

2020

# **Annual Crash Report**



David Rico, Traffic Studies Analyst City of Mesa 9/13/2021

# **SECTION 1:**

## **FATALITIES**



In 2020, the City of Mesa had 35 fatal crashes with a total of 36 fatalities. The following collection of charts and tables documents fatal crashes of 2020. Descriptions of these tables and charts will be found underneath each respectively.

For the purposes of this document, "Vehicle 1" is defined as the motorist (or non-motorist) deemed at fault by Mesa Police Department. "Vehicle 2" is defined as the involved motorist (or non-motorist) that was deemed the victim by Mesa Police Department.

#### **Mesa Fatal Crashes by Year**

Year	Fatal Crashes	Total Fatalities	Total Crashes	Mesa Population	Fatalities Per 100,000 Population	% Change From 5-Year Average
2010	15	15	5118	439041	3.4	-43.28%
2011	27	29	5178	441711	6.6	27.59%
2012	24	24	5134	443875	5.4	6.06%
2013	23	28	5313	447002	6.3	19.78%
2014	19	20	5025	452091	4.4	-15.18%
2015	15	15	4979	458860	3.3	-36.96%
2016	28	30	5554	470456	6.4	23.87%
2017	29	30	5611	479317	6.3	17.68%
2018	32	33	5494	491194	6.7	24.20%
2019	28	28	5357	499720	5.6	-0.75%
2020	35	36	5324	504258	7.1	11.22%

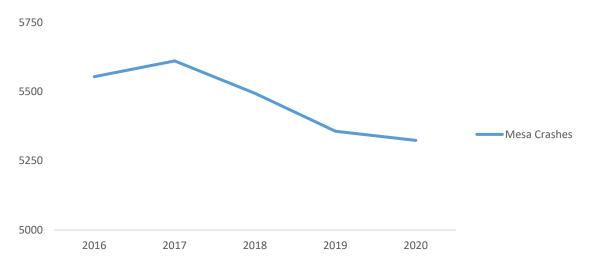
In 2020, 36 people lost their lives on Mesa's public streets because of a collision with a motor vehicle, an increase from the year before. Likewise, the number of fatalities per 100,000 population increased by 26.8%.



FATALITIES

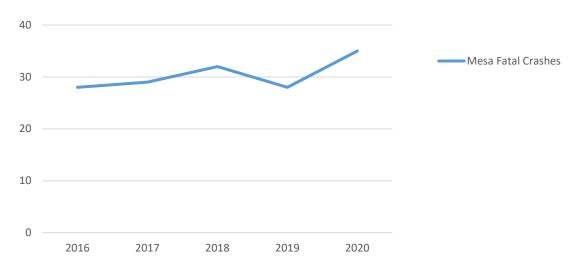
2

#### **Mesa Total Crashes by Year**



In 2020, City of Mesa motor vehicle crashes decreased by 33 from the year before; this is a 0.62% decrease from 2019.

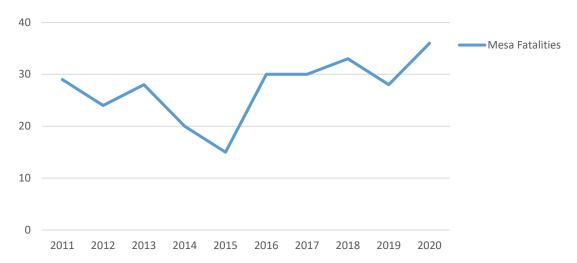
#### **Mesa Fatal Crashes by Year**



Over the past five years, **fatal crashes** in Mesa have had a general upward trend. From the chart above, the number of fatal crashes has increased since 2016. City of Mesa fatal collisions in 2020 were 25.0% greater than the previous year.

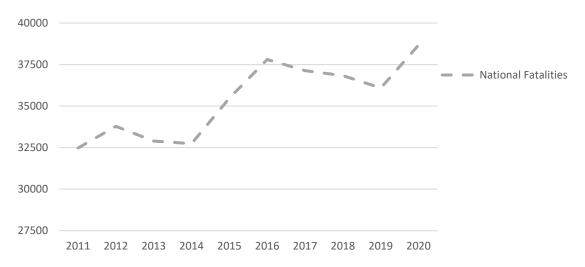


#### Mesa Total Fatalities by Year



Based on a 10-year average (2011 – 2020), **total fatalities** are trending upward. Fatalities increased within Mesa proportionate to the total national fatalities as shown below.

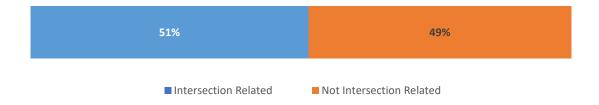
#### **National Total Fatalities by Year\***



According to the early estimate of "Motor Vehicle Traffic Fatalities in 2020" provided by the National Highway Traffic Safety Administration (NHTSA), 38,680 people died because of a collision with a motor vehicle in 2020. This is an increase of 6.7% from 2019. Note that this figure represents fatal crashes on all roads within the United States, not just local.



## **2020** Mesa Fatal Crashes: Intersection Relation

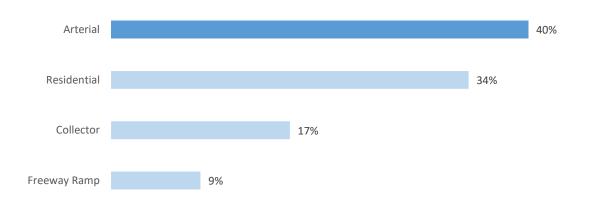


Of the 35 fatal crashes, 18 were intersection related and 17 were non intersection related.

#### 2020 Mesa Fatal Crashes: On Street Class

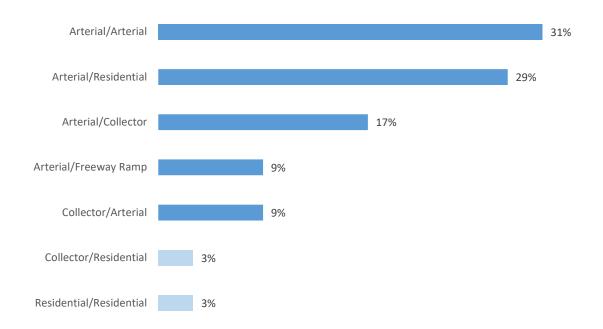


#### 2020 Mesa Fatal Crashes: Cross Street Class



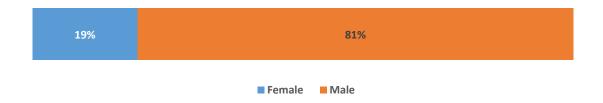


## Mesa 2020 Fatal Crashes: Intersection Class



City of Mesa fatal crashes in 2020 primarily occurred along arterial streets. According to the crash data, 33 of the 35 fatal crashes involved an arterial roadway.

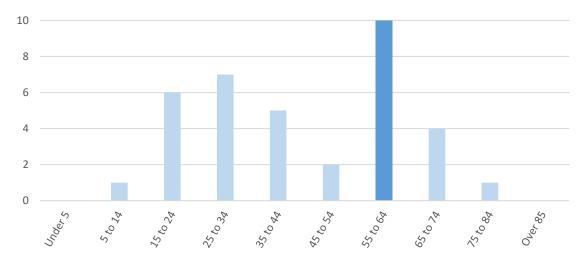
#### 2020 Mesa Fatalities by Gender



Data analysis of 2020 crashes within the City of Mesa found that motor vehicle fatalities were higher among males than females.



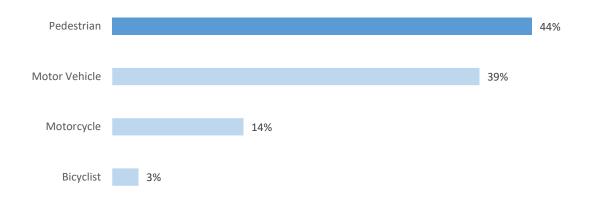
#### Mesa 2020 Fatalities by Age



Motor vehicle crash fatalities were higher among people aged 55 to 64 than any other age group in 2020.

It should also be noted that the highest number of fatalities relative to the population within their respective age group was people aged 55 to 64. This group made up 11.0% of the total population in 2020 but contributed to 27.8% of the total fatalities within Mesa in 2020.

## Mesa 2020 Fatalities: Unit Type



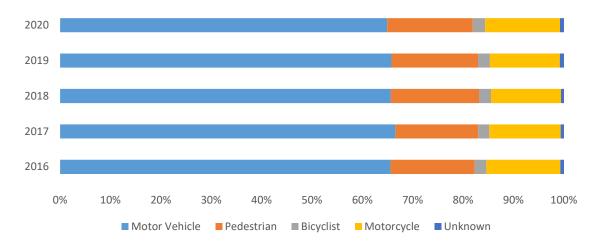
Among the unit types, **pedestrians** were most involved in a fatal crash. The number of pedestrian fatalities in 2020 increased by 167% compared to the previous year.



FATALITIES

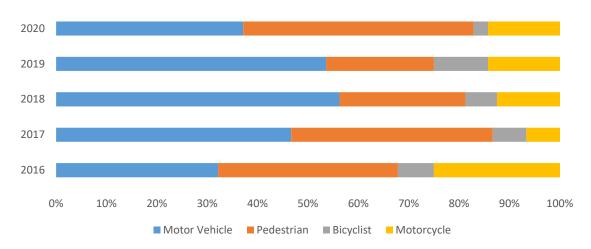
7

#### **National Fatalities by Unit Type**



Nationally, fatalities involving motor vehicles greatly exceeded those involving other unit types. Collisions involving pedestrians across the United States comprised 17% of all fatalities in 2020.

#### Mesa Fatalities by Unit Type



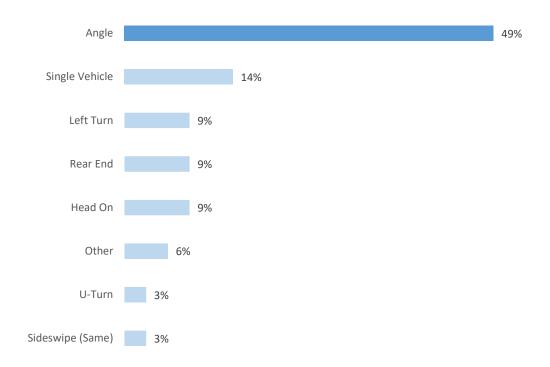
In Mesa, motor vehicle fatalities made up 39% of all fatalities in 2020. Compared to the previous five years, pedestrian fatalities in 2020 were the highest in terms of percentage with 44%.



FATALITIES

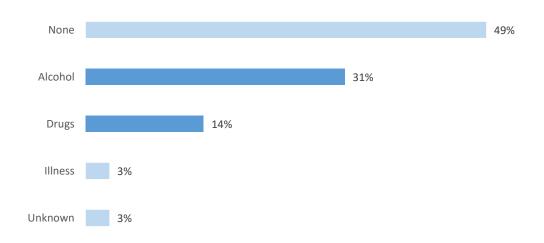
8

#### Mesa 2020 Fatal Crash Manner



The highest percentage of motor vehicles fatalities within the City of Mesa in 2020 were **angle** crashes. Angle and left turn crashes together made up 57% of all 2020 fatalities which includes 13 pedestrian crashes.

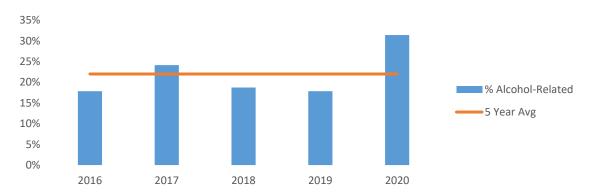
## Mesa 2020 Fatal Crashes: Impairment



Drugs or alcohol were involved in 16 (46%) of the 35 fatal crashes in Mesa.

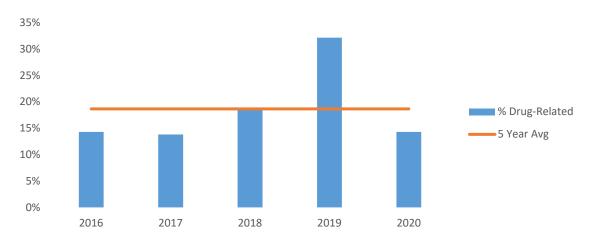


## Mesa Fatal Crashes (2016-2020): Alcohol Involvement



The above chart shows a 5-year trend in alcohol impairment involved with fatal crashes. The percentage is compared to the total number of fatal crashes per year. Over the past five years, an average of 22% of fatal collisions involved a person under the influence of alcohol.

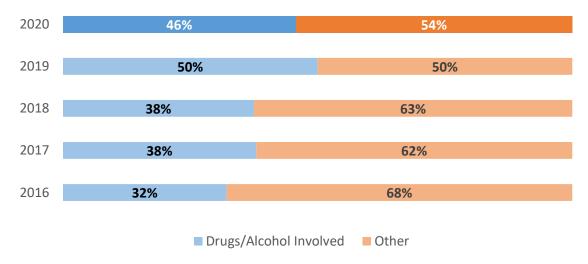
## Mesa Fatal Crashes (2016-2020): Drug Involvement



The above chart shows a 5-year trend in drug impairment involved with fatal crashes. The percentage is compared to the total number of fatal crashes per year. Over the past five years, an average of 19% of all fatal collisions involved a person under the influence of drugs.

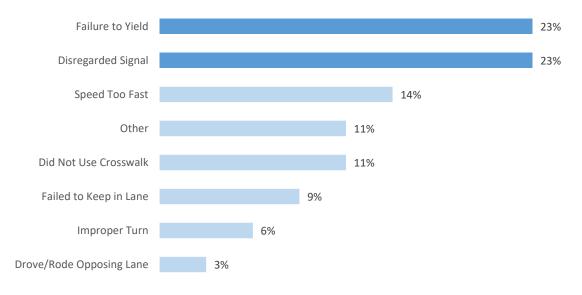


## Mesa Fatal Crashes (2016-2020): Drug & Alcohol Involvement



The above chart shows a 5-year trend that combines alcohol and drug impairment. Over the past five years, alcohol and drug involvement in fatal collisions has increased significantly. Other crashes include those that had no impairment and those which had other forms of impairment, such as fatigue.

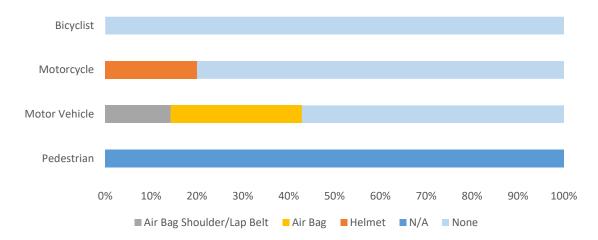
## Mesa 2020 Fatal Crashes: Vehicle 1 Violation



The above chart details the reported violations made by vehicle 1 which led to a fatal crash within Mesa in 2020. Of the 36 motor vehicle fatalities, 16 resulted from a **failure to yield** or a **disregarded signal** violation.

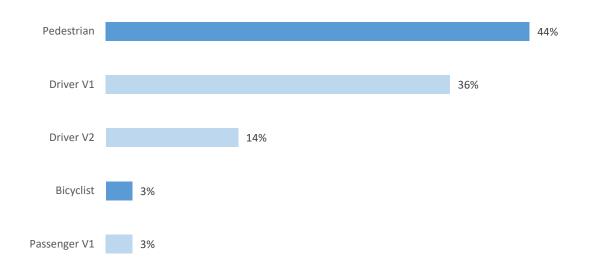


#### Mesa 2020 Fatal Unit Safety Device



The chart above shows the victim safety devices involved in the 36 Mesa fatalities in 2020. Separate from pedestrians, thirteen fatalities involved victims that were **not using a safety device**. This includes more than **85% of motorists not wearing a seatbelt**.

#### Mesa 2020 Fatal Unit Location



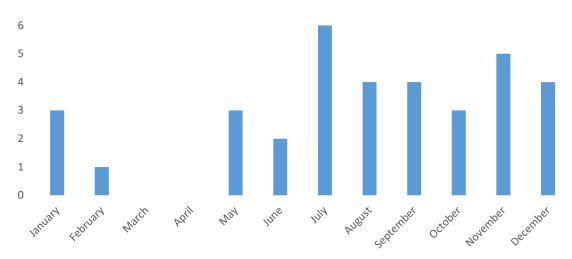
The chart above shows the fatal unit's location within a vehicle or the unit type if it was a non-motorist fatality. Of the 36 motor vehicle fatalities within Mesa in 2020, 17 involved a non-motorist victim (16 pedestrian collisions and 1 bicyclist collision).



FATALITIES

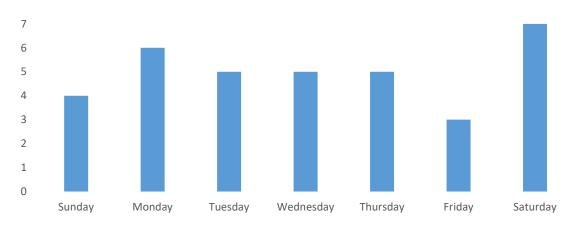
12

#### Mesa 2020 Fatal Crashes by Month



City of Mesa fatal crashes by month in 2020 showed increases in the months of July and November.

#### Mesa 2020 Fatal Crashes by Day of Week



The highest number of fatal crashes occurred on Saturdays in 2020 within the City of Mesa, and fatalities were spread consistently throughout the other weekdays.



FATALITIES

13

Mesa 2020 Fatal Crashes by Time of Day

Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
12:00 AM - 1:00 AM	0	0	0	0	0	0	0	0
1:00 AM - 2:00 AM	0	1	0	0	0	0	0	1
2:00 AM - 3:00 AM	0	0	0	0	1	0	0	1
3:00 AM - 4:00 AM	1	0	0	0	0	0	0	1
4:00 AM - 5:00 AM	0	0	0	0	0	0	0	0
5:00 AM - 6:00 AM	0	0	0	0	0	0	1	1
6:00 AM - 7:00 AM	0	1	1	1	0	1	0	4
7:00 AM - 8:00 AM	0	0	0	1	0	0	0	1
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0
9:00 AM - 10:00 AM	0	0	1	0	1	0	0	2
10:00 AM - 11:00 AM	0	0	1	0	0	0	0	1
11:00 AM - 12:00 PM	0	0	0	0	0	0	0	0
12:00 PM - 1:00 PM	0	0	0	0	0	0	1	1
1:00 PM - 2:00 PM	0	0	0	0	0	0	0	0
2:00 PM - 3:00 PM	0	1	0	0	0	0	0	1
3:00 PM - 4:00 PM	0	0	1	0	0	0	0	1
4:00 PM - 5:00 PM	0	0	0	2	1	0	0	3
5:00 PM - 6:00 PM	1	0	0	0	0	0	1	2
6:00 PM - 7:00 PM	0	1	0	0	1	1	1	4
7:00 PM - 8:00 PM	2	0	0	0	0	0	1	3
8:00 PM - 9:00 PM	0	1	0	0	0	0	0	1
9:00 PM - 10:00 PM	0	1	1	0	1	1	2	6
10:00 PM - 11:00 PM	0	0	0	1	0	0	0	1
11:00 PM - 12:00 AM	0	0	0	0	0	0	0	0
Total	4	6	5	5	5	3	7	35

In 2020, over half of the fatal crashes within Mesa (54%) occurred between 4:00 PM and 10:00 PM.



Mesa 5-Year Trend: Fatal Crashes by Time of Day

	2016	2017	2018	2019	2020	5-Year Total	% of Total
12:00 AM - 1:00 AM	0	3	0	0	0	3	2.1%
1:00 AM - 2:00 AM	0	0	1	1	1	3	2.1%
2:00 AM - 3:00 AM	0	0	0	0	1	1	0.7%
3:00 AM - 4:00 AM	0	0	0	1	1	2	1.4%
4:00 AM - 5:00 AM	0	1	1	0	0	2	1.4%
5:00 AM - 6:00 AM	1	0	0	1	1	3	2.1%
6:00 AM - 7:00 AM	1	1	0	3	4	9	6.4%
7:00 AM - 8:00 AM	0	1	1	1	1	4	2.9%
8:00 AM - 9:00 AM	0	1	0	0	0	1	0.7%
9:00 AM - 10:00 AM	0	1	1	1	2	5	3.6%
10:00 AM - 11:00 AM	1	0	2	1	1	5	3.6%
11:00 AM - 12:00 PM	1	0	3	0	0	4	2.9%
12:00 PM - 1:00 PM	0	3	1	0	1	5	3.6%
1:00 PM - 2:00 PM	1	1	1	0	0	3	2.1%
2:00 PM - 3:00 PM	4	0	4	1	1	10	7.1%
3:00 PM - 4:00 PM	2	1	1	1	1	6	4.3%
4:00 PM - 5:00 PM	0	2	1	3	3	9	6.4%
5:00 PM - 6:00 PM	3	0	3	1	2	9	6.4%
6:00 PM - 7:00 PM	0	5	2	2	4	13	9.3%
7:00 PM - 8:00 PM	4	3	1	2	3	13	9.3%
8:00 PM - 9:00 PM	4	4	4	1	1	14	10.0%
9:00 PM - 10:00 PM	4	1	2	6	6	19	13.6%
10:00 PM - 11:00 PM	1	0	3	1	1	6	4.3%
11:00 PM - 12:00 AM	1	1	0	0	0	2	1.4%
Total	16	28	29	32	35	140	

Over a 5-year trend, the highest concentration of fatal crashes occurred between 3:00 PM and 9:00 PM, like 2020, with 45% of the total crashes.



FATALITIES

# SECTION 2: SERIOUS INJURIES



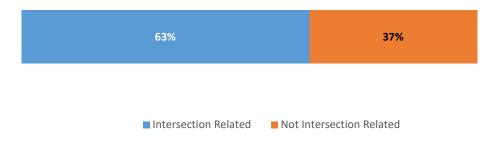
#### Mesa Serious Injury Crashes: General View

Year	Serious Injury Crashes	Total Serious Injuries	Total Crashes	Mesa Population	Serious Injuries Per 100,000 Population	% Change From 5-Year Average
2010		228	5118	439041	52	
2011		236	5178	441711	53	
2012	-	233	5134	443875	52	
2013	-	239	5313	447002	53	5%
2014	183	237	5025	452091	52	3%
2015	181	213	4975	458860	46	-9%
2016	234	272	5511	470456	58	13%
2017	194	218	5579	479317	45	-11%
2018	169	191	5479	491194	39	-19%
2019	186	207	5357	499720	41	-10%
2020	133	152	5324	504258	30	-29%

In 2020, 133 serious injury crashes occurred on Mesa roadways resulting in 152 serious injuries. The percentage of severe injury crashes per 100,000 population, decreased by 26.8% from the previous year.

The average serious injury rate per 100,000 population within the City of Mesa between the five-year period of 2016 and 2020 was 43.

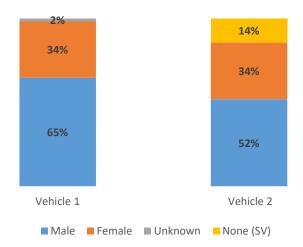
## Mesa 2020 Serious Injury Crashes: Intersection Relation



Of the 133 serious injury crashes that happened within Mesa in 2020, 84 were intersection related.

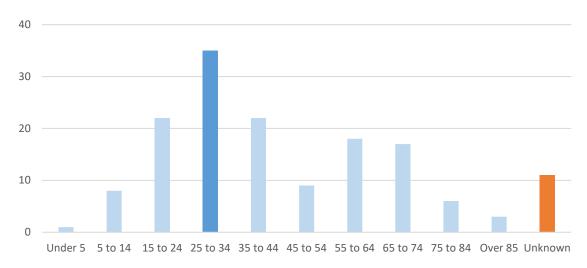


#### Mesa 2020 Serious Injury Crashes by Gender



Data analysis of 2020 crashes within the City of Mesa found that motor vehicle serious injury crashes were higher among males than females. Genders that are unknown are typically attributed to hit and run crashes. Single vehicle (SV) crashes are crashes where there was no Vehicle 2.

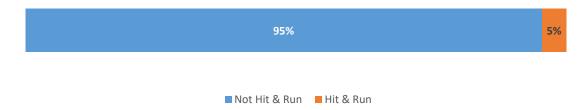
#### Mesa 2020 Serious Injuries by Age



Motor vehicle serious injury crashes were higher among people aged 25 to 34 than any other age group in 2020. Due to changes in City of Mesa PD electronic reporting, there were certain crashes where age was unknown.



## Mesa 2020 Serious Injury Crashes: Hit & Run



There were 6 serious injury crashes that were classified as **hit and run** in 2020. The percentage of serious injury hit and run crashes in 2020 was lower than the previous year.

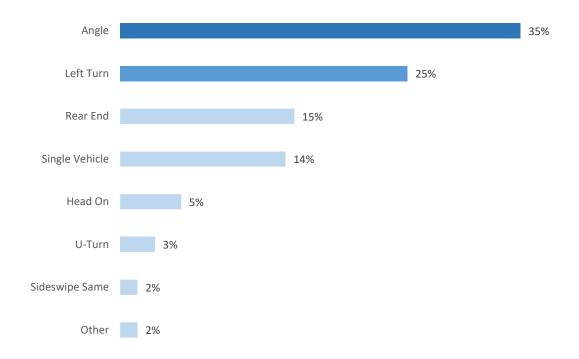
#### Mesa 2020 Serious Injury Crashes: Unit Type



Most of the serious injury crashes that occurred in Mesa in 2020 were **motor vehicle** collisions. This number includes motorcyclists and single vehicle crashes.

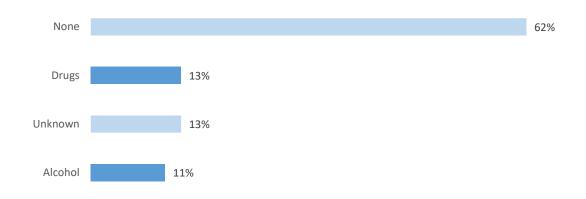


#### Mesa 2020 Serious Injury Crash Manner



In 2020, the leading crash manners resulting in serious injuries were **angle** and **left turn** crashes. These include pedestrian and bicyclist crashes when direction and travel behaviors resembled the manners listed above.

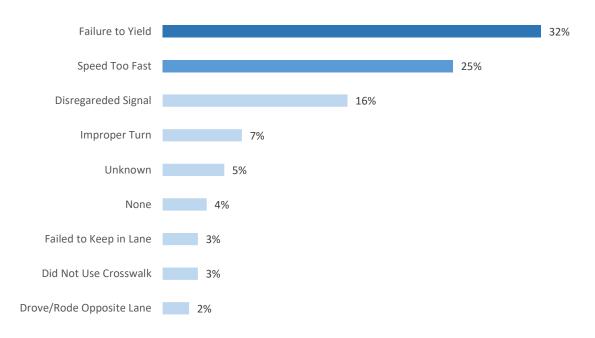
## Mesa 2020 Serious Injury Crashes: Impairment



Impairment, including both **alcohol and drug** use, was a factor in 31 serious injury crashes in 2020 (14 alcohol-related incidents and 17 drug-related incidents).

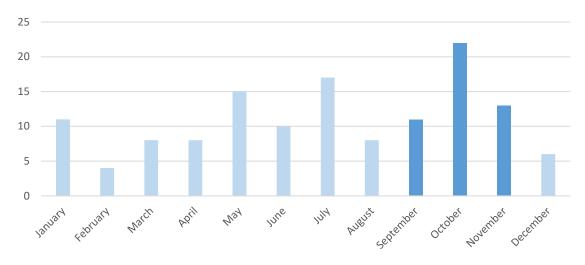


## Mesa 2020 Serious Injury Crashes: Vehicle 1 Violation



The above chart shows a distribution of Mesa vehicle 1 violations in 2020 that resulted in crashes with serious injuries. Over half of the reported violations, 57%, were noted as either a failure to yield or speed too fast.

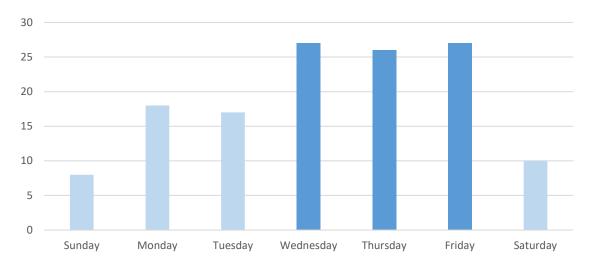
#### Mesa 2020 Serious Injury Crashes by Month



The highest three-month period for serious injury crashes was from September to November. Those three months comprised 34.6% of all serious injury crashes within the City of Mesa in 2020.



#### Mesa 2020 Serious Injury Crashes by Day of Week



Serious injury crashes within Mesa were most frequent between Wednesday and Friday; 60.2% of all serious injury crashes occurred on those days in 2020.



#### Mesa Serious Injury Crashes by Time and Day of Week

Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
12:00 AM - 1:00 AM	1	1	0	1	0	1	1	5
1:00 AM - 2:00 AM	0	0	0	0	0	0	0	0
2:00 AM - 3:00 AM	0	0	0	0	0	1	0	1
3:00 AM - 4:00 AM	0	0	0	0	1	0	0	1
4:00 AM - 5:00 AM	0	0	0	0	0	0	0	0
5:00 AM - 6:00 AM	0	0	0	1	0	0	1	2
6:00 AM - 7:00 AM	0	1	0	1	0	2	0	4
	0	0	3	1	1	2	0	7
7:00 AM - 8:00 AM	0	_					_	· · · · · · · · · · · · · · · · · · ·
8:00 AM - 9:00 AM		1	1	2	1	2	1	8
9:00 AM - 10:00 AM	0	0	1	0	2	1	0	4
10:00 AM - 11:00 AM	0	0	0	2	0	2	0	4
11:00 AM - 12:00 PM	0	2	1	2	0	1	2	8
12:00 PM - 1:00 PM	0	0	2	4	1	1	0	8
1:00 PM - 2:00 PM	1	3	1	1	2	2	0	10
2:00 PM - 3:00 PM	0	0	1	1	2	2	1	7
3:00 PM - 4:00 PM	0	2	2	2	1	2	0	9
4:00 PM - 5:00 PM	3	1	0	5	3	1	0	13
5:00 PM - 6:00 PM	0	2	1	1	2	0	1	7
6:00 PM - 7:00 PM	2	2	0	0	3	1	0	8
7:00 PM - 8:00 PM	0	0	1	0	3	1	0	5
8:00 PM - 9:00 PM	0	1	2	0	2	1	2	8
9:00 PM - 10:00 PM	0	0	0	0	1	1	1	3
10:00 PM - 11:00 PM	1	1	1	3	1	1	0	8
11:00 PM - 12:00 AM	0	1	0	0	0	2	0	3
Total	8	18	17	27	26	27	10	133

Data analysis of City of Mesa serious injury collisions in 2020 showed that the highest concentration of crashes occurred between 11:00 AM and 5:00 PM.



# **SECTION 3:**

# **BIKE CRASHES**



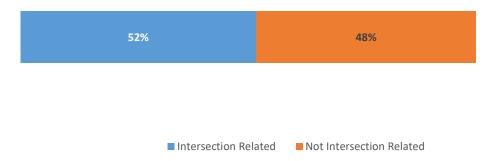
#### Mesa Bicycle Crashes: General View

Year	Bike Crashes	Total Crashes	Bike Crashes % Of Total	Mesa Population	Bike Crashes Per 100,000 Population	% Change From 5-Year Average
2010	206	5118	4.0%	439041	47	2.02%
2011	219	5178	4.2%	441711	50	3.34%
2012	257	5134	5.0%	443875	58	16.91%
2013	190	5313	3.6%	447002	43	-13.05%
2014	163	5025	3.2%	452091	36	-22.62%
2015	131	4975	2.6%	458860	29	-33.48%
2016	175	5511	3.2%	470456	37	-8.02%
2017	172	5579	3.1%	479317	36	-0.43%
2018	168	5479	3.1%	491194	34	-0.51%
2019	124	5357	2.3%	499720	25	-22.77%
2020	87	5324	1.6%	504258	17	-42.24%

The City of Mesa had 87 bike-related crashes reported in 2020 which comprised 1.6% of all local crashes. The number of bicyclist crashes per 100,000 was 17, which is a 32% reduction from the previous year.

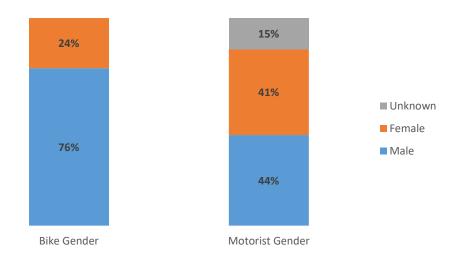


## Mesa 2020 Bicycle Crashes: Intersection Relation



Of the 87 bike crashes within the City of Mesa in 2020, 45 were intersection related.

#### Mesa 2020 Bicycle Crash Gender

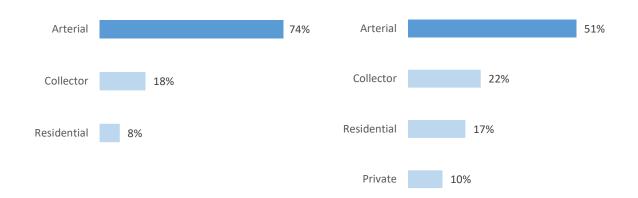


Data analysis of 2020 bicycle crashes showed that most bicyclists involved in crashes were male. Crashes where the driver was unknown are typically attributed to hit and run collisions.



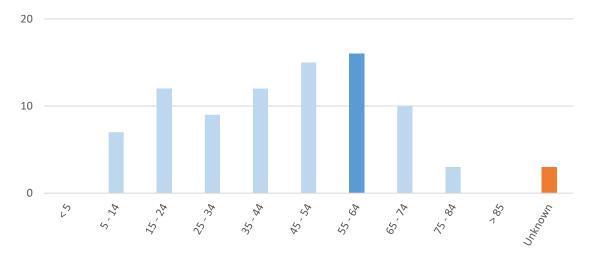
#### Mesa 2020 Bicycle Crashes: On Street Classification

## Mesa 2020 Bicycle Crashes: Cross Street Classification



The charts above show the street intersection classifications for Mesa bicycle crashes in 2020. Most bike crashes occurred along **arterial streets**, contributing to 74% of all cases.

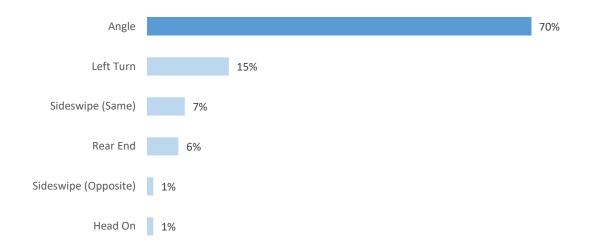
#### Mesa 2020 Bicycle Crashes by Age



Bicycle crashes were higher among people aged 55 to 64 than any other age group in 2020. This group makes up 11% of the total population yet contributed to 18.4% of the total bicycle crashes. Due to electronic reporting issues, the age of some bicyclists was unable to be determined.

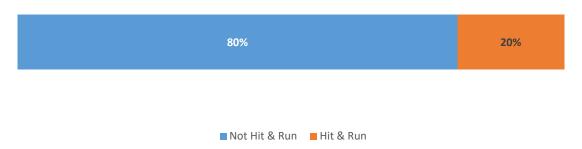


#### Mesa 2020 Bicycle Crash Manner



Over half of the total bicycle crashes were **angle crashes** with 61 incidents. These types of conflicts commonly occur at intersections and driveways.

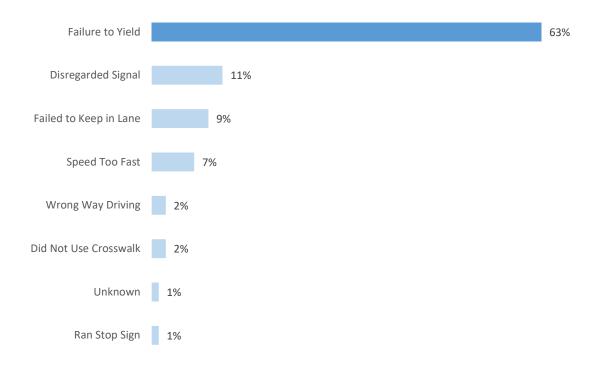
## Mesa 2020 Bicycle Crashes: Hit & Run



Of the 87 bicycle crashes within Mesa in 2020, 17 were deemed **hit and run** collisions. Relative to the total number of bike crashes, this is a decrease of 54.5% from the previous year.



## Mesa 2020 Bicycle Crashes: Vehicle 1 Violation



The reported violations of vehicle 1, inclusive of both bicyclists and drivers of motor vehicles, were highest for a **failure to yield**. In this category, there were 55 crashes.

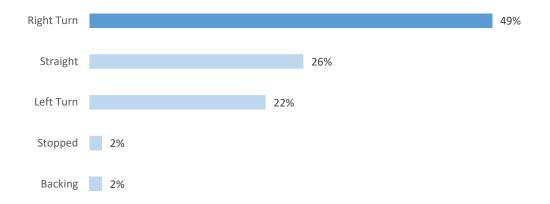
## Mesa 2020 Bicycle Crashes: Bicyclist at Fault Actions



Breaking the crashes down by unit, out of the 87 total bicyclist collisions, 22 were reportedly caused by a violation of the bicyclist. Of those crashes, 11 were caused by bicyclists attempting to cross the road. This includes midblock and intersection crossings.

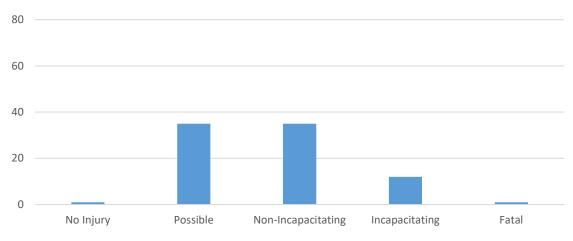


## Mesa 2020 Bicycle Crashes: Motorist at Fault Actions



Of the 87 bicyclist crashes, 65 were caused by actions of the motor vehicle driver, as reported by police officers. Of those crashes, 32 were caused by motorists attempting to make a **right turn** movement.

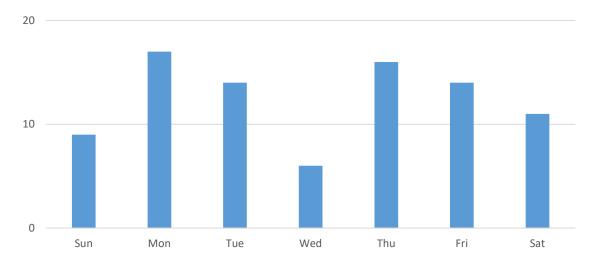
## Mesa 2020 Bicycle Crashes: Injury Severity



Of the 87 total bicycle crashes within the City of Mesa in 2020, there was 1 fatality and 12 serious injuries, totalling 15% of all bicycle-related crashes.

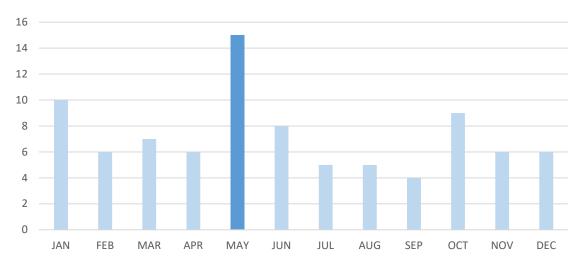


#### Mesa 2020 Bicycle Crashes by Day of Week



The chart above shows the frequency of bicycle crashes within Mesa in 2020 by day of week.

#### Mesa 2020 Bicycle Crashes by Month



Data analysis of bicycle crashes by month revealed an increase in the winter and spring months, with a large spike in May.



Mesa 2020 Bicycle Crashes by Time and Day of Week

Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
12:00 AM - 1:00 AM	0	0	0	0	0	0	0	0
1:00 AM - 2:00 AM	0	0	0	0	0	0	0	0
2:00 AM - 3:00 AM	0	0	0	0	0	0	0	0
3:00 AM - 4:00 AM	0	0	0	0	0	0	1	1
4:00 AM - 5:00 AM	0	0	0	0	0	0	0	0
5:00 AM - 6:00 AM	0	0	0	0	0	1	2	3
6:00 AM - 7:00 AM	1	0	1	1	1	1	1	6
7:00 AM - 8:00 AM	0	2	0	0	0	3	1	6
8:00 AM - 9:00 AM	0	1	0	0	0	0	1	2
9:00 AM - 10:00 AM	0	0	2	0	3	1	0	6
10:00 AM - 11:00 AM	1	2	0	0	0	1	0	4
11:00 AM - 12:00 PM	1	2	0	0	1	0	1	5
12:00 PM - 1:00 PM	0	1	0	0	2	0	1	4
1:00 PM - 2:00 PM	0	1	0	1	1	1	0	4
2:00 PM - 3:00 PM	0	1	1	1	0	1	2	6
3:00 PM - 4:00 PM	3	1	2	1	1	0	1	9
4:00 PM - 5:00 PM	0	1	3	2	1	3	0	10
5:00 PM - 6:00 PM	1	1	0	0	1	0	0	3
6:00 PM - 7:00 PM	0	3	1	0	1	2	0	7
7:00 PM - 8:00 PM	1	0	3	0	1	0	0	5
8:00 PM - 9:00 PM	1	0	1	0	0	0	0	2
9:00 PM - 10:00 PM	0	0	0	0	1	0	0	1
10:00 PM - 11:00 PM	0	1	0	0	2	0	0	3
11:00 PM - 12:00 AM	0	0	0	0	0	0	0	0
Total	9	17	14	6	16	14	11	87

Bicycle crashes in 2020 were most common during local rush hour in the morning and afternoon. The peak hour for bicyclist crashes was between 4:00 PM and 5:00 PM.



Mesa 5-Year Trend: Bicycle Crashes by Time of Day

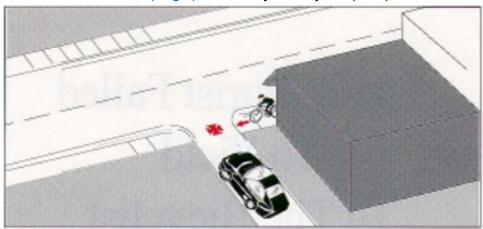
						5-Year	% of
	2016	2017	2018	2019	2020	Total	Total
12:00 AM - 1:00 AM	0	0	1	0	0	1	0.1%
1:00 AM - 2:00 AM	1	0	0	0	0	1	0.1%
2:00 AM - 3:00 AM	0	0	0	0	0	0	0.0%
3:00 AM - 4:00 AM	0	1	0	0	1	2	0.3%
4:00 AM - 5:00 AM	0	1	1	1	0	3	0.4%
5:00 AM - 6:00 AM	4	1	3	4	3	15	2.1%
6:00 AM - 7:00 AM	4	9	3	3	6	25	3.4%
7:00 AM - 8:00 AM	11	8	12	9	6	46	6.3%
8:00 AM - 9:00 AM	15	18	4	12	2	51	7.0%
9:00 AM - 10:00 AM	8	9	7	7	6	37	5.1%
10:00 AM - 11:00 AM	6	3	7	5	4	25	3.4%
11:00 AM - 12:00 PM	8	6	7	8	5	34	4.7%
12:00 PM - 1:00 PM	17	14	16	5	4	56	7.7%
1:00 PM - 2:00 PM	13	7	10	6	4	40	5.5%
2:00 PM - 3:00 PM	15	12	12	8	6	53	7.3%
3:00 PM - 4:00 PM	11	26	13	12	9	71	9.8%
4:00 PM - 5:00 PM	13	14	16	15	10	68	9.4%
5:00 PM - 6:00 PM	12	8	18	7	3	48	6.6%
6:00 PM - 7:00 PM	14	14	10	4	7	49	6.7%
7:00 PM - 8:00 PM	12	9	7	10	5	43	5.9%
8:00 PM - 9:00 PM	6	2	7	3	2	20	2.8%
9:00 PM - 10:00 PM	2	4	7	2	1	16	2.2%
10:00 PM - 11:00 PM	3	4	5	3	3	18	2.5%
11:00 PM - 12:00 AM	0	2	2	0	0	4	0.6%
Total	175	172	168	124	87	726	

Analyzing the bicycle crash trend over the past five years shows that the peak time frame for bicycle-related crashes is between 12:00 PM to 6:00 PM.

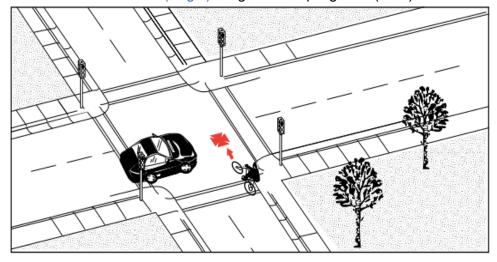


The following is a list of the most common crash types for bicycle-motorist collisions. They are ordered from highest to lowest and show the number of collisions of a certain type followed by the percentage of total crashes. Graphics are sourced from Federal Highway Administration, *Bicycle Crash Types: A 1990's Informational Guide.* The most common crash types (and associated crash manner) for bicycle-motorist collisions of 2020 were as follows:

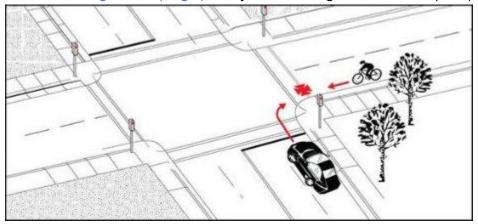
1. Motorist Drive Out (Angle) – driveway or alley: 19 (22%)



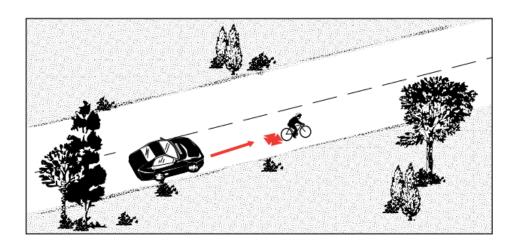
2. Bike Failed to Yield (Angle) – signal or stop sign: 16 (18%)



#### 3. Motorist Right Turn (Angle) – bicycle with or against traffic: 16 (18%)



#### 4. Motor Vehicle Rear End (Rear End) – bicycle riding with traffic: 8 (9%)





# SECTION 4: PEDESTRIAN CRASHES



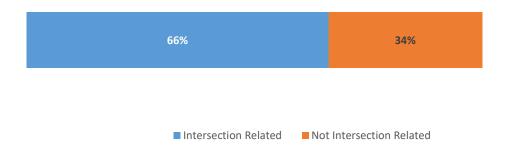
Mesa 2020 Pedestrian Crashes: General View

Year	Ped Crashes	Total Crashes	Ped Crashes % Of Total	Mesa Population	Ped Crashes Per 100,000 Population	% Change From 5-Year Average
2010	79	5118	1.54%	439041	18	-18.69%
2011	98	5178	1.89%	441711	22	0.40%
2012	120	5134	2.34%	443875	27	21.26%
2013	103	5313	1.94%	447002	23	2.78%
2014	72	5025	1.43%	452091	16	-25.01%
2015	68	4975	1.37%	458860	15	-28.07%
2016	96	5511	1.74%	470456	20	0.79%
2017	104	5579	1.86%	479317	22	13.14%
2018	109	5479	1.99%	491194	22	16.75%
2019	79	5357	1.47%	499720	16	-16.73%
2020	92	5324	1.73%	504258	18	-7.24%

The City of Mesa had 92 pedestrian crashes reported in 2020, making up 1.7% of all crashes for that year. The number of pedestrian crashes per 100,000 people was 12.5% higher than the previous year.

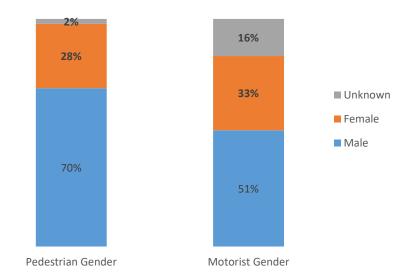


### Mesa 2020 Pedestrian Crashes: Intersection Relation



Of the 92 pedestrian crashes that occurred within the City of Mesa in 2020, 61 were intersection related.

#### Mesa 2020 Pedestrian Crash Gender

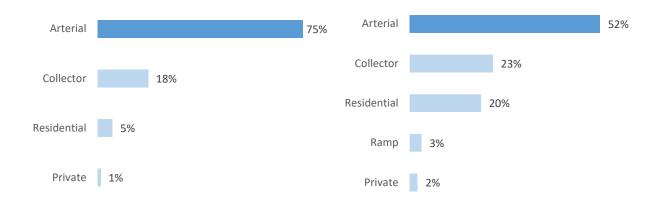


Data analysis of pedestrian crashes in 2020 showed that the persons involved in these types of collisions were mostly male. Crashes where the gender of the involved person was unknown are typically attributed to hit and run collisions.



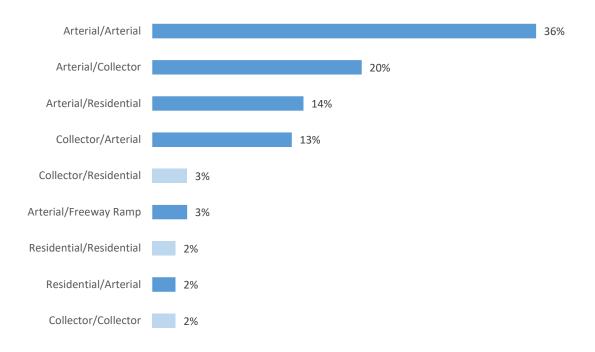
Mesa 2020 Pedestrian Crashes:
On Street Classification

Mesa 2020 Pedestrian Crashes: Cross Street Classification



Of the 92 pedestrian crashes within Mesa in 2020, 69 occurred along an arterial roadway.

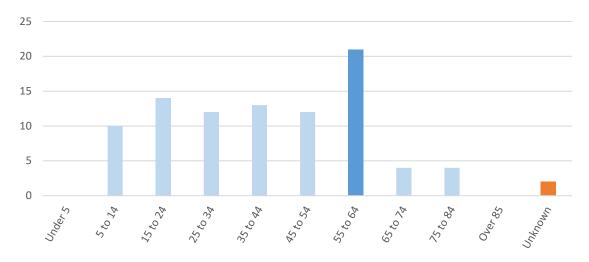
# Mesa 2020 Pedestrian Crashes: Intersection Classification



Arterial roads, whether on-street or cross street, were involved in 91% of all pedestrian crashes.

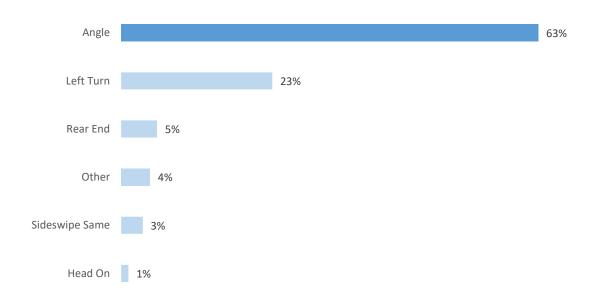


#### Mesa 2020 Pedestrian Crashes by Age



When analyzed by age group, most pedestrian crashes were among people aged 55 to 64 years old. This group makes up 11% of the total population yet contributed to 22.8% of the total pedestrian crashes. Due to electronic reporting issues, the age of some pedestrians was unable to be determined.

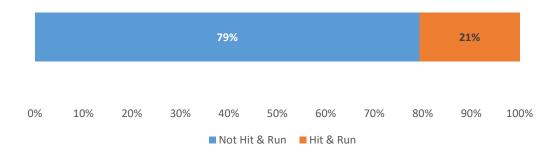
#### Mesa 2020 Pedestrian Crash Manner



Most of all pedestrian crashes were considered **angle crashes** with 58. Within the City of Mesa in 2020, these types of crashes were common for intersection and midblock crossings.

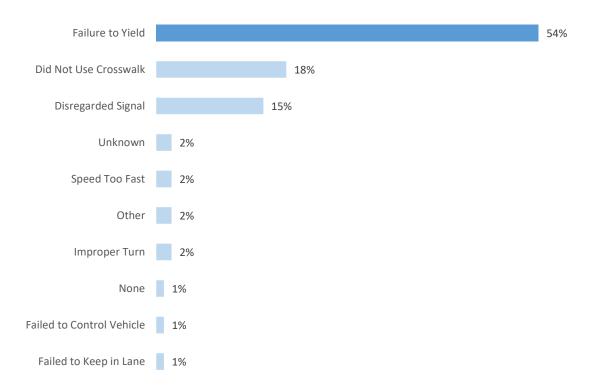


## Mesa 2020 Pedestrian Crashes: Hit & Run



Data analysis of crashes within the City of Mesa in 2020 showed 19 of the 92 pedestrian crashes were reported as **hit and run**.

### Mesa 2020 Pedestrian Crashes: Vehicle 1 Violation



The reported violations of vehicle 1 in 2020, inclusive of both pedestrians and drivers of motor vehicles, were mostly attributed to a **failure to yield**. In this category, there were 50 crashes.

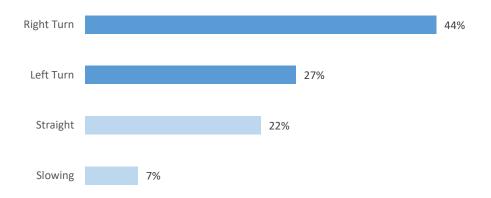


### Mesa 2020 Pedestrian Crashes: Pedestrian at Fault Actions



Of the 92 pedestrian crashes within the City of Mesa in 2020, 33 were reported as being caused by the pedestrian. Of those crashes, the most common action was **crossing the road**, with 31 cases.

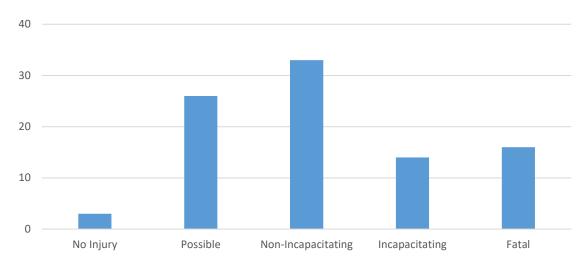
## Mesa 2020 Pedestrian Crashes: Motorist at Fault Actions



Of the 92 pedestrian crashes within the City of Mesa in 2020, 59 were reported as being caused by the driver of a motor vehicle. Of those crashes where the motorist was deemed at fault, **left and right turning movements** made up 71% of the actions leading to a crash with a pedestrian (47 collisions).

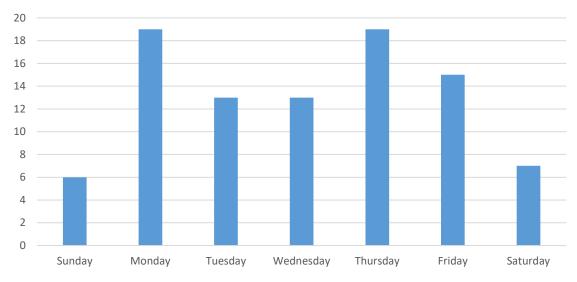


# Mesa 2020 Pedestrian Crashes: Injury Severity



There were 16 fatal pedestrian crashes and 14 serious injuries in 2020, totaling 33% of all pedestrian crashes. There were three crashes that resulted in no injury.

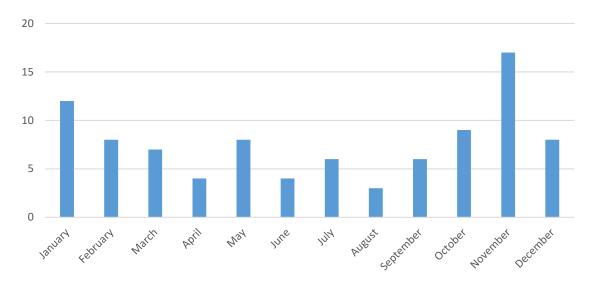
#### Mesa 2020 Pedestrian Crashes by Day of Week



Pedestrian crashes occurred more frequently on Wednesday, Thursday, and Friday than any other consecutive three-day period, totaling 51% of all related crashes.



#### Mesa 2020 Pedestrian Crashes by Month



City of Mesa pedestrian collisions in 2020 decreased during the summer months and were higher during the winter and spring.



Mesa 2020 Pedestrian Crashes by Time and Day of Week

		-		<del>-</del>				
Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
12:00 AM - 1:00 AM	0	0	0	1	0	0	0	1
1:00 AM - 2:00 AM	0	1	0	0	0	0	0	1
2:00 AM - 3:00 AM	0	0	0	0	0	0	0	0
3:00 AM - 4:00 AM	0	1	0	0	0	0	0	1
4:00 AM - 5:00 AM	0	0	0	1	0	0	0	1
5:00 AM - 6:00 AM	0	0	0	0	0	0	0	0
6:00 AM - 7:00 AM	0	3	1	0	1	2	0	7
7:00 AM - 8:00 AM	0	0	0	0	0	1	0	1
8:00 AM - 9:00 AM	1	1	0	1	1	1	0	5
9:00 AM - 10:00 AM	0	0	0	0	2	1	0	3
10:00 AM - 11:00 AM	0	1	0	2	1	1	1	6
11:00 AM - 12:00 PM	0	1	0	0	0	0	0	1
12:00 PM - 1:00 PM	0	0	1	0	1	0	0	2
1:00 PM - 2:00 PM	0	0	1	0	0	2	0	3
2:00 PM - 3:00 PM	1	1	0	0	0	0	1	3
3:00 PM - 4:00 PM	0	2	1	0	2	0	0	5
4:00 PM - 5:00 PM	0	1	2	1	3	0	0	7
5:00 PM - 6:00 PM	1	0	0	1	1	2	0	5
6:00 PM - 7:00 PM	1	1	1	1	3	3	1	11
7:00 PM - 8:00 PM	1	1	2	1	1	1	1	8
8:00 PM - 9:00 PM	0	3	1	2	1	1	1	9
9:00 PM - 10:00 PM	0	2	2	1	2	0	1	8
10:00 PM - 11:00 PM	0	0	1	1	0	0	1	3
11:00 PM - 12:00 AM	1	0	0	0	0	0	0	1
Total	6	19	13	13	19	15	7	92

Within the City of Mesa in 2020, the peak hour for pedestrian crashes was from 6:00 PM to 7:00 PM.



Mesa 5-Year Trend: Pedestrian Crashes by Time of Day

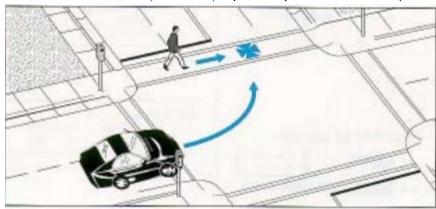
	2016	2017	2018	2019	2020	5-Year Total	% of Total
12:00 AM - 1:00 AM	3	2	1	1	1	8	1.7%
1:00 AM - 2:00 AM	1	0	0	0	1	2	0.4%
2:00 AM - 3:00 AM	0	0	0	0	0	0	0.0%
3:00 AM - 4:00 AM	0	0	0	1	1	2	0.4%
4:00 AM - 5:00 AM	0	1	0	0	1	2	0.4%
5:00 AM - 6:00 AM	0	0	0	0	0	0	0.0%
6:00 AM - 7:00 AM	3	2	7	0	7	19	4.0%
7:00 AM - 8:00 AM	7	5	7	6	1	26	5.4%
8:00 AM - 9:00 AM	5	4	3	2	5	19	4.0%
9:00 AM - 10:00 AM	5	5	3	2	3	18	3.8%
10:00 AM - 11:00 AM	1	2	3	2	6	14	2.9%
11:00 AM - 12:00 PM	0	6	4	3	1	14	2.9%
12:00 PM - 1:00 PM	3	3	6	5	2	19	4.0%
1:00 PM - 2:00 PM	7	3	4	2	3	19	4.0%
2:00 PM - 3:00 PM	2	6	5	7	3	23	4.8%
3:00 PM - 4:00 PM	6	6	7	11	5	35	7.3%
4:00 PM - 5:00 PM	8	9	8	7	7	39	8.1%
5:00 PM - 6:00 PM	9	5	6	1	5	26	5.4%
6:00 PM - 7:00 PM	8	12	13	7	11	51	10.6%
7:00 PM - 8:00 PM	6	13	9	3	8	39	8.1%
8:00 PM - 9:00 PM	8	8	10	6	9	41	8.5%
9:00 PM - 10:00 PM	7	8	9	9	8	41	8.5%
10:00 PM - 11:00 PM	4	1	2	1	3	11	2.3%
11:00 PM - 12:00 AM	3	3	2	3	1	12	2.5%
Total	96	104	109	79	92	480	

Analyzing the five-year pedestrian crash trend within Mesa revealed that the peak hours for pedestrian-related collisions to be between 4:00 PM and 10:00 PM.

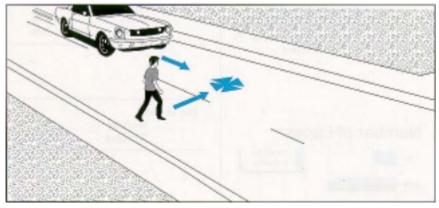


The following is a list of the most common crash types for pedestrian-motorist collisions. They are ordered from highest to lowest and show the number of collisions of a certain type, followed by the percentage of total crashes. Graphics are sourced from Federal Highway Administration, *Pedestrian Crash Types: A 1990's Informational Guide.* The most common crash types (and associated crash manner) for pedestrian-motorist collisions of 2020 were as follows:

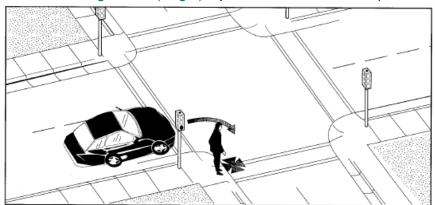
1. Motorist Left Turn (Left Turn) – parallel pedestrian travel (either direction): 21 (23%)



2. Pedestrian Walk Out Midblock (Angle) – outside of crosswalk 19 (21%)



3. Motorist Right Turn (Angle) – pedestrian in crosswalk (either direction): 17 (18%)



4. Pedestrian Dash Out (Angle) – jaywalking or against the light: 14 (15%)

