

Streets PHX

STREET TRANSPORTATION DEPARTMENT

Annual Collision Trends

When Do Collisions Occur

Where Do Collisions Occur

How Do Collisions Occur

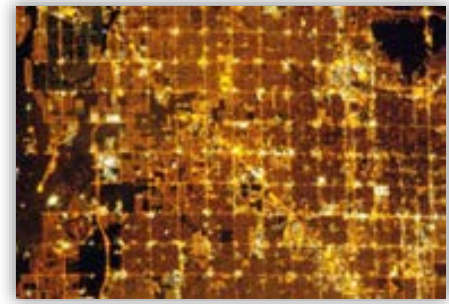
Motorcyclist Collisions

Pedestrian Collisions

Bicycle Collisions

These icons have been designed using images from Shutterstock.com

# 2022 City of Phoenix Traffic Collision Summary



# 2022 City of Phoenix Quick Collision Facts:

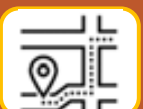
Annual Collision Trends



When Do Collisions Occur



Where Do Collisions Occur



How Do Collisions Occur



Motorcyclist Collisions



Pedestrian Collisions



Bicycle Collisions



## Preface:

The raw data used for this report was obtained from the Arizona Department of Transportation and processed utilizing a custom application, coded by Y2K Engineering for the City of Phoenix - Street Transportation Department. The data included in this year's report may vary from trends and statistics that have been presented in prior years. For more information on the modifications made to the selection criteria used to complete this report, please make a request to the [Office of Roadway Safety](#).

It must be noted that data following the COVID-19 epidemic years may have altered trends due to the unusual societal factors affecting typical roadway user behavior.

Collision Total

24,489

Pedestrian Collisions

770

Bicycle Collisions

289

Total Injuries

9,555

Total Fatalities

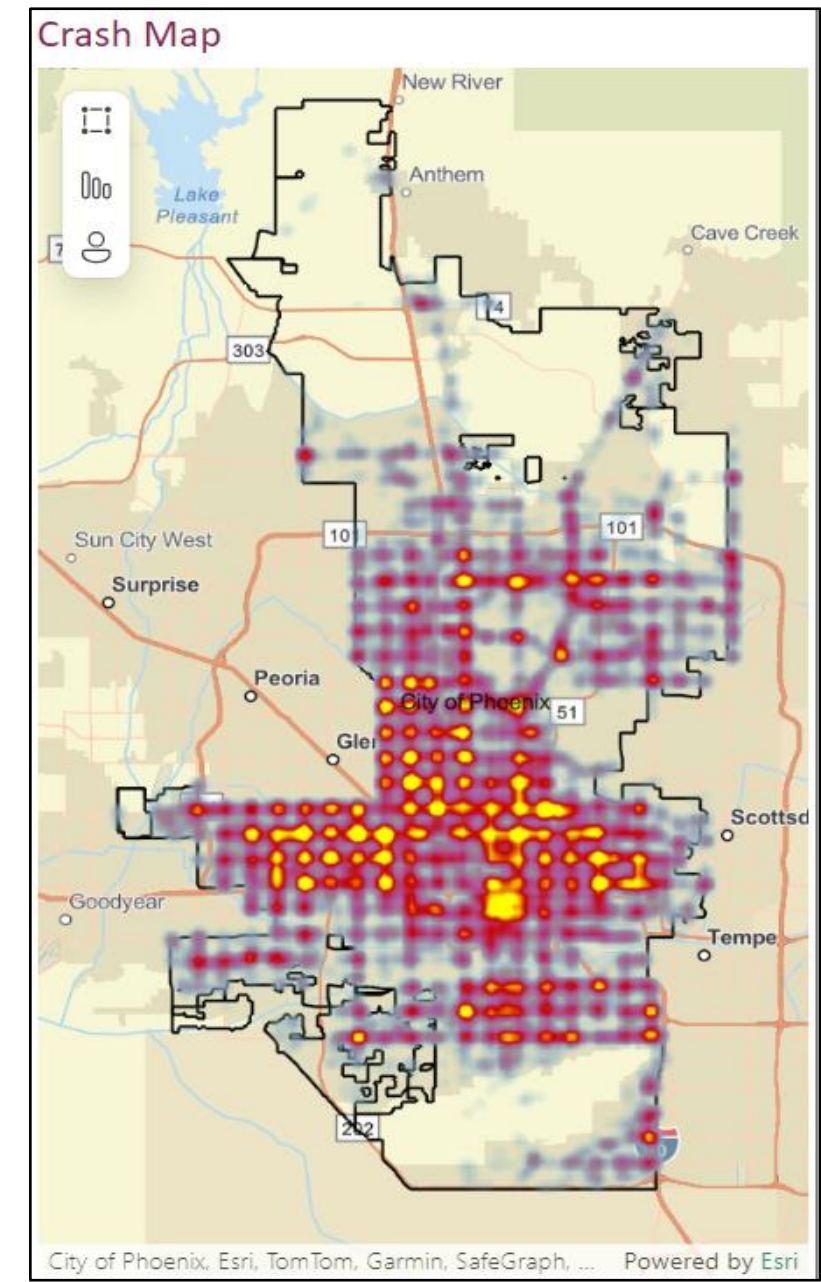
253

Total Hit and Runs

3,838

Total Work-Zone Related

148



Total Collisions  
24,489

# 2022 City of Phoenix Quick Collision Facts:

Annual Collision Trends



When Do Collisions Occur



Where Do Collisions Occur



How Do Collisions Occur



Motorcyclist Collisions



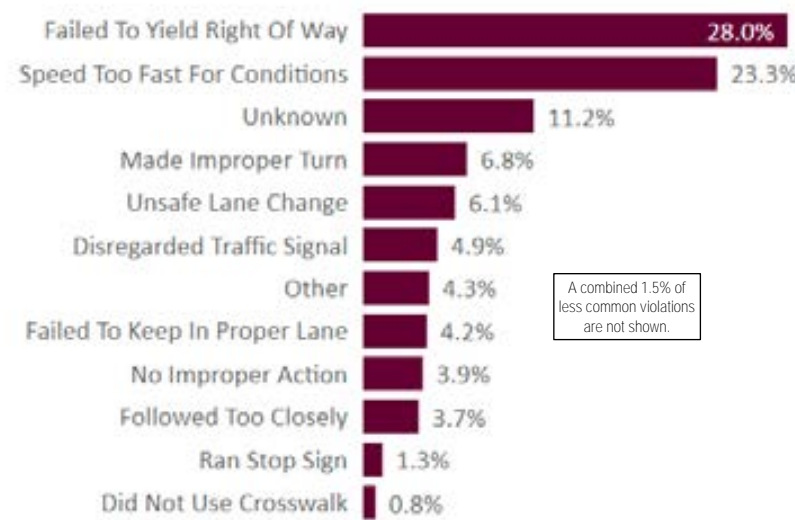
Pedestrian Collisions



Bicycle Collisions



## Unit 1 Top Violations



A combined 1.5% of less common violations are not shown.

## Speed Related



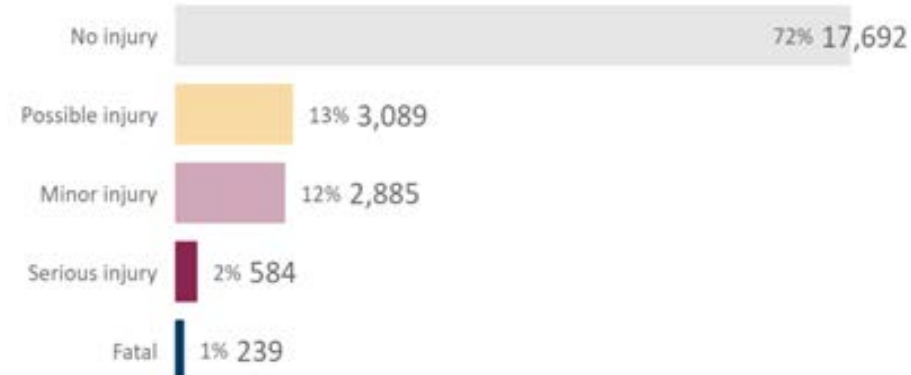
## Hit and Run



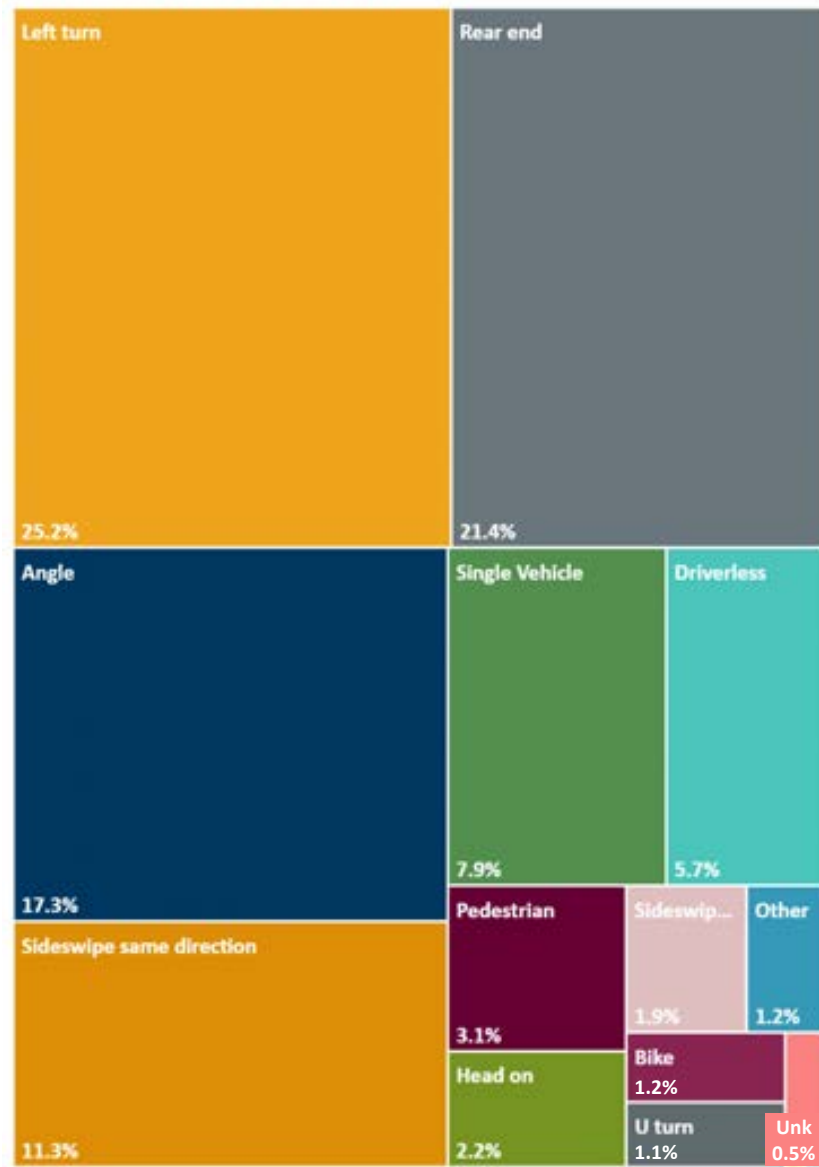
## Driver 1 Impaired



## Collisions by Injury Severity



## Collision Manner



Total Collisions  
24,489



Streets PHX

STREET TRANSPORTATION DEPARTMENT

Annual Collision Trends

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Motorcyclist Collisions

Pedestrian Collisions

Bicycle Collisions

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# Annual Collision Trends

Total Collisions by Year

Year	Total Collisions
2018	28,828
2019	29,678
2020	23,364
2021	26,359
2022	24,489

Total Injury Collisions by Year

Year	Total Injury Collisions
2018	8,003
2019	7,761
2020	5,895
2021	6,855
2022	6,558

Total Fatal Collisions by Year

Year	Total Fatal Collisions
2018	201
2019	167
2020	169
2021	234
2022	239

Total Collisions

24,489

## Arizona Crash Facts

Note: Arizona data comes from the 2022 Arizona Crash Facts Summary (ADOT)

Statewide Total Collisions

Year	Statewide Total Collisions
2018	127,749
2019	131,101
2020	99,107
2021	121,506
2022	119,991

Statewide Injury Collisions

Year	Statewide Injury Collisions
2018	36,711
2019	37,346
2020	28,728
2021	35,277
2022	35,878

Statewide Fatal Collisions

Year	Statewide Fatal Collisions
2018	918
2019	909
2020	967
2021	1,076
2022	1,178

←

2022 Phoenix Traffic Collision Summary

→

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# When Do Collisions Occur?

## Annual Collision Trends



## When Do Collisions Occur



## Where Do Collisions Occur



## How Do Collisions Occur



## Motorcyclist Collisions



## Pedestrian Collisions

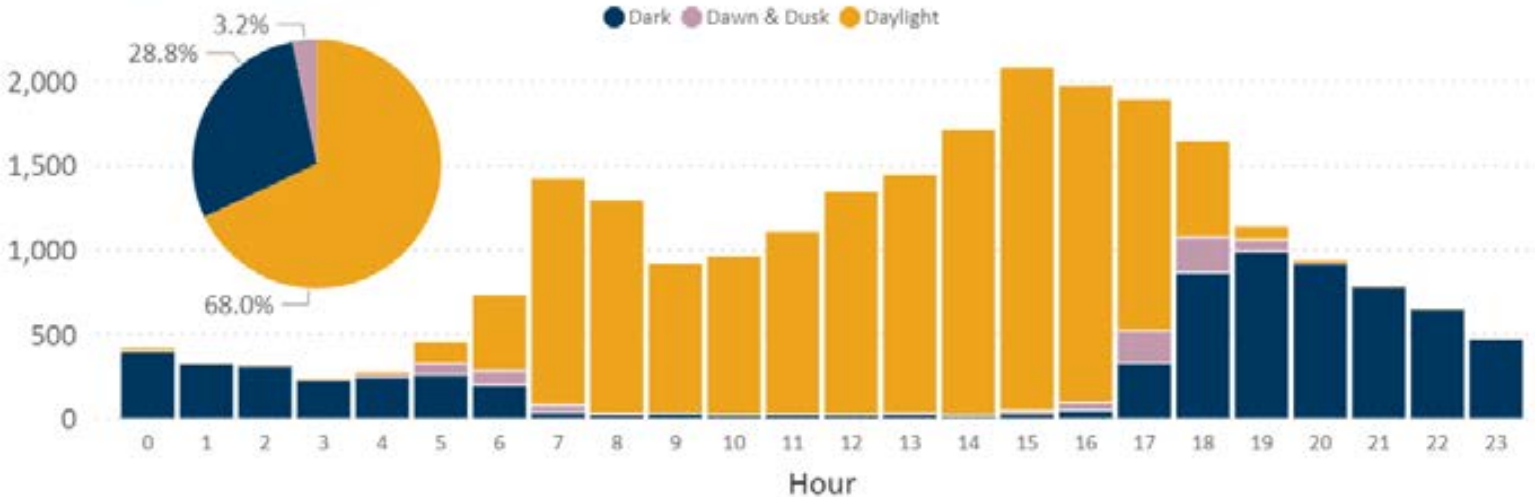


## Bicycle Collisions

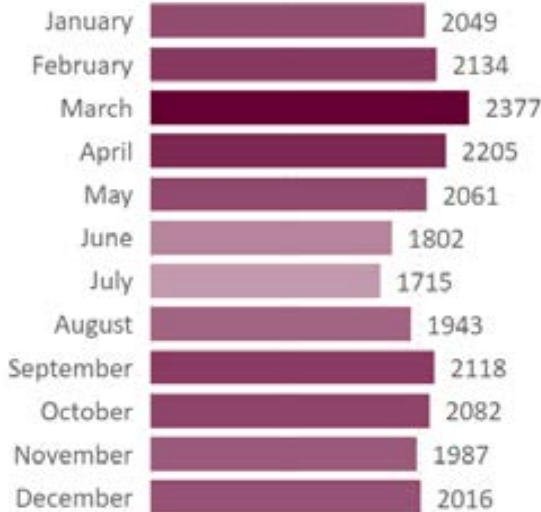


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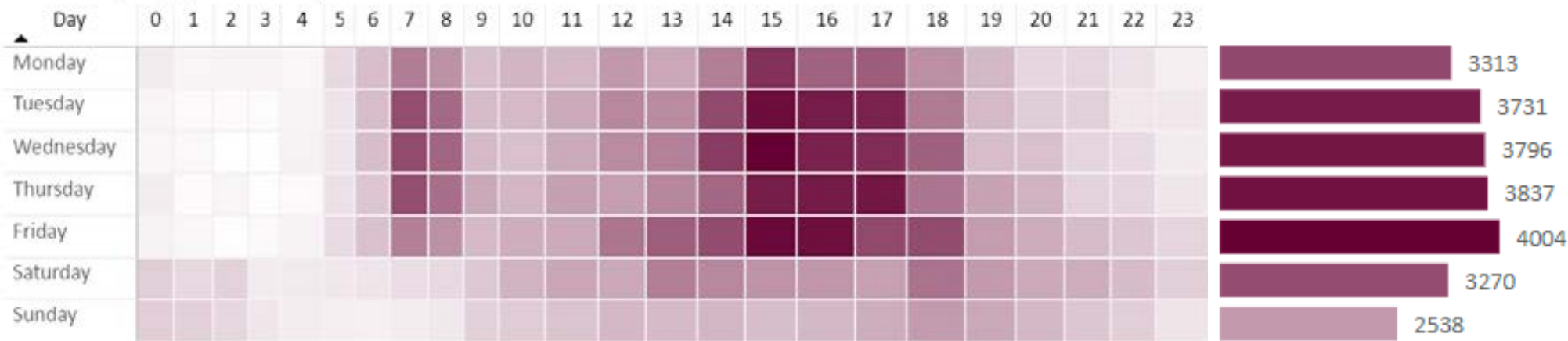
### Collisions by Time of Day and Light Condition



### Collisions by Month



### Collision Frequency by Hour and Day of the Week



Total Collisions

24,489



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Annual Collision Trends

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Motorcyclist Collisions

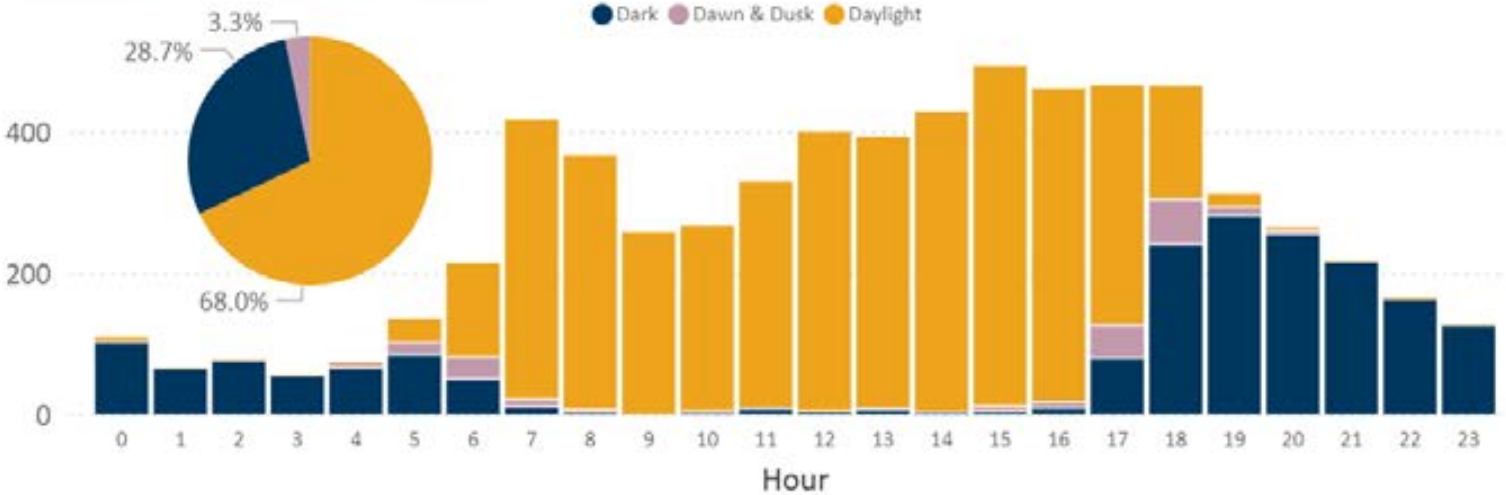
Pedestrian Collisions

Bicycle Collisions

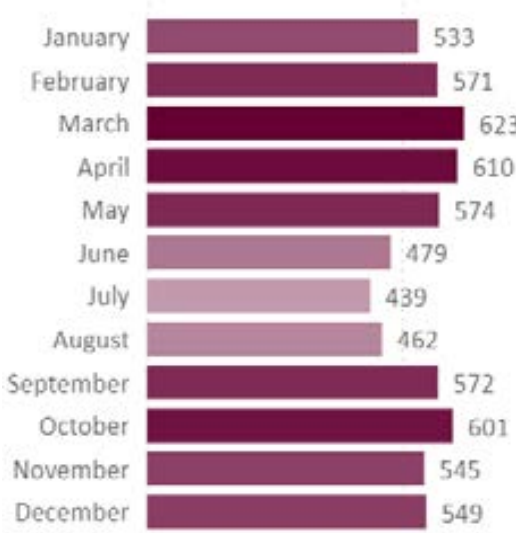
These icons have been designed using Images from Flaticon.com

# When Do Injury Collisions Occur?

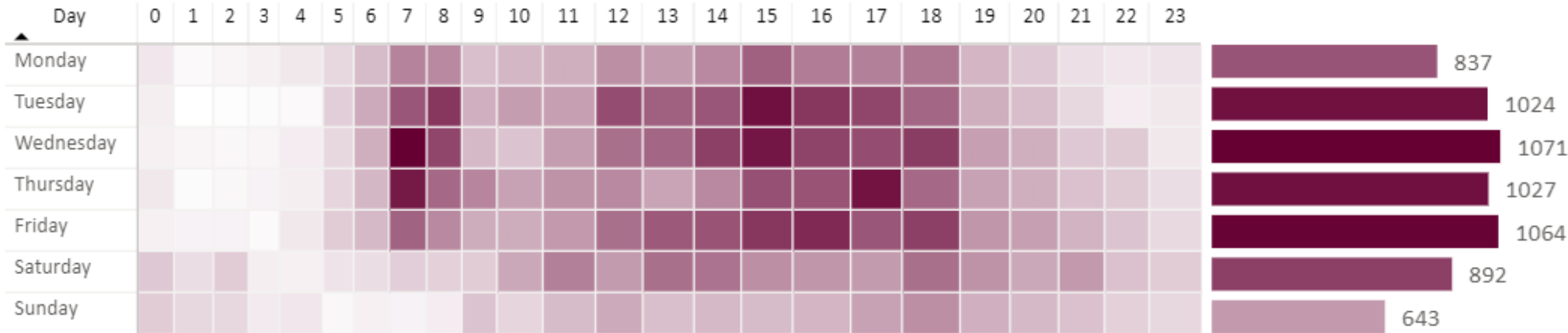
Collisions by Time of Day and Light Condition



Injury Collisions by Month



Injury Collisions Frequency by Hour and Day of the Week



Injury Collisions  
6,558



# When Do Fatal Collisions Occur?

Annual Collision Trends

When Do Collisions Occur

Where Do Collisions Occur

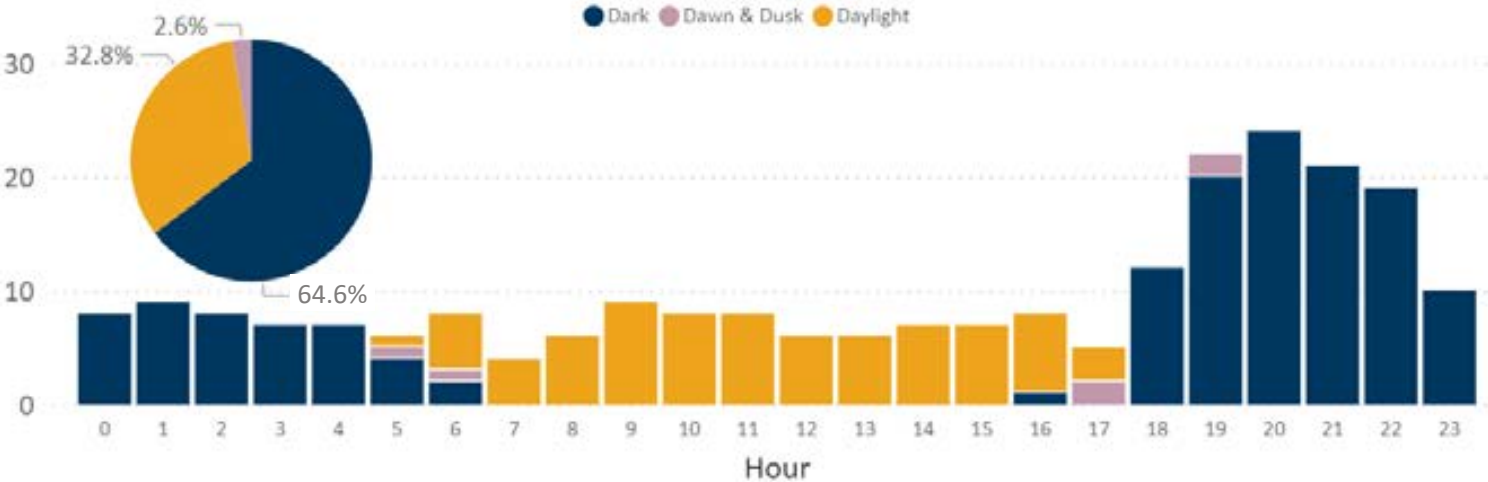
How Do Collisions Occur

Motorcyclist Collisions

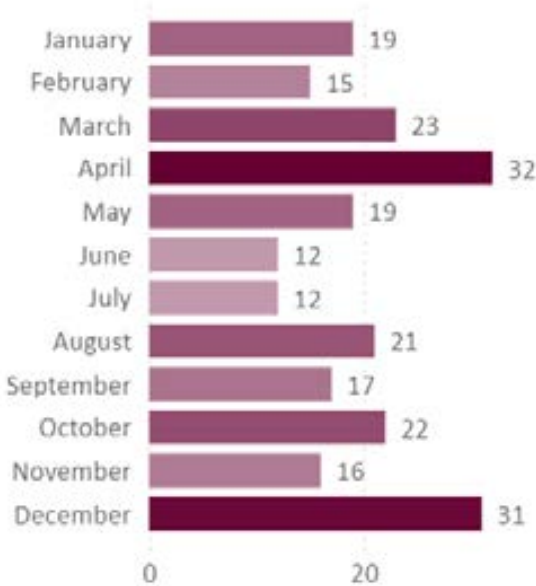
Pedestrian Collisions

Bicycle Collisions

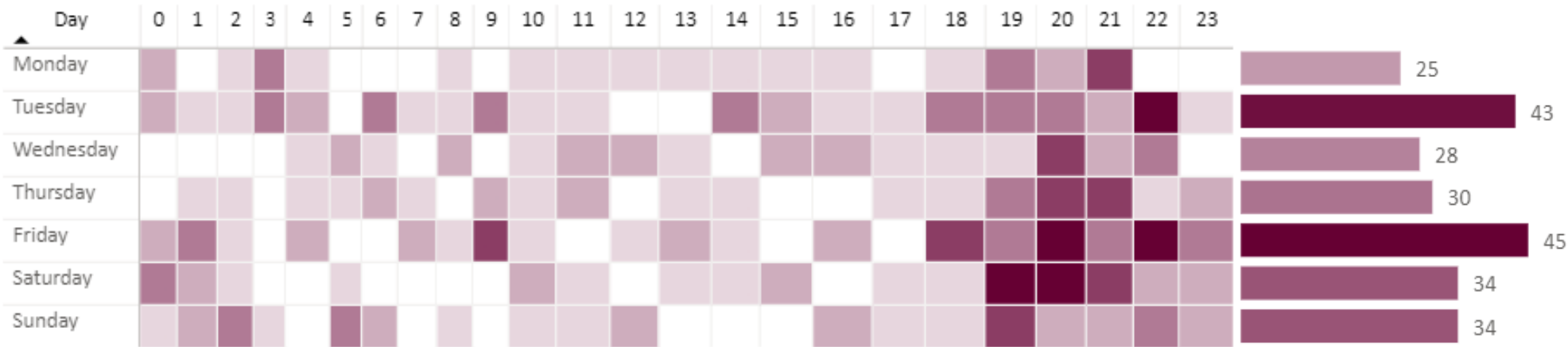
Collisions by Time of Day and Light Condition



Fatal Collisions by Month



Fatal Collision Frequency by Hour and Day of the Week





# Where Do Collisions Occur?

Annual Collision Trends



When Do Collisions Occur



Where Do Collisions Occur



How Do Collisions Occur



Motorcyclist Collisions



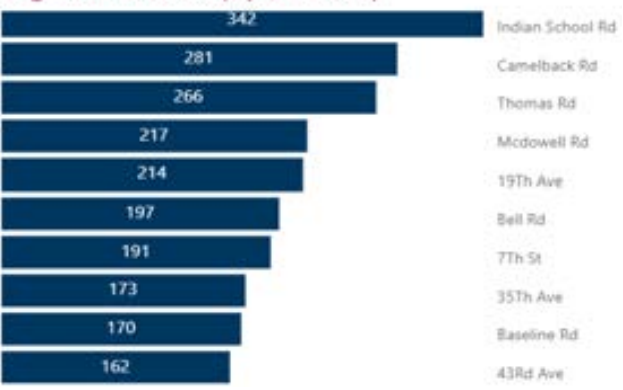
Pedestrian Collisions



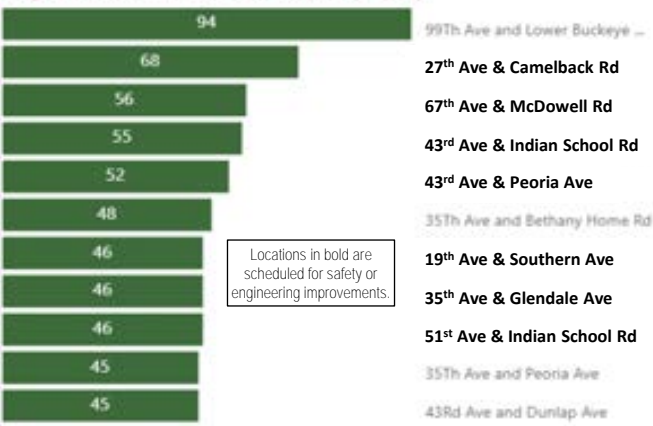
Bicycle Collisions



Segment Crashes (by On Road)

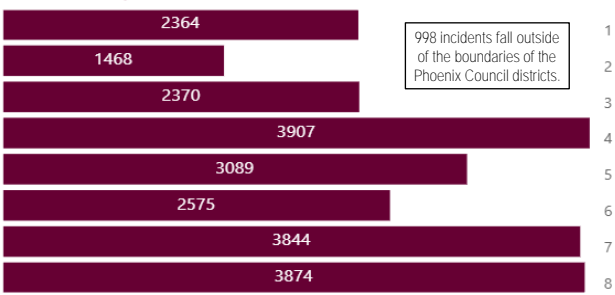


High Crash Intersections (150 feet)



Locations in bold are scheduled for safety or engineering improvements.

Crashes by Council District

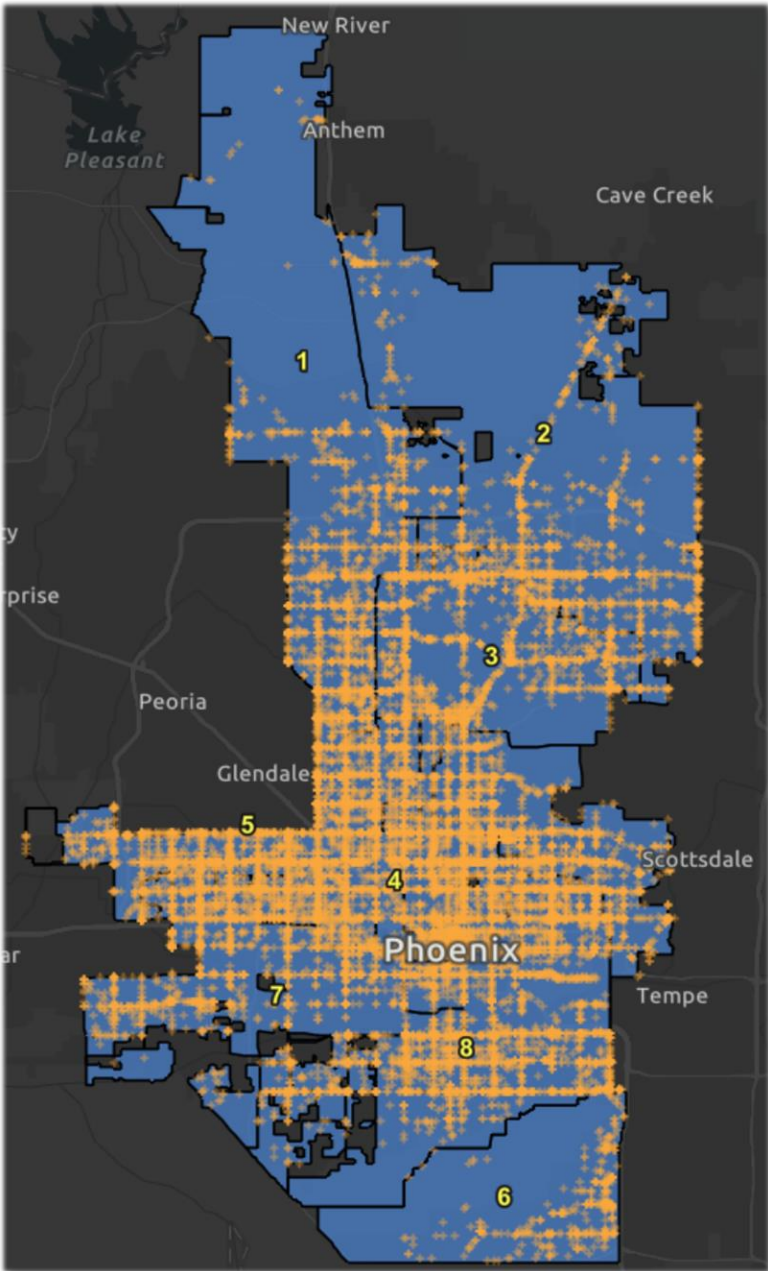
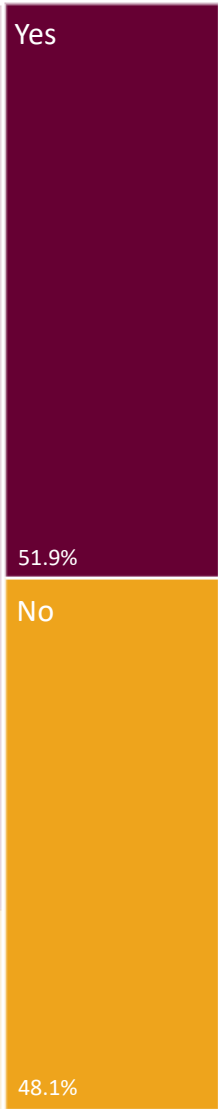


998 incidents fall outside of the boundaries of the Phoenix Council districts.

Arterial Crash



Traffic Signal Device Presence



Total Collisions  
24,489



# Where Do Fatal Collisions Occur?

## Annual Collision Trends



## When Do Collisions Occur



## Where Do Collisions Occur



## How Do Collisions Occur



## Motorcyclist Collisions



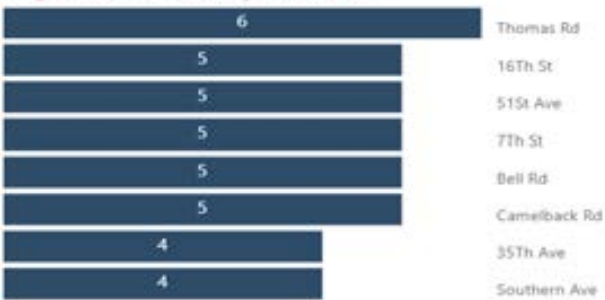
## Pedestrian Collisions



## Bicycle Collisions



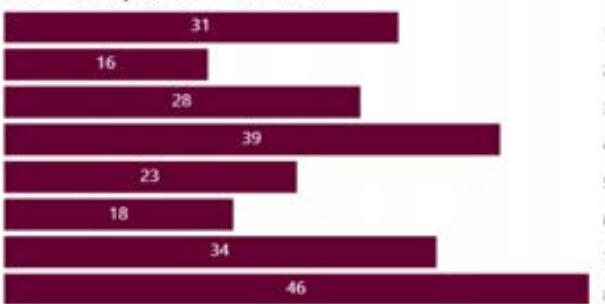
Segment Crashes (by On Road)



High Crash Intersections (150 feet)



Crashes by Council District



## Arterial Crash

Yes

92.0%

No

8.0%

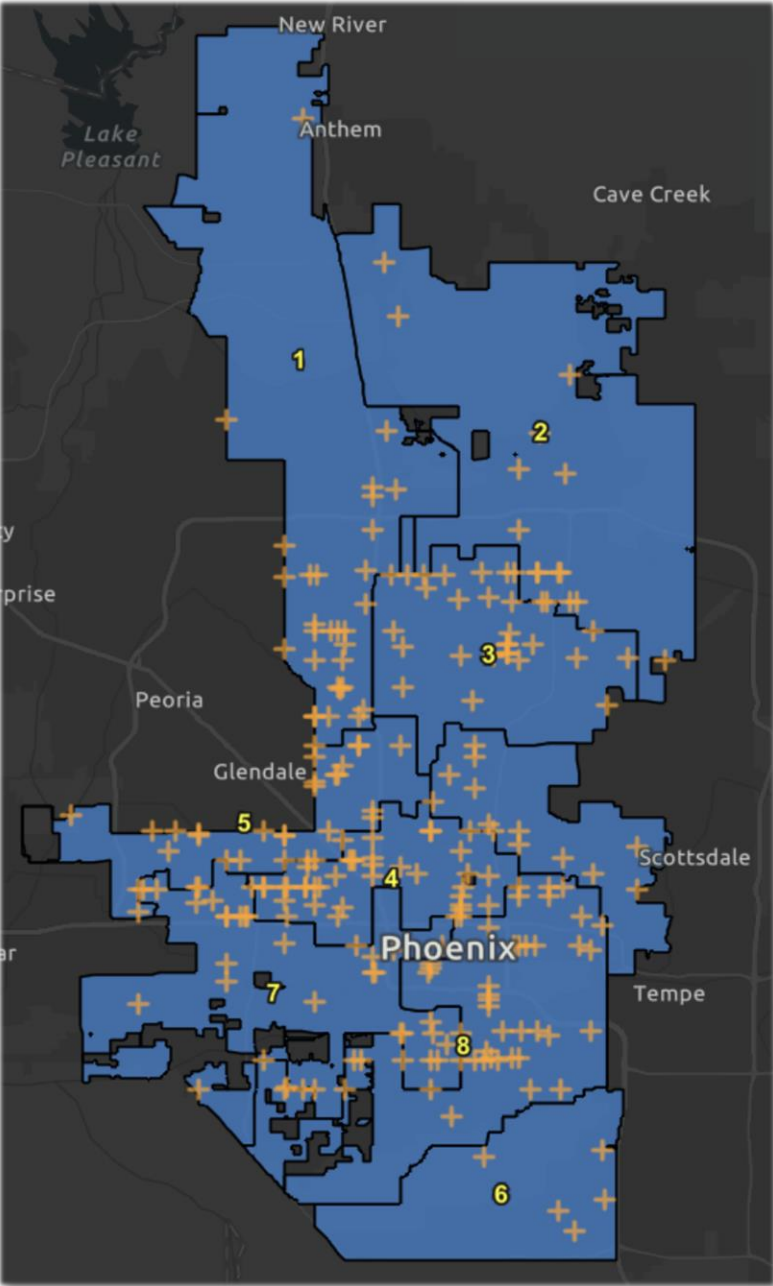
## Traffic Signal Device Presence

No

56.2%

Yes

43.8%



Fatal Collisions  
239

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Motorcyclist Collisions

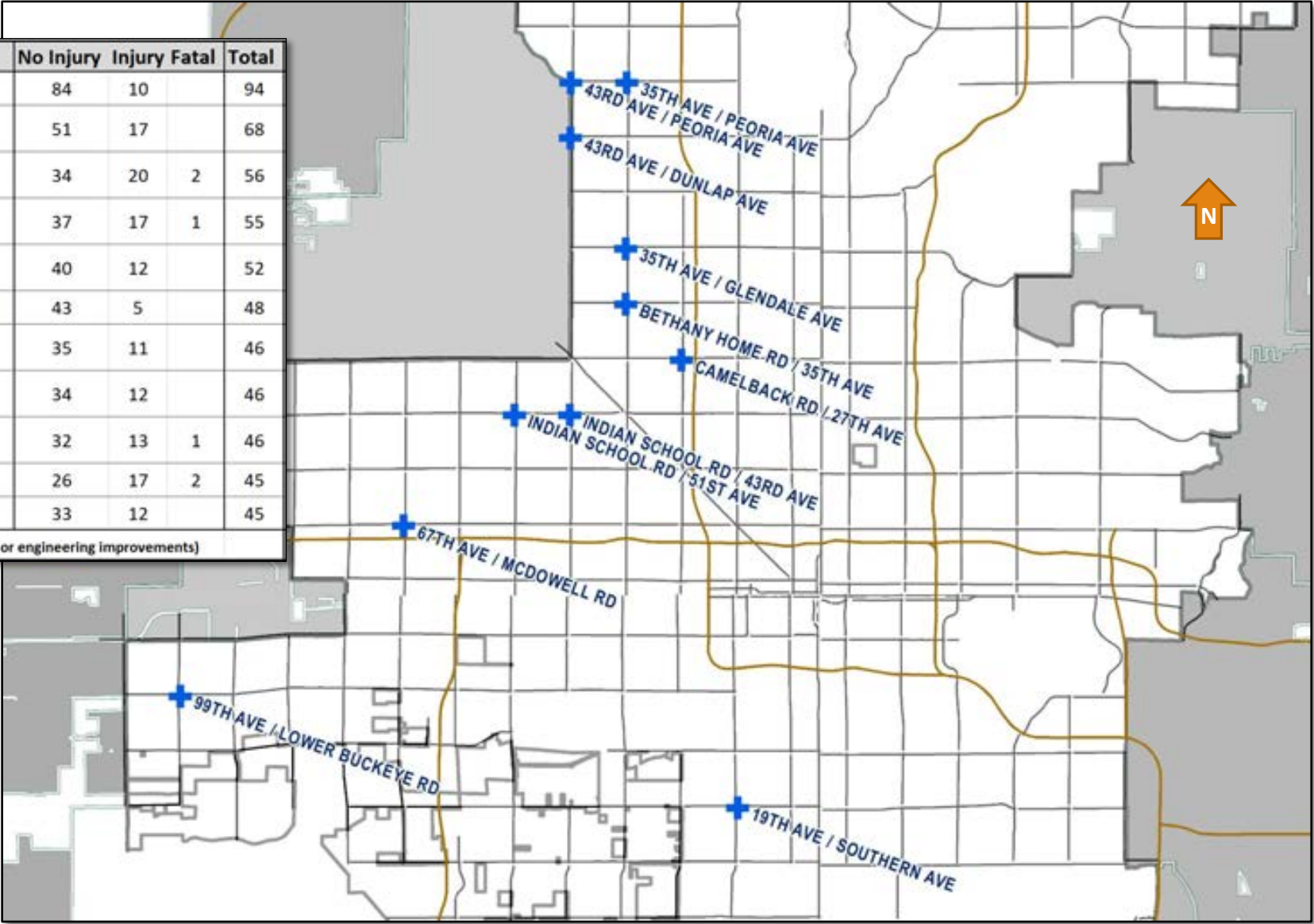
Pedestrian Collisions

Bicycle Collisions

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Locations with the Highest Number of Collisions 2022

Intersection	No Injury	Injury	Fatal	Total
99th Ave and Lower Buckeye Rd	84	10		94
27th Ave and Camelback Rd (Traffic Signal Modernization)	51	17		68
67th Ave and McDowell Rd (Traffic Signal Modernization)	34	20	2	56
43rd Ave and Indian School Rd (ReVISIONing Indian School Road)	37	17	1	55
43rd Ave and Peoria Ave (Median Offset Improvements)	40	12		52
35th Ave and Bethany Home Rd	43	5		48
51st Ave and Indian School Rd (ReVISIONing Indian School Road)	35	11		46
35th Ave and Glendale Ave (Nearby HAWK Install at 37th Ave)	34	12		46
19th Ave and Southern Ave (Traffic Signal Modernization)	32	13	1	46
43rd Ave and Dunlap Ave	26	17	2	45
35th Ave and Peoria Ave	33	12		45
(Locations in bold are scheduled for safety or engineering improvements)				



Only collisions within 150' were counted.

# How Do Collisions Occur?

## Annual Collision Trends



## When Do Collisions Occur



## Where Do Collisions Occur



## How Do Collisions Occur



## Motorcyclist Collisions



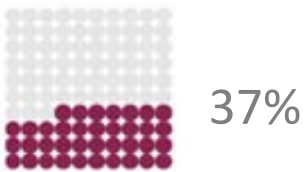
## Pedestrian Collisions



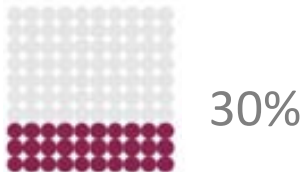
## Bicycle Collisions



### Driver Distraction



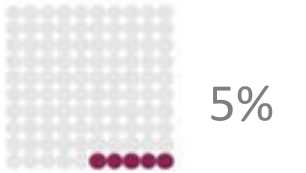
### Speeding



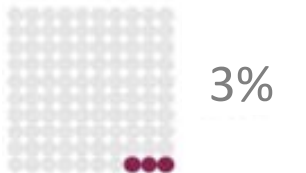
### Hit and Run



### Impaired Driver 1

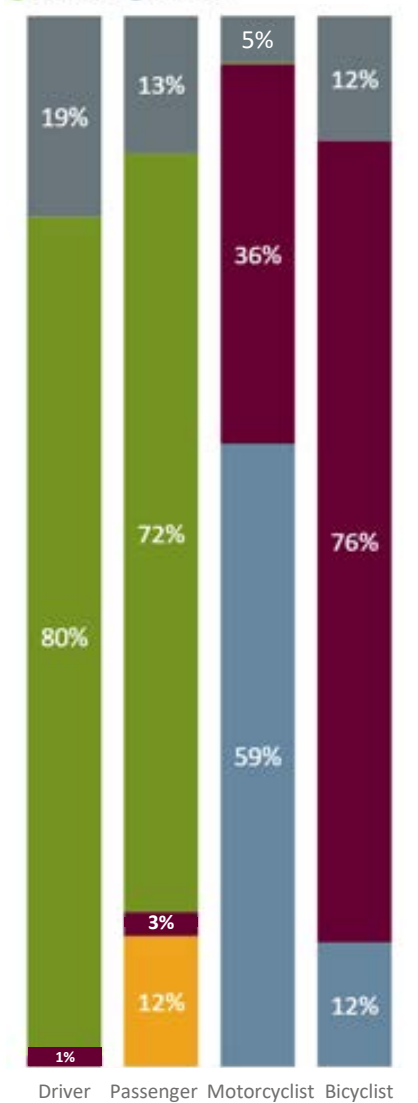


### Unrestrained Driver

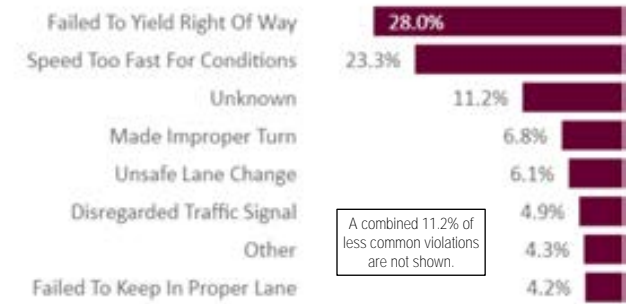


### Safety Device Use by Person Type

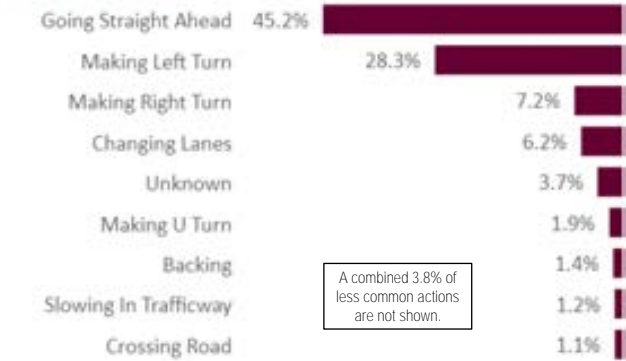
Child Restraint (Orange) Helmet (Blue) None Used (Dark Purple) Seat belt (Green) Unknown (Grey)



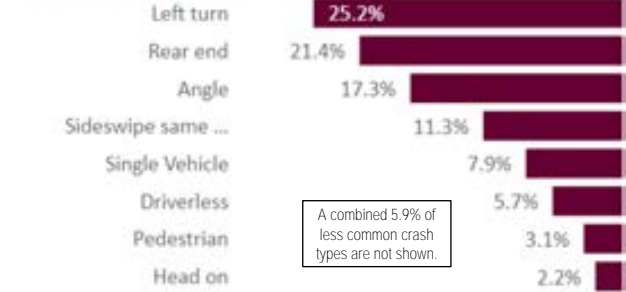
### Unit 1 Violation



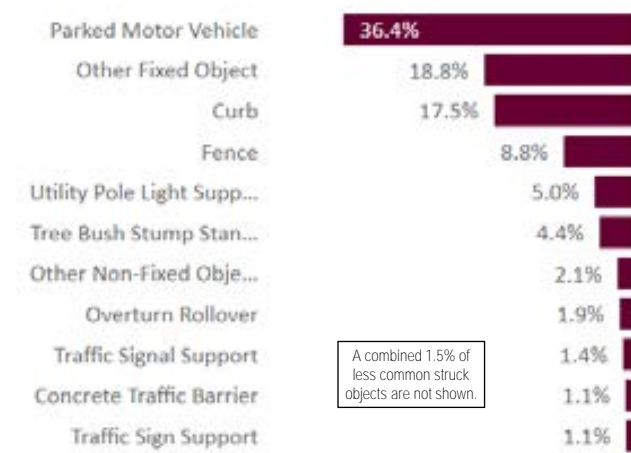
### Unit 1 Action



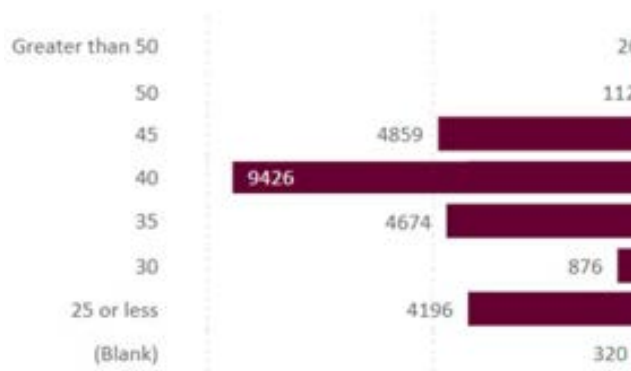
### Collision Manner



### First Harmful Event (Single Vehicle/Driverless)



### Posted Speed Limit (On Road)



Total Collisions  
24,489



# How Do Injury Collisions Occur?

## Annual Collision Trends



## When Do Collisions Occur



## Where Do Collisions Occur



## How Do Collisions Occur



## Motorcyclist Collisions



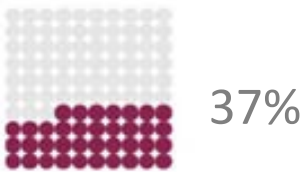
## Pedestrian Collisions



## Bicycle Collisions



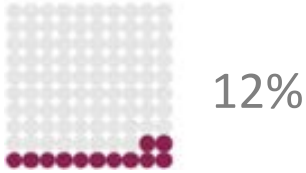
## Driver Distraction



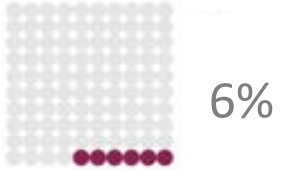
## Speeding



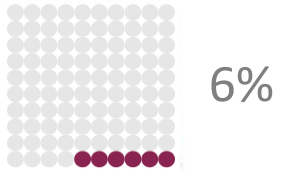
## Hit and Run



## Impaired Driver 1

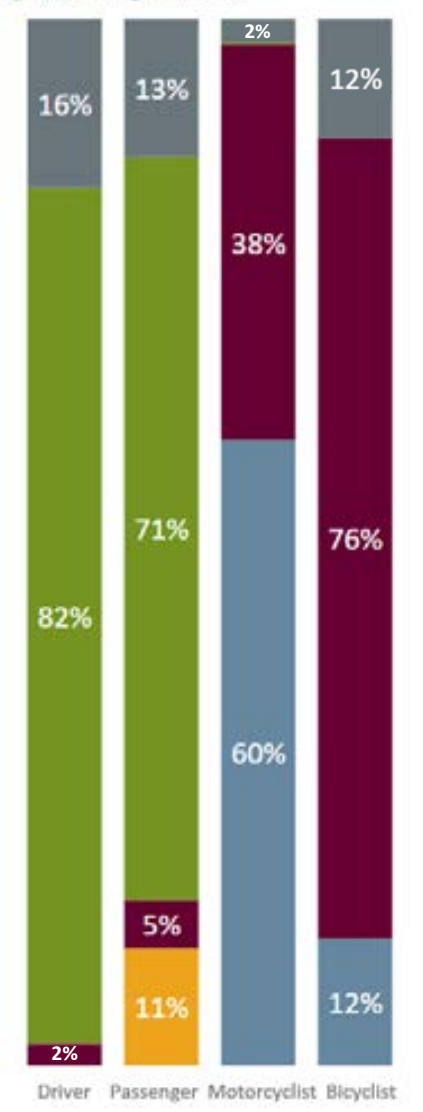


## Unrestrained Driver

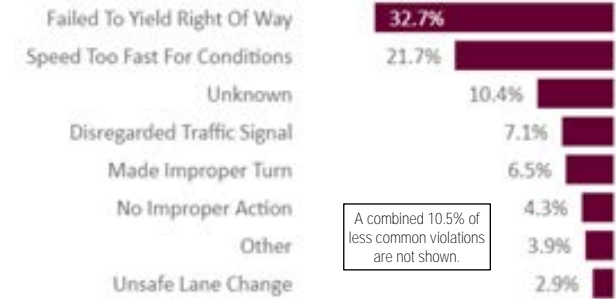


## Safety Device Use by Person Type

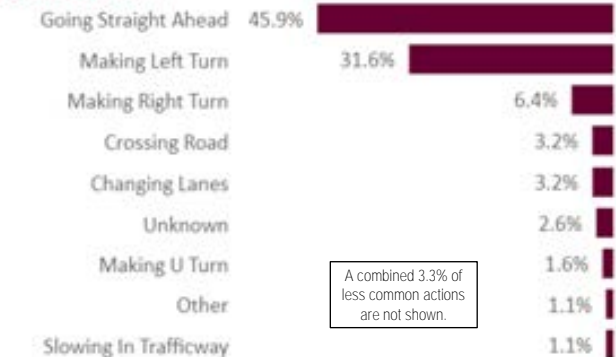
Child Restraint (Yellow) Helmet (Blue) None Used (Red) Seat belt (Green) Unknown (Grey)



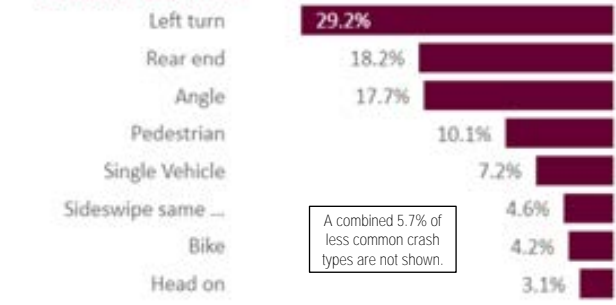
## Unit 1 Violation



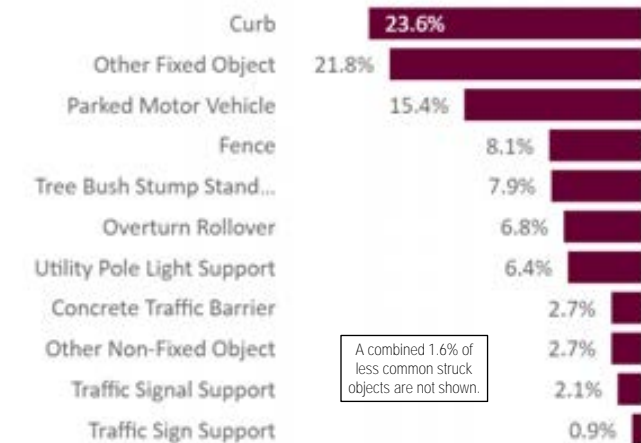
## Unit 1 Action



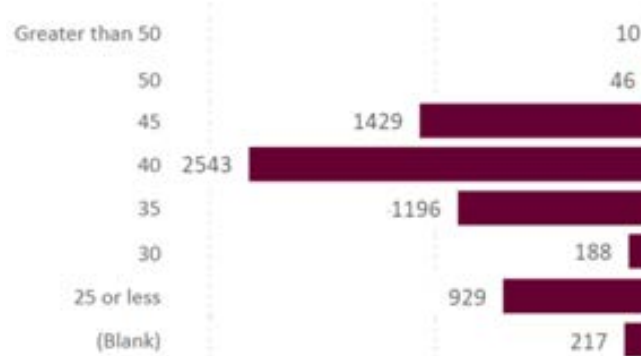
## Collision Manner



## First Harmful Event (Single Vehicle/Driverless)



## Posted Speed Limit (On Road)



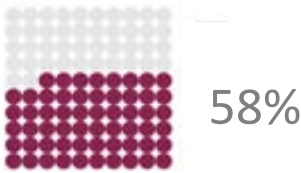
Injury Collisions  
6,558



# How Do Fatal Collisions Occur?

- Annual Collision Trends
- When Do Collisions Occur
- Where Do Collisions Occur
- How Do Collisions Occur
- Motorcyclist Collisions
- Pedestrian Collisions
- Bicycle Collisions

## Driver Distraction



## Speeding



## Hit and Run



## Impaired Driver 1

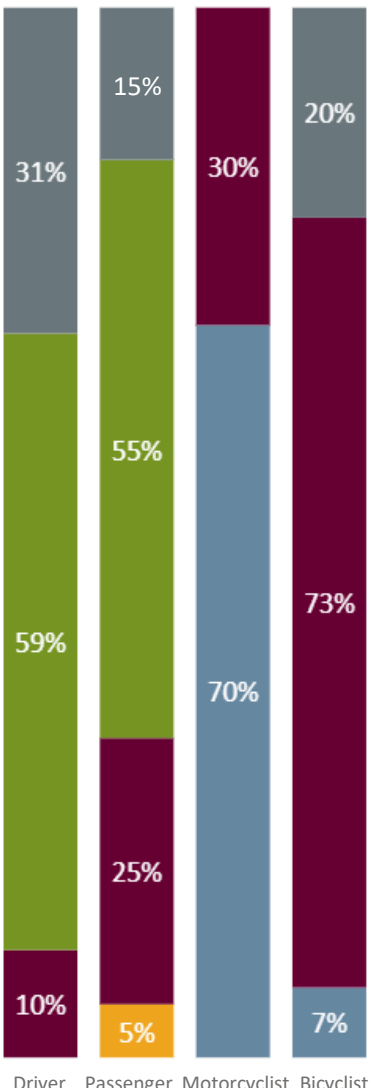


## Unrestrained Driver

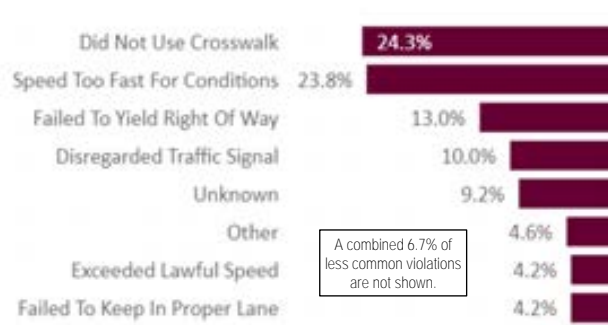


## Safety Device Use by Person Type

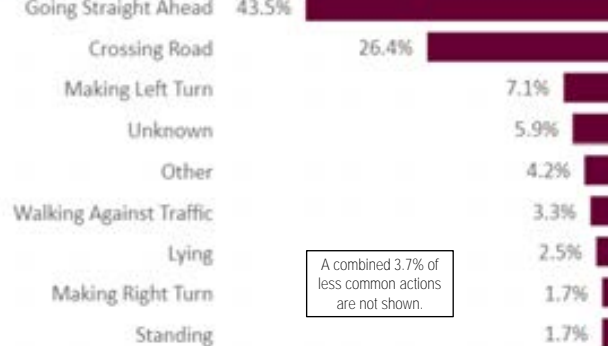
Child Restraint    Helmet    None Used  
Seat belt    Unknown



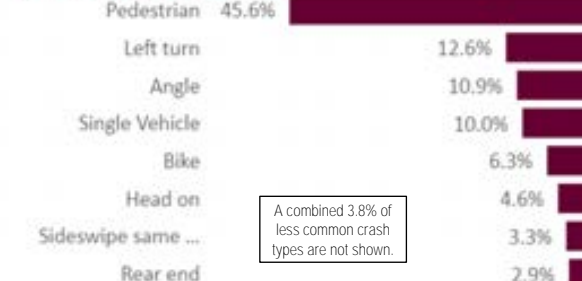
## Unit 1 Violation



## Unit 1 Action



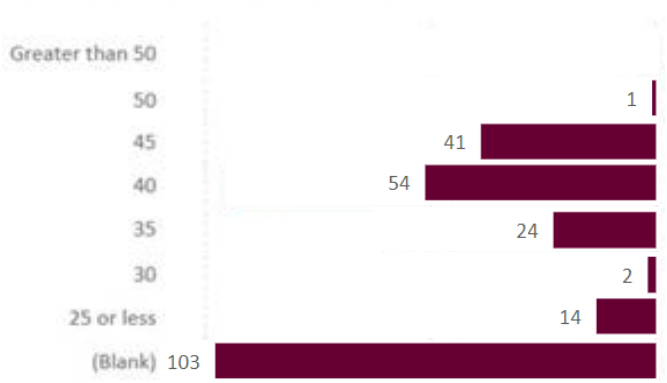
## Collision Manner



## First Harmful Event (Single Vehicle/Driverless)



## Posted Speed Limit (On Road)



Fatal Collisions

239

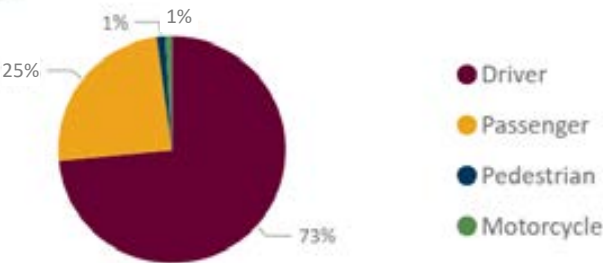
# How Do Collisions Occur and to Who?

## Impairment by Person Type

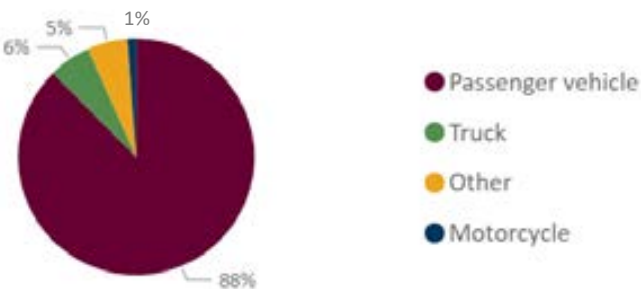


\*Note: it is not a violation to walk under the influence.

## Person Type

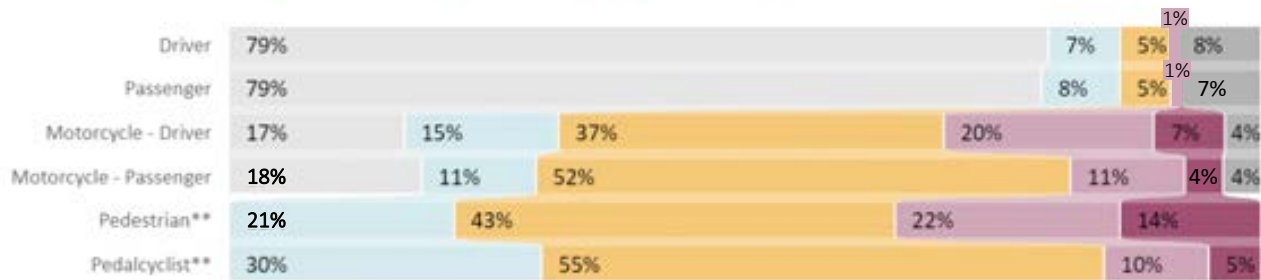


## Vehicle Body Style



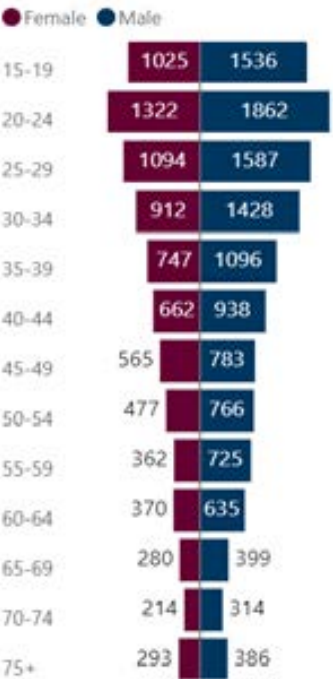
## Person Types Involved in Crashes by Injury Status

Injury Status: No injury (Light Blue), Possible injury (Medium Blue), Minor injury (Yellow), Serious injury (Red), Fatal (Dark Red), Unknown (Grey)

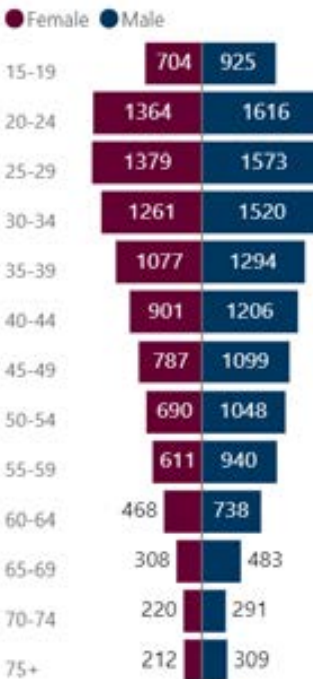


\*\*Note: This data includes only crashes with a property damage above \$2,000. Crashes involving pedestrian and bicyclist crashes with less severe injuries may be under-reported.

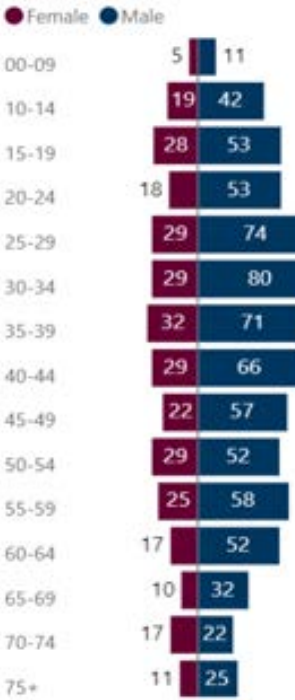
## Drivers of Unit 1 by Age and Gender



## Drivers of Unit 2-6 by Age and Gender



## Ped and Bike by Age and Gender



### Annual Collision Trends



### When Do Collisions Occur



### Where Do Collisions Occur



### How Do Collisions Occur



### Motorcyclist Collisions



### Pedestrian Collisions



### Bicycle Collisions



Total Collisions  
24,489



# How Do Injury Collisions Occur and to Who?

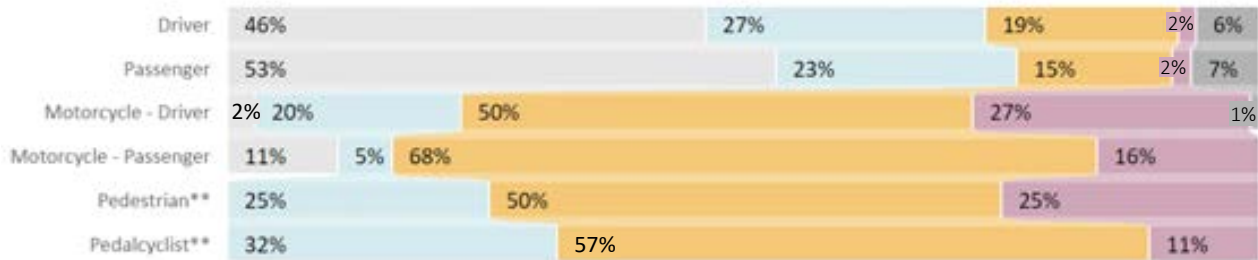
## Impairment by Person Type



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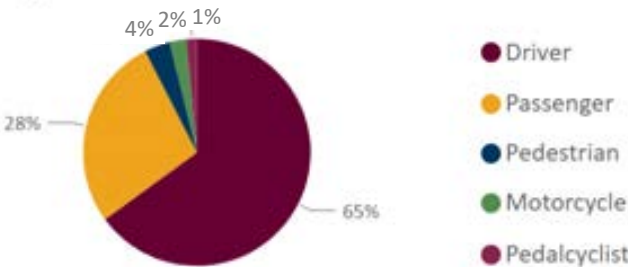
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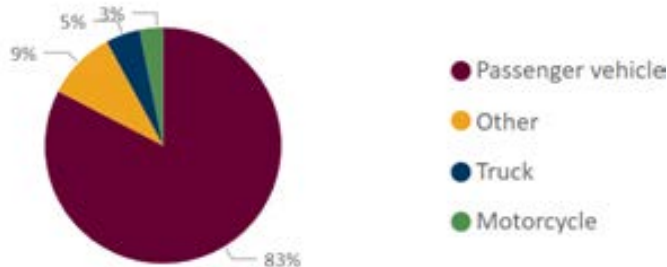


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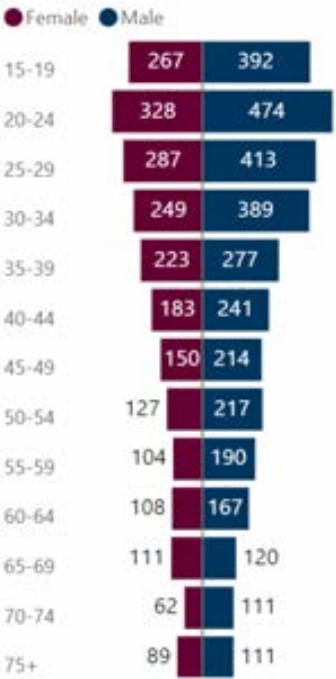
## Person Type



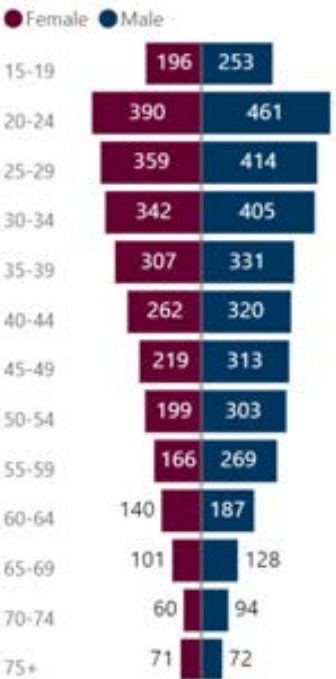
## Vehicle Body Style



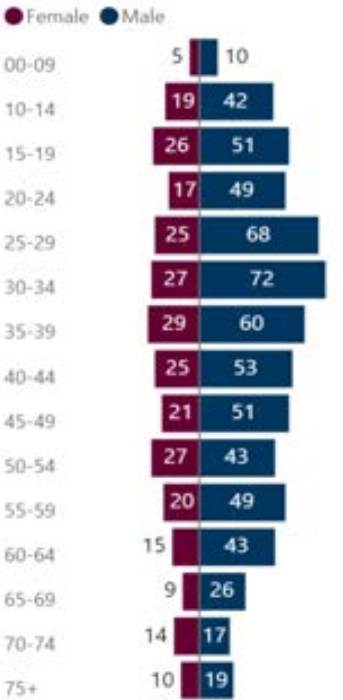
## Drivers of Unit 1 by Age and Gender



## Drivers of Unit 2-6 by Age and Gender



## Ped and Bike by Age and Gender



### Annual Collision Trends



### When Do Collisions Occur



### Where Do Collisions Occur



### How Do Collisions Occur



### Motorcyclist Collisions



### Pedestrian Collisions



### Bicycle Collisions



Injury Collisions  
6,558



## How Do Fatal Collisions Occur and to Who?)

## Annual Collision Trends



## When Do Collisions Occur



## Where Do Collisions Occur



## How Do Collisions Occur



## Motorcyclist Collisions



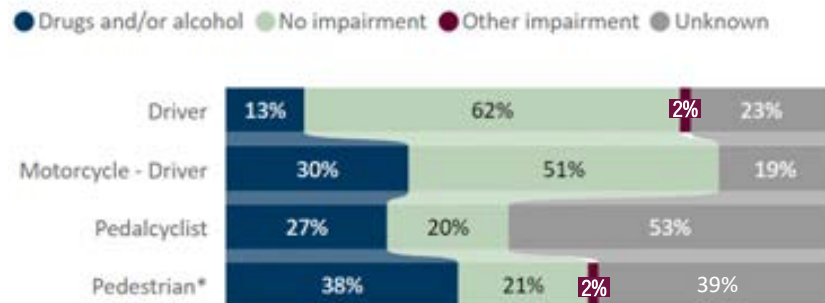
## Pedestrian Collisions



## Bicycle Collisions

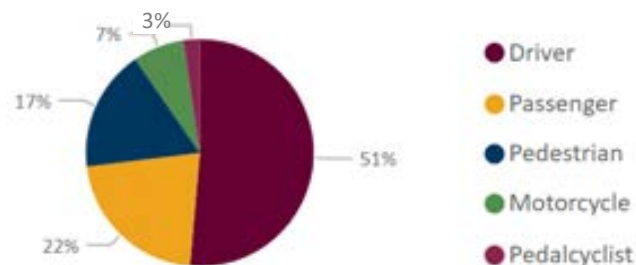


### Impairment by Person Type

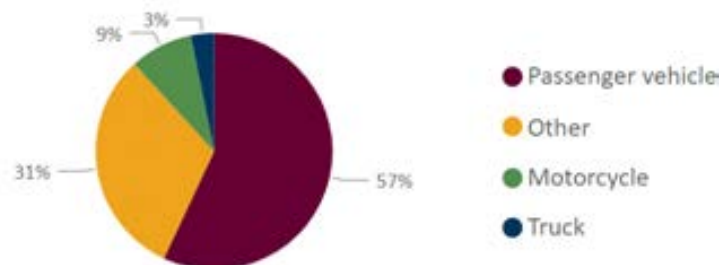


\*Note: it is not a violation to walk under the influence.

### Person Type

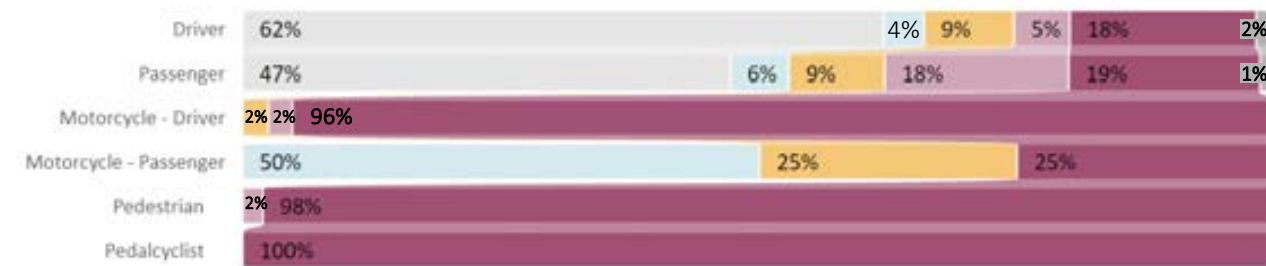


### Vehicle Body Style



### Person Types Involved in Crashes by Injury Status

**Injury Status**    ● No injury    ● Possible injury    ● Minor injury    ● Serious injury    ● Fatal    ● Unknown



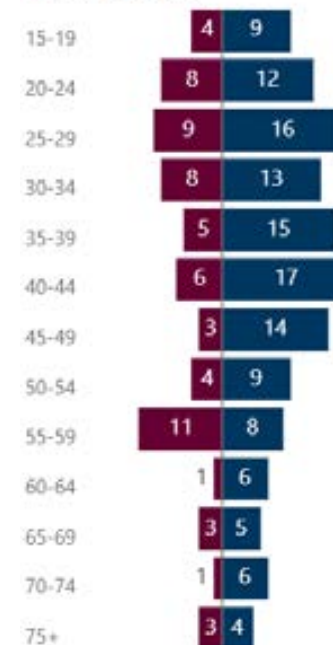
### Drivers of Unit 1 by Age and Gender

● Female ● Male



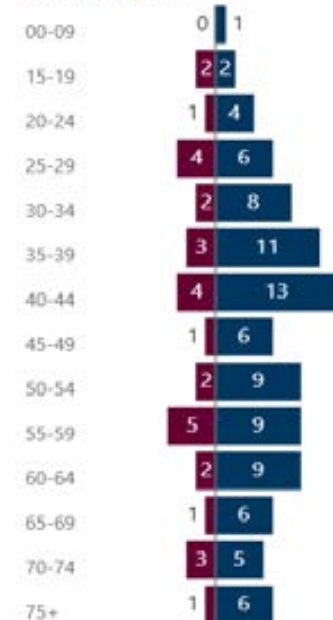
### Drivers of Unit 2-6 by Age and Gender

● Female ● Male



### Ped and Bike by Age and Gender

● Female ● Male



## Fatal Collisions

239

## 2022 Phoenix Traffic Collision Summary

Streets PHX

STREET TRANSPORTATION DEPARTMENT

Annual Collision Trends

When Do Collisions Occur

Where Do Collisions Occur

How Do Collisions Occur

Motorcyclist Collisions

Pedestrian Collisions

Bicycle Collisions

# Community Engagement

Community engagement is integral to the formation of an actionable plan. The input of those who travel Phoenix's roadways, whether driving, walking or biking, is key to making streets safer for everyone.

## Road Safety Action Plan Resources

- [Speed Limit Changes and Studies](#)
- [Yellow Light Timing Field Study](#)
- [Phoenix High Injury Network \(HIN\)](#)
- [Road Safety Action Plan FAQ](#)
- [Phase 1 - Public Involvement Summary Report](#)
- [Phase 2 - Public Involvement Summary Report](#)

Click on Links for More Information

← 2022 Phoenix Traffic Collision Summary →

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STREET TRANSPORTATION DEPARTMENT

Annual Collision Trends

When Do Collisions Occur

Where Do Collisions Occur

How Do Collisions Occur

Motorcyclist Collisions

Pedestrian Collisions

Bicycle Collisions

These icons have been designed using images from Shutterstock.com

# Motorcyclist Collisions

Collision Total

583

Total Injuries

498

Total Fatalities

43

Total Hit and Runs

68

Motorcycle Collisions

583

Crashes by Year and Injury Severity

Injury Severity ● No injury ● Possible inj... ● Minor injury ● Serious inj... ● Fatal

Year	No injury	Possible injury	Minor injury	Serious injury	Fatal
2018	151	122	221	105	639
2019	147	130	194	115	622
2020	122	114	180	544	544
2021	86	110	189	103	528
2022	103	90	225	124	583

Motorcyclist Location

High Crash Intersections

19Th Ave and Union Hills Dr	4
7Th St and Townley Ave	4
Bell Rd and Cave Creek Rd	4

Speeding

Crashes by Light Condition

● Daylight ● Dark ● Dawn ...

Motorcyclist Impairment

No impairment	86%
Unknown	11%
Alcohol alone	2%
Drugs alone	1%

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2022 Phoenix Traffic Collision Summary

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STREET TRANSPORTATION DEPARTMENT

Annual Collision Trends

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How Do Collisions Occur

Motorcyclist Collisions

Pedestrian Collisions

Bicycle Collisions

These icons have been designed using images from Shutterstock.com

# Pedestrian Collisions

Collision Total

770

Total Injuries

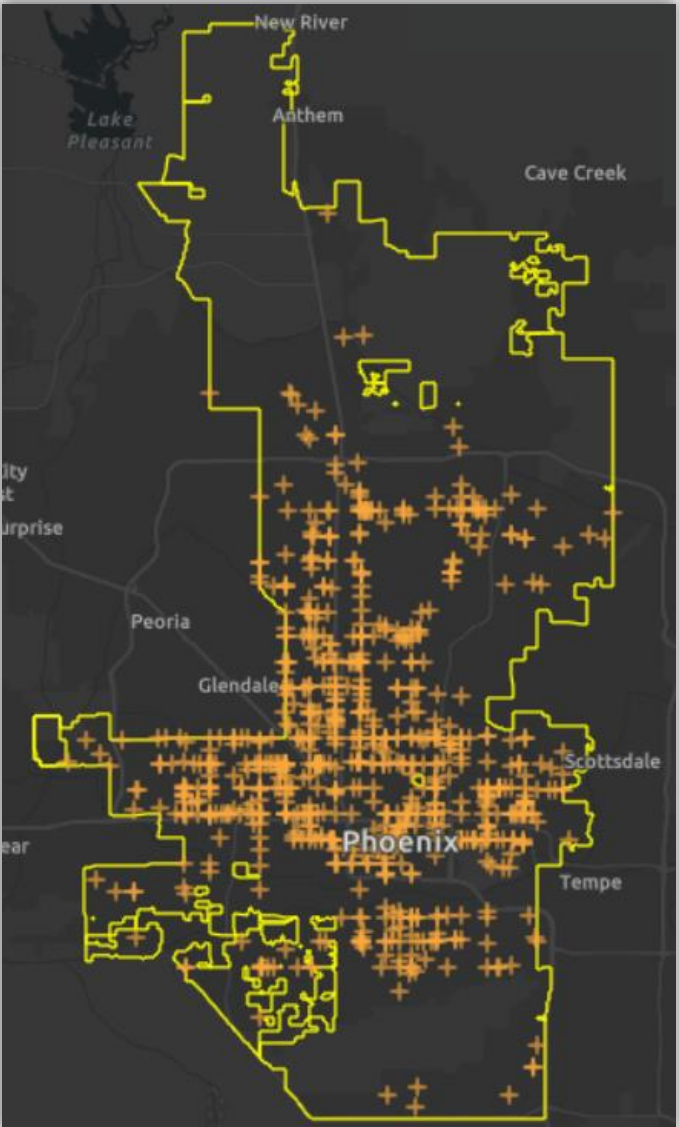
728

Total Fatalities

110

Total Hit and Runs

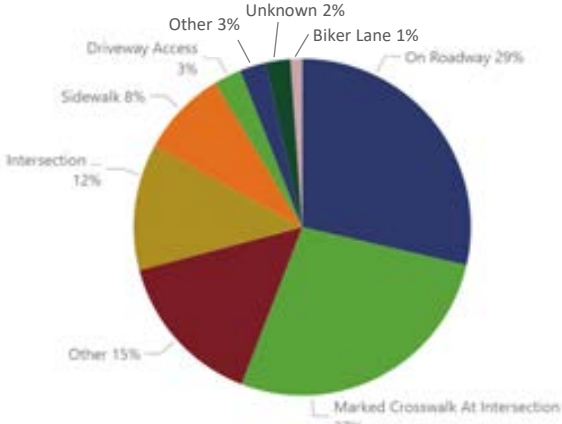
208



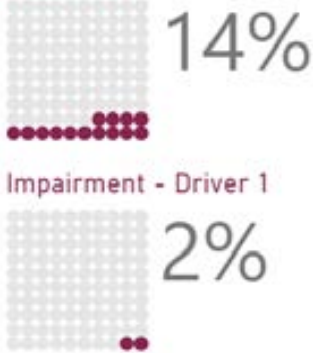
Crashes by Year and Injury Severity



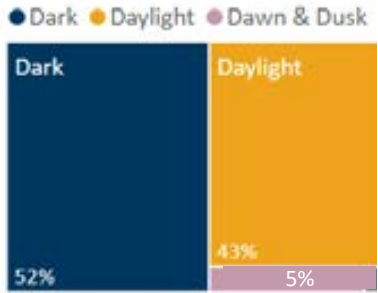
Pedestrian Location



Speeding



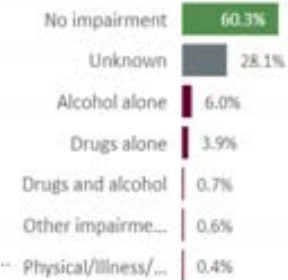
Crashes by Light Condition



High Crash Intersections



Pedestrian Impairment



Pedestrian Violations



Pedestrian Collisions

770





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The Hawk Signal at 41<sup>st</sup> St and McDowell Rd was Activated in February

The Hawk Signal at 32 St and Yale St was Activated in September

# HAWK Pedestrian Signals Activated in 2022

- 41st St and McDowell Rd
- 3rd Av and Glendale Av
- 8210 W Indian School Rd
- 2975 N 43rd Av
- 35th Av and Behrend Dr
- 7th Av and Turney Av
- 24th St and Highline Canal
- 13th Av and Hatcher Rd
- 32nd St and Yale St

Total Hawk Signals  
79 (thru 2022)

2022 Phoenix Traffic Collision Summary

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# Bicycle Collisions

Annual Collision Trends



When Do Collisions Occur



Where Do Collisions Occur



How Do Collisions Occur



Motorcyclist Collisions



Pedestrian Collisions



Bicycle Collisions



Collision Total

289

Total Injuries

283

Total Fatalities

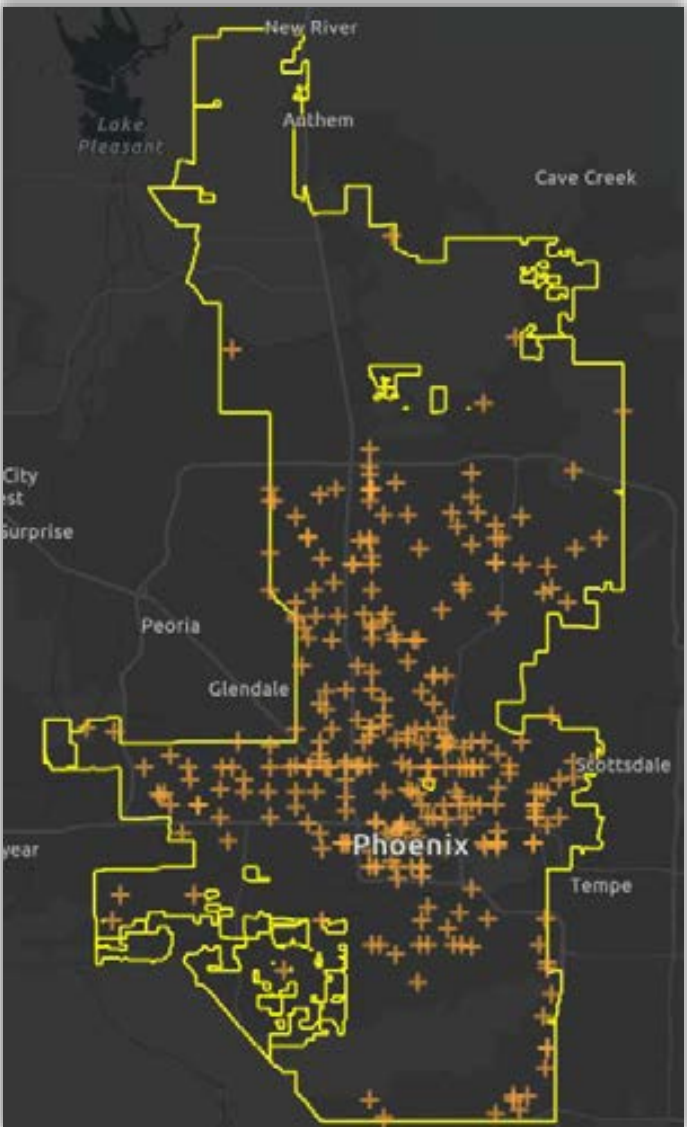
15

Total Hit and Runs

65

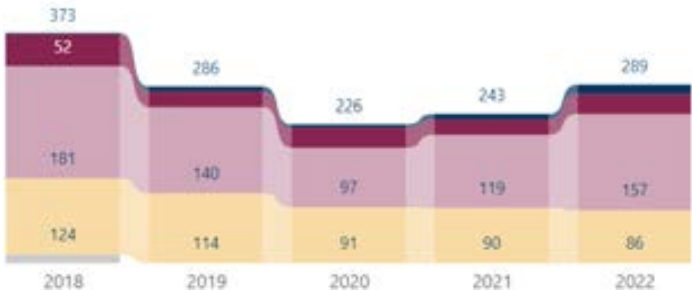
Bicyclist Collisions

289



Crashes by Year and Injury Severity

Injury Severity ● No injury ● Possible inj... ● Minor injury ● Serious inj... ● Fatal



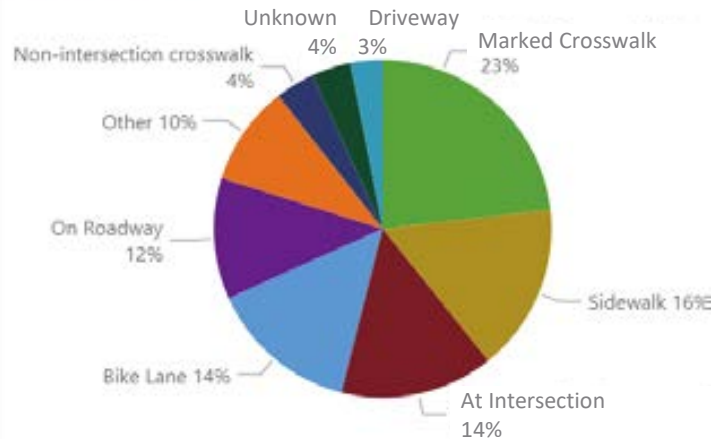
Speeding



Impairment - Driver

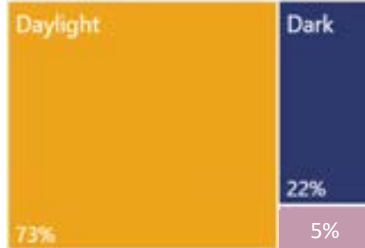


Bicyclist Location



Crashes by Light Condition

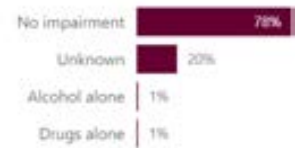
Daylight ● Dark ● Dawn & Dusk



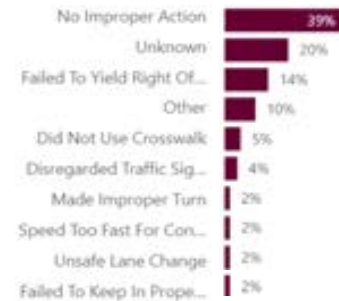
High Crash Intersections



Bicyclist Impairment



Bicyclist Violation





Active transportation is defined as walking, bicycling, using a small wheeled vehicle, or a mobility device. It includes e-scooters and other new types of lightweight, electric vehicles. In 2019, the City of Phoenix decided to start using the term "active transportation" to include all of these wonderful ways of getting around our streets. Using a general term also helps us talk about how multi-use paths and HAWKS (pedestrian hybrid beacons) serve people walking, bicycling, or using mobility devices and small wheeled vehicles.



<https://www.phoenix.gov/streets/headsup>

Streets PHX

STREET TRANSPORTATION DEPARTMENT

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Bicycle Collisions

# Bicycle Facility Improvements - 2022

Pinnacle Peak Road from 23rd Avenue to 19th Avenue

**Where:** Pinnacle Peak Road from 23rd Avenue to 19th Avenue.  
**What:** Where there was enough space on the roadway, buffered bike lanes were added. The number of travel lanes remained the same. This project did not remove or add parking.  
**When:** Pavement maintenance (new asphalt) and traffic lane improvements were conducted in the Spring.  
**Why:** Buffered bike lanes added space between people driving and people walking or biking for increased protection from vehicles, improved safety and added comfort. Additionally, the slight narrowing of the lane widths to accommodate the buffers will help to guide cars and deter speeding. The bicycle lanes also will provide connectivity between other nearby bicycle lanes.  
**More:** Click [HERE](#) for more 2022 Improvement Projects

Total Bike Lane Miles

595 (thru 2022)

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2022 Phoenix Traffic Collision Summary

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# Acknowledgements

The 2022 City of Phoenix Traffic Collision Summary documents the collisions in the City of Phoenix throughout the 2022 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 2022 Traffic Collision Summary was prepared by Traffic Safety Section staff Jacob Martinez (Chief Engineering Technician).

The SDM database includes motor vehicle crashes that occurred on public right of way where someone was injured, killed or property damage exceeded \$2,000.

The cover graphic of the Phoenix road network is courtesy of the ISS Crew Earth Observations experiment and Image Science & Analysis Laboratory, Johnson Space Center. Other photographs featured in this summary were taken by various employees or consultants of the City of Phoenix Street Transportation Department.

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

**Active Transportation Program:**  
602-534-0258  
[bike@phoenix.gov](mailto:bike@phoenix.gov)

**Pavement Maintenance Program:**  
623-825-3444  
[pavement@phoenix.gov](mailto:pavement@phoenix.gov)

**Office of Roadway Safety:**  
602-256-3319  
[RoadSafety@phoenix.gov](mailto:RoadSafety@phoenix.gov)

**Office of Pedestrian Safety:**  
602-316-8879  
[School.Safety@phoenix.gov](mailto:School.Safety@phoenix.gov)