

2021

# **Annual Crash Report**



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# **SECTION 1:**

# **FATALITIES**



**FATALITIES** 

In 2021, the City of Mesa had 36 fatal crashes resulting in a total of 37 fatalities. The following collection of charts and tables documents fatal crashes of 2021. 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.

Note: Because of Covid-19 and a transition to a new electronic reporting software, certain data is estimated. The estimates shall be noted throughout this report.

#### Mesa Fatal Crashes by Year

Year	Fatal Crashes	Total Fatalities	Total Crashes	Mesa Estimated Population	Fatalities Per 100,000 Population	% Change From 5-Year Average
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	504500	7.1	11.17%
2021	36	37	5958*	509475	7.3	10.11%

In 2021, 37 people lost their lives on Mesa's public streets because of a collision with a motor vehicle, an increase from the year before. The number of fatalities per 100,000 population increased by 1.8% relative to 2020. Mesa estimated population numbers were taken from the United States Census Bureau.

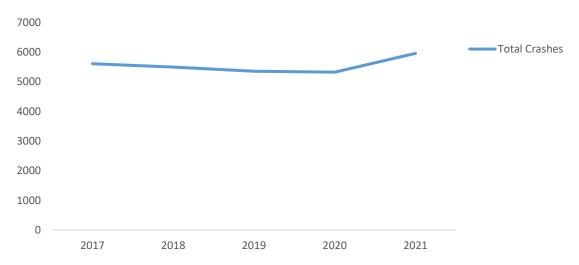
\*Total crash data estimated as a percentage of reported crashes from the Arizona Department of Transportation relative to prior years.



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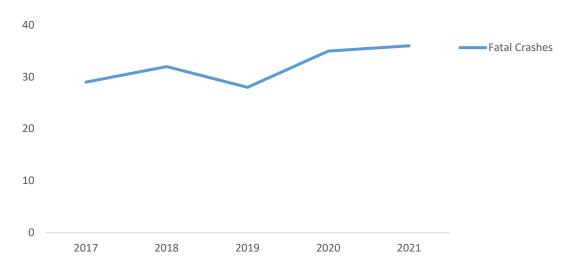
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#### **Mesa Total Crashes by Year**



In 2021, City of Mesa motor vehicle crashes are estimated to have increased by 11.91% from the previous year.

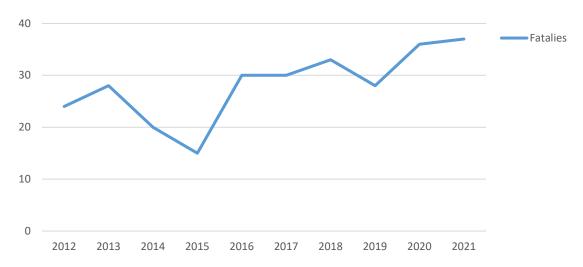
#### **Mesa Fatal Crashes by Year**



Over the past five years, **fatal crashes** in Mesa have been trending upward at a rate of 1.7 crashes per year. From the chart above, the number of fatal crashes has risen since 2017. City of Mesa fatal collisions in 2021 were 2.9% greater than the previous year.

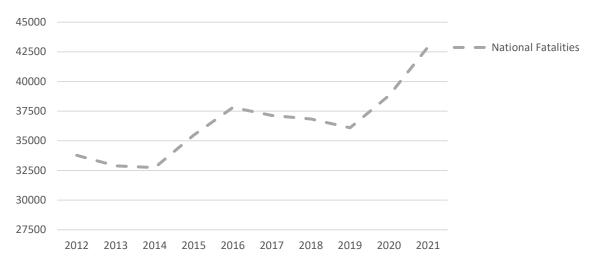


#### Mesa Total Fatalities by Year



Based on a 10-year average (2012 – 2021), total fatalities are trending upward.

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

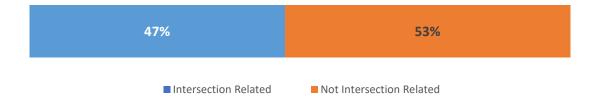


According to the "Early Estimate of Motor Vehicle Traffic Fatalities in 2021" provided by the National Highway Traffic Safety Administration (NHTSA), 42,915 people died because of a collision with a motor vehicle in 2021. This is an increase of 10.5% as compared to the 38,842 fatalities reported in 2020. Note that this figure represents fatal crashes on all roads within the United States, not just local. Relative to the increase in traffic fatalities nationally, the percent increase in fatalities in 2021 from 2020 within Mesa was lower.



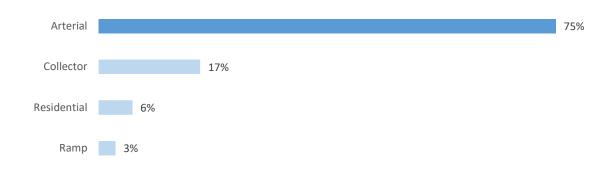
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## **2021 Mesa Fatal Crashes:** Intersection Relation

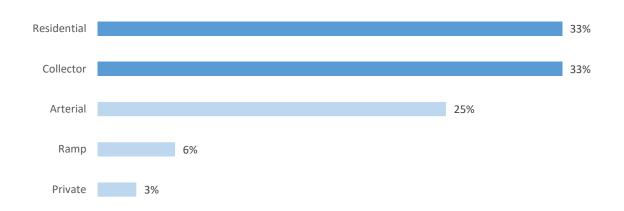


Of the 36 fatal crashes, 17 were intersection related and 19 were non-intersection related.

#### 2021 Mesa Fatal Crashes: On Street Class



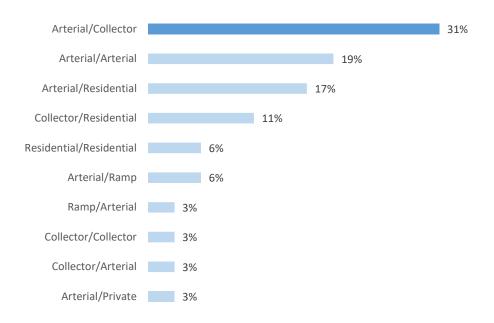
## **2021 Mesa Fatal Crashes:** Cross Street Class





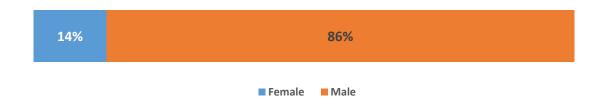
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## **2021 Mesa Fatal Crashes:** Intersection Class



City of Mesa fatal crashes in 2021 primarily occurred along arterial streets. According to the crash data, 29 of the 36 fatal crashes involved an arterial roadway.

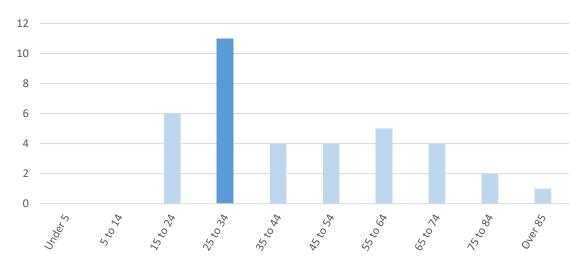
#### 2021 Mesa Fatalities by Gender



Data analysis of 2021 crashes within the City of Mesa found that motor vehicle fatalities were higher among males than females.

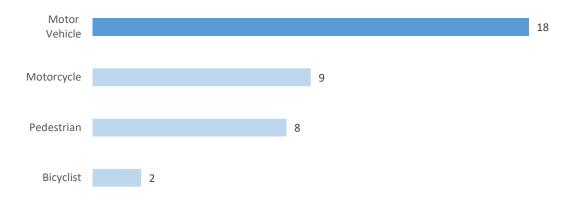


#### Mesa 2021 Fatalities by Age



Motor vehicle crash fatalities were higher among people aged 25 to 34 than any other age group in 2021. This age group represented 14.8% of the City of Mesa reported population in 2021 but contributed to 29.7% of traffic fatalities.

## Mesa 2021 Fatalities: Unit Type

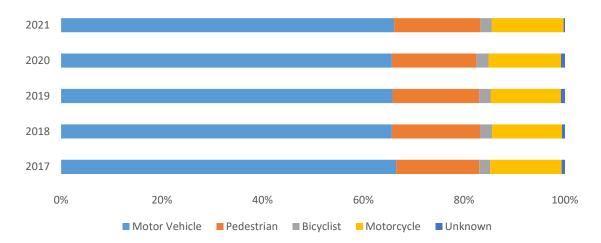


Among the unit types, **motor vehicles** were most involved in a fatal crash. The number of pedestrian fatalities in 2021 decreased by 50% compared to the previous year. Additionally, the motorcycle fatality count in 2021 is the highest since 2006.



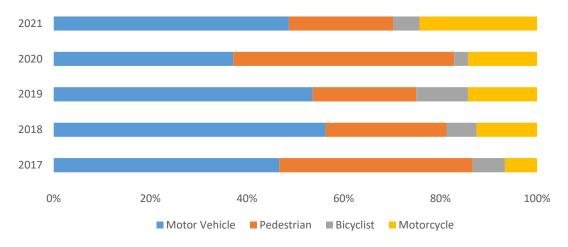
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#### **National Fatalities by Unit Type**



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 2021.

#### Mesa Fatalities by Unit Type

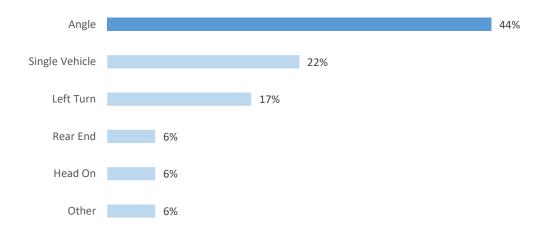


In Mesa, motor vehicle fatalities made up 49% of all fatalities in 2021. Compared to the five year mean, pedestrian fatalities in 2021 were below average at 22% of total fatalities.



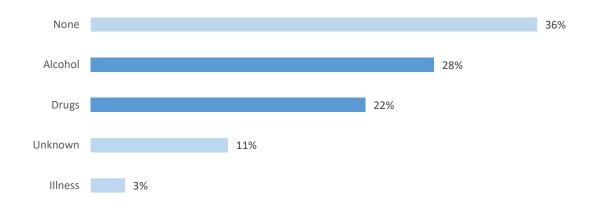
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#### Mesa 2021 Fatal Crash Manner



The highest percentage of motor vehicles fatalities within the City of Mesa in 2021 were **angle** crashes. Angle and left turn crashes together made up 61% of all 2021 fatalities which includes six pedestrian crashes. Additionally, 75% of the single vehicle fatal crashes involved impairment by either alcohol or drugs.

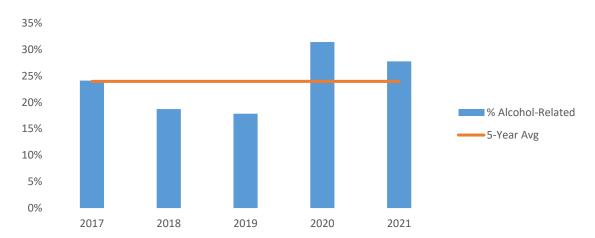
## Mesa 2021 Fatal Crashes: Impairment



Impairment by either alcohol or drugs was a factor in 18 (50%) of the 36 fatal crashes within Mesa in 2021. If both alcohol and drugs were involved in a collision, then alcohol was prioritized.

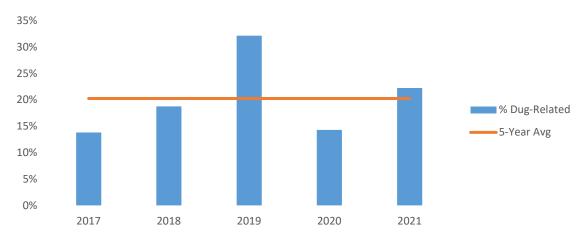


## Mesa 2021 Fatal Crashes: Alcohol Involvement



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 24% of fatal collisions involved a person under the influence of alcohol.

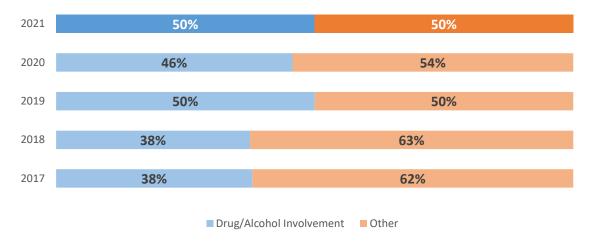
## Mesa 2021 Fatal Crashes: Drug Involvement



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 20% of all fatal collisions involved a person under the influence of drugs.

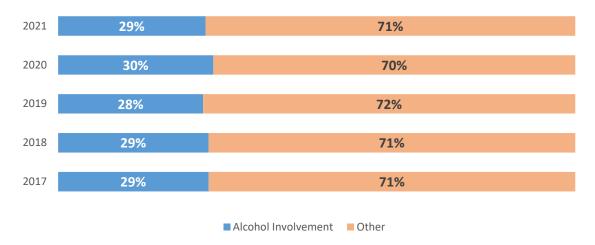


#### Mesa 2021 Drug & Alcohol Involvement



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.

### National 2021 Fatal Crashes: Alcohol Involvement

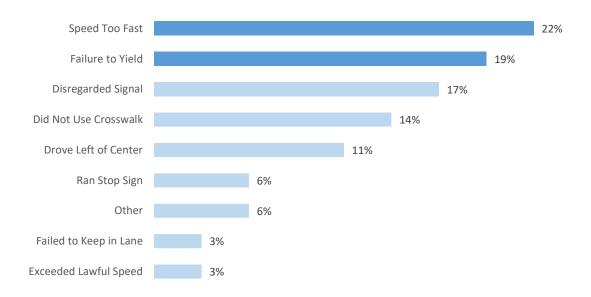


The National Highway Traffic Safety Administration collects data on alcohol impaired fatalities, defined as any fatal crash involving a driver with a blood alcohol concentration of .08 grams per deciliter or higher. Nationally, alcohol-involved fatalities account for nearly 30% of all motor vehicle deaths.



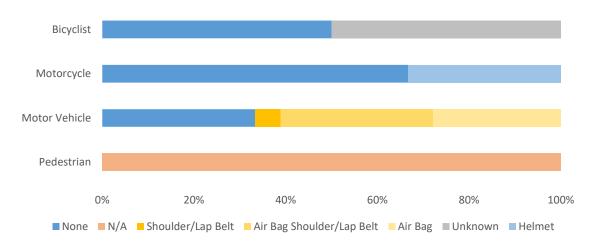
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## Mesa 2021 Fatal Crashes: Vehicle 1 Violation



The above chart details the reported violations made by vehicle 1 which led to a fatal crash within Mesa in 2021. Out of the 36 motor vehicle fatal crashes, 16 resulted from a speed too fast or a failure to yield violation.

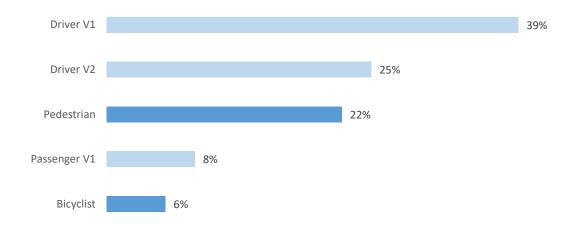
#### Mesa 2021 Fatal Unit Safety Device



The chart above shows the victim safety devices involved in the 37 Mesa fatalities in 2021. Separate from pedestrians, thirteen fatalities involved victims that were **not using a safety device**. This includes **33% of motorist fatalities not wearing a seatbelt**.

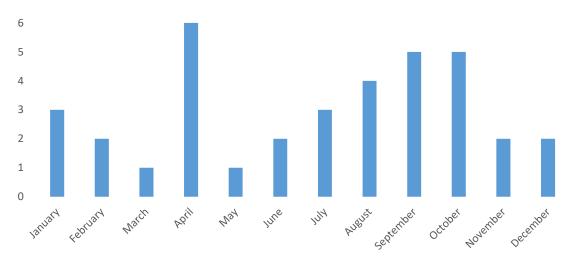


#### Mesa 2021 Location of Fatal Unit



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 2021, 10 involved a non-motorist victim (8 pedestrian collisions and 2 bicyclist collisions).

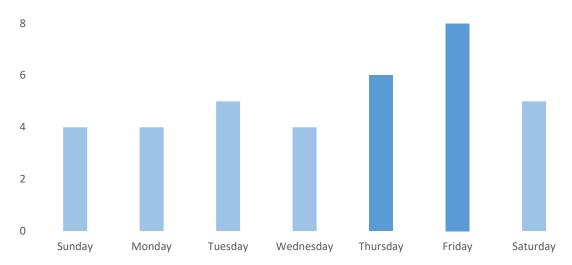
#### Mesa 2021 Fatal Crashes by Month



City of Mesa fatal crashes by month in 2021 showed a rise in fatal collisions during the summer and fall seasons with a large spike in April.



#### Mesa 2021 Fatal Crashes by Day of Week



By weekday, fatal crashes were generally higher during the weekend. Taking an average over a five-year period revealed that 36% of fatal crashes have occurred on **Thursday** and **Friday** within Mesa.



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Mesa 2021 Fatal Crashes by Time of Day

Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
12:00 AM - 1:00 AM	0	0	1	1	0	0	0	2
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	2	2
4:00 AM - 5:00 AM	0	0	1	0	0	0	0	1
5:00 AM - 6:00 AM	0	0	0	0	1	0	0	1
6:00 AM - 7:00 AM	0	0	0	0	0	1	0	1
7:00 AM - 8:00 AM	1	0	0	0	0	0	0	1
8:00 AM - 9:00 AM	0	0	0	0	0	1	0	1
9:00 AM - 10:00 AM	0	0	0	1	0	0	0	1
10:00 AM - 11:00 AM	0	0	0	0	1	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	0	0
1:00 PM - 2:00 PM	1	0	0	0	0	0	0	1
2:00 PM - 3:00 PM	0	0	0	0	0	0	0	0
3:00 PM - 4:00 PM	0	0	0	1	0	0	0	1
4:00 PM - 5:00 PM	0	0	1	0	0	2	1	4
5:00 PM - 6:00 PM	0	0	1	0	0	0	0	1
6:00 PM - 7:00 PM	0	1	1	0	0	1	1	4
7:00 PM - 8:00 PM	0	0	0	0	1	0	0	1
8:00 PM - 9:00 PM	1	0	0	0	1	2	0	4
9:00 PM - 10:00 PM	0	2	0	1	0	0	0	3
10:00 PM - 11:00 PM	1	1	0	0	2	1	1	6
11:00 PM - 12:00 AM	0	0	0	0	0	0	0	0
Total	4	4	5	4	6	8	5	36

In 2021, 64% of fatal crashes within Mesa occurred after 4:00 PM.



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

	2017	2018	2019	2020	2021	5-Year Total	% Of Total
12:00 AM - 1:00 AM	3	0	0	0	2	5	3.1%
1:00 AM - 2:00 AM	0	1	1	1	0	3	1.9%
2:00 AM - 3:00 AM	0	0	0	1	0	1	0.6%
3:00 AM - 4:00 AM	0	0	1	1	2	4	2.5%
4:00 AM - 5:00 AM	1	1	0	0	1	3	1.9%
5:00 AM - 6:00 AM	0	0	1	1	1	3	1.9%
6:00 AM - 7:00 AM	1	0	3	4	1	9	5.6%
7:00 AM - 8:00 AM	1	1	1	1	1	5	3.1%
8:00 AM - 9:00 AM	1	0	0	0	1	2	1.3%
9:00 AM - 10:00 AM	1	1	1	2	1	6	3.8%
10:00 AM - 11:00 AM	0	2	1	1	1	5	3.1%
11:00 AM - 12:00 PM	0	3	0	0	0	3	1.9%
12:00 PM - 1:00 PM	3	1	0	1	0	5	3.1%
1:00 PM - 2:00 PM	1	1	0	0	1	3	1.9%
2:00 PM - 3:00 PM	0	4	1	1	0	6	3.8%
3:00 PM - 4:00 PM	1	1	1	1	1	5	3.1%
4:00 PM - 5:00 PM	2	1	3	3	4	13	8.1%
5:00 PM - 6:00 PM	0	3	1	2	1	7	4.4%
6:00 PM - 7:00 PM	5	2	2	4	4	17	10.6%
7:00 PM - 8:00 PM	3	1	2	3	1	10	6.3%
8:00 PM - 9:00 PM	4	4	1	1	4	14	8.8%
9:00 PM - 10:00 PM	1	2	6	6	3	18	11.3%
10:00 PM - 11:00 PM	0	3	1	1	6	11	6.9%
11:00 PM - 12:00 AM	1	0	0	0	0	1	0.6%
Total	28	29	32	35	36	160	

Likewise, over a 5-year period, the highest concentration of fatal crashes occurred in the afternoon and evening with 56.9% of fatal crashes occurring after 4:00PM.



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# SECTION 2: SERIOUS INJURIES



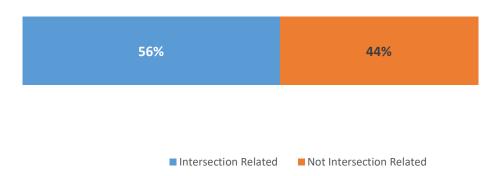
#### Mesa Serious Injury Crashes: General View

Year	Serious Injury Crashes	Total Serious Injuries	Total Crashes	Mesa Population	Serious Injuries Per 100,000 Population	% Difference From 5-Year Average
2010	1	228	5118	439041	52	-
2011	ı	236	5178	441711	53	-
2012	1	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	504500	30	-30%
2021	163	179	5958	509475	35	-8%

In 2021, 163 serious injury crashes occurred on Mesa roadways resulting in 179 serious injuries. The percentage of severe injury crashes per 100,000 population, increased by 17.3% from the previous year.

Between 2017 and 2021, the average serious injury rate per 100,000 population within the City of Mesa was 38.

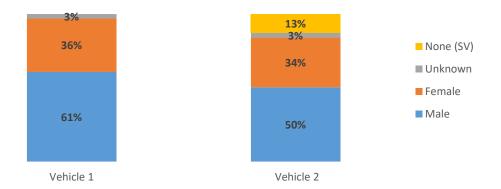
## Mesa 2021 Serious Injury Crashes: Intersection Relation



Of the 163 serious injury crashes that occurred within Mesa in 2021, 92 were intersection related.

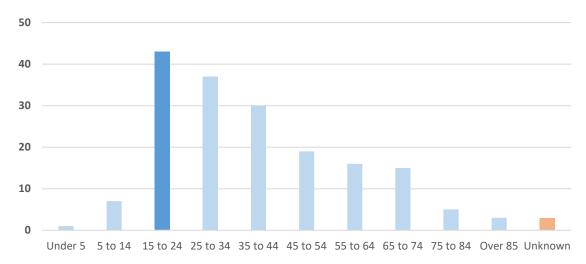


#### Mesa 2021 Serious Injury Crashes by Gender



Data analysis of 2021 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 collisions that involve a single motor vehicle driver and no other unit.

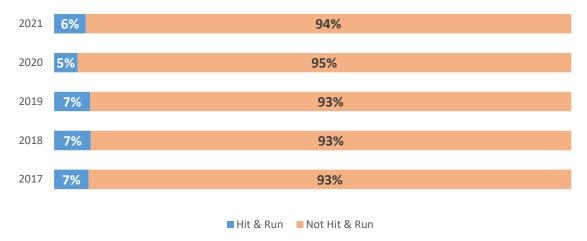
#### Mesa 2021 Serious Injuries by Age



Motor vehicle serious injury crashes were higher among people aged 15 to 24 than any other age group in 2021. There was a small number of crashes (3) where age of the injured person was unknown.



## Mesa 2021 Serious Injury Crashes: Hit and Run



There were 10 serious injury crashes that were classified as hit and run in 2021. This number is 1.7% greater than the previous year and slightly lower than the five-year average.

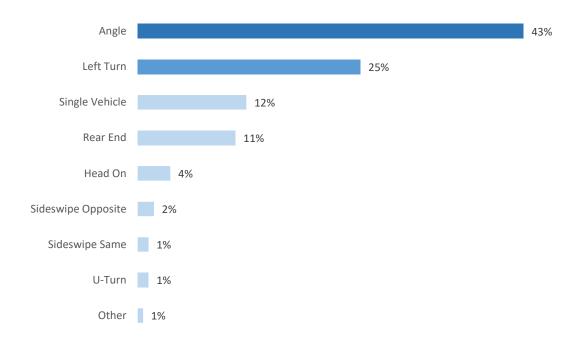
## Mesa 2021 Serious Injury Crashes: Unit Type



Most of the serious injury crashes that occurred in Mesa in 2021 were **motor vehicle** collisions. This number includes motorcyclists and single vehicle crashes.

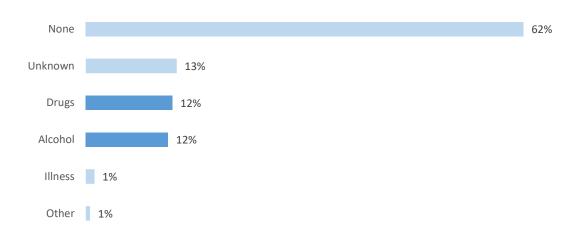


Mesa 2021 Serious Injury Crash Manner



In 2021, the leading crash manners resulting in serious injuries were **angle** and **left turn** crashes. These percentages include respective pedestrian and bicyclist crashes.

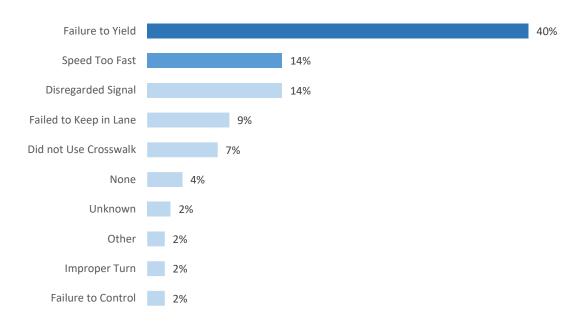
## Mesa 2021 Serious Injury Crashes: Impairment



Impairment, including both **alcohol and drug** use, was a factor in 39 serious injury crashes in 2021 (19 alcohol-related incidents and 20 drug-related incidents). Hit & run collisions and reporting errors resulted in an abnormal number of cases where impairment was unknown.

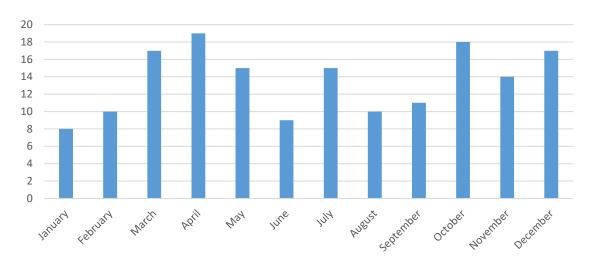


## Mesa 2021 Serious Injury Crashes: Vehicle 1 Violation



The above chart shows a distribution of Mesa vehicle 1 violations in 2021 that resulted in a serious injury crash. Over half of the reported violations (54%) were noted as either a **failure to yield** or **speed too fast**.

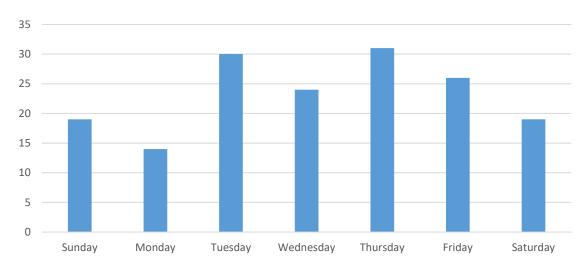
#### Mesa 2021 Serious Injury Crashes by Month



The highest three-month period for serious injury crashes was from March to May. Those three months comprised 32% of all serious injury crashes within the City of Mesa in 2021. Over a five-year average, the peak month for serious injury crashes, with 11%, is March.



#### Mesa 2021 Serious Injury Crashes by Day of Week



In 2021, 52% of serious injury crashes within Mesa occurred between Tuesday and Thursday. Over a five-year period, 55% of serious injury collisions occurred between Wednesday and Friday.



Mesa 2021 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	0	0	0	0
1:00 AM - 2:00 AM	2	0	0	0	0	1	0	3
2:00 AM - 3:00 AM	0	0	0	0	1	1	2	4
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	2	0	2
5:00 AM - 6:00 AM	1	0	1	0	1	1	0	4
6:00 AM - 7:00 AM	1	0	0	0	1	0	0	2
7:00 AM - 8:00 AM	1	2	0	3	3	0	1	10
8:00 AM - 9:00 AM	1	1	1	2	4	1	0	10
9:00 AM - 10:00 AM	0	0	2	1	1	0	1	5
10:00 AM - 11:00 AM	2	0	1	0	1	2	1	7
11:00 AM - 12:00 PM	2	0	3	3	2	1	1	12
12:00 PM - 1:00 PM	1	3	5	2	1	0	1	13
1:00 PM - 2:00 PM	0	0	1	0	3	1	0	5
2:00 PM - 3:00 PM	0	1	0	1	0	1	1	4
3:00 PM - 4:00 PM	2	0	4	2	1	1	3	13
4:00 PM - 5:00 PM	2	1	2	1	2	2	2	12
5:00 PM - 6:00 PM	2	0	3	3	2	2	2	14
6:00 PM - 7:00 PM	1	1	3	3	4	0	0	12
7:00 PM - 8:00 PM	0	3	2	2	1	2	1	11
8:00 PM - 9:00 PM	0	1	0	0	1	2	0	4
9:00 PM - 10:00 PM	1	1	2	0	0	3	2	9
10:00 PM - 11:00 PM	0	0	0	1	1	1	1	4
11:00 PM - 12:00 AM	0	0	0	0	1	2	0	3
Total	19	14	30	24	31	26	19	163

Data analysis of City of Mesa serious injury collisions in 2021 showed that the highest concentration was between 3:00 PM and 8:00 PM. During this timeframe, 38% of serious injury crashes occurred.



# **SECTION 3:**

## **BIKE CRASHES**



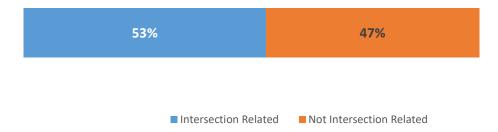
#### Mesa Bicycle Crashes: General View

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%	504500	17	-42.26%
2021	139	5958	2.3%	509475	27	-2.16%

The City of Mesa had 139 bike-related crashes reported in 2021 which comprised 2.3% of all local crashes. The number of bicyclist crashes per 100,000 population increased by 58.2% from the previous year.

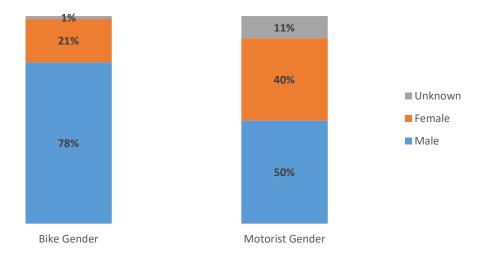


## Mesa 2021 Bicycle Crashes: Intersection Relation



Of the 139 bike crashes within the City of Mesa in 2021, 74 were intersection related.

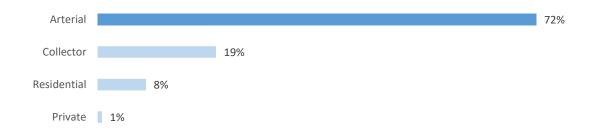
#### Mesa 2021 Bicycle Crash Gender



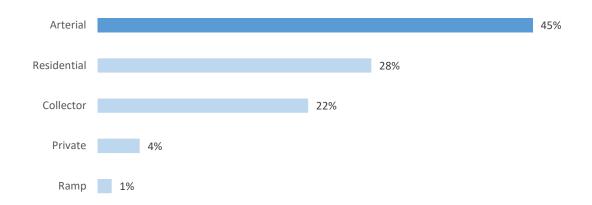
Data analysis of 2021 bicycle crashes showed that most bicyclists involved in crashes were male. Crashes where the driver was unknown are typically attributed to hit and run collisions.



#### Mesa 2021 Bicycle Crashes: On Street Class



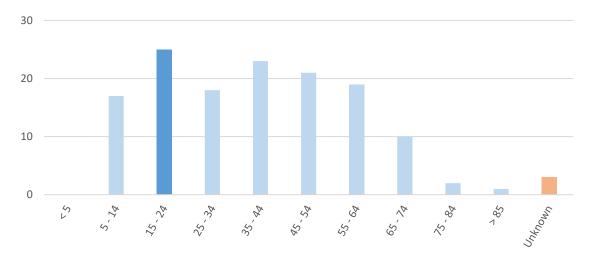
#### Mesa 2021 Bicycle Crashes: Cross Street Class



The charts above show the street classifications for Mesa bicycle crashes in 2021. Most bike crashes occurred on or adjacent to an **arterial roadway**, contributing to 86% of all cases. Of the 74 intersection related crashes, 88% occurred on an arterial road.

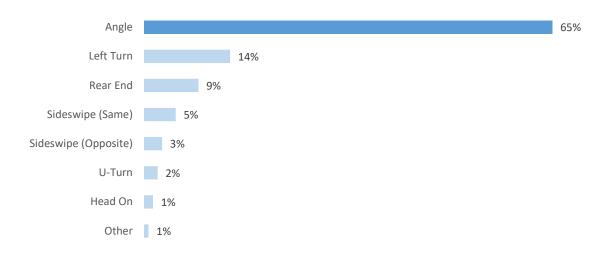


#### Mesa 2021 Bicycle Crashes by Age



Bicycle crashes were higher among people aged 15 to 24 than any other age group in 2021. This group makes up 13% of the total population yet contributed to 18% of the total bicycle crashes. Due to electronic reporting issues, the age of some bicyclists was unable to be determined.

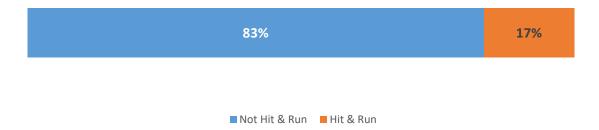
#### Mesa 2021 Bicycle Crash Manner



Over half of the total bicycle crashes were **angle crashes** with 91 incidents. This manner of collision commonly occurred at intersections and driveways.

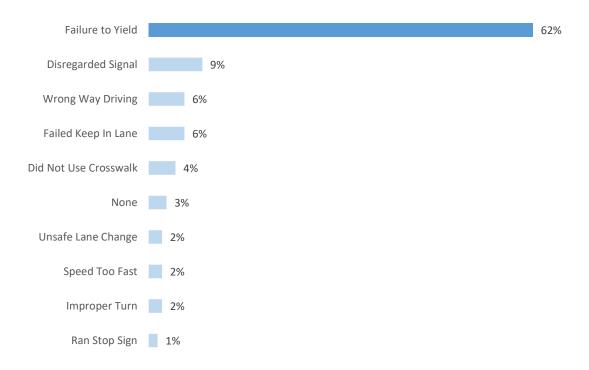


## Mesa 2021 Bicycle Crashes: Hit & Run



Of the 139 bicycle crashes within Mesa in 2021, 23 were reported as **hit and run** collisions. Relative to the total number of bike crashes, this is a decrease of 15% from the previous year.

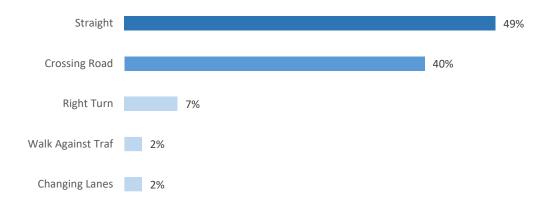
## Mesa 2021 Bicycle Crashes: Vehicle 1 Violation



The reported violations of vehicle 1, inclusive of both bicyclist and driver violations, were highest for a **failure to yield**. In this category, there were 86 crashes.

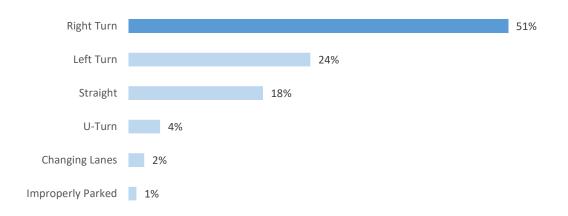


## Mesa 2021 Bicycle Crashes: Bicyclist at Fault Actions



Of the 139 total bicyclist collisions, 44 were reportedly caused by a violation by the bicyclist. Of those crashes, 21 stated that the bicyclist was **traveling straight**. This is attributed to wrongway riding, and a deeper analysis is provided at the end of this section. Additionally, 18 of the crashes were caused by bicyclists attempting to **cross the road**. This includes midblock and intersection crossings.

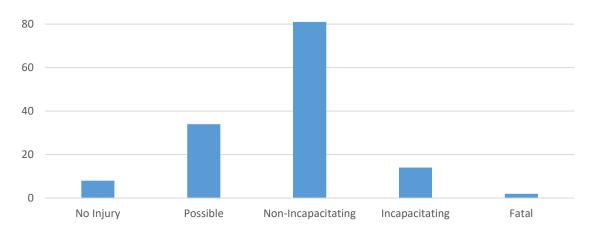
## Mesa 2021 Bicycle Crashes: Motorist at Fault Actions



Of the 139 bicyclist crashes, 95 were reportedly caused by violations by the motor vehicle driver. Of those crashes, 48 were attributed to motorists attempting to make a **right turn** movement at intersections and driveways.

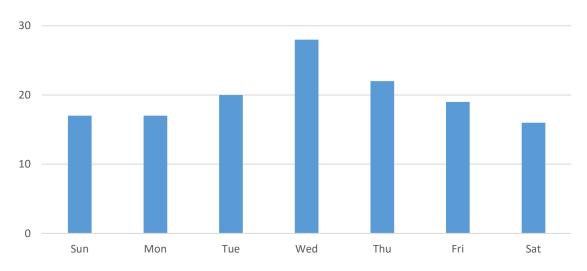


## Mesa 2021 Bicycle Crashes: Injury Severity



Of the 139 total bicycle crashes within the City of Mesa in 2021, there were 2 fatalities and 14 serious injuries, comprising 12% of all bicycle-related crashes. Only 6% of bicycle crashes resulted in no injury.

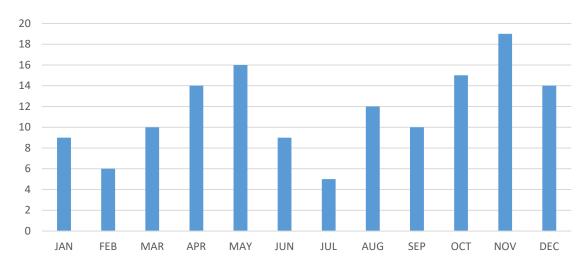
#### Mesa 2021 Bicycle Crashes by Day of Week



In 2021, 50% of bicycle crashes occurred between Tuesday and Thursday. This is consistent with the five-year average.



#### Mesa 2021 Bicycle Crashes by Month



Data analysis of bicycle crashes by month revealed an increase in the spring and fall seasons, with a notable drop during the summer and winter months. In 2021, 35% of crashes occurred between October and December. Over a five-year average the highest period of bicyclist crashes occurred between March and May with 30%.



Mesa 2021 Bicycle Crashes by Time and Day of Week

Time	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Total
12:00 AM - 1:00 AM	1	0	2	1	0	0	0	4
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	1	0	0	0	0	1
5:00 AM - 6:00 AM	0	0	0	2	0	0	0	2
6:00 AM - 7:00 AM	0	1	1	0	0	0	1	3
7:00 AM - 8:00 AM	1	1	1	3	2	2	1	11
8:00 AM - 9:00 AM	2	1	1	3	1	4	0	12
9:00 AM - 10:00 AM	1	2	2	1	2	1	1	10
10:00 AM - 11:00 AM	0	0	0	1	1	0	2	4
11:00 AM - 12:00 PM	3	0	1	0	0	0	1	5
12:00 PM - 1:00 PM	2	3	1	3	2	2	2	15
1:00 PM - 2:00 PM	0	1	0	3	1	0	1	6
2:00 PM - 3:00 PM	0	4	1	1	2	2	0	10
3:00 PM - 4:00 PM	1	1	1	0	4	1	2	10
4:00 PM - 5:00 PM	2	1	2	3	2	2	2	14
5:00 PM - 6:00 PM	1	0	1	0	2	0	0	4
6:00 PM - 7:00 PM	0	1	4	2	1	1	1	10
7:00 PM - 8:00 PM	1	0	1	0	0	0	0	2
8:00 PM - 9:00 PM	0	0	0	3	0	1	1	5
9:00 PM - 10:00 PM	0	0	0	2	0	2	0	4
10:00 PM - 11:00 PM	2	0	0	0	0	0	0	2
11:00 PM - 12:00 AM	0	1	0	0	2	1	1	5
Total	17	17	20	28	22	19	16	139

Bicycle crashes in 2021 were most common during local peak traffic times in the morning and afternoon, and 80% of bicyclist crashes occurred between 7:00AM to 7:00PM.



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

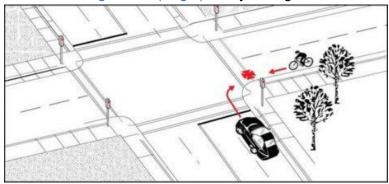
						5-Year	% Of
	2017	2018	2019	2020	2021	Total	Total
12:00 AM - 1:00 AM	0	1	0	0	4	5	0.7%
1:00 AM - 2:00 AM	0	0	0	0	0	0	0.0%
2:00 AM - 3:00 AM	0	0	0	0	0	0	0.0%
3:00 AM - 4:00 AM	1	0	0	1	0	2	0.3%
4:00 AM - 5:00 AM	1	1	1	0	1	4	0.6%
5:00 AM - 6:00 AM	1	3	4	3	2	13	1.9%
6:00 AM - 7:00 AM	9	3	3	6	3	24	3.5%
7:00 AM - 8:00 AM	8	12	9	6	11	46	6.7%
8:00 AM - 9:00 AM	18	4	12	2	12	48	7.0%
9:00 AM - 10:00 AM	9	7	7	6	10	39	5.7%
10:00 AM - 11:00 AM	3	7	5	4	4	23	3.3%
11:00 AM - 12:00 PM	6	7	8	5	5	31	4.5%
12:00 PM - 1:00 PM	14	16	5	4	15	54	7.8%
1:00 PM - 2:00 PM	7	10	6	4	6	33	4.8%
2:00 PM - 3:00 PM	12	12	8	6	10	48	7.0%
3:00 PM - 4:00 PM	26	13	12	9	10	70	10.1%
4:00 PM - 5:00 PM	14	16	15	10	14	69	10.0%
5:00 PM - 6:00 PM	8	18	7	3	4	40	5.8%
6:00 PM - 7:00 PM	14	10	4	7	10	45	6.5%
7:00 PM - 8:00 PM	9	7	10	5	2	33	4.8%
8:00 PM - 9:00 PM	2	7	3	2	5	19	2.8%
9:00 PM - 10:00 PM	4	7	2	1	4	18	2.6%
10:00 PM - 11:00 PM	4	5	3	3	2	17	2.5%
11:00 PM - 12:00 AM	2	2	0	0	5	9	1.3%
Total	172	168	124	87	139	690	

Analyzing the bicycle crash trend over the past five years shows that the peak time frame for bicycle-related crashes is from 11:00 AM to 5:00 PM. However, there is a notable increase during morning peak traffic times.

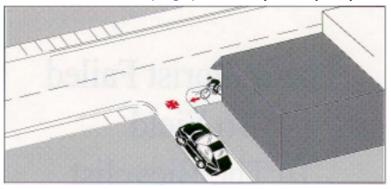


The following is a list of the most common crash types for bicycle-motorist collisions. They are ordered from highest to lowest and show the number of collisions of a certain type followed by the percentage of total crashes. Graphics are sourced from Federal Highway Administration, *Bicycle Crash Types: A 1990's Informational Guide.* The most common crash types (and associated crash manner) for bicycle-motorist collisions of 2021 were as follows:

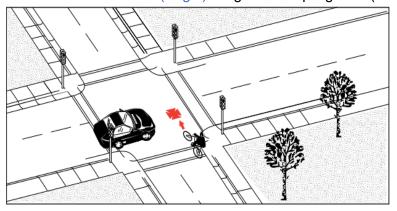
1. Motorist Right Turn (Angle) – bicyclist against traffic on sidewalk or road: 36 (26%)



2. Motorist Drive Out (Angle) – driveway or alley; bicyclist on sidewalk: 25 (18%)

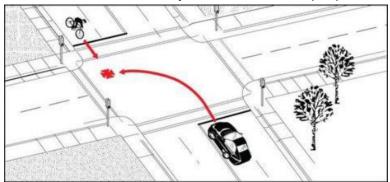


3. Bike Failed to Yield (Angle) – signal or stop sign: 17 (12%)

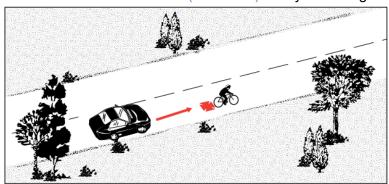




#### 4. Motorist Left Turn – bicyclist with traffic: 11 (8%)



### 5. Motor Vehicle Rear End (Rear End) – bicyclist riding with traffic: 11 (8%)



# SECTION 4: PEDESTRIAN CRASHES



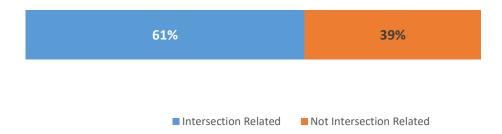
#### **Mesa Pedestrian Crashes: General View**

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%	504500	18	-7.28%
2021	80	5958	1.34%	509475	16	-16.15%

The City of Mesa had 80 reported pedestrian crashes in 2021, making up 1.3% of all crashes for that year. The number of pedestrian crashes per 100,000 population decreased by 14% from the previous year.



## Mesa 2021 Pedestrian Crashes: Intersection Relation



Of the 80 pedestrian crashes that occurred within the City of Mesa in 2021, 49 were intersection related.

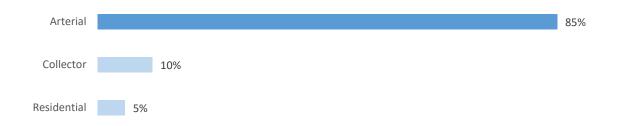
Mesa 2021 Pedestrian Crashes by Gender



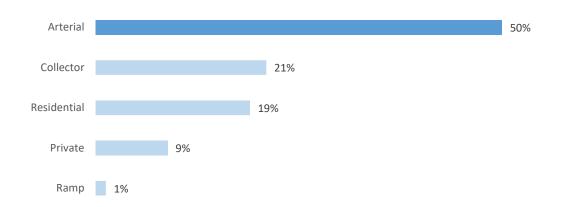
Data analysis of pedestrian crashes in 2021 showed that the persons involved in these types of collisions were mostly male. Crashes where the gender of the involved person was unknown are typically attributed to hit and run collisions.



## Mesa 2021 Pedestrian Crashes: On Street Class



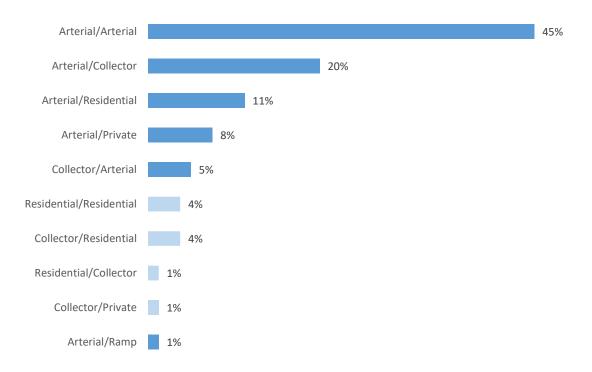
## Mesa 2021 Pedestrian Crashes: Cross Street Class



The charts above show the street classifications for Mesa pedestrian crashes in 2021. Most pedestrian crashes occurred on an **arterial roadway**, comprising 68 total cases. Of those crashes, 60% were intersection related.

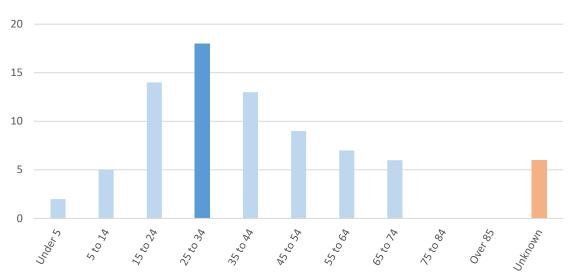


## Mesa 2021 Pedestrian Crashes: Intersection Class



In 2021, 90% of Mesa pedestrian crashes were on or adjacent to high volume intersections.

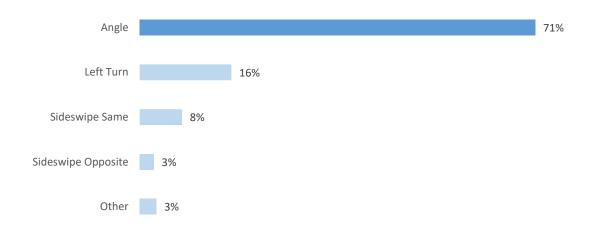
#### Mesa 2021 Pedestrian Crashes by Age



Pedestrian crashes were higher among people aged 25 to 34 years old than any other age group. This group makes up 15% of the total population yet contributed to 21% of the total pedestrian crashes. Due to electronic reporting issues and certain hit and run incidents, the age of six pedestrians was unable to be determined.

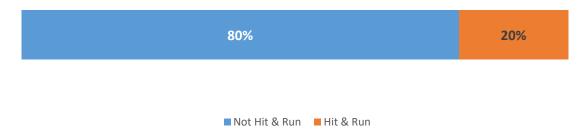


#### Mesa 2021 Pedestrian Crash Manner



Over half of the total pedestrian crashes were **angle crashes** with 57 incidents. This manner of collision was most common for intersection and midblock crossings.

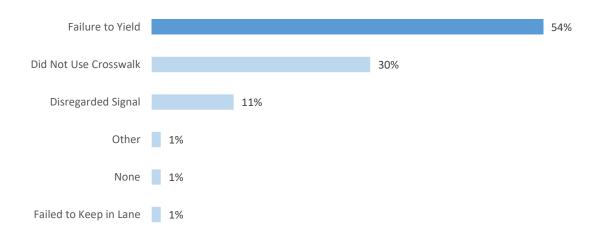
## Mesa 2021 Pedestrian Crashes: Hit & Run



Of the 80 pedestrian crashes in Mesa, 16 were reported as **hit and run** collisions. Relative to the total number of pedestrian crashes, this is a 3% decrease from the previous year.



## Mesa 2021 Pedestrian Crashes: Vehicle 1 Violation



The reported violations of vehicle 1, inclusive of both pedestrian and driver violations, were highest for a **failure to yield**. In this category, there were 43 crashes.

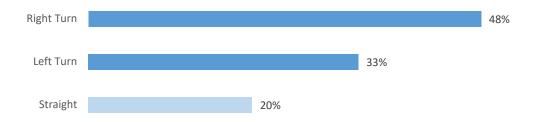
## Mesa 2021 Pedestrian Crashes: Pedestrian at Fault Action



Of the 80 total pedestrian collisions, 34 were reportedly caused by a violation by the pedestrian. Of those crashes, 30 stated that the pedestrian was **crossing the road**.

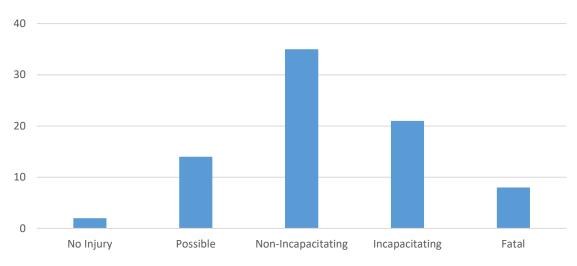


## Mesa 2021 Pedestrian Crashes: Motorist at Fault Action



Of the 80 pedestrian crashes, 46 were reportedly caused by violations by the motor vehicle driver. Of those crashes, 37 (82%) were attributed to motorists attempting to make turning movements.

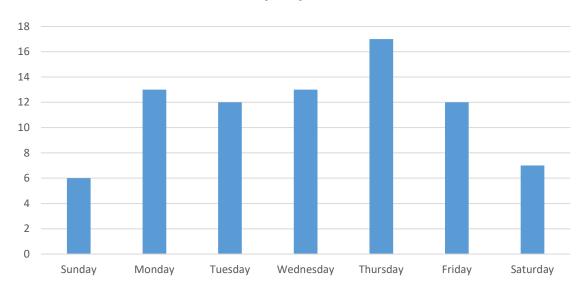
# Mesa 2021 Pedestrian Crashes: Injury Severity



Of the 80 total pedestrian crashes within the City of Mesa in 2021, there were 8 fatalities and 21 serious injuries, comprising 36% of all pedestrian crashes. Only 3% of pedestrian crashes resulted in no injury.

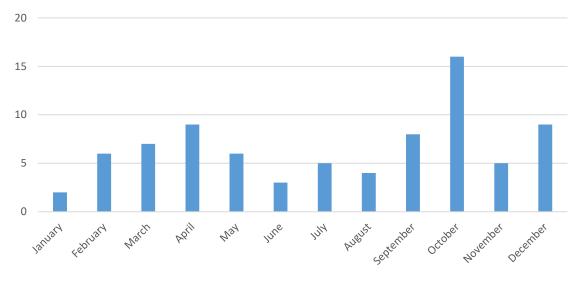


Mesa 2021 Pedestrian Crashes by Day of Week



Pedestrian crashes occurred most frequently midweek between Tuesday and Friday. Of the 80 crashes, 63% occurred on those days. Over a five-year period, 51% of pedestrian collisions occur between Wednesday and Friday.

Mesa 2021 Pedestrian Crashes by Month



Like bicyclist crashes, City of Mesa pedestrian collisions in 2021 decreased during the summer months and were higher during the spring and fall seasons. In contrast to the five-year average where pedestrian crashes reach their highest point in January, 2021 recorded a low point.



Mesa 2021 Pedestrian 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	1	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	1	0	1	1	3
6:00 AM - 7:00 AM	0	0	0	1	1	1	0	3
7:00 AM - 8:00 AM	0	2	2	0	1	0	1	6
8:00 AM - 9:00 AM	0	0	0	0	1	0	0	1
9:00 AM - 10:00 AM	1	0	0	0	0	0	0	1
10:00 AM - 11:00 AM	1	1	0	0	0	0	0	2
11:00 AM - 12:00 PM	0	0	2	2	1	0	0	5
12:00 PM - 1:00 PM	0	1	0	1	1	0	0	3
1:00 PM - 2:00 PM	0	1	0	1	1	1	0	4
2:00 PM - 3:00 PM	0	1	0	0	1	0	0	2
3:00 PM - 4:00 PM	2	2	1	0	1	0	0	6
4:00 PM - 5:00 PM	0	0	2	1	1	0	0	4
5:00 PM - 6:00 PM	0	0	2	0	2	1	1	6
6:00 PM - 7:00 PM	0	1	0	1	0	0	0	2
7:00 PM - 8:00 PM	0	0	1	2	2	2	1	8
8:00 PM - 9:00 PM	2	1	1	0	2	4	0	10
9:00 PM - 10:00 PM	0	1	1	1	0	0	2	5
10:00 PM - 11:00 PM	0	2	0	2	1	1	0	6
11:00 PM - 12:00 AM	0	0	0	0	1	1	0	2
Total	6	13	12	13	17	12	7	80

Pedestrian crashes in 2021 were most common during local peak traffic times in the morning and afternoon, and 76% of pedestrian crashes occurred between 11:00AM to 11:00PM.



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

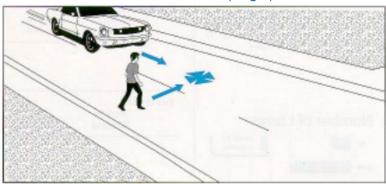
	2016	2017	2018	2019	2020	5-Year Total	% Of Total
12:00 AM - 1:00 AM	3	2	1	1	1	8	1.7%
1:00 AM - 2:00 AM	1	0	0	0	1	2	0.4%
2:00 AM - 3:00 AM	0	0	0	0	0	0	0.0%
3:00 AM - 4:00 AM	0	0	0	1	1	2	0.4%
4:00 AM - 5:00 AM	0	1	0	0	1	2	0.4%
5:00 AM - 6:00 AM	0	0	0	0	0	0	0.0%
6:00 AM - 7:00 AM	3	2	7	0	7	19	4.0%
7:00 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 pedestrian crash trend over the past five years shows that the peak time frame for pedestrian collisions is from 4:00 PM to 10:00 PM. However, there is a notable increase during morning peak traffic times.

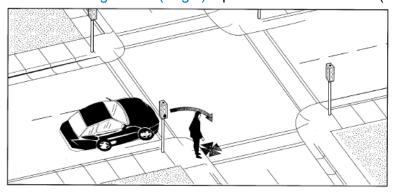


The following is a list of the most common crash types for pedestrian-motorist collisions. They are ordered from highest to lowest and show the number of collisions of a certain type, followed by the percentage of total crashes. Graphics are sourced from Federal Highway Administration, *Pedestrian Crash Types: A 1990's Informational Guide.* The most common crash types (and associated crash manner) for pedestrian-motorist collisions of 2021 were as follows:

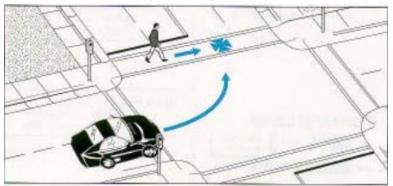
1. Pedestrian Walk Out Midblock (Angle) – outside of crosswalk 23 (29%)



2. Motorist Right Turn (Angle) – pedestrian in crosswalk (either direction): 18 (23%)



3. Motorist Left Turn (Left Turn) – parallel pedestrian travel (either direction): 13 (16%)



## 4. Pedestrian Dash Out (Angle) – jaywalking or against the light: 8 (10%)

