



2018

Annual Crash Report



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City of Mesa

1/23/2020

SECTION 1:

FATALITIES

In 2018, the City of Mesa had 32 fatal crashes with a total of 33 fatalities. The following collection of charts and tables documents fatal crashes of 2018. Descriptions of these tables and charts will be found underneath each respectively.

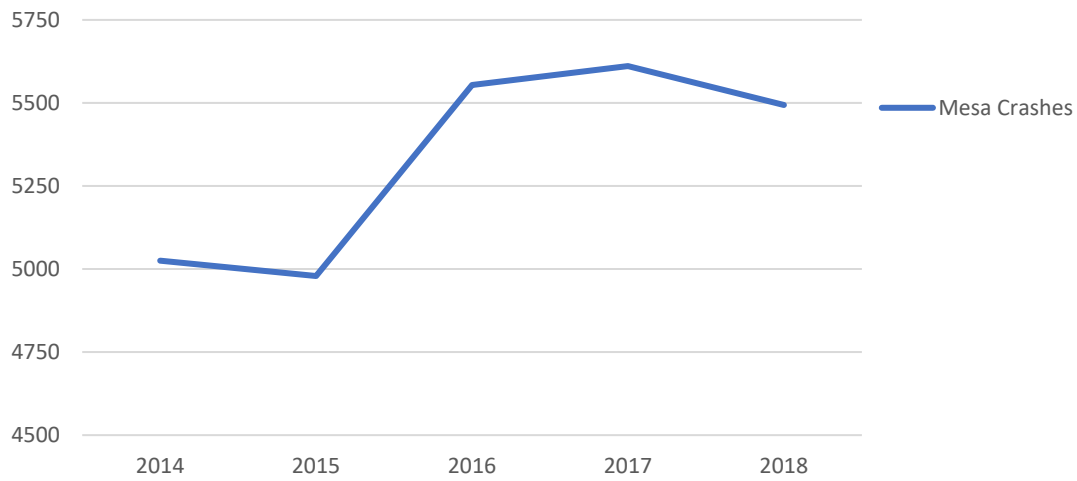
For the purposes of this document, “Vehicle 1” is defined as the motorist (or non-motorist) deemed at fault by Mesa Police Department. “Vehicle 2” is defined as the involved motorist (or non-motorist) that was deemed the victim by Mesa Police Department.

Mesa Fatal Crashes by Year

Year	Fatal Crashes	Total Fatalities	Total Crashes	Mesa Population	Fatalities Per 100,000 Population	% Change From Previous Year
2001	31	31	9928	416301	7.4	-
2002	22	23	9155	427923	5.4	-27.8%
2003	30	31	8520	435391	7.1	+32.5%
2004	25	27	9184	443733	6.1	-14.5%
2005	64	67	9205	450948	14.9	+144.2%
2006	47	50	8522	456449	11.0	-26.3%
2007	25	26	7933	460493	5.6	-48.5%
2008	25	26	5908	463829	5.6	-0.7%
2009	19	21	5504	467157	4.5	-19.8%
2010	15	15	5118	440031	3.4	-24.2%
2011	27	29	5178	444685	6.5	+91.3%
2012	24	24	5134	451677	5.3	-18.5%
2013	23	28	5313	457587	6.1	+15.2%
2014	19	20	5025	464704	4.3	-29.7%
2015	15	15	4979	471825	3.2	-26.1%
2016	28	30	5554	475274	6.3	+98.5%
2017	29	30	5611	496401	6.0	-4.3%
2018	32	33	5494	508958	6.5	+7.3%

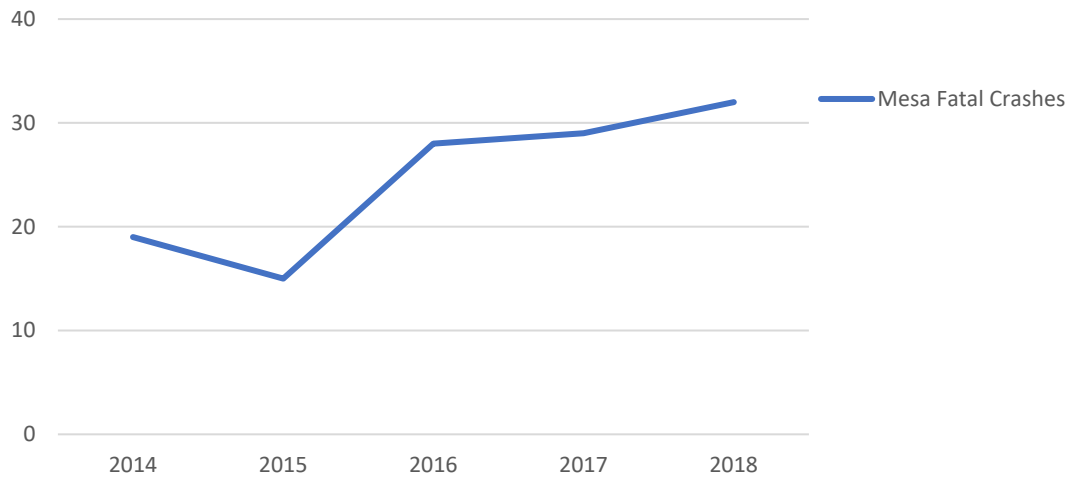
In 2018, 33 people lost their lives on Mesa’s public streets as a result of a collision with a motor vehicle, an increase from the year before. Likewise, the number of fatalities per 100,000 population increased by 7.3%.

Mesa Total Crashes by Year



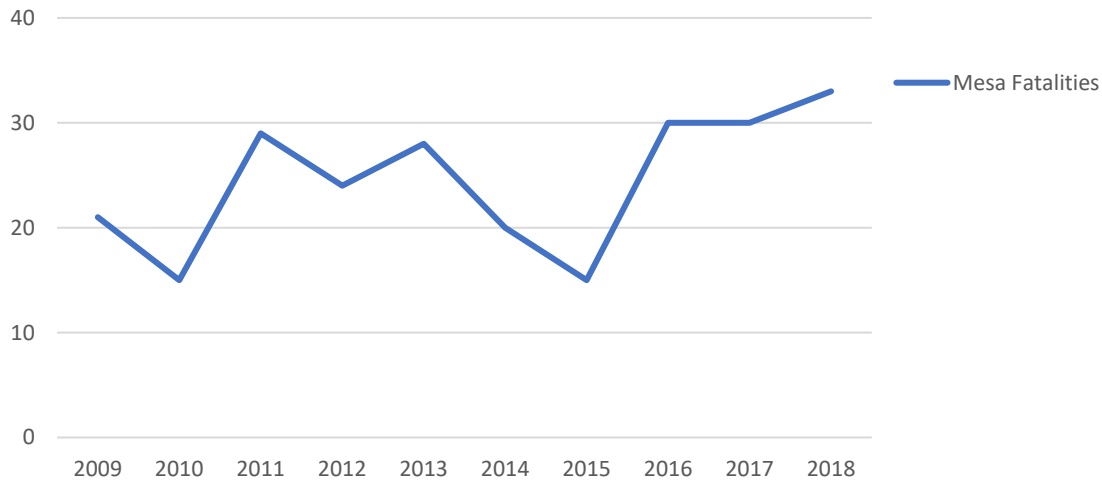
In 2018, City of Mesa **motor vehicle crashes** decreased by 117 from the year before; this is a 2% decrease from 2017.

Mesa Fatal Crashes by Year



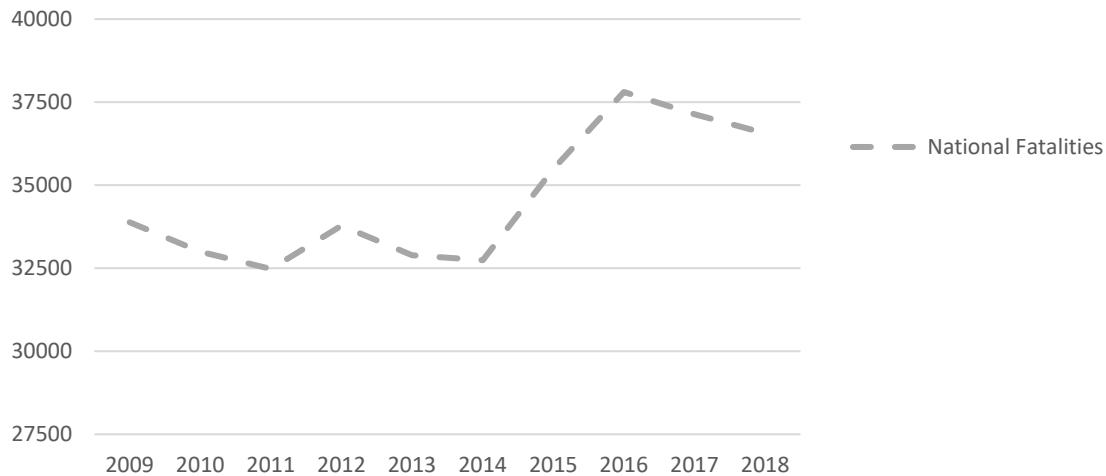
Over the past five years, **fatal crashes** in Mesa have had a general upward trend. From the chart above, the number of fatal crashes has increased since 2015.

Mesa Total Fatalities by Year



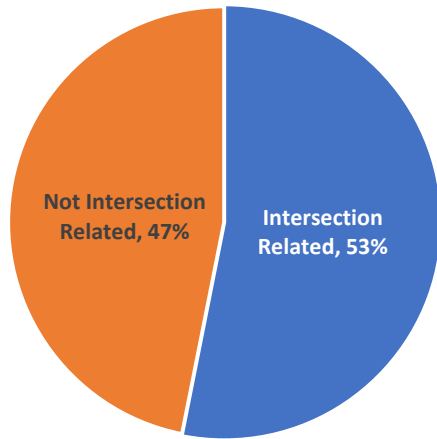
Based on a 10-year average (2009 – 2018), **total fatalities** are trending upward which is consistent with the national average over a 10-year period, as shown below.

National Total Fatalities by Year



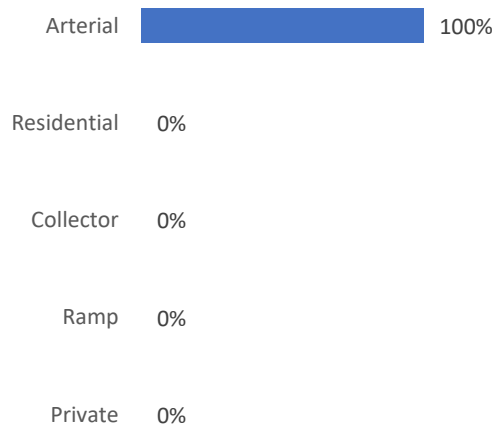
According to the National Highway Traffic Safety Administration (NHTSA) report on fatal crashes, 36,560 people died as a result of a collision with a motor vehicle in 2018. This is a decrease of 1.6% from 2017. Note that this figure represents crashes on all roads within the United States, not just local.

2018 Mesa Fatal Crashes: Intersection Relation

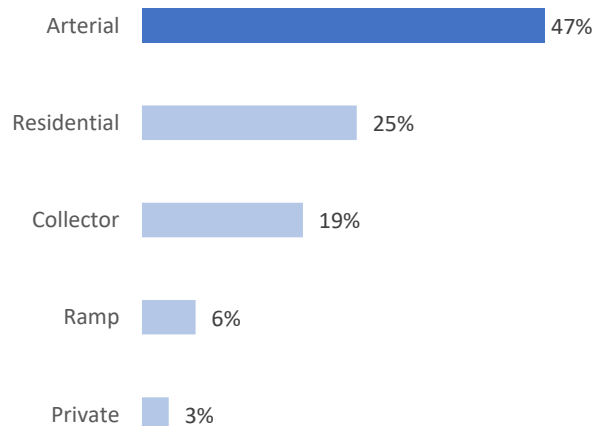


Of the 32 fatal crashes, 17 were **intersection related**.

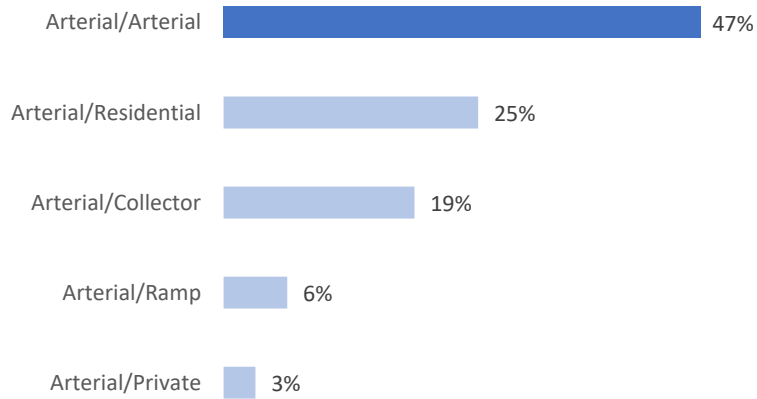
2018 Mesa Fatal Crashes: On Street Class



2018 Mesa Fatal Crashes: Cross Street Class

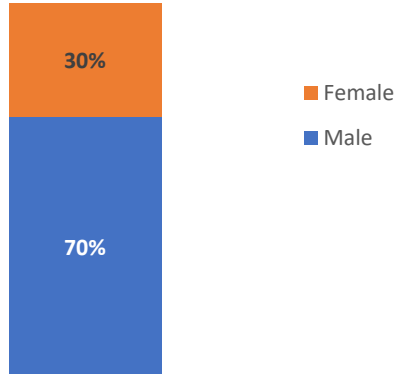


Mesa 2018 Fatal Crashes: Intersection Class



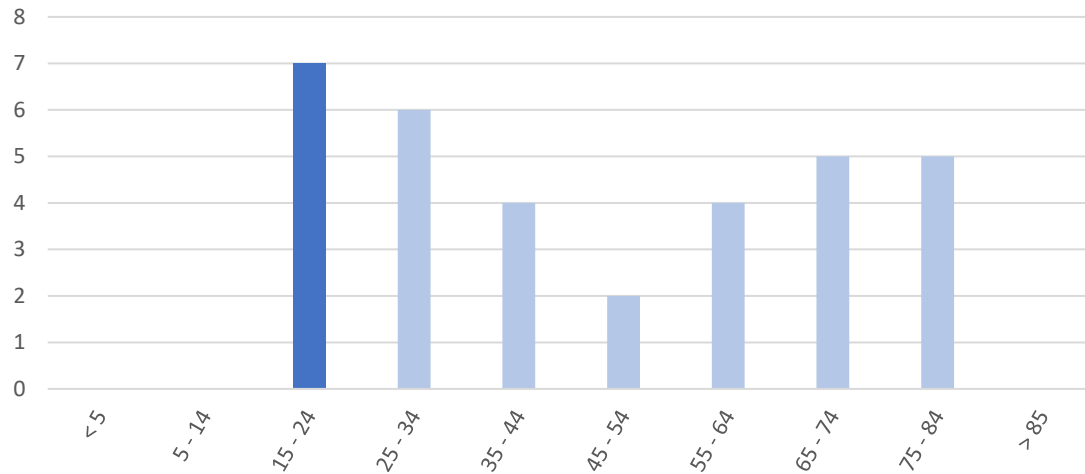
All 33 motor vehicle fatalities within the City of Mesa in 2018 **occurred on an arterial roadway.**

2018 Mesa Fatalities by Gender



Data analysis of 2018 crashes within the City of Mesa found that motor vehicle collision fatalities were **higher among males** than females.

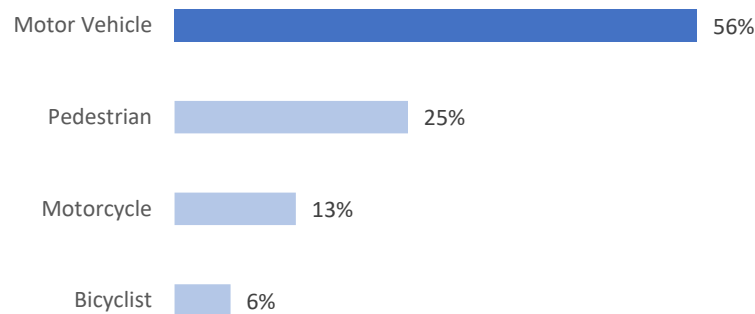
Mesa 2018 Fatalities by Age



Motor vehicle crash fatalities were higher among people **aged 15 to 24** than any other age group in 2018.

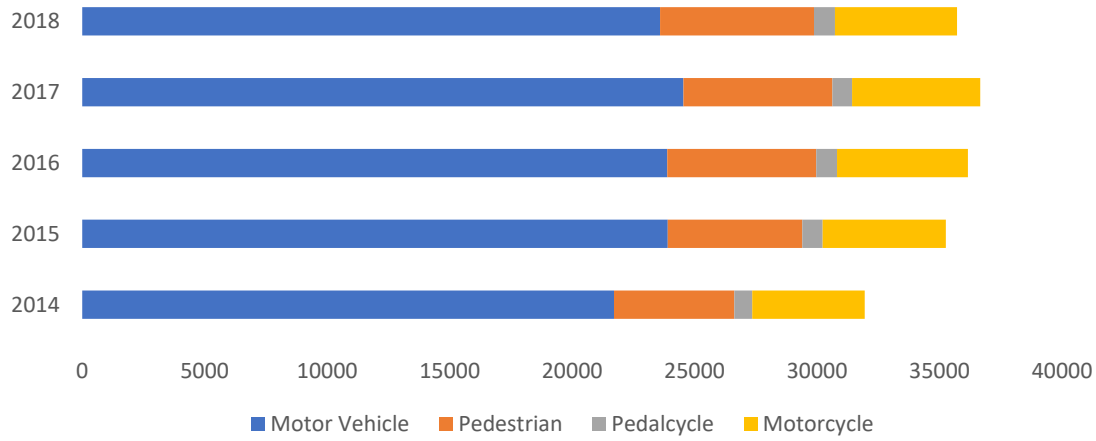
It should also be noted that the highest number of fatalities relative to the population within that age group was in people aged 75 to 84. This group makes up just over 5% of the total population and contributed to over 15% of the total fatalities within Mesa in 2018.

Mesa 2018 Fatalities: Unit Type



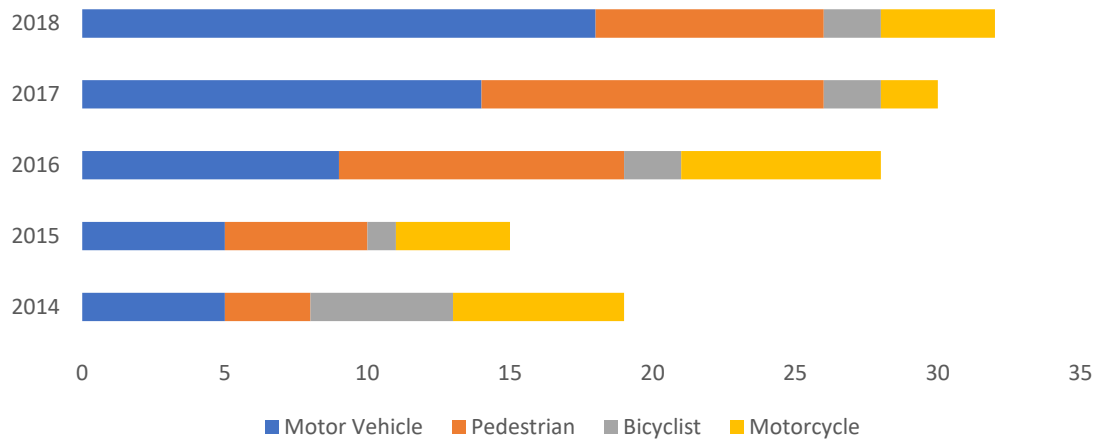
Among the unit types, drivers and passengers of **motor vehicles** were most involved in a fatal crash. The number of pedestrian fatalities decreased by 33% compared to 2017.

National Fatalities by Unit Type



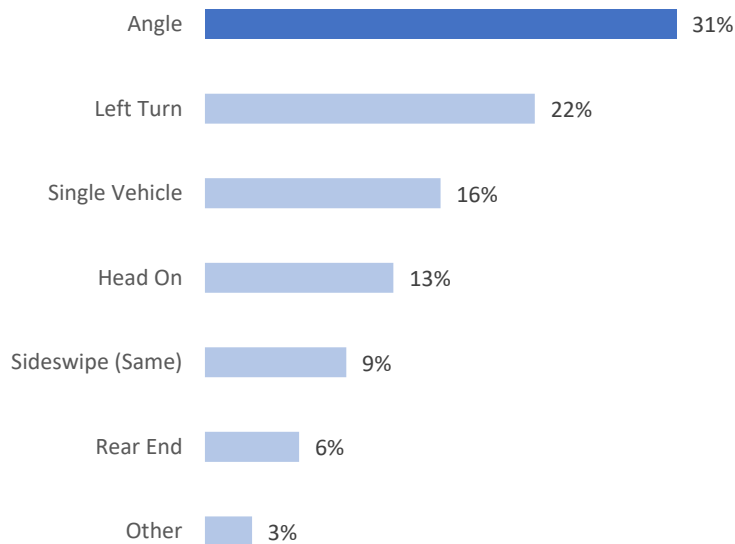
Nationally, fatalities involving **motor vehicles** greatly exceeded those involving other unit types. Collisions involving **pedestrians** comprised 17% of all fatalities in 2018.

Mesa Fatalities by Unit Type



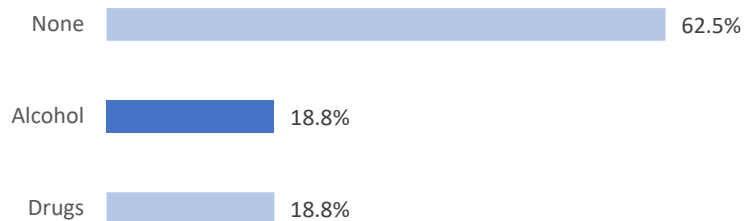
In Mesa, **motor vehicle** fatalities made up 56% of all fatalities in 2018, and another 25% were **pedestrian** fatalities.

Mesa 2018 Fatal Crash Manner



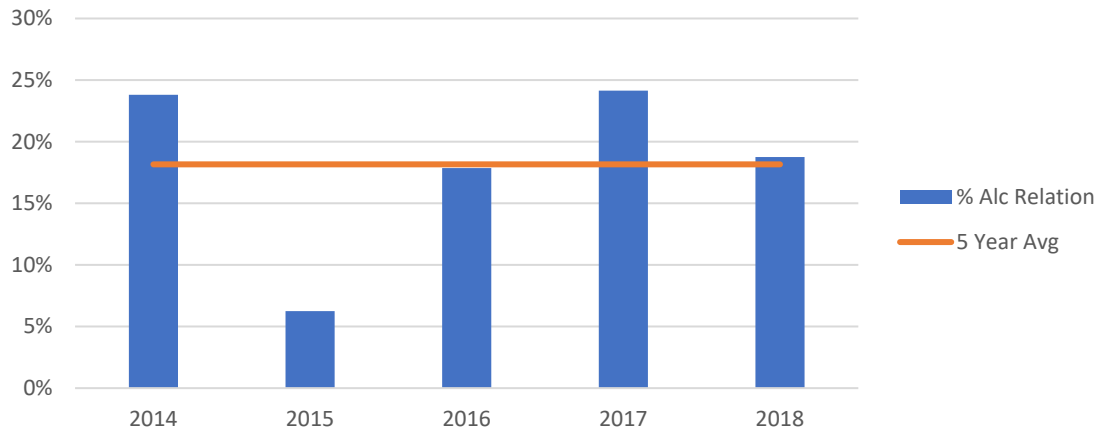
Motor vehicle fatalities within Mesa in 2018 were mostly due to **angle** crashes. Angle and left turn crashes made up more than half of the fatal crash total with 17. Angle crashes include those involving motor vehicles and pedestrians.

Mesa 2018 Fatal Crashes: Impairment



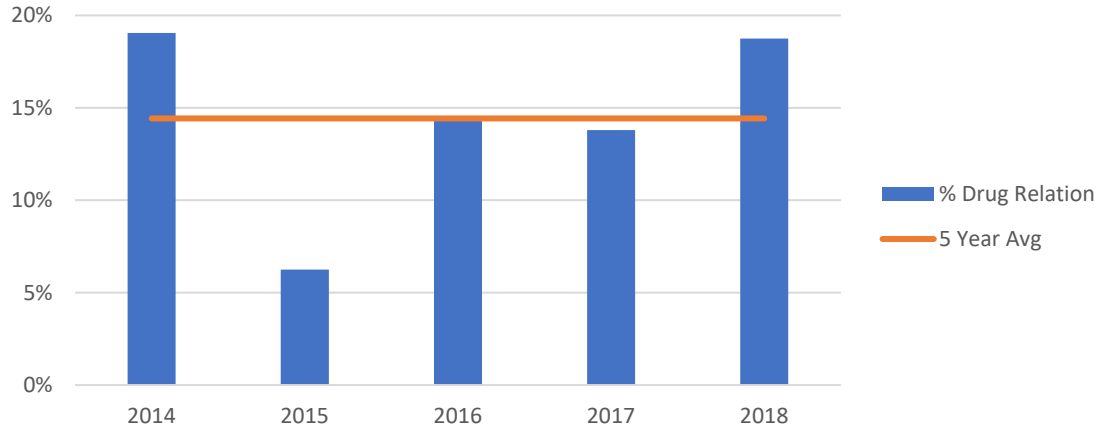
Almost 38% of the 32 fatal crashes in Mesa involved impairment. **Alcohol** and drugs were each involved in six fatal crashes.

Mesa 2018 Fatal Crashes: Alcohol Involvement



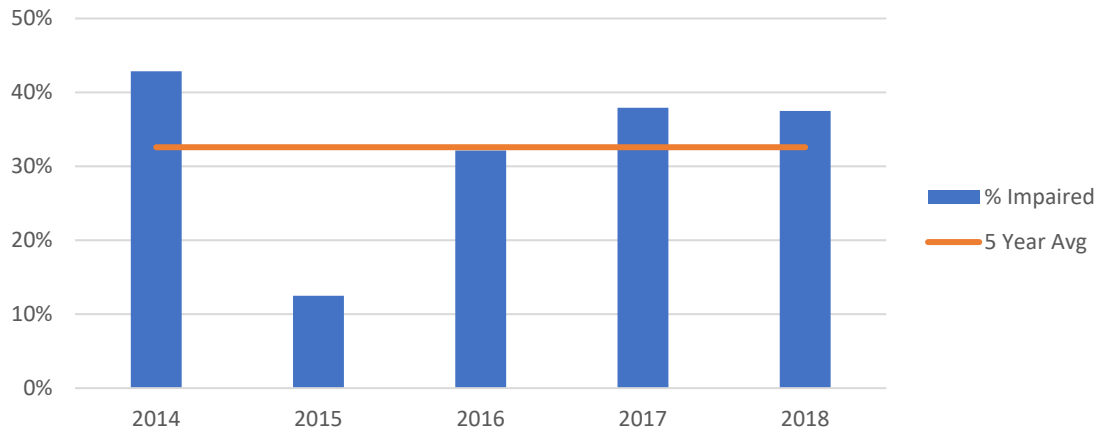
The above chart shows a 5-year trend in alcohol impairment, compared to the **average**, linked to fatal crashes. Over the past five years, an average 18% of fatal collisions involved a person under the influence of alcohol.

Mesa 2018 Fatal Crashes: Drug Involvement



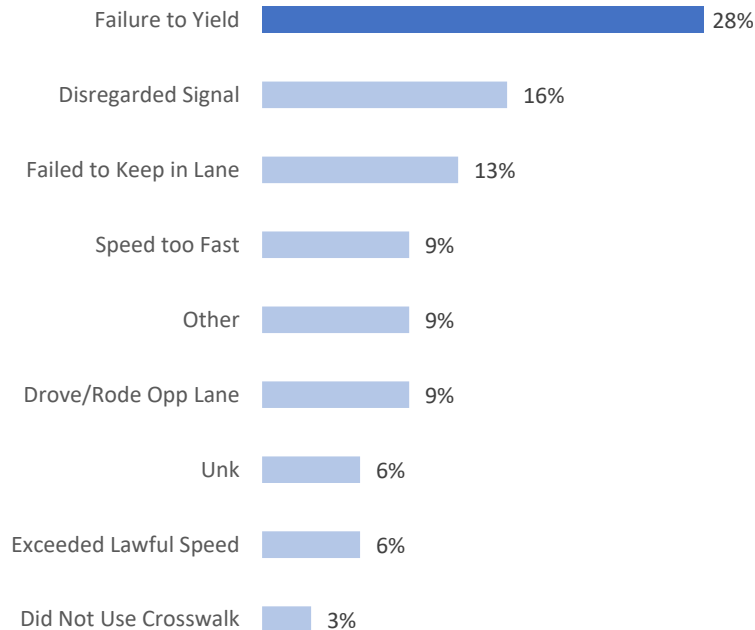
The above chart shows a 5-year trend in drug impairment, compared to the **average**, linked to fatal crashes. Over the past five years, an average 14% of fatal collisions involved a person under the influence of drugs.

Mesa 2018 Fatal Crashes: Drug & Alcohol Involvement



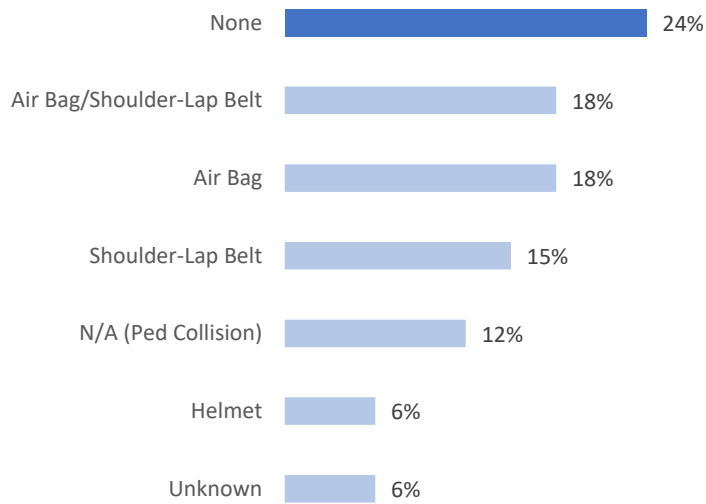
The above chart shows a 5-year trend that combines alcohol and drug impairment, compared to the **average**. Over the past five years, an average 33% of fatal collisions involved a person under the influence of either drugs or alcohol.

Mesa 2018 Fatal Crashes: Vehicle 1 Violation



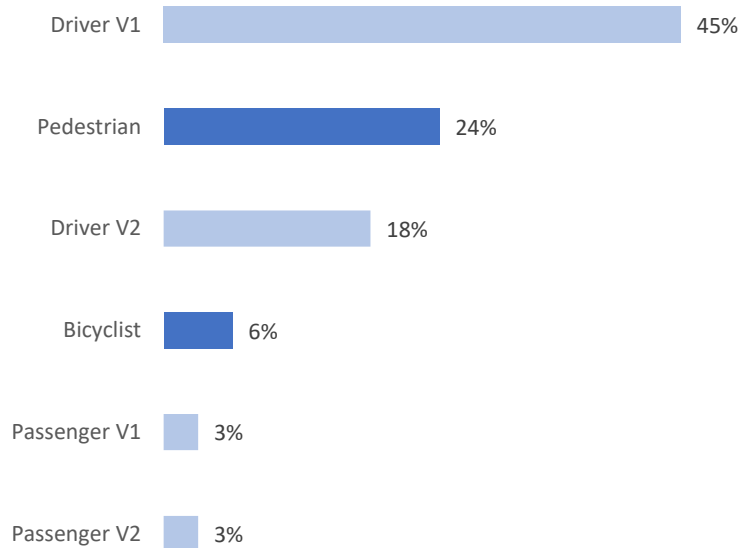
The above chart details the violations made by vehicle 1 leading to fatal crashes within Mesa in 2018. Of the 32 fatal motor vehicle crashes, 9 resulted from a **failure to yield**.

Mesa 2018 Fatal Unit Safety Device



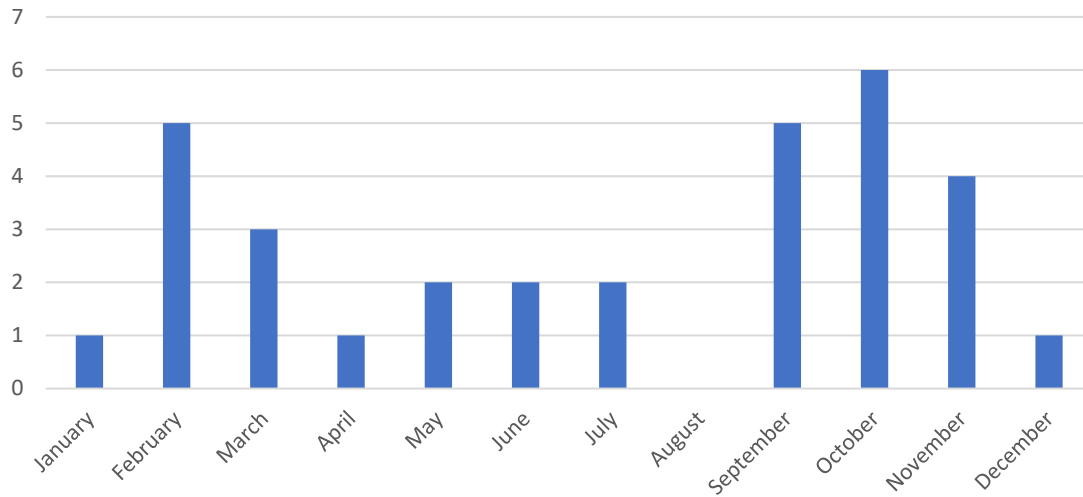
The chart above shows the known and unknown victim safety devices involved in the 33 Mesa fatalities in 2018. Eight fatalities involved victims that were **not using a safety device**.

Mesa 2018 Location of Fatal Unit



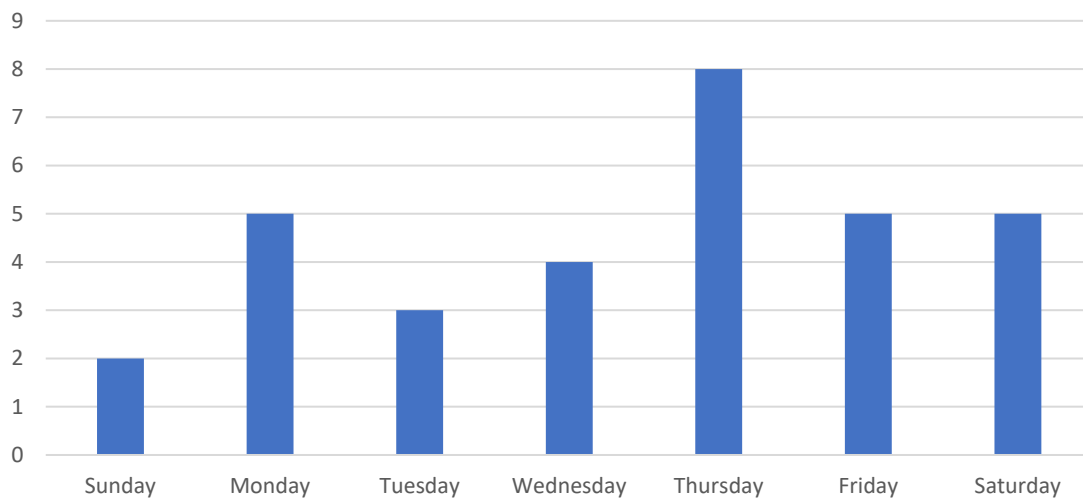
There were 33 fatalities in 2018. Among those, 10 involved a non-motorist victim (**8 pedestrian collisions and 2 bicyclist collisions**).

Mesa 2018 Fatal Crashes by Month



The pattern of fatal crashes by month in 2018 showed that fatalities rose during the Spring and Autumn months. During the Summer and Winter seasons, fatal crashes were relatively low. Note that there were zero fatal crashes within Mesa in the month of August.

Mesa 2018 Fatal Crashes by Week



Over half of the fatal crashes that occurred within Mesa in 2018 happened during the three-day period of Thursday, Friday, and Saturday.

Mesa 2018 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	0	0	0	0
3:00 AM - 4:00 AM	0	0	0	0	0	0	0	0
4:00 AM - 5:00 AM	0	0	0	0	0	1	0	1
5:00 AM - 6:00 AM	0	0	0	0	0	0	0	0
6:00 AM - 7:00 AM	0	0	0	0	0	0	0	0
7:00 AM - 8:00 AM	0	0	0	0	1	0	0	1
8:00 AM - 9:00 AM	0	0	0	0	0	0	0	0
9:00 AM - 10:00 AM	1	0	0	0	0	0	0	1
10:00 AM - 11:00 AM	0	1	0	0	1	0	0	2
11:00 AM - 12:00 PM	0	0	1	1	0	0	1	3
12:00 PM - 1:00 PM	0	0	0	0	0	0	1	1
1:00 PM - 2:00 PM	0	0	0	0	1	0	0	1
2:00 PM - 3:00 PM	1	1	0	0	1	1	0	4
3:00 PM - 4:00 PM	0	0	0	0	1	0	0	1
4:00 PM - 5:00 PM	0	1	0	0	0	0	0	1
5:00 PM - 6:00 PM	0	0	0	0	1	1	1	3
6:00 PM - 7:00 PM	0	0	1	0	0	1	0	2
7:00 PM - 8:00 PM	0	0	0	1	0	0	0	1
8:00 PM - 9:00 PM	0	1	1	1	0	0	1	4
9:00 PM - 10:00 PM	0	0	0	0	1	1	0	2
10:00 PM - 11:00 PM	0	0	0	1	1	0	1	3
11:00 PM - 12:00 AM	0	0	0	0	0	0	0	0
Total	2	5	3	4	8	5	5	32

In 2018, the highest concentration of fatal crashes within a three-hour period occurred from 8:00 PM to 11:00 PM.

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

	2014	2015	2016	2017	2018	5-Year Total	% of Total
12:00 AM - 1:00 AM	0	0	0	3	0	3	2.4%
1:00 AM - 2:00 AM	1	0	0	0	1	2	1.6%
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	1	0.8%
4:00 AM - 5:00 AM	0	0	0	1	1	2	1.6%
5:00 AM - 6:00 AM	2	0	0	1	0	3	2.4%
6:00 AM - 7:00 AM	0	0	1	1	0	2	1.6%
7:00 AM - 8:00 AM	2	0	0	1	1	4	3.2%
8:00 AM - 9:00 AM	0	0	0	1	0	1	0.8%
9:00 AM - 10:00 AM	1	1	0	1	1	4	3.2%
10:00 AM - 11:00 AM	0	3	1	0	2	6	4.8%
11:00 AM - 12:00 PM	1	2	1	0	3	7	5.6%
12:00 PM - 1:00 PM	1	1	0	3	1	6	4.8%
1:00 PM - 2:00 PM	2	0	1	1	1	5	4.0%
2:00 PM - 3:00 PM	3	1	4	0	4	12	9.5%
3:00 PM - 4:00 PM	0	2	2	1	1	6	4.8%
4:00 PM - 5:00 PM	1	0	0	2	1	4	3.2%
5:00 PM - 6:00 PM	1	2	3	0	3	9	7.1%
6:00 PM - 7:00 PM	1	1	0	5	2	9	7.1%
7:00 PM - 8:00 PM	1	0	4	3	1	9	7.1%
8:00 PM - 9:00 PM	0	0	4	4	4	12	9.5%
9:00 PM - 10:00 PM	2	0	4	1	2	9	7.1%
10:00 PM - 11:00 PM	1	1	1	0	3	6	4.8%
11:00 PM - 12:00 AM	1	1	1	1	0	4	3.2%
Total	21	16	28	29	32	126	

Over a 5-year trend, the peak six-hour period for fatal crashes was between 5:00 PM and 11:00 PM.

SECTION 2:

SERIOUS INJURIES

As of 2014, serious injury crashes are now being measured by the City of Mesa to help determine problematic areas on roadways. This metric is likely to give a clearer view of the behaviors and factors that lead to collisions resulting in serious injuries by significantly increasing the sample size of analyzed crashes, when compared to only analyzing fatal crashes.

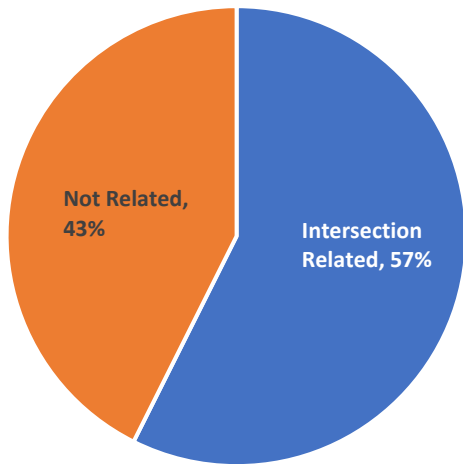
Mesa Serious Injury Crashes: General View

Year	Serious Injury Crashes	Total Serious Injuries	Total Crashes	Mesa Population	Serious Injuries Per 100,000 Population	% Change From Previous Year
2001			9928	416301		
2002			9155	427923		
2003			8520	435391		
2004			9184	443733		
2005			9205	450948		
2006			8522	456449		
2007			7933	460493		
2008			5908	463829		
2009			5504	467157		
2010		228	5118	440031	52	-
2011		236	5178	444685	53	+2.4%
2012	-	233	5134	451677	52	-2.8%
2013	-	239	5313	457587	52	+1.3%
2014	183	237	5025	464704	51	-2.4%
2015	181	213	4979	471825	45	-11.5%
2016	234	272	5554	475274	57	+26.8%
2017	194	218	5611	496401	44	-23.3%
2018	169	191	5479	508958	33	-24.4%

In 2018, 169 serious injury crashes occurred on Mesa roadways resulting in 191 serious injuries. The percentage of severe injury crashes per 100,000 population, decreased by 24% from the previous year.

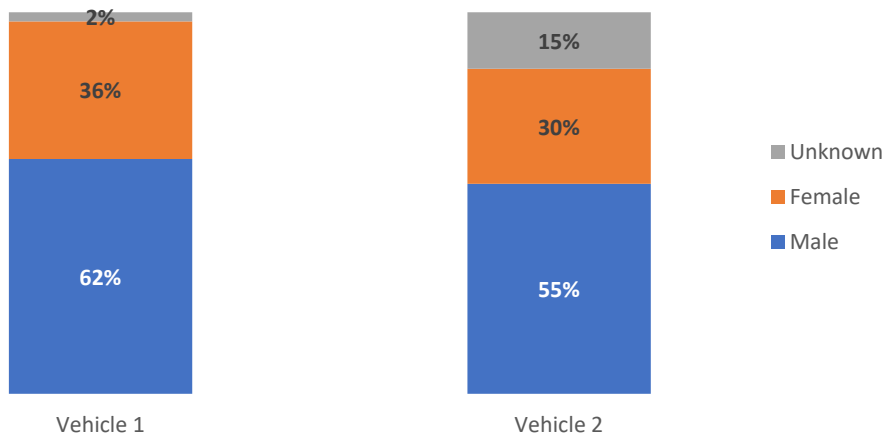
The average number of serious injuries per 100,000 population from 2014 to 2018 was about 46.

Mesa 2018 Serious Injury Crashes: Intersection Relation



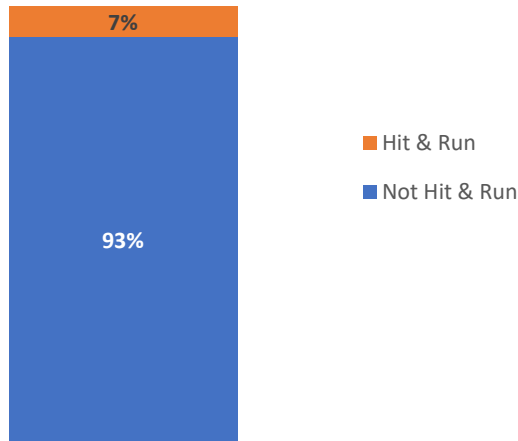
Of the 169 serious injury crashes that happened within Mesa in 2018, 97 were **intersection related**.

Mesa 2018 Serious Injury Crashes by Gender



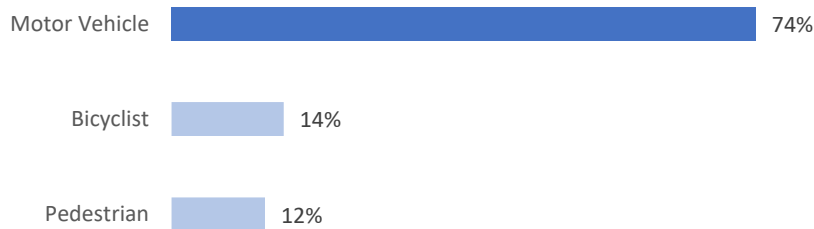
Data analysis of 2018 crashes within the City of Mesa found that motor vehicle serious injury crashes were higher among **males** than **females**. Genders that are **unknown** are typically attributed to hit and run crashes.

Mesa 2018 Serious Injury Crashes: Hit and Run



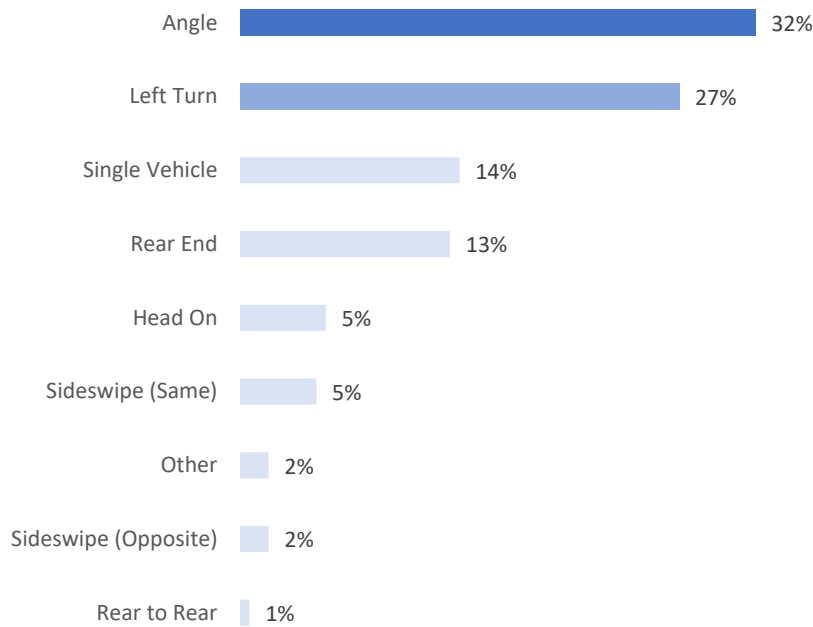
There were 12 serious injury crashes that were classified as **hit and run** in 2018.

Mesa 2018 Serious Injury Crashes: Unit Type



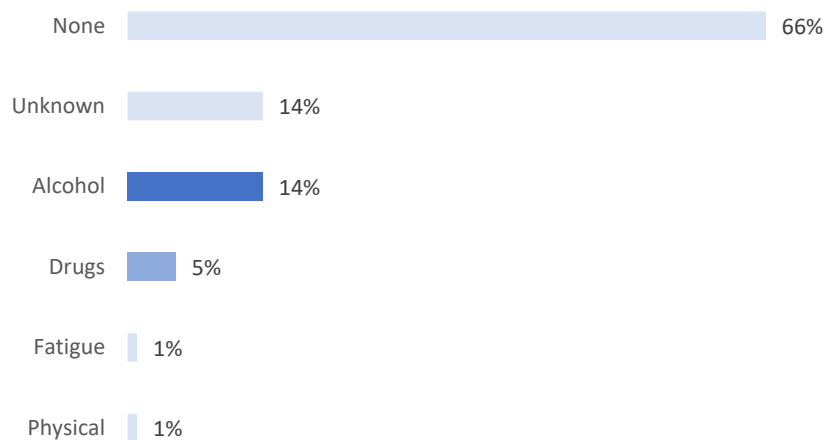
Most of the serious injury crashes that occurred in Mesa in 2018 were **motor vehicle** collisions. This number includes motorcyclists and single vehicle crashes.

Mesa 2018 Serious Injury Crash Manner



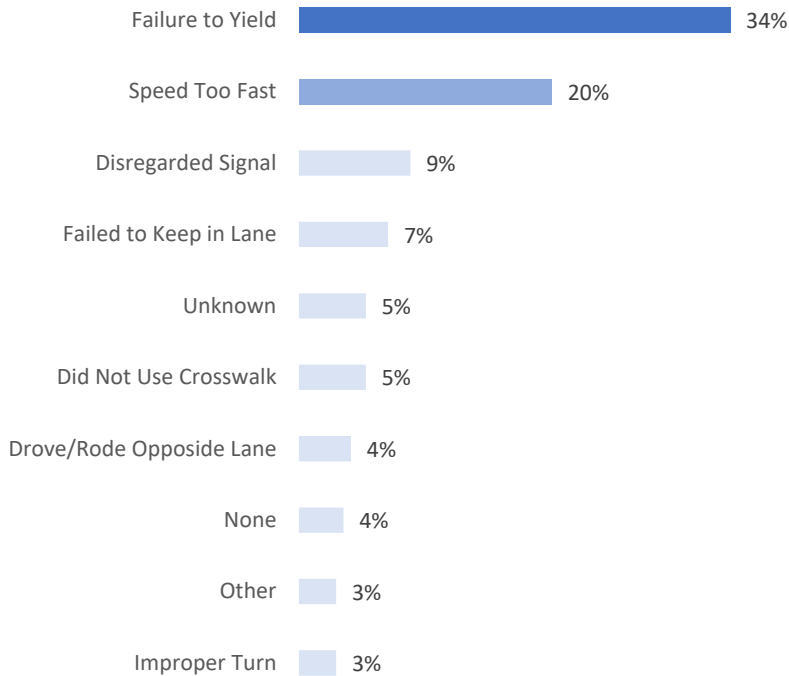
In 2018, the leading crash manners resulting in serious injuries were **angle** and **left turn** crashes. These include pedestrian and bicyclist crashes when behaviors were like the manners listed above.

Mesa 2018 Serious Injury Crashes: Impairment



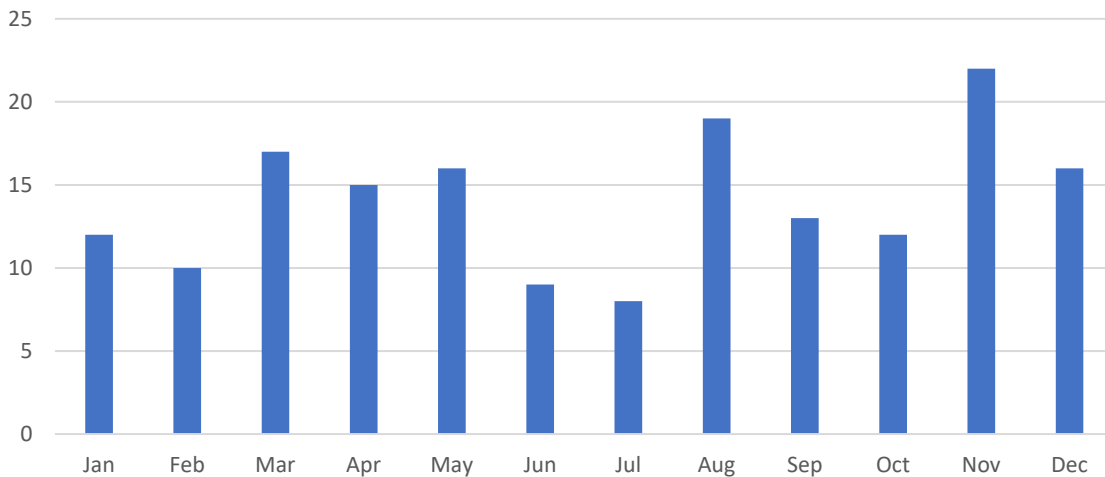
Impairment, including both **alcohol** and **drug** use, was a factor in 27 serious injury crashes in 2018 (24 alcohol incidents and 9 drug incidents).

Mesa 2018 Serious Injury Crashes: Vehicle 1 Violation

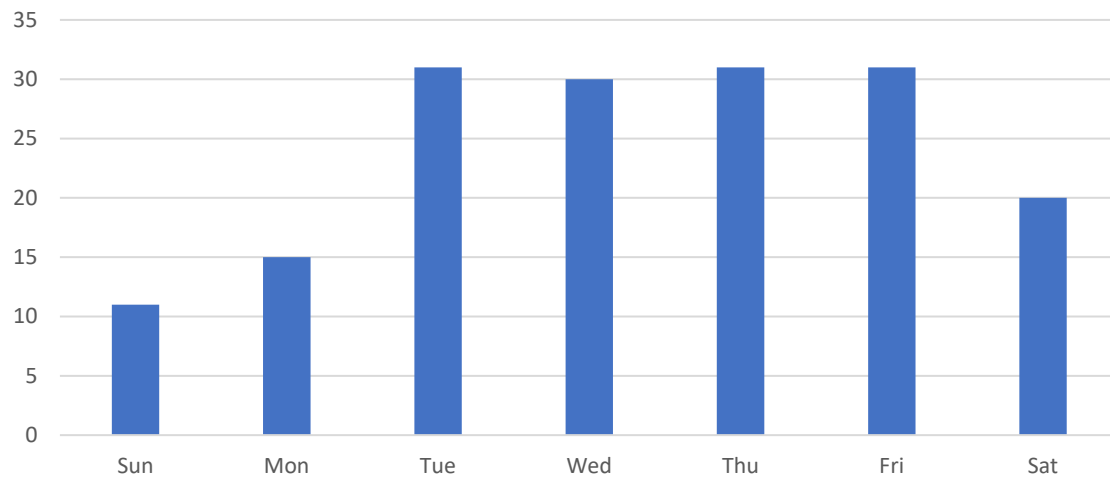


This chart shows a distribution of Mesa vehicle 1 violations in 2018 that resulted in crashes with serious injuries. The most common violation was noted as a **failure to yield**. Another common violation for units labeled as vehicle 1 was **speed too fast for conditions**.

Mesa 2018 Serious Injury Crashes by Month



Mesa 2018 Serious Injury Crashes by Day of Week



Serious injury crashes were most frequent between Tuesday and Friday.

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	0	0	0	0	2	0	1	3
1:00 AM - 2:00 AM	0	0	1	0	0	0	0	1
2:00 AM - 3:00 AM	1	1	0	0	0	0	1	3
3:00 AM - 4:00 AM	0	1	0	0	0	0	0	1
4:00 AM - 5:00 AM	0	0	1	0	0	1	0	2
5:00 AM - 6:00 AM	1	1	0	2	0	1	1	6
6:00 AM - 7:00 AM	0	0	1	0	0	4	0	5
7:00 AM - 8:00 AM	0	0	4	3	4	1	1	13
8:00 AM - 9:00 AM	0	0	2	1	2	2	0	7
9:00 AM - 10:00 AM	0	0	1	3	0	0	1	5
10:00 AM - 11:00 AM	1	0	4	1	0	1	1	8
11:00 AM - 12:00 PM	0	1	1	1	2	5	1	11
12:00 PM - 1:00 PM	0	3	2	1	4	3	0	13
1:00 PM - 2:00 PM	0	2	0	3	2	1	0	8
2:00 PM - 3:00 PM	2	2	2	1	3	2	1	13
3:00 PM - 4:00 PM	1	0	2	0	3	3	2	11
4:00 PM - 5:00 PM	0	2	5	2	3	0	0	12
5:00 PM - 6:00 PM	0	1	1	3	3	1	3	12
6:00 PM - 7:00 PM	2	1	0	5	0	2	1	11
7:00 PM - 8:00 PM	1	0	1	1	0	2	2	7
8:00 PM - 9:00 PM	1	0	2	2	1	2	1	9
9:00 PM - 10:00 PM	0	0	1	0	2	0	1	4
10:00 PM - 11:00 PM	0	0	0	1	0	0	1	2
11:00 PM - 12:00 AM	1	0	0	0	0	0	1	2
Total	11	15	31	30	31	31	20	169

Data analysis of Mesa crashes in 2018 showed that the highest concentration of crashes occurred between 12:00 PM and 6:00 PM.

SECTION 3:

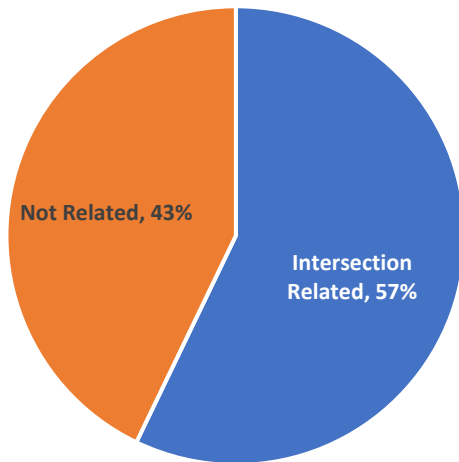
BIKE CRASHES

Mesa Bicycle Crashes: General View

Year	Bike Crashes	Total Crashes	Bike Crashes % Of Total	Mesa Population	Bike Crashes Per 100,000 Population	% Change From Previous Year
2001	284	9928	2.9%	416301	68.2	-
2002	254	9155	2.8%	427923	59.4	-13.0%
2003	282	8520	3.3%	435391	65	+9.1%
2004	258	9184	2.8%	443733	58	-10.2%
2005	276	9205	3.0%	450948	61	+5.3%
2006	181	8522	2.1%	456449	40	-35.2%
2007	231	7933	2.9%	460493	50	+26.5%
2008	212	5908	3.6%	463829	46	-8.9%
2009	222	5504	4.0%	467157	48	+4.0%
2010	206	5118	4.0%	440031	47	-1.5%
2011	219	5178	4.2%	444685	49	+5.2%
2012	257	5134	5.0%	451677	57	+15.5%
2013	190	5313	3.6%	457587	42	-27.0%
2014	163	5025	3.2%	464704	35	-15.5%
2015	131	4979	2.6%	471825	28	-20.8%
2016	175	5554	3.2%	475274	37	+32.6%
2017	172	5611	3.1%	496401	35	-5.9%
2018	168	5479	3.1%	508958	33	-4.7%

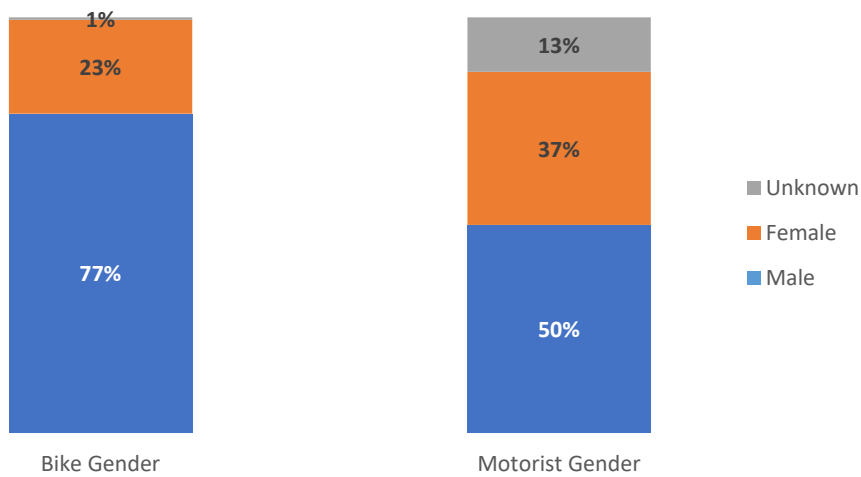
The City of Mesa had 168 bike crashes in 2018 which was 3.1% of all Mesa crashes. The number of bike crashes per 100,000 population decreased 4.7% from the previous year.

Mesa 2018 Bicycle Crashes: Intersection Relation



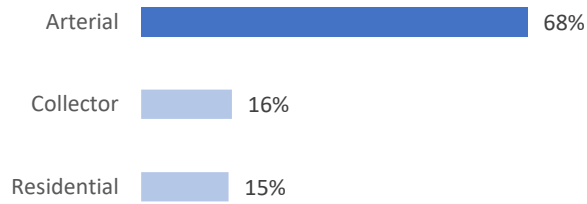
Of the 168 bike crashes in Mesa 2018, 96 were **intersection related**.

Mesa 2018 Bicycle Crash Gender

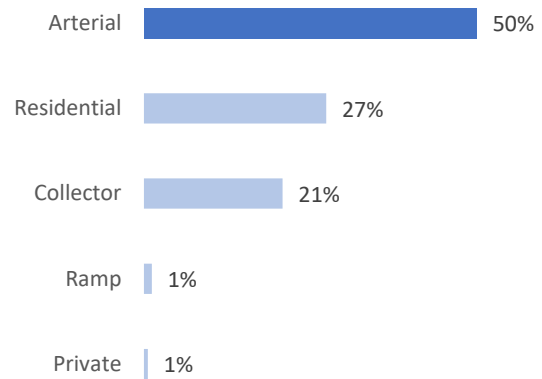


Data analysis of 2018 bicycle crashes showed that most bicyclists that were involved in crashes were **male**. The gender of the motorist involved was a near even split, with males being slightly higher than **females**.

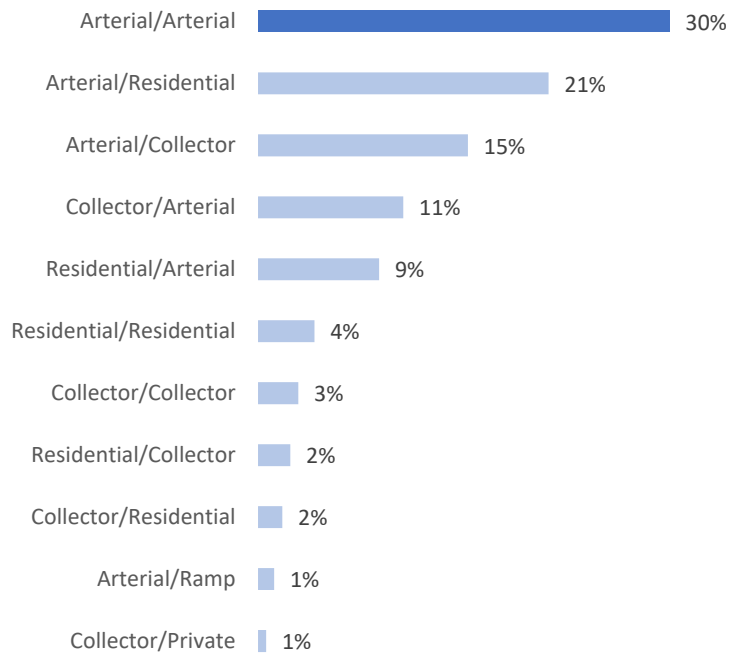
Mesa 2018 Bicycle Crashes: On Street Classification



Mesa 2018 Bicycle Crashes: Cross Street Classification

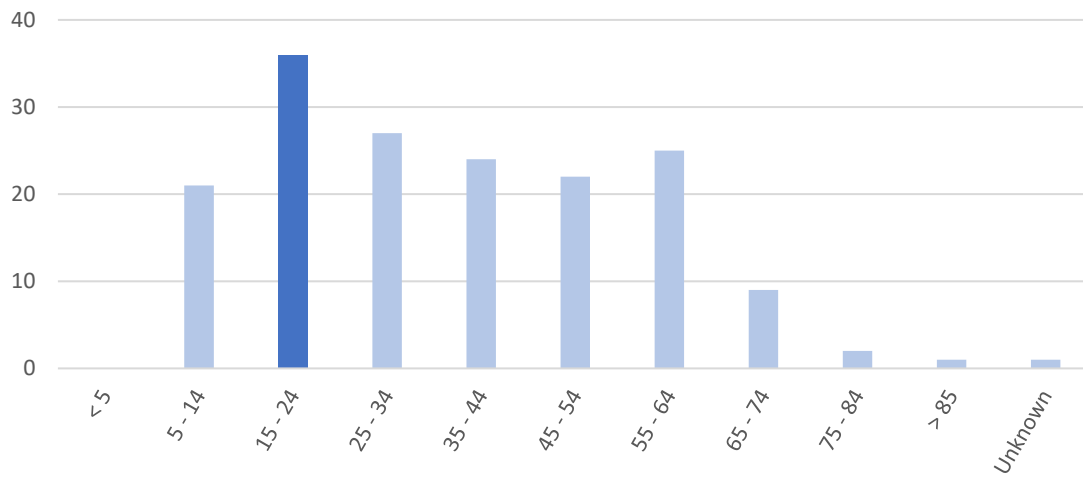


Mesa 2018 Bicycle Crashes: Intersection Classification



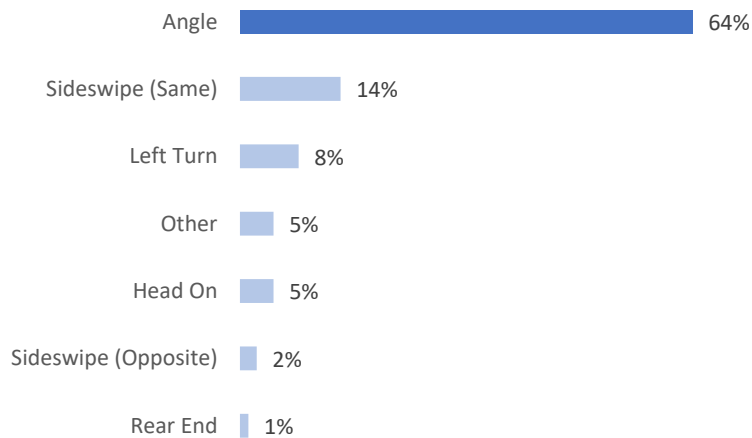
The charts above show the street intersection classifications for Mesa bicycle crashes in 2018. Most of these crashes occurred on, or crossed with, an **arterial** street.

Mesa 2018 Bicycle Crashes by Age



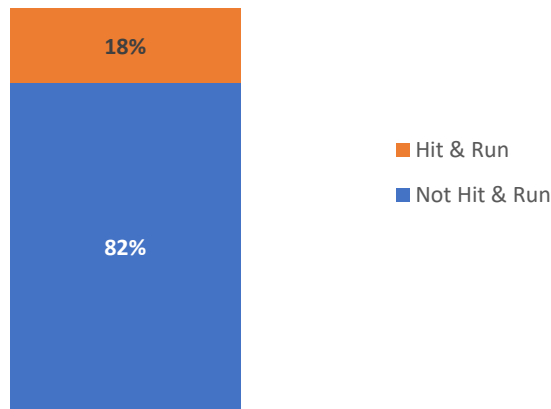
The ages of bicyclists involved in motor vehicle crashes in 2018 were analyzed and broken down into age groups. The group with the highest percentage of crashes, with 21.4%, was **between the ages of 15 and 24**.

Mesa 2018 Bicycle Crash Manner



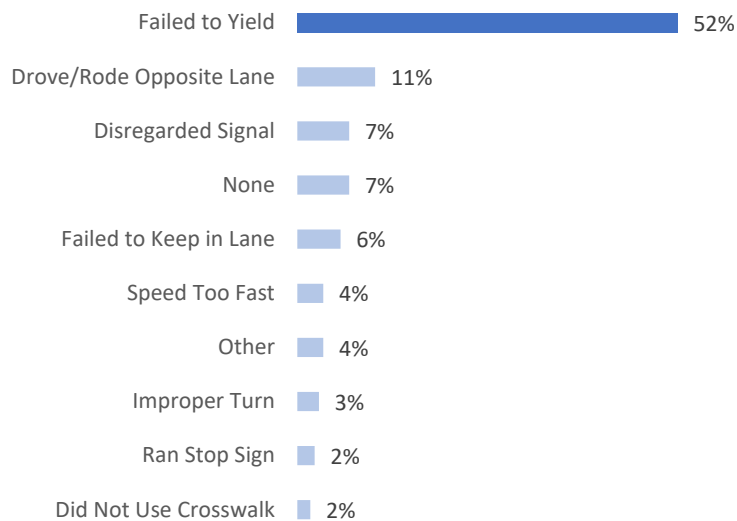
Over half of the total bicycle crashes were **angle crashes** with 108 incidents. These types of crashes were common at intersections and driveways.

Mesa 2018 Bicycle Crashes: Hit & Run



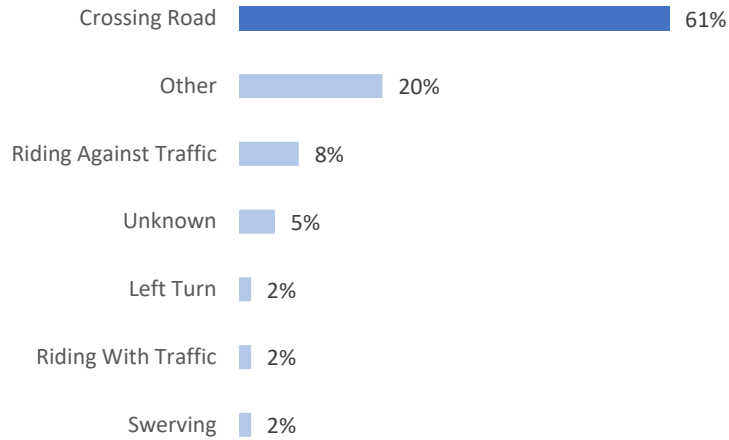
Of the 168 bike crashes within Mesa in 2018, 31 were deemed **hit and run** collisions. Relative to the total number of bike crashes, this is an increase of 3.9% from the previous year.

Mesa 2018 Bicycle Crashes: Vehicle 1 Violation



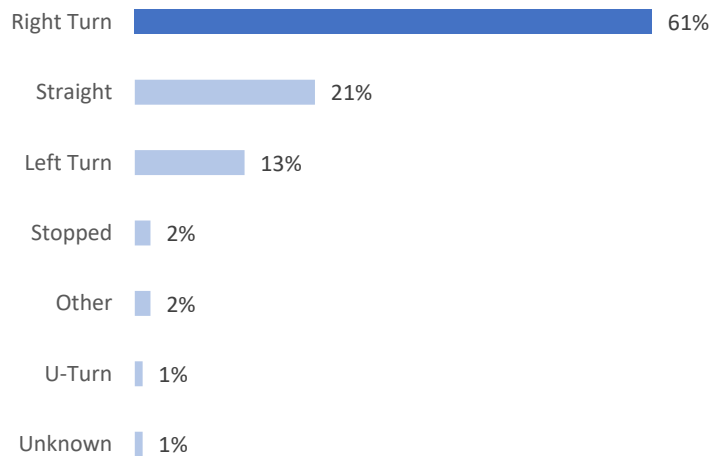
The cited violations of vehicle 1, inclusive of both bicyclists and drivers of motor vehicles, were mostly attributed to a **failure to yield**. In this category, there were 88 crashes.

Mesa 2018 Bicycle Crashes: Bicyclist at Fault Actions



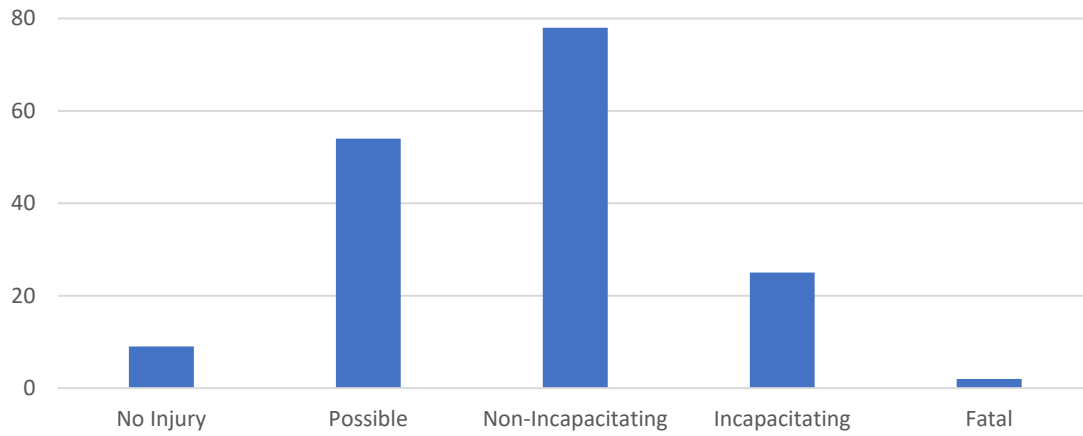
Breaking the crashes down by unit, out of the 168 total bicyclist collisions, 59 were caused by a violation of the bicyclist. Of those crashes, 61% of the bicyclists were **crossing the road**.

Mesa 2018 Bicycle Crashes: Motorist at Fault Actions



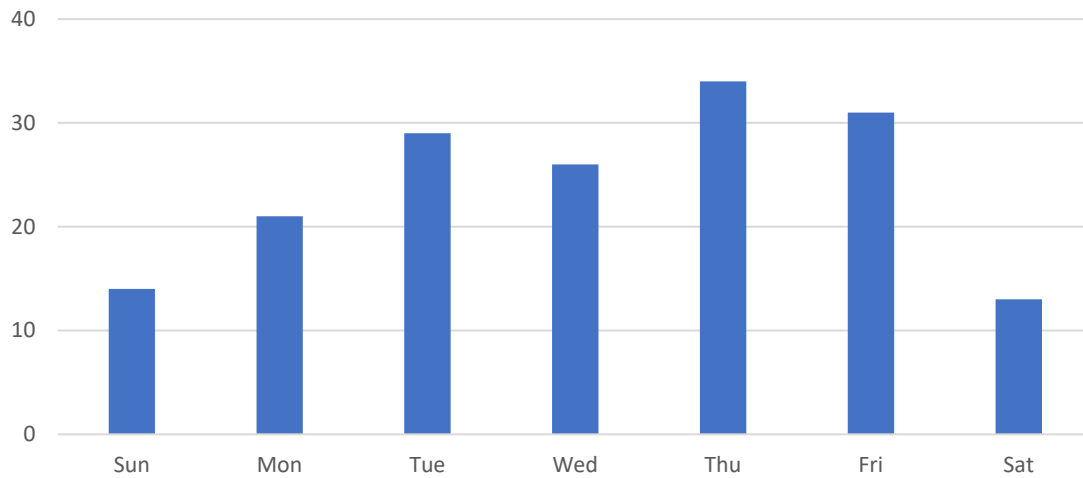
Of the 168 bicyclist crashes, 109 were deemed motorist at fault. **Right turns** were the most common action of motorists that were cited as vehicle 1 with a total of 66 bicycle-related crashes.

Mesa 2018 Bicycle Crashes: Injury Severity



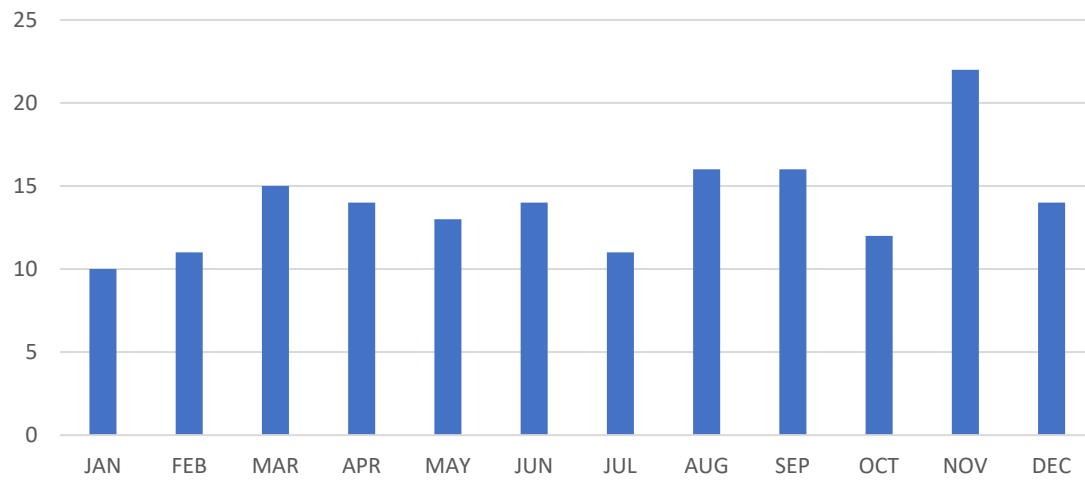
Of the 168 total bicycle crashes within Mesa in 2018, there were 2 fatalities and 25 serious injuries, totalling 16% of all bicycle-related crashes.

Mesa 2018 Bicycle Crashes by Day of Week



Bicycle crashes were more frequent during the middle of the week which generally coincides with higher traffic volumes and more commuting traffic.

Mesa 2018 Bicycle Crashes by Month



Data analysis of bicycle crashes by month revealed a slow increase throughout the year in 2018.

Mesa 2018 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	1	0	0	0	1
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	0	0
4:00 AM - 5:00 AM	0	1	0	0	0	0	0	1
5:00 AM - 6:00 AM	0	0	0	0	1	1	1	3
6:00 AM - 7:00 AM	0	0	1	0	0	2	0	3
7:00 AM - 8:00 AM	0	2	6	0	4	0	0	12
8:00 AM - 9:00 AM	0	0	0	0	2	2	0	4
9:00 AM - 10:00 AM	0	1	1	2	2	1	0	7
10:00 AM - 11:00 AM	0	0	2	0	1	0	4	7
11:00 AM - 12:00 PM	1	1	1	1	3	0	0	7
12:00 PM - 1:00 PM	3	3	2	2	1	5	0	16
1:00 PM - 2:00 PM	1	1	0	2	2	3	1	10
2:00 PM - 3:00 PM	2	3	2	1	2	2	0	12
3:00 PM - 4:00 PM	1	0	4	1	4	2	1	13
4:00 PM - 5:00 PM	1	3	4	3	2	3	0	16
5:00 PM - 6:00 PM	0	3	0	5	5	3	2	18
6:00 PM - 7:00 PM	1	1	0	4	0	4	0	10
7:00 PM - 8:00 PM	1	1	1	1	1	1	1	7
8:00 PM - 9:00 PM	2	0	2	2	0	1	0	7
9:00 PM - 10:00 PM	1	0	2	1	2	1	0	7
10:00 PM - 11:00 PM	0	0	1	0	2	0	2	5
11:00 PM - 12:00 AM	0	1	0	0	0	0	1	2
Total	14	21	29	26	34	31	13	168

2018 bicycle crashes were most common during Mesa's peak AM and PM hours. The peak AM hour for these crashes was from 7:00 AM to 8:00 AM, and the peak PM hour was between 5:00 PM and 6:00 PM.

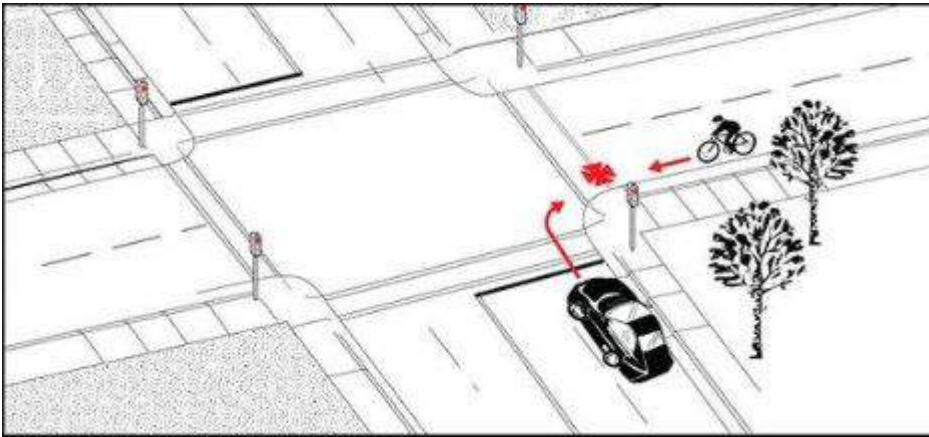
Mesa 5-Year Trend: Bicycle Crashes by Time of Day

	2014	2015	2016	2017	2018	5-Year Total	% of Total
12:00 AM - 1:00 AM	0	0	0	0	1	1	0.1%
1:00 AM - 2:00 AM	0	0	1	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	0	0	1	0	1	0.1%
4:00 AM - 5:00 AM	1	0	0	1	1	3	0.4%
5:00 AM - 6:00 AM	5	1	4	1	3	14	1.7%
6:00 AM - 7:00 AM	5	5	4	9	3	26	3.2%
7:00 AM - 8:00 AM	8	8	11	8	12	47	5.8%
8:00 AM - 9:00 AM	8	8	15	18	4	53	6.6%
9:00 AM - 10:00 AM	5	10	8	9	7	39	4.8%
10:00 AM - 11:00 AM	6	7	6	3	7	29	3.6%
11:00 AM - 12:00 PM	11	6	8	6	7	38	4.7%
12:00 PM - 1:00 PM	6	7	17	14	16	60	7.4%
1:00 PM - 2:00 PM	5	5	13	7	10	40	4.9%
2:00 PM - 3:00 PM	8	6	15	12	12	53	6.6%
3:00 PM - 4:00 PM	20	17	11	26	13	87	10.8%
4:00 PM - 5:00 PM	26	18	13	14	16	87	10.8%
5:00 PM - 6:00 PM	12	8	12	8	18	58	7.2%
6:00 PM - 7:00 PM	10	7	14	14	10	55	6.8%
7:00 PM - 8:00 PM	13	7	12	9	7	48	5.9%
8:00 PM - 9:00 PM	6	6	6	2	7	27	3.3%
9:00 PM - 10:00 PM	3	3	2	4	7	19	2.3%
10:00 PM - 11:00 PM	3	2	3	4	5	17	2.1%
11:00 PM - 12:00 AM	2	0	0	2	2	6	0.7%
Total	163	131	175	172	168	809	

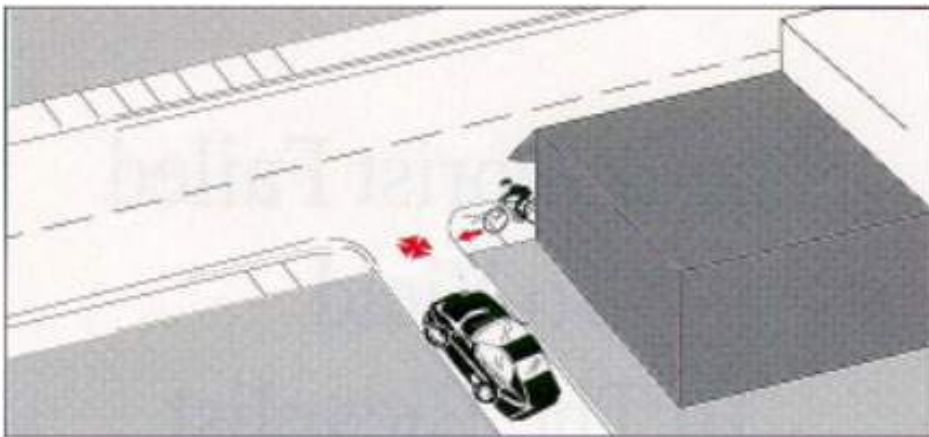
Analyzing the bicycle crash trend over the past five years shows that the peak hours for bicycle-related crashes is from 3:00 PM to 5:00 PM.

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 sourced from Federal Highway Administration, *Bicycle Crash Types: A 1990's Informational Guide*. The most common crash types for bicycle-motorist collisions of 2018 were as follows:

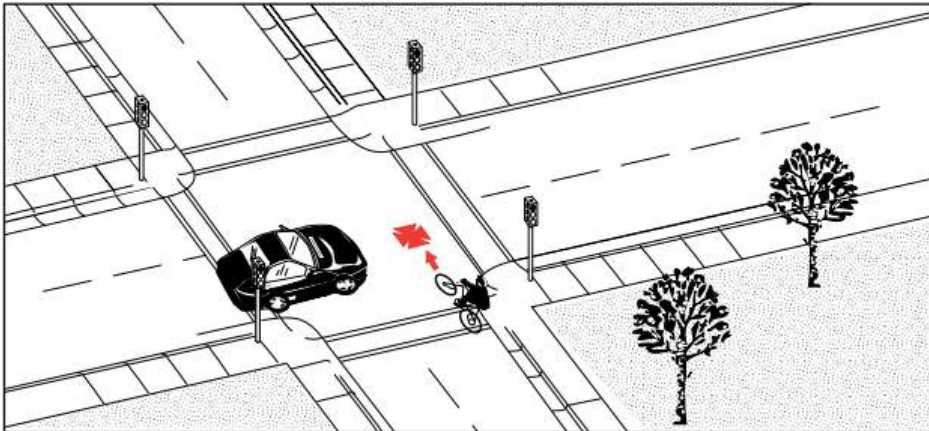
1. **Bike Ride into Intersection** – bicycle traveling against traffic: 43 (26%)



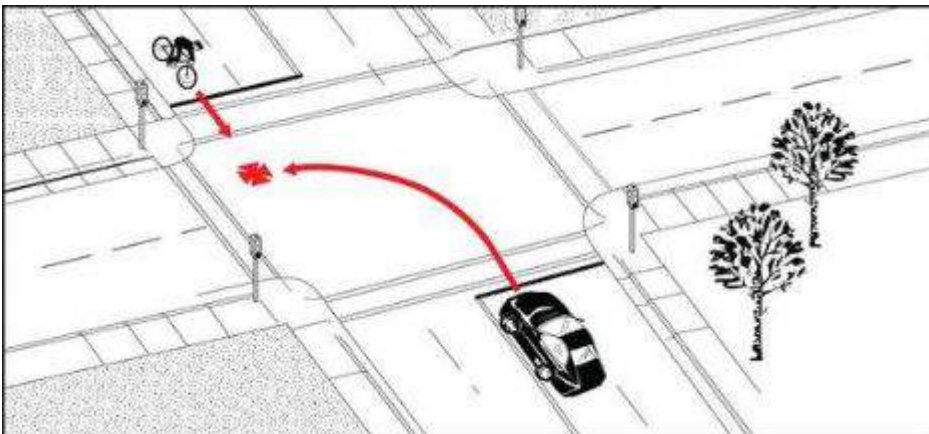
2. **Motorist Drive Out** – driveway or alley: 36 (21%)



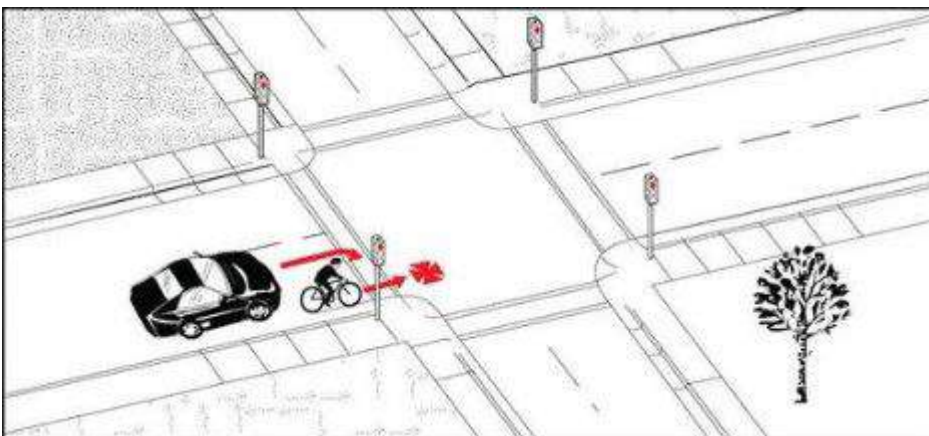
3. Bike Failed to Yield – signal or stop sign: 14 (8%)



4. Motorist Left Turn – bicycle with or against traffic: 14 (8%)



5. Motorist Right Hook – bicycle traveling with traffic: 13 (8%)



SECTION 4:

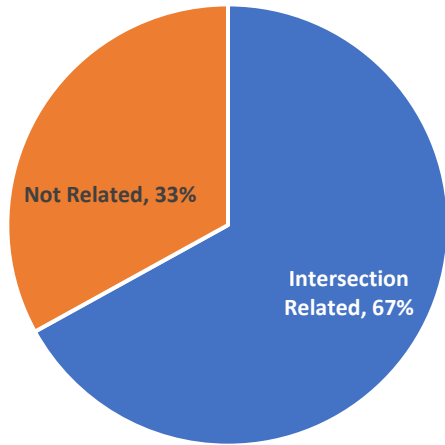
PEDESTRIAN CRASHES

Mesa 2018 Pedestrian Crashes: General View

Year	Ped Crashes	Total Crashes	Ped Crashes % Of Total	Mesa Population	Ped Crashes Per 100,000 Population	% Change From Previous Year
2001	112	9928	1.13%	416301	27	-
2002	122	9155	1.33%	427923	29	+6.0%
2003	116	8520	1.36%	435391	27	-6.5%
2004	126	9184	1.37%	443733	28	+6.6%
2005	109	9205	1.18%	450948	24	-14.9%
2006	102	8522	1.20%	456449	22	-7.5%
2007	120	7933	1.51%	460493	26	+16.6%
2008	104	5908	1.76%	463829	22	-14.0%
2009	102	5504	1.85%	467157	22	-2.6%
2010	79	5118	1.54%	440031	18	-17.8%
2011	98	5178	1.89%	444685	22	+22.8%
2012	120	5134	2.34%	451677	27	+20.6%
2013	103	5313	1.94%	457587	23	-15.3%
2014	72	5025	1.43%	464704	15	-31.2%
2015	68	4979	1.37%	471825	14	-7.0%
2016	96	5554	1.73%	475274	20	+40.2%
2017	104	5611	1.85%	496401	21	+3.7%
2018	109	5479	1.99%	508958	21	+2.2%

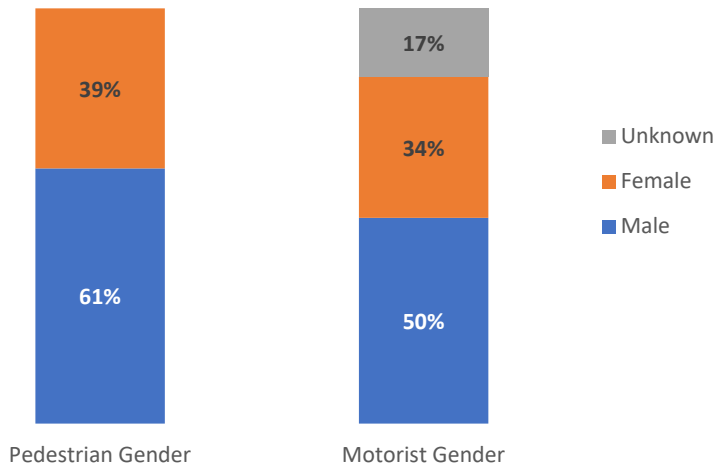
The City of Mesa had 109 pedestrian crashes in 2018, making up 2% of all crashes that year. The number of pedestrian crashes per 100,000 people was 2.2% higher than the previous year.

Mesa 2018 Pedestrian Crashes: Intersection Relation



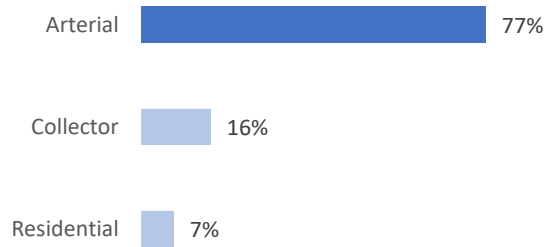
Of the 109 pedestrian crashes, 73 were **intersection related**.

Mesa 2018 Pedestrian Crash Gender

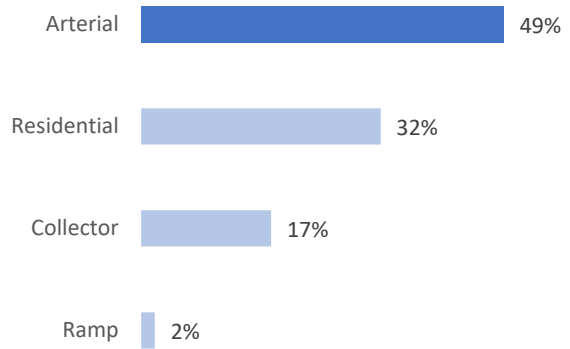


Data analysis of pedestrian crashes in 2018 showed that the persons involved in these collisions were mostly **male**.

Mesa 2018 Pedestrian Crashes: On Street Classification

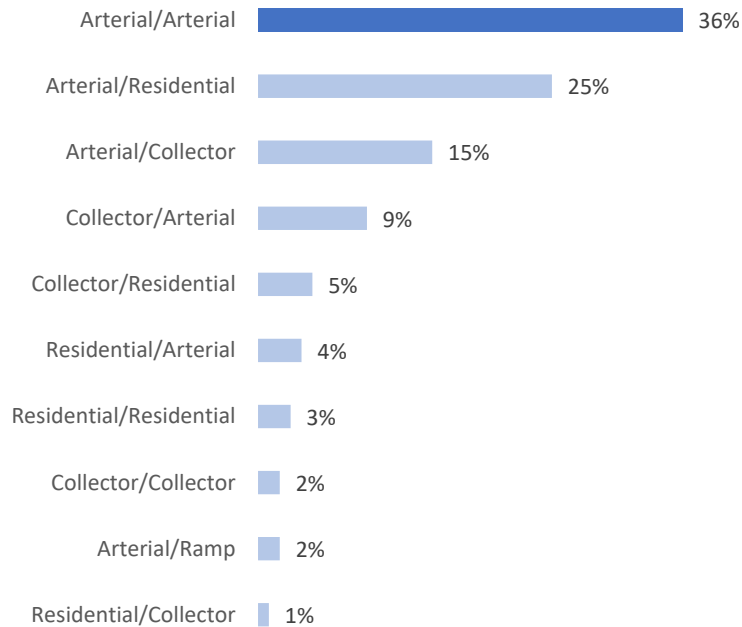


Mesa 2018 Pedestrian Crashes: Cross Street Classification



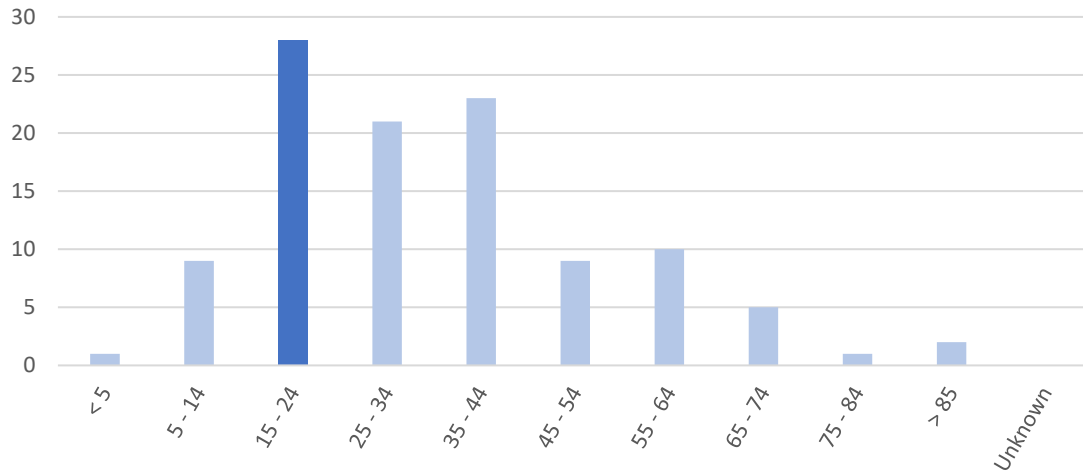
Of the 109 pedestrian crashes within Mesa 2018, 84 occurred along an **arterial** roadway, and the cross street was often an arterial road.

Mesa 2018 Pedestrian Crashes: Intersection Classification



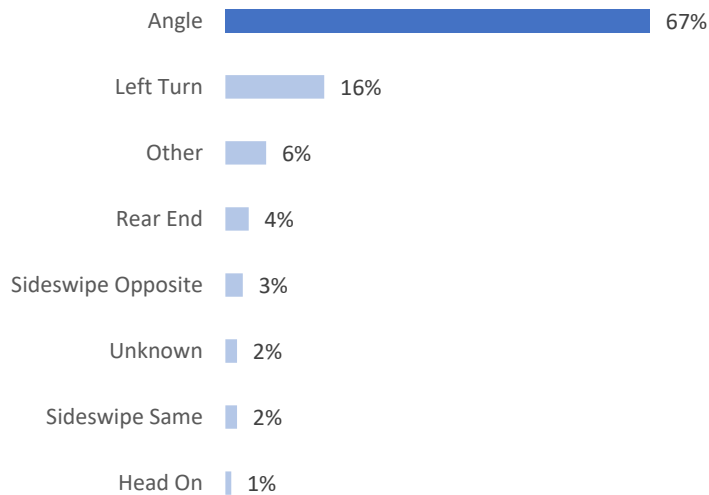
Arterial roads, whether on-street or cross street, were involved in 90% of all pedestrian crashes.

Mesa 2018 Pedestrian Crashes by Age



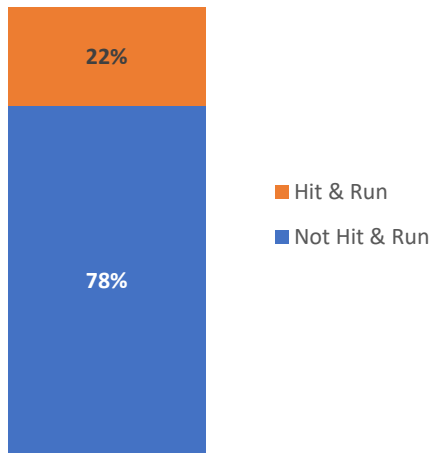
When analyzed by age group, most pedestrian crashes were among people aged **15 to 24 years old**. This group makes up the second-highest percent of the total population at nearly 13.6% but contributed to 25.7% of the total pedestrian crashes.

Mesa 2018 Pedestrian Crash Manner



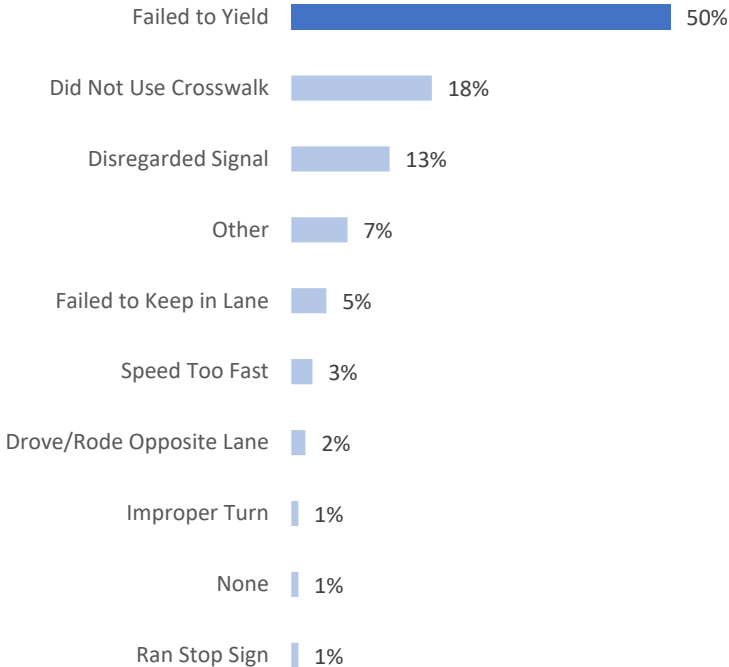
Over two-thirds of all pedestrian crashes were considered **angle crashes** with 73. These types of crashes were common at intersections and midblock.

Mesa 2018 Pedestrian Crashes: Hit & Run



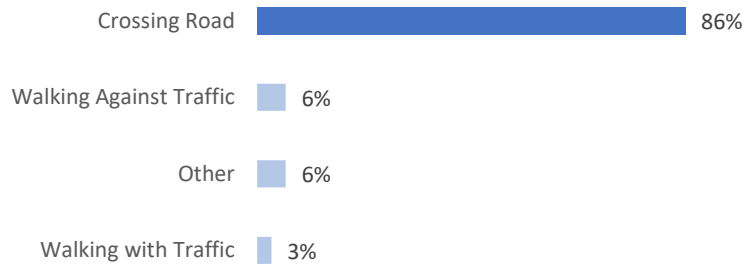
Data analysis of crashes within the City of Mesa in 2018 showed 24 of the 109 pedestrian crashes were deemed **hit and run**.

Mesa 2018 Pedestrian Crashes: Vehicle 1 Violation



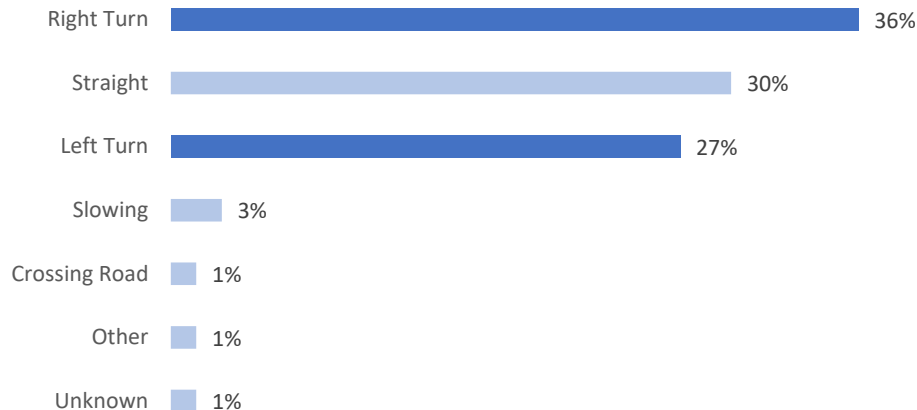
The cited violations of vehicle 1, inclusive of both pedestrians and drivers of motor vehicles, were mostly attributed to a **failure to yield**. In this category, there were 54 crashes. Another 20 crashes were caused when a pedestrian **did not use the crosswalk**.

Mesa 2018 Pedestrian Crashes: Pedestrian at Fault Actions



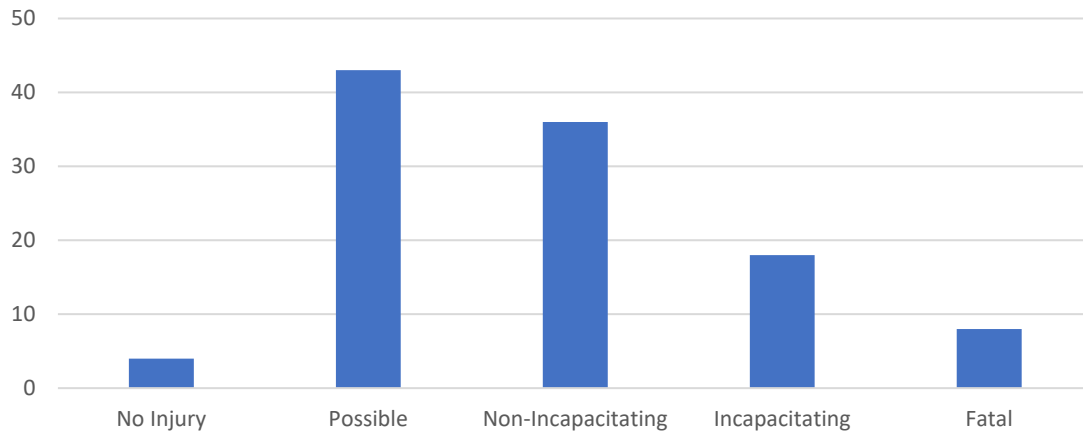
Of the 35 pedestrian crashes where a pedestrian was deemed at fault, the most common action was **crossing the road**, with 30 cases.

Mesa 2018 Pedestrian Crashes: Motorist at Fault Actions



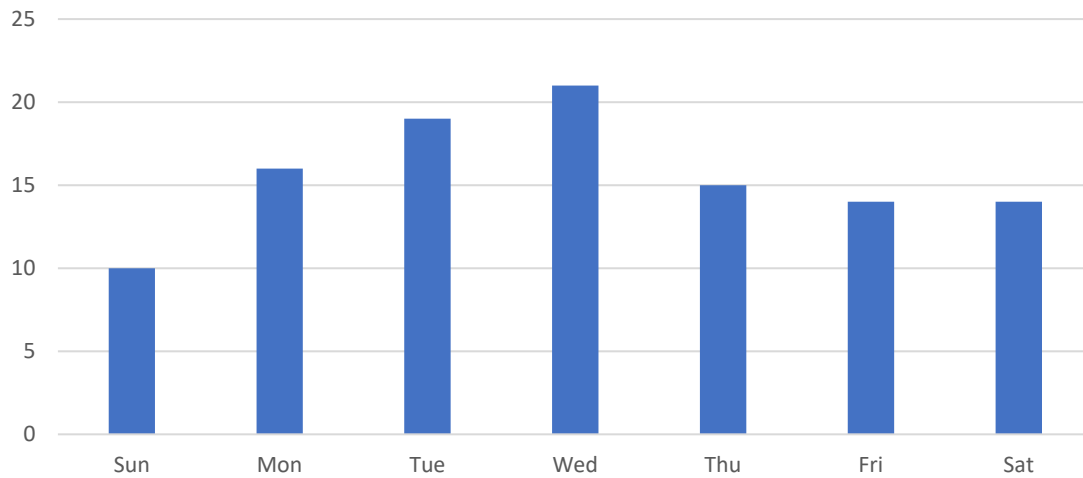
Of the 74 pedestrian crashes where the motorist was deemed at fault, left and right **turning movements** made up nearly two-thirds of the actions leading up to a crash with a pedestrian.

Mesa 2018 Pedestrian Crashes: Injury Severity



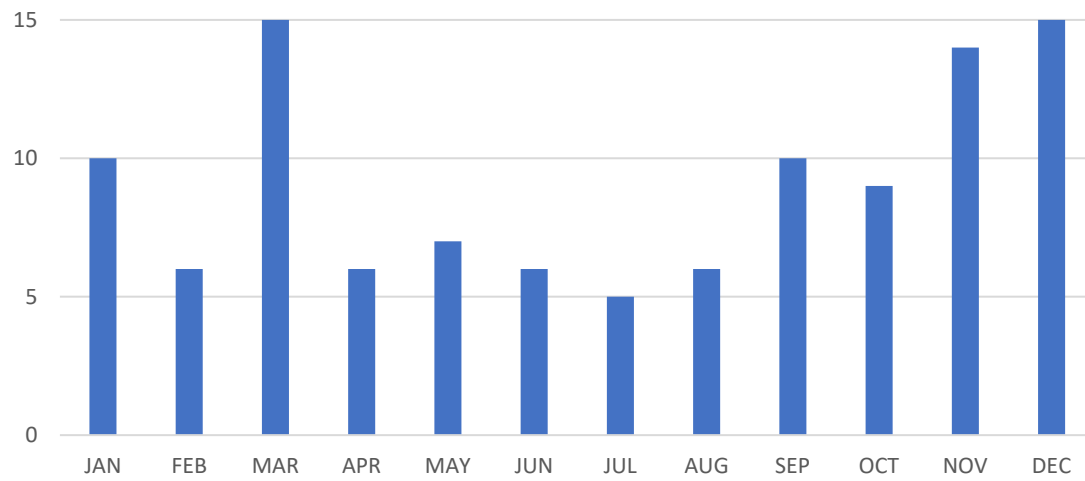
There were 8 fatal pedestrian crashes and 18 serious injuries in 2018, totaling 24% of all pedestrian crashes.

Mesa 2018 Pedestrian Crashes by Day of Week



Pedestrian crashes occurred more frequently on Monday, Tuesday, and Wednesday than any other three-day period.

Mesa 2018 Pedestrian Crashes by Month



Mesa pedestrian crashes in 2018 were highest during the Fall, Winter, and Spring months.

Mesa 2018 Pedestrian Crashes by Time and Day of Week

Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
12:00 AM - 1:00 AM	0	1	0	0	0	0	0	1
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	0	0
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	0	0
6:00 AM - 7:00 AM	0	2	0	2	2	0	1	7
7:00 AM - 8:00 AM	0	0	1	2	2	1	1	7
8:00 AM - 9:00 AM	0	0	0	2	0	1	0	3
9:00 AM - 10:00 AM	1	1	0	1	0	0	0	3
10:00 AM - 11:00 AM	0	1	1	0	0	1	0	3
11:00 AM - 12:00 PM	0	0	1	0	1	1	1	4
12:00 PM - 1:00 PM	0	3	1	1	0	0	1	6
1:00 PM - 2:00 PM	1	0	2	0	0	1	0	4
2:00 PM - 3:00 PM	0	0	0	1	1	2	1	5
3:00 PM - 4:00 PM	0	1	0	3	2	1	0	7
4:00 PM - 5:00 PM	0	0	4	1	2	0	1	8
5:00 PM - 6:00 PM	1	1	1	1	1	0	1	6
6:00 PM - 7:00 PM	0	3	1	4	0	3	2	13
7:00 PM - 8:00 PM	3	0	1	2	0	1	2	9
8:00 PM - 9:00 PM	3	2	3	0	0	1	1	10
9:00 PM - 10:00 PM	0	0	2	1	3	1	2	9
10:00 PM - 11:00 PM	1	0	0	0	1	0	0	2
11:00 PM - 12:00 AM	0	1	1	0	0	0	0	2
Total	10	16	19	21	15	14	14	109

2018 pedestrian crashes were most common between the evening hours between 6:00 PM and 10:00 PM.

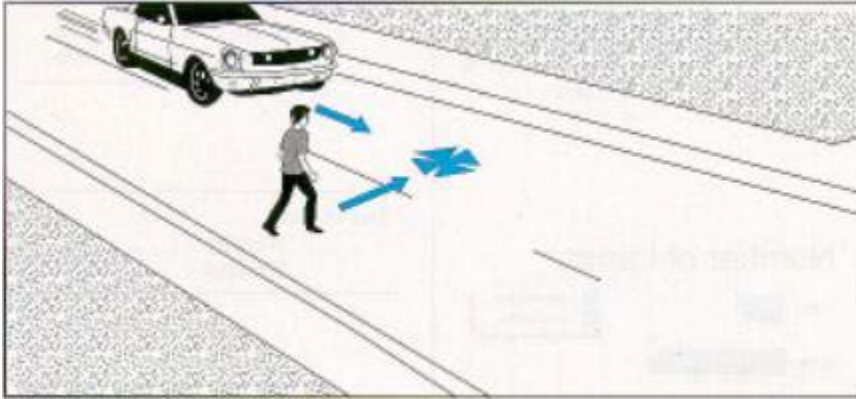
Mesa 5-Year Trend: Pedestrian Crashes by Time of Day

	2014	2015	2016	2017	2018	5-Year Total	% of Total
12:00 AM - 1:00 AM	0	0	3	2	1	6	1.3%
1:00 AM - 2:00 AM	1	0	1	0	0	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	0	0	0	0.0%
4:00 AM - 5:00 AM	1	0	0	1	0	2	0.4%
5:00 AM - 6:00 AM	2	0	0	0	0	2	0.4%
6:00 AM - 7:00 AM	2	4	3	2	7	18	4.0%
7:00 AM - 8:00 AM	5	6	7	5	7	30	6.7%
8:00 AM - 9:00 AM	3	0	5	4	3	15	3.3%
9:00 AM - 10:00 AM	0	6	5	5	3	19	4.2%
10:00 AM - 11:00 AM	0	1	1	2	3	7	1.6%
11:00 AM - 12:00 PM	4	1	0	6	4	15	3.3%
12:00 PM - 1:00 PM	0	2	3	3	6	14	3.1%
1:00 PM - 2:00 PM	3	1	7	3	4	18	4.0%
2:00 PM - 3:00 PM	5	7	2	6	5	25	5.6%
3:00 PM - 4:00 PM	8	3	6	6	7	30	6.7%
4:00 PM - 5:00 PM	6	5	8	9	8	36	8.0%
5:00 PM - 6:00 PM	9	6	9	5	6	35	7.8%
6:00 PM - 7:00 PM	4	9	8	12	13	46	10.2%
7:00 PM - 8:00 PM	7	3	6	13	9	38	8.5%
8:00 PM - 9:00 PM	6	3	8	8	10	35	7.8%
9:00 PM - 10:00 PM	2	4	7	8	9	30	6.7%
10:00 PM - 11:00 PM	3	5	4	1	2	15	3.3%
11:00 PM - 12:00 AM	1	2	3	3	2	11	2.4%
Total	72	68	96	104	109	449	

Analyzing the five-year pedestrian crash trend within Mesa revealed a later peak hour than for bicycle crashes at 6:00 PM to 7:00 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 sourced from Federal Highway Administration, *Pedestrian Crash Types: A 1990's Informational Guide*. The most common crash types for pedestrian-motorist collisions of 2018 were as follows:

1. Pedestrian Walk Out Midblock – 22 (20%)



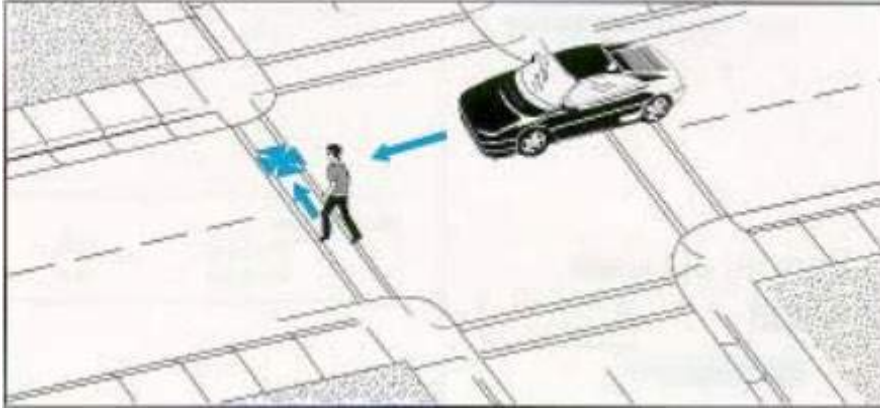
2. Motorist Right Turn – pedestrian in crosswalk (either direction): 21 (19%)



3. Motorist Left Turn – parallel pedestrian travel (either direction): 18 (17%)



4. Motorist Failure to Yield – intersections and driveways: 13 (12%)



5. Pedestrian Dash Out – jaywalking or against the light: 12 (11%)

