

2017 Pedestrian Collision Summary



City of Phoenix

STREET TRANSPORTATION DEPARTMENT

TRAFFIC SERVICES DIVISION

TRAFFIC SAFETY SECTION

DECEMBER 2018

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Introduction

The 2017 Collision Summary provides a brief analysis of pedestrian collision statistics related to demographics, accident types, and locations. The report also includes collision data from 2013 through 2017 to identify and track pedestrian collision trends that have emerged during the past five years. These statistics provide a strong indication of roadway behaviors that negatively impact pedestrians' safety and helps identify which violations should be prioritized for increased education and enforcement.

The 2017 Pedestrian collision summary includes a reported 719 pedestrian-related collisions resulting in 643 pedestrian injuries and 92 pedestrian fatalities. These pedestrian-related collisions accounted for 2 percent of all collisions, 4 percent of all injuries, and 44 percent of all fatalities occurring on City Streets. Statistics show the number of pedestrian-related collisions has increased (5 percent) as compared to the 2016 collisions and the number of collisions and fatalities are at a ten year high. Consistent with previous years, male pedestrians were involved in more collisions at a male to female ratio of 1.8:1. Also, the age group with the highest number of pedestrian-related collisions were males between the ages of 26 and 35. The majority (59 percent) of collisions occurred at uncontrolled locations.

The findings in this report are used to inform and influence the design of new pedestrian facilities, the redesign of existing roadways, the development of education programs and enforcement campaigns for pedestrians and motorists. In an effort to identify locations and collision trends that may require special attention, this report also identifies intersections and roadway locations with the highest annual pedestrian collisions.

NOTE: Some figures in the 2017 Pedestrian Collision Summary differ from 2017 Traffic Collision Summary due to the detailed analysis of crash reports.

2017 Phoenix Pedestrian Collision Facts-at-a-Glance

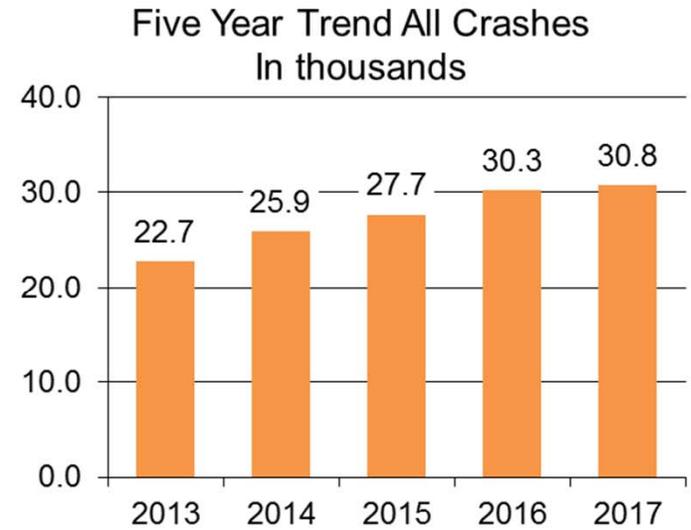
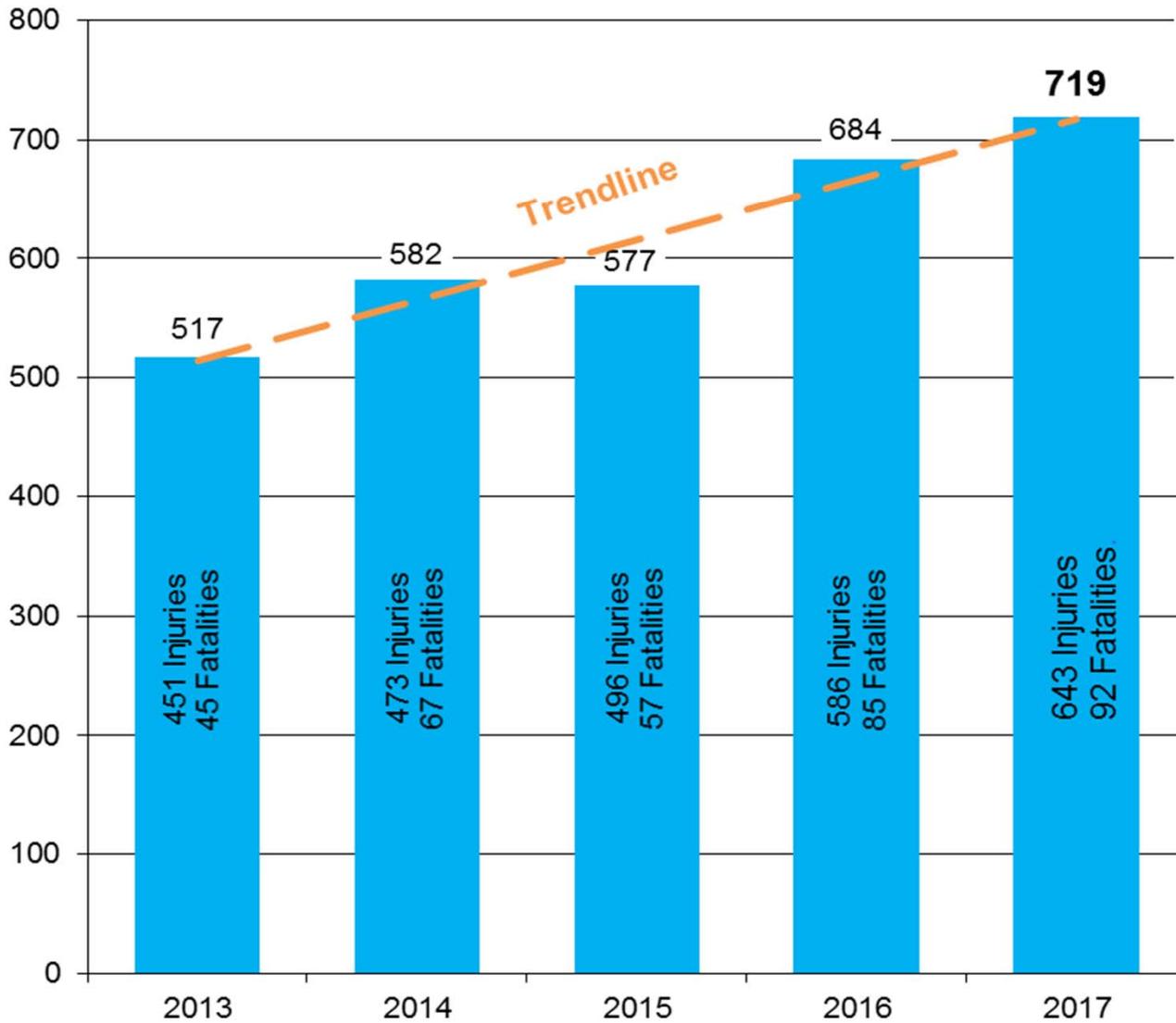
Important Points to Know About the Pedestrian Collision Summary in 2017:

- Pedestrian collisions are on a six year increasing trend.
- The majority of pedestrian collisions involve risky behaviors by pedestrians.
- More pedestrians are struck at mid-block crossings than other locations.
- A large majority of fatal pedestrian collisions occur at night.
- There is a very small chance for a pedestrian to come out of a collision un-injured.

In 2017,

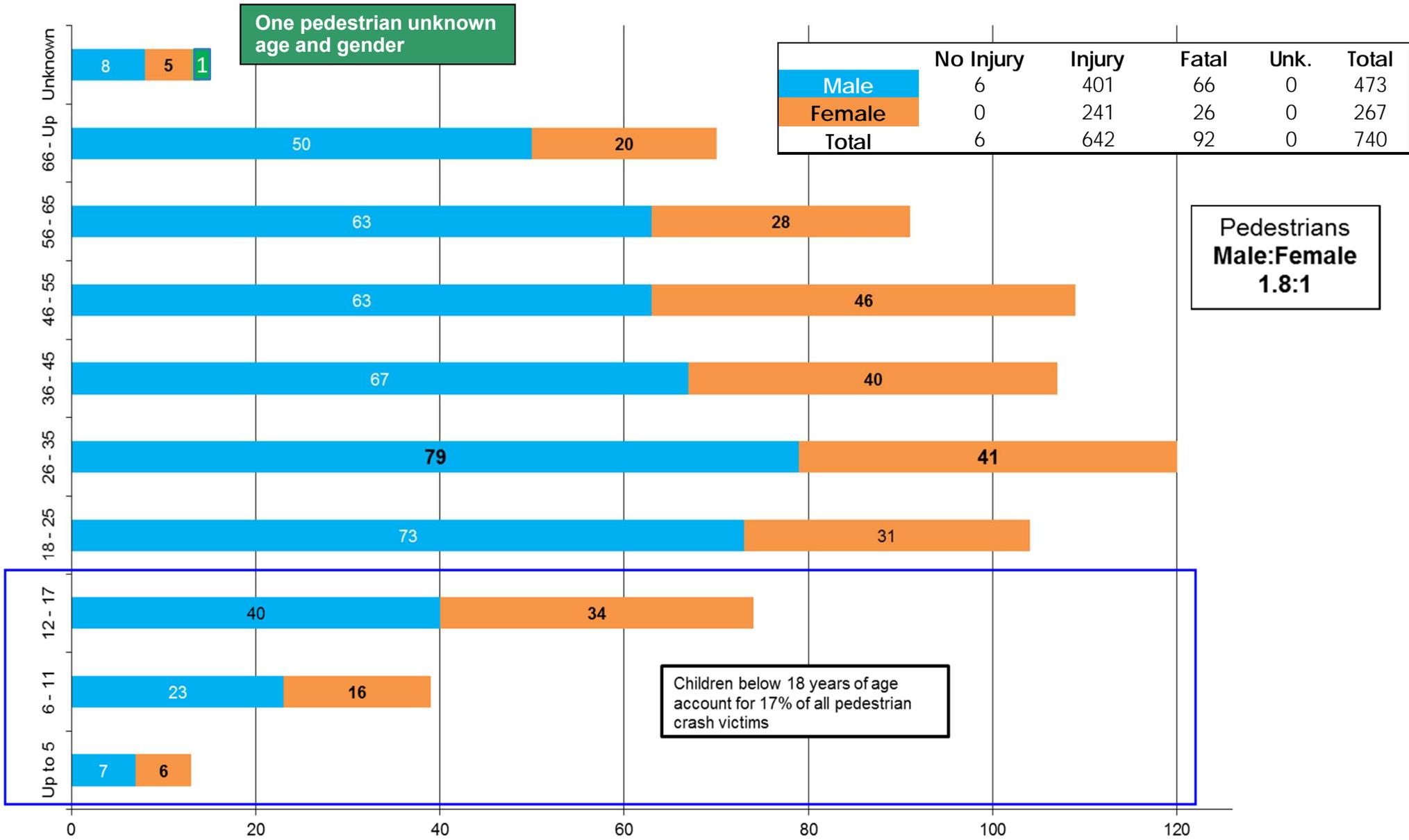
- Pedestrian collisions accounted for 2% of all collisions, but 44% of all fatal collisions on city streets.
- There was a 8% increase in pedestrian fatalities compared to 2016.
- 48 school-age pedestrians (5 to 17 years old) were hit during school hours (Monday – Friday, 7 AM – 4 PM).
- 58% of all pedestrians were struck at night/twilight, but 89% of all pedestrian fatalities occurred at night/twilight.
- Pedestrian collisions occurred most frequently between 6 PM and 9 PM.
- Tuesday had the highest percentage (17%) of all pedestrian collisions.
- There were 130 pedestrian-related collisions involving alcohol or drugs, a 5% decrease from 2016; of those, 114 involved a pedestrian under the influence, 12 involved a motorist under the influence, and in 4 both pedestrian and motorist were under the influence. (These statistics exclude any hit and run motorists who may also have been under the influence.)
- 29% of all pedestrian collisions occurred at traffic signal controlled intersections.
- December had the highest number of pedestrian collisions at a total of 78.
- October had the highest number of fatalities at a total of 14.
- 46% of pedestrian related collisions were due to violations by only the pedestrians.
- 23% of pedestrian related collisions involved hit and runs.

Five-Year Trend of Pedestrian-Involved Collisions, Injuries, and Fatalities

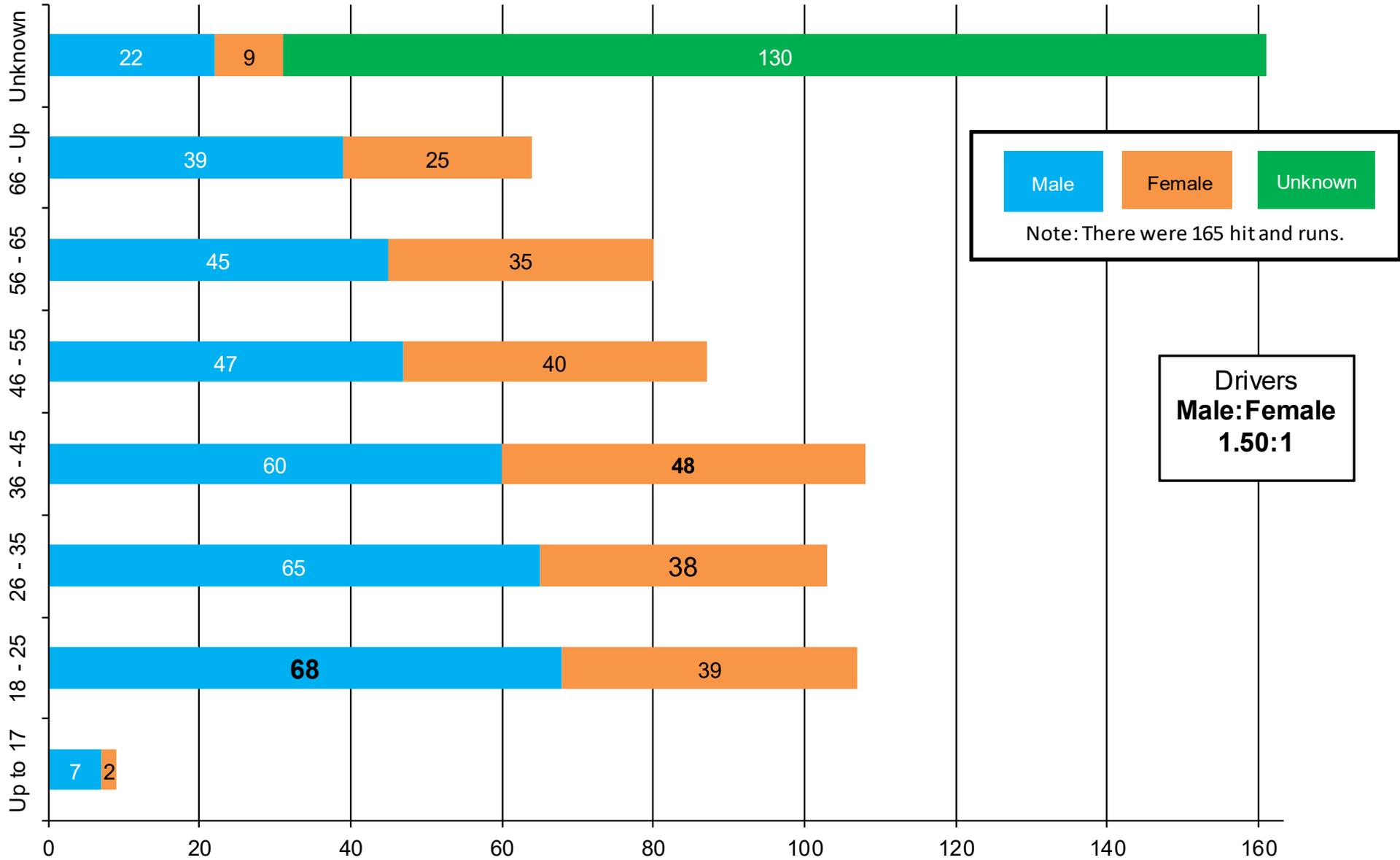


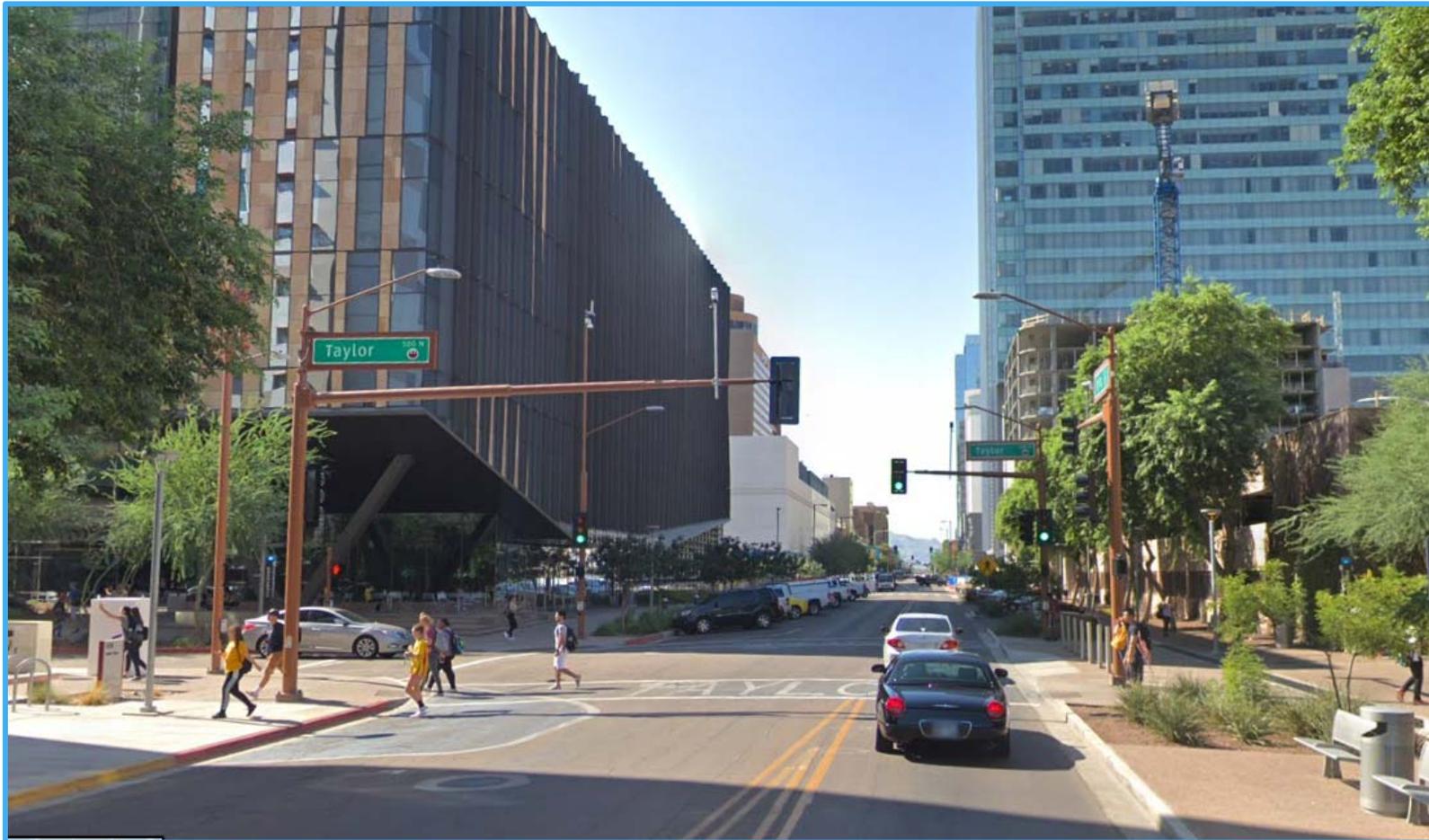
Key Note:
The 10 year average is 565 collisions.

Age and Gender of Pedestrians in Collisions



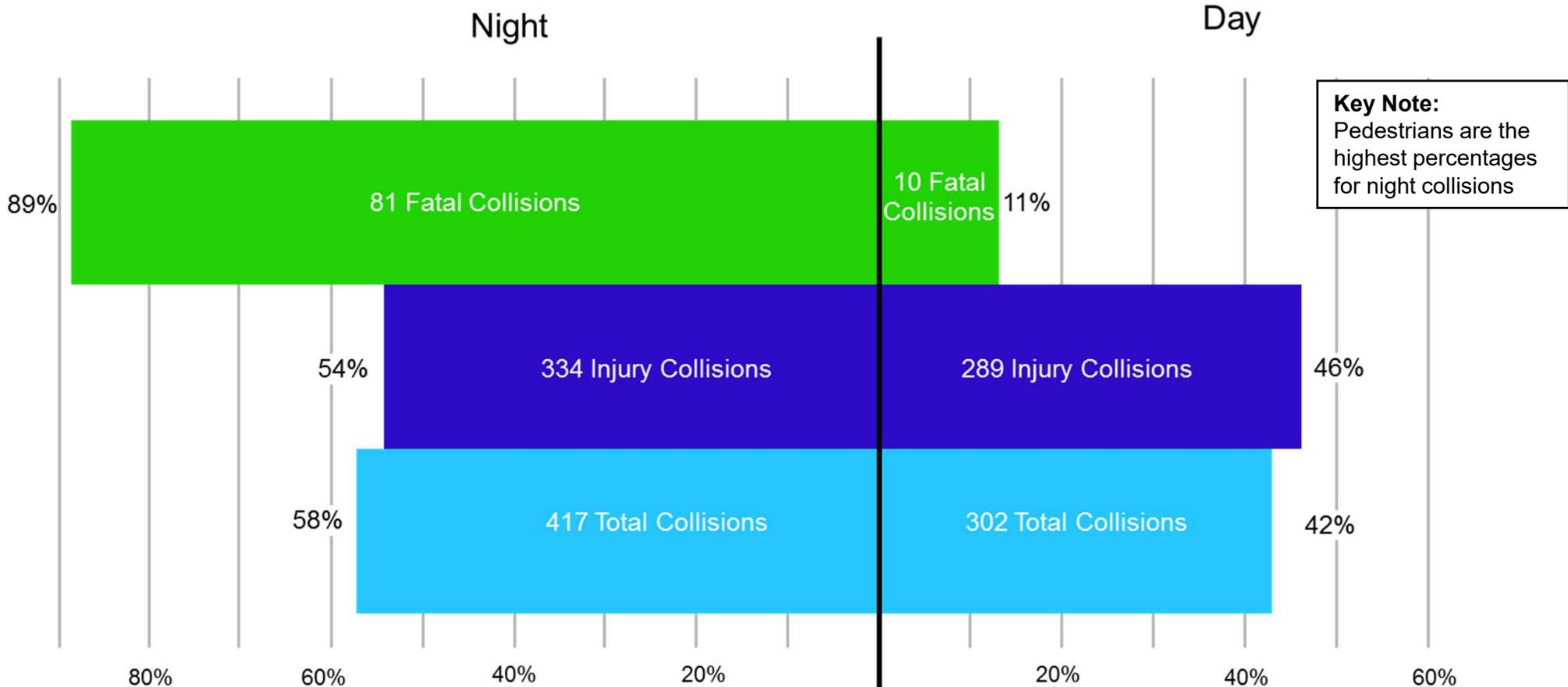
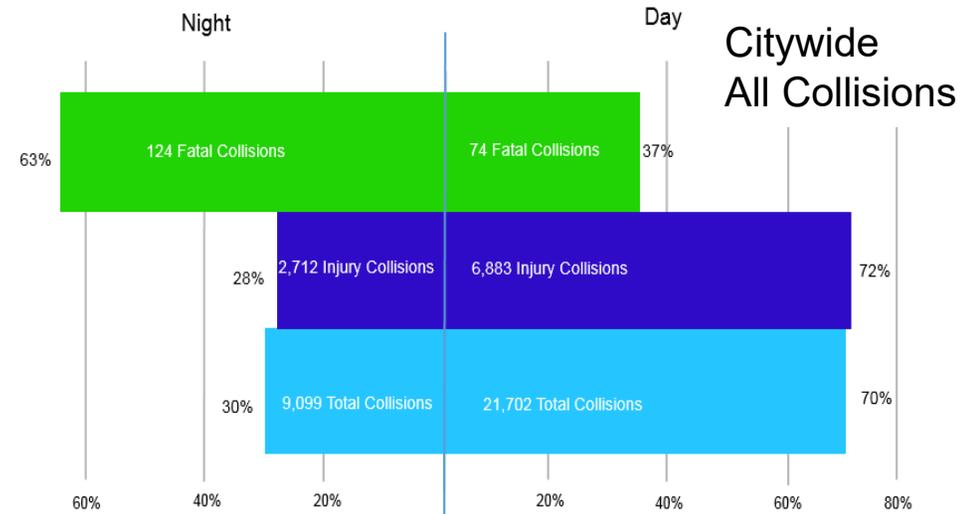
Age and Gender of Drivers in Pedestrian Collisions



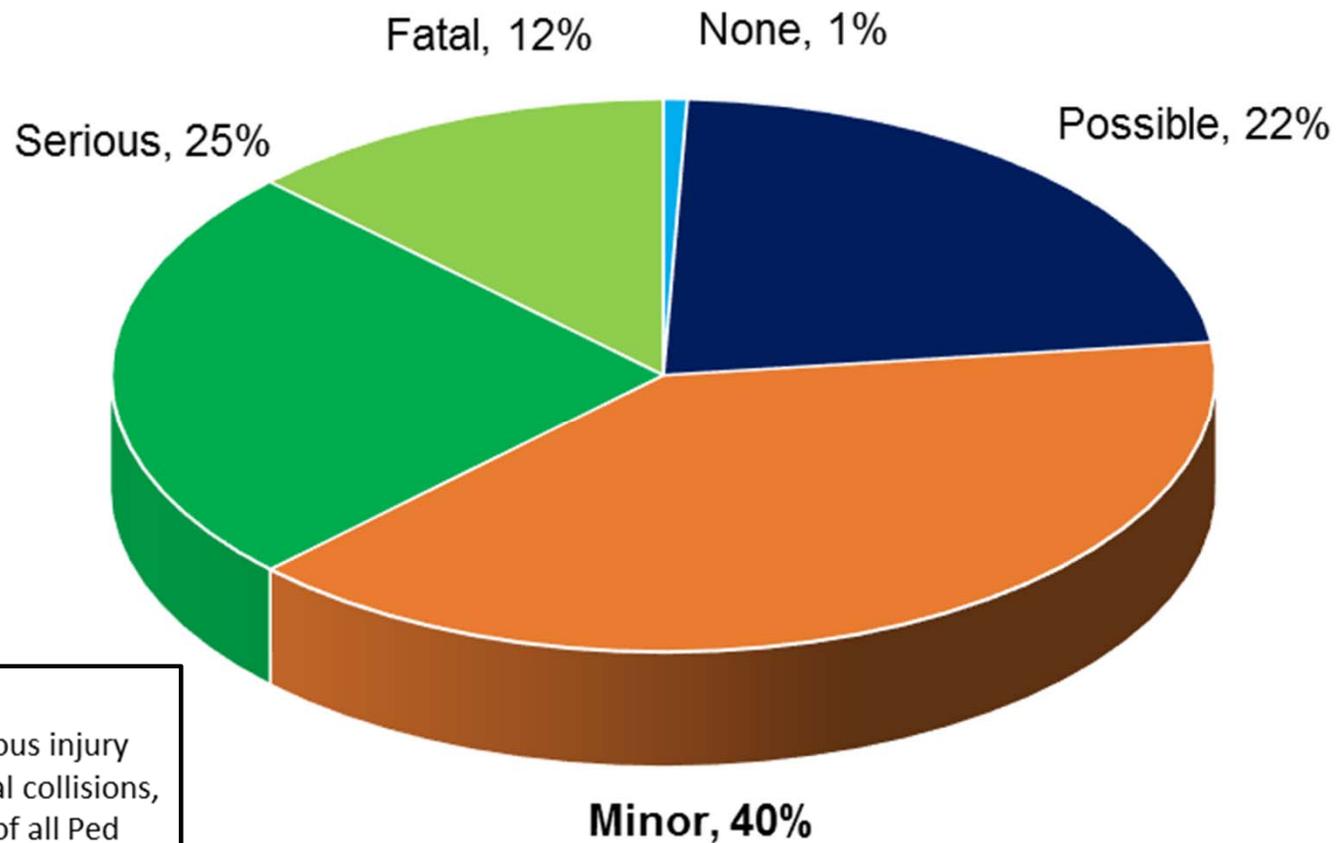


Traffic Signal at North 1st and East Taylor Streets features a “pedestrian scramble” allowing all pedestrian movements to proceed simultaneously.

Pedestrian-Involved Collisions by Light Conditions



Pedestrian-Involved Collisions by Injury Severity



Key Note:

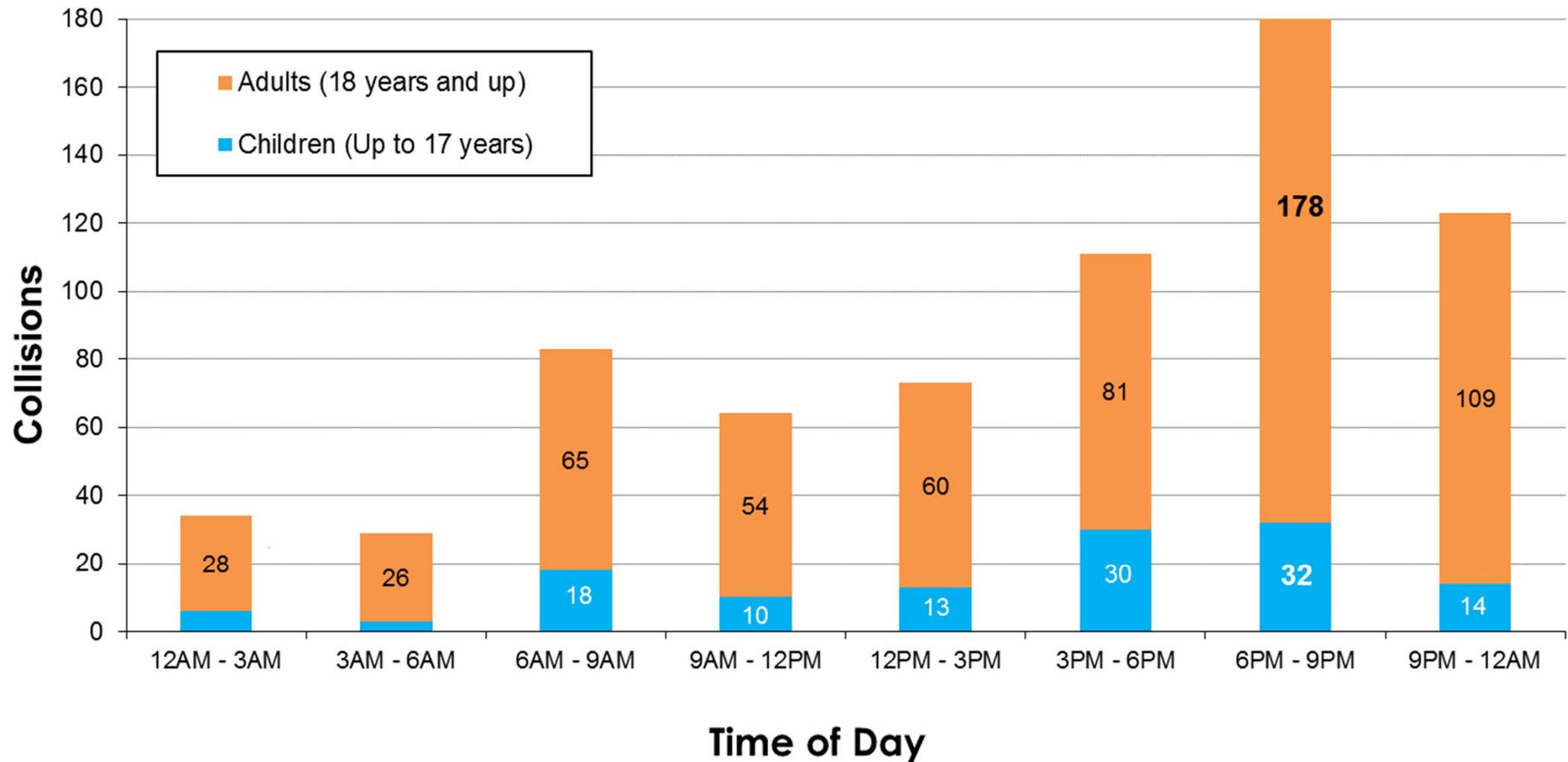
There were 178 serious injury collisions and 91 fatal collisions, accounting for 37% of all Ped collisions.



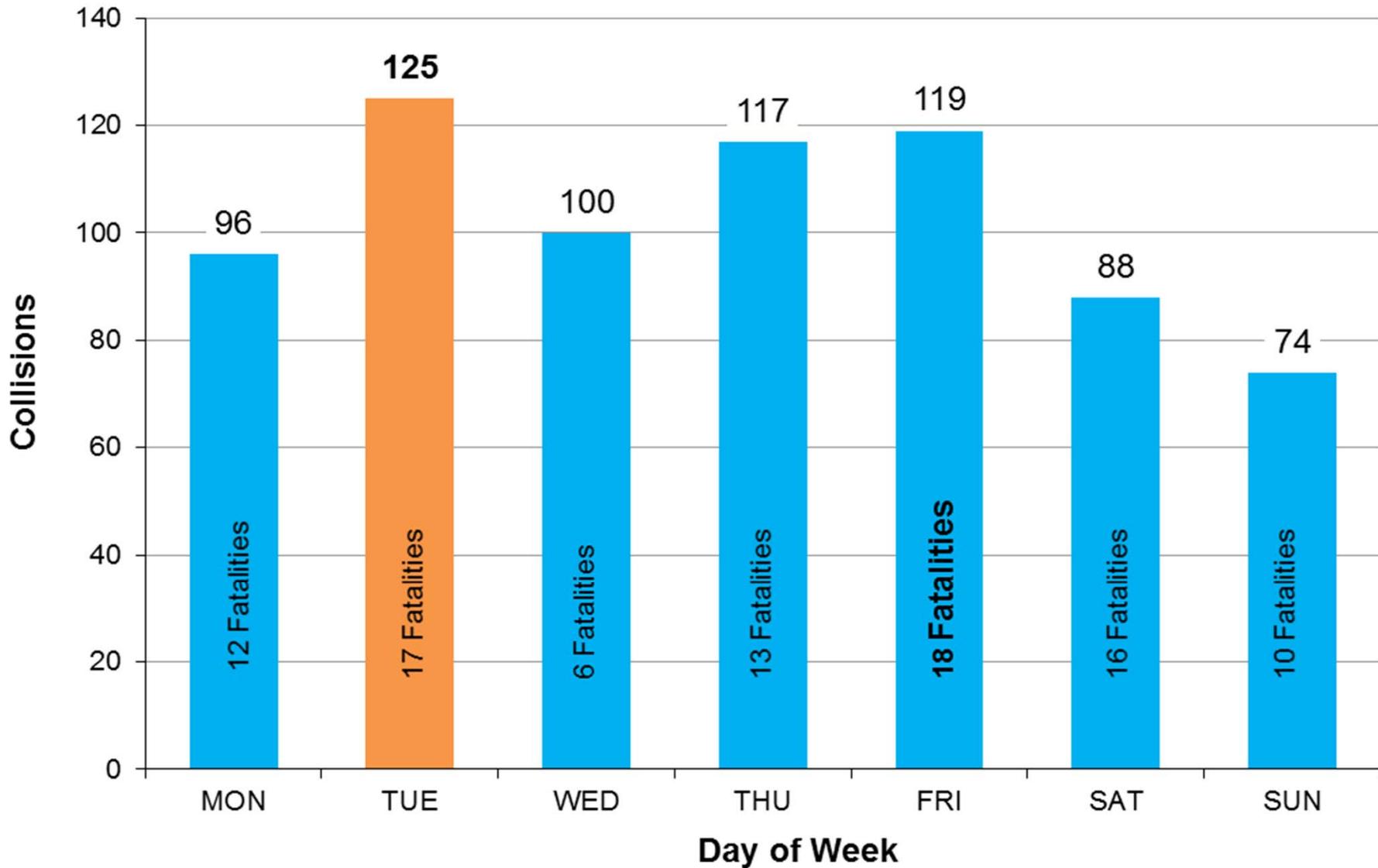
Pedestrian signal (HAWK) at the Whittier Elementary School
(16th Street and Palm Lane)

Pedestrians in Collisions by Time of Day and Age Group

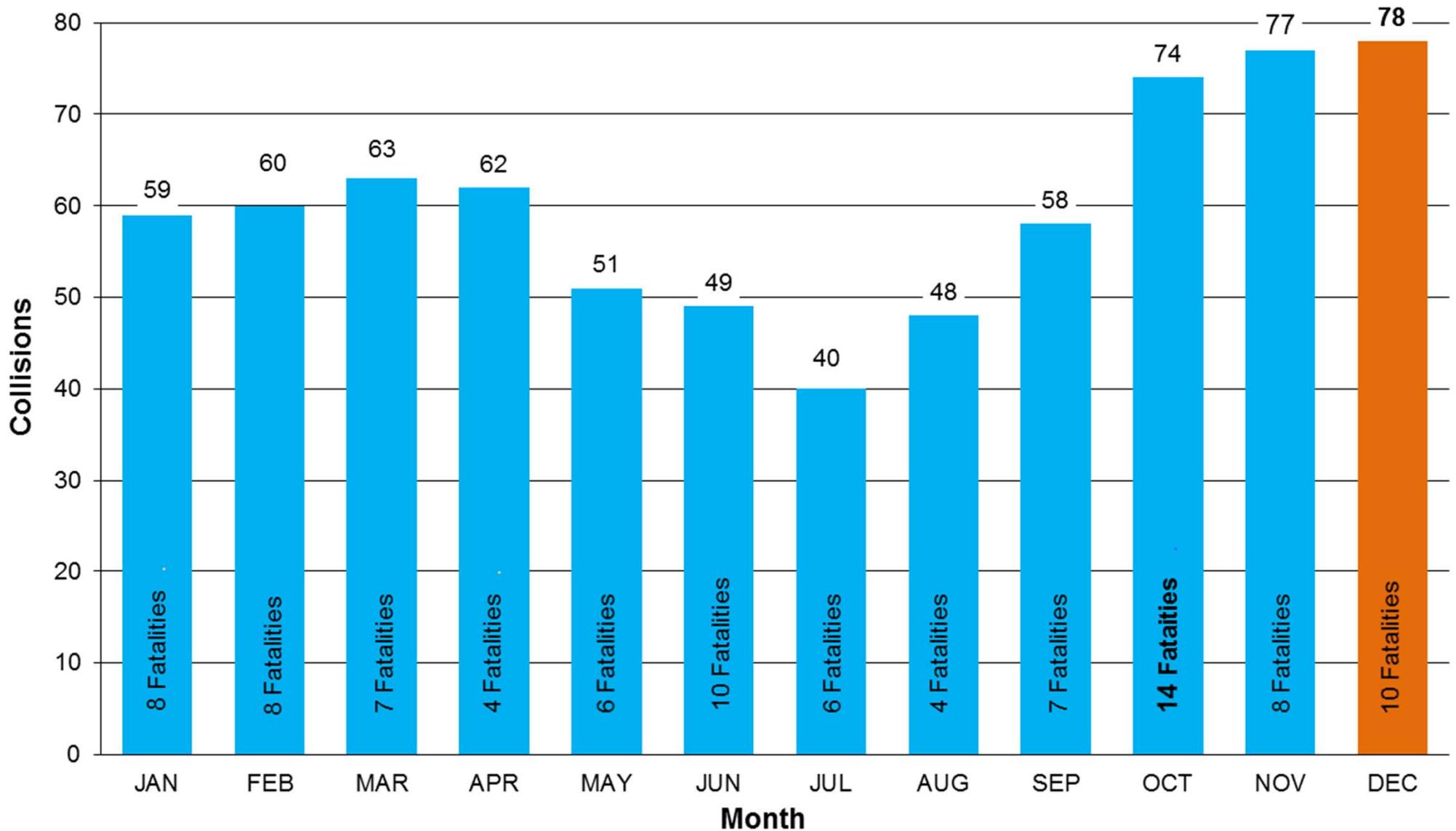
Key Note: Between 9 PM and 12 AM there were a total of 34 pedestrian fatalities, or 37% of all pedestrian fatalities



Pedestrian-Involved Collisions by Day of Week



Pedestrian-Involved Collisions by Month

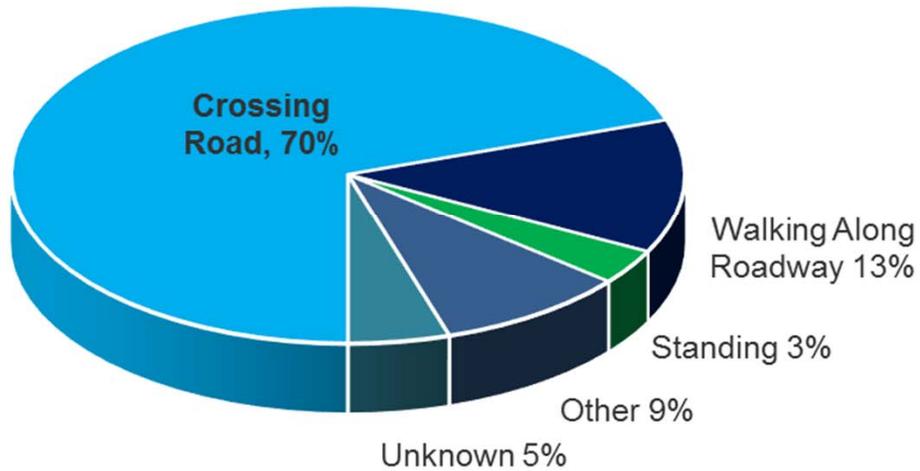




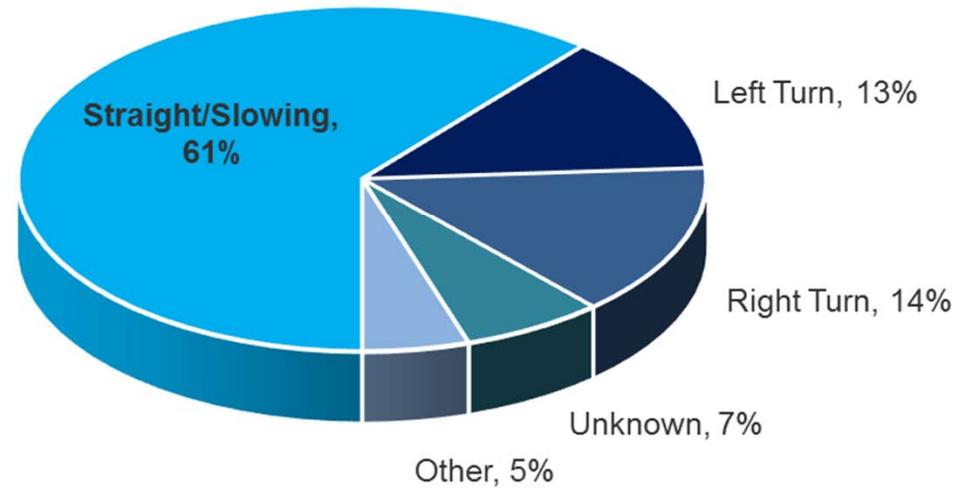
Pedestrian Flashing Beacon (PFB) installation and testing for St. Joseph's hospital crossing on North 3rd Avenue at West Merrill Street

Actions of Pedestrians and Drivers

Pedestrians

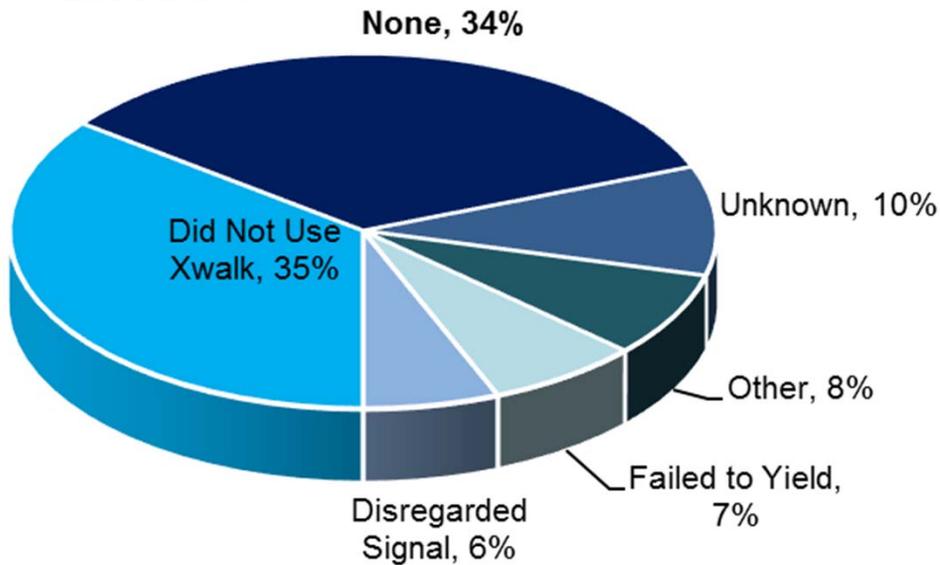


Drivers

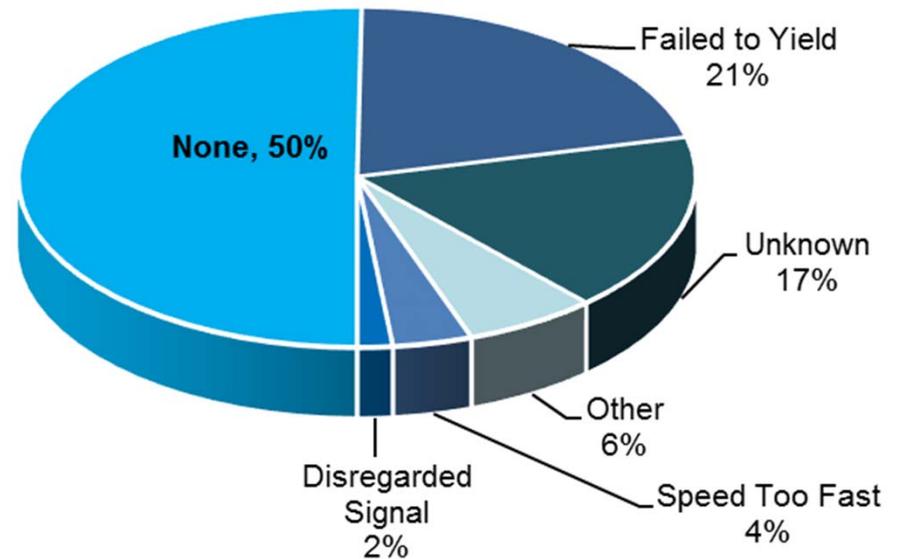


Behavior/Violations of Pedestrians and Drivers

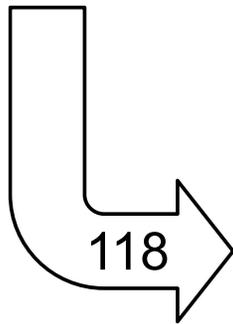
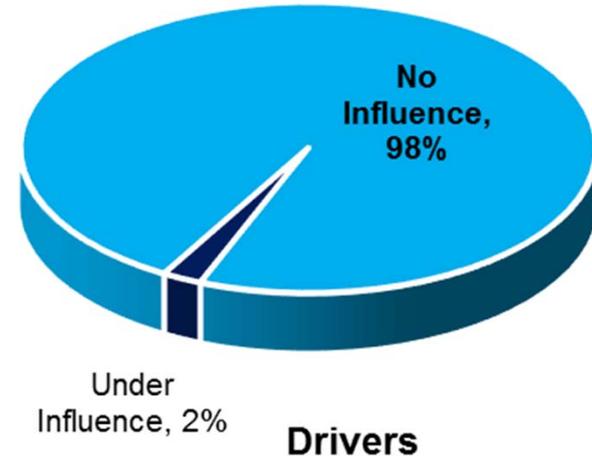
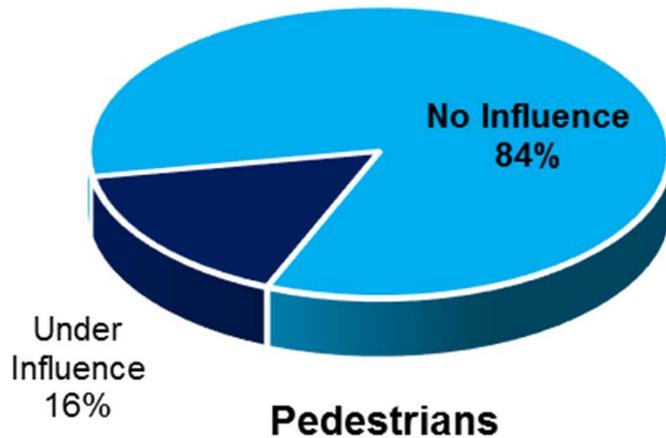
Pedestrians



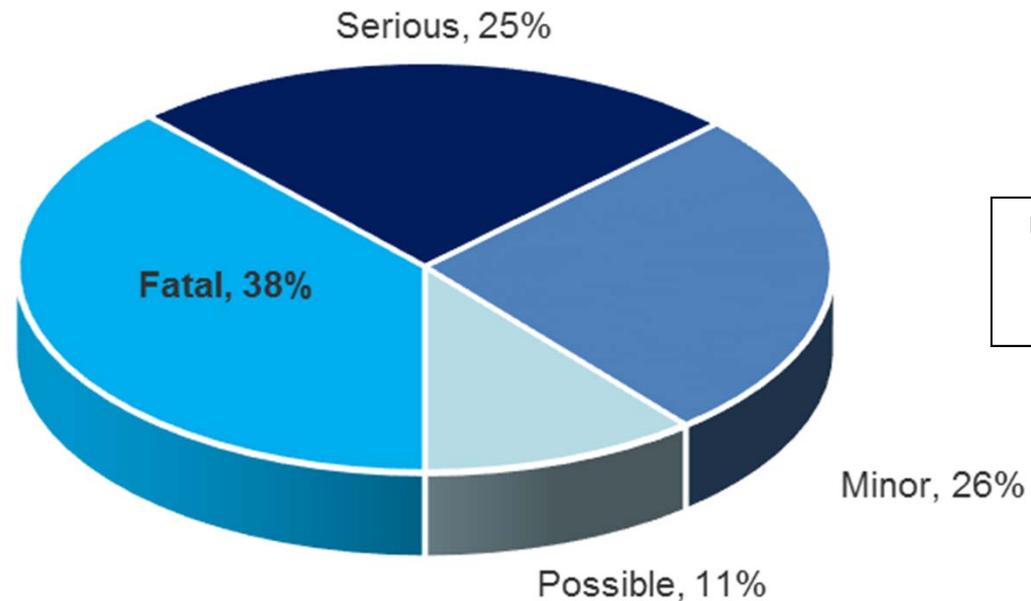
Drivers



Impairment of Pedestrians and Drivers



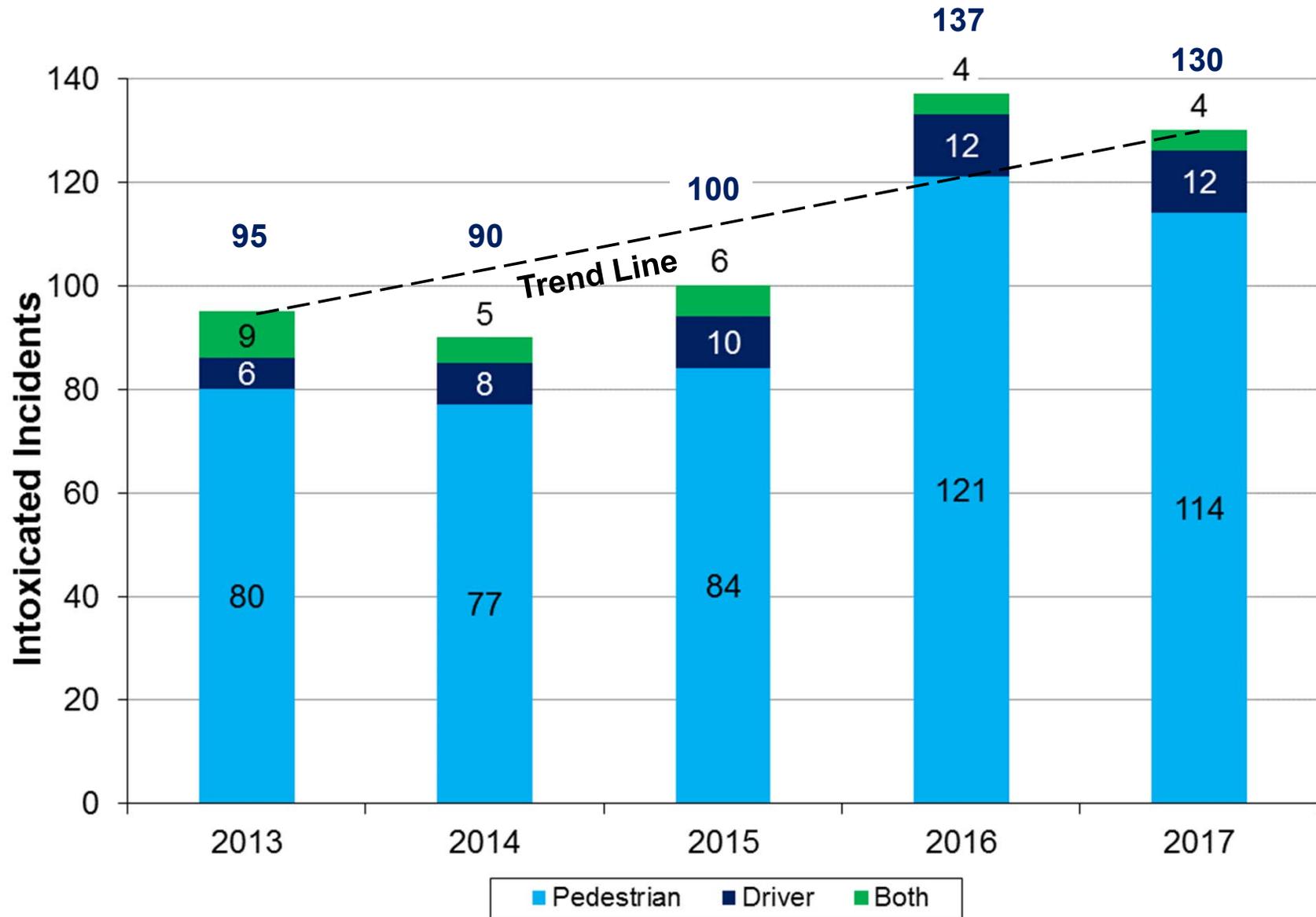
Injury Severity of Pedestrians under the Influence



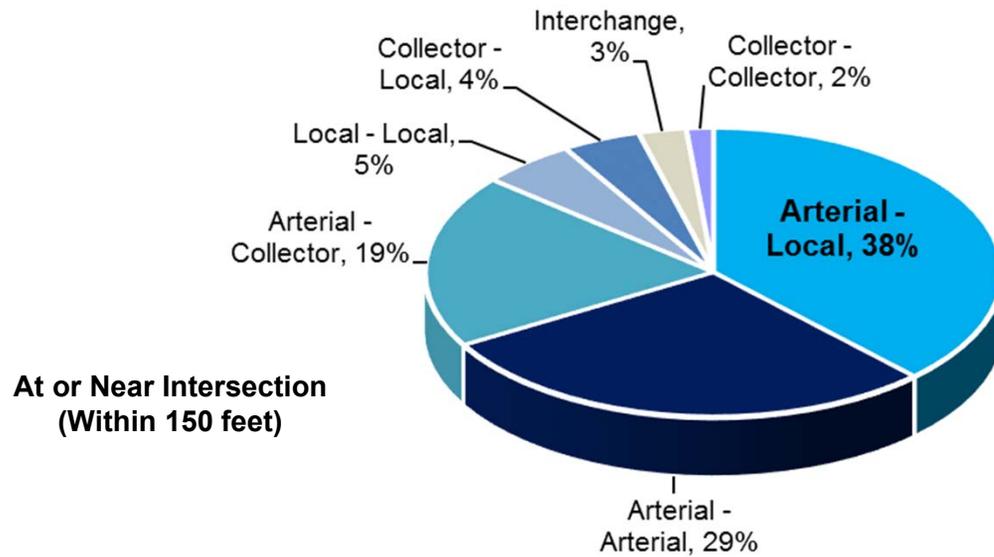
Under the Influence
Male:Female
3.7:1

Key Note:
 Fatal (45) and seriously injured (29) pedestrians combined for 63% of all pedestrians under the influence of drugs or alcohol.

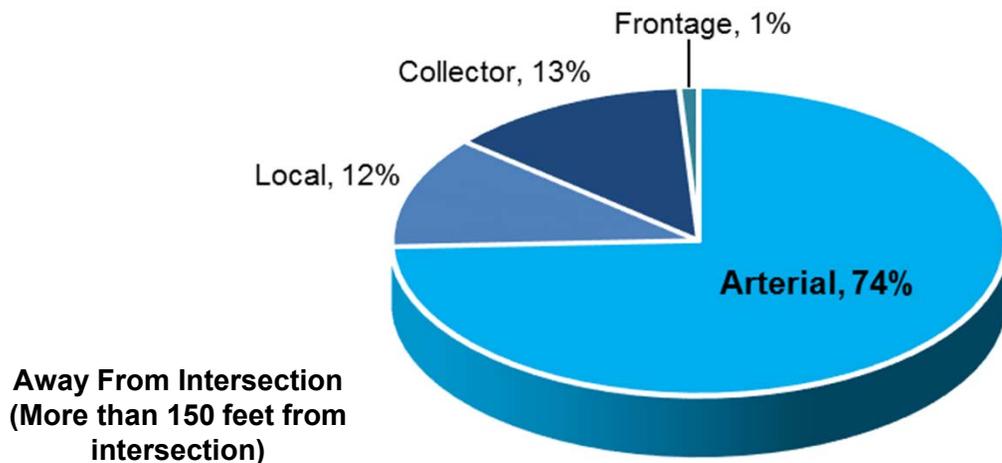
Five Year Trend of Drugs or Alcohol Use In Pedestrian-Involved Collisions



Pedestrian-Involved Collisions by Street Classification



**Intersection Related
73%
of all pedestrian collisions**



**Non-Intersection Related
27%
of all pedestrian collisions**

Street Classification Examples

- Freeways are I-17 (Black Canyon Freeway), I-10, Loop 202, on-ramps, access roads, etc.
- Arterial streets are typically the mile-line streets such as 7th Ave, 16th St, Camelback Rd, and Union Hills Dr as defined on the Phoenix Street Classification Map.
- Collector streets are typically the half-mile-line streets such as 39th Ave, 28th St, Roeser Rd, and Maryland Ave as defined on the Phoenix Street Classification Map. Local streets are typically the neighborhood streets such as 88th Ln, Dromedary Rd, Holly St, 21st St, and Glenn Dr and are not defined as arterial or collector streets.

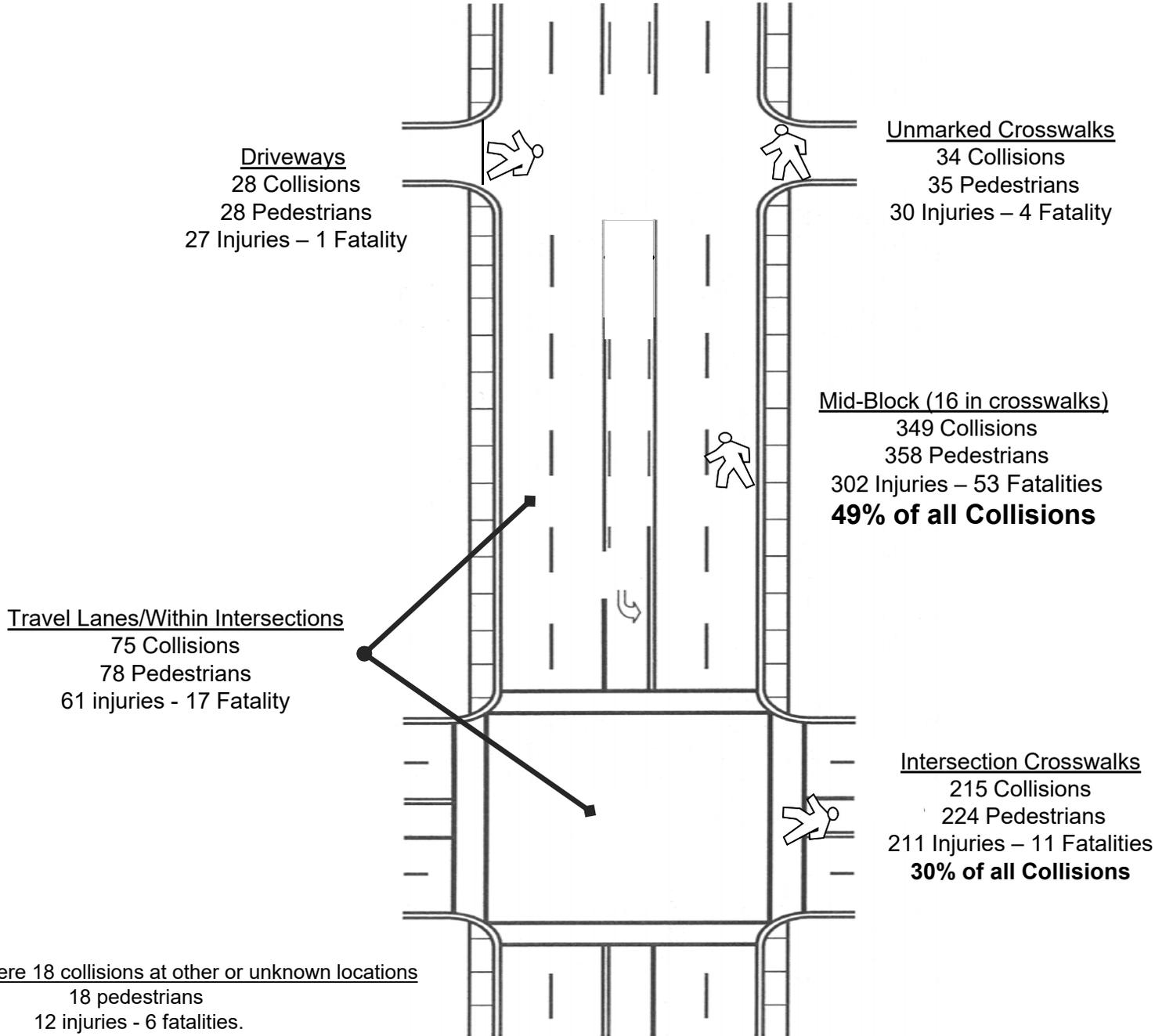


Pedestrian signal (HAWK) at Raul H. Castro Middle school on North 79th and West Cartwright Avenues

Pedestrian Flashing Beacon (PFB) crosswalk at North 6th and East Fillmore Streets

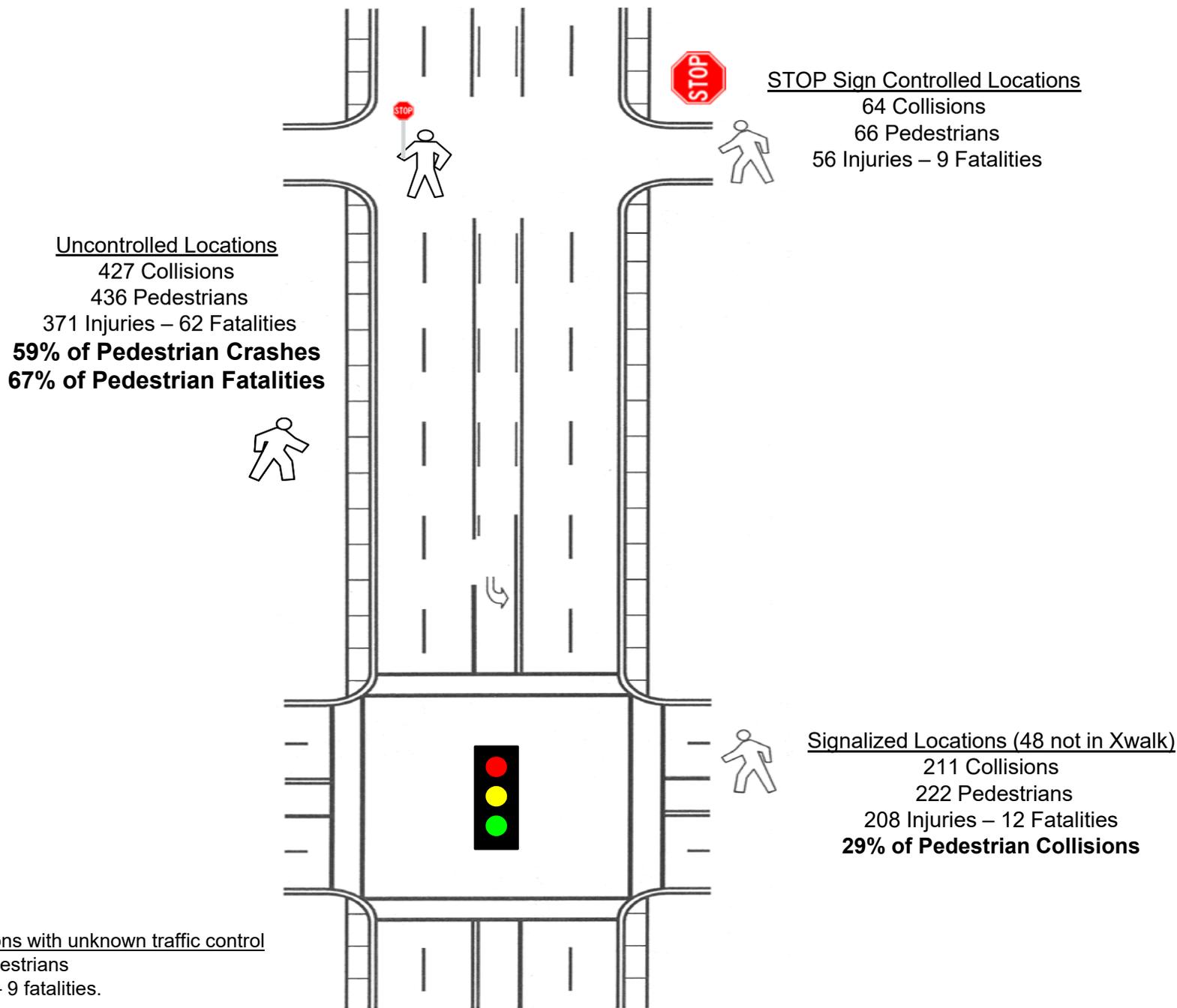


Pedestrian-Involved Roadway Collisions



NOTE: There were 18 collisions at other or unknown locations
 18 pedestrians
 12 injuries - 6 fatalities.

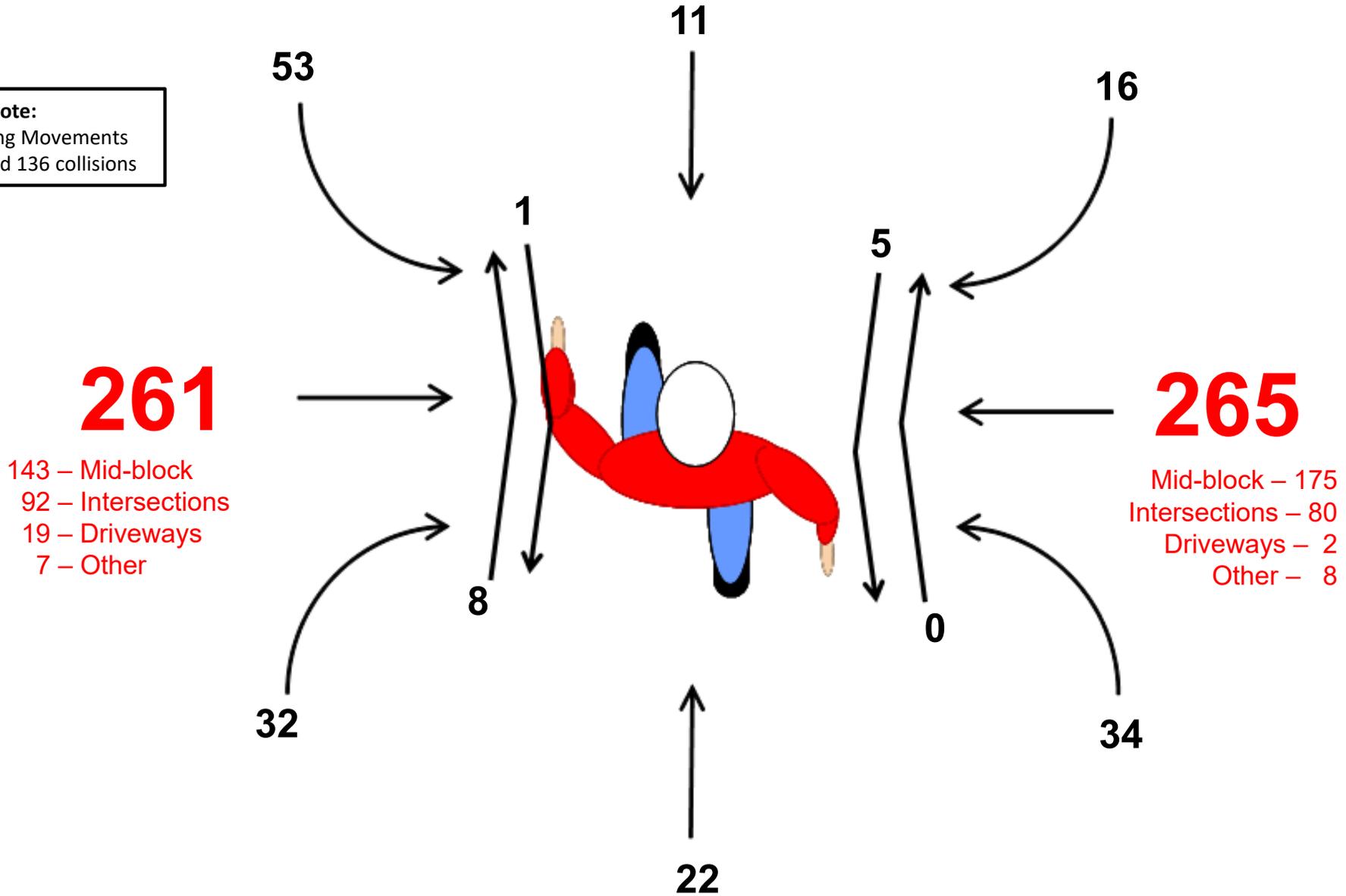
Pedestrian-Involved Collisions and Traffic Control



NOTE: There were 17 collisions with unknown traffic control
 17 pedestrians
 8 injuries – 9 fatalities.

Direction of the Vehicle Impact with Pedestrian

Key Note:
Turning Movements
totaled 136 collisions

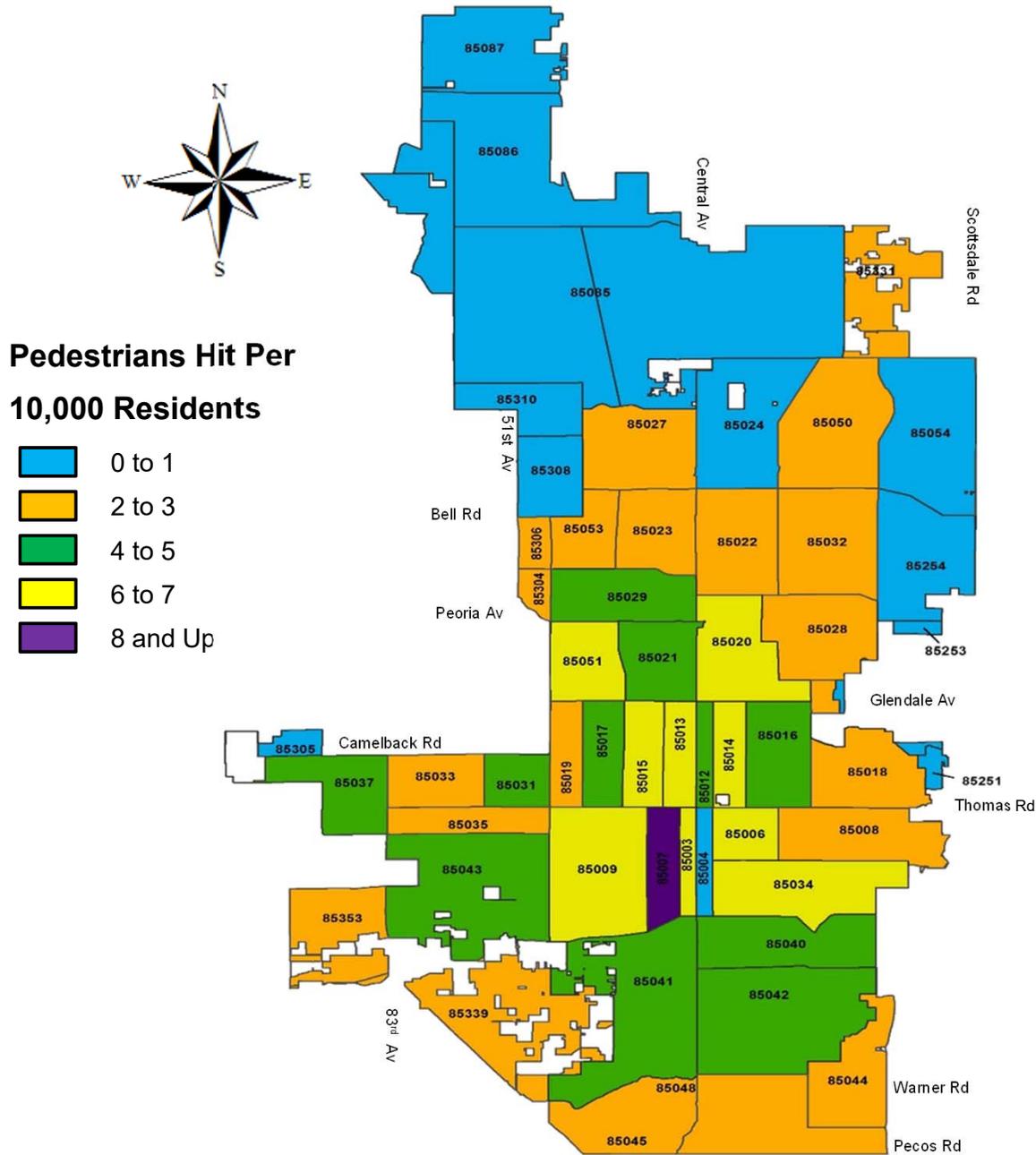


NOTE: There were 33 collisions involving unknown pedestrian or vehicle directions.

2017 Walk to School Days



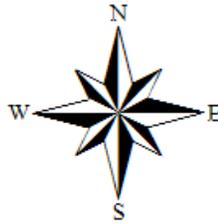
Pedestrian-Involved Collisions by Zip Code of Pedestrian



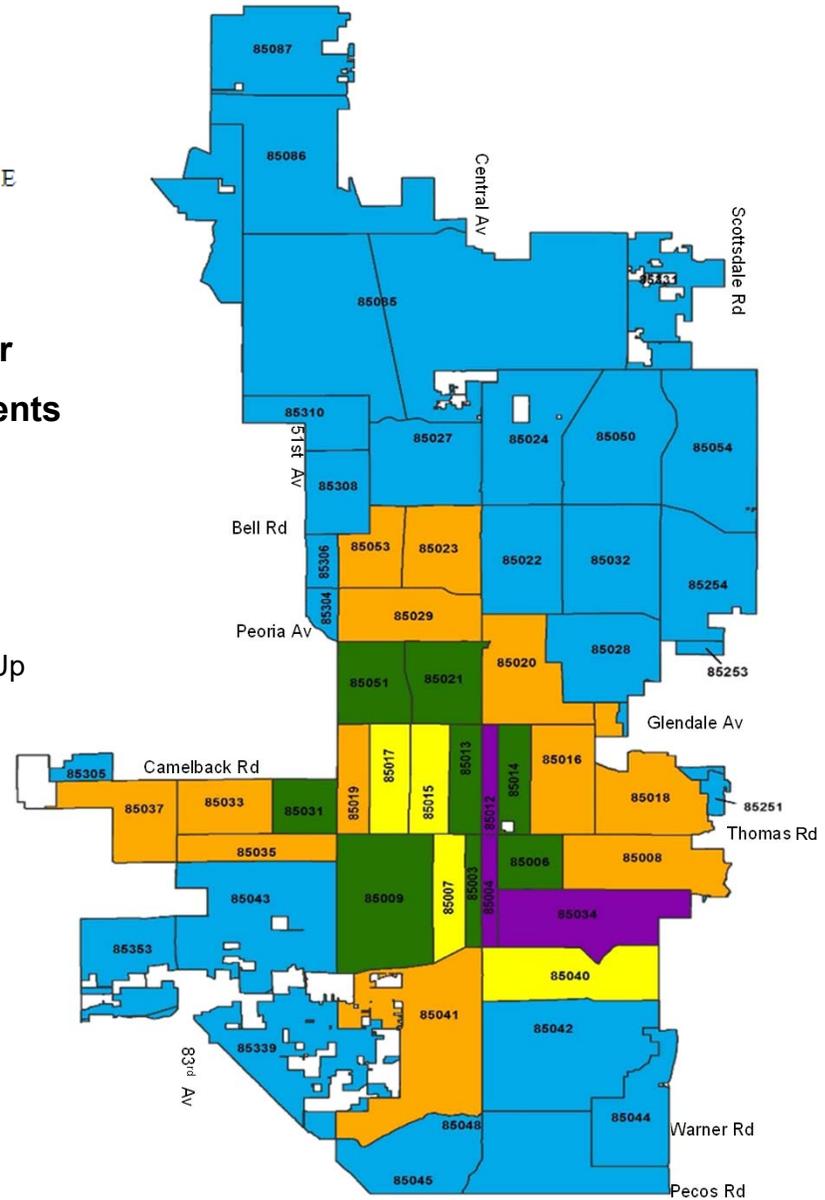
Pedestrian-Involved Collisions by Zip Code of Collisions Location and High Pedestrian-Involved Collision Intersections

Intersection	Count
Indian School Rd & 20th Av	5
Camelback Rd & 19th Av	4
Central Av & Baseline Rd	4
Indian School Rd & 27th Av	4
Northern Av & 27th Av	4

(Collisions Within 150 feet of the intersection)



Collisions Per 10,000 Residents



Acknowledgements

The 2017 Phoenix Pedestrian Collision Summary documents the collisions involving pedestrians in the City of Phoenix throughout the 2017 calendar year. Collision data utilized for this report were acquired through Phoenix Police records and the database maintained by the Arizona Department of Transportation (ADOT) known as Safety Data Mart (SDM). The 2017 Phoenix Pedestrian Collision Summary was prepared by Joe Alcala (ASU Intern) with assistance from Traffic Safety Section staff Richard Russ (Principal Engineering Technician) and Jacob Martinez (Senior Engineering Technician).

The SDM database includes motor vehicle collisions involving pedestrians that occurred on public right of way where someone was injured or killed or where property damage exceeded \$1,000.

Cover photograph: The cover photograph is the community turn-on event for a High-Intensity Activated crossWalk beacon (HAWK) at North 16th Street and East Palm Lane.

This publication can be made available in an alternative format upon request. Contact the Street Transportation Department at 602-262-6284 if you would like any of these services. Our TTY phone number is 711.



Questions?

**Please contact Street Transportation Department at
602-262-6284 or TTY 711**



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