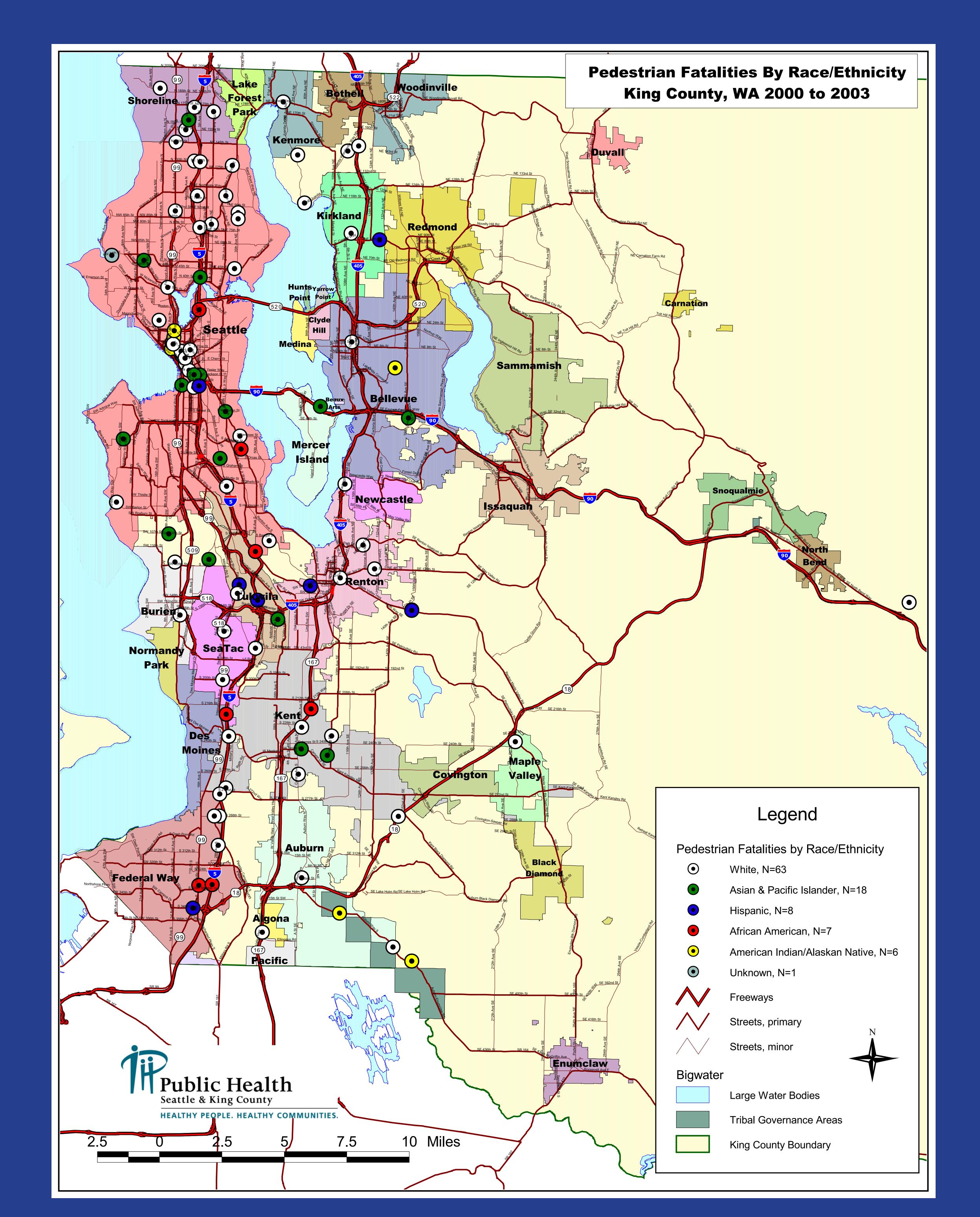
Factors Associated with Pedestrian Fatalities in Seattle and King County, WA, 2000-2003

Background

King County (Seattle) has by far the greatest number of pedestrian fatalities in Washington State. Pedestrians account for 19 percent of all motor vehicle (MV) crash fatalities in King County. Pedestrians in King County constitute a greater percentage of total MV crash deaths than they do statewide (12%) or nationally (11%).

Objectives

- To map pedestrian fatality locations using geographical information systems (GIS).
- 2. To collect and analyze pedestrian fatality data for person, time, and place characteristics and other factors associated with pedestrian fatalities in King County.

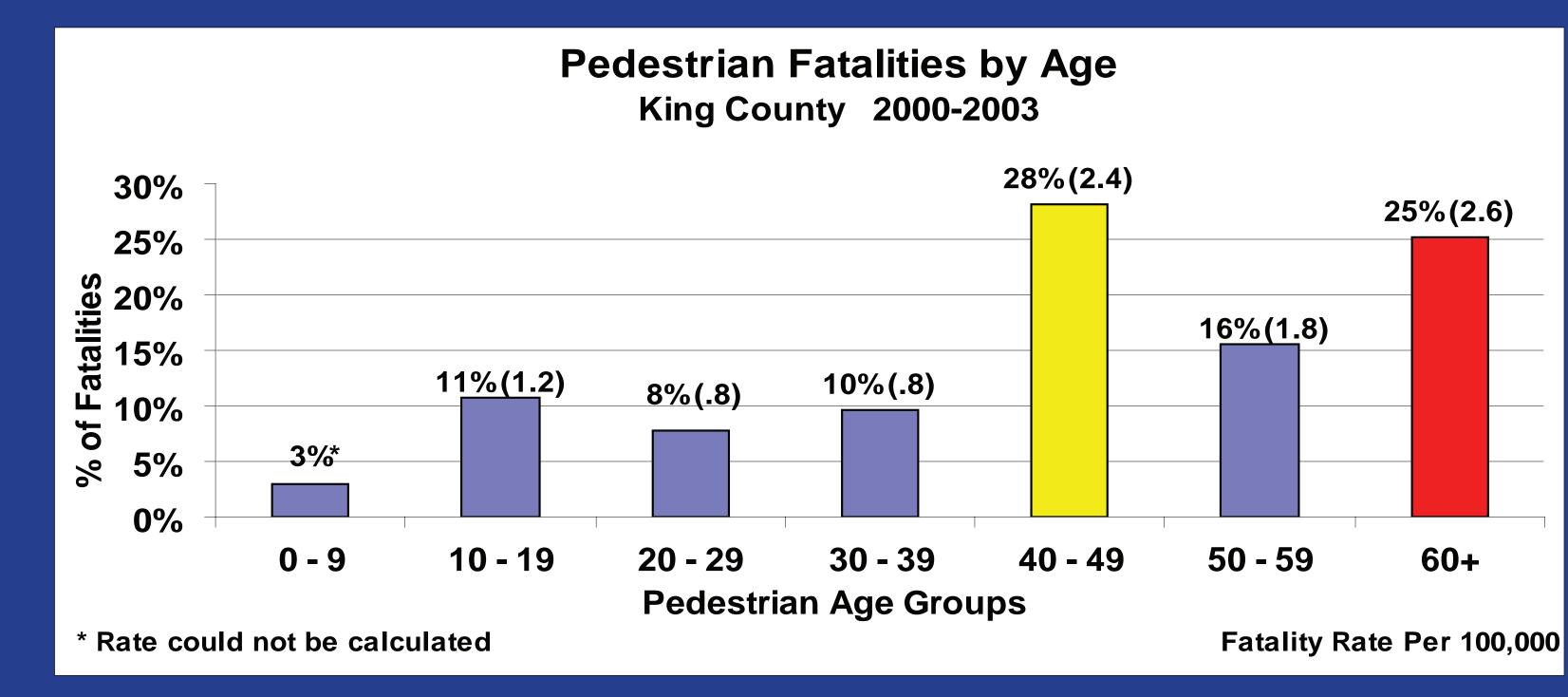


Methods

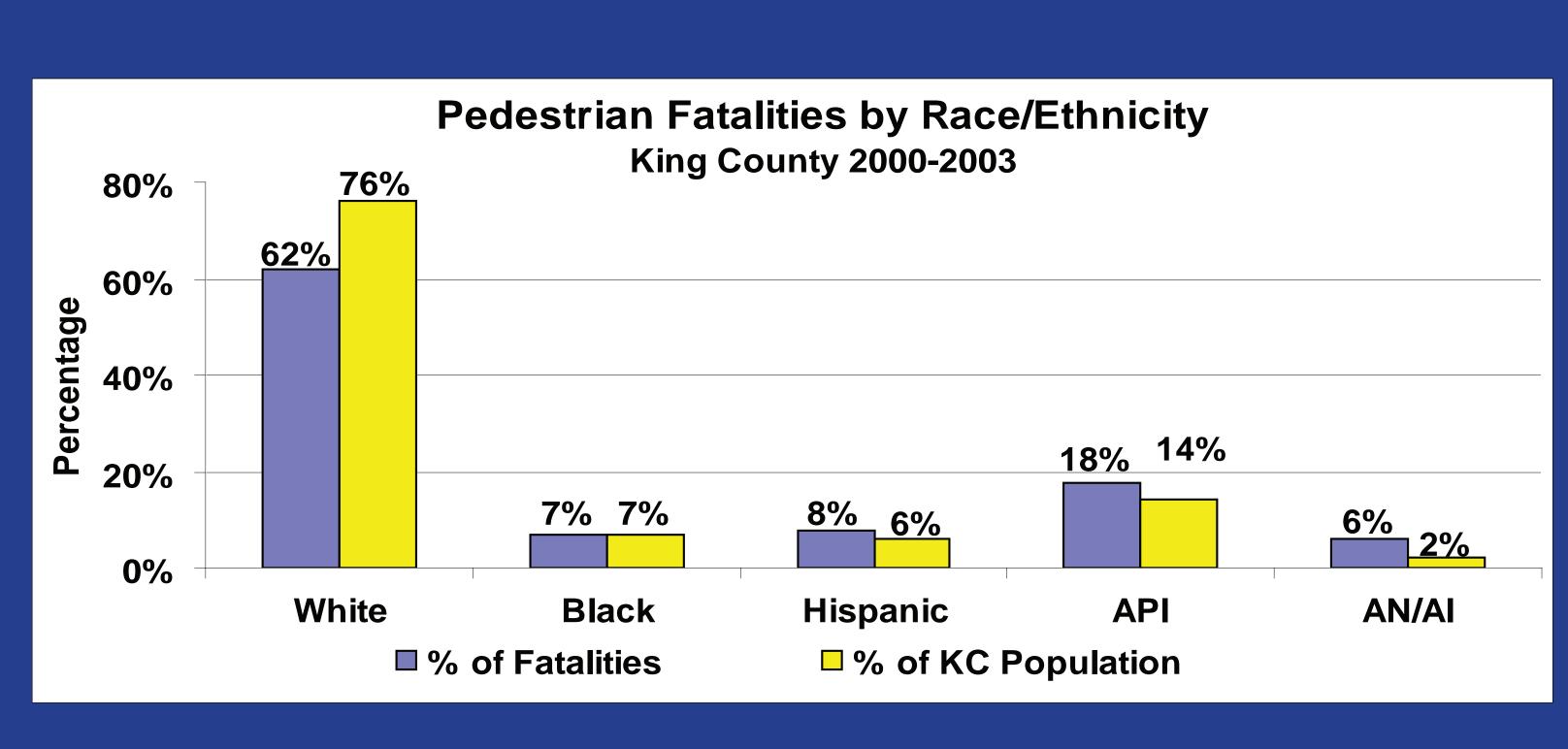
Reviewed County medical examiner records and police reports from January 1, 2000 to December 31, 2003, for all pedestrian-MV crashes that occurred in King County and resulted in a pedestrian fatality.

Key Findings

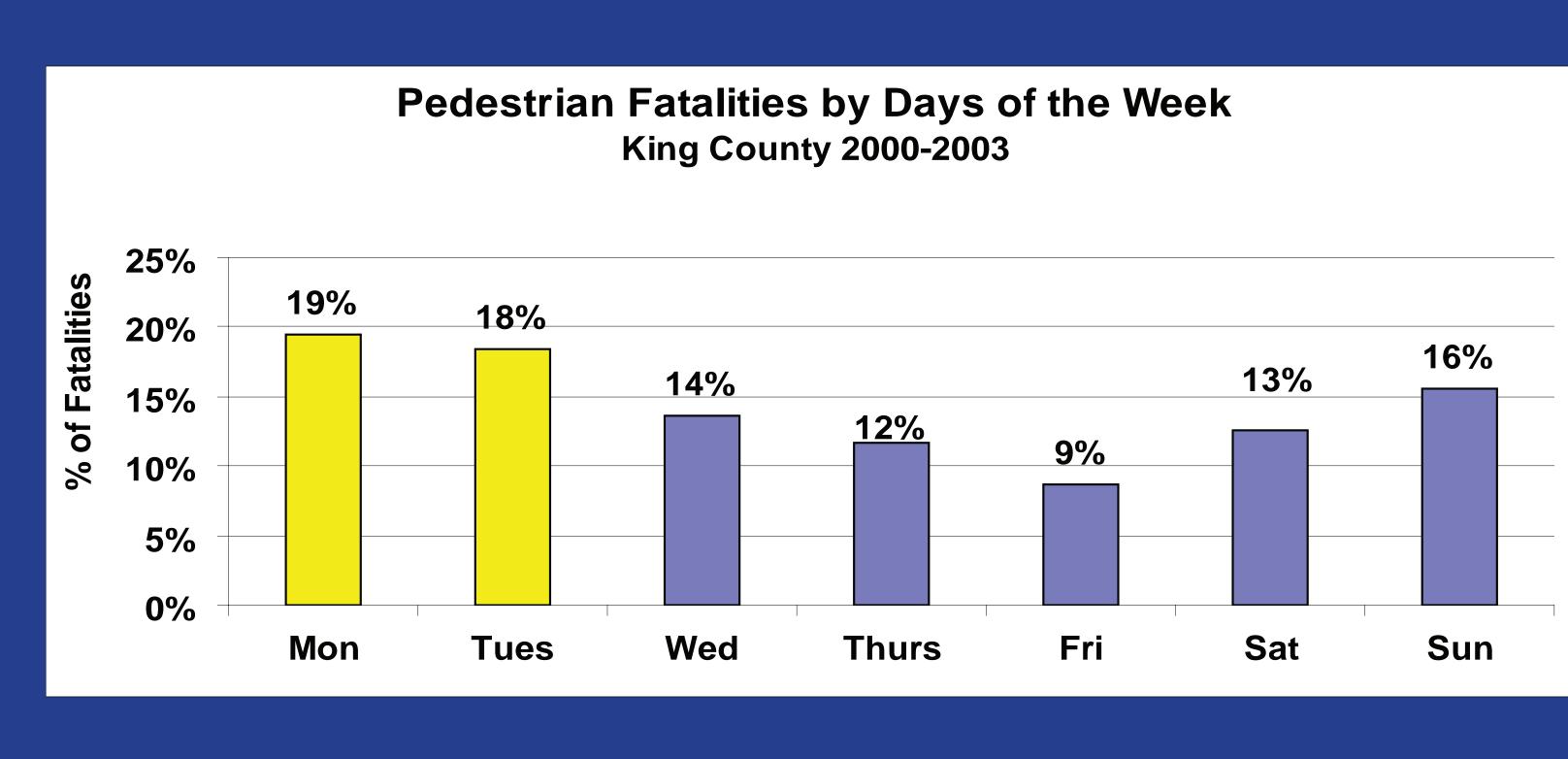
Pedestrian-MV crashes resulted in a total of 103 pedestrian fatalities during 2000-2003.
 During this period an average of 26 pedestrians were fatally injured in King County each year.



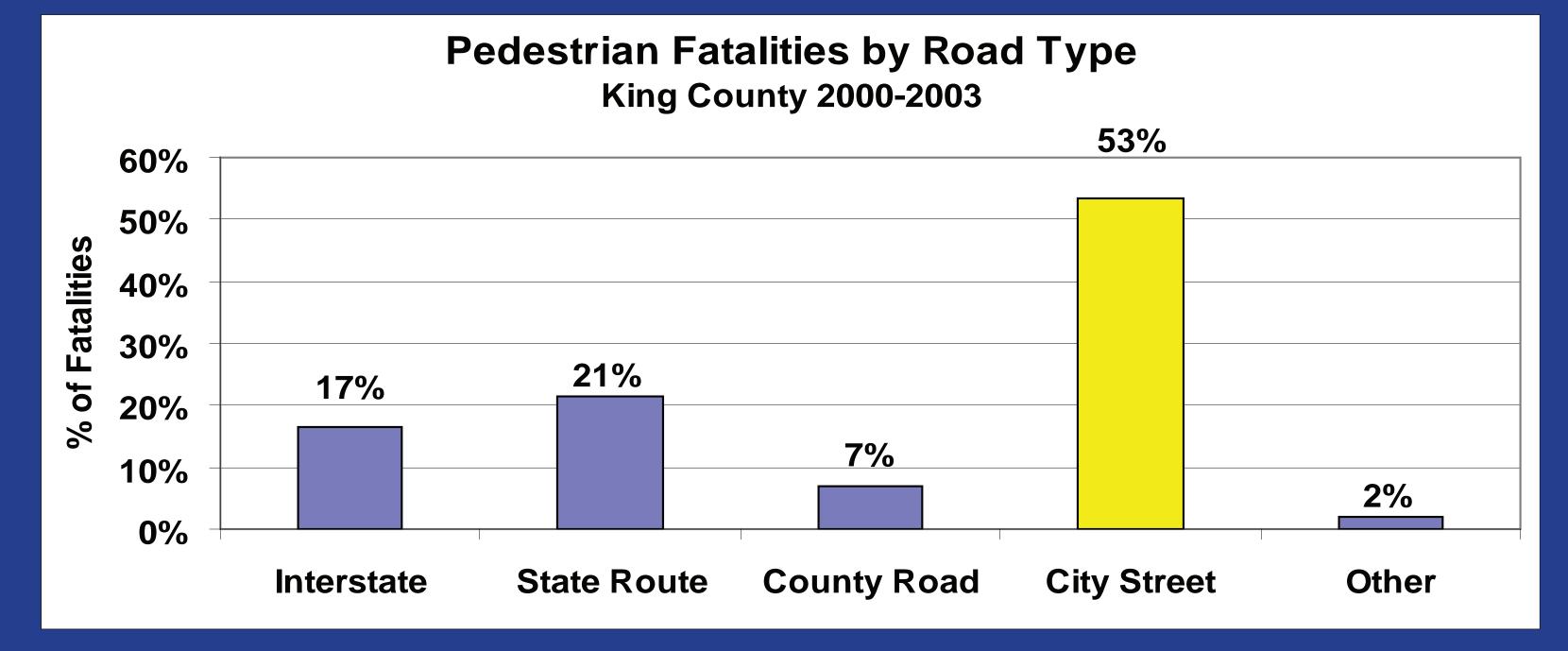
- 40 to 49 year olds were involved in nearly 3 out of 10 deaths.
- Pedestrians age 60 and older accounted for 25 percent of the total fatalities.



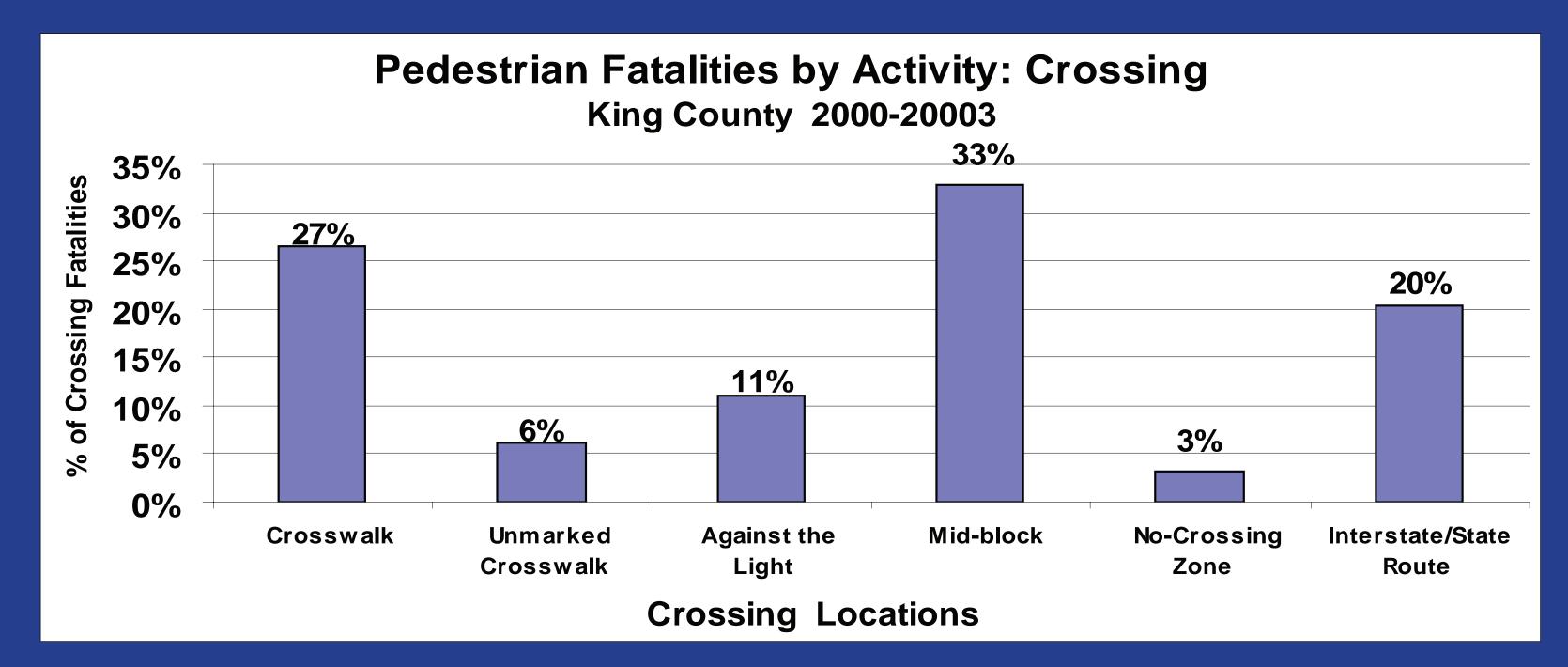
 Asians and Pacific Islanders (18%), Hispanics (8%) and American Indians/Alaskan Natives (6%) were disproportionately represented, compared to the King County population make-up.



- Compared to the national FARS data (2003), where most fatalities occurred on the weekend (48%), in King County, Monday and Tuesday had the highest percentage of fatalities.
- Most fatalities took place during times of darkness and work rush hours.
- 30 percent of the fatalities occurred during adverse weather conditions, primarily rain.
- Alcohol was a factor in approximately 30 percent of the deaths, either by the pedestrian, driver, or both.



Most crashes occurred on city streets (53%), and more than half (59%) of the pedestrians were killed on roads with posted speed limits of 35 mph or less.



- Most pedestrian-MV crashes occurred when pedestrians were attempting to cross a roadway (62%). Many of these incidents involved pedestrians attempting to cross against the light, at mid-blocks, interstates/state routes or no-crossing zones.
- In cases where drivers were at fault, "inattention" was the leading factor noted in the police reports.

Limitations

- Data access issue: unable to obtain BAC levels for all cases and no imputation method was used.
- Focused on fatalities.
- Did not use Pedestrian Bicycle Crash Analysis Tool (PBCAT) crash typing.

Conclusion

Additional work needs to be conducted to reduce the incidence of pedestrian deaths in King County. Education of high-risk populations and drivers are of particular importance. Engineering strategies could include traffic-calming measures and increased street lighting. Enforcement should target both pedestrians and drivers.

Next Steps

As a result of the research findings, Public Health-Seattle & King County organized a one-day King County pedestrian safety summit in January 2006. Over 140 participants representing the "3 E's" of injury prevention as well as county and city officials attended this meeting. It resulted in a discussion among traffic engineers in the county and the city. In addition, the Seattle police department has begun enforcement activities. Injury data is being collected.

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The full report can be accessed at: http://www.metrokc.gov/health/injury/pedestrian.htm

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