Purpose

The purpose of the Cooper Jones Active Transportation Safety Council (ATSC) Study Team is to review and discuss observations made from detailed case materials of fatal crashes involving bicyclists, walkers or people using 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 within the Safe System Approach framework.

The observations reported by the Fatal Case Review Study Team are not the official recommendations of the ATSC or the Washington Traffic Safety Commission (WTSC). The Study Team submits a summary of their observations to the ATSC and WTSC for consideration when developing actionable recommendations. The official recommendations of the ATSC are published in their Annual Report and are found at https://wtsc.wa.gov/programs-priorities/active-transportation-safety-council/.

Scope of Review

Meeting Date:	November 25, 2024
Case Selection Topic for Review:	Pedestrian Fatalities in the City of Kent
Case Selection Criteria:	There were 12 pedestrian fatalities in the city of Kent 2022-2023. Four cases were excluded: one occurred on I-5; one on an I-5 ramp; one was considered a private-way crash by WSDOT and was a hit and run so little information was available; and one was already reviewed in the Young Driver-focused FCR. The remaining eight cases were included in this review.

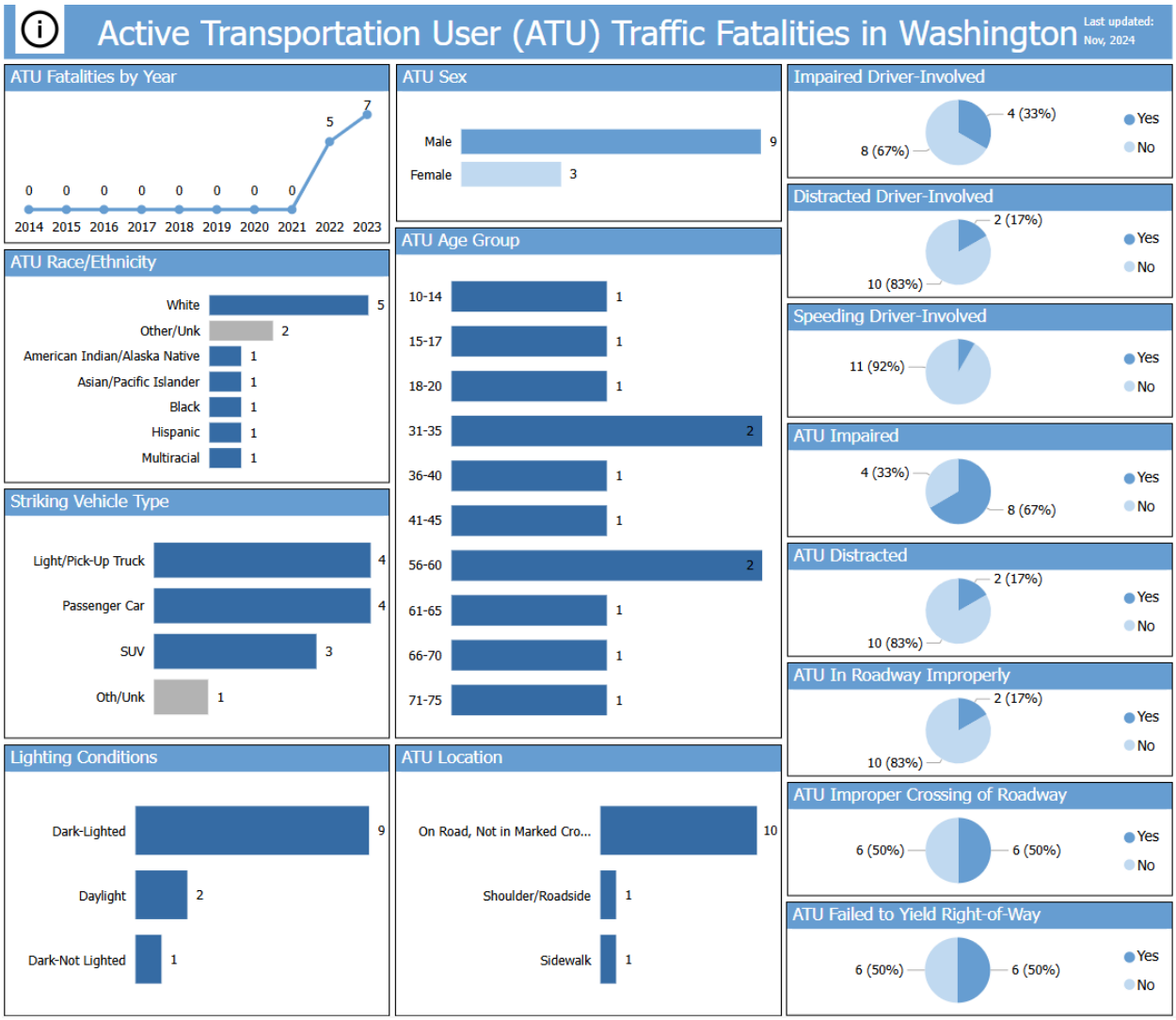
Data Sources

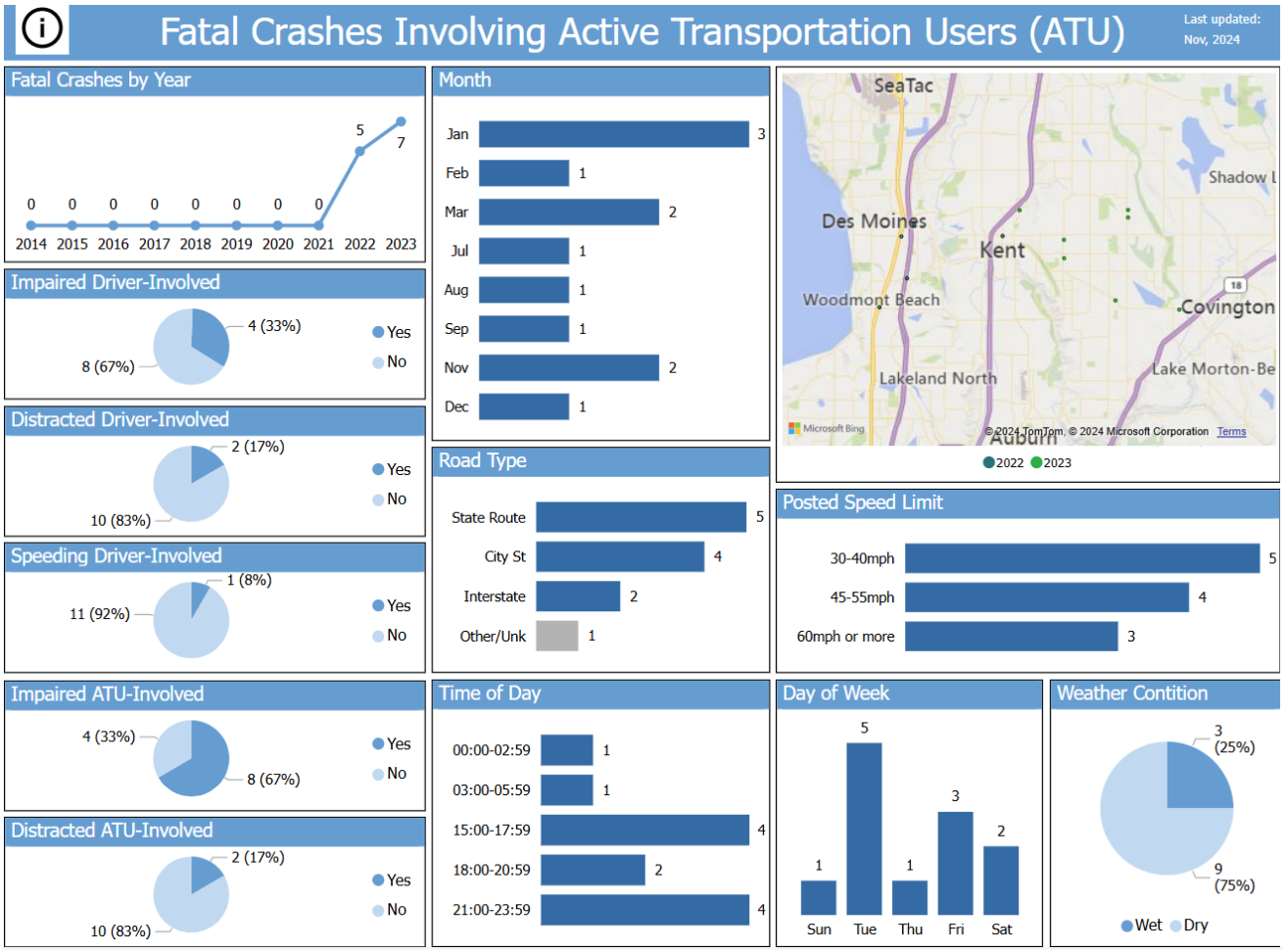
Data was extracted from the following WTSC data dashboard(s):

- https://wtsc.wa.gov/dashboards/active-transportation-user-fatalities/
- https://wtsc.wa.gov/dashboards/fatal-crash-map/
- Dashboard filters include the following: Year=2022 and 2023; City=Kent; Pedestrian Fatality=Yes (includes persons on personal conveyances)

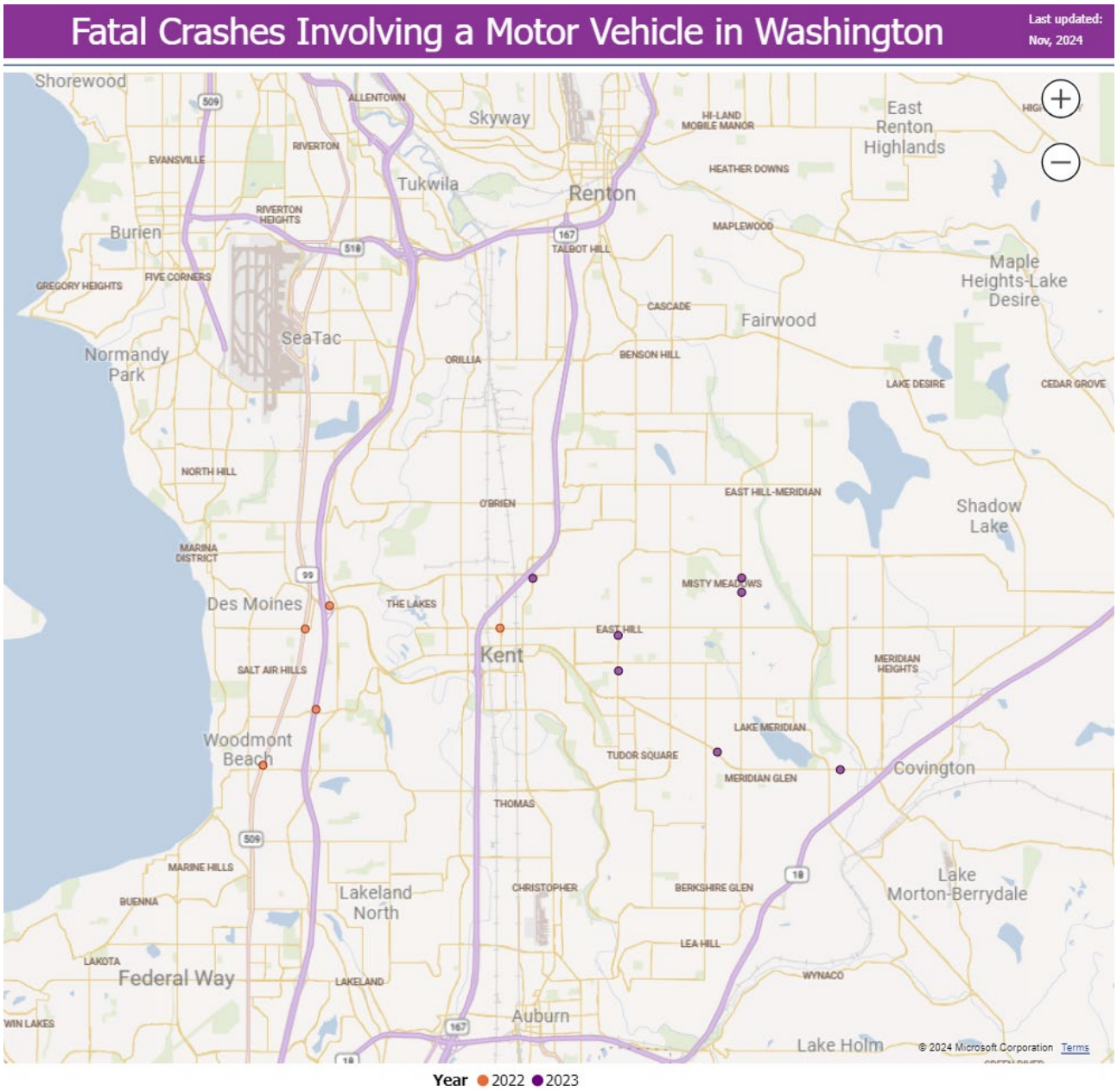
2022-2023 Pedestrian Fatalities in the City of Kent

- There were 12 pedestrian fatalities in the city of Kent between 2022-2023, 75% were male and spanned many age groups and 42% were white (note: the one AIAN fatality was the case involving the young driver that was reviewed in a previous FCR).
- Two-thirds involved vehicles larger than passenger cars (i.e. pickup trucks and SUVs).
- Three-fourths occurred in dark but lighted conditions.
- Ten fatalities occurred on the roadway outside of a marked crosswalk.
- One-third involved an impaired driver, and two-thirds involved an impaired pedestrian.
- One crash involved a distracted driver, one crash involved a distracted pedestrian, and one crash involved both a distracted driver and a distracted pedestrian.
- Half of the pedestrians were noted as improper crossing of the roadway or fail to yield.




Fatal Crashes Involving Active Transportation Users (ATU)
Last updated: Nov, 2024
Fatal Crashes by Year
0 0 0 0 0 0 0 0 5 7
2014 2015 2016 2017 2018 2019 2020 2021 2022 2023
Impaired Driver-Involved
4 (33%)
8 (67%)
Yes
No
Distracted Driver-Involved
2 (17%)
10 (83%)
Yes
No
Speeding Driver-Involved
1 (8%)
11 (92%)
Yes
No
Impaired ATU-Involved
4 (33%)
8 (67%)
Yes
No
Distracted ATU-Involved
2 (17%)
10 (83%)
Yes
No
Month
Jan 3
Feb 1
Mar 2
Jul 1
Aug 1
Sep 1
Nov 2
Dec 1
Road Type
State Route 5
City St 4
Interstate 2
Other/Unk 1
Time of Day
00:00-02:59 1
03:00-05:59 1
15:00-17:59 4
18:00-20:59 2
21:00-23:59 4
SeaTac
Shadow L
Des Moines
Kent
Woodmont Beach
Covington
Lakeland North
Lake Morton-Be
Auburn
Microsoft Bing
© 2024 TomTom, © 2024 Microsoft Corporation Terms
2022 2023
Posted Speed Limit
30-40mph 5
45-55mph 4
60mph or more 3
Day of Week
1 5 1 3 2
Sun Tue Thu Fri Sat
Weather Contition
3 (25%)
9 (75%)
Wet
Dry

Locations of 2022-2023 Pedestrian Fatalities in the City of Kent



City of Kent

The review team included two guests from the city of Kent that provided local insight and context into the crashes reviewed: the Target Zero Manager for the Kent area and the lead Kent Police Department Collision Investigator. They also shared traffic safety tactics implemented since the date of the crashes we reviewed and identified challenges and barriers. To learn more about how Kent is addressing traffic safety, view their local road safety plan and target zero action plan.

Observations

The observations and findings presented are based on the discussion of factors involved in the individual cases selected for review by the team.

Safer Road Users

1. In four out of eight cases reviewed, pedestrian impairment was a factor: two involved the pedestrian lying in the roadway; one involved a pedestrian standing in the roadway (not attempting to cross); and one involved a pedestrian crossing midblock. In all these crashes, the impaired pedestrian died.
2. In seven of the eight cases reviewed, visibility was a factor – the drivers reported they did not see the pedestrian in enough time to react and avoid impact. All seven cases involved a pedestrian crossing midblock/not in a crosswalk or otherwise in the roadway while wearing dark clothing when it was dark outside. How do we train drivers to expect the unexpected?
3. Three cases showed bystander invention was possible in the moments prior to the crash. How do we provide better bystander intervention training and make it widely available?
    a. One case involved an impaired driver that had multiple passengers in their vehicle. One passenger reportedly asked the driver if they were okay to drive since they had been drinking and smoking cannabis prior to departure. The driver said they were fine. However, the passenger reported they were “afraid” of the driver.
    b. One case involved an impaired pedestrian that was observed by multiple people prior to the collision “sleeping, stumbling around, looked intoxicated” on the sidewalk next to a busy five-lane roadway.
    c. One case involved an underage, impaired person (BAC 0.139), with multiple opportunities for bystander intervention to occur.
        i. The young person was at a party with peers before leaving to walk home while impaired.
        ii. The impaired youth live streamed on social media their actions leading up to the crash. Multiple people attempted bystander intervention by commenting on the live stream about the youth needing help but couldn’t do much without knowing the location (it was very dark) or who to call for help (911 would need a location).

   iii. The impaired youth was recorded on a home ring camera 17 minutes prior to the collision. The recording showed the youth displaying signs of impairment (falls down, slurred speech, etc.) and was seemingly confused about whether it was their house. This moment was also live streamed on the youth's social media.
4. One impaired pedestrian's postmortem toxicology report showed positive for methamphetamine at 3100 ng/ml. Studies show users with blood levels of 200-600 ng/ml exhibit irrational behavior, and high doses of methamphetamine can elicit confusion and hallucinations. The review team has observed fatal crashes involving impaired pedestrians with a high level (over 600 ng/ml) of methamphetamine across multiple reviews conducted in 2024. Is this an increasing trend?
5. Two cases involved a young person (19 and 22 years of age) driving the striking vehicle that killed a pedestrian less than one year after receiving their license. The review team continues to observe the need for education for young drivers. Consider requiring a driver's education course – not just passing the written and driving exams – to get licensed and then intermittent continued education.

Safer Vehicles

1. Of the eight pedestrian fatalities reviewed, nine striking vehicles were involved: five were larger vehicles (SUVs & Pickup Trucks) and four were passenger cars. The review team was curious about the vehicle heights and wondered why this information is not recorded in investigation documentation.
    a. The Insurance Institute for Highway Safety has published studies noting the risk for serious injury and fatalities increases when the vehicle is over 40 inches in height (when a person is struck above their hips).
        i. Is vehicle height an actual factor or a reflection of higher vehicles being a more popular choice to drive in recent years?
2. One case involved a young driver that didn't call 911 until 30 minutes after colliding with a pedestrian. The investigation report noted the driver stated this was due to a panic attack. Vehicles with technology that alerts a driver of impact and will call 911 on the drivers' behalf is helpful, especially when timing to aid injured people is vital.

Safer Speeds

1. One case involved a young, underage (19 years old), impaired driver that was speeding at rates as high as 95 mph just prior to the collision. The posted speed limit was 35 mph. The impaired driver reported to the officer they were going about 50 mph. An active intelligent speed assistance system could have reduced the vehicle's speed.
2. Five of the eight crashes occurred on arterials with a posted speed limit of 35 mph, and three on arterials posted at 45 mph. In cases where the driver of the striking vehicle's speed was *not* a factor, a reduction in the posted speed limit would reduce risk.

   a. Note, the city of Kent recently reduced the speed from 45 mph to 40 mph in the section where one crash under review occurred (Pacific Hwy / SR-99).
   b. When an arterial has a posted speed limit of 45 mph, consider the following:
      i. Beacons and lighting enhancements added to midblock crosswalks to reduce risk to pedestrians.
      ii. On state routes, work with local municipalities to get speed cameras installed.
      iii. Install roundabouts as much as possible, and road diets between traffic signal-controlled intersections.

Safer Roads

1. Every crash occurred on an arterial roadway; half were on a principal arterial (three state-owned, one city-owned) and the other half on a minor arterial (three city-owned, one state-owned). Most arterial crash locations had long block spacing and limited controlled crosswalks. Distance to available crosswalks contributes to road user behavior. How do we ensure planners consider this need in comprehensive roadway plans and secure the funding necessary to increase midblock crosswalks?

Safer Land Use

1. Two cases involved pedestrians over 70 years of age crossing midblock. Both occurred on a state-owned principal arterial with five lanes and a posted speed limit of 45 mph. In one case, the closest marked crosswalk was 750 ft., and the other was 1,200 ft. away from their crossing location.
   a. It was noted by the Target Zero Manager that the city's request to install crosswalks on one of these arterials (SR-516) had been denied by WSDOT. Funding was noted as the primary issue.
   b. How do we consider older active transportation users and dementia-friendly infrastructure? This population is increasing and impacting what we know as "typical" pedestrian behavior.
2. One case involved a hit and run in which a speeding driver went over the sidewalk curb and struck a person waiting at a bus stop.

Post-Crash Care

1. One case involved an impaired pedestrian that was standing in the middle of the road and saying phrases that implied suicidal ideation. A psychological autopsy would help confirm this implication.
2. One case involved an impaired driver whose toxicology report showed they were under the influence of alcohol but nothing else – even though the driver admitted to smoking cannabis earlier and a search of the vehicle resulted in finding narcotics and cannabis smoking paraphernalia. This is partially due to the 'stop testing' practice the state's toxicology lab has implemented to address their backlog and process tests faster.

a. Kent PD noted the 'stop testing' practice impacts their investigations (i.e., they can't charge for anything beyond alcohol findings).
b. It was noted the WSP lab reported the 'stop testing' will continue through 2025, but they will eliminate this at some point.

Additional Discussion

The following expands beyond observations made in this fatal case review and are based on patterns observed over time from multiple fatal case reviews with similar factors.

Safer Road Users

1. Kent PD Traffic Unit shared they have observed an increase in people not wearing seatbelts.
2. The review team has observed fatal crashes involving impaired pedestrians with a high level of methamphetamine across multiple reviews conducted in 2024. Consider tracking this to determine if it is an increasing pattern.
3. Pedestrian impairment has been a factor in crashes across all ATSC fatal case reviews conducted in 2024, regardless of the scope of review.
    a. A 2019 study published by NHTSA suggested that, "people with prior alcohol related driving offences may be at greater risk for being killed as a high-BAC pedestrian than those without prior alcohol offense." This implies early interventions for pedestrian safety may start with impaired driving countermeasures.
    b. Does ATSC consider impaired driving data in their work when developing countermeasures? Does ATSC and active transportation safety programs partner with impaired driving programs to support early interventions (i.e., DUI courts) for people dealing with substance use disorder?
4. Data show drivers that receive a drivers' education course prior to getting their license are at a lower risk of being involved in a collision. How can we track whether drivers involved in a fatal crash went through an educational course prior to being licensed?
    a. The fatal case review coordinator is meeting with a representative from DOL to discuss how best to gather this information for future fatal case reviews.
5. Some municipalities have an incident response unit that can provide non-law enforcement intervention to people that may need assistance to keep them out of immediate danger. Research more about which municipalities provide these services, the successes and barriers, and identify gaps (where are these services most needed).
6. Trying to convince an impaired person not to drive can feel nearly impossible if the driver doesn't believe they're impaired or are belligerent. Does current bystander intervention training address de-escalation tactics, whether intervention services are available in their area, and how to assess when to call for intervention services versus law enforcement?

Safer Vehicles

1. Multiple cases reviewed this year involved a 'young driver' that didn't call 911 immediately following their collision. Consider manufacturing vehicles with impact detection systems that will automatically ask the driver about calling 911 – this could be a phone app, too.
2. When considering brain development (full development typically doesn't occur until 25 years of age) and young drivers' ability to assess risk, does it make sense to require anyone under the age of 25 to drive a vehicle with passive alcohol detection and active intelligent speed assistance systems in their vehicle? Equity is often an issue for these types of requirements. Consider conducting a feasibility study.
3. Most headlights are designed to look low and right. When a pedestrian is entering the roadway from the left, the headlights may not illuminate them, especially if the pedestrian is blocked from the driver's view by the A-pillar.

Safer Speeds

1. Across multiple reviews, investigation reports do not always include the speed of the striking vehicle involved in a pedestrian fatality crash. Sometimes an officer will note why a speed analysis was not conducted but other times nothing is included.

Safer Roads

1. No further discussion regarding safer roads.

Safer Land Use

1. Provide more convenience for people to cross at a controlled crosswalk by locating public transit stops as close as possible to intersections.
2. The review team continues to observe cases involving drivers and investigating officers that state the person struck by a vehicle was "not seen" or "unexpected." How do we build a system that plans for the unexpected and considers socioeconomic and psychological factors? For example: people dealing with substance use disorder and moving through shared spaces while impaired; youth without fully developed brains; people with dementia; how people may move through space versus how we *want* them to move, sensory processing limitations of drivers (studied by the ATSC Human Factors team), etc.
3. Are municipalities planning infrastructure/land use by overlaying their grids with public transit maps, reviewing "goat paths" to see where people are choosing to walk, and considering buying active transportation user data (i.e., Strava) to plan for more crosswalks and other multi-modal features for active transportation user safety? Using these tools and planning ahead in local road safety plans and other comprehensive planning documents will help secure funding.
    a. Can ATSC fund using Strava (or comparable) data? https://metro.strava.com/

Post-Crash Care

1. RCW 46.52.065 requires testing for alcohol, presence of drugs, or other toxic substances for any person killed in a crash. In scenarios where the pedestrian is killed, they are automatically tested but drivers are not. This may result in skewed perception of factors when reviewing available data – creates impression pedestrians are more "at fault." Why aren't all drivers involved in a fatal crash tested?
    a. Kent PD noted their standard practice is to request a voluntary SFST or blood draw of all drivers in fatal crashes.
2. Vehicle height is a factor to consider but is not tracked in current fatal crash/traffic records systems. Consider requiring this information in fatal crash investigation records. However, this data could skew assumptions so need pair that info with the question, "would this crash have been survivable without long-term disabilities if the vehicle had been at a lower height?" when conducting fatal case reviews.
3. Research into which municipalities offer drivers' follow-up services to address trauma from being involved in a fatal crash.
    a. Kent PD noted this is something their agency does in fatal crash cases.
4. DUI processing is an issue. Law enforcement and prosecuting attorneys that investigate fatal crashes have expressed frustration with toxicology testing at the state's lab: the 'stop testing' process; the backlog and delay in receiving results; and – specific to agencies on the east side of the state – the challenges to get a toxicologist to come testify in court when needed.
    a. Investigators are required to use the WSP toxicology lab – can we change the WAC so they can outsource toxicology testing?
        i. If an eastside agency outsources their testing, it becomes even more difficult to have the toxicologist that performed the testing come to court to testify.