

PURPOSE

The purpose of the Cooper Jones Active Transportation Safety Council (CJATSC) Study Team is to review and discuss observations made from detailed case materials of fatal crashes involving people who bike, walk, roll, and use other forms of active transportation to identify modifiable risks and protective factors that if present or absent could prevent future fatalities. Review and discussion of case materials are organized around modifiable risk factors within Washington's Safe System Approach.

The observations reported by the Fatal Case Review Study Team are **not the official recommendations** of the CJATSC or the Washington Traffic Safety Commission (WTSC). The study team submits a summary of their observations to CJATSC for consideration when developing actionable recommendations. The official recommendations of the CJATSC are published in their annual report, found at <https://wtsc.wa.gov/programs-priorities/active-transportation-safety-council/>.

SCOPE OF REVIEW

Meeting Date: Monday, August 18, 2025

Topic for Review: Fatal crashes involving bicyclist fatalities that occurred in 2024

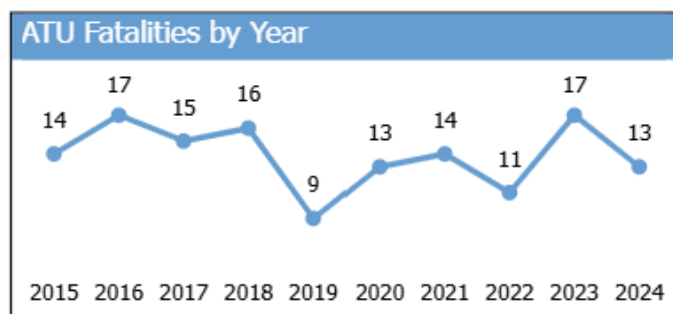
DATA SOURCE

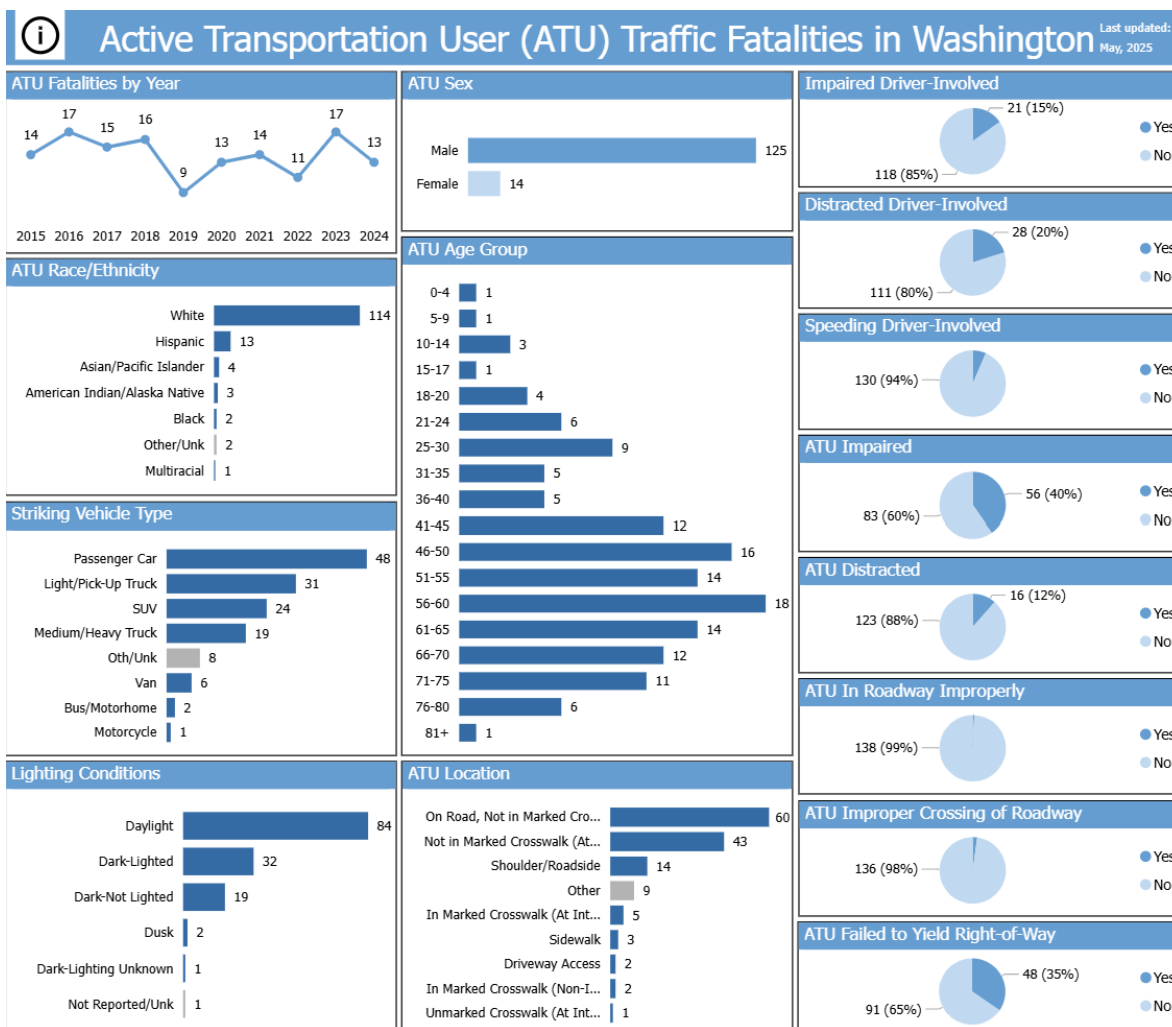
Data for the 10-year data summary was extracted, August 4, 2025, from the Active Transportation User Fatalities dashboard, located on the WTSC website at <https://wtsc.wa.gov/dashboards/active-transportation-user-fatalities>. For additional details on fatal crash data, contact Dr. Max Roberts at mroberts@wtsc.wa.gov.

DATA SUMMARY

Of the bicyclist **fatalities and fatal crashes** that occurred in Washington from 2015-2024:

- There were 139 bicyclist fatalities.
- Nine out of ten (n=125, 90%) were male.
- The majority occurred between the ages of 41 and 75 (n=97, 70%)
- The majority (n=114, 82%) were white.
- One in six (n=21, 15%) involved an impaired driver. Two out of five (40%) involved an impaired bicyclist.
- One in five (n=28, 20%) involved a distracted driver. One in ten (n=16, 12%) involved a distracted bicyclist.
- Nine (6%) involved a speeding driver.





- One in three (n=48, 35%) bicyclists failed to yield right-of-way.
- About two out of five (n=60, 43%), occurred on the road, not in a marked crosswalk (not at an intersection).
- Over half (n=80, 60%) of the striking vehicles were larger vehicles - either a light/pick-up truck, SUV, medium/heavy truck, or van. One in three (n=48, 35%) were a passenger car.
- Three out of five (n=84, 60%) occurred in daylight.
- Nearly one in three (n=41, 29%) occurred in King County, followed by one in ten (n=14, 10%) in Spokane County, and one in ten (n=13, 9%) in Pierce County.
- About one in six (n=23, 17%) occurred in July, followed by one in seven in September (n=19, 14%).
- One in five (n=29, 22%) occurred on Wednesdays, followed by one in six (n=22, 16%) on Sundays, and one in six (n=22, 16%) on Tuesdays.
- One in five (n=29, 21%), occurred between 3pm and 6pm, followed by about one in six (n=23, 17%) between 6pm and 9pm.
- About two out of five (n=61, 44%) occurred on a city street.
- Two out of five (n=54, 39%) occurred on a road with a posted speed limit of 30-40mph.
- About one in six (n=24, 17%) were hit and runs.

Figure 2: Map visualizing the locations of all bicyclist fatalities in Washington state from 2015-2024.

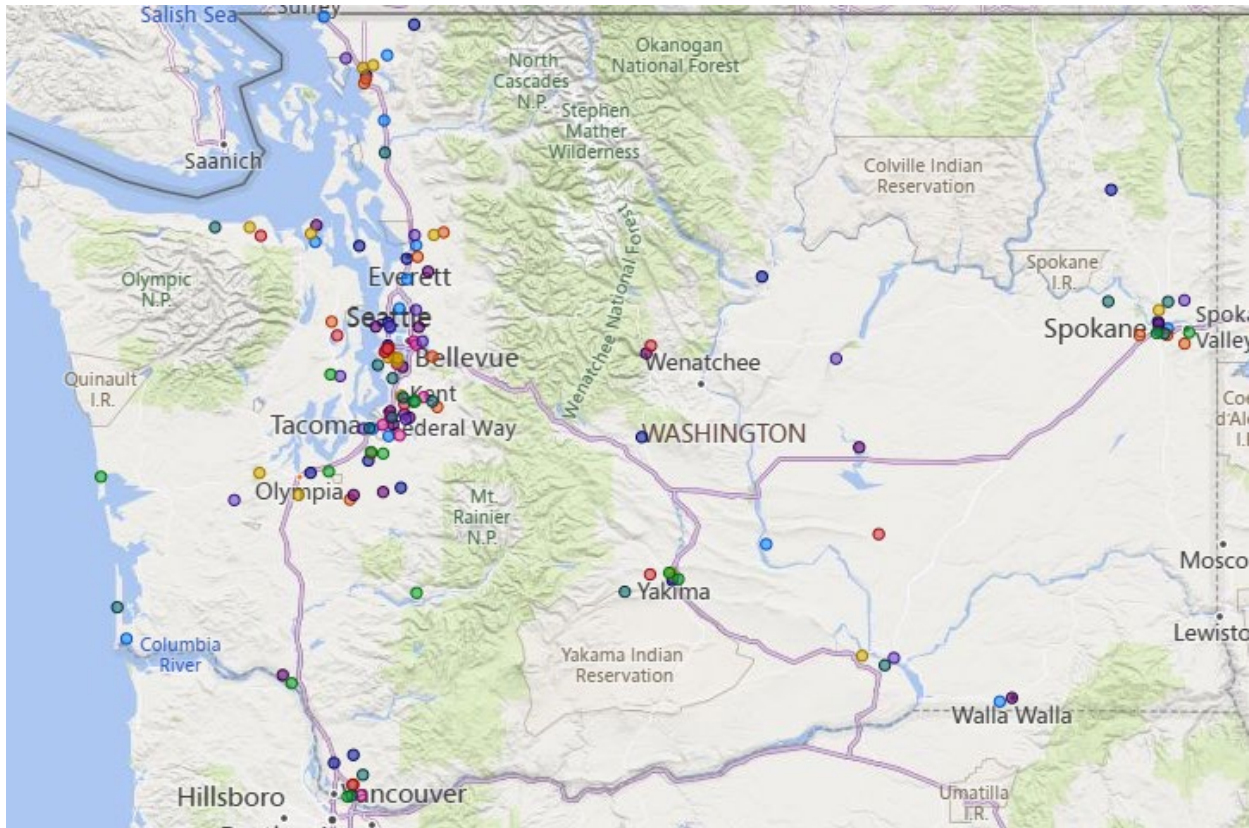
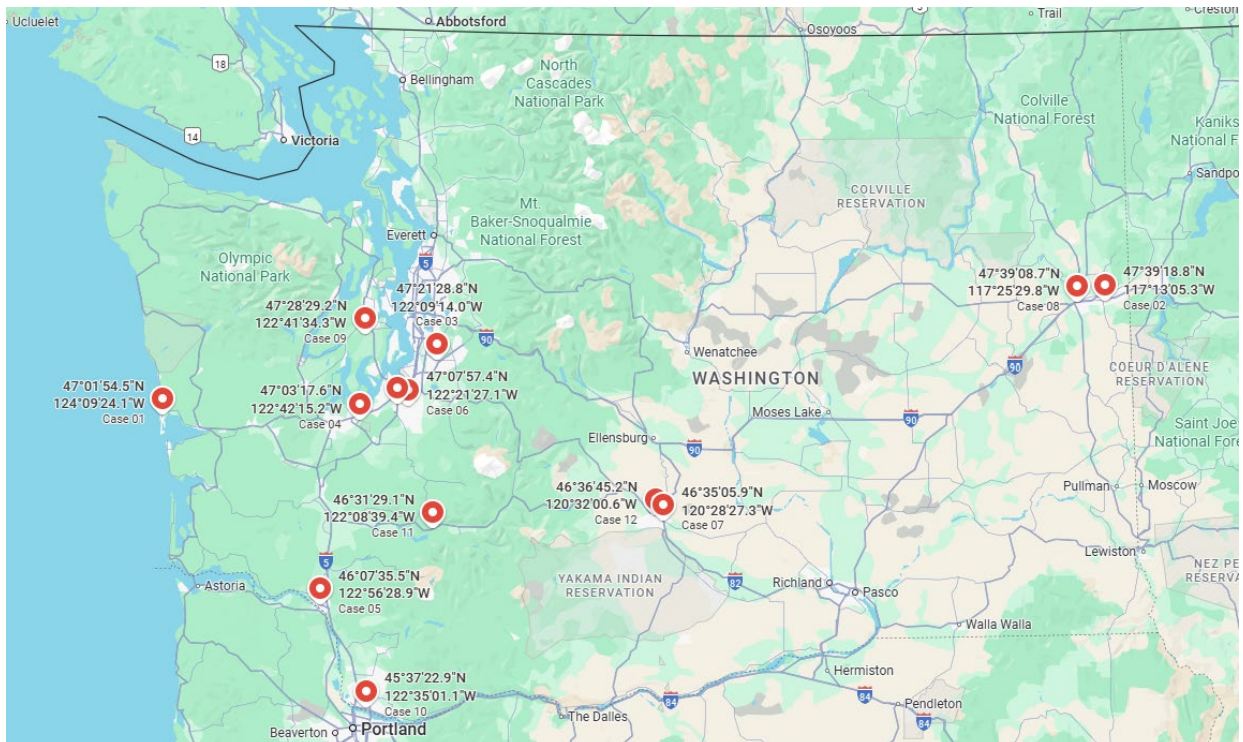


Figure 1: Map visualizing the locations of all the bicyclist fatalities in Washington state in 2024.



TRAFFIC FATALITY REVIEW

There were 13 crashes extracted from the WTSC's Coded Fatal Crash Files that met the following criteria: fatal crashes involving bicyclist fatalities that occurred in 2024. Of those 13, one case involved an e-scooter. This was due to the crash being miscoded as a "pedalcycle" and, therefore, matched the scope criteria when it was extracted. The CJATSC is interested in learning more about fatal crashes that involve e-scooters, so all 13 crashes were selected for review.

The following are patterns and observations identified and discussed by the study team based on the factors involved in the individual cases selected for this traffic fatality review.

Summary of Observations

1. Nine crashes included factors related to roadway design, posted speed limit, and land use. The most common factors being long and straight corridors that lack active transportation facilities, posted speed limits too high for vulnerable road user safety, and prioritizing movement of vehicles over vulnerable road users. The study team noted they often see a "driving system not a transportation system." In cases where there are active transportation facilities, they're often designed primarily for pedestrians.
2. Ten cases included information about impairment status while three had no records. Of those, seven active transportation users were under the influence of drugs. The majority (6 out of 7) were a combination of methamphetamine and fentanyl.
3. Almost half the crashes (6 out of 13) had roadway lighting and visibility factors that impacted the driver's ability to see a person using the roadway. The most common factors being a combination of lack of street lighting and a bicyclist operating a bike at night with no front bike light while wearing dark clothing.
4. Of the 13 fatalities reviewed, 10 involved a driver that struck a bicyclist. Of those, six were either a truck or SUV and four were passenger cars. The height of the vehicles were not recorded. In the last 2 years (2023-24), 60% of striking vehicles were larger: light trucks, medium/heavy trucks, SUVs, and one van.

Case-Level Observations

- A. Nine crashes included factors related to **roadway design**, posted **speed** limit, and **land use** as follows:
 1. Two crashes occurred on a forested, rural road with two lanes, a posted speed limit of 50 mph, no active transportation facilities and limited shoulder space which forces a bicyclist to ride in the roadway. In both crashes, the bicyclist was struck from behind by a vehicle traveling in the same direction.
 2. One crash occurred on a state route that is wide and long with five lanes, a posted speed limit of 45 mph, and minimal active transportation facilities (sidewalks). This roadway has long block spacing, limited marked crosswalks, no bike lanes, and runs through densely populated residential areas with mixed-use housing. The roadway is designed to move vehicles and avoid congestion. The crash occurred near an intersection where the side roads have driveway aprons.



Meaning most drivers would not recognize this as an intersection as it looks like driveway access points.

3. One crash occurred on rural county road (minor arterial) with two lanes that is forested, a posted speed limit of 35 mph, and no active transportation facilities. This roadway runs through sparse residential areas, a couple businesses, a tribal reservation, and connects with a state route and a major highway.
 4. One crash occurred just outside a major five-way intersection where the active transportation facilities are built for pedestrians and not a person on a bicycle. There are no way-finding signs for bicyclists to assist navigating the confusing intersection. The roadway and intersection is in a major industrial area that moves freight and a densely populated residential areas.
 5. One crash occurred at an intersection with a freeway off ramp near a popular bike trail that is a major destination for bicyclists. Yet, the intersection is designed to prioritize moving vehicles. For example, there is a slip lane that allows traffic to turn right across a crosswalk often used by bicyclists. There's no flashing beacons to alert a driver of the crosswalk being in use as they exit the freeway.
 6. Three crashes occurred on principal arterials with five to six lanes, a posted speed limit of 35 mph, and no active transportation facilities other than sidewalks and marked crosswalks at signal-controlled intersections.
- B. Almost half the crashes (6 out of 13) had **roadway lighting** and **visibility** factors that impacted the driver's ability to see a person using the roadway as follows:
1. One crash occurred at night on a forested rural road, with a posted speed limit of 50 mph, and little overhead streetlight.
 2. A driver was approaching a midblock crosswalk at or around 35 mph, in the dark, and the road had no overhead streetlights. The lighting was described as "little ambient lighting" from local businesses. Additionally, there was a retaining wall and a business with equipment parked out front on the righthand side of the roadway that blocked the driver's view of a bicyclist approaching the crosswalk.
 3. A driver was traveling on a rainy night at or around 45 mph on a road through a residential area with no overhead streetlights.
 4. A driver was moving through an intersection where a building was obstructing clear view up a hill until already moving past the stop line, and the building cast shadows on the roadway.
 5. Two crashes occurred at night on a roadway with a posted speed limit of 35 mph, limited overhead streetlights, and areas void of light.
 6. Seven crashes occurred in the dark and involved a person operating a bicycle with no front bike light and wearing dark clothing.
- C. Three of the 13 cases involved a **motor vehicle driver** whose **actions** were identified as a factor as follows:
1. A driver struck a bicyclist from behind. Then, left the scene of the crash and did not call emergency services to assist the injured bicyclist.



2. A driver did not come to a full stop at an intersection controlled with a stop sign. As the driver rolled through the intersection, a person on an e-scooter struck the vehicle.
 3. A young (aged 17) driver was distracted and struck a bicyclist from behind.
- D. Eight cases involved an **active transportation road user** whose actions were identified as a factor as follows:
1. Three cases involved a person on a bicycle entering a marked crosswalk without stopping to ensure it's clear and when the approaching vehicle had the right-of-way. Two of the three occurred at a controlled intersection while oncoming traffic had a green light.
 2. Two cases involved a person operating a bicycle at night, under the influence of drugs, wearing dark clothing with no front bicycle light, and crossing the roadway within 40-80 feet of a controlled intersection without clearing oncoming traffic.
 3. Two cases involved a person operating a bicycle at night, under the influence of drugs, wearing dark clothing with no front bicycle light, that left the sidewalk and crossed a five-lane arterial.
 4. One case involved a person operating a bicycle under the influence of drugs that crossed through the middle of an intersection on a red light, while oncoming traffic had a green light.
 5. One case involved a person operating a bicycle, traveling against traffic, and crossing the fog line into oncoming traffic.
- E. Out of 13 cases reviewed, 10 included information about **impairment** status while three had no records. Of those 10, seven active transportation users were under the influence of drugs. The majority (6 out of 7) being a combination of methamphetamine and fentanyl.
- F. Of the 13 bicycle fatalities, 10 involved a driver that struck a bicyclist. The **striking vehicle** make and model were on average 16 years old and noted as follows:
1. SUV – 2008 Nissan Rouge
 2. Passenger Car – 2010 Kia Forte
 3. SUV – 2000 Dodge Durango
 4. Truck – 2022 Ford F150
 5. Truck – 2016 Chevy Silverado
 6. Passenger Car – 2000 Honda Acord
 7. Passenger Car – 2012 Acura TL
 8. Truck – 1989 Ford F250
 9. SUV – 2011 Jeep Liberty
 10. Passenger Car – 2012 Dodge Caliber
- G. The study team discussed **helmet use** by the active transportation users, noting that without a coroner's report there is no way to verify whether a head injury was the cause



of death or if using a helmet would have reduced the severity of injuries. Helmet use was noted as follows:

1. Out of 13 cases, two cases did not include any record about whether a helmet was worn or not.
 2. In the 11 cases where helmet use was noted, six involved a bicyclist not wearing a helmet and five involved a person wearing a helmet.
 3. Out of the five cases in which the person was wearing a helmet, four people's helmet split or broke into pieces upon impact. In these crashes, impact speeds ranged from under 25 mph and up to 50 mph.
 4. Out of the four people's helmets that split or broke upon impact, three involved a bicyclist and one involved a person on an e-scooter.
 5. In the case that involved a person on an e-scooter, the team discussed if the bicycle helmet was adequate or whether to consider promoting using a motorcycle helmet.
- H. There was one case involving an **e-scooter**. While the e-scooter rider was not at fault, as the vehicle involved ran a stop sign, there were factors discussed relating to its design and whether people understand the risks when operating it downhill. The e-scooter was owned by the operator. It has a regenerative rear-brake system and a max speed of 19.9 mph. However, the investigation report noted it was traveling downhill at approximately 25 mph and the braking system failed (brakes smoking, slid 60 feet, person planted their foot to stop the scooter) when the person attempted to brake to avoid impact with a vehicle. Braking and handling performance are significant factors in the rider's ability to react to the mistakes and poor driving of other road users.

Traffic Records

The following are gaps identified in the records reviewed from each case, as well as considerations to improve data.

1. Three crashes involved drivers that law enforcement should have reported to the Department of Licensing for a reexamination. The team discussed that law enforcement are not well informed of the driver reexamination laws (RCW [46.52.070](#) and [46.20.305](#)) or the process required to report a driver.
2. There were five bicyclist fatalities, between 2014-2025, that occurred in bike lanes. However, the WTSC's data dashboard lumped these into an "other" category. The study team wants to see these in their own category.
3. One police traffic collision report (PTCR) assigned a contributing factor to the bicyclist as "Nonmotorist On Wrong Side of Road." Per RCW 46.61.755, the bicyclist was operating as a vehicle and is allowed to travel in the roadway with traffic.
4. Ten cases included abstract driving records that were inaccurate. Of those, one did not reflect the driver's felony hit and run charge, two recorded the fatal crash as injury only, and seven did not show the driver as being involved in any crash.