 1120 N Street (MS-52), Sacramento, CA 95814. Commission staff will provide assistive services including translation and interpretation in multiple languages, real-time captioning, transcription, large print, digital audio and/or video recordings, as well as Task Force meeting materials in an accessible format for the visually impaired. To obtain services or copies in one of these alternate formats or languages, please contact us at (916) 654-4245 or [ctc@catc.ca.gov](mailto:ctc@catc.ca.gov). Arrangements should be made as soon as possible but no later than at least five working days prior to the scheduled meeting.” (Las solicitudes de acomodación especial o servicios de interpretación deben hacerse tan pronto como sea posible o por lo menos cinco días antes de la reunión programada.)

Improper comments and disorderly conduct are not permitted. In the event that the meeting conducted by Commission staff is willfully interrupted or disrupted by a person or by a group so as to render the orderly conduct of the meeting infeasible, Commission staff may order the removal of those individuals who are willfully disrupting the meeting.

\*“A” denotes an “Action” item; “I” denotes an “Information” item.

For a glossary of frequently used terms and acronyms please visit the Commission website at:

[https://catc.ca.gov/-/media/ctc-media/documents/about\\_ctc/acronyms-11-04-21-a11y.pdf](https://catc.ca.gov/-/media/ctc-media/documents/about_ctc/acronyms-11-04-21-a11y.pdf)

**GENERAL BUSINESS**

<b>Tab</b>	<b>Item Description</b>	<b>Presenter</b>	<b>Type*</b>
1	Roll Call & Webinar Logistics	Dylan Jimenez (CTC)	I

**INFORMATION ITEMS**

<b>Tab</b>	<b>Item Description</b>	<b>Presenter</b>	<b>Type*</b>
2	Overview of Vehicle Weight Safety Study Process, Schedule, and Next Steps	Cayla McDonell (CTC)	I
3	Task Force Findings Summary	Cayla McDonell (CTC)	I

**OTHER MATTERS**

<b>Tab</b>	<b>Item Description</b>	<b>Presenter</b>	<b>Type*</b>
4	Public Comment	Cayla McDonell (CTC)	I

**ADJOURN**

# Memorandum

**To:** TASK FORCE MEMBERS

**Vehicle Weight Safety Study  
Task Force Meeting:**  
November 13, 2025

**From:** TANISHA TAYLOR, Executive Director

**Reference Number:** Tab 2, Information

**Prepared By:** Cayla McDonell  
Associate Deputy Director

**Published Date:** November 3, 2025

**Subject:** Overview of Vehicle Weight Safety Study Process, Schedule, and Next Steps

## **Summary:**

California Transportation Commission (Commission) staff will provide an overview of the development of the Vehicle Weight Safety Study (Study). The presentation will summarize the work to date and outline how the Task Force findings summary, included in the following item (Tab 3), will inform the Commission's report to the Legislature.

Following this final Task Force Meeting, staff will present the findings summary to the Commission for initial feedback. Staff will also seek feedback on the findings summary from the Interagency Equity Advisory Committee. After the December Commission meeting, staff will begin developing the Commission's report to the Legislature, relying on the Task Force findings summary and the University of California's academic report as key inputs.

In early 2026, staff anticipate releasing the draft report for public comment. Staff expects to hold a public workshop to gather further public comment. While November 13 is the final planned meeting of the Task Force, members will continue to be engaged until the final report is presented to the Commission for approval. The approved report is anticipated to be submitted to the Legislature in early 2026.

## **Background:**

Government Code Section 14527.3 requires the 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 that considers vehicle weight ([Assembly Bill 251](#), Ward, Chapter 320, Statutes of 2023). Statute requires the Commission to prepare and submit

a report to the Legislature detailing the findings of the study and including any legislative recommendations.

In August 2024, the Commission contracted with UC Berkeley to compile relevant research literature, passenger vehicle data, and other sources, and summarize findings to inform the development of the Study.

At the December 2024 Commission meeting, the Commission approved the Task Force membership. Commission staff convened five meetings of the Task Force between June and November 2025. Task Force meetings featured the topics identified in Assembly Bill 251 and provided a venue for Task Force members and the public to discuss research findings with Commission staff and the UC Berkeley research team. Task Force membership and meeting materials are available via the [Commission's website](#).

# Memorandum

**To:** TASK FORCE MEMBERS

**Vehicle Weight Safety Study  
Task Force Meeting:  
November 13, 2025**

**From:** TANISHA TAYLOR, Executive Director

**Reference Number:** Tab 3, Information

**Prepared By:** Cayla McDonell  
Associate Deputy Director

**Published Date:** November 3, 2025

**Subject:** Task Force Findings Summary

## **Summary:**

California Transportation Commission (Commission) staff will present the draft summary of Vehicle Weight Safety Study Task Force findings to the Task Force for additional comments and input. The summary compiles the academic findings presented in the Task Force meetings, as well as feedback shared by Task Force members. The summary highlights key themes in Task Force member feedback, as well as areas not covered during Task Force meetings that could be the subject of further study. The summary will serve as a key input in the Commission's report to the Legislature on the Vehicle Weight Safety Study.

Task Force members who are unable to join the November 13 meeting are requested to provide feedback to Commission staff verbally or in writing by November 14, 2025, to be considered for the final summary. The draft summary is included as an attachment to this item and is available via the [Commission's website](#).

Staff is anticipated to present the final summary of Task Force findings to the Commission at the December 2025 Commission meeting.

**Background:**

Commission staff held five meetings of the Vehicle Weight Safety Study Task Force between June and November 2025. The meetings covered the following topics:

- June 2025: Kick-Off Meeting, Introduction to the Vehicle Weight Safety Study and Task Force Process
- July 2025: Trends in Vehicle Fleet and Trends in Road User Injuries and Fatalities
- September 2025: Introduction to Potential Policy Responses: Regulations and Built Environment solutions, the Safe Systems Approach to Reducing Traffic Injuries and Fatalities, and Impact of Vehicle Weight on Road Degradation
- October 2025: Potential Policy Responses discussion continued: Vehicle Weight Fee and Consumer Behavior Response
- November 2025: Presentation on the Task Force Findings Summary

**Attachments:**

- Attachment A: Draft Summary of Task Force Findings

# Vehicle Weight Safety Study Task Force Meeting

November 13, 2025



# AGENDA – November 13, 2025

Tab	Item Description	Presenter	Type	Agency
<b>GENERAL BUSINESS</b>				
1	Roll Call & Webinar Logistics	Dylan Jimenez (CTC)	I	C
<b>INFORMATION ITEMS</b>				
2	Overview of Vehicle Weight Safety Study Process, Schedule, and Next Steps	Cayla McDonell (CTC)	I	C
3	Draft Summary of Vehicle Weight Safety Study Task Force Findings	Cayla McDonell (CTC)	I	C
<b>OTHER MATTERS</b>				
4	Public Comment	Cayla McDonell	I	C

# AGENDA – November 13, 2025

---

## GENERAL BUSINESS

Tab	Item Description	Presenter	Type	Agency
1	Roll Call & Webinar Logistics	Dylan Jimenez	I	C

## AGENDA – November 13, 2025

---

The Task Force's meeting agenda is located on our website at <https://catc.ca.gov/programs/vehicle-weight-safety-study>.

All documents on the CTC website can be translated into any language you need. Simply e-mail us at [ctc@catc.ca.gov](mailto:ctc@catc.ca.gov) and we will have them returned to you as quickly as possible.

## AGENDA – November 13, 2025

---

Live closed captioning is available.

Please select the show captions tab at the bottom of your screen. There are a number of language options available there to choose from.

## AGENDA – November 13, 2025

---

We welcome comments from the public as a part of each item at this meeting.

You should see the webinar control panel, likely located on the bottom of your screen. There you will find the Raise Hand and Q&A tabs.



We encourage you to use the raise hand feature as early into the item as you can to give the system time to acknowledge you.

Alternately, you may use the Q&A tab to submit your comment. Please be sure to include the agenda item number you are commenting on. Commission staff will read the comment on your behalf.

As a reminder, each registered attendee is provided a unique link and phone number to access the webinar. These should not be shared with other participants, as they are registered to a specific attendee and can create confusion for staff when making comments.

# AGENDA – November 13, 2025

---

## **For Presenters:**

If you are on the agenda to make a presentation, please do your best to be succinct.

We hope that you will turn on your camera during your presentation, if you have one.

# AGENDA – November 13, 2025

---

## **For All Meeting Attendees:**

Please do your best to be concise.

Please make sure that your comments add new information. If you agree with the comments of a previous speaker, simply make that statement.

Since we often have many speakers, we ask that you make your point in 2 minutes or less. If, for some reason, we have many speakers on a topic, we reserve the right to limit comments to 1 minute if needed.

# AGENDA – November 13, 2025

---

## GENERAL BUSINESS

Tab	Item Description	Presenter	Type	Agency
1	Roll Call & Webinar Logistics	Dylan Jimenez	I	C

# AGENDA – November 13, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
2	Overview of Vehicle Weight Safety Study Process, Schedule, and Next Steps	Cayla McDonell	I	C

# Vehicle Weight Safety Study Timeline

DATE	MILESTONE
Jun – Nov 2025	Monthly Task Force meetings
Dec 2025	Staff presents Task Force findings to California Transportation Commission and Interagency Equity Advisory Committee
Early 2026	Staff develops draft report to the Legislature
Early 2026	Public comment period and workshop on draft report
Spring 2026	California Transportation Commission adopts final report and submits to Legislature

# Task Force Legislative Requirements

---

**Government Code Section 14527.3** (AB 251, Ward) directs the Commission to convene a task force to study the relationship between vehicle weight and:

- (1) Vulnerable road user injuries and fatalities. **(July Task Force Meeting)**
- (2) Degradation of road infrastructure. **(September Task Force Meeting)**
- (3) How a passenger vehicle weight fee may change driver behavior. **(October Task Force Meeting)**
- (4) 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. **(October Task Force Meeting)**
- (5) 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. **(All Task Force Meetings)**

## Next Steps for Commission's Report to the Legislature

---

- Staff will circulate a form for Task Force members to provide open-ended supplementary comments.
- Presentation of Task Force Findings to California Transportation Commission and the Interagency Equity Advisory Committee
- Development of draft report to the Legislature informed by:
  - Summary of Task Force Findings (today's item)
  - UC Research
- Public workshop on the draft report during comment period (Early 2026)

# AGENDA – November 13, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
2	Overview of Vehicle Weight Safety Study Process, Schedule, and Next Steps	Cayla McDonell	I	C

# AGENDA – November 13, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
3	Draft Summary of Vehicle Weight Safety Study Task Force Findings	Cayla McDonell	I	C

## Overview: Task Force Findings Report

---

1. Overview of the legislative requirements and the Task Force, including Task Force membership, purpose and scope, and meeting schedule and topics (Tab 2)
2. Key Takeaways: Key takeaways derived from the academic research with additional feedback provided by Task Force members and the public
3. Other Topics Identified by Task Force Members for Further Consideration: Topics outside the legislation but potentially relevant for Commission consideration

## Key Takeaways: Task Force Findings Report

---

The following slides restate key takeaways from the University of California's research on the topics below and summarize additional feedback from Task Force members and the public, with modifications and additional comments received since the previous Task Force meeting (shown in red).

1. California Vehicle Fleet Trends;
2. California Injury and Fatality Trends;
3. Potential Regulatory Responses;
4. Potential Built Environment Responses;
5. Vehicle Weight and Road Degradation;
6. Potential Weight-Based Fee Responses; and,
7. Consumer Behavior Response.

# 1. California Vehicle Fleet Trends Key Takeaways

---

**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.

**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. California Vehicle Fleet Trends Key Takeaways

---

**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. However, their share of registrations is small but increasing, with hybrids making up 6.5% of registrations and electric vehicles making up 5% of registrations.

## 1. California Vehicle Fleet Trends: Summary of Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- How decades of federal safety regulations may have impacted vehicle weight and form.
- What factors have contributed to Californians holding on to their vehicles for longer, how this might impact safety outcomes in different communities, and whether a vehicle weight fee might increase the amount of time Californians hold on to their vehicles thus exacerbating this issue.
- Whether there are fewer smaller vehicles available to California consumers when compared to larger and heavier vehicles.
- **In part, vehicle composition trends presented here are in response to changing consumer demands and mobility needs.**

## 2. California Injury & Fatality Trends Key Takeaways

---

**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, pickups, ~~and sedans~~ 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. California Injury & Fatality Trends Key Takeaways

---

**2.1 (d)** 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. California Injury & Fatality Trends Key Takeaways

---

**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.

**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.

## California Injury & Fatality Trends: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- Further study how effective new NHTSA rulemaking and updates to the New Car Assessment Program, and automotive industry standards to improve safety outcomes of vulnerable road users for new vehicles, have improved trends for vulnerable road users.
- 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 behaviors of both vulnerable road users and drivers, including speeding, inattention, impairment, and the unsafe use of in vehicle entertainment contribute to collisions.

## California Injury & Fatality Trends: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- 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.**
- **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.**

## 3. Potential Regulatory Responses Key Takeaways

---

- 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 advancements tended have been on improving** 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.

## Potential Regulatory Responses: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- Whether traffic enforcement, over-reliance on safety features in new vehicles, and funding challenges at the local level to make roadway improvements factor into fatality and serious injury trends seen amongst vulnerable road users.
- Whether states or countries have implemented stricter licensing standards for more dangerous passenger vehicles.
- **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.**

## Potential Regulatory Responses: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- Whether other states or countries have implemented stricter licensing requirements to **operate larger ~~more dangerous~~** passenger vehicles.
- **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. Potential Built Environment Responses Key Takeaways

---

### 4.1 (new key takeaway, subsequent key takeaways will be renumbered)

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. Potential Built Environment Responses Key Takeaways

---

**4.2 (formerly key takeaway 4.1. Subsequent takeaways will be renumbered)** As part of the Safe System Approach, effective roadway design and infrastructure that prioritizes safety for all (i.e. 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.

**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. Potential Built Environment Responses Key Takeaways

---

**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.

## Potential Built Environment Responses: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- How land use influences safety of vulnerable road users.
- Better identify how effective each safety countermeasures is as vehicle speed increases. If investments are made in certain countermeasures that are then offset by adjacent vehicle speeds, infrastructure dollars are potentially being wasted on ineffective safety infrastructure for vulnerable road users.
- Emphasize mode deconfliction to reduce the fatality and serious injury trends seen amongst 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. Vehicle Weight and Road Degradation Key Takeaways

---

**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. Potential Weight-Based Fee Responses Key Takeaways

---

**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; and,
- Parking fees.

## 6. Potential Weight-Based Fee Responses Key Takeaways

---

**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:** 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.

**6.5:** 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. Potential Weight-Based Fee Responses Key Takeaways

---

**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.

**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. Potential Weight-Based Fee Responses Key Takeaways

---

**6.9:** According to UC Berkeley, 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, 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.

## Potential Weight-Based Fee Responses: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- Since UC Berkeley's research does not show a clear relationship between vehicle weight and fatality and serious injury trends, coupled with the rising cost to purchase a vehicle and the cost of living in California, it is difficult to justify a weight-based passenger vehicle fee.
- If a passenger vehicle weight-based fee were implemented, revenues generated should be invested in transportation infrastructure to promote safety for all users if a passenger weight-based fee would be imposed.

## Potential Weight-Based Fee Responses: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- If a passenger vehicle weight-based fee were implemented, 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 (i.e., mode deconfliction, walking and bicycling facilities, and enhance the built environment to reduce serious injuries and fatalities of road users). Examples of such programs include the Road Maintenance and Rehabilitation Formula program, the Active Transportation Program, the Office of Traffic Safety programs, or similar.

## Potential Weight-Based Fee Responses: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- 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; and
  - 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.

## Potential Weight-Based Fee Responses: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- 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 no change 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.

## Potential Weight-Based Fee Responses: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- 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 section 6.** 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 ~~that~~ expressed the importance of investment in transportation infrastructure to promote **safety for all users in all regions statewide including urban, suburban, and rural areas and in response to current safety trends (see key takeaway 2.2)** if a passenger weight-based fee would be imposed.

## 7. Consumer Behavior Response Key Takeaways

---

**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.

**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. Consumer Behavior Response Key Takeaways

---

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

**7.7** ~~Manufacturers could potentially respond to higher fees on heavier vehicles by lowering the weight of new vehicles.~~ 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. ~~This could also limit the types of vehicles available to consumers.~~

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

## 7. Consumer Behavior Response Key Takeaways

---

**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:

1. Heaviest 10% of vehicle weights would decline 2.5%;
2. Mean weight of all vehicles on the road would decline 1.2%;
3. Number of large SUVs would decline by 17%;
4. Number of heavy and standard pickup trucks would decline by 10.5%;
5. Annual revenues of \$4.6 billion;

**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 is not a specific policy proposal for consideration.**

## 7. Consumer Behavior Response Key Takeaways

---

### 7.9 continued:

6. Number of electric vehicles would decline by 2.3%;
7. Number of plug-in hybrid vehicles would decline by 4.3%;
8. 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; and,
9. 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 is not a specific policy proposal for consideration.

## 7. Consumer Behavior Response Key Takeaways

---

**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:

1. Mean weight of all vehicles on the road would decline 0.26%;
2. Number of large SUVs would decline by 4%;
3. Number of heavy and standard pickup trucks would decline by 3%;
4. Annual revenues of \$1.45 billion;
5. Number of electric vehicles would decline by 0.4%;

**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 is not a specific policy proposal for consideration.**

## 7. Consumer Behavior Response Key Takeaways

---

### 7.10 continued:

6. Number of plug-in hybrid vehicles would decline by 1%; and,
7. 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 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).

## Consumer Behavior Response: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- Consider making any fee revenue-neutral for the purposes of decreasing the weight of passenger vehicles purchased and manufactured over time and incentivizing the purchase of lighter weight 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, other.
- There may be additional safety, economic, and market shifts not accounted for in this consumer demand model that need to be studied further if a fee were imposed.

## Consumer Behavior Response: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- Additional information from other states with a weight-based passenger vehicle fee should be further studied, such as programmatic structure and goals, how revenue generated is being used, exemptions, and other vehicle features (i.e. towing capacity, etc.) is factored into fee structures.
- Consider incentives to encourage lowering passenger vehicle weight manufactured and purchased 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.

## Consumer Behavior Response: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- 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 advance driver assistance systems and other crash avoidance features. Furthermore, the more exorbitant fee modeled could have an even more adverse impact on consumers.

## Consumer Behavior Response: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- 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.
- 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.

## Consumer Behavior Response: Additional Feedback from Task Force Members

---

Task Force members offered this additional feedback:

- 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.

## Other Topics from Task Force Members

---

Other topics from Task Force members for further consideration which are outside of the scope of UC Berkeley's research and the Task Force process include:

- a. Fee v. Tax; - propose moving to Chapter 2, Section 6.
- b. Incentivizing Versus Disincentivizing; - propose moving to Chapter 2, Section 6.
- c. Insurance;
- d. Motor Vehicle Nonoccupant Safety Rating;
- e. Perceptions of Safety;
- f. Traffic Enforcement; - propose moving to Chapter 2, Section 3.
- g. Unique Vehicle Needs; - propose moving to Chapter 2, Section 6.
- h. Unsafe Driving Behavior.- propose moving to Chapter 2, Section 6.

## Additional Optional Feedback Opportunity for Task Force Members

---

Any additional commentary can be submitted to [Cayla.McDonell@catc.ca.gov](mailto:Cayla.McDonell@catc.ca.gov) no later than COB Tuesday, November 25, for inclusion in the presentation materials for the California Transportation Commission's December meeting, via the format emailed to Task Force members.

# AGENDA – November 13, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
3	Draft Summary of Vehicle Weight Safety Study Task Force Findings	Cayla McDonell	I	C

# AGENDA – November 13, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
4	Public Comment	Cayla McDonell	I	C

# AGENDA – November 13, 2025

---

## INFORMATION ITEMS

Tab	Item Description	Presenter	Type	Agency
4	Public Comment	Cayla McDonell	I	C

# AGENDA – November 13, 2025

---

ADJOURN

Thank you

Cayla McDonell  
Associate Deputy Director  
[Cayla.McDonell@catc.ca.gov](mailto:Cayla.McDonell@catc.ca.gov)



## Appendix C

### Task Force Supplementary Comments

(Page Intentionally Left Blank)



[ctc@catc.ca.gov](mailto:ctc@catc.ca.gov)

4.4

**SUMMARY OF VEHICLE WEIGHT SAFETY**  
**STUDY TASK FORCE FINDINGS**  
**(ASSEMBLY BILL 251)**

ATTACHMENT B FOR THIS ITEM WILL BE PROVIDED  
PRIOR TO THE DECEMBER 4-5, 2025  
CALIFORNIA TRANSPORTATION COMMISSION MEETING