



**zero deaths - zero serious injuries**

# **2020 Montana Crash Data (2011-2020)**

2022 Annual Transportation Safety Meeting

Pam Langve-Davis, Comprehensive Highway Safety Plan

Montana Department of Transportation

October 11 & 12, 2022

# Federal Requirements



- Data Driven



- Multiagency Coordination & 4Es



- Performance Measures



- Consistent safety targets

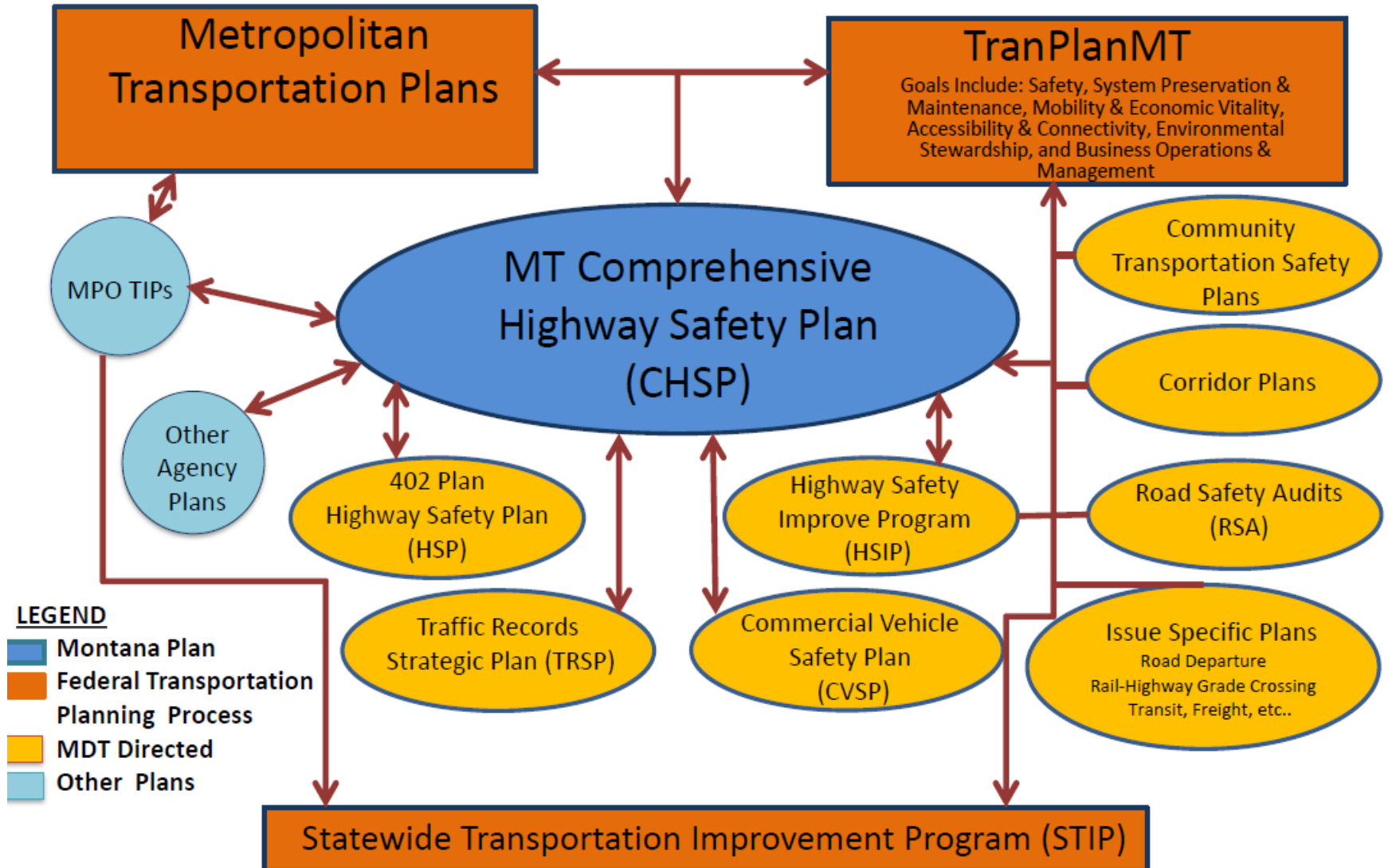


- Report, track, and evaluation process



- Update CHSP every 5 years

# Relationship of Montana's Safety Plan (CHSP) with Agency Safety Plans & Programs



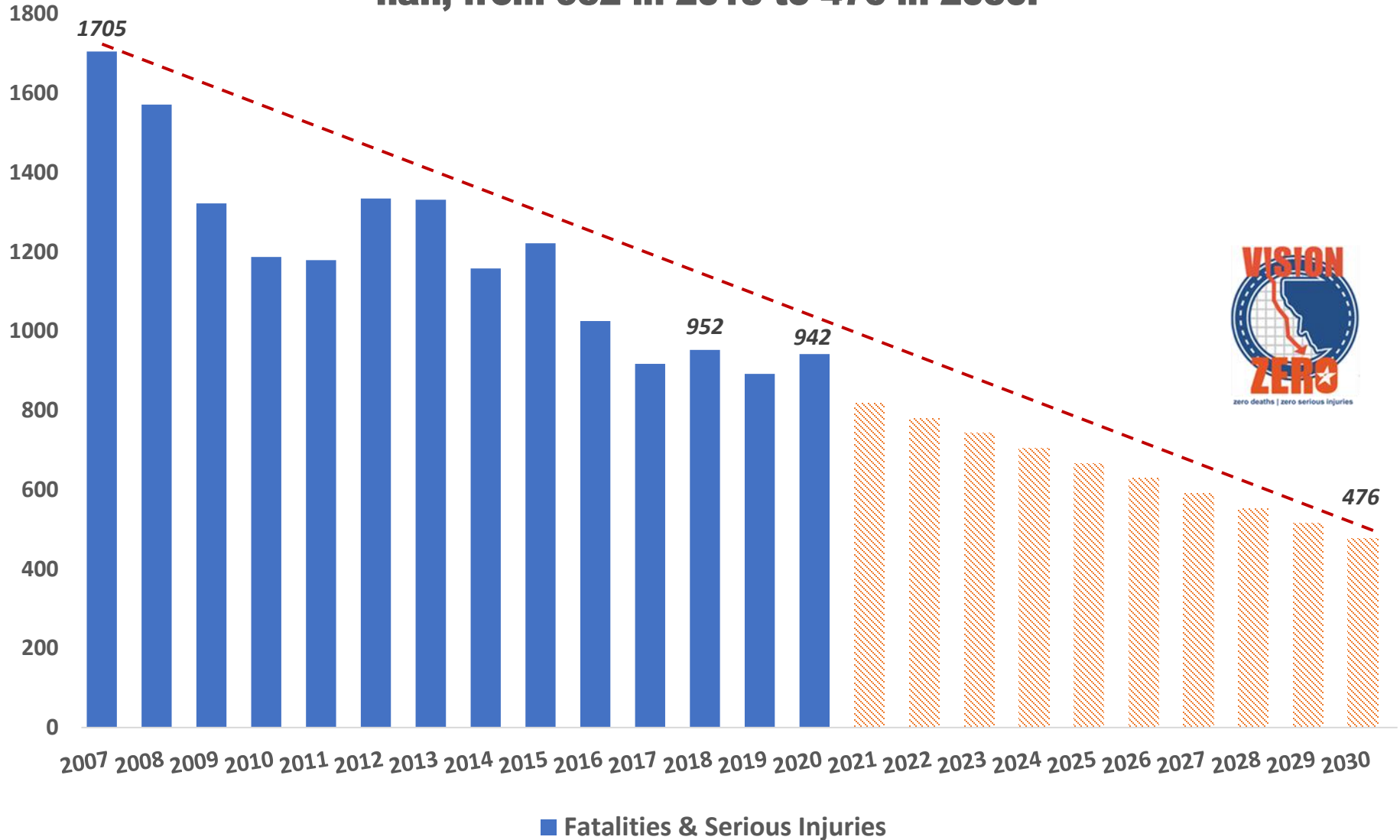


**2020 Montana  
Crash Data  
(2011-2020)**

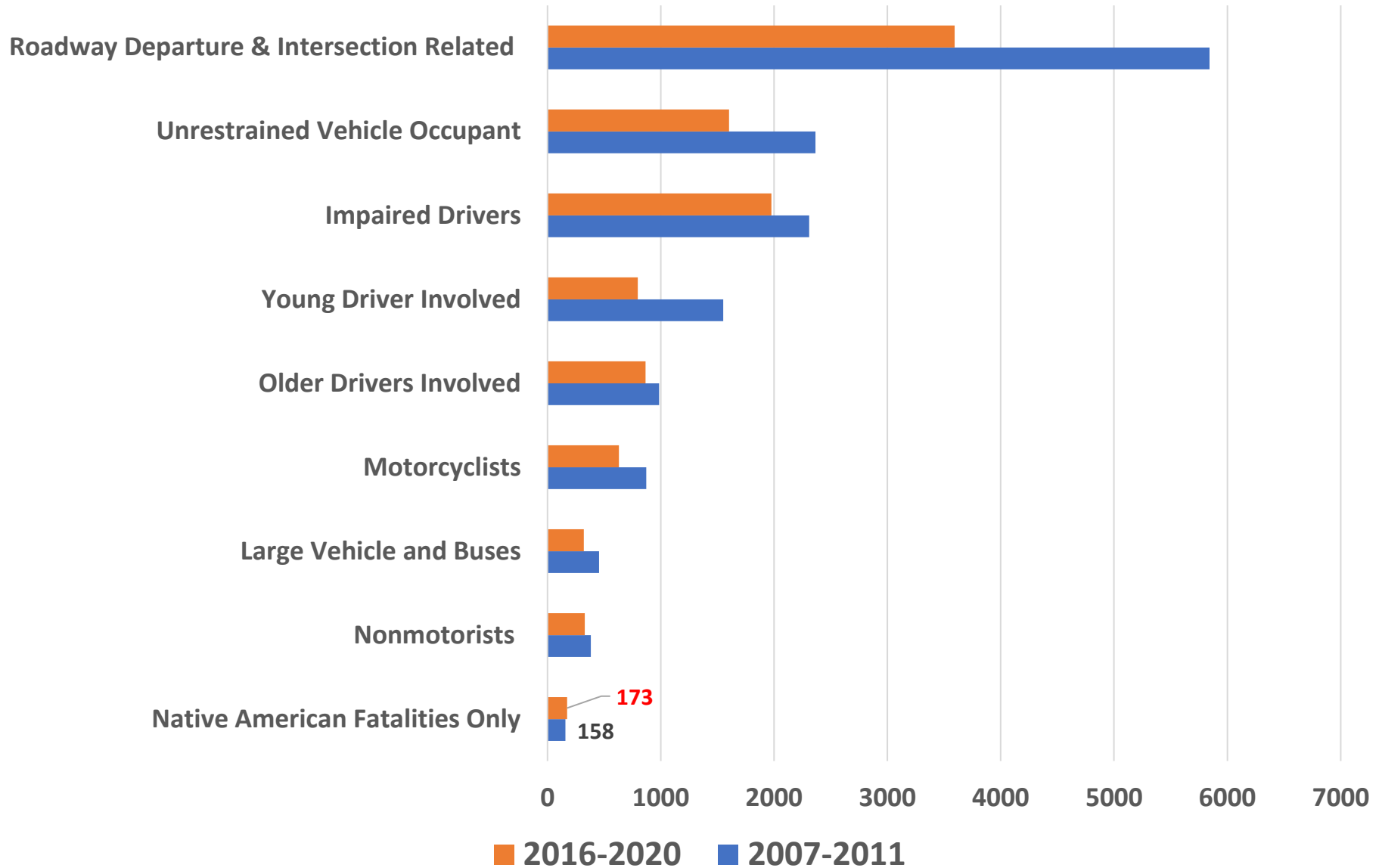


# CHSP Interim Goal

Reduce fatalities and serious injuries on Montana's roads by half, from 952 in 2018 to 476 in 2030.

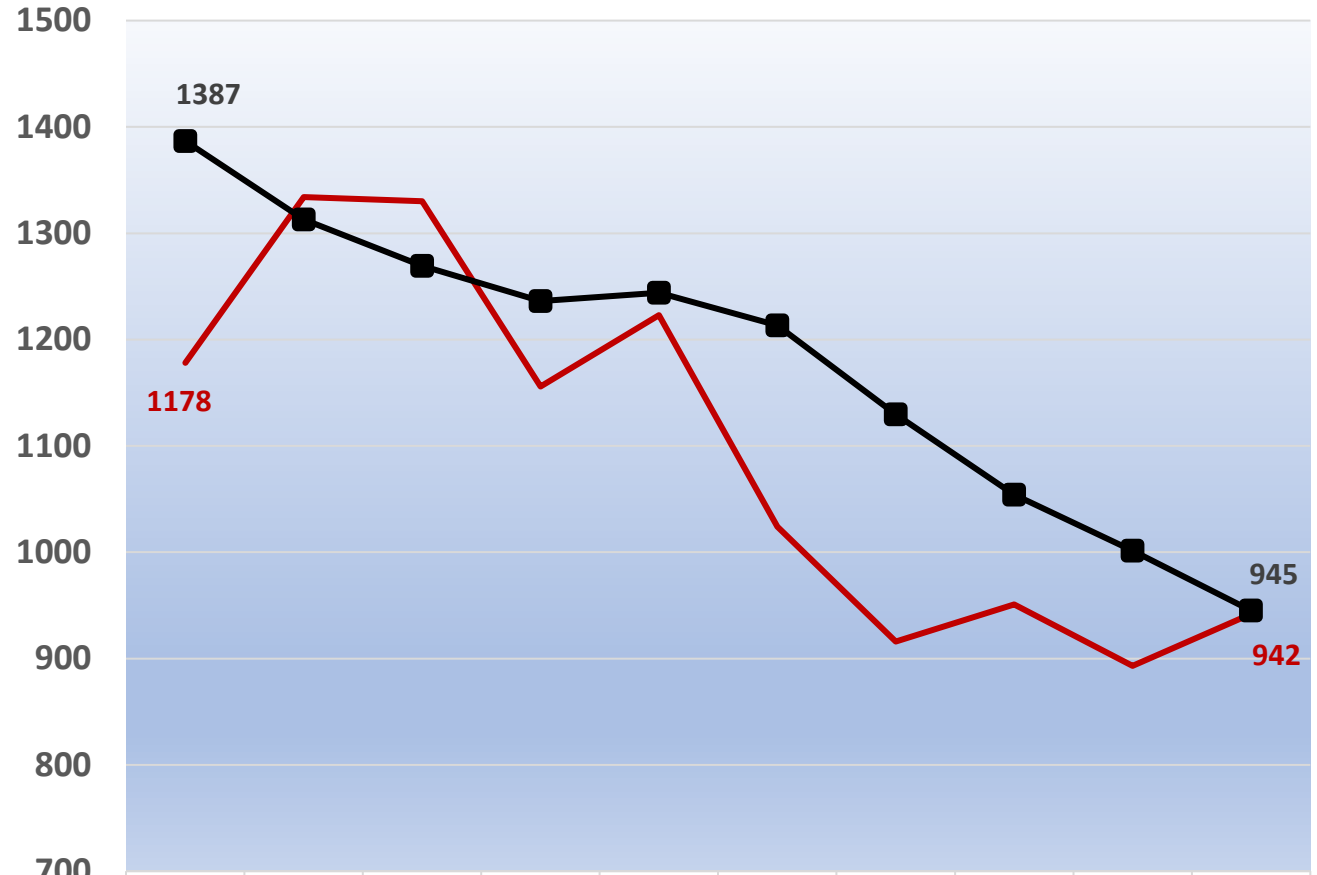


# Fatal & Serious Injuries Associated Key Emphasis Areas, First 5-Years vs Recent 5-Years of Implementation



Data confirmed 8/30/2022

# Total Fatalities & Serious Injuries, 2011-2020



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
— Total Fatalities & Serious Injuries	1178	1334	1330	1156	1223	1024	916	951	893	942
■ 5-Year Average	1387	1313	1269	1236	1244	1213	1130	1054	1001	945
Fatalities	211	205	229	192	224	190	186	182	184	212
Serious Injuries	967	1129	1101	964	999	834	730	769	709	730

Data confirmed 8/30/2022

**Overall, the trend is continuing to decrease.**

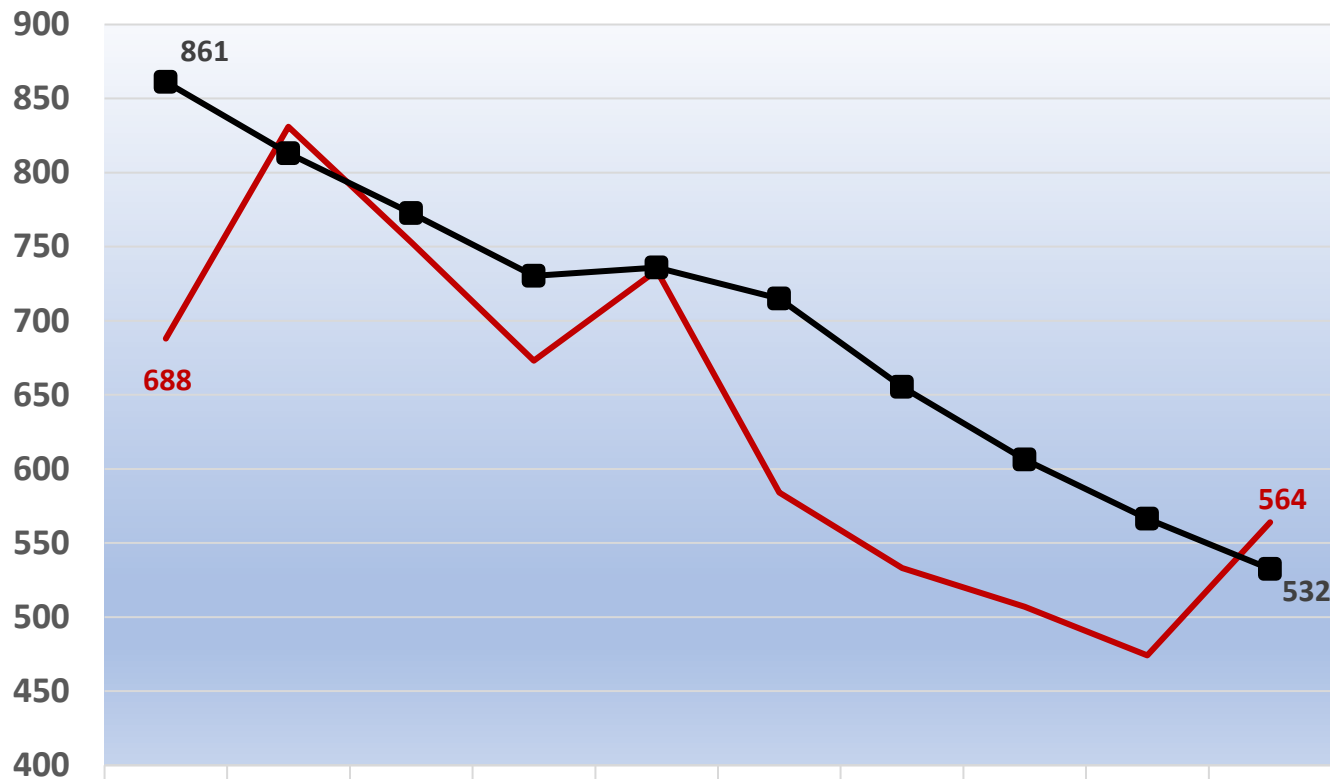
# **Roadway Departure Fatalities & Serious Injuries, 2011- 2020**

A roadway departure is defined as any instance in which a vehicle leaves the travel lane. It includes a non-junction Head On collision (HO), Side-Swipe Opposite Direction (SSOD), Fixed Object (FO) or Roll Over (RO).





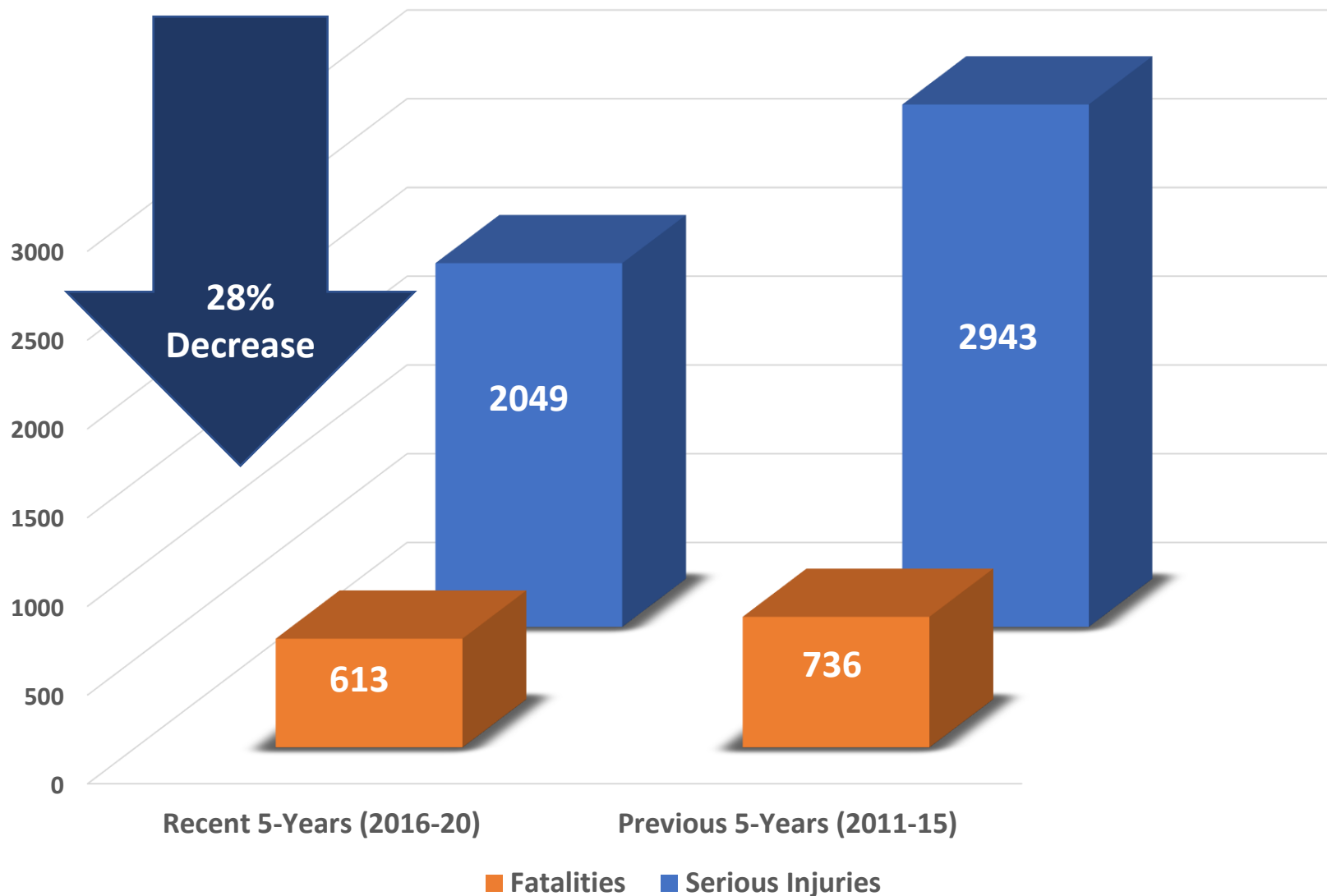
# Roadway Departure Fatalities & Serious Injuries, 2011-2020



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
— All Fatalities & Serious Injuries	688	831	753	673	734	584	533	507	474	564
■ 5-Year Average	861	813	773	730	736	715	655	606	566	532
Fatalities	143	159	150	129	155	131	127	127	94	134
Serious Injuries	545	672	603	544	579	453	406	380	380	430

**In 2020 there was a spike in roadway fatalities & serious injuries.  
Overall, the trend continues to decrease.**

# Roadway Departure Fatalities & Serious Injuries, 5-Year Comparison

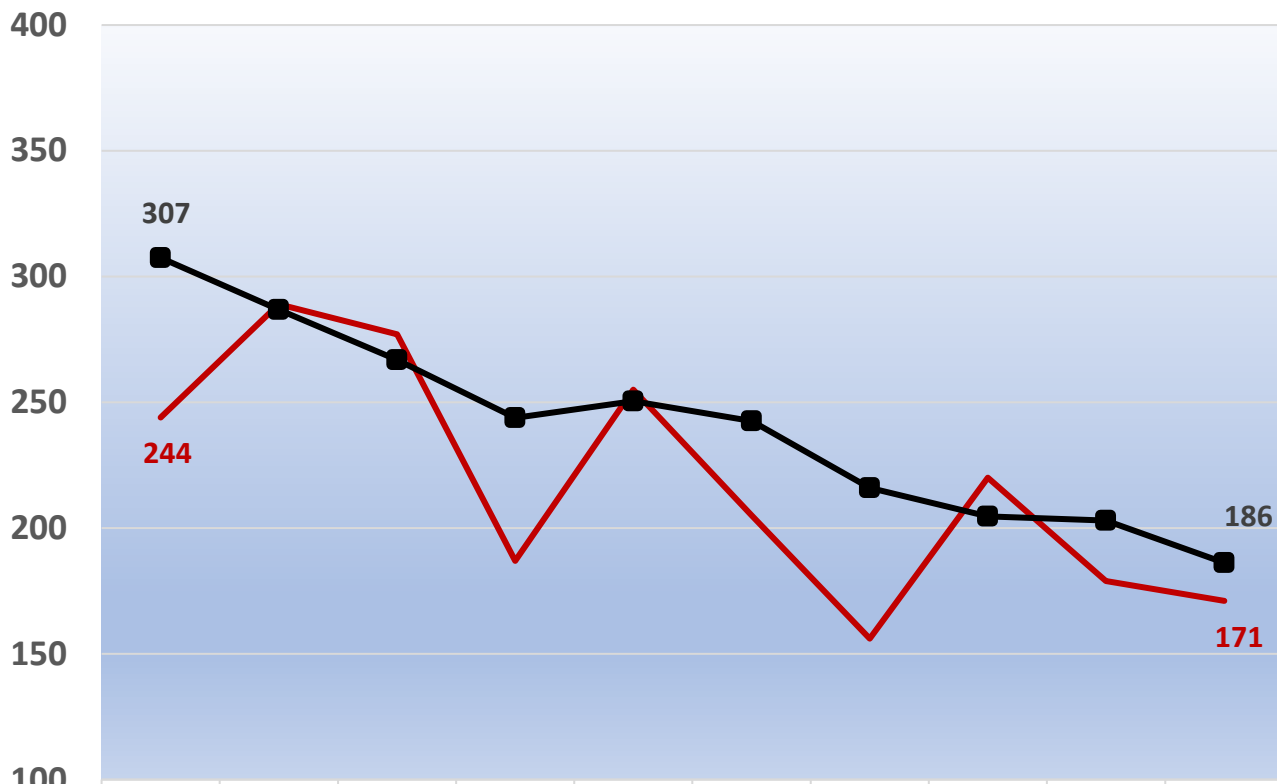


# Intersection -related Fatalities & Serious Injuries, 2011- 2020

An Intersection related crash is defined as a crash occurring in or related to or near an intersection.



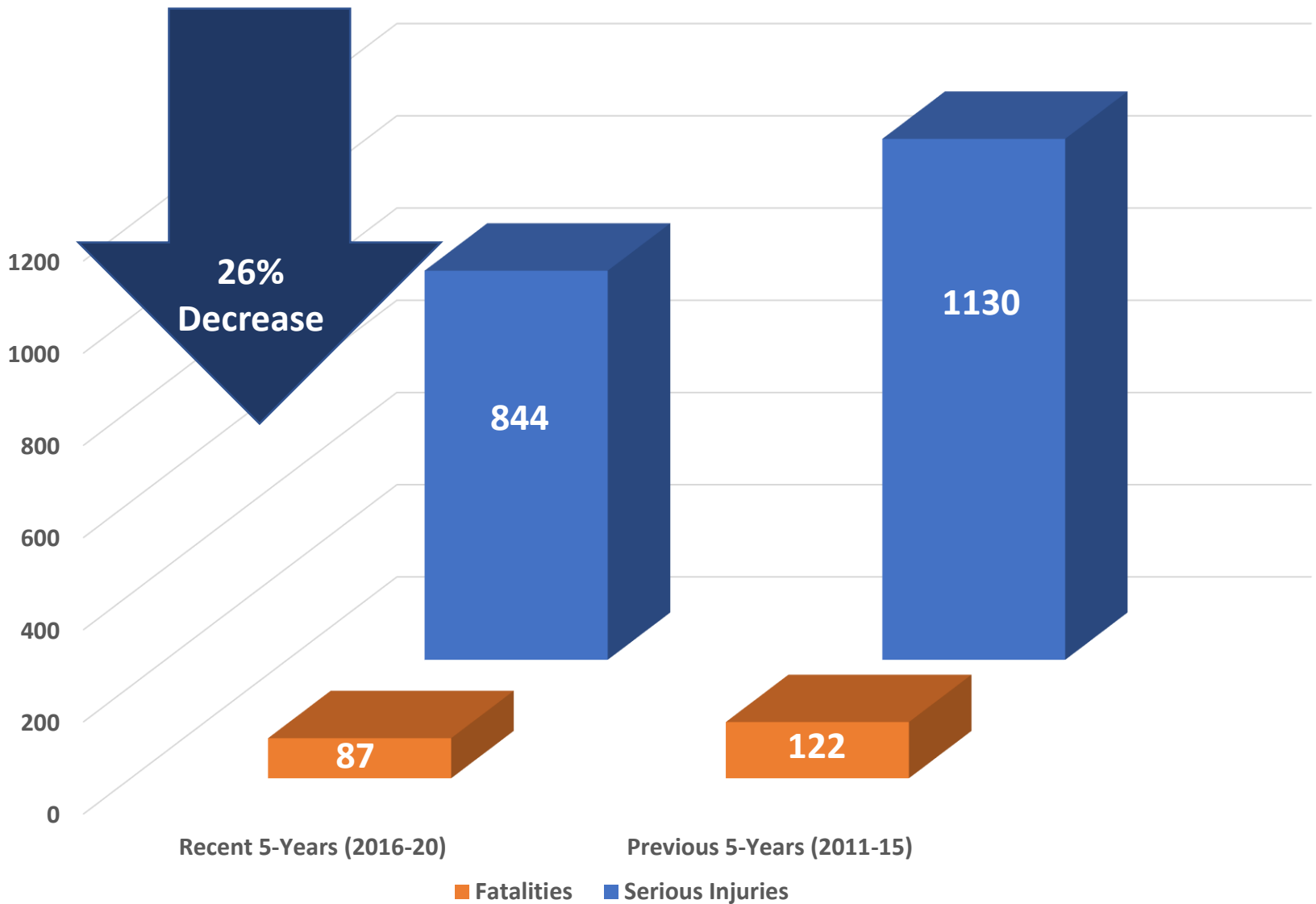
# Intersection-related Fatalities & Serious Injuries, 2011-2020



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<span style="color: red;">—</span> All Fatalities & Serious Injuries	244	289	277	187	255	205	156	220	179	171
<span style="color: black;">—</span> ● 5-Year Average	307	287	267	244	250	243	216	205	203	186
Fatalities	29	17	27	19	30	14	15	21	21	16
Serious Injuries	215	272	250	168	225	191	141	199	158	155

**Intersection-related fatalities & serious injuries were lower in 2020 than the previous two years and below the 5-year average.**

# Intersection-related Fatalities & Serious Injuries, 5-Year Comparison



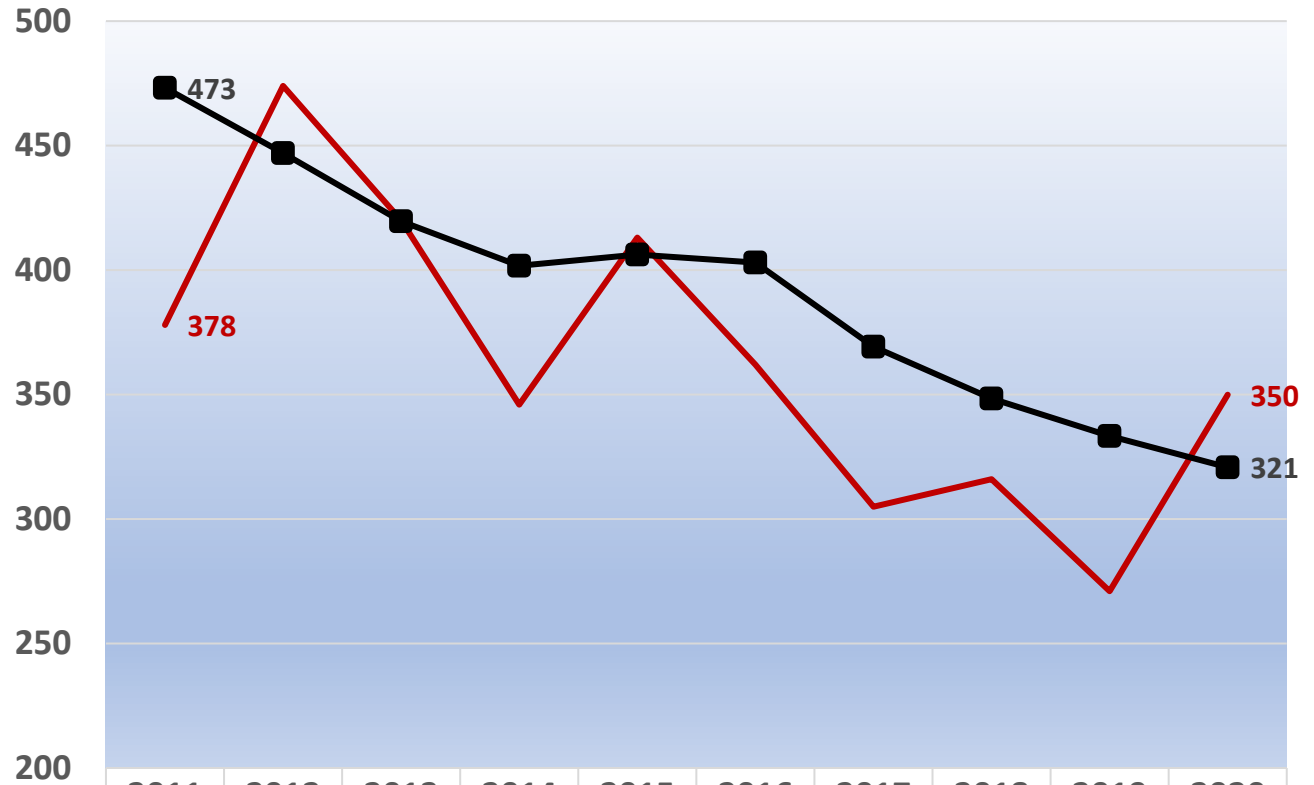
Data confirmed 8/30/2022

# **Unrestrained Vehicle Occupant Fatalities & Serious Injuries, 2011- 2020**

Unrestrained is defined as no or improperly restrain usage. An Unrestrained Vehicle Occupant includes all vehicle occupants regardless of age and seat location and includes seatbelts, booster seats, and child passenger seats.



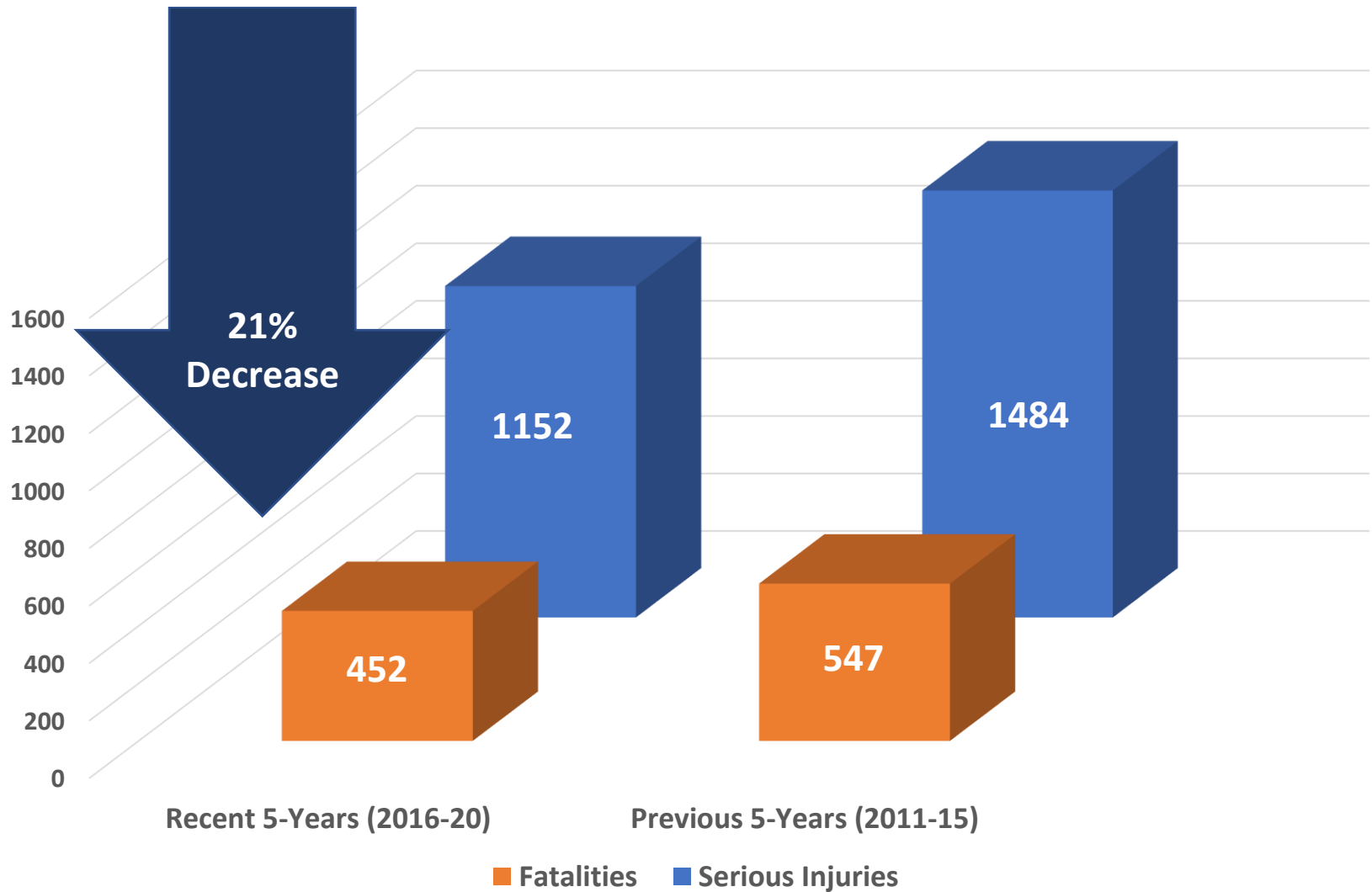
# Unrestrained Vehicle Occupant Fatalities & Serious Injuries, 2011-2020



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All Fatalities & Serious Injuries	378	474	420	346	413	362	305	316	271	350
5-Year Average	473	447	420	402	406	403	369	348	333	321
Fatalities	110	114	105	100	118	95	84	91	74	108
Serious Injuries	268	360	315	246	295	267	221	225	197	242

The 5-year average shows a continuous decrease. 2017, 2018, & 2019 were the lowest years for unrestrained vehicle occupant fatalities & serious injuries.

# Unrestrained Vehicle Occupant Fatalities & Serious Injuries, 5-Year Comparison



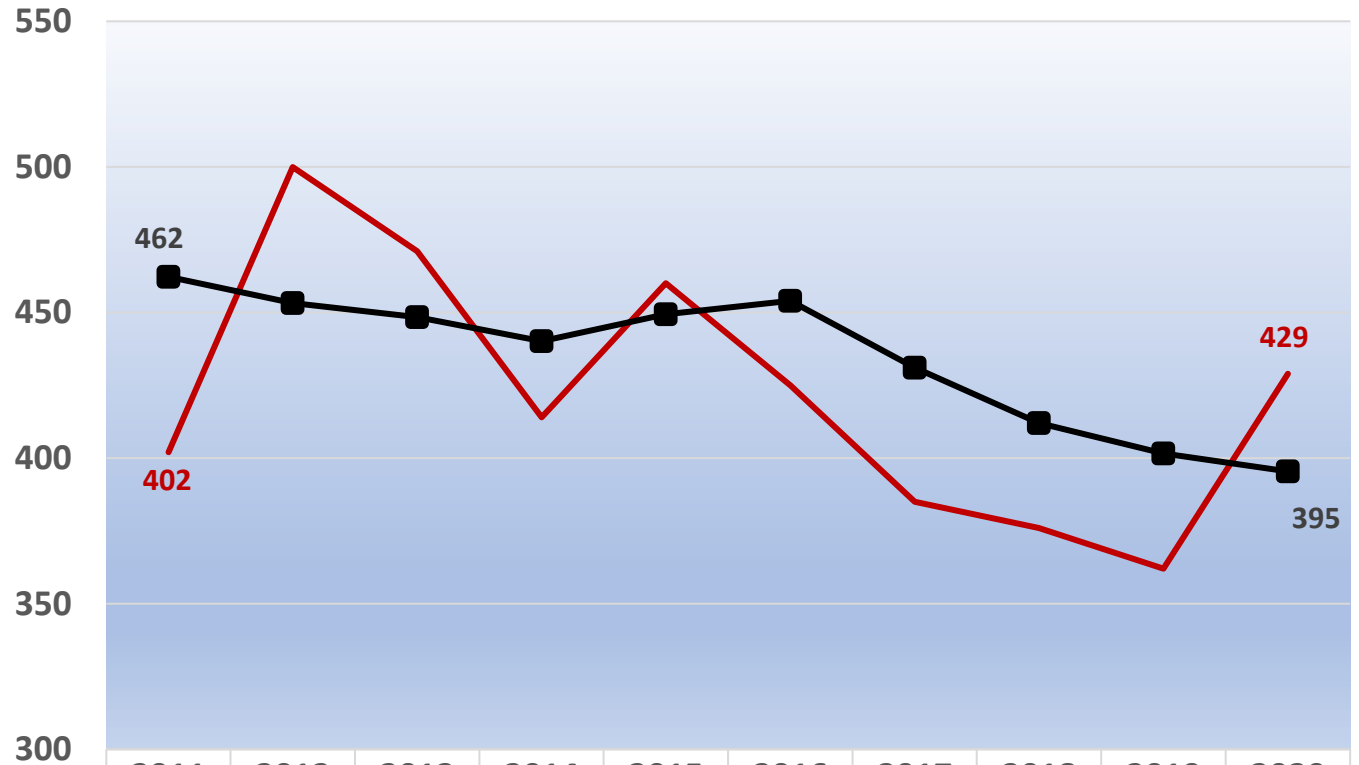


# **Impaired Driving-related Fatalities & Serious Injuries, 2011- 2020**

An impaired driving crash is indicated on the crash form that one of the drivers was impaired by alcohol & / or drugs.



# Impaired Driver Involved Fatalities & Serious Injuries, 2011-2020

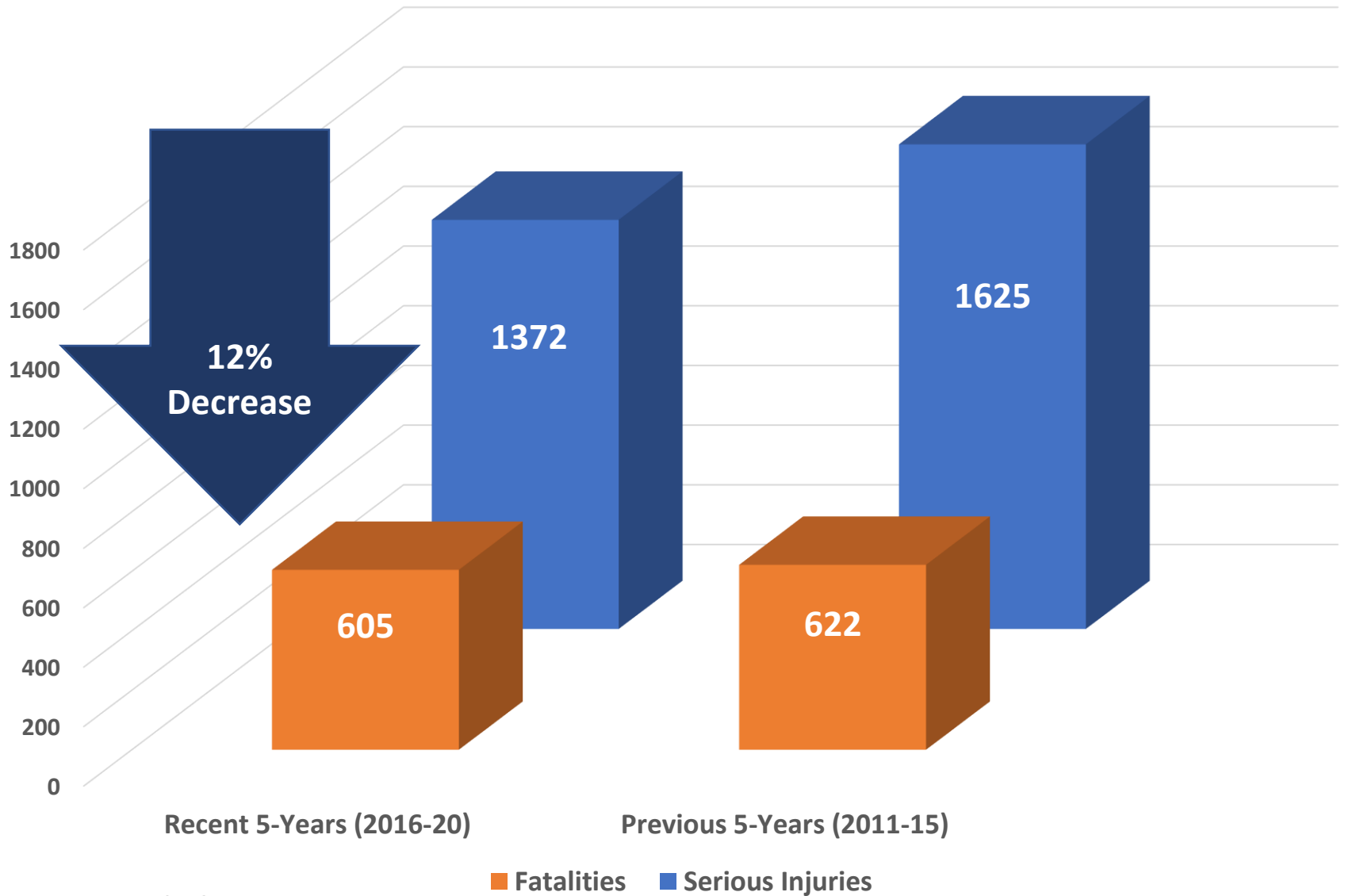


— All Fatalities & Serious Injuries	402	500	471	414	460	425	385	376	362	429
■ 5-Year Average	462	453	448	440	449	454	431	412	402	395
Fatalities	112	127	137	117	129	128	114	117	106	140
Serious Injuries	290	373	334	297	331	297	271	259	256	289

The 2020 fatalities & serious injuries increased and are similar to 2016.

Overall, the trend continues to decrease, but is at risk at leveling off.

# Impaired Driver Involved Fatalities & Serious Injuries, 5-Year Comparison



Data confirmed 8/30/2022



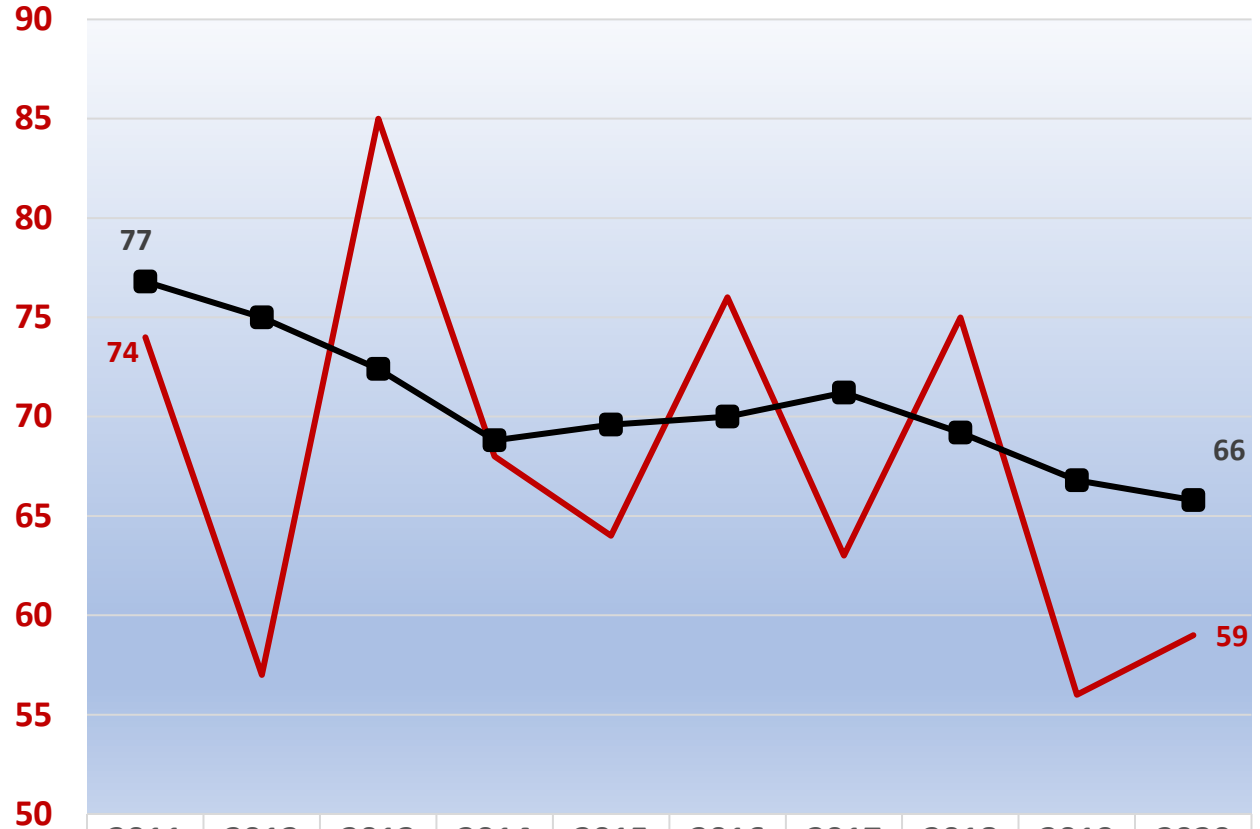
**Vulnerable Users  
2011-2020**



**Nonmotorized  
Fatalities &  
Serious  
Injuries,  
2011-  
2020**



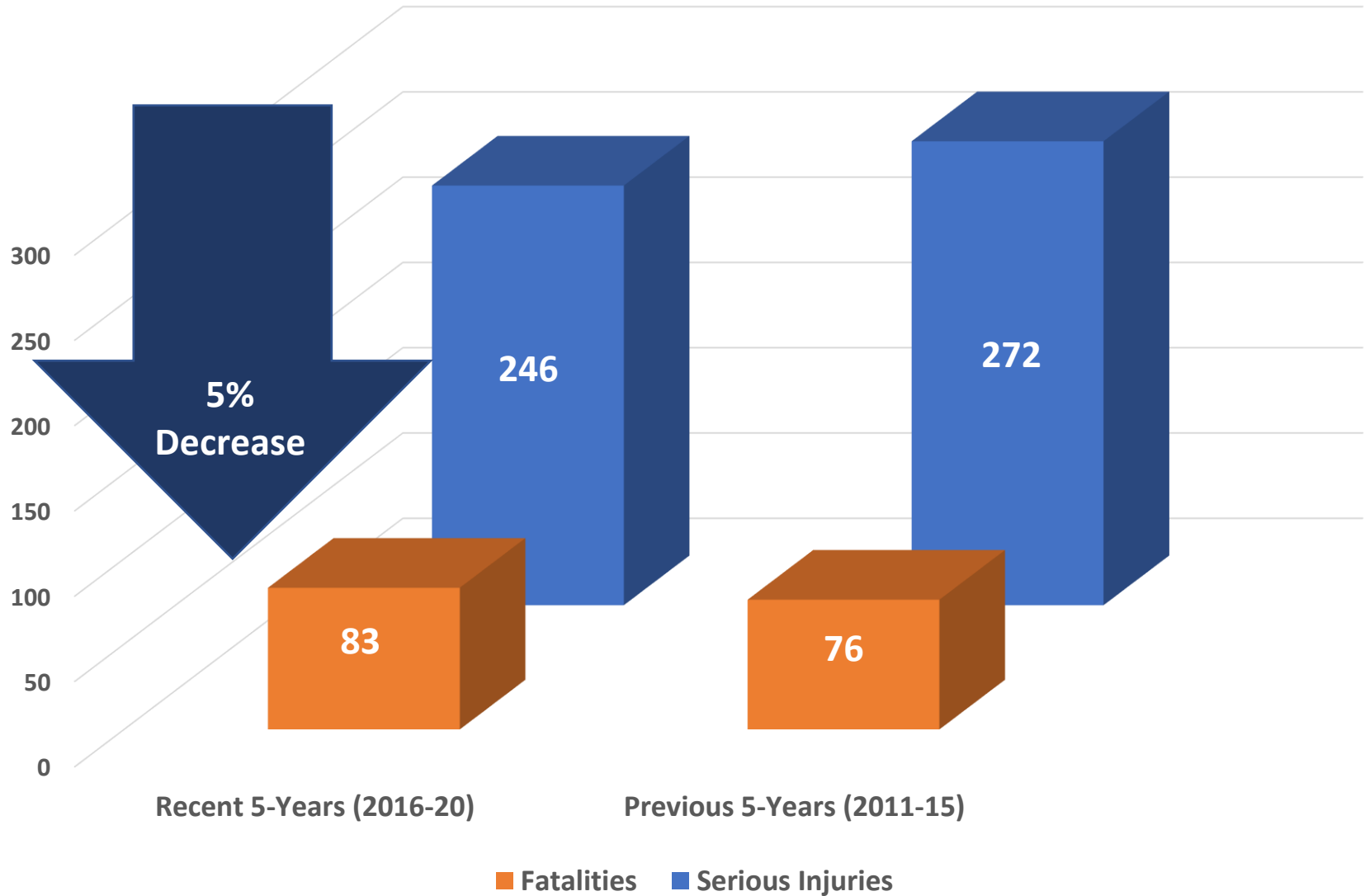
# Nonmotorized Fatalities & Serious Injuries, 2011-2020



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>— All Fatalities &amp; Serious Injuries</b>	74	57	85	68	64	76	63	75	56	59
<b>■ 5-Year Average</b>	77	75	72	69	70	70	71	69	67	66
Fatalities	16	9	24	12	15	14	15	17	20	17
Serious Injuries	58	48	61	56	49	62	48	58	36	42

The annual numbers change from year-to-year; looking at the 5-year average confirms a downward trends continues.

# Nonmotorized Fatalities & Serious Injuries, 5-Year Comparison

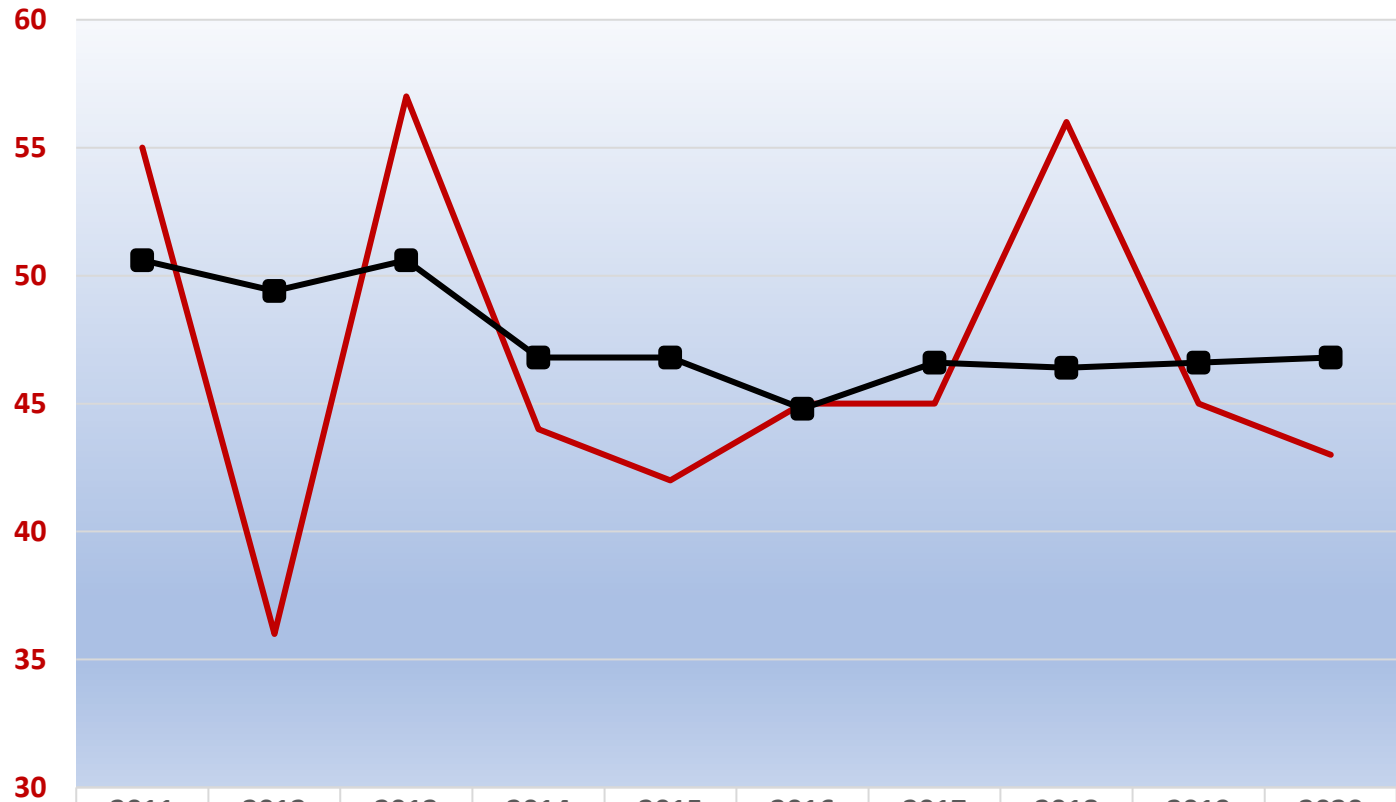


**Pedestrian  
Fatalities  
& Serious  
Injuries,  
2011-  
2020**





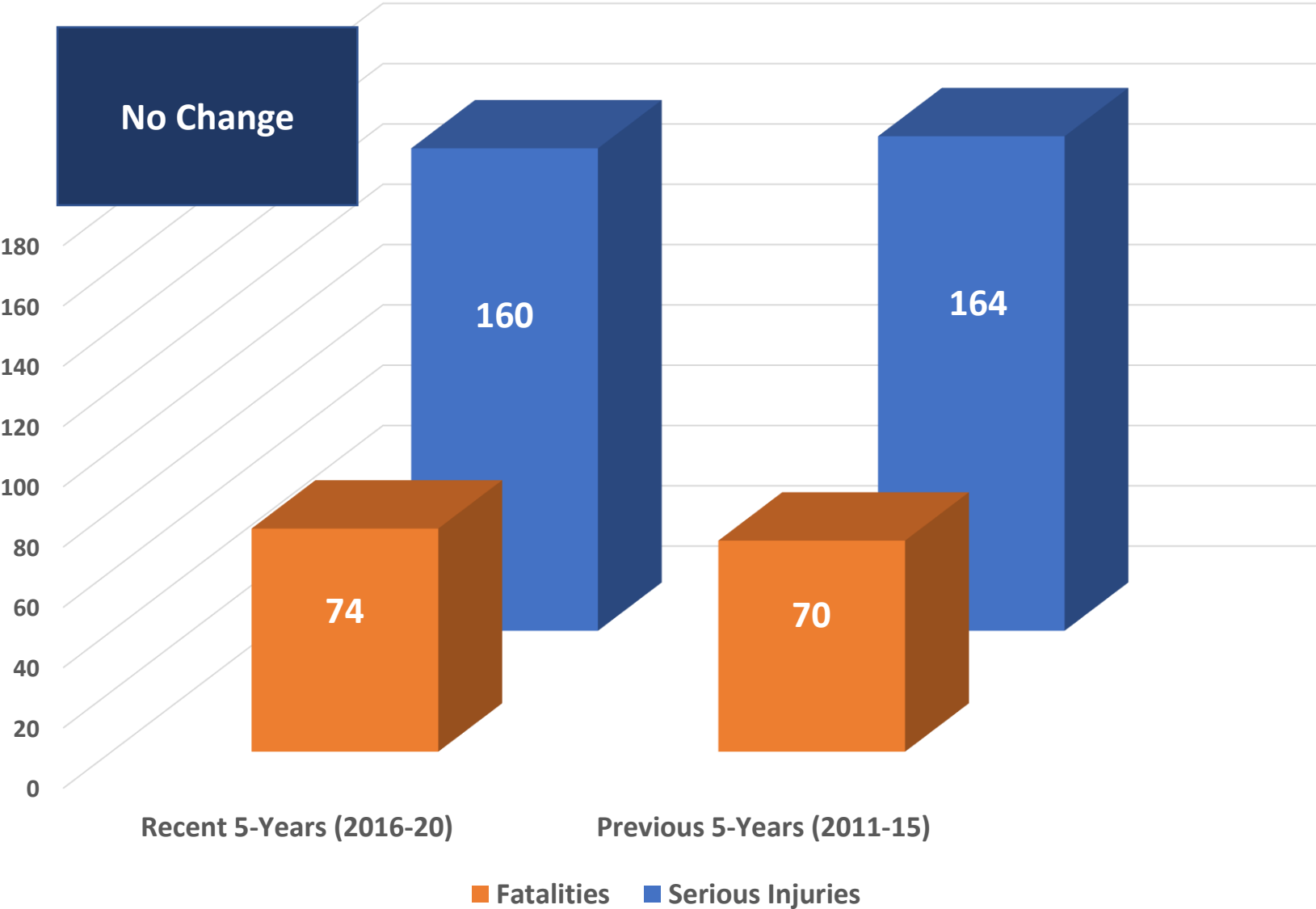
# Pedestrian Fatalities & Serious Injuries, 2011-2020



— Total Fatalities & Serious Injuries	55	36	57	44	42	45	45	56	45	43
■ 5-Year Average	51	49	51	47	47	45	47	46	47	47
Fatalities	15	8	23	10	14	11	14	15	17	17
Serious Injuries	40	28	34	34	28	34	31	41	28	26

**The 2020 pedestrian fatalities & serious injuries are slightly lower than the previous 4 years and below the 5-year average.**

# Pedestrian Fatalities & Serious Injuries, 5-Year Comparison

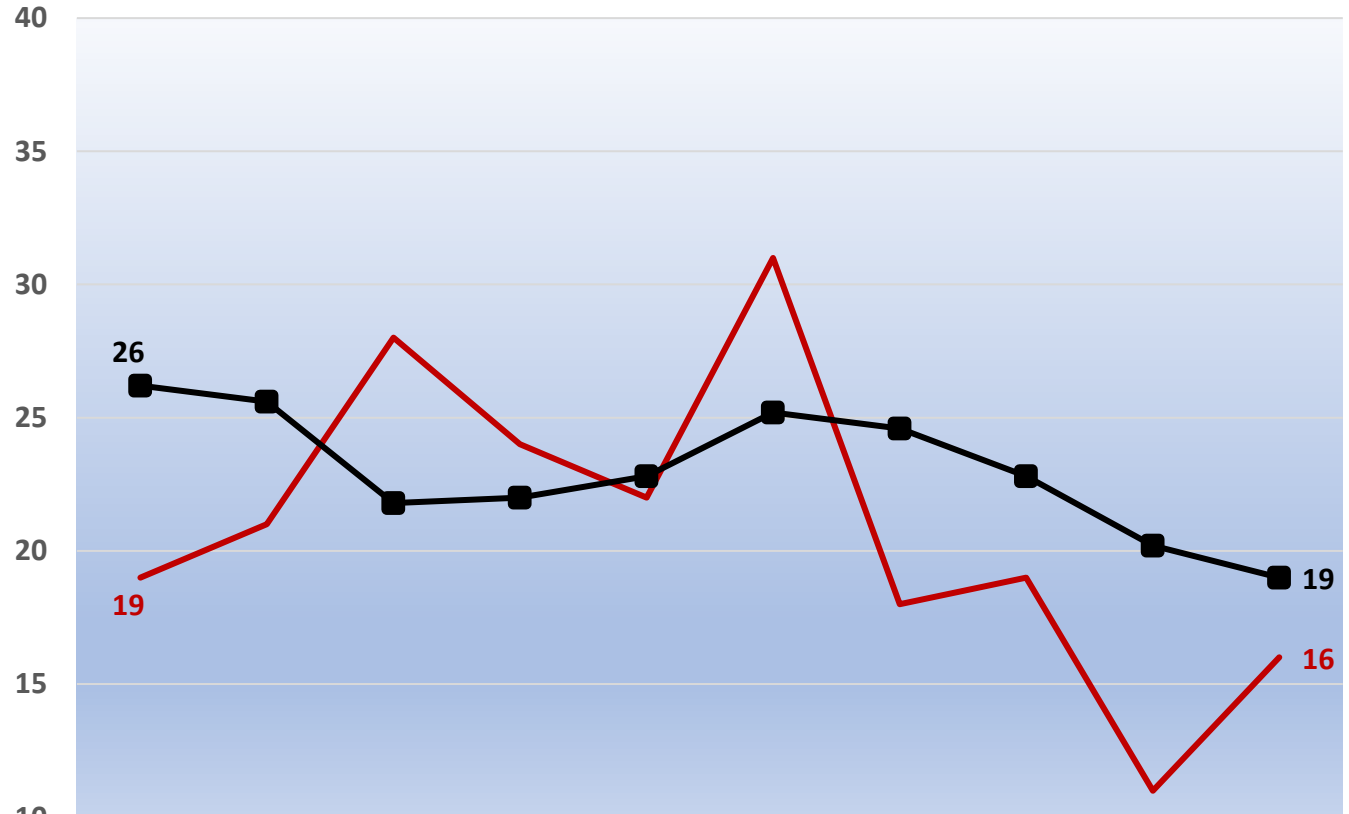


Data confirmed 8/30/2022

**Bicyclist  
Fatalities  
& Serious  
Injuries,  
2011-  
2020**



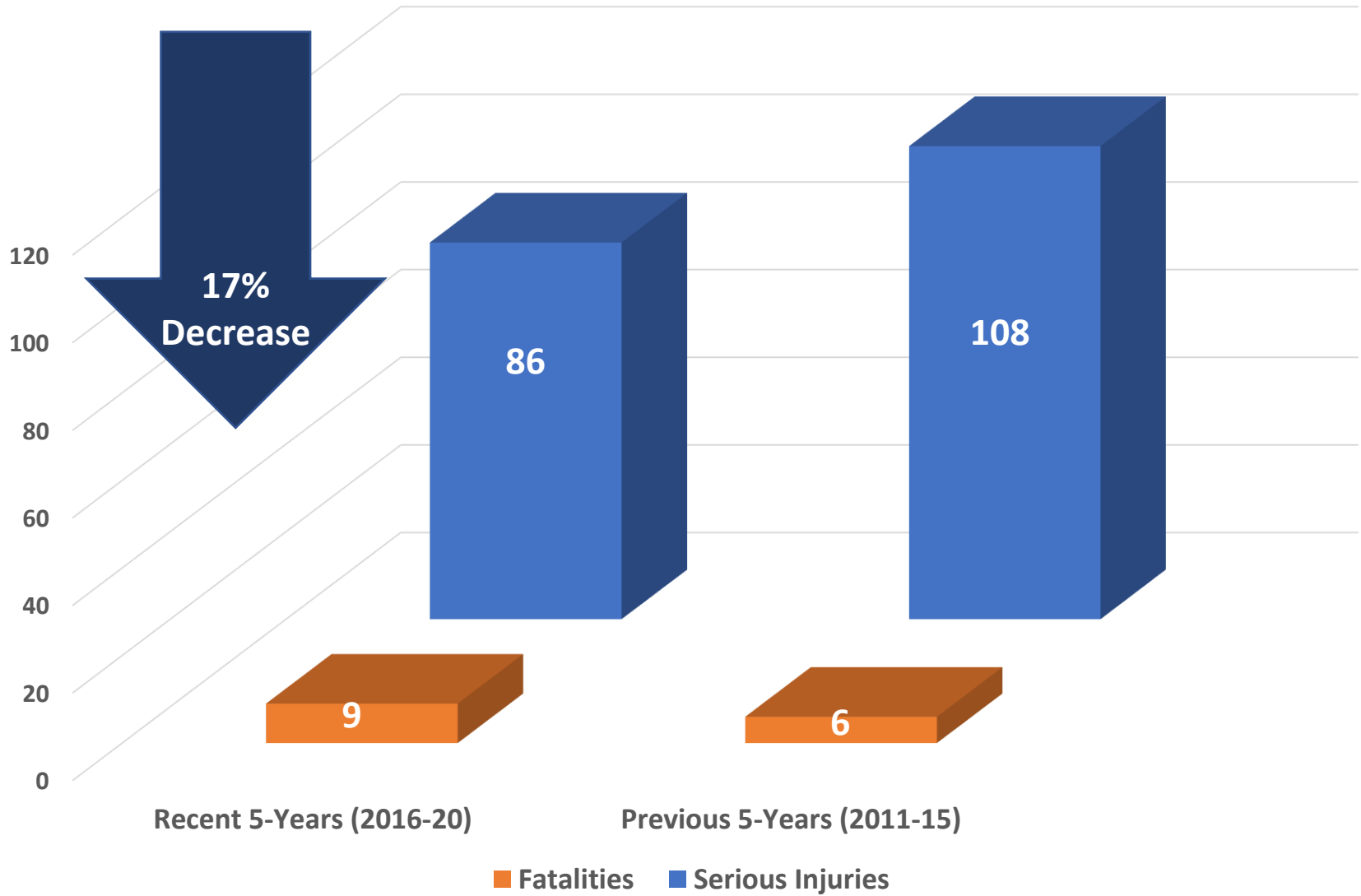
# Bicyclist Fatalities & Serious Injuries, 2011-2020



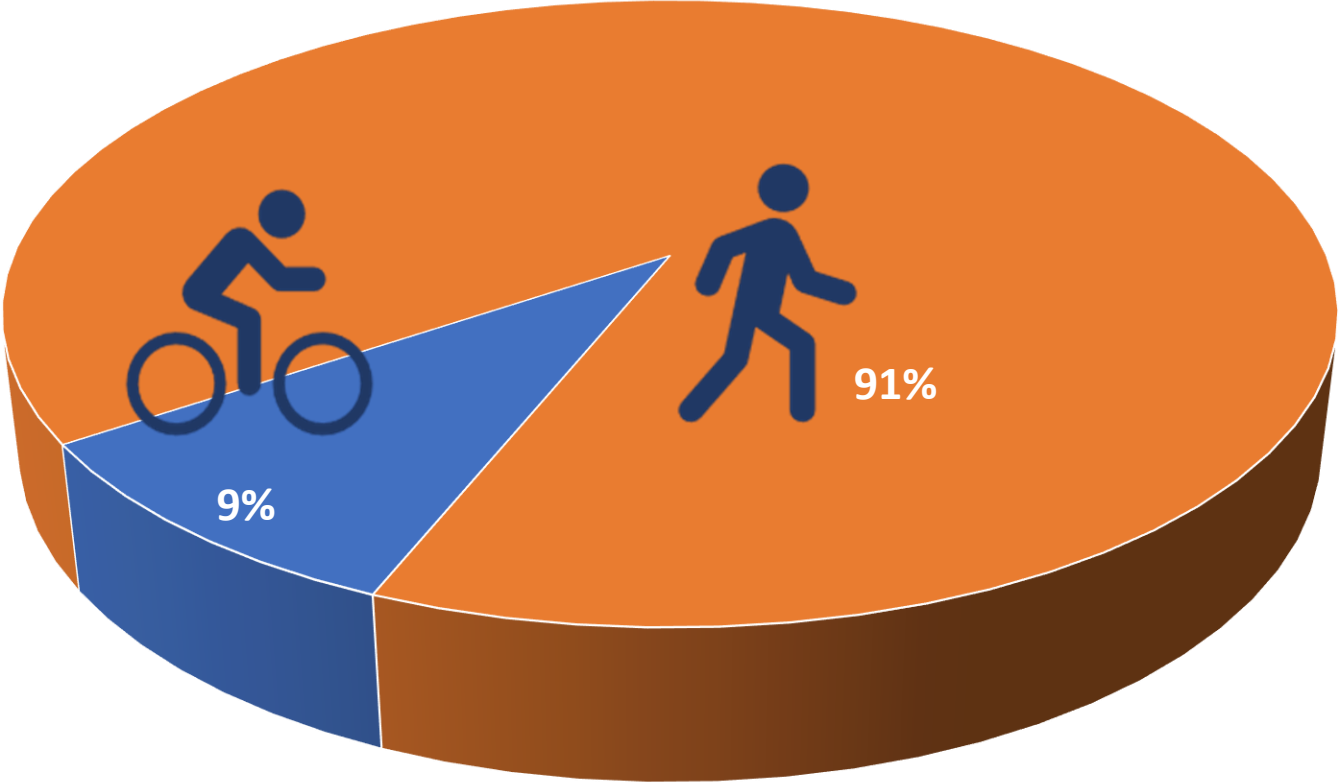
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>All Fatalities &amp; Serious Injuries</b>	19	21	28	24	22	31	18	19	11	16
<b>5-Year Average</b>	26	26	22	22	23	25	25	23	20	19
Fatalities	1	1	1	2	1	3	1	2	3	0
Serious Injuries	18	20	27	22	21	28	17	17	8	16

**Bicyclist serious injuries reflect a spike in 2020. There were no fatalities in 2020. Overall, the trend continues to decrease.**

# Bicyclist Fatalities & Serious Injuries, 5-Year Comparison



# 10-Year Nonmotorized Fatalities, 2011-2020



■ 10-Year Bicyclist Fatalities    ■ 10-Year Pedestrian Fatalities

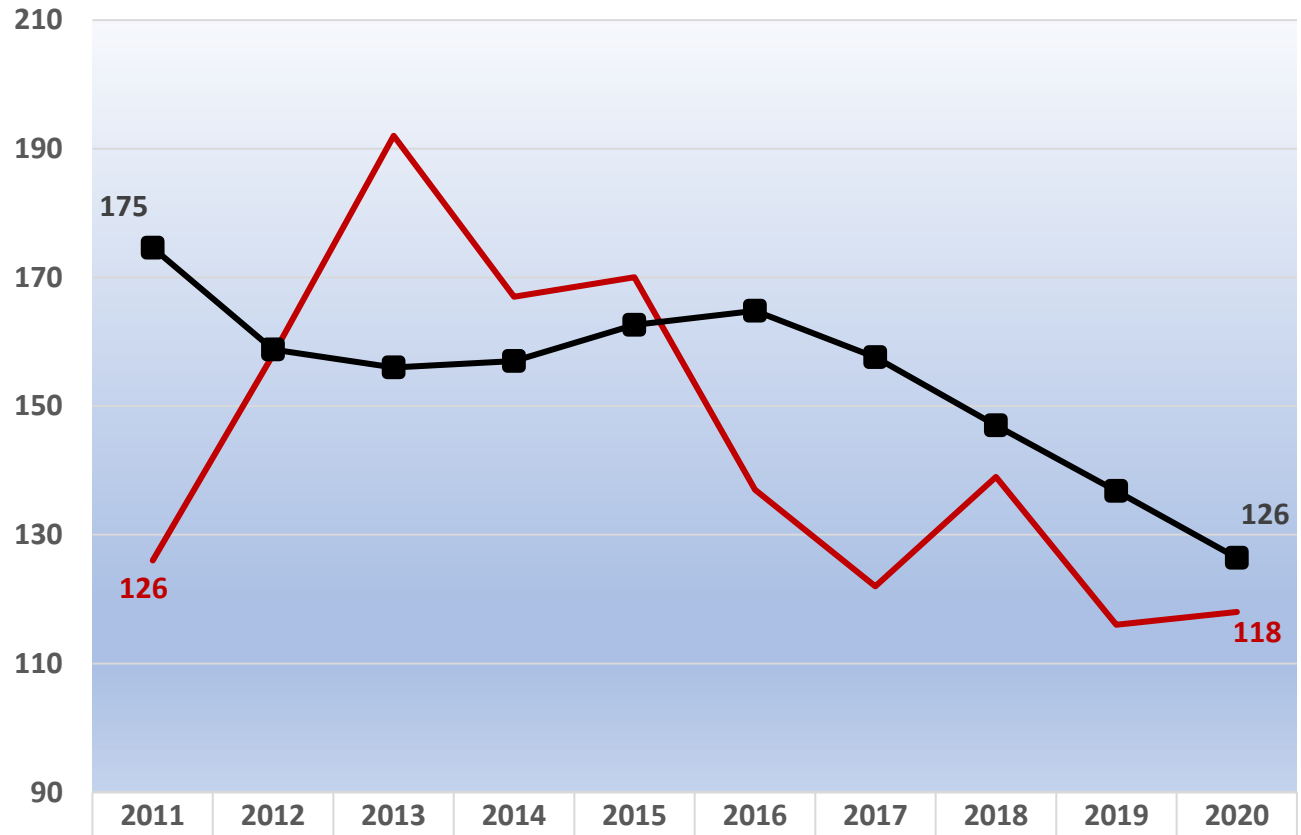
Data confirmed 8/30/2022

# **Motorcyclist Fatalities & Serious Injuries, 2011- 2020**



Motorcyclist is defined and includes the motorcycle operator and passenger.

# Motorcyclist\* Fatalities & Serious Injuries, 2011-2020



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>Total Fatalities &amp; Serious Injuries</b>	126	158	192	167	170	137	122	139	116	118
<b>5-Year Average</b>	175	159	156	157	163	165	158	147	137	126
Fatalities	20	30	34	23	25	17	22	21	22	29
Serious Injuries	106	128	158	144	145	120	100	118	94	89

**Motorcyclist fatalities & serious injuries for 2019 & 2020 were the lowest in ten years. Overall, the trend continues to decrease.**

Data confirmed 8/30/2022

\* Motorcyclist is defined as operator and passenger.



# Motorcyclist Fatalities & Serious Injuries Facts, 2011- 2020

13% of All Fatalities & Serious Injuries were Motorcyclist Fatalities & Serious Injuries

95% of All Motorcyclist Fatalities & Serious Injuries occurred on Dry Roads

69% of All Motorcyclist Fatalities & Serious Injuries were Single Vehicle Crashes

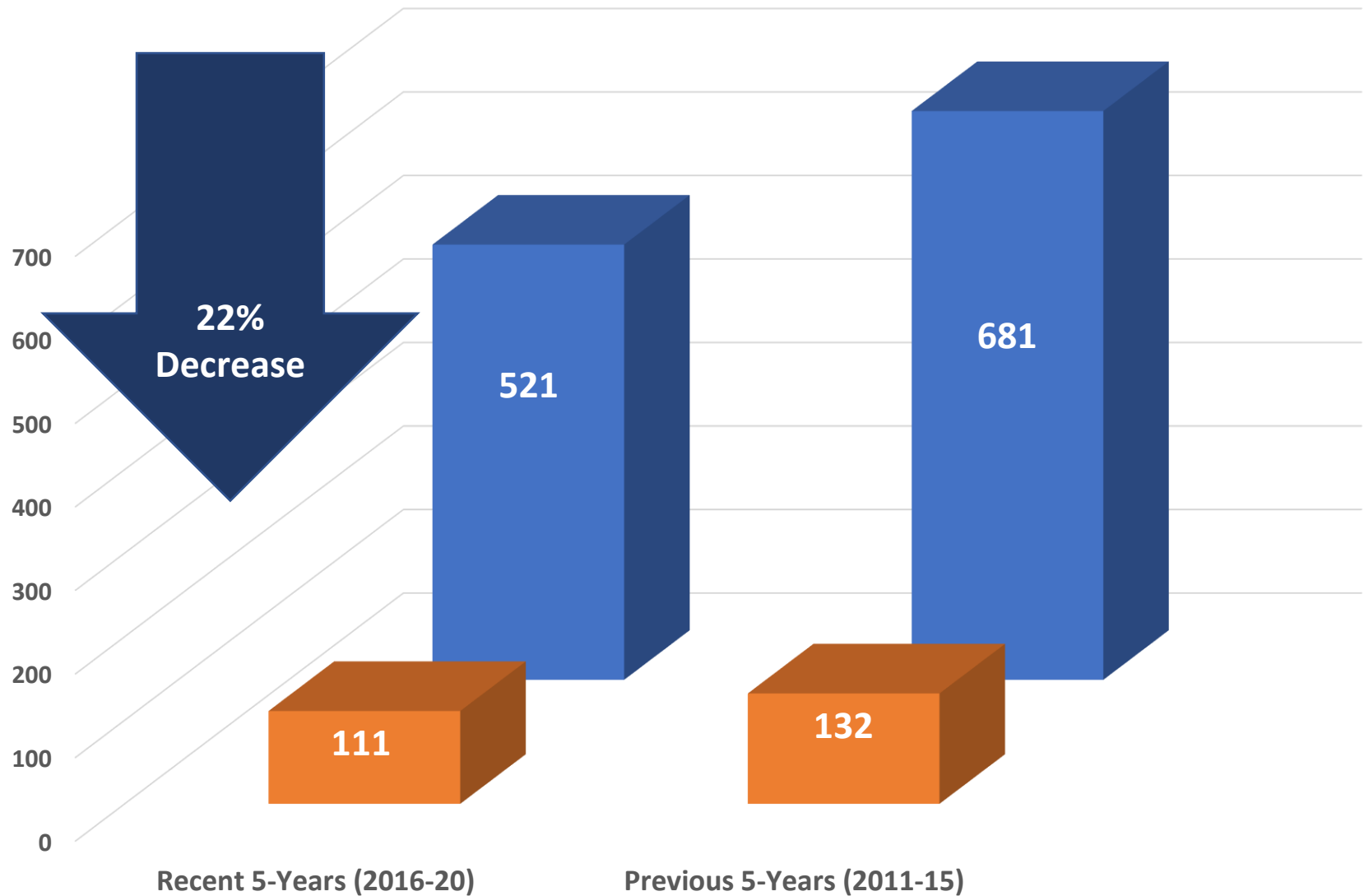
47% of All Motorcyclist Fatalities & Serious Injuries involved a Roadway Departure.

18% of All Motorcyclist Fatalities & Serious Injuries occurred at night.

15% of All Motorcyclist Fatalities & Serious injuries involved a collision with a wild animal.

9% of All Motorcyclist Fatalities & Serious Injuries resulting from an impaired motorcycle operator.

# Motorcyclist Fatalities & Serious Injuries, 5-Year Comparison



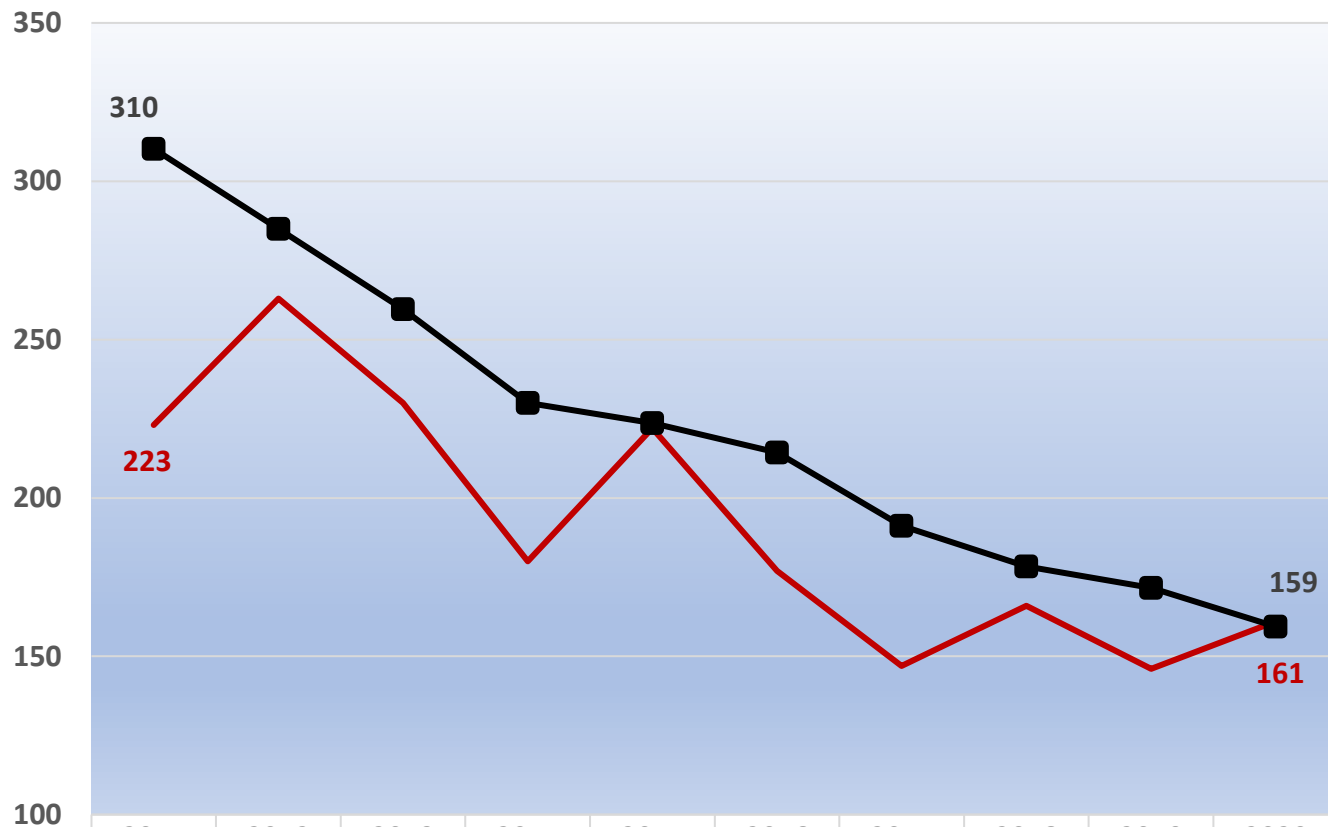
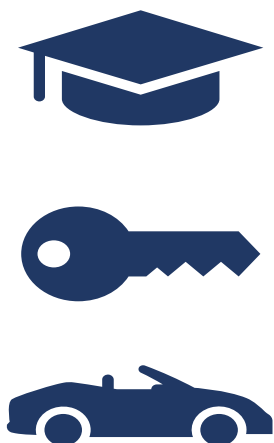
Data confirmed 8/30/2022

■ Fatalities ■ Serious Injuries

**Young Driver  
Involved  
(14-20 YOA)  
Fatalities &  
Serious  
Injuries,  
2011-  
2020**



# Young Driver\*(14-20 YOA)\*\* Involved Fatalities & Serious Injuries, 2011-2020



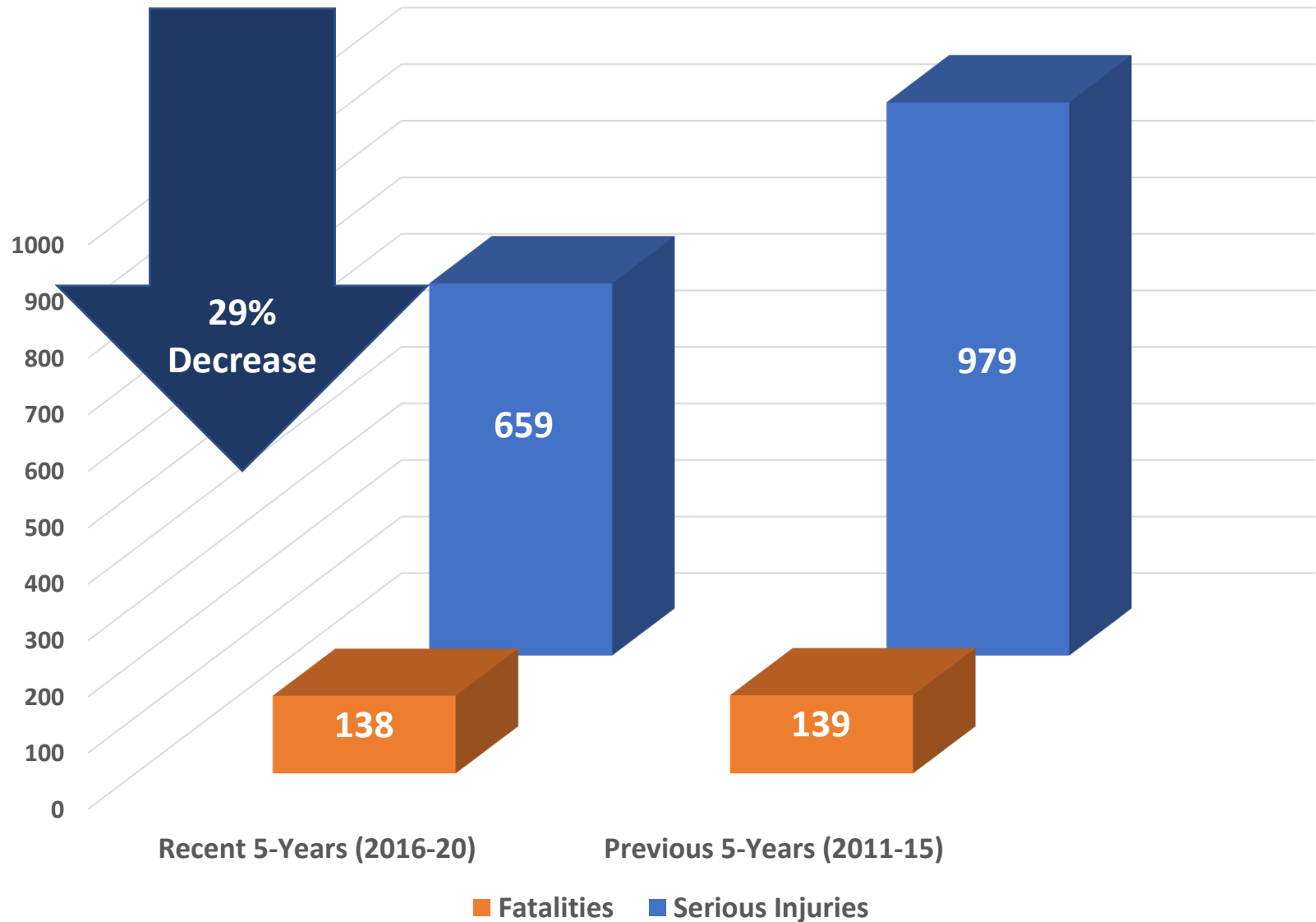
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All Fatalities & Serious Injuries	223	263	230	180	222	177	147	166	146	161
5-Year Average	310	285	260	230	224	214	191	178	172	159
Fatalities	27	26	26	24	36	18	25	29	35	31
Serious Injuries	196	237	204	156	186	159	122	137	111	130

The trend has been decreasing with the random annual numbers over the last ten years.

Data confirmed 8/30/2022

\* Younger Driver Involved does not assign blame, just involvement. \*\* Not yet legal to drink.

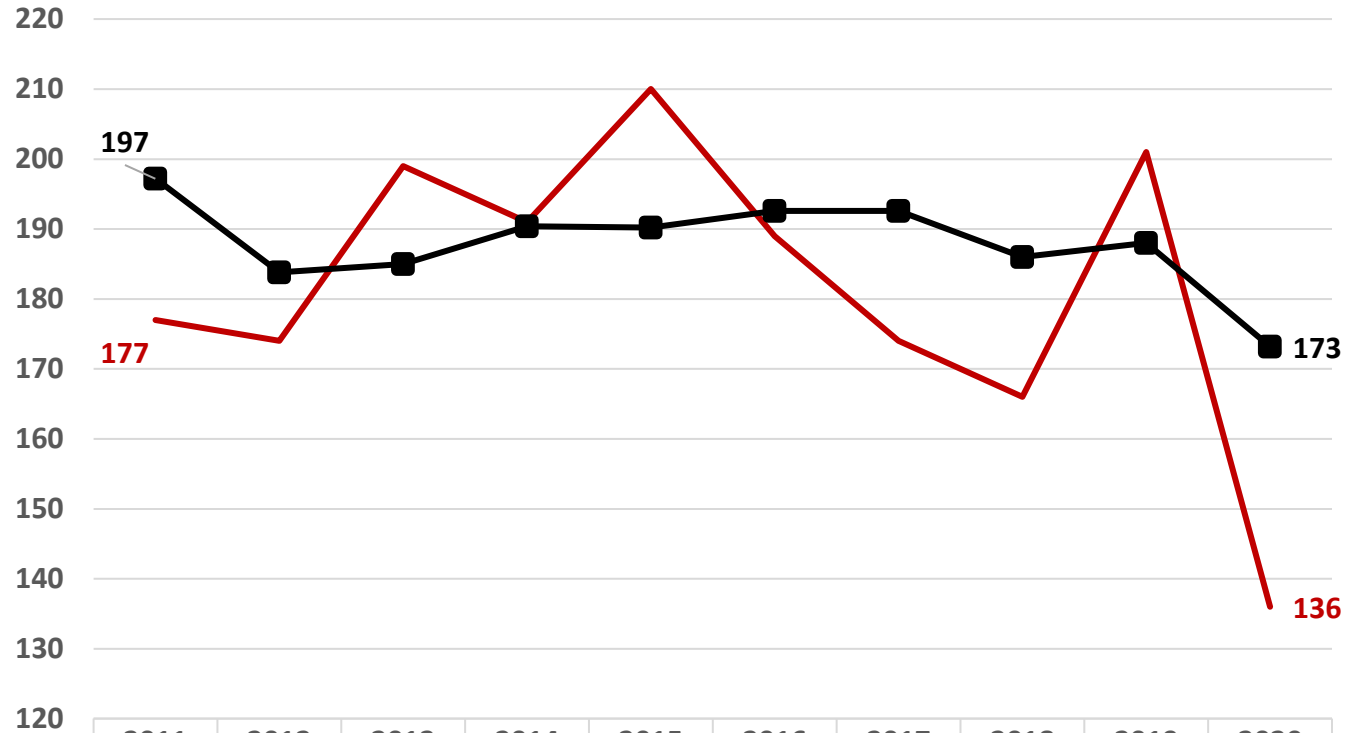
# Young Driver (14-20 YOA) Involved Fatalities & Serious Injuries, 5-Year Comparison



**Older Driver  
(65+ YOA)  
Fatalities &  
Serious Injuries,  
2011-  
2020**



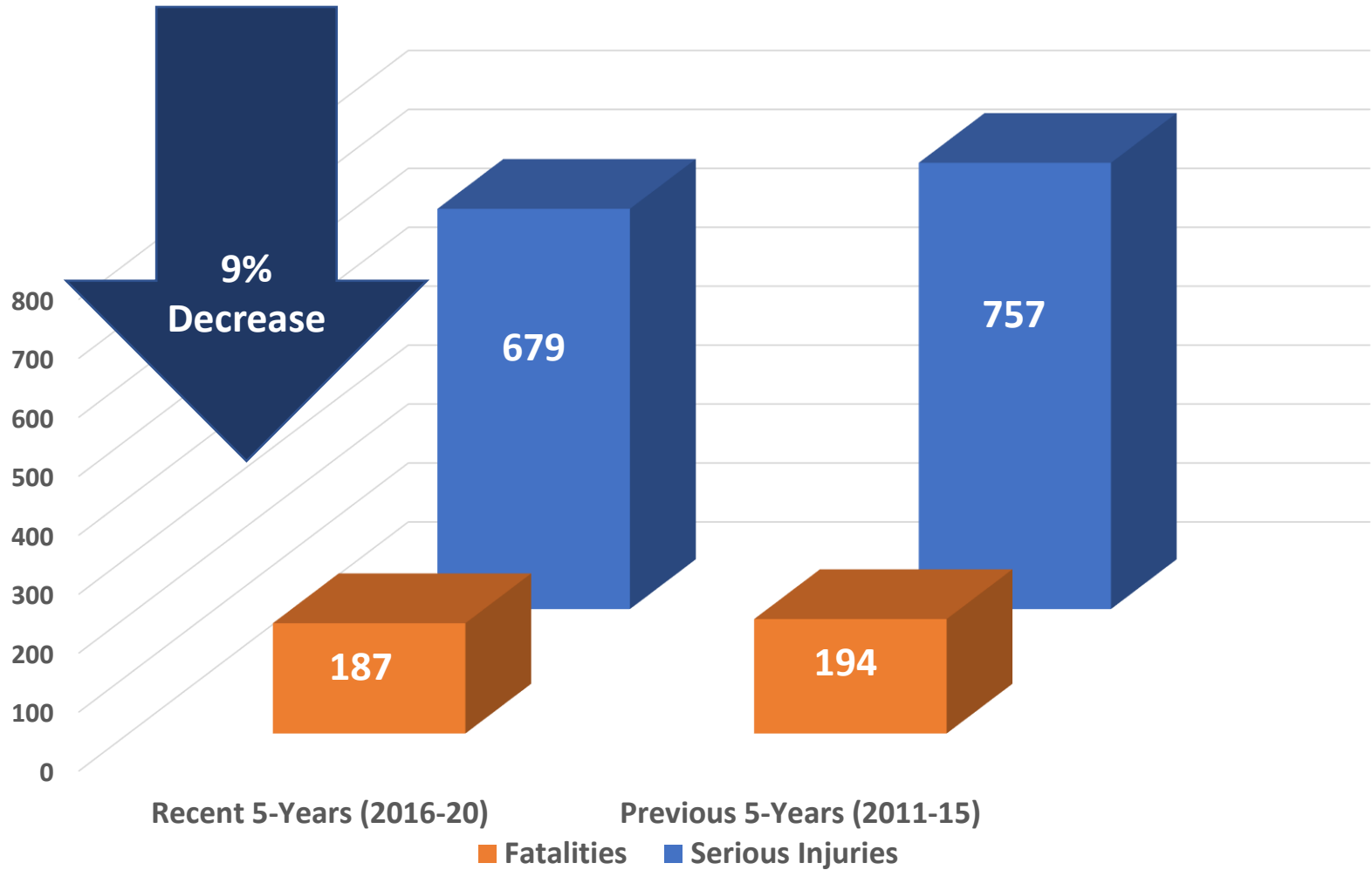
# Older Driver (65+YOA) Involved Fatalities & Serious Injuries, 2011-2020



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Total Fatalities & Serious Injuries	177	174	199	191	210	189	174	166	201	136
5-Year Average	197	184	185	190	190	193	193	186	188	173
Fatalities	39	26	51	32	46	34	37	29	54	33
Serious Injuries	138	148	148	159	164	155	137	137	147	103

**In 2020, Older Driver involved Fatalities & Serious injuries were the lowest in 10 years. This maybe due to designated shopping hours & encouragement to stay at home during COVID.**

# Older Driver (65+ YOA) Involved Fatalities & Serious Injuries, 5-Year Comparison



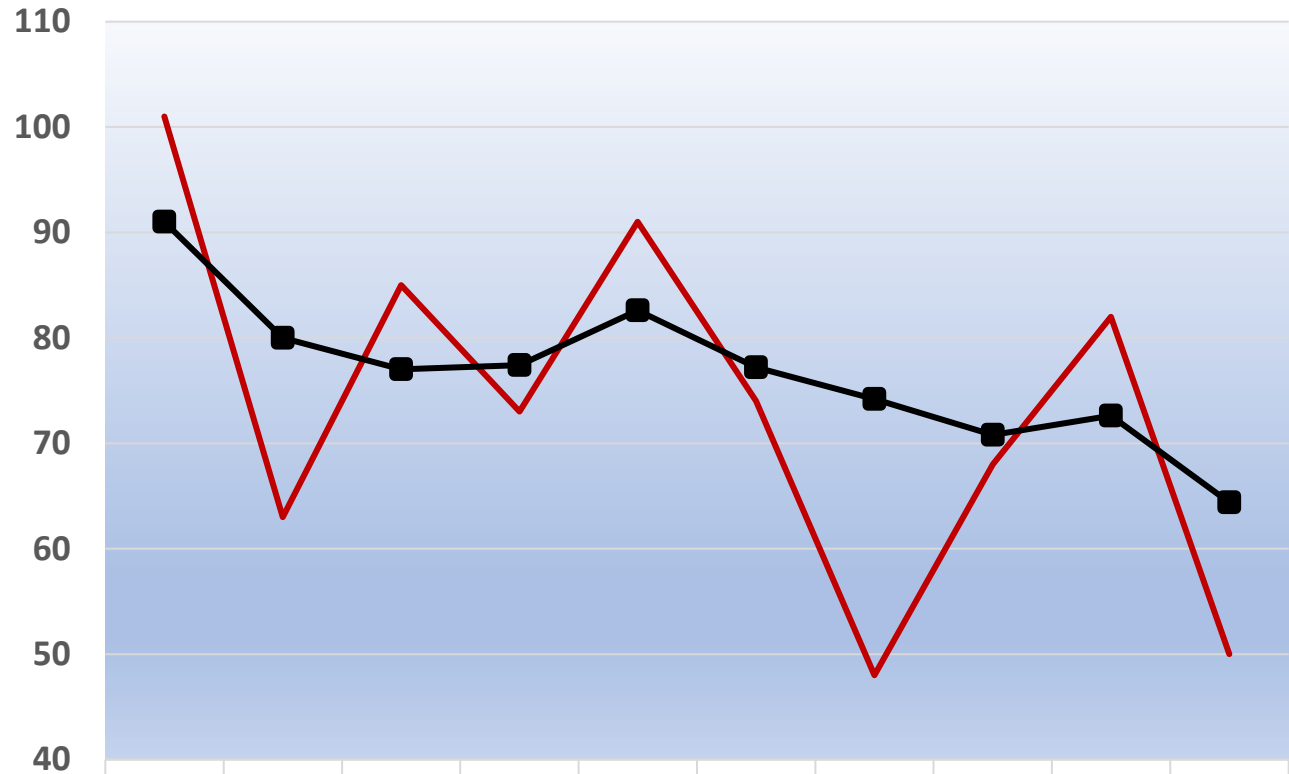


**Large  
Vehicle -  
Involved  
Fatalities  
& Serious  
Injuries,  
2011-  
2020**



Large vehicles, those being over 9,999 pounds and often requiring a Commercial Drivers License

# Large Vehicle Involved Fatalities & Serious Injuries, 2011-2020



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
All Fatalities & Serious Injuries	101	63	85	73	91	74	48	68	82	50
5-Year Average	91	80	77	77	83	77	74	71	73	64
Fatalities	32	11	21	14	22	22	20	16	25	19
Serious Injuries	69	52	64	59	69	52	28	52	57	31

**In Montana, large vehicle\* fatalities & serious injuries continue to decrease.**

**\*Large Vehicles are those over 9,999 pounds & require a Commercial Drivers License.**

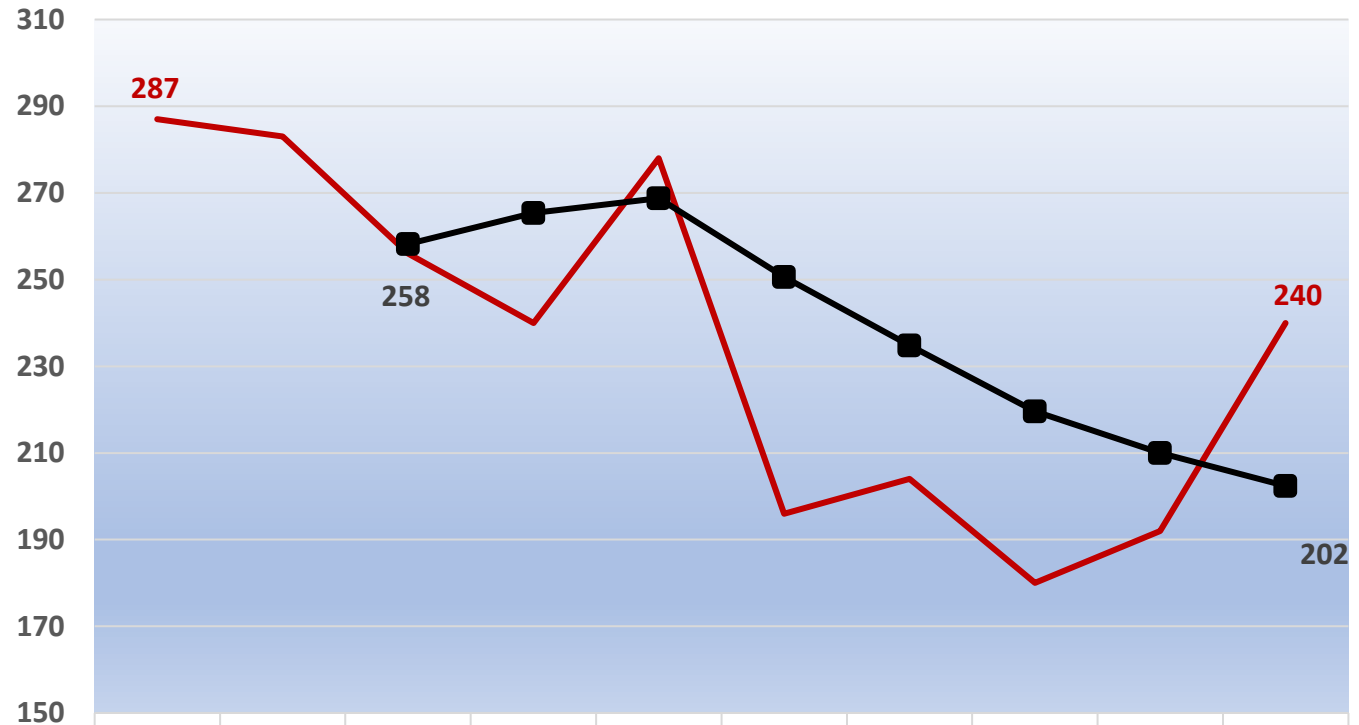
Data confirmed 8/30/2022



Other Factors



# Speed-related Fatalities & Serious Injuries, 2011-2020

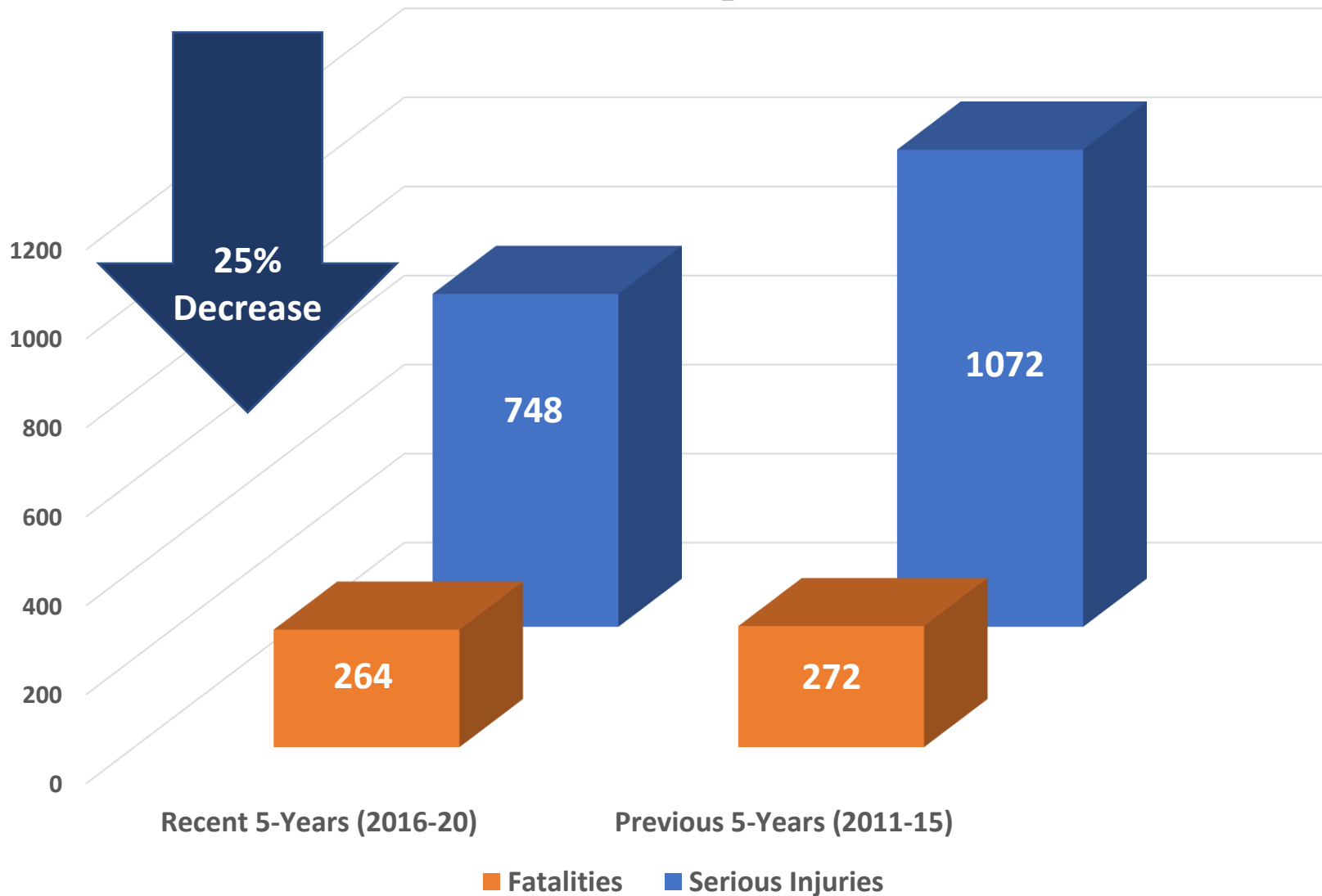


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
<b>— Total Fatalities &amp; Serious Injuries</b>	287	283	256	240	278	196	204	180	192	240
<b>■ 5-Year Average</b>			258	265	269	251	235	220	210	202
Fatalities	58	56	52	38	68	47	54	54	44	65
Serious Injuries	229	227	204	202	210	149	150	126	148	175

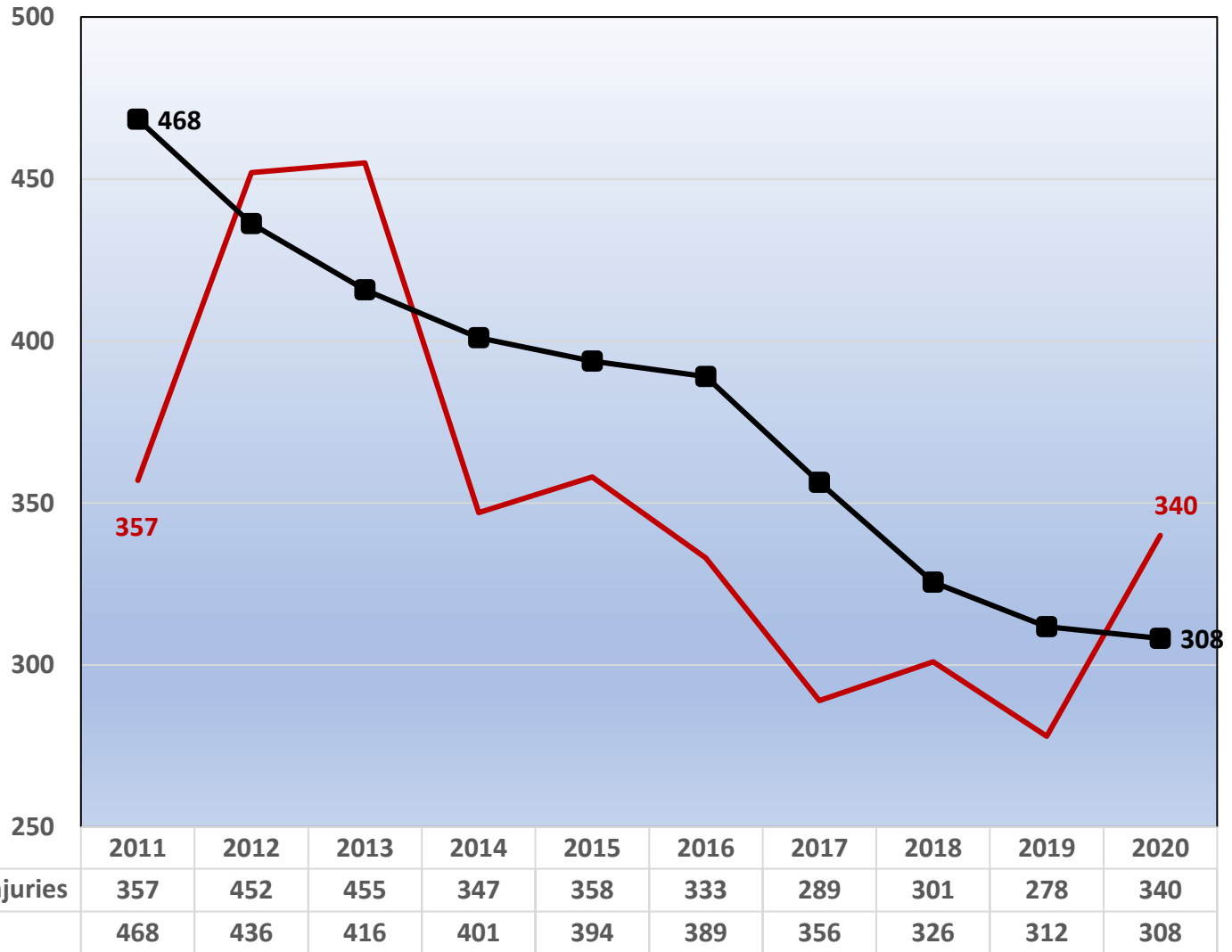
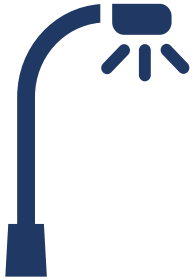
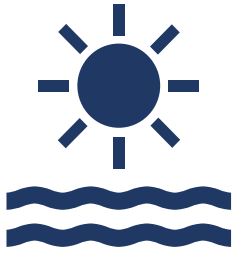
**Speed related fatalities & serious injuries have decreased over the past 10 years, but notable increased in 2020.**

Data confirmed 8/30/2022

# Speed-related Fatalities & Serious Injuries, 5-Year Comparison



# Under Dark Conditions- Occurrence of Fatalities & Serious Injuries, 2011-2020

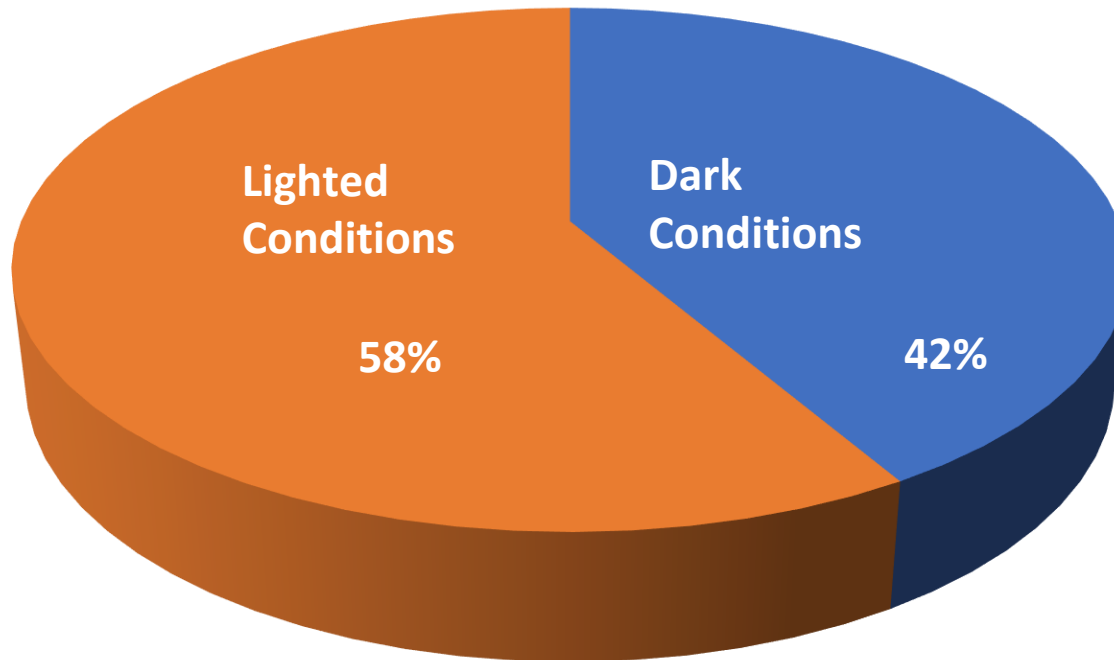


**Fatalities & serious injuries occurring at night & under dark conditions increased in 2020.**

Data confirmed 8/30/2022

# Lighting Conditions – Occurrence of Fatalities, 10-Year Average

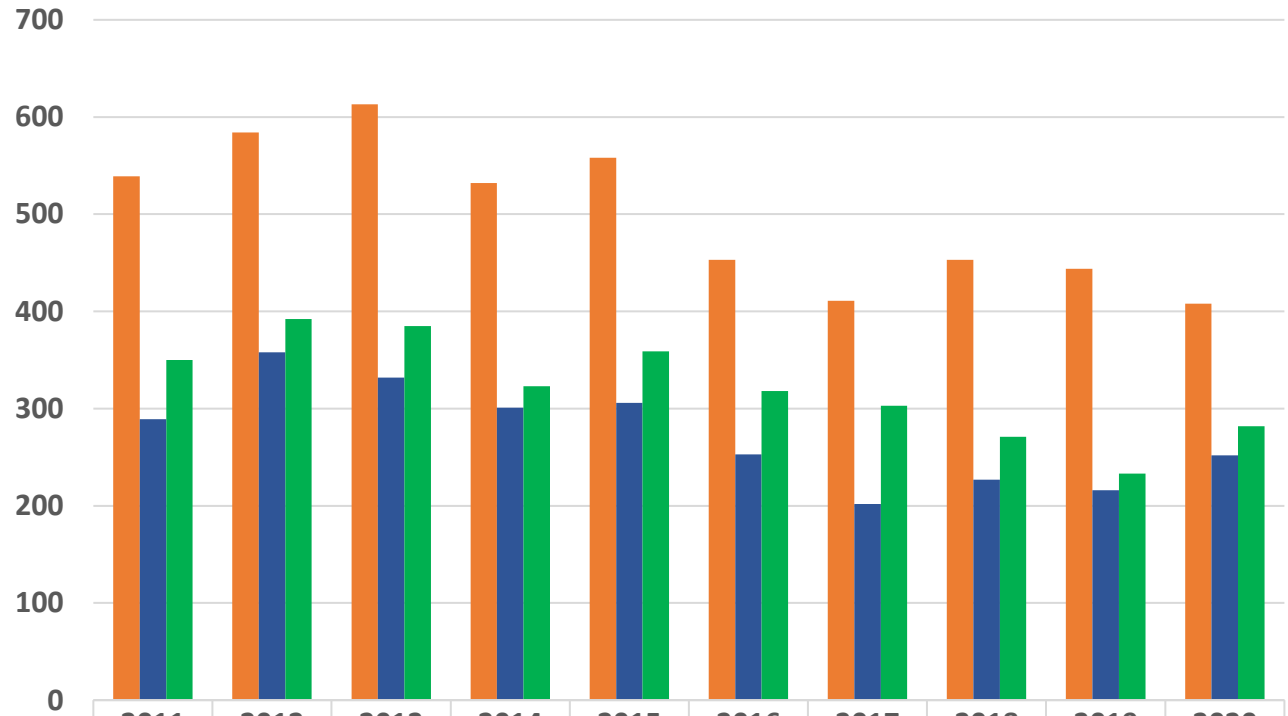
Fatalities, 10-Year Average



■ Percentage of Fatalities under Dark Conditions ■ Percentage of Fatalities under Lighted Conditions

**No significant change in time-of-day when fatalities occurred.**

# When Fatalities & Serious Injuries Occur, 2011-2020

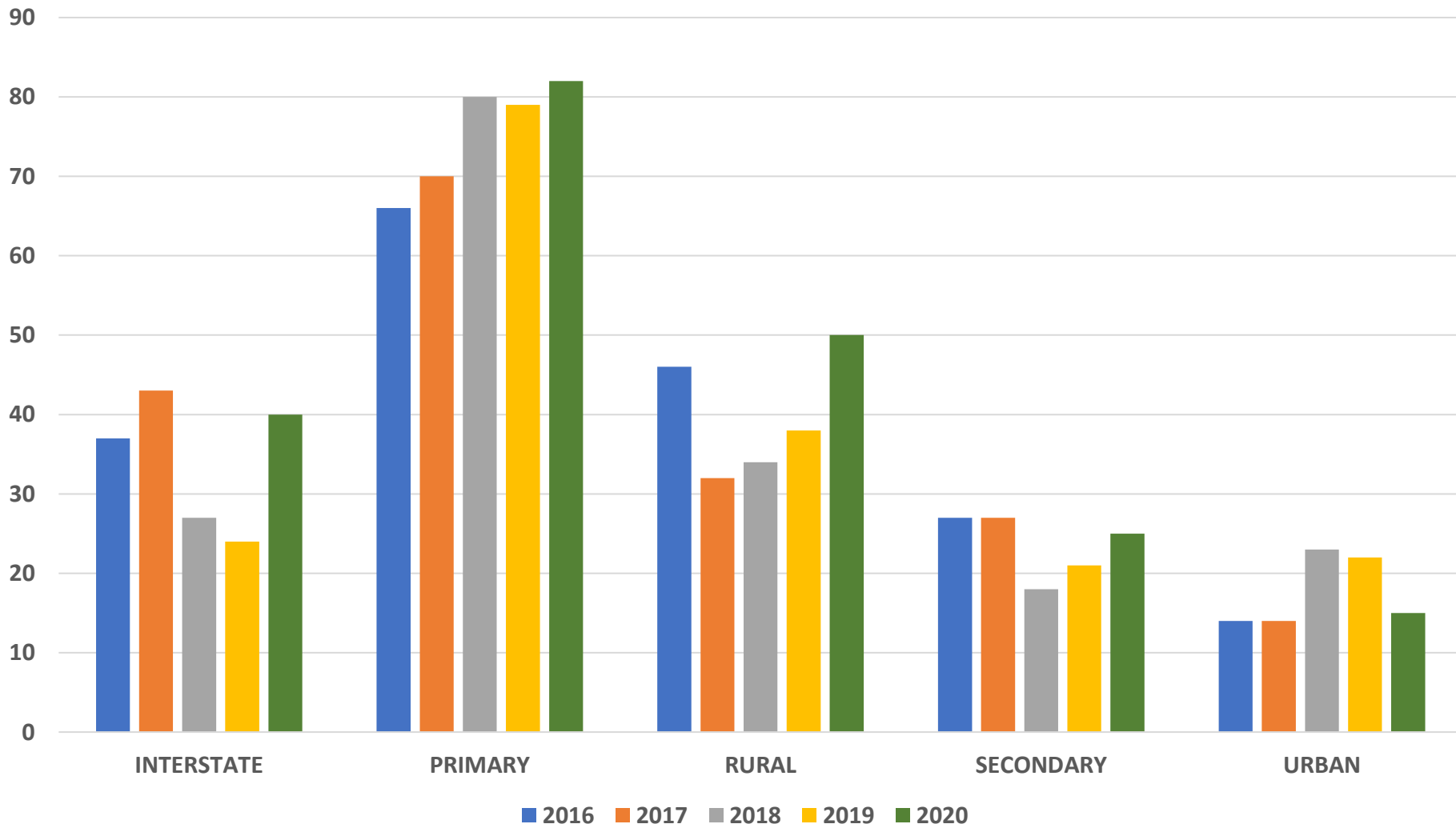


	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Summer Fatalities & Serious Injuries	539	584	613	532	558	453	411	453	444	408
Winter Fatalities & Serious Injuries	289	358	332	301	306	253	202	227	216	252
Shoulder Season Fatalities & Serious Injuries	350	392	385	323	359	318	303	271	233	282

**Fatalities & Serious Injuries occur most often during the Summer months of Jun, Jul, Aug & Sept when weather is good. Opposite of the adverse Winter weather months of Jan, Feb, Nov & Dec when people tend to be more cautious and drive less.**

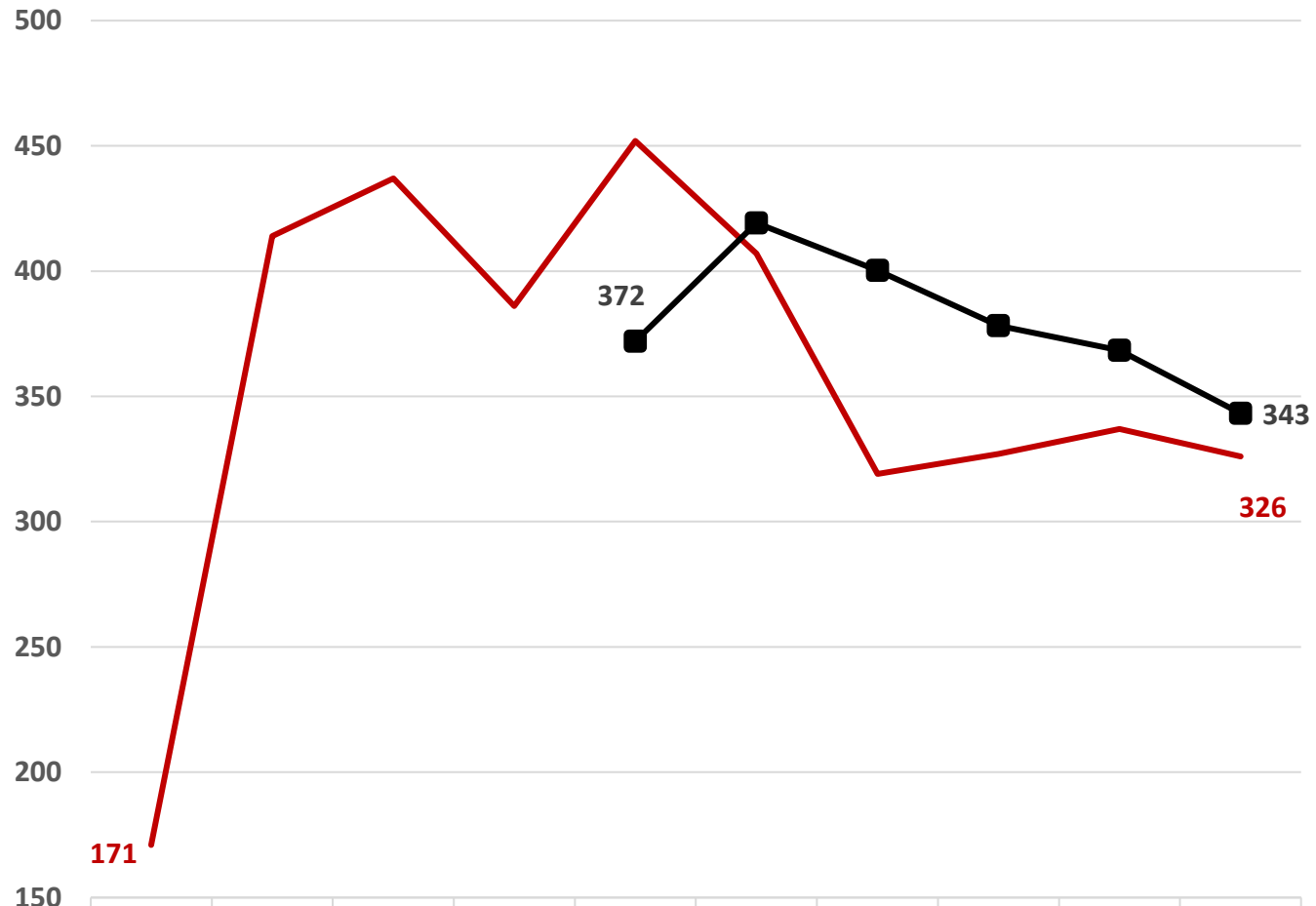


# Fatal Crashes Occurred, past 5 Years, 2016-2020



**Fatal crashes are up across the state. Fatal crashes occurring on urban area roads decreased in 2020 from the previous two years.**

# Careless/Inattentive/Distracted Driving Fatalities & Serious Injuries, 2011-2020



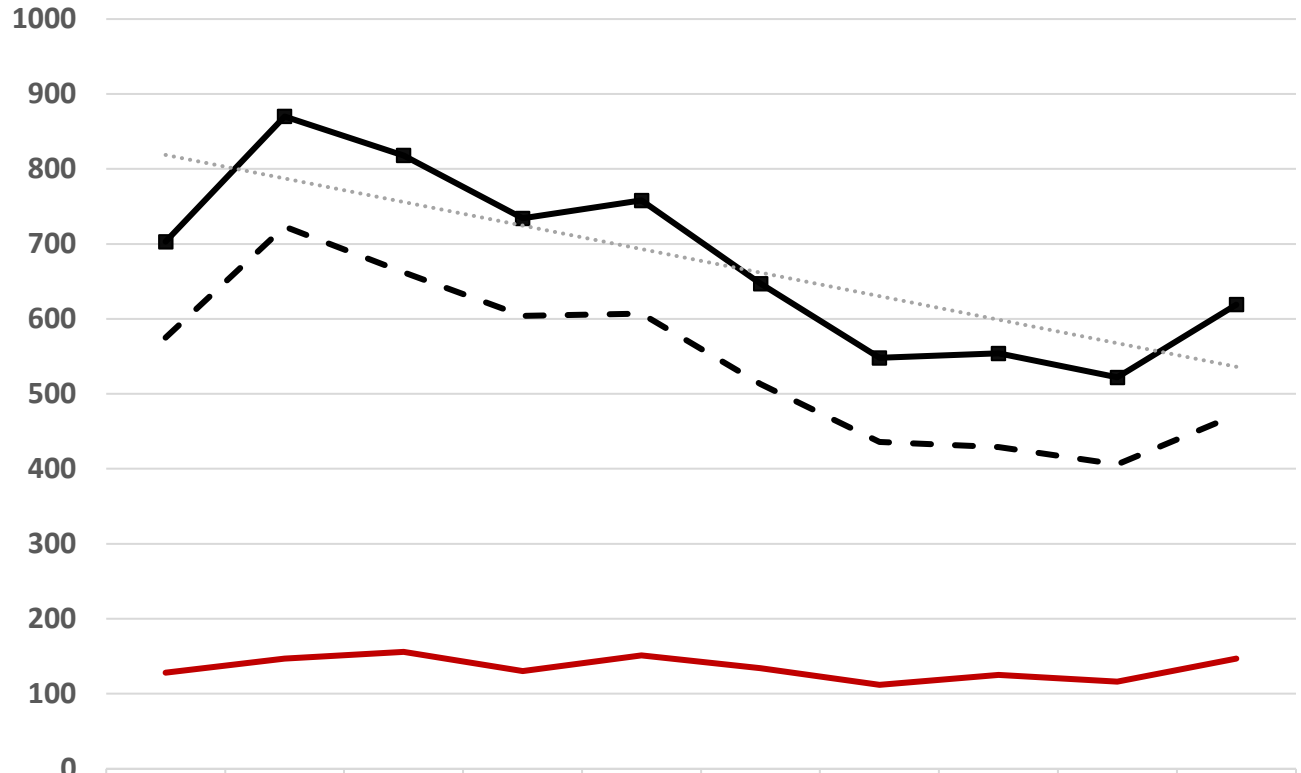
	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
— Total Careless/ Inattentive /Distracted Fatality & Serious Injuries	171	414	437	386	452	407	319	327	337	326
■ 5- Year Average					372	419	400	378	368	343

Data confirmed 8/30/2022

**Single  
Vehicle  
Fatalities  
& Serious  
Injuries,  
2011-  
2020**



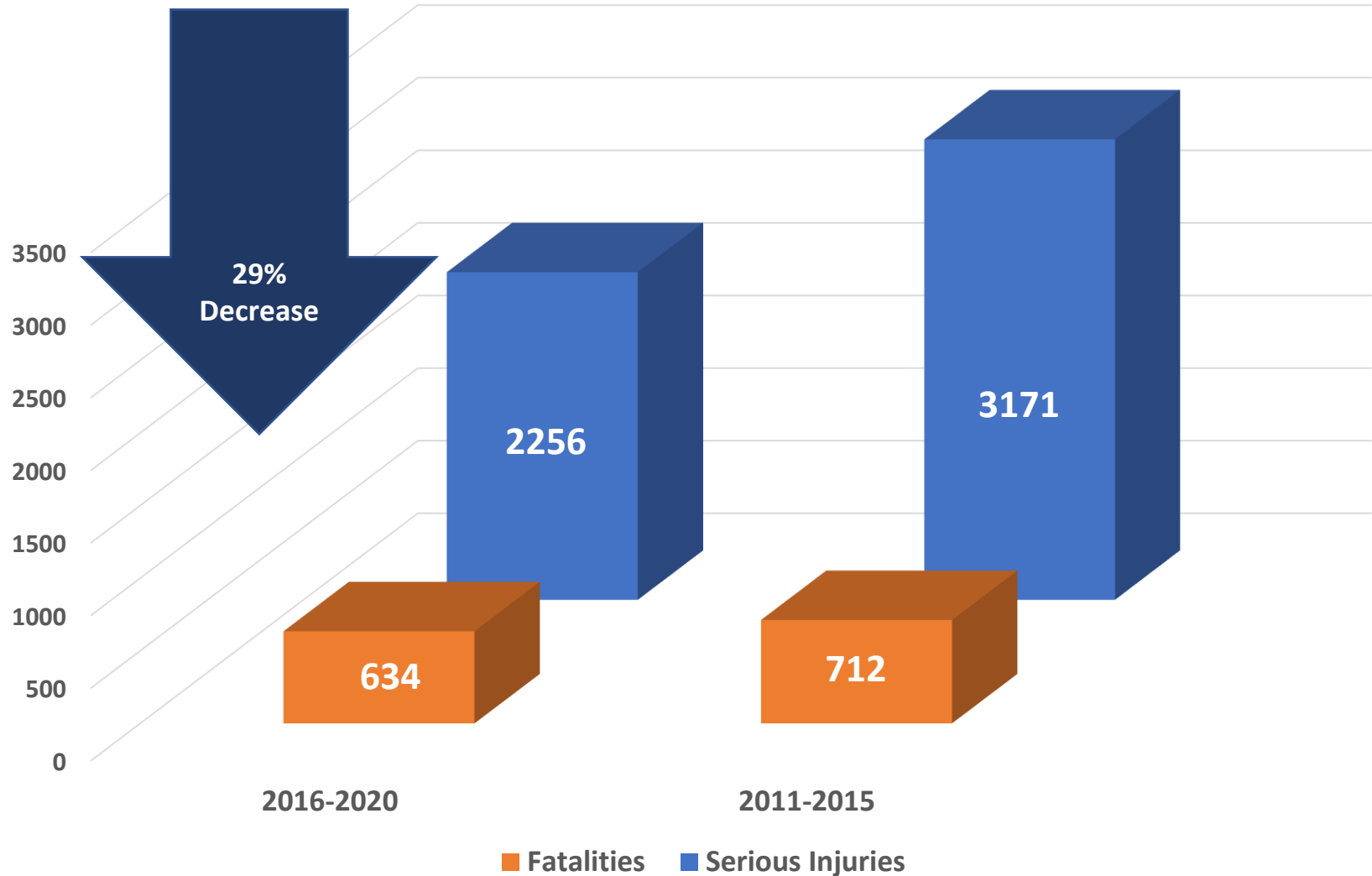
# Single Vehicle Fatalities & Serious Injuries, 2011-2020



	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
—■— Total Fatalities & Serious Injuries	703	870	818	734	758	647	548	554	522	619
— Fatality	128	147	156	130	151	134	112	125	116	147
— - Serious Injury	575	723	662	604	607	513	436	429	406	472

**The total fatalities & serious injuries mirrors single vehicle serious injuries. 2020 reflects an upturn of both fatalities and serious injuries from the previous 3 years.**

# Single Vehicle Fatalities & Serious Injuries, 5-Year Comparison



# Comprehensive Highway Safety Plan information

<http://www.mdt.mt.gov/visionzero/plans/chsp.shtml>

For questions or more information  
please contact:

Pam Langve-Davis, CHSP Manager,  
MDT 406-444-7646,  
[plangvedavis@mt.gov](mailto:plangvedavis@mt.gov)

