

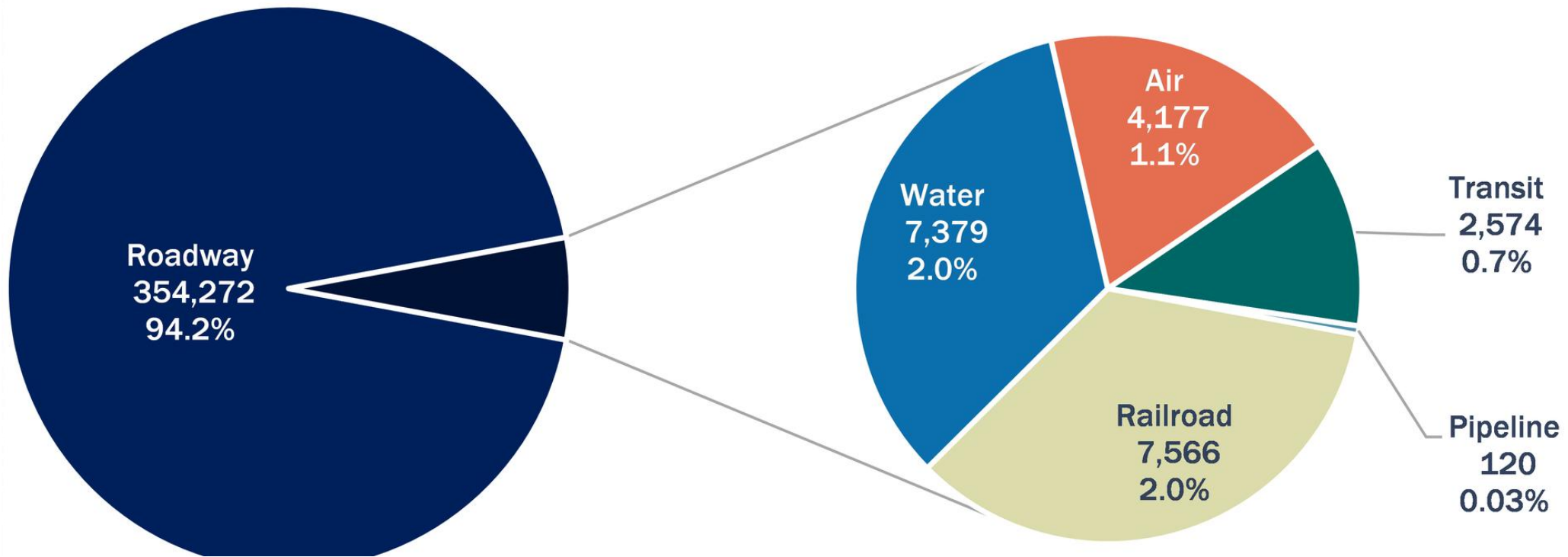
# Automation and Electrification of the Vehicle Fleet

A view from



Ann Carlson  
Shirley Shapiro Professor of Law  
UCLA School of Law

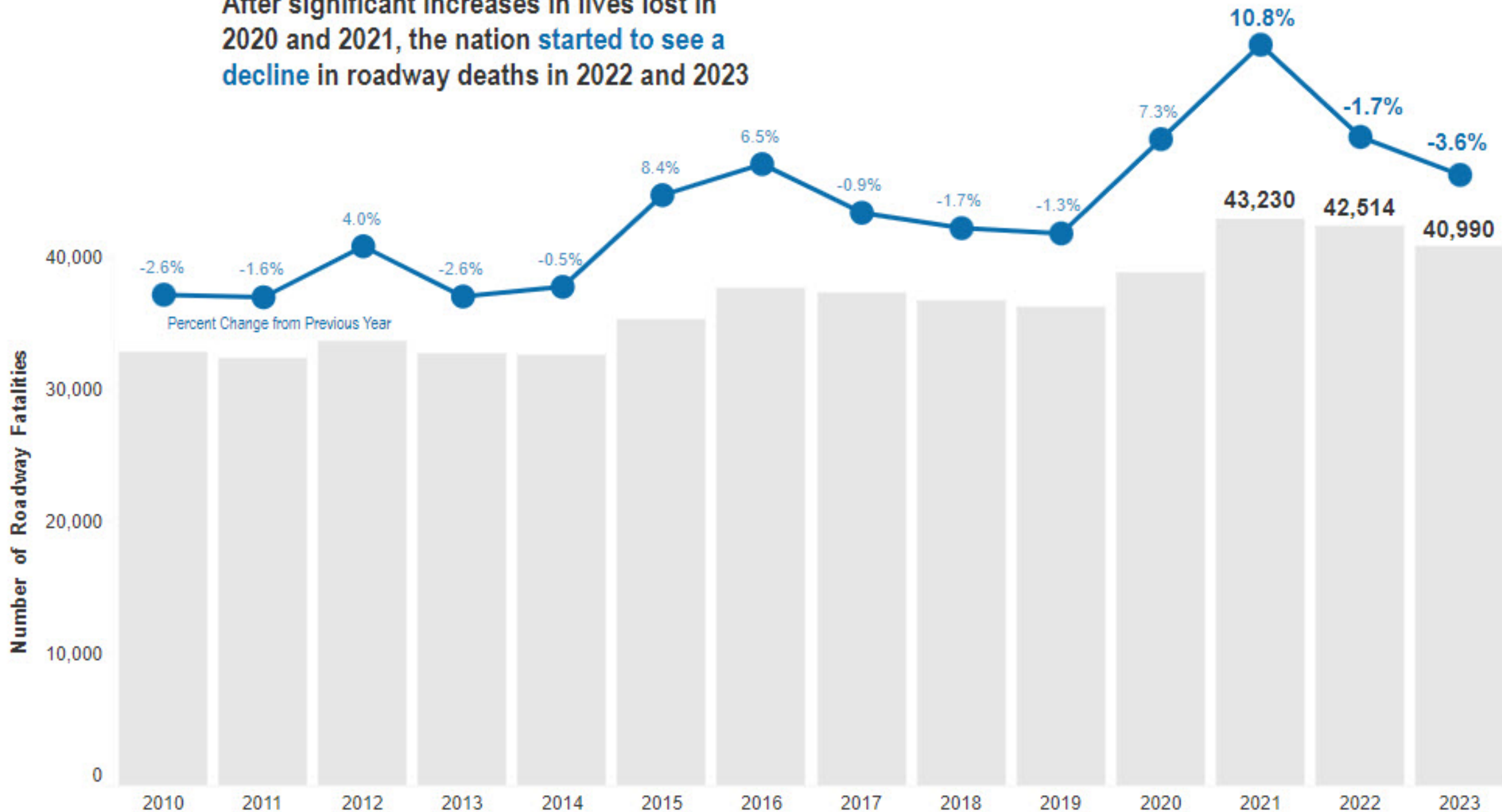
*The Future. of Transportation:  
Environmental Law in Motion*  
AALS January 10, 2025

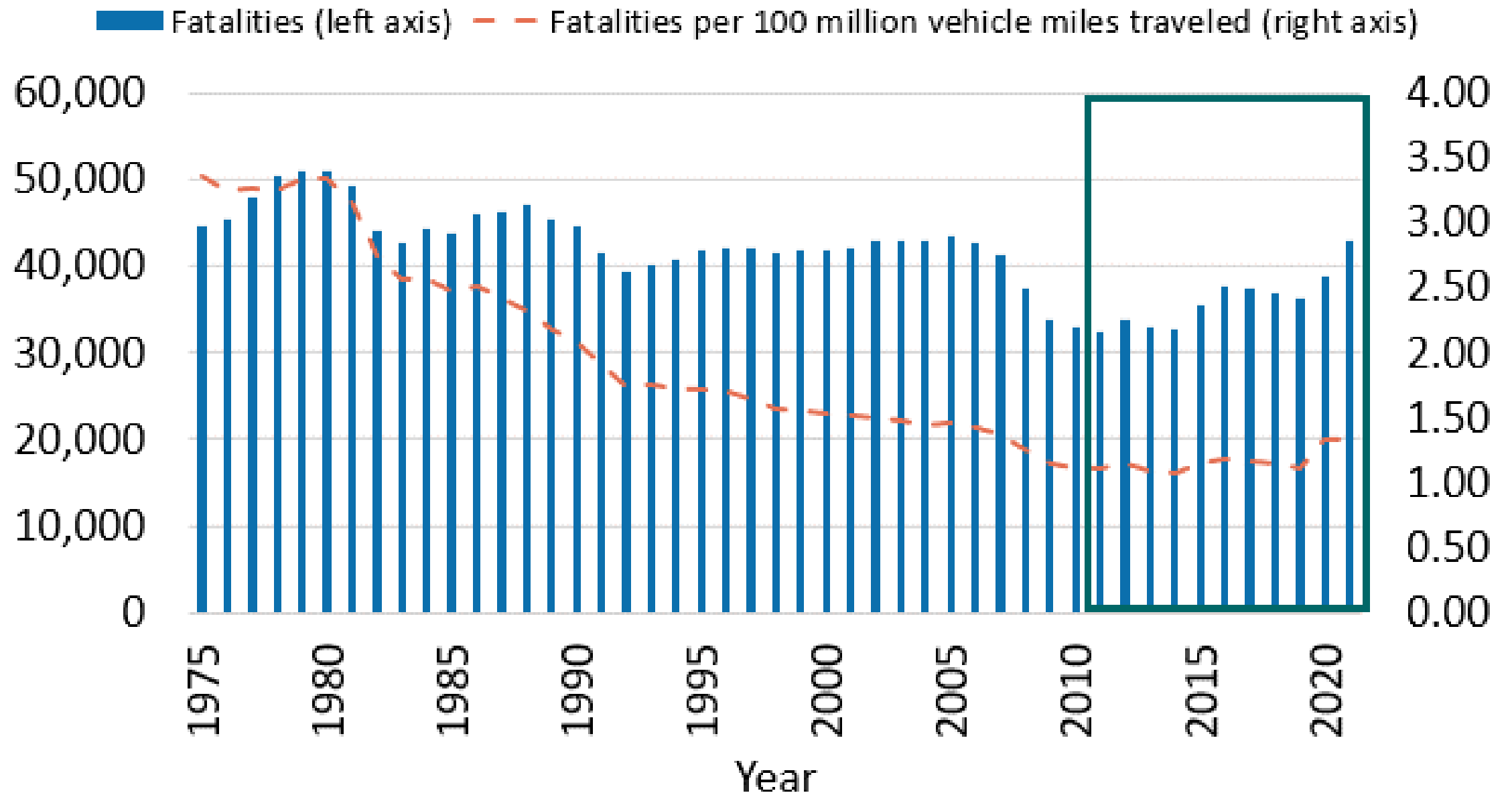


Source: U.S. DOT

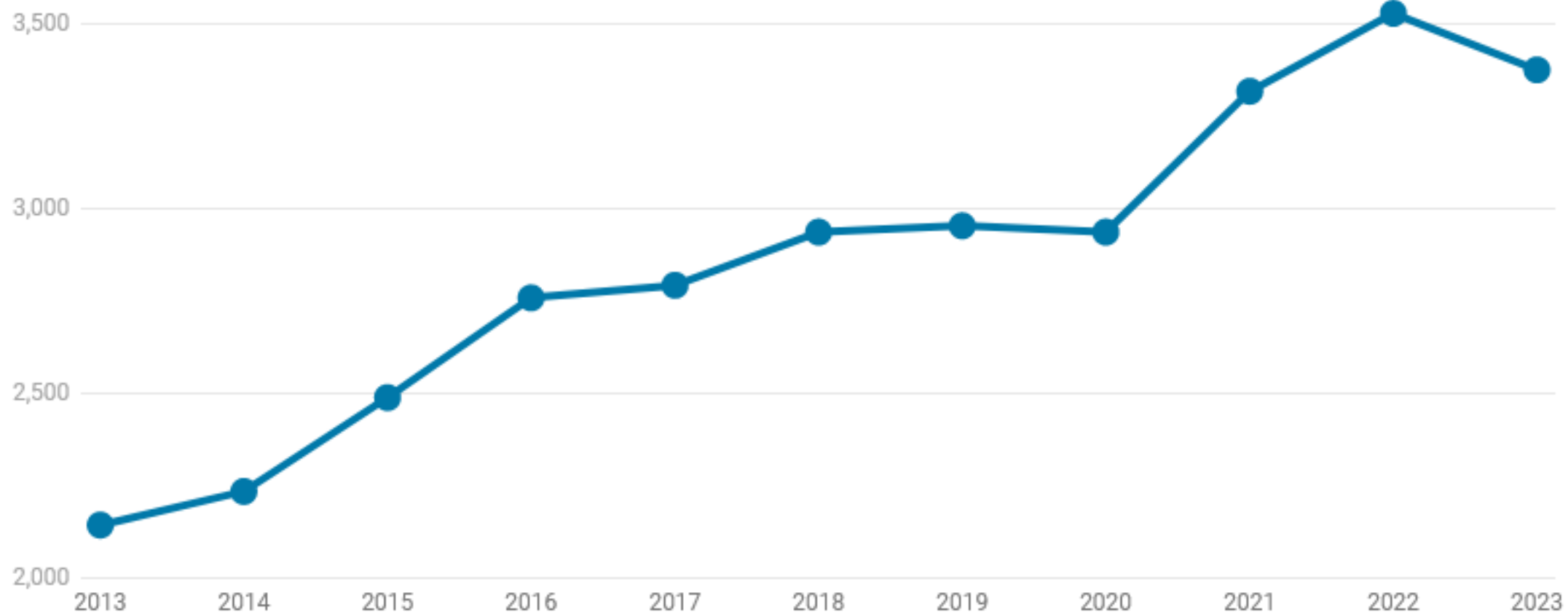
- Fatalities by Transportation Mode, 2011-2020, US DOT

After significant increases in lives lost in 2020 and 2021, the nation started to see a decline in roadway deaths in 2022 and 2023



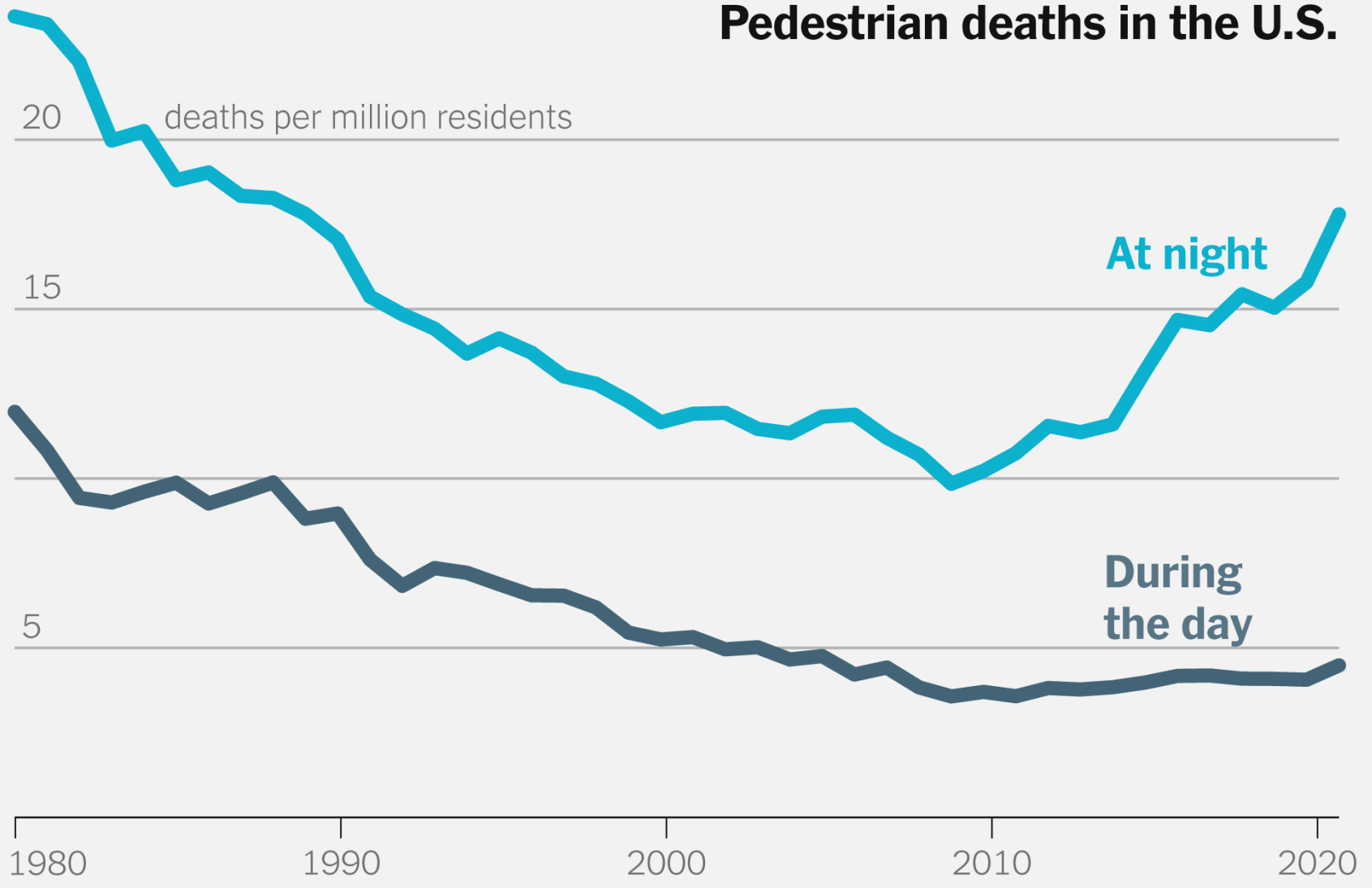


## U.S. Pedestrian Traffic Fatalities, 2013-2023 (January-June)



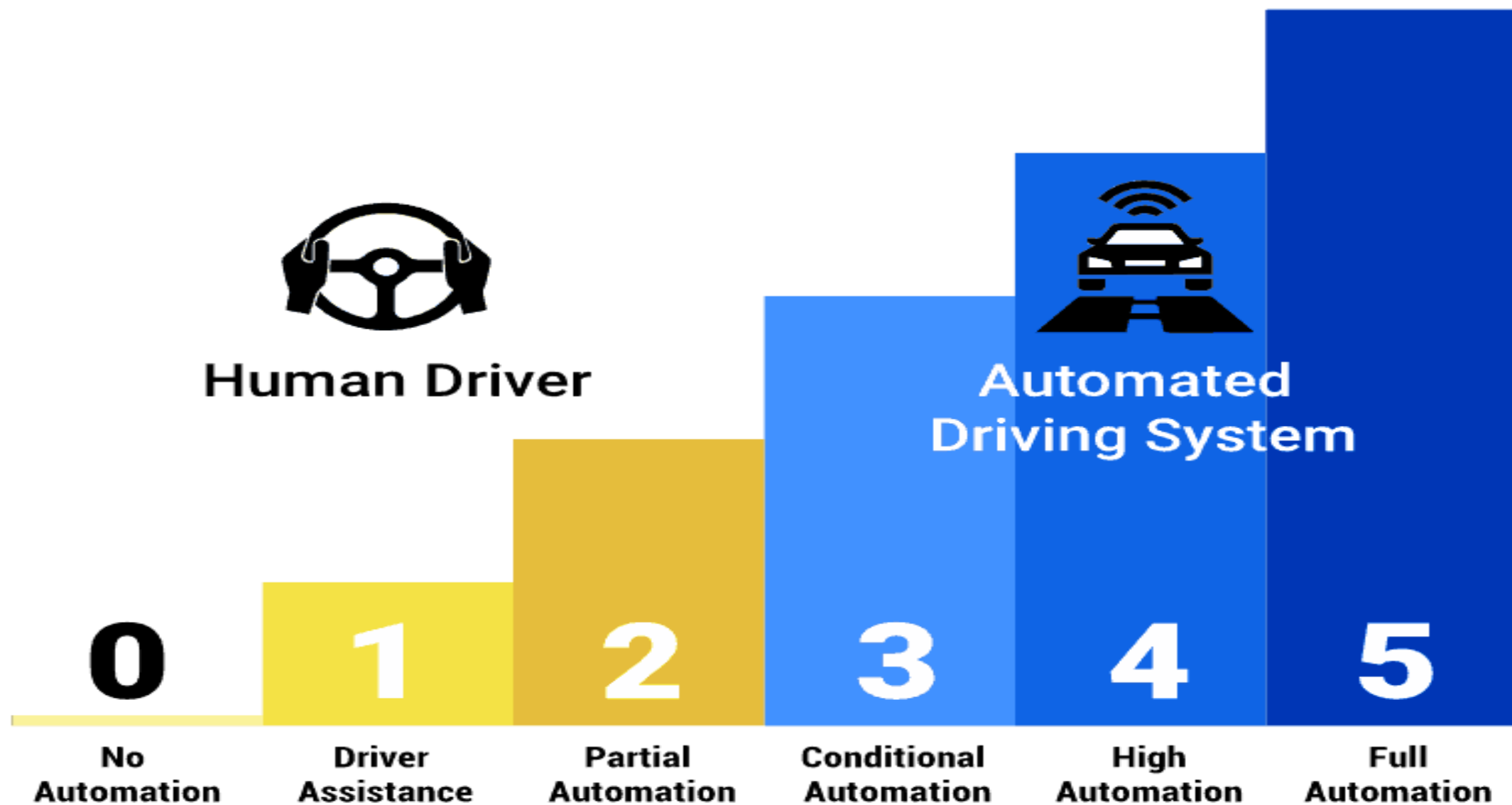
Source: Governors Highway Safety Association • [Get the data](#) • [Download image](#) • Created with [Datawrapper](#)

# Pedestrian deaths in the U.S.



# Levels of Automation For On-Road Vehicles

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WAYMO

JAGUAR

Hotel Midtown San Francisco





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## 2024-26 Final CAFE Rule

**Table II-4 – Estimated Average of CAFE Levels (mpg) Required Under Final Rule**

| <b>Fleet</b>   | <b>2024</b> | <b>2025</b> | <b>2026</b> | <b>2027</b> | <b>2028</b> | <b>2029</b> |
|----------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Passenger Cars | 49.2        | 53.4        | 59.4        | 59.4        | 59.3        | 59.3        |
| Light Trucks   | 35.1        | 38.2        | 42.4        | 42.4        | 42.4        | 42.4        |
| Overall Fleet  | 40.6        | 44.2        | 49.1        | 49.1        | 49.2        | 49.3        |

# Table I-4: Estimated Required Average and Estimated Achieved Average of CAFE Levels

(mpg) for Passenger Cars and Light Trucks, Reference Baseline, Preferred Alternative

**PC2LT002<sup>19,20</sup>**

| Model Year     | 2022 | 2027 | 2028 | 2029 | 2030 | 2031 |
|----------------|------|------|------|------|------|------|
| Passenger Car  |      |      |      |      |      |      |
| Required       | 44.1 | 60.0 | 61.2 | 62.5 | 63.7 | 65.1 |
| Achieved       | 47.1 | 68.6 | 68.4 | 68.6 | 68.6 | 70.8 |
| Light Truck    |      |      |      |      |      |      |
| Required       | 32.1 | 42.6 | 42.6 | 43.5 | 44.3 | 45.2 |
| Achieved       | 32.1 | 43.7 | 44.2 | 44.9 | 45.3 | 46.4 |
| Total LD Fleet |      |      |      |      |      |      |
| Required       | 35.8 | 47.3 | 47.4 | 48.4 | 49.4 | 50.4 |
| Achieved       | 36.5 | 49.9 | 50.2 | 50.8 | 51.1 | 52.5 |



**WHAT IS OIRA**

**AND WHY**

**DOES IT EXIST?**