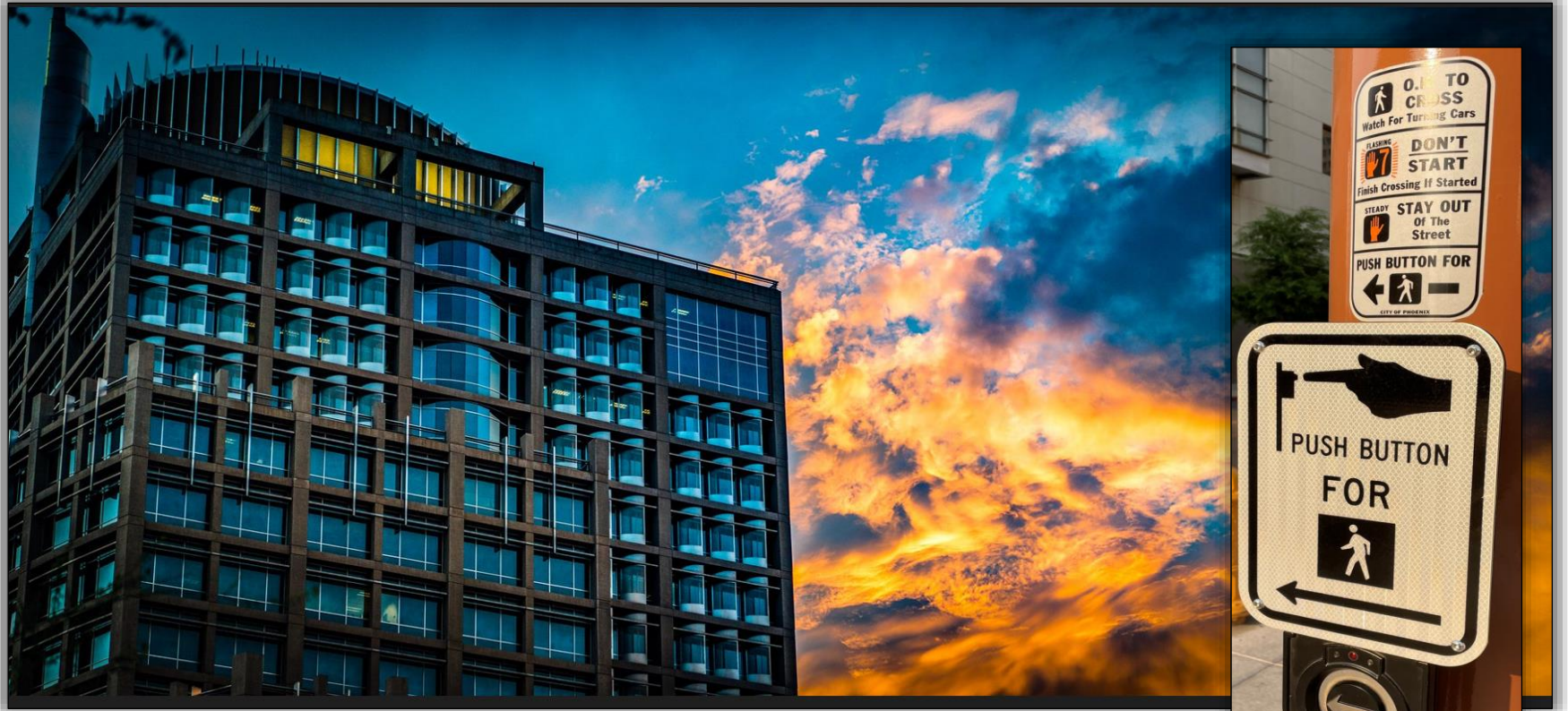


City of Phoenix 2021 Pedestrian Related Collision Summary



TRAFFIC SERVICES DIVISION
DECEMBER 2023

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Introduction

The 2021 Collision Summary provides a brief analysis of pedestrian collision statistics related to demographics, crash types, and locations. The report includes collision data from 2017 through 2021 to identify and track pedestrian collision trends that have emerged during the past five years. These statistics provide a correlation between negative roadway behaviors and pedestrian safety and helps identify which violations can be prioritized for increased education and enforcement.

The 2021 Pedestrian Collision Summary includes a reported 641 pedestrian related collisions involving 647 pedestrians, which resulted in 554 pedestrian injuries and 93 pedestrian fatalities. These pedestrian related collisions account for 2 percent of all collisions, 5 percent of all injuries, and 37 percent of all fatalities occurring on city streets. Consistent with previous years, male pedestrians were involved in more collisions at a ratio of 2:1. Also, the pedestrian age group with the highest number of collisions were males between the ages of 26 and 35. Just like prior years, the majority (56 percent) of collisions occurred at uncontrolled locations. It must be noted that data from 2020 and 2021 may not show an accurate account of trends due to the unusual societal factors affecting pedestrian and driver behavior during this time.

The findings in this report are used to inform and influence the design of new pedestrian facilities, the redesign of existing roadways and the development of education 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 related collisions.

NOTE: Some figures in the 2021 Pedestrian Related Collision Summary may differ from 2021 Traffic Collision Summary due to the detailed analysis of crash reports.

2021 Phoenix Pedestrian Related Collision Facts-at-a-Glance

More than 50% of pedestrian related collisions involve risky behavior by pedestrians.

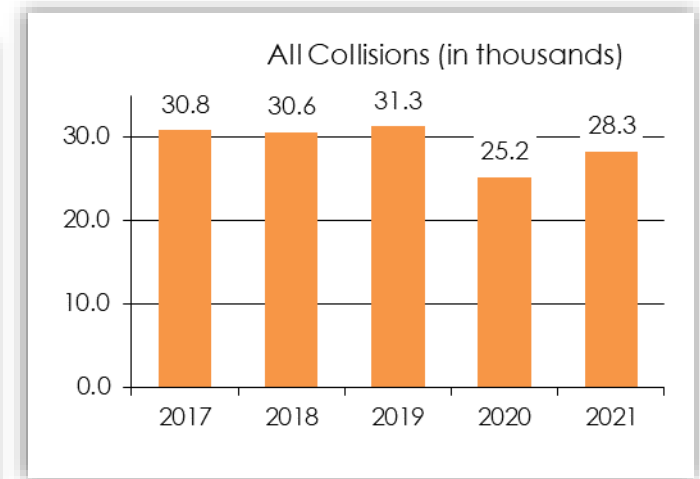
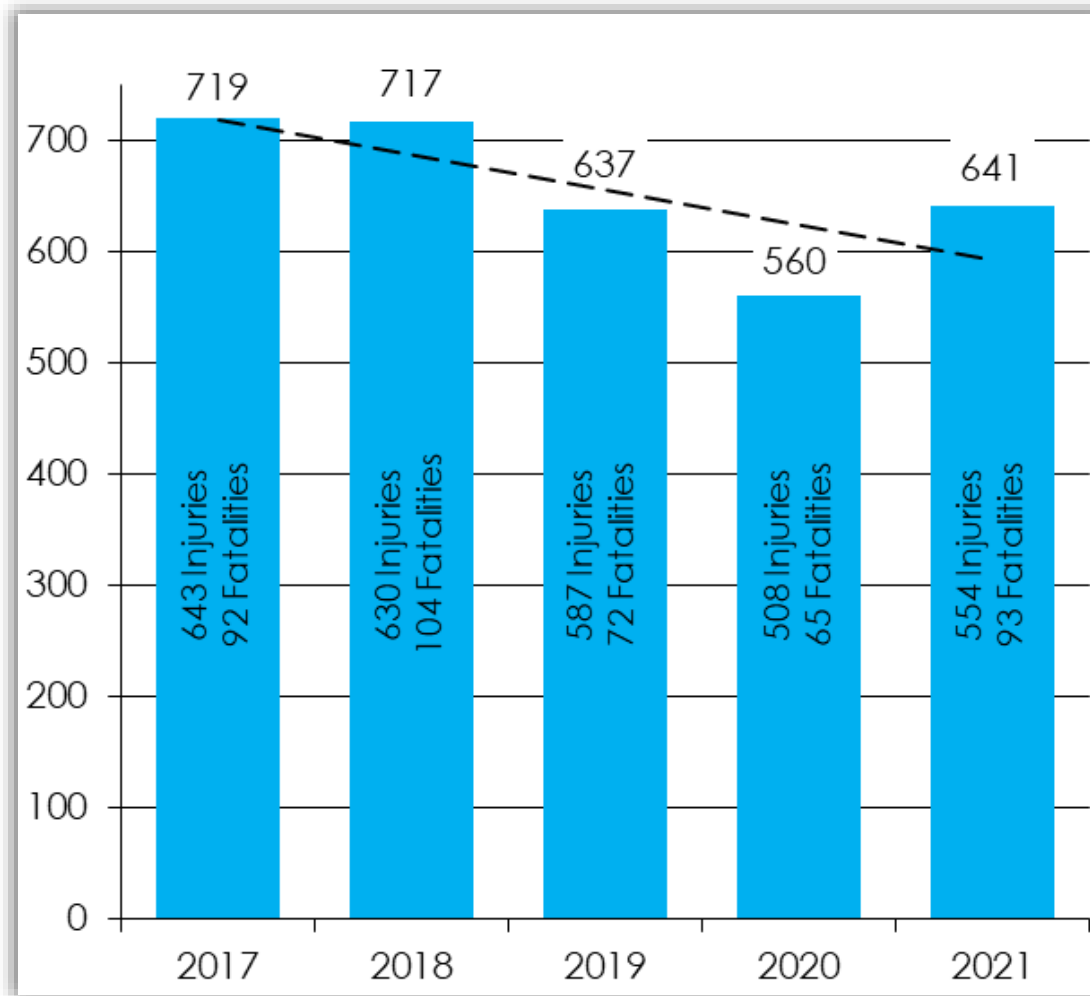
Pedestrians are more likely to be struck crossing mid-block than other locations.

Vehicle speed greatly affects the injury severity of a struck pedestrian, the chance of a pedestrian coming out of a collision un-injured is less than one percent.

In 2021,

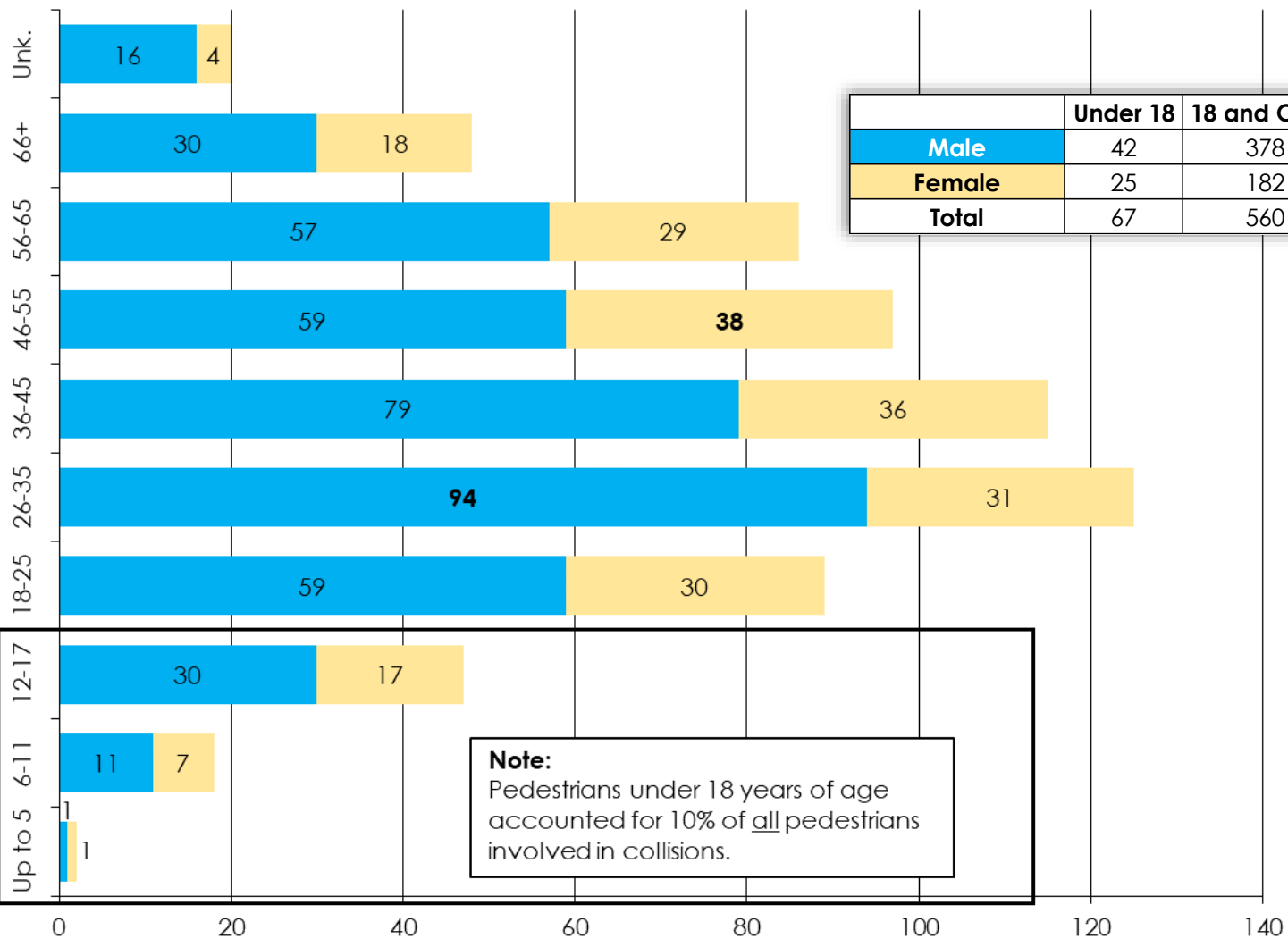
- Pedestrian related collisions accounted for 2% of all collisions and 37% of all fatalities on city streets.
- There was a 9% increase in pedestrian injuries and a 29% increase in pedestrian fatalities from 2019.
- 35 school-age pedestrians (5 to 17 years old) were hit during school hours (Monday – Friday, 7 AM – 4 PM).
- The light condition was reported as dawn, dusk or dark in 56% of all pedestrian related collisions and in 87% of fatal pedestrian related collisions.
- Pedestrian related collisions occurred most frequently between 6 PM and 9 PM.
- Wednesday had the highest percentage of all pedestrian related collisions at 17%.
- November had the highest number of pedestrian related collisions with a total of 70 and June had the highest number of pedestrian fatalities with a total of 14.
- There were 88 pedestrian related collisions involving alcohol or drugs. Of those, 75 involved a pedestrian under the influence, 11 involved a motorist under the influence and both pedestrian and motorist were under the influence in 2 incidents.
- 35% of all pedestrian related collisions occurred at traffic signal-controlled intersections.
- 58% of pedestrian related collisions were due to improper behavior by only the pedestrians.
- 26% of pedestrian related collisions involved a reported hit and run driver.

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



Note:
The 10-year average is 611 collisions.

Age and Gender of Pedestrians

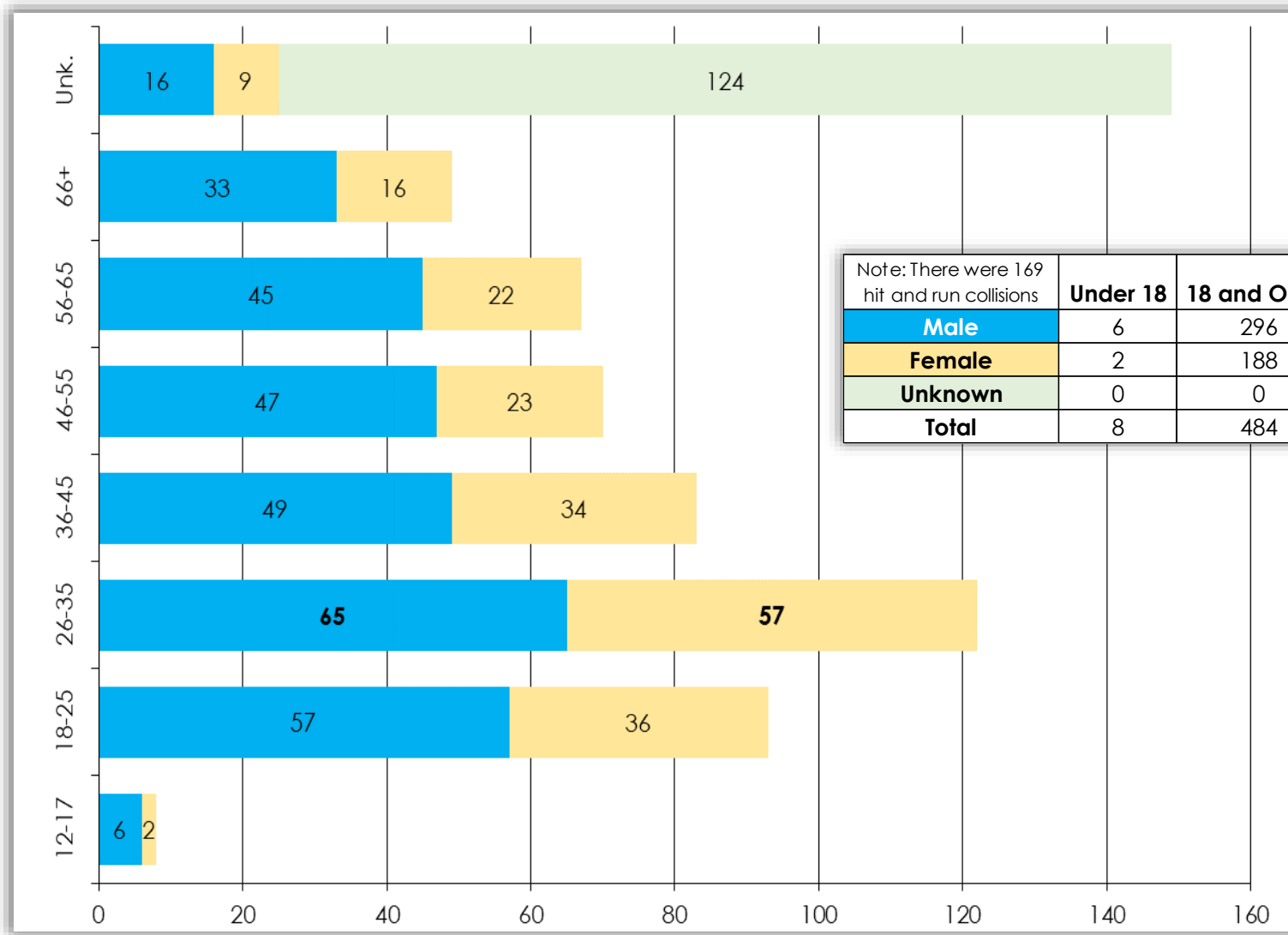


	Under 18	18 and Older	Unknown	Total
Male	42	378	16	436
Female	25	182	4	211
Total	67	560	20	647

Note:
Pedestrians under 18 years of age accounted for 10% of all pedestrians involved in collisions.

Ratio
Male : 2.1
Female : 1

Age and Gender of Drivers



Note: There were 169 hit and run collisions

	Under 18	18 and Older	Unknown	Total
Male	6	296	16	318
Female	2	188	9	199
Unknown	0	0	124	124
Total	8	484	149	641

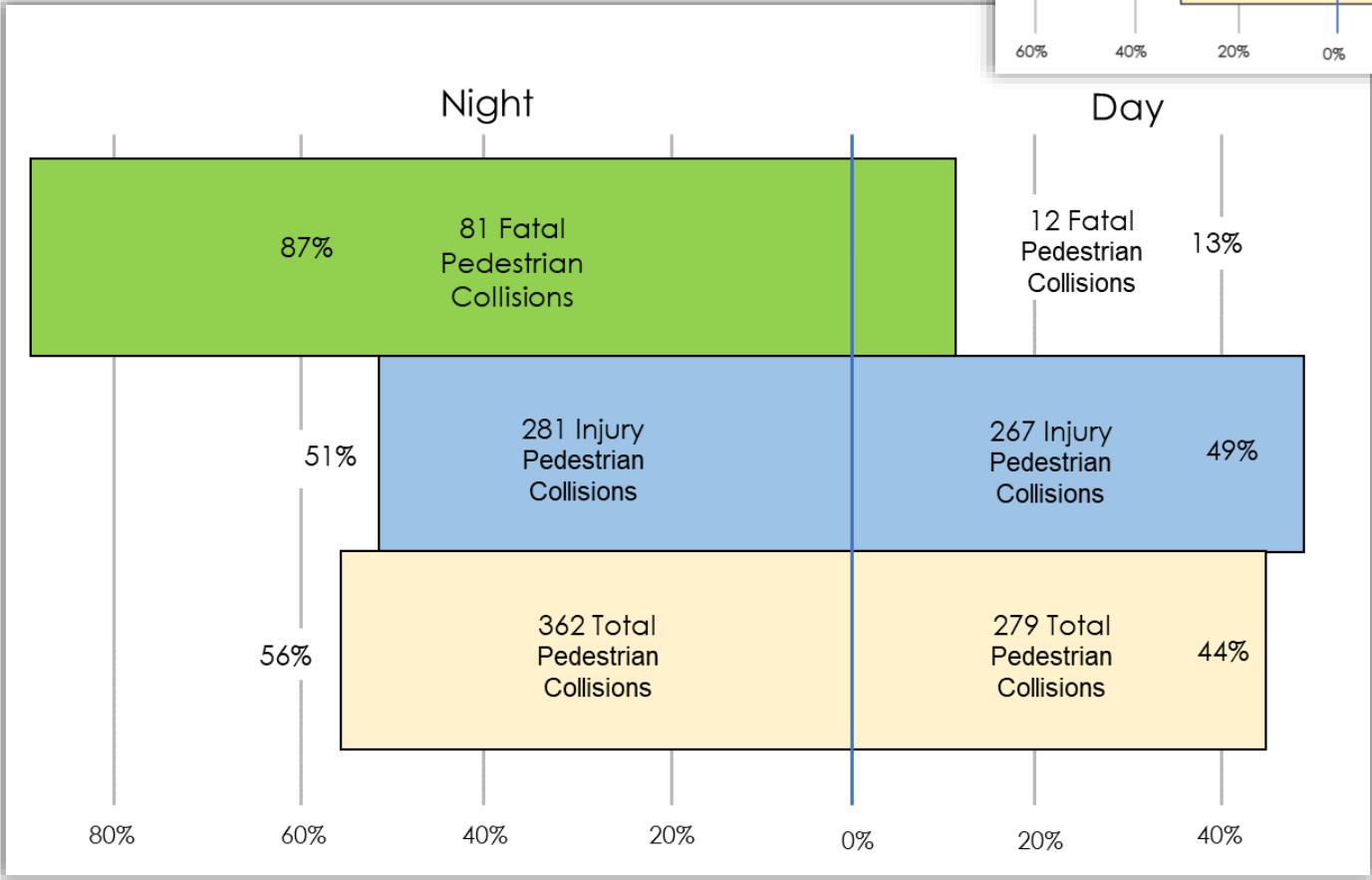
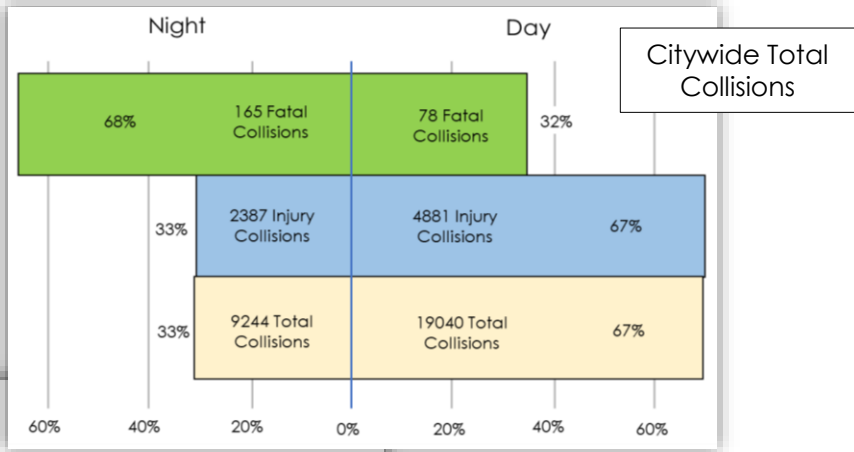
Ratio
 Male : 1.6
 Female : 1

NOTE: Unknown driver gender typically involves an unknown driver that fled the scene without stopping to render aid.



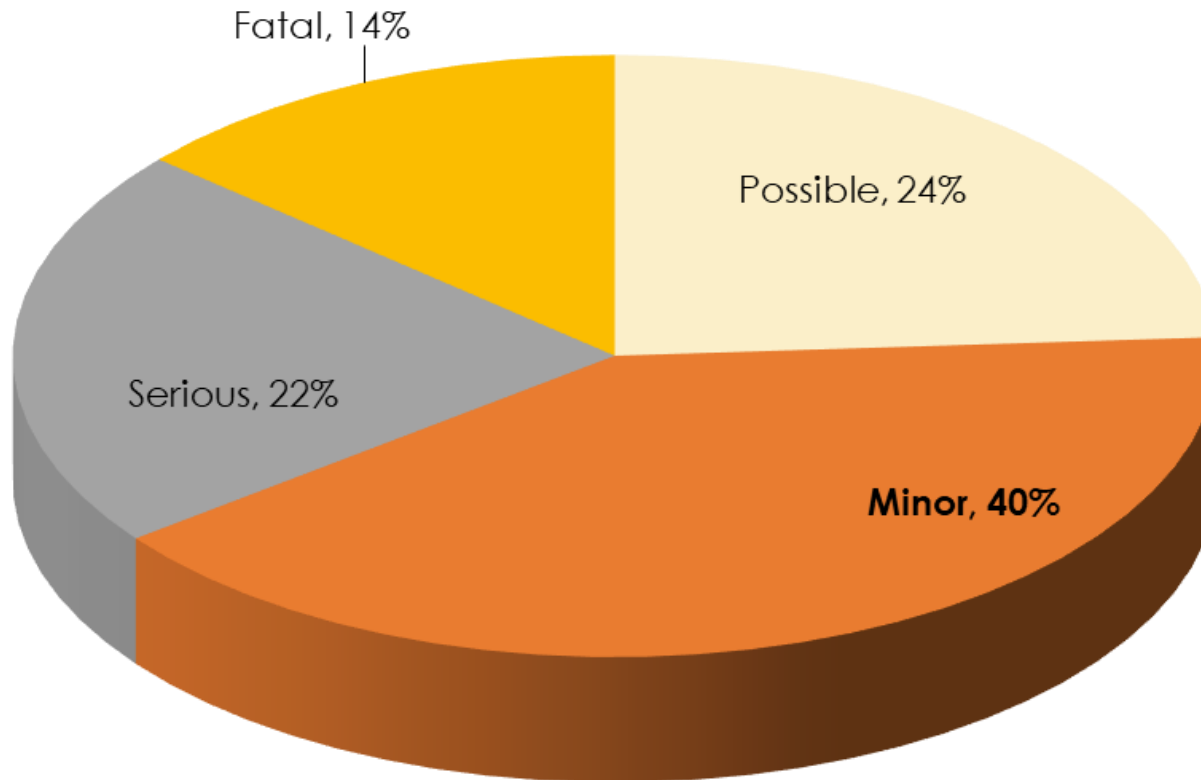
The Hawk Signal at 8025 South 7th Street (Highline Canal) was Activated in January of 2021.

Pedestrian Related Collisions by Light Conditions



Note:
Fatal pedestrian-related collisions accounted for 49% of all fatal collisions occurring at night.

Pedestrian Related Collisions by Injury Severity



Note:

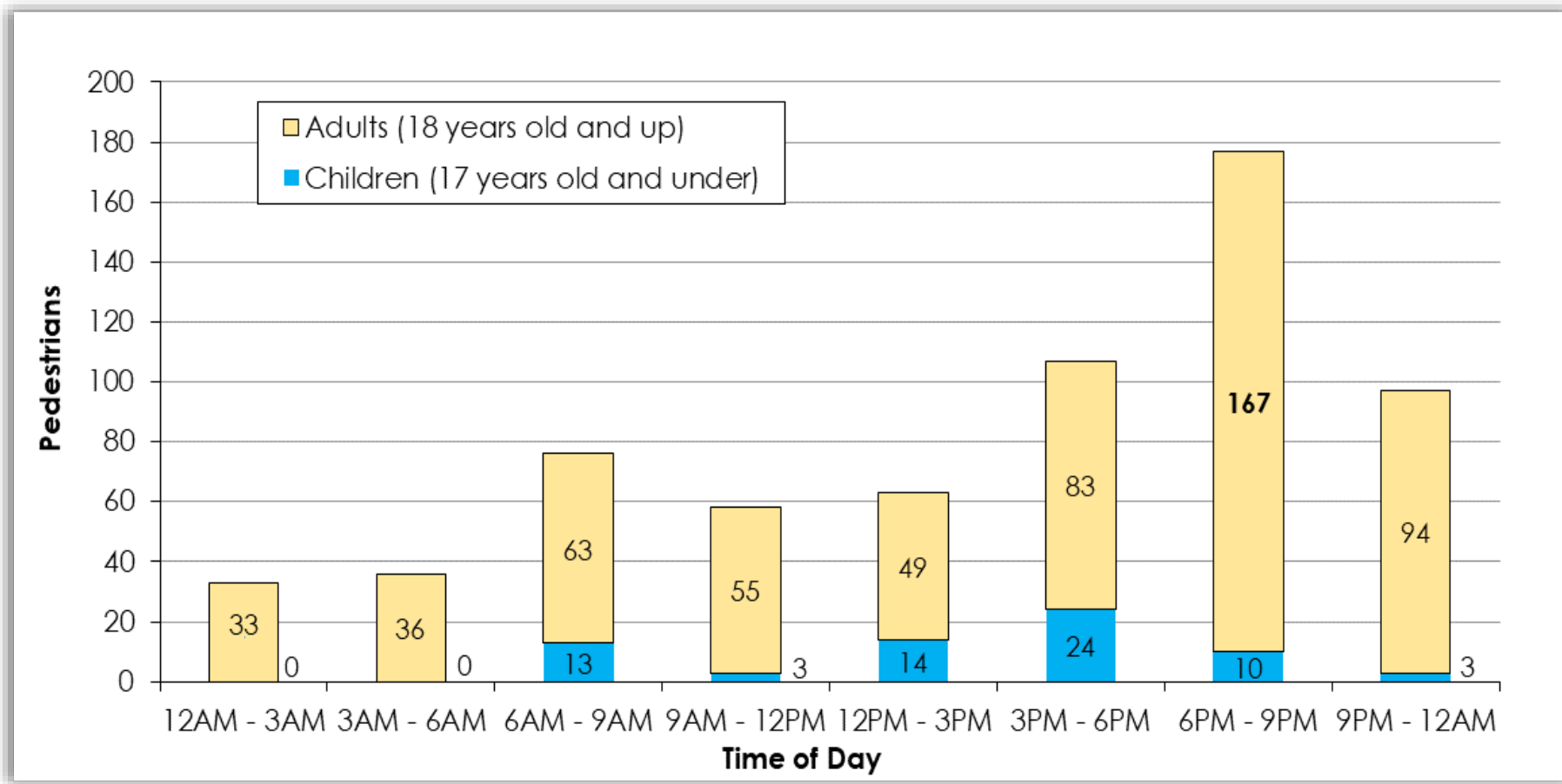
There were 138 serious injury collisions and 93 fatal collisions, accounting for 36% of all pedestrian related collisions.



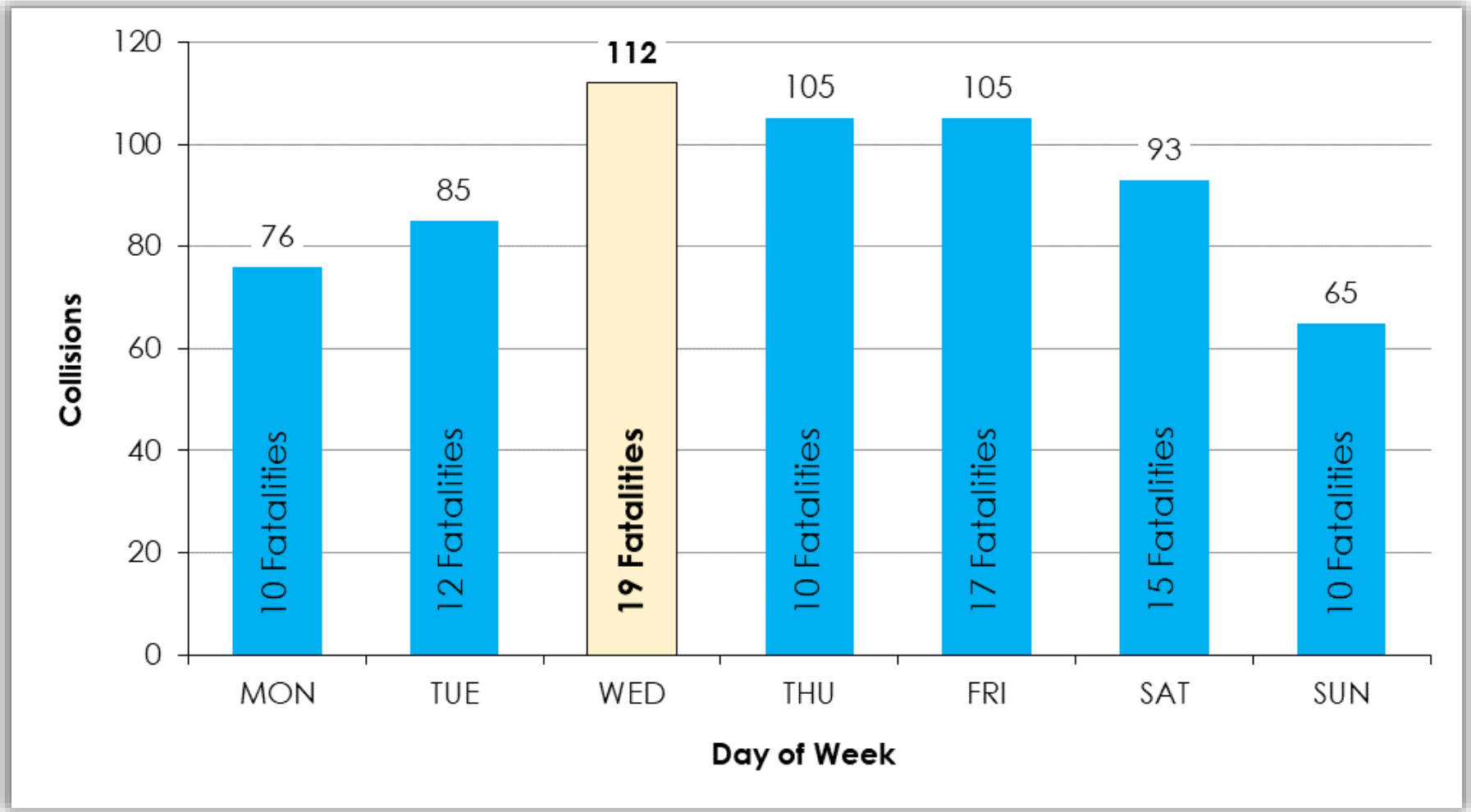
The Hawk Signal at 3rd Avenue and Latham Street was Activated in June of 2021.

Pedestrian Related Collisions by Time of Day and Age Group

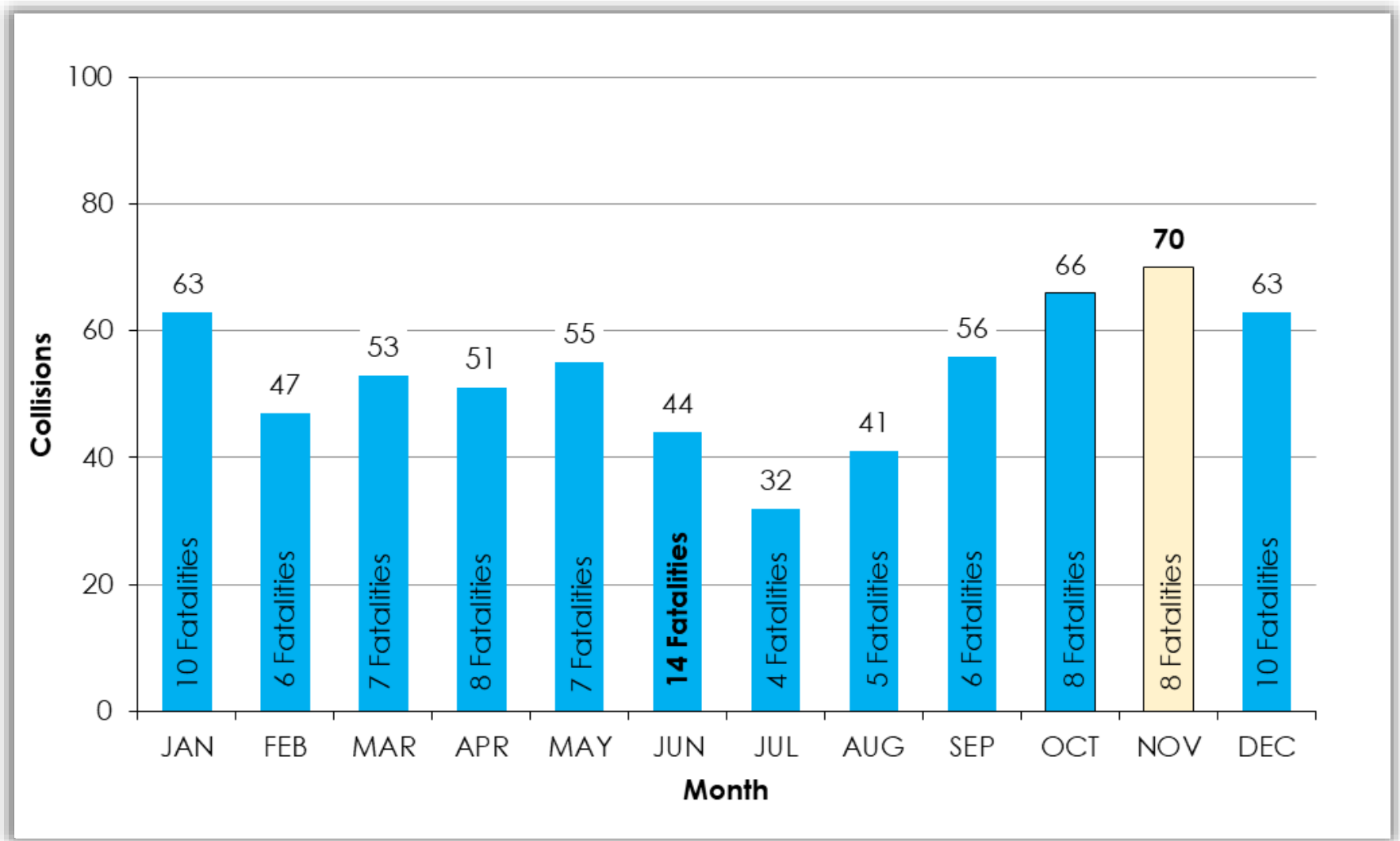
Note:
Between 6 PM and 10 PM there were a total of 45 pedestrian fatalities, or 48% of all pedestrian fatalities



Pedestrian Related Collisions by Day of Week



Pedestrian Related Collisions by Month



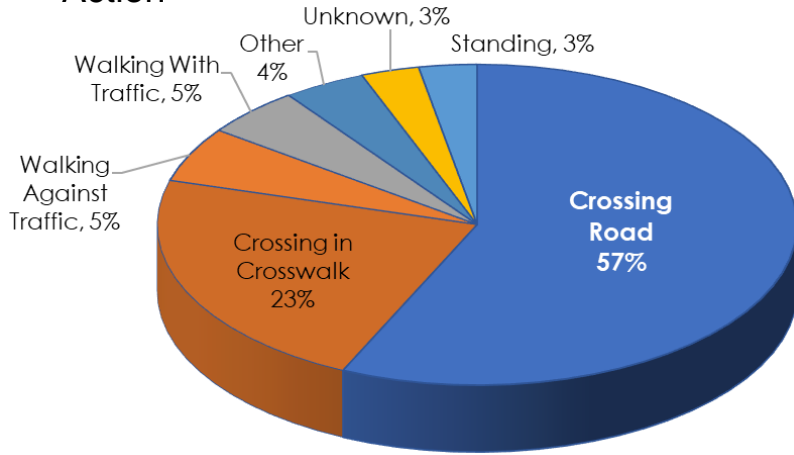


The Hawk Signal at 1215 South 7th Avenue was Activated in October of 2021.

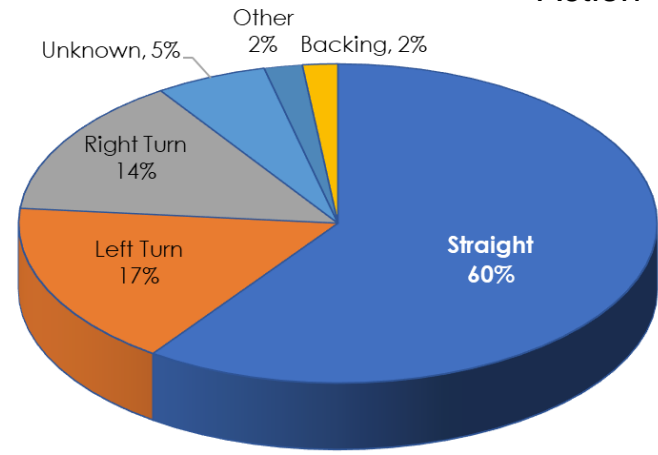
Pedestrian Related Collisions

Actions and Violations

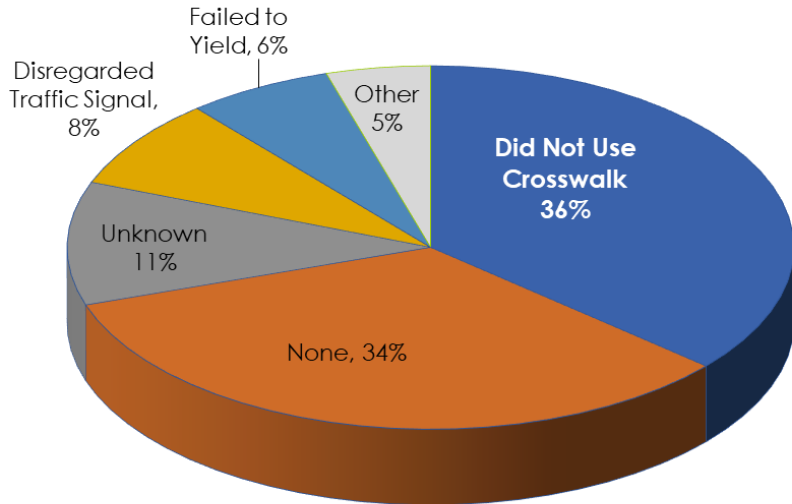
Pedestrian Action



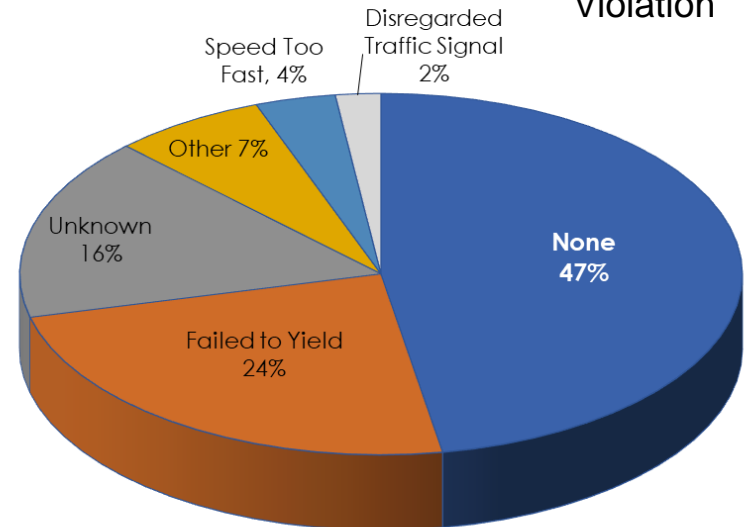
Driver Action



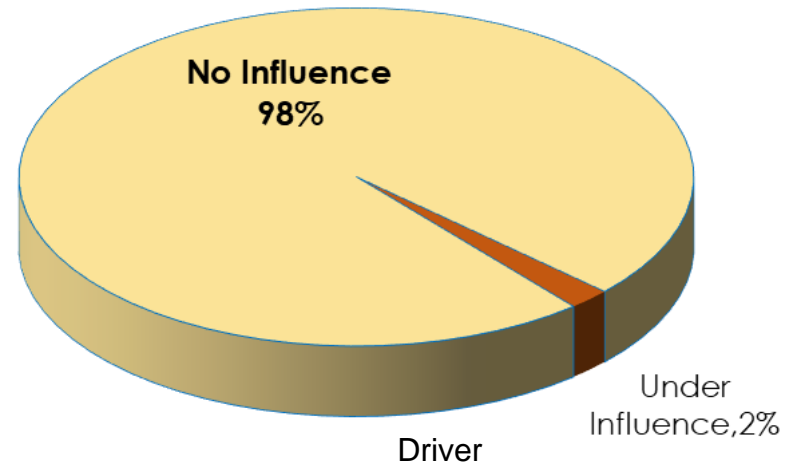
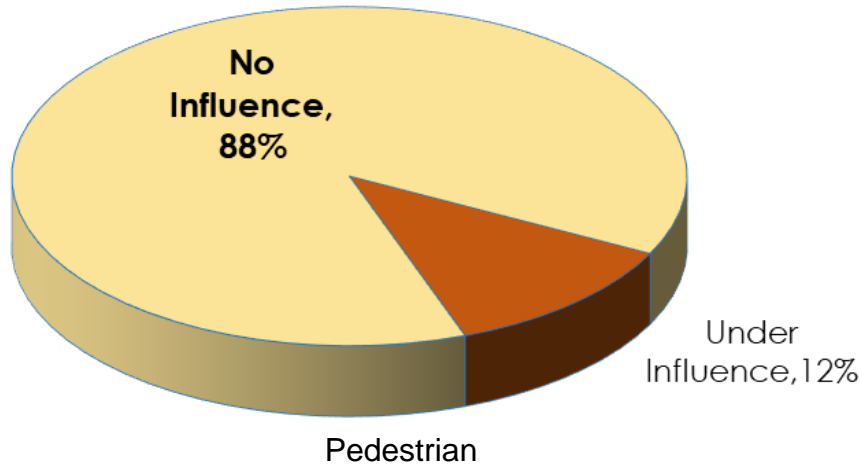
Pedestrian Violation



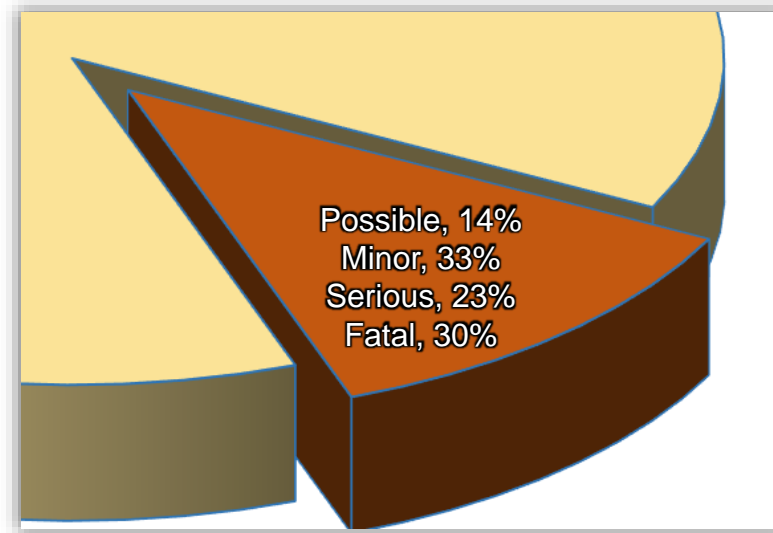
Driver Violation



Impairment of Pedestrians and Drivers

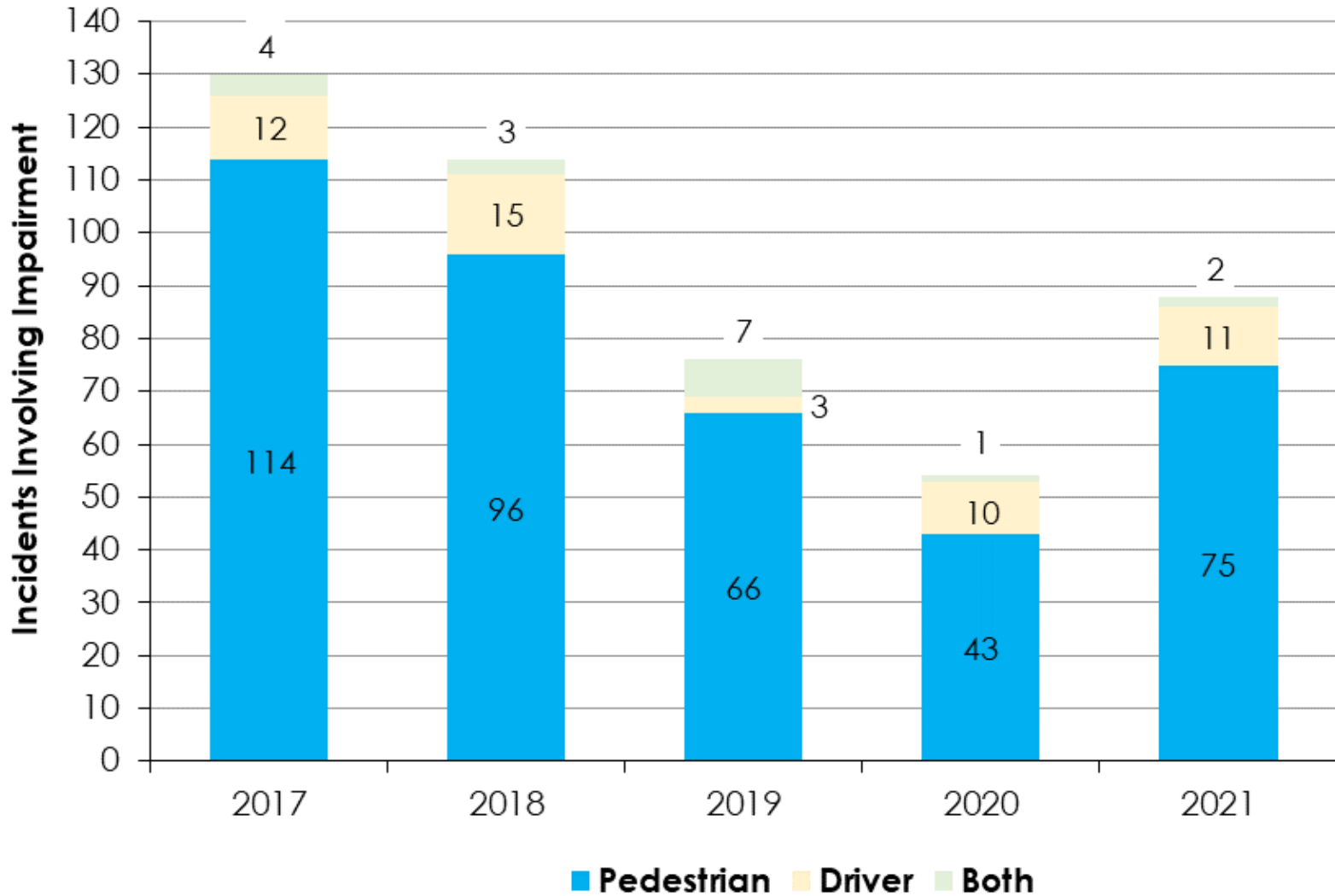


Ratio
Male : 3.8
Female : 1

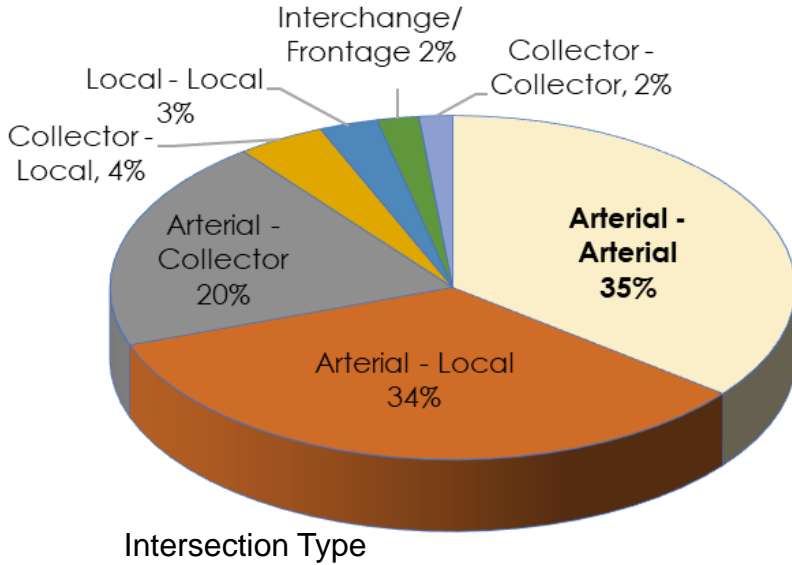


Note:
Fatal (23) and seriously injured (18) pedestrians combined make up 53% of all pedestrians under the influence of drugs or alcohol.

Drug or Alcohol Use in Pedestrian Related Collisions



Collisions by Street Classification

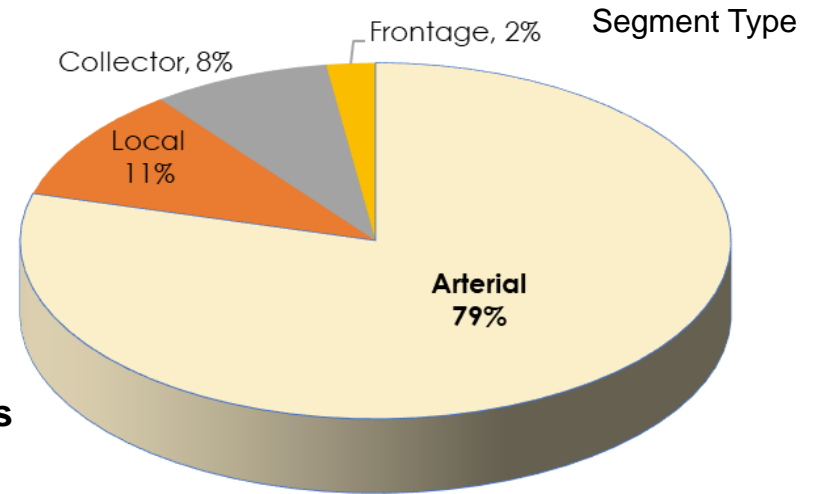


Intersection Related
79%
of all pedestrian related collisions

At or Near Intersection
(within 150 feet from intersection)

Non-Intersection Related
21%
of all pedestrian related collisions

Away from Intersection
(more than 150 feet from intersection)



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.

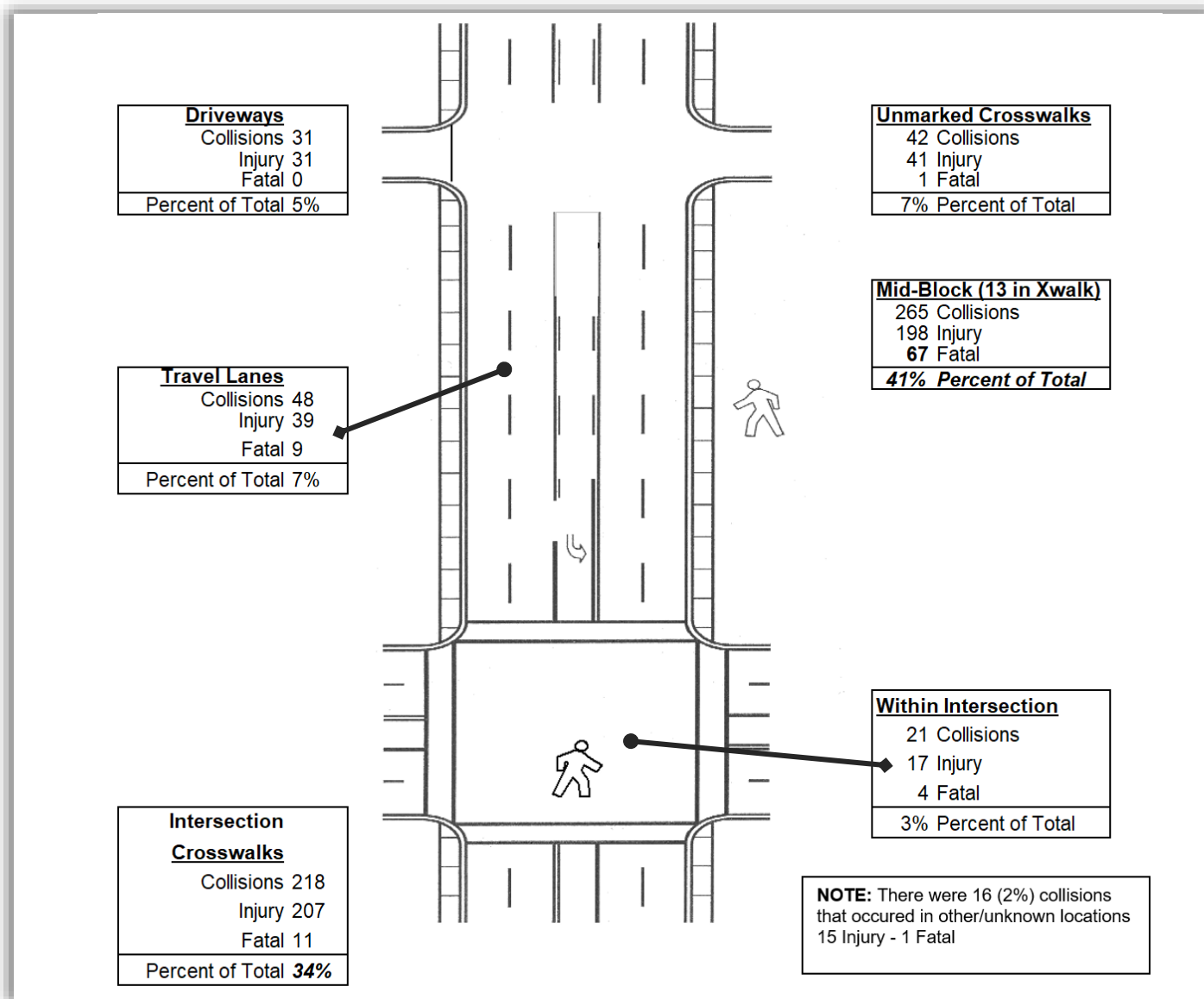
Collector streets are typically the half-mile-line streets such as 39th Ave, 28th St, Roeser Rd, and Maryland Ave as defined on the Phoenix Street Classification Map.

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.

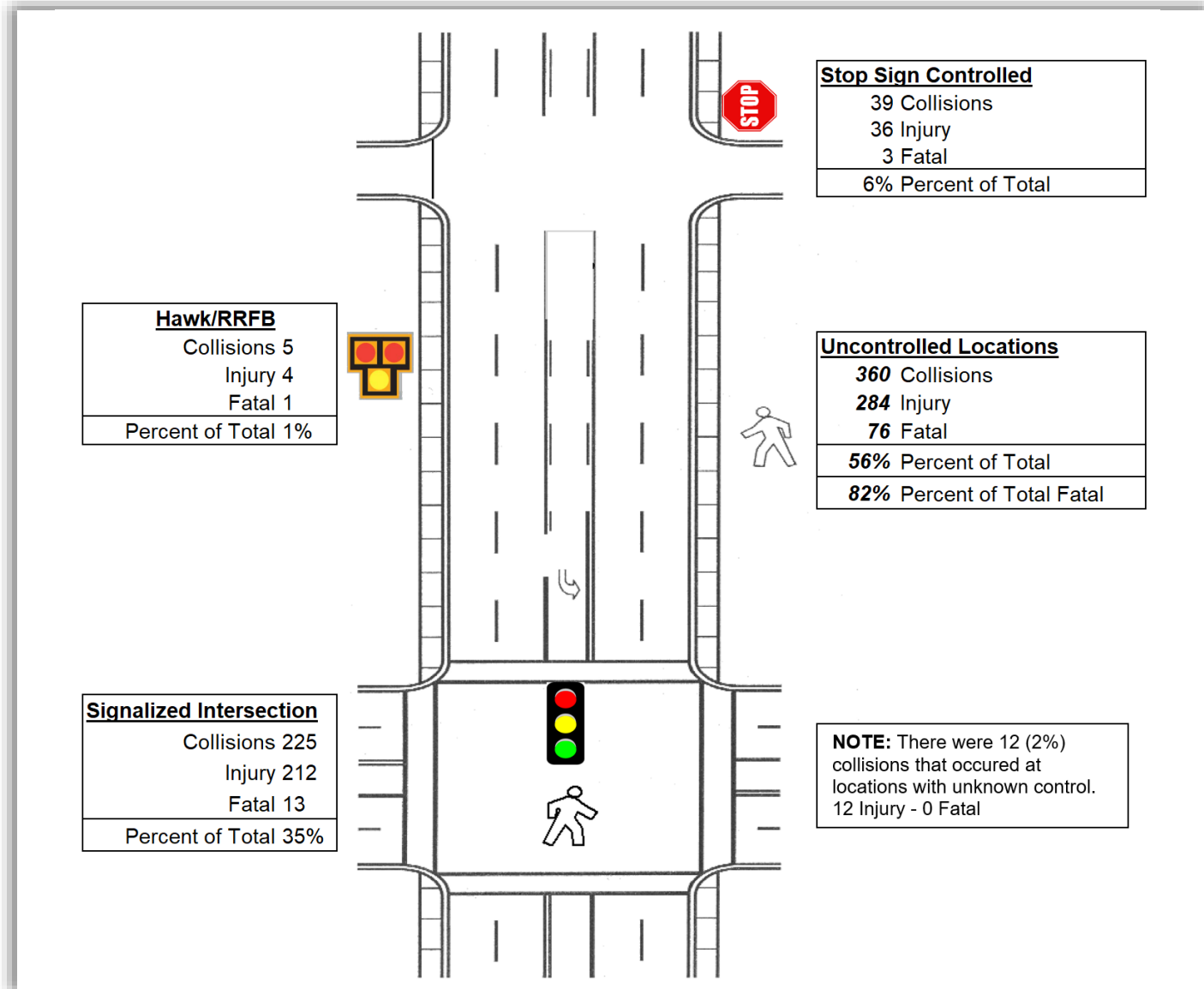


The Hawk Signal at 7th Avenue and Cocopah Street was Activated in December of 2021.

Collisions by Location Type

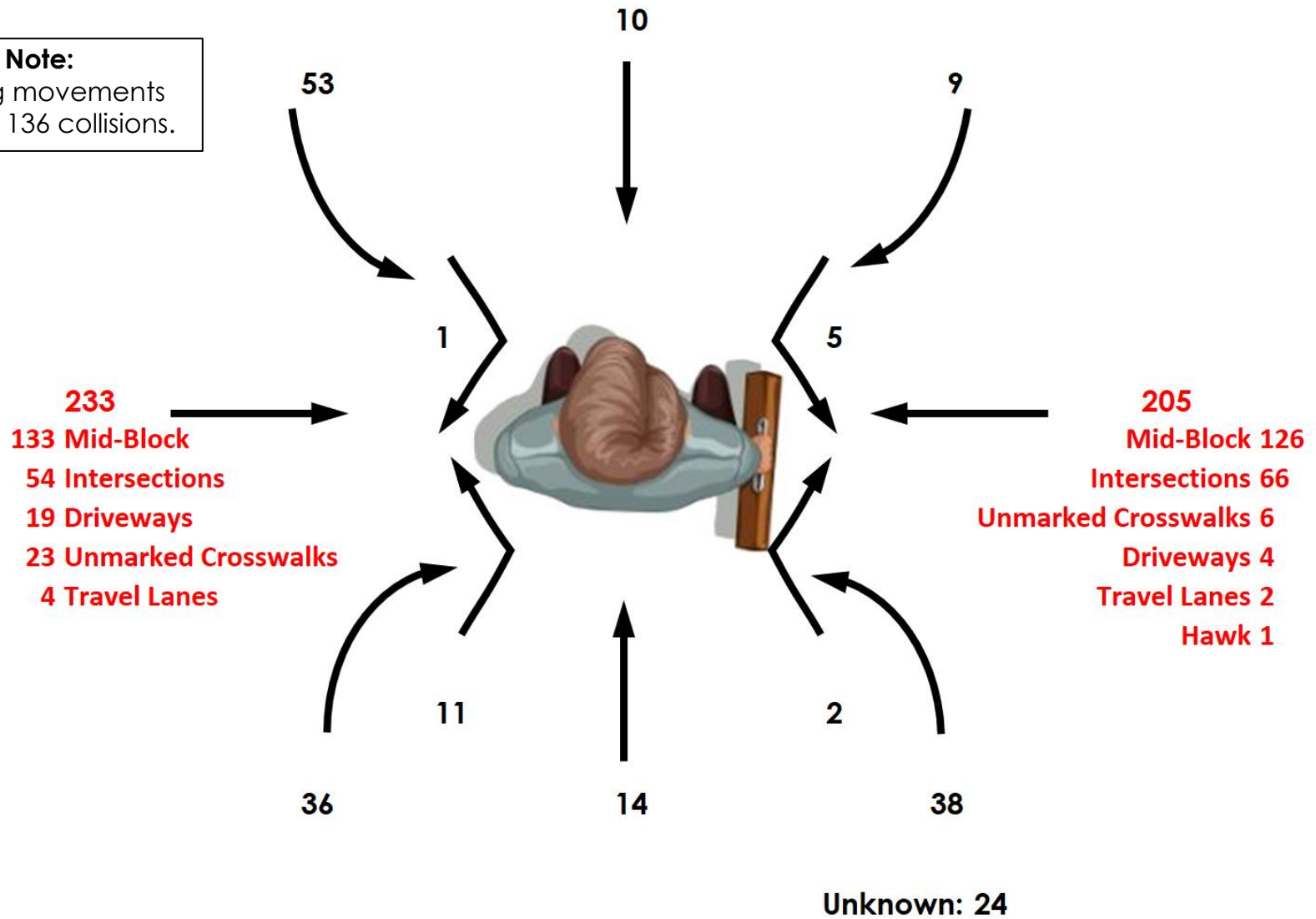


Collisions by Traffic Control Type



Driver Action Prior to Impact

Note:
Turning movements
totaled 136 collisions.



Man Vectors by Vecteezy [vecteezy.com]



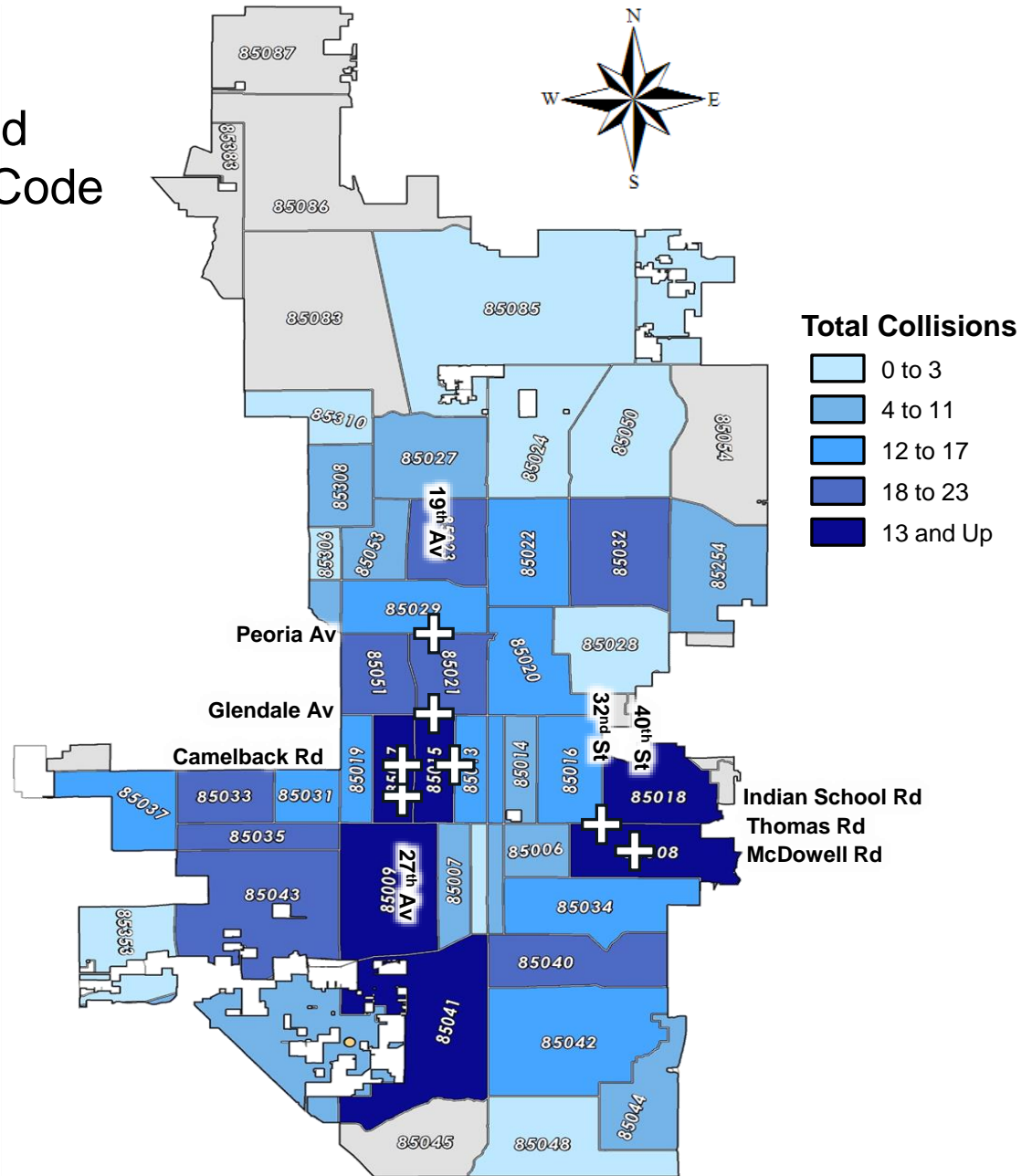
The Hawk Signal at 6104 N 27th Avenue was Activated in December of 2021.

Total Pedestrian Related Collisions by Location Zip Code

Top Intersections*

Intersection	Count
19th Av & Peoria Av	7
27th Av & Camelback Rd	6
40th St & McDowell Rd	5
27th Av & Indian School Rd	4
32nd St & Thomas Rd	4
19th Av & Glendale Av	4
15th Av & Camelback Rd	4

*Only collisions within 150 feet of the intersection are included.



Acknowledgements

The 2021 Pedestrian Related Collision Summary documents the collisions involving pedestrians in the City of Phoenix throughout the 2021 calendar year. Collision data utilized for this report was acquired through Phoenix Police records and the database maintained by the Arizona Department of Transportation (ADOT) known as Safety Data Mart (SDM). The 2021 Phoenix Pedestrian Related Collision Summary was prepared by Traffic Safety Section staff Jacob Martinez (Chief 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 \$2,000.

Cover photo of Phoenix City Hall and Pedestrian Pushbutton were taken by various employees or consultants of the City of Phoenix Street Transportation Department.

Some pictures of the roadway facilities are screen captures from Google Street-View, all other photographs used were taken by various employees or consultants of the City of Phoenix Street Transportation Department.

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Questions?

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