

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 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 around modifiable risk factors within the <u>Safe System Approach</u>. Within each Safe System Element, modifiable risk and protective factors are identified across the <u>Spectrum of Prevention</u> framework.

The observations reported by the Fatality 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 and are found at https://wtsc.wa.gov/programs-priorities/active-transportation-safety-council/.

Scope of Review

Meeting Date: May 29, 2025

Case Selection Topic for Review: 2022-2023 Pedestrian Fatalities in South King County

Case Selection Criteria: Pedestrian Fatalities (excluding city of Kent) on roads with

posted speed 35-45 mph that occurred during dark. There were 13 fatal crashes that met this scope, all 13 were

selected for the review.

DATA SUMMARY

Data for the 10-year data summary was extracted from the Washington Traffic Safety Commission Coded Fatal Crash (CFC) files. A custom data query was required as the speed limit bands for the case selection (e.g., 35-45 mph) varied from the speed limit bands available on the Active Transportation User dashboard (e.g., 30-40 mph).

For this review, South King County includes the cities of Algona, Auburn, Burien, Covington, Des Moines, Enumclaw, Federal Way, Maple Valley, Normandy Park, North Bend, Pacific, Renton, SeaTac, Tukwila, and Unincorporated South King County. The city of Kent was excluded because we recently conducted a review focused on Kent.

Following is a summary of the factors involved in the 58 pedestrian fatalities that occurred in South King County (excluding the city of Kent), between 2014-2023, in dark conditions on roads with posted speeds 35-45 mph.

South King Pedestrian Fatalities occurring at dark

on roads posted 35-45 mph

15.5%

10.3%

8.6%

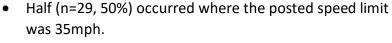
12.1%

Crash Factors

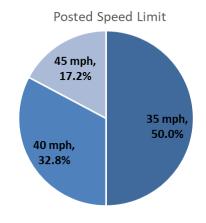
- One-third (20, 34%) occurred during months October - December.
- Nearly one-third (n=17, 29%) occurred between 6pm and 9pm. An additional one-fourth (n=14, 24%) occurred between 12am and 3am.
- More than one-third (n=22, 38%)
 occurred on weekend days, Saturday
 and Sunday.



15.5%



- Two-thirds (n=37, 64%) occurred on the road, not in a marked crosswalk, not at an intersection. An additional one-fourth (n=16, 28%) occurred at intersections.
- The majority (n=51, 88%) occurred in locations with lighting (dark but lighted).
- Two-thirds (n=39, 67%) occurred in dry weather conditions.
- Nearly one-third (n=17, 29%) were a hit-and-run.

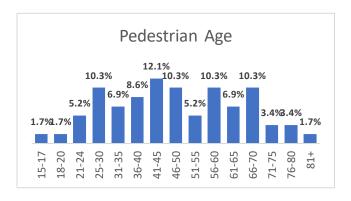


19.0%

19.0%

Pedestrian Factors

- Nearly one in four (n=13, 23%) pedestrians were ages 41-50.
- Three in four pedestrian fatalities (n=44, 76%) were male.
- Half (n=31, 53%) of the pedestrians were noted as failing to yield right-ofway and nearly half (n=26, 45%) were noted as improperly crossing the roadway.
- Two in five pedestrians were impaired (n=22, 38%). About one in six (n=9, 16%) involved pedestrian distraction.



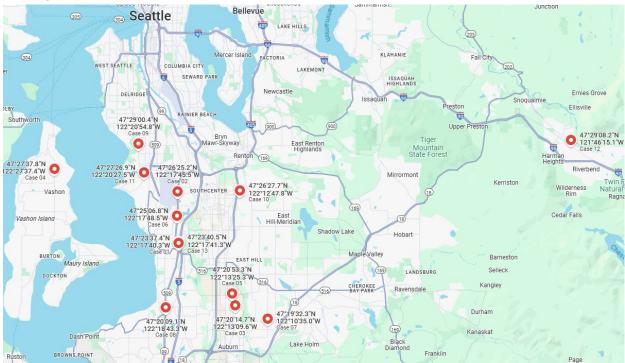
Driver Factors

- Eight drivers were impaired (14%). Nearly one in five drivers (n=10, 17%) were distracted. Two drivers (3%) were noted as speeding.
- Nearly half (n=26, 45%) of the striking vehicles were passenger cars, followed by SUVs (n=10, 17%).

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Figure 1: Map visualizing location of crashes involving a pedestrian in South King County (excluding Kent) between 2014-2023.

Figure 2: Map visualizing locations of crashes included in traffic fatality review involving a pedestrian in South King County (excluding Kent) between 2022-2023.



OBSERVATIONS

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

Safer Road Users

- The frequency of hit-and-run crashes involving a pedestrian in dark conditions has
 increased in South King County. The two most recent years (2022–2023) account for
 approximately 47% of all hit and run crashes over a 10-year period (9 of 19 crashes),
 despite only representing 20% of the timeframe. If this pattern is sustained or increases,
 it could signal a pattern or emerging risk, rather than a short-term anomaly.
 - The aggregate data only accounts for 17 crashes involving a hit and run over the 10-year period but this review revealed two crashes that involved a hit and run but were not coded as such.
- Out of 13 crashes reviewed, records showed 11 involved pedestrians facing multiple intersecting systemic barriers – many related to poverty, behavioral health, and environmental risk. Key vulnerabilities noted across the 11 individuals, who may fall into more than one category:
 - Houselessness
 - Four people were noted as experiencing houselessness.
 - Panhandling in High-Risk Environments
 - Two people were panhandling at a center median on an eight-lane state route, leading to exposure in high-speed, vehicle-dominated areas.
 - Disabilities and Developmental Conditions
 - One person had developmental delays and reduced vision, increasing pedestrian vulnerability and possibly reducing hazard detection.
 - Mental Health
 - Two people expressed suicidal ideation just prior to crossing the road.
 - One person had PTSD and avoided driving due to mental health and substance use challenges.
 - Substance Use Disorder
 - Six people were under the influence of impairing substances. The most common being methamphetamine and fentanyl, followed by alcohol.
- Twelve cases included records detailing where the vehicle struck the pedestrian, of which nine involved a pedestrian being struck by the left side of the driver's vehicle. Of those nine, six pedestrians were coming from or standing in the roadway to the left of the driver and three were crossing from the right but had almost reached the center median to the left of the driver. The team discussed this pattern and whether there was a lack of perception on the left; was the A pillar plus reduced visibility in the dark blocking view of a pedestrian; or was it a combination of all those things.



- Five out of thirteen crashes involved a pedestrian crossing the road and "almost to the other side." Meaning the pedestrian was either steps away from reaching the opposite side of the road or close the center median and out of the striking vehicle's travel path.
- Two cases involved a vulnerable person discharged from a hospital and, shortly after being discharged, they were struck by a driver on a road adjacent to the hospital. The review team discussed the lack of programs and resources for discharge nurses to recommend that would keep people out of the roadway and reduce risk in these situations.
- Two cases involved bystanders that drove by the person in the roadway, in obvious distress and at risk, but the bystander did not stop to check on the person or call emergency services.
- Two cases involved a driver operating a loaned or rented vehicle with a suspended license. One case involved an Eagle's club lending their vehicle to a person with a suspended driver's license, who later struck and killed a pedestrian after driving while tired and under the influence of alcohol. The other case involved a person operating a U-Haul pick-up truck.
- One crash involved an employee of the Port of Seattle that was leaving work from SeaTac Airport, and was struck in the crosswalk at an intersection on International Blvd.
 The review team discussed that the SeaTac employee parking lot is at capacity, which is pushing people to walk to their cars parked at other lots and areas near the airport.
- Most of the crashes reviewed involved a driver engaging in risky behavior (e.g. speeding, driving impaired, etc.) and breaking laws (fleeing the scene of a crash).

Considerations for Safer Road Users

- Review data and the pattern of hit and run crashes involving a pedestrian. Track if
 pattern at night on roads with a posted speed limit between 35-45 mph is sustained or
 increases.
- Track the pattern of pedestrians being struck by left side of vehicle.
- Review data and pattern of crashes involving people facing multiple intersecting systemic barriers. Identify highest risk and program possibilities, such as partnering homeless shelters and outreach programs to codevelop countermeasures that address active transportation user safety.
- Support programs that reduce risk for people facing poverty and behavioral health disparities.
- Create campaigns that target drivers with messaging about looking out for vulnerable pedestrians in unexpected places.
- The review team discussed whether there should be culpability applied to the vehicle owner if they loan or rent to a person with a suspended license. However, it was noted that a person can show a valid license and it's difficult for the public or rental agency to look up and verify a person's driving record. Research what can be done to reduce the chances of a person being allowed to borrow a car without a valid license.



- Consider messaging about community care: inform the public about who to contact for help when witnessing someone standing, unprotected, in the middle of a roadway and encourage the public to call asap. Ideally, there is someone that makes contact, offers resources, and gets the person in the roadway to relocate from the dangerous location.
- Review panhandling laws.
- Consider creating "hospital zones" with similar laws as school zones regarding reduced speeds, safe routes, etc.

Safer Vehicles

- Two crashes involved large vehicles, one a semi and one a city bus, running over a
 pedestrian with a back tire. The team discussed camera and detection technology that
 could alert a driver prior to impact. While ideal, these systems are expensive and
 difficult to mandate.
- Nine crashes involved a pedestrian being struck by the left side of the driver's vehicle.
 The team discussed this pattern and whether the A pillar may have blocked the driver's view of approaching a person.

Safer Speeds

- Only one out of thirteen cases noted speed as a factor. It was a hit and run case, in
 which the report noted video footage and witness statements noting the driver was
 going faster than the cars around it when they struck a pedestrian in a crosswalk at an
 intersection on International Blvd by SeaTac.
- In the cases not involving a driver choosing to speed, a reduction in the posted speed limit could reduce risk.
- The review team discussed how guidance in the Manual on Uniform Traffic Control Devices (MUTCD) and related national guidance has been to set speed limits at or below which 85% of vehicles are observed traveling under free-flowing conditions. That has recently been updated, in 2023, "Speed limits should be established based on an engineering study that includes consideration of the 85th percentile speed of free-flowing traffic, roadway characteristics, crash history, and contextual factors such as land use, pedestrian activity, and bicycle facilities." (§2B.21 Speed Limit Sign Guidance)

Considerations for Safer Speeds

- Support training and resources for law enforcement traffic units to collect forensic
 evidence and calculate speed for all crashes involving a fatality and to note when no
 evidence is available.
- Support engineering projects that aim to update speed limit studies that referenced the 85-percentile speed as a key reference point for setting speed limits to now include contextual factors and reduce speed limits accordingly.



- Support education and training programs that provide specific updates for traffic engineers and jurisdiction transportations staff regarding updated MUTCD guidance for setting speed limits.
- Consider variable speed signs that reduce speeds on principal arterials roadways during times in which pedestrians are at highest risk, such as in dark.

Safer Roads

- Out of the thirteen crashes reviewed:
 - o Eight occurred on principal arterial roadways with 5-8 lanes.
 - o Five occurred on SR-99, between SeaTac Airport and Federal Way.
 - Two crashes occurred at or near the intersection of Pacific Hwy S (SR-99) and Kent Des Moines Rd (SR-516).
- One crash occurred after both the pedestrian and driver (making right turn) were given
 a green light to proceed through the intersection of SR-99 and SR-516. The review team
 noted that not allowing people and cars to move through an intersection at the same
 time would reduce risk.
 - The review team noted the WSDOT has scheduled, 2024-2027, projects for this intersection that will meet the Complete Streets requirement. Learn more at https://wsdot.wa.gov/construction-planning/search-projects/sr-99-s-272nd-st-sr-516-vic-paving-ada-compliance-project.
- One crash occurred on Auburn Way N. The review team noted that Auburn Way N is a principal arterial that lacks pedestrian safety features (e.g., marked crosswalks with flashing beacons and road diets to slow traffic).
- While all crashes selected occurred in the dark with streetlights on, there were multiple crashes in which the street lighting was not adequate to illuminate a pedestrian. The FHWA published an article with information and resources regarding lighting for pedestrian safety. Learn more at https://highways.dot.gov/media/20756.

Considerations for Safer Roads

- The review team noted that not allowing people and cars to move through an intersection at the same time would reduce risk.
- Monitor the WSDOT projects scheduled at Pacific Hwy S (SR-99) and Kent Des Moines Rd (SR-516) and track whether the project completes improvements to active transportation user safety; there's ambiguity in the language as WSDOT notes, "We will be working to incorporate as much active transportation facilities as feasible within the project delivery timelines. However, it is likely some active transportation facilities needed to meet the Complete Streets requirement will be implemented at a later date."

Safer Land Use

 Two crashes occurred in rural areas with limited or no streetlights and no consistent and cleared sidewalks.



• The review team discussed the challenges of a complex system that's trying to accomplish too many things at once, and the challenge of addressing safer land use after land development has already occurred.

Post-Crash Care

• No specific observations regarding post-crash care were noted for this review.

TRAFFIC RECORDS

The following includes discrepancies identified in the individual case records selected for review, as well as considerations to improve data collection in future crash investigations.

Police Traffic Collision Report

- Four cases showed no supplement PTCR was submitted by the investigating law enforcement agency.
 - One case involved a hit-and-run, but the original PTCR did not capture this information. Without a supplemental report, the data collected was inaccurate.
 - Two cases involved a hit and run in which the driver was later identified. By not submitting a supplemental report, no data was recorded about the vehicle involved or driver demographics.
 - One of the two cases involved a DUI, and the lack of a supplemental PTCR resulted in the DOL not taking administrative actions for the DUI.
 - One case involved a pedestrian dying after the crash. The original PTCR noted the crash as injury only. The lack of a supplement report resulted in the driver of the striking vehicle not having the fatal collision recorded on their driving record.

Abstract Driving Record / State Identification Card

- Five pedestrian's department of licensing record (either driving or state I.D. record) did not reflect the person as deceased; three years after their death.
- One driver's record did not show the citation received as a result of the crash, which
 was for driving with a suspended license.
- One driver's record did not show any collision, but should have at least one fatal collision listed.

Investigation

- Speed may have been a factor in some cases and just not reported. Nine out of thirteen
 cases didn't note anything about speed as a factor; meaning, there were no
 investigation notes about collecting and considering forensic evidence or noting lack
 thereof.
- Multiple cases reviewed provided general statements about bystander interventions, such as "bystander stayed to help." Prevention and behavior change experts would



benefit from investigation reports noting specifically what type of bystander interventions were provided (i.e., stayed and talked to victim, performed CPR, stop the bleed, etc.).

WTSC Crash Coding

- One case involved a hit-and-run, which was noted in the narrative of the PTCR, but this was not coded in crash data.
- One case involved a pedestrian under the influence of impairing substances, but the toxicology results were not coded in crash data.

EMERGING PATTERNS

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

- The review team continues to observe active transportation user (ATU) fatalities on principal arterial roadways where businesses and residential housing have been built up over time. The review team would like to know the regulations for developers when applying for a land use permit – are they required to address or improve ATU safety? Are land use waivers allowed when active transportation safety issues are present? How are traffic studies, crash history, and ATU activities incorporated into the permitting processes?
- Pedestrian impairment as a factor is observed across ATU fatal case reviews regardless
 of the scope of the review. Research how best to support public health programs that
 provide substance use disorder services and partner with providers to codevelop
 countermeasures that work.
- Law enforcement agencies not submitting supplemental PTCRs is impacting accurate data collection.
- Speed as a contributing factor is under investigated and reported.
- The review team continues to observe fatal crashes involved pedestrians facing multiple intersecting systemic barriers – many related to poverty, behavioral health, and environmental risk.