

State of Nebraska

2020 **Annual Report**

traffic Crash Facts



Prepared By **Highway Safety Section** Nebraska Department of Transportation

Pete Ricketts Governor

John R. Selmer, P.E. Director

NEBRASKA

Good Life. Great Journey.

DEPARTMENT OF TRANSPORTATION







John Selmer

The *Traffic Crash Facts* booklet provides statistics and information on traffic crash trends that occurred in Nebraska during 2020. The report is designed to heighten awareness about traffic safety issues while allowing interested individuals to identify areas where safety programs may be focused in an effort to reduce traffic-related injuries and deaths. Information is compiled from traffic crash reports submitted to the Nebraska Department of Transportation (NDOT) by state and local law enforcement agencies.

Safety is, and always will be, a top priority in how NDOT does business. The agency is committed to providing the safest possible driving environment for the residents and visitors who travel in our state each year. We are focused on utilizing partnerships with law enforcement, health and education agencies, as well as private advocacy groups and businesses, to improve driving behaviors and ultimately save lives. Traffic crashes are largely avoidable, including those that result in personal injury or loss of life.

Every life matters and Nebraska continues to aim "Toward Zero Deaths" with zero fatalities on all Nebraska roadways as our traffic safety goal. Although much progress in traffic safety has been made over the years, far too many Nebraskans—friends, neighbors, and loved ones—are still being killed or seriously injured in crashes. Improving the situation begins with setting a good example for youth by always buckling up, keeping our hands on the wheel and our eyes on the road, and putting away the cell phone while driving.

Pete Ricketts Governor John R. Selmer, P.E. Director

Nebraska Strategic Highway Safety Plan

The Nebraska Interagency Safety Committee, comprised of leaders from the Department of Transportation, State Patrol, Department of Motor Vehicles, Health & Human Services System, Local Technical Assistance Program, League of Municipalities, and Association of County Officials, last updated the Nebraska Strategic Highway Safety Plan (SHSP) for 2017-2021. The objective of the plan is to significantly reduce traffic deaths and serious injuries in the state. To accomplish this objective, the Committee selected six Critical Emphasis Areas, based on the crash data, on which to concentrate their efforts. These six Critical Emphasis Areas were:

1. Increasing Seat Belt Usage

The use of seat belts is an effective way to prevent serious injuries and fatalities in traffic crashes. While surveys indicate that over 81% of Nebraskans wear their seat belts, about two-thirds of the vehicle occupants killed in crashes were not using belts. Reaching the remaining 19% of Nebraskans who avoid restraint use is a difficult problem. Overtime enforcement operations emphasizing safety belt compliance such as "Click It or Ticket" are one method used to fight the problem.

2. Reducing Roadway Departure Crashes

Many of our rural fatalities are the result of Roadway Departure crashes. The term "Roadway Departure" includes crashes where vehicles run-off-the-road and collide with fixed objects (trees, guardrail, poles, etc.) or where vehicles overturn. It also includes crashes where vehicles leave the portion of the road designed for them to drive on, such as head-on and cross-median crashes. The Department of Transportation has implemented the use of shoulder and centerline rumble strips as countermeasures for these types of crashes on state highways.

3. Reducing Impaired Driving Crashes

Crashes involving drinking and driving continue to significantly contribute to the state's fatality total. Although Nebraska is among the nation's leading states in effective public policy countermeasures, this factor remains a challenging one. While the long-term trend in alcohol-involved crashes is down, over 21% of the drivers involved in 2020 fatal crashes had been drinking. Increasing sobriety checkpoints, periodic impaired driver enforcement crackdowns, new prosecution strategies, and public information campaigns are among the countermeasures used to combat the problem.

4. Reducing Intersection Crashes

Since these are the places where vehicles cross paths, a large percentage of traffic crashes naturally occur at intersections. The Department of Transportation is constantly reviewing intersection operations to look for improvements that can be made. Adding turn lanes, adding flashing yellow arrows for left turns, adjusting signal timing, and improving marking and signing are just a few ways intersection operations can be improved. The Department is also committed to using newer types of intersections, such as roundabouts and restricted crossing U-turns, which have been proven to reduce crashes.

5. Reducing Young Driver Crashes

The continuing over-involvement of young, inexperienced drivers in crashes and especially fatal crashes is disturbing. Although they made up less than 8% of registered drivers in the state, in 2020 drivers aged 16 to 20 were involved in over 16% of the crashes. Effective programs aimed at reducing younger driver crashes are offered by several agencies, both public and private.

6. Reducing Older Driver Crashes

As the older population in Nebraska increases, there are more drivers 65+ years of age on Nebraska roads. The population aged 65+ in Nebraska has increased by almost 26% from 2011-2019. Crashes involving older drivers continue to increase along with the increasing older population. In 2020, older drivers made up 15% of fatal crashes in Nebraska. The Department of Transportation is committed to reducing the number of crashes involving older drivers with the installation of wider pavement markings, advanced warning detection, and larger signs and signal heads.

Table of Contents

	Page No.
Definitions	ii
Part I - Overview	
Fatality Rate per 100 Million Vehicle Miles	2
Ten-Year Trend in Fatal Crashes	3
All Crashes in Nebraska	3
Geographic Summary of Traffic Fatalities by County	4
Crash Data by County	5
Part II - 2020 Data	
Summary - Number of Traffic Crashes	8
First Harmful Event: All and Fatal Crashes	9
Surface Condition: All and Fatal Crashes	11
Type of Roadway: All and Fatal Crashes	12
Day and Time	14
Month: All and Fatal Crashes	15
Age: Driver and Casualties	16
Sex: Driver	17
Restraint Use	18
Body Style: All and Fatal Crashes	20
Intersection Crashes	21
Non-Intersection Crashes	22
Alcohol Involvement: PDO, Injury and Fatal Crashes	23
Driver Age and Alcohol Involvement	24
Driver Contributing Circumstances	25
Part III - Crash Trends	
Motor Vehicle Traffic Crash Information	27
Body Style: Passenger Cars and Truck Types	27
ATV/ROV Crashes	28
Motorcycle Crashes	29
Pedestrian/Pedalcycle	30
Alcohol Involvement in Crashes and Animal Crashes	31
Railroad and Work Zone Crashes	32

(Note: Due to rounding, percentages on graphs may not equal 100%.)

The data contained in this booklet are based on Reportable Crashes Only. Reportable crashes involve death, injury, or property damage in excess of \$1,000.00 to the property of any one person. Various injury severity categories are defined below.

Injury Severity	Definition
Fatal (K)	One or more persons are killed.
Serious Injury (A) Incapacitating	Suspected serious injury - cannot leave the scene without assistance (severe laceration; broken or distorted extremity (arm or leg); unconsciousness; paralysis, suspected skull, chest, or abdominal injury, etc.
Visible Injury (B) Non-incapacitating	Visible but not disabling (minor cuts, swelling, etc.)
Possible Injury (C)	Possible but not visible (complaint of pain, etc.)
Property Damage Only Crash (PDO)	No injury to any person, but only damage to a motor vehicle, or to other property, including injury to domestic animals.

Part I Overview

Fatality Rate

The fatality rate on Nebraska roadways for 2020 was 1.20 persons killed per 100 million vehicle miles traveled, up slightly from the 2019 rate of 1.16. Despite this increase, the long-term trend in fatality rate, shown in Figure 1, is significantly downward. Much of this reduction is the result of improvements in vehicle design, roadway engineering, emergency medical services, specific safety programs, enforcement, and improved driver awareness.

Figure 2 depicts the number of fatal crashes per year for the last 10 years. In 2020, there were 217 fatal crashes, an increase of 5 from 2019.

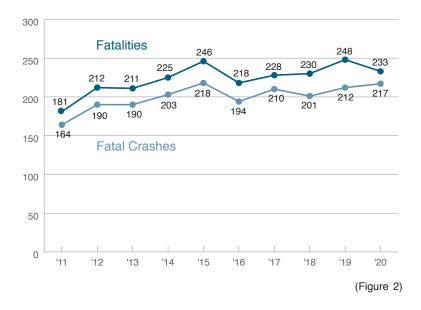
Fatal crashes make up only a small portion of the total crashes in Nebraska. Property damage only (PDO) crashes make up the majority. Figure 3 shows the percentage distribution of all crash types. In 2020, there were 217 fatal crashes, 1,052 serious injury crashes, 9,847 total injury crashes, and 19,354 property damage only crashes. Fatal crashes made up 0.7% of all crashes, serious injury crashes made up 3.6%, and total injury and PDO crashes made up 33.5% and 65.8%, respectively.

Fatality Rate Per 100 Million Vehicle Miles

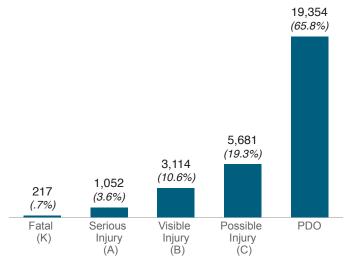
(1966 - 2020)



Ten-Year Trend in Fatal Crashes and Fatalities (2011 - 2020)



All Crashes in Nebraska



(Figure 3)

Geographic Summary of Traffic Fatalities by County in 2020

Total Traffic Fatalities - 233 / Traffic Fatalities with Apparent Alcohol Involvement - 72

			~~~	~	1/1 NEMAHA	1/0 RICHARDSON
	4/1 BURT	4/1 wash.	46/13 DOUGLAS 9/6		1/1	
1/0 % 3/0% MWE THURSTON	1/0 cuming	8/2 DODGE	4/0 SAUNDERS	18/8	LANCASTER	2/1
1/1 CEDAR DIXON 2/1 WAYNE		1/1 COLFAX	2/1 BUTLER	5/0 SEWARD	7/3 SALINE	2/0 JEFFERSON
0/0 PIERCE	1/0 0/0 MADISON STANTON	4/2 PLATTE	75 × 1	2/1 YORK	1/0 FILLMORE	3/0 THAYER
1/1 KNOX 1/0	w l	BOONE 1/1	NANCE MERRICK 2/1	0/0 HAMILTON	2/1 CLAY	0/0 1/0 0/0 FRANKLIN WEBSTER NUCKOLLS
0/0	0/0 WHEELER	2/1 GREELEY	0/0 HOWARD	7/2 HALL	5/1 ADAMS	1/0 WEBSTER
1/0 1/0	0/0 GARFIELD	0/0	1/0 SHERMAN	3/0	1/0 KEARNEY	
0,0 X	0/0			BUF	2/1 PHELPS	1/1 HARLAN
0/0 0/0 BROWN	1/0 BLAINE	ć	3/ U	3/1 DAWSON	2/1 GOSPER	0/0 FURNAS
	0/0 THOMAS	0/0	2,0	0/5	0/0 FRONTIER	2/0 RED WILLOW
1/0	0/0	1/0 McPHERSON	,	UNCOLN	0/0 HAYES	1/0
CHERRY	1/1 GRANT	0/0 ARTHUR	3/0	0/0 PERKINS	0/0 CHASE	0/0
0/0	NACIENT	1/0	GARDEN 4/2			,
1/1 Dawes 1/1 1/1	0/6	MORRILL	4/2 CHEYENNE	Number of Fatalities	. 51	6 - 10 11 and Over
0/0	7/2 scotts bluff	1/0 BANNER	4/1 KIMBALL	Number c	0 +	9 =

Douglas County, which includes Omaha, the state's largest city, had the highest number of traffic fatalities with 46, followed by Lancaster County with 18. Twenty-seven counties experienced no fatalities in 2020.

2	2020 Crash Data by County										
County		Cras	Person: and Ir	s Killed njured							
	Total	Fatal	Injury	PDO	Killed	Injured					
Adams Antelope Arthur Banner Blaine Boone Box Butte Boyd Brown Buffalo Burt Butler Cass Cedar Chase Cherry Cheyenne Clay Colfax Cuming Custer Dakota Dawes Dawes Dawson Deuel Dixon Dodge Douglas Dundy Fillmore Franklin	Total  506 57 4 24 8 45 142 7 41 879 71 118 305 90 26 84 157 69 138 131 163 247 121 411 50 39 598 9037 12 57 22			PDO  380 40 4 17 3 30 101 5 32 594 46 67 207 58 16 63 118 52 95 75 120 161 92 302 37 24 373 5777 9 32 17	and Ir	njured					
Franklin Frontier Furnas Gage Garden Garfield Gosper Grant Greeley Hall Hamilton Harlan Hayes Hitchcock Holt Hooker	22 57 52 329 34 15 33 4 18 1134 220 59 25 50 120 6	0 0 2 1 0 2 1 2 7 0 1 0 1 0	5 18 93 5 6 5 2 5 347 56 13 5 22 36 3	17 42 34 234 28 9 26 1 11 780 164 45 20 27 83 3	0 0 2 1 0 2 1 2 7 0 1 0 1 0	7 20 24 130 12 8 9 2 8 485 79 14 6 27 44 3					

County		Cras	shes		Persons and Ir	s Killed njured
	Total	Fatal	Injury	PDO	Killed	Injured
Howard	68	0	18	50	0	22
Jefferson	123	2	21	100	2	37
Johnson	77	1	19	57	1	24
Kearney	67	1	26	40	1	42
Keith	204	3	64	137	3	92
Keya Paha	15	0	3	12	0	4
Kimball	76	3	19	54	4	33
Knox	73	1	29	43	1	38
Lancaster	5285	17	2112	3156	18	3025
Lincoln	689	9	223	457	12	340
Logan	9	0	6	3	0	10
Loup Madison	11 585	0	2 173	9 411	0	3 243
McPherson	10	1 1	1/3	7	1	3
Merrick	107	2	33	72	2	46
Morrill	71	2	20	49	2	27
Nance	21	1	6	14	1	7
Nemaha	93		26	66	1 1	38
Nuckolls	30	0	7	23	0	15
Otoe	251	2	54	195	2	72
Pawnee	47	3	10	34	3	11
Perkins	33	0	15	18	0	23
Phelps	135	2	42	91	2	68
Pierce	86	0	33	53	0	50
Platte	647	4	167	476	4	226
Polk	95	1	24	70	1	43
Red Willow	181	2	48	131	2	65
Richardson	113	1	26	86	1	33
Rock	13	0	2	11	0	3
Saline	194	6	53	135	7	75
Sarpy	2067	9	686	1372	9	968
Saunders	185	3	59	123	4	89
Scotts Bluff	595	6	192	397	7	277
Seward	305	5	100	200	5	142
Sheridan Sherman	79 36	0	22 10	57 25	0	31 16
Sioux	23	0	4	19	0	4
Stanton	49	0	21	28	0	28
Thayer	76	2	15	59	3	25
Thomas	13	0	4	9	0	7
Thurston	50	1	21	28	1	31
Valley	45	0	14	31	0	16
Washington	221	4	54	163	4	67
Wayne	106	2	38	66	2	54
Webster	78	1	16	61	1	21
Wheeler	14	0	2	12	0	2
York	252	2	60	190	2	91
Totals	29418	217	9847	19354	233	14100

# Part II 2020 Data

#### Summary Number of Traffic Crashes

All Crashes	29,418
Property Damage Only (PDO) 19,354	
Injury Crashes 9,847	
Persons Injured 14,100	
Fatal Crashes 217	
Fatalities 233	
Number of Registered Vehicles in Nebraska 2	,398,328
Number of Licensed Drivers in Nebraska 1	,474,924
Number of Vehicles in Crashes*	52,587
Number of Drivers in Crashes*	46,394

^{*}There may be more than one vehicle or driver involved in a single crash. Parked and driverless vehicles are included.

#### **During 2020:**

One crash occurred every 18 minutes. Thirty-nine persons were injured each day. One person was killed every 38 hours.

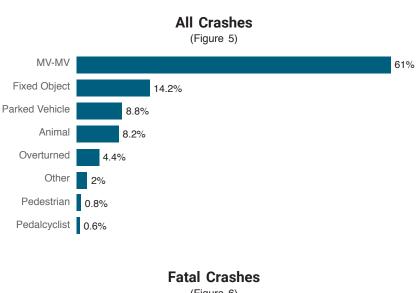
The economic loss in terms of dollars was \$4,708,415,810**

^{**}Federal Highway Administration Research Report Number, FHWA-SA-17-071, Crash Costs for Highway Safety Analysis, January 2018, Nebraska Department of Transportation Crash Data 2013-2017.

#### First Harmful Event

First harmful event (FHE) is the initial incident that causes injury or damage. It is sometimes referred to as "type of crash" and implies a collision with each of the objects listed in the following charts. "Overturned" and "other" crashes refer to crashes where no collision is involved (e.g., a car loses control and overturns, a car catches on fire).

First harmful events for all crashes and for fatal crashes are shown in Figures 5 and 6. In both instances, collisions between two or more motor vehicles (MV-MV) make up the majority of crashes. Crashes involving fixed objects, vehicles overturning, pedestrians and trains tend to be more severe, as indicated by their over-representation in fatal crashes as compared to all crashes.



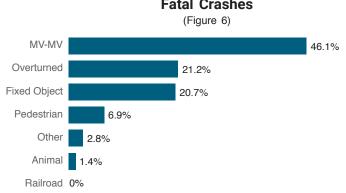


Table 1 provides the number of crashes in each category listed in Figures 5 and 6 on the previous page.

	FIDOT IIA DMEIII		2020									
	FIRST HARMFUL EVENT		CRASHES				PERSONS KILLED OR INJURED					
		TOTAL	FATAL	INJURY	PDO	KILLED	1	NON-FATAI	LINJURIES	3		
	(Current Year)	TOTAL	FATAL	INJURY	PDO	KILLED	TOTAL	A★	в⋆	C*		
	Pedestrian	259	15	242	2	16	253	56	91	106		
S	Motor vehicle in transport	17849	100	6847	10902	113	10459	657	2516	7286		
NVOLVING	Parked motor vehicle	2597	2	203	2392	2	255	28	98	129		
ž	Railroad train	28	0	10	18	0	10	3	2	5		
8	Pedalcyclist	174	1	169	4	1	176	22	90	64		
NOISIT	Animal	2412	3	199	2210	3	233	13	78	142		
COL	Fixed object	4188	45	1260	2883	47	1517	247	604	666		
	Other object	309	1	58	250	1	71	4	23	44		
Ν	oncollision overturned	1299	46	804	449	46	1065	243	434	388		
0	ther noncollision	271	4	51	216	4	55	12	19	24		
U	nknown	32	0	4	28	0	6	0	1	5		
_	TOTALS —	29418	217	9847	19354	233	14100	1285	3956	8859		

(Table 1)

* = Injury severity codes
 A = Suspected Serious Injury
 B = Visible Injury (not disabling)
 C = Possible Injury (not visible)
 PDO = Property Damage Only

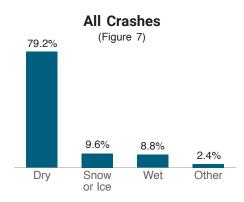
			2019										
	FIRST HARMFUL		CRASHES				PERSONS KILLED OR INJURED						
	EVENT	TOTAL	FATAL	INJURY	PDO	KILLED	1	NON-FATAI	LINJURIE	S			
		TOTAL	FATAL	INJUNT	PDO	KILLED	TOTAL	A★	в⋆	C★			
	Pedestrian	342	20	322	0	20	342	72	137	133			
VING	Motor vehicle in transport	24049	107	8819	15123	138	13459	783	2912	9764			
ᅵᅥ	Parked motor vehicle	2963	0	220	2743	0	249	26	99	124			
ž	Railroad train	24	1	11	12	1	19	8	6	5			
NO O	Pedalcyclist	238	1	234	3	1	239	27	133	79			
ILISION	Animal	2836	1	240	2595	1	297	26	104	167			
100	Fixed object	4319	44	1238	3037	49	1493	240	561	692			
	Other object	310	2	39	269	2	44	8	17	19			
Ν	oncollision overturned	1245	35	737	473	35	961	193	391	377			
0	ther noncollision	340	1	69	270	1	84	16	34	34			
U	nknown	40	0	10	30	0	11	1	6	4			
_	TOTALS —	36706	212	11939	24555	248	17198	1400	4400	11398			

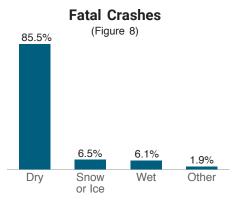
(Table 2)

Table 2 provides 2019 data for comparison to 2020 The number of fatal crashes increased by 5 and the number of fatalities decreased by 15, showing that there were fewer multi-fatality crashes in 2020. The number of injury crashes declined by 2,092 and the number of injuries decreased by 3,098. The largest decrease was in property damage only crashes, which fell by 5,201.

#### **Surface Condition**

The condition of the road surface plays an important role in motor vehicle crashes. Slick road conditions are generally more hazardous than dry conditions, but drivers tend to compensate for this by being more cautious. Fewer fatal crashes occur under slick road surface conditions than under dry road conditions, since there are many more dry days than wet days. Crashes on wet roads decreased by 37.4% during 2020.





The following table provides the number of crashes in each category.

ROAD SURFACE CONDITION	TOTAL	FATAL	INJURY	PDO
Dry	22837	183	7981	14673
Wet	2523	13	886	1624
Snowy or icy	2778	14	662	2102
Other	695	4	245	446
Not stated	585	3	73	509
- TOTALS -	29418	217	9847	19354

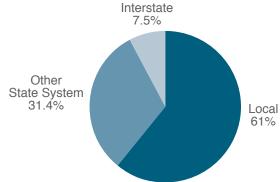
(Table 3)

# Type of Roadway

The distributions of all crashes and fatal crashes, by roadway type, are shown in Figures 9 and 10. Table 4 (page 13) shows the actual number of crashes and casualties by roadway type. The percent of fatal crashes that occur on the interstate and other state highways is larger than the percent of all crashes that occur on the interstate and other state highways. Crashes on interstate and other state highways tend to occur at higher speeds, accounting for their increased severity.

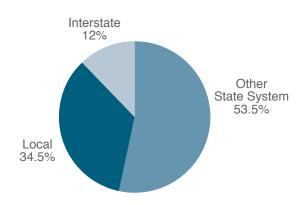
#### **All Crashes**





#### **Fatal Crashes**

(Figure 10)



ROADWAY		CRASHES					SONS
		TOTAL	FATAL	INJURY	PDO	KILLED	INJURED
	Interstate	1119	7	350	762	9	464
NA8	Other State System Highways	4869	27	1852	2990	31	2665
URBAN	Local Roads and Streets	15070	36	4945	10089	38	6996
	URBAN SUBTOTAL	21058	70	7147	13841	78	10125
	Interstate	1099	19	292	788	23	438
3AL	Other State System Highways	4380	89	1305	2986	91	1948
RURAL	Local Roads and Streets	2881	39	1103	1739	41	1589
	RURAL SUBTOTAL	8360	147	2700	5513	155	3975
	- TOTALS -	29418	217	9847	19354	233	14100

(Table 4)

Rather than referring to numbers of crashes, the relative safety of different roadway classifications can be compared by using crash rates. Table 5 provides crash rates for 2020. These rates are based on crashes per 100 million vehicle miles driven.

#### Crashes Per 100 Million Vehicle Miles Traveled

	CRASH SEVERITY						
	FATAL	INJURY	PDO	TOTAL			
Interstate	0.6	15.3	37.0	52.9			
Other State Highways	1.4	39.0	73.8	114.3			
Local Roads and Streets	1.1	85.2	166.7	252.9			

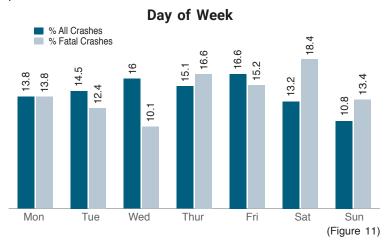
(Table 5)

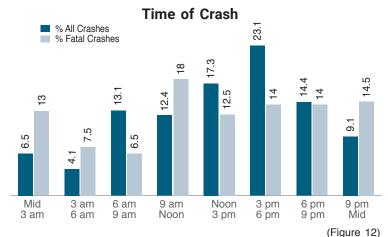
The interstate actually has the lowest crash rate for all roadway categories, followed by other state highways and local roads.

# Day and Time

Crashes can occur at any time, but they tend to be more frequent during certain times of the day. Crash frequency follows the daily activity cycle, increasing from a low in the early morning hours to a peak in the late afternoon. The highest three-hour time period for crashes in 2020 was from 3:00 - 6:00 p.m., when 23.1% of all crashes occurred. Fatal crashes were most prevalent in the afternoon or early evening, as 55% of them took place between noon and 9:00 p.m.

Friday was the highest day of the week for crashes (4,874), and Saturday had the most fatal crashes (40) during 2020. The next highest fatal crash numbers were on Thursday (36) and Friday (33). Although, Sunday had the third fewest fatal crashes (29) during the week, traditionally, more fatal crashes occur on or near the weekends when more recreational driving takes place.



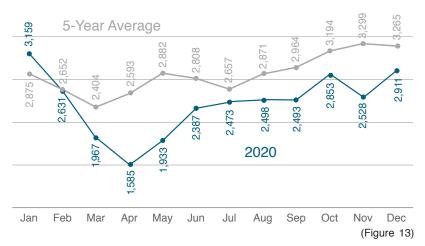


#### **Month**

The seasonal cycles of all crashes and fatal crashes are illustrated in Figures 13 and 14. Crashes tend to increase during the late fall and winter as weather conditions worsen. Fatal crashes usually decrease during bad weather conditions, once motorists adjust to less than perfect driving conditions.

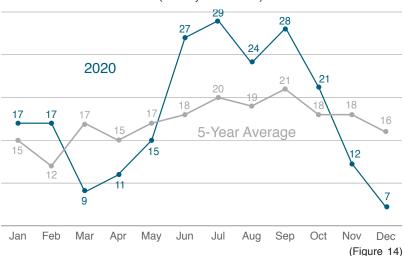
#### All Crashes by Month

(January - December)



#### **Fatal Crashes by Month**

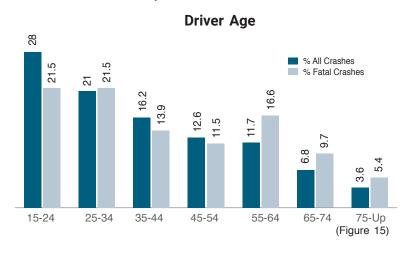
(January - December)

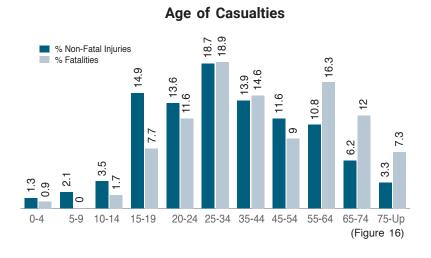


# Age of Driver

Younger drivers are involved in a disproportionate number of crashes. In 2020, 49.1% of the drivers involved in crashes were age 34 or younger. Drivers in the youngest age bracket, ages 15 to 24, which included 15.1% of all drivers, had the highest percentage involvement of all age groups in all crashes, 28%. In 2020, these drivers were also involved in 21.5% of fatal crashes.

Figure 16 represents percentages of nonfatal and fatal injuries by age groups. Persons aged 75 and over are overrepresented in fatal injuries as compared to nonfatal injuries. Persons between the ages of 15 and 44 suffered 65.6% of all injuries.



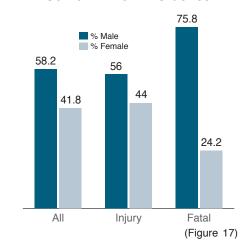


#### **Sex of Driver**

Figure 17 shows the difference between male and female drivers' involvement in motor vehicle traffic crashes. Males represented 58.2% of the drivers in all crashes in Nebraska in 2020, and were involved in 75.8% of all fatal crashes. At least a part of this difference can be attributed to the fact that males may drive more miles than females and, thus, have greater exposure to crashes.

More females than males, however, are victims of motor vehicle crashes. Females made up 51.1% of the persons injured or killed in motor vehicle crashes in 2020. (See Table 7).

#### Sex of Driver in Crashes



SEX OF DRIVER	TOTAL	FATAL	INJURY	PDO
Male	26726	251	9643	16832
Female	19174	80	7590	11504
Not stated	494	0	181	313
- TOTALS -	46394	331	17414	28649

(Table 6)

	ALL CRASHES				ALCOHOL-RELATED CRASHES							
AGE AND	KILLED		INJURED		KILLED			INJURED				
SEX	TOTAL	М	F	TOTAL	М	F	TOTAL	М	F	TOTAL	М	F
0-4 years	2	1	1	179	81	98	0	0	0	6	1	5
5-9 years	0	0	0	287	143	144	0	0	0	11	7	4
10-14 years	4	3	1	481	206	275	0	0	0	10	3	7
15-19 years	18	6	12	2046	918	1128	4	1	3	100	54	46
20-24 years	27	22	5	1860	903	957	11	10	1	193	126	67
25-34 years	44	37	7	2565	1245	1320	22	19	3	240	153	87
35-44 years	34	26	8	1908	883	1025	15	13	2	121	74	47
45-54 years	21	17	4	1593	812	781	9	7	2	88	60	28
55-64 years	38	29	9	1475	790	685	9	8	1	65	44	21
65-74 years	28	23	5	847	425	422	6	5	1	27	18	9
75 and older	17	16	1	449	238	211	0	0	0	5	3	2
Age not stated	0	0	0	165	70	95	0	0	0	10	7	3
- TOTALS -	233	180	53	13855	6714	7141	76	63	13	876	550	326

(Table 7)

#### **Restraint Use**

Restraint usage is the best available means of preventing fatalities and injuries in motor vehicle crashes. Passive restraints, such as air bags, which require no occupant action to be put in use, are standard equipment for drivers and front seat passengers in newer vehicles. For these passive systems to provide effective protection, however, seat belts must still be used.

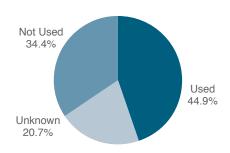
Effective January 1, 1993, Nebraska passed a mandatory seat belt law. This law calls for secondary enforcement, meaning that a citation for not wearing a seat belt can only be issued if the driver is first charged with another violation. Although not as effective as a primary enforcement law, the law has been successful in promoting seat belt use.

The most accurate measure of safety belt usage in Nebraska comes from the results of surveys conducted by the NDOT Highway Safety Office and approved by the National Highway Traffic Safety Administration (NHTSA). In 2020, the observed statewide safety belt usage rate was 81%.

Usage rates have risen in recent years primarily due to increased law enforcement efforts and media campaigns, however, there is still room for improvement. Belt use is particularly low in crashes which result in the most severe injuries. Only 22.4% of those vehicle occupants who died and 44.9% of those who suffered suspected serious injuries in 2020 crashes were belted.

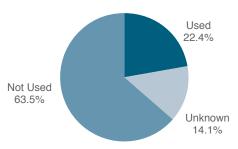
#### Restraint Use for Suspected Serious Injuries

(Figure 18)



# Restraint Use for Fatal Injuries

(Figure 19)

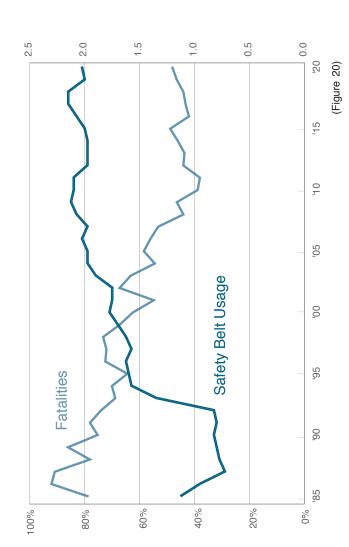


Nebraska Safety Belt Usage Rate vs. Fatality Rate Per 100 Million Miles Traveled

Safety Belt Usage Rate

38% 29% 31% 32% 33% 33% 54% 63%

64% 65%



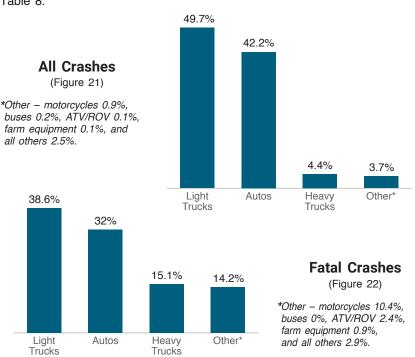
80% 83% 86% 86% 80% 81%

# **Vehicle Body Style**

The major vehicle body styles involved in all crashes and fatal crashes are displayed in Figures 21 and 22. Compared to their involvement in all crashes, motorcycles and heavy trucks are overrepresented in fatal crashes. Motorcycles offer little protection to riders involved in crashes, and heavy trucks tend to be involved in more severe crashes due to their large size. The number of vehicles in each body style group which were involved in crashes is provided in Table 8.

BODY STYLE OF CRASH VEHICLES	TOTAL	FATAL	INJURY	PDO
Bus	119	0	47	72
Semi-trailer truck	1261	35	365	861
Other heavy truck	954	16	279	659
Automobile	21435	108	7565	13762
Van	2529	7	934	1588
Sport utility vehicle	13679	50	5031	8598
Pickup truck	9063	73	2890	6100
Motorcycle	467	35	375	51
Motorhome	38	0	13	25
Farm equipment	68	3	22	43
ATV/ROV	63	8	49	6
Other	1161	2	406	753
Unknown	1756	4	306	1446
- TOTALS -	52587	341	18282	33964

(Table 8)



# **Intersection Crashes**

2020
Type of Multi-Vehicle Collisions at Intersections*

Total Crashes: 13,674

	NUMBER OF CRASHES	% OF TOTAL INTERSECTION CRASHES	% resulting In injury
Angle	6,261	45.8	43.1
Rear-end	4,051	29.6	40.6
Sideswipe	1,166	8.5	21.0
Sideswipe	184	1.3	31.5
Left Turn Leaving	1,649	12.1	49.5
Head-on	52	0.4	53.8
Backing	305	2.2	10.8
Unknown	6	0	50.0
Total	13,674	99.9%	

^{*}Multi-vehicle crashes at intersections comprise 46.5% of all crashes.

# **Non-Intersection Crashes**

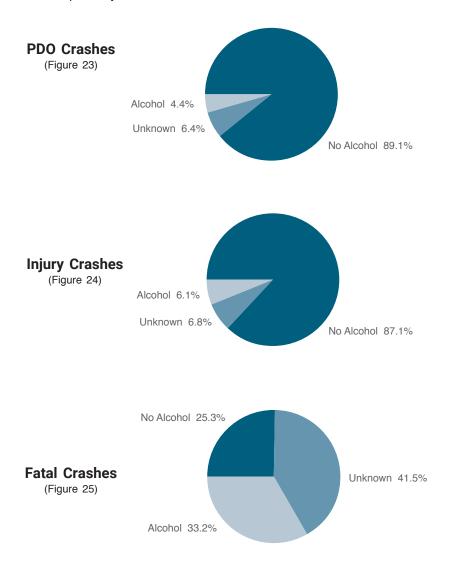
2020 Type of Multi-Vehicle Collisions Not at Intersections* Total Crashes: 4,175

	NUMBER OF CRASHES	% OF TOTAL NON-INTERSECTION CRASHES	% RESULTING IN INJURY
Rear-end	2,072	49.6	40.0
Head-on	93	2.2	61.3
Angle	129	3.1	37.2
Sideswipe	1,226	29.4	21.5
Sideswipe	398	9.5	47.5
Left Turn Leaving	30	0.7	40.0
→ ◆ → Backing	219	5.2	9.6
Unknown	8	0.2	0
Total	4,175	99.9%	

^{*}Multi-vehicle crashes not at intersections comprise 14.2% of all crashes.

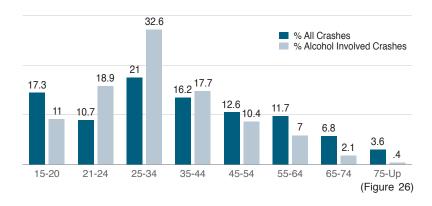
#### Alcohol Involvement

Figures 23, 24 and 25 show the relationship between alcohol involvement and crash severity. As crash severity increased, so did alcohol involvement. In 2020, 33.2% of Nebraska's fatal crashes were alcohol-involved, an increase from the 24% recorded in 2019. Since alcohol testing is only required in fatal crashes, the alcohol involvement listed for injury and PDO crashes is probably understated.



# **Driver Age and Alcohol Involvement**

The relationship between driver age and alcohol involvement in motor vehicle crashes is illustrated in Figure 26. Compared to their involvement in all crashes, drivers aged 21-34 are overrepresented in alcohol related crashes. In fact, these drivers are in 51.5% of alcohol involved crashes. By comparison, these drivers are only involved in 31.7% of total crashes. Note that drivers between the ages of 15 and 20 are in 11% of alcohol-related crashes, despite the fact that the legal drinking age in Nebraska is 21.



	TOTAL		FA	TAL	INJURY		
AGE OF DRIVER	ALL CRASHES	ALCOHOL INVOLVED	ALL CRASHES	ALCOHOL INVOLVED	ALL CRASHES	ALCOHOL INVOLVED	
15 and younger	408	1	4	0	148	0	
16	1517	10	4	0	561	5	
17	1523	22	4	1	553	8	
18	1597	38	7	2	601	16	
19	1469	39	11	2	569	9	
20	1467	55	8	0	563	22	
21	1336	77	9	4	505	24	
22	1281	80	6	2	508	39	
23	1233	71	9	3	460	26	
24	1089	55	9	1	418	25	
25 to 34	9680	489	71	23	3646	211	
35 to 44	7479	265	46	13	2836	90	
45 to 54	5798	156	38	8	2196	61	
55 to 64	5390	105	55	8	2007	37	
65 to 74	3153	31	32	5	1156	10	
75 and older	1650	6	18	0	613	2	
Not stated	324	6	0	0	74	1	
- TOTALS -	46394	1506	331	72	17414	586	

(Table 9)

# **Driver Contributing Circumstances**

In 2020, there were 29,418 reportable motor vehicle traffic crashes in Nebraska involving 46,394 drivers. The table below lists the driver contributing circumstances and the number of drivers involved in fatal, injury and property damage only crashes.

DRIVER CONTRIBUTING CIRCUMSTANCES	TOTAL	FATAL	INJURY	PDO
No improper driving	21935	111	8203	13621
Failed to yield right-of-way	4251	19	1886	2346
Disregarded traffic controls	1710	12	903	795
Exceeded speed limit	134	7	87	40
Speed too fast for conditions	1446	11	459	976
Made an improper turn	449	3	119	327
Followed too closely	2560	1	1033	1526
Leave lane/run off road	1769	36	651	1082
Operating in erratic manner	2058	29	917	1112
Swerving or avoiding	430	4	146	280
Visibility obstructed	342	1	93	248
Inattention	3082	9	964	2109
Mobile phone distraction	131	0	51	80
Distracted - other	711	4	267	440
Fatigued/asleep	286	0	135	151
Defective equipment	179	1	60	118
Other improper action	1151	24	400	727
Unknown	3770	59	1040	2671
- TOTALS -	46394	331	17414	28649

(Table 10)

While "Failed to yield right-of-way" was the most common contributing circumstance in all crashes, in fatal crashes "Leave lane/run off road" was the most frequent.

# Part III Crash Trends

#### Motor Vehicle Traffic Crash Data

The crash rate on Nebraska roads has remained fairly steady over the last few years. Although, the state's fatality rate increased 3.4% from 1.16 in 2019 to 1.20 in 2020.

Year	Total Crashes	Persons Injured	Persons Killed	Crash Rate (per MVM)	Fatality Rate (per HMVM)	National Fatality Rate (per HMVM)
'01	47,894	26,751	246	2.67	1.37	1.51
'02	46,238	23,379	307	2.51	1.67	1.51
'03	46,602	21,984	293	2.51	1.58	1.48
'04	37,227	21,315	254	1.98	1.35	1.44
'05	35,739	19,827	276	1.89	1.46	1.46
'06	32,780	18,424	269	1.71	1.40	1.42
'07	35,875	18,983	256	1.87	1.33	1.36
'08	34,604	17,799	208	1.83	1.10	1.26
'09	34,665	17,775	223	1.81	1.17	1.15
'10	33,212	16,712	190	1.70	0.97	1.11
'11	32,302	16,108	181	1.69	0.95	1.10
'12	30,443	15,872	212	1.58	1.10	1.14
'13	31,377	16,083	211	1.62	1.09	1.10
'14	32,318	15,871	225	1.65	1.15	1.08
'15	33,988	16,806	246	1.68	1.22	1.15
'16	34,890	17,962	218	1.68	1.05	1.18
'17	34,999	17,691	228	1.67	1.09	1.17
'18	36,117	17,726	230	1.72	1.10	1.13
'19	36,706	17,198	248	1.72	1.16	1.11
'20	29,418	14,100	233	1.52	1.20	1.37 *
	Vehicle Miles ( ed Million Vehic		1)		*NHT	SA estimate

(Table 11)

# **Body Style**

More passenger cars are involved in crashes than any other body style of vehicle. The percentage of automobiles in the total mix of vehicles in crashes, however, has been generally declining over the last decade. Figure 27 displays this trend.

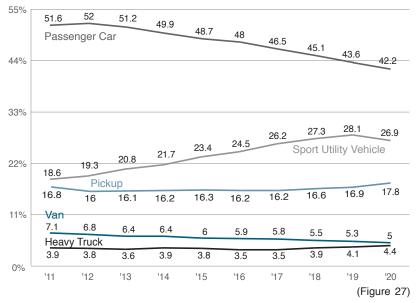
Sport utility vehicles (SUVs) have been the fastest growing segment of the vehicle mix, surpassing pickup trucks and vans. The percentage of heavy trucks involved in crashes, on the other hand, has remained relatively steady. Figure 28 shows the trends in the percentage of various truck types involved in crashes during the last decade.

Note: In any one year, the combined percentages of passenger cars, light trucks, heavy trucks and motorcycles will not total 100%.

The percentage of "other" body styles, like buses, is not shown.

#### Passenger Cars and Truck Types in All Crashes



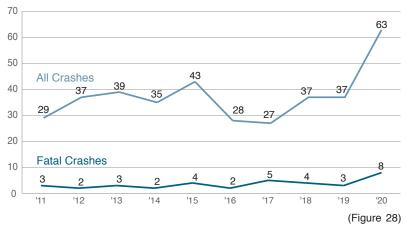


## **ATV/ROV Crashes**

All-Terrain Vehicle (ATV) or Recreational Off-Road Vehicles (ROV) are gaining popularity in recent years. ATV/ROV crashes increased in 2020, going from 37 in 2019 to 63 in 2020. Fatal crashes increased to 8 in 2020; this is a 167% increase from the 3 fatal crashes in the previous year.

## All ATV/ROV Crashes and Fatal Crashes



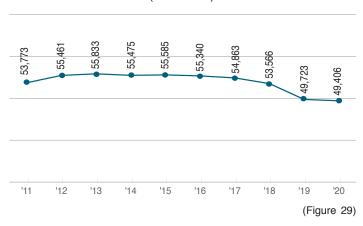


# **Motorcycle Crashes**

The number of motorcycle registrations had plateaued in the last decade and more recently have started to decline. Despite these declining numbers, the total motorcycle crashes (447) and motorcycle fatal crashes (34) increased over the previous year.

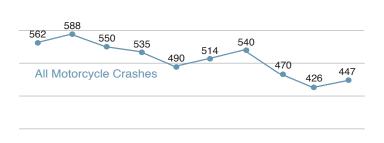
#### **Motorcycle Registrations**

(2011-2020)



#### All Motorcycle Crashes and Fatal Crashes

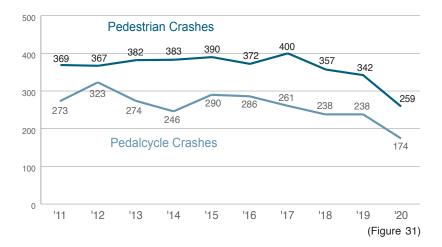
(2011 - 2020)

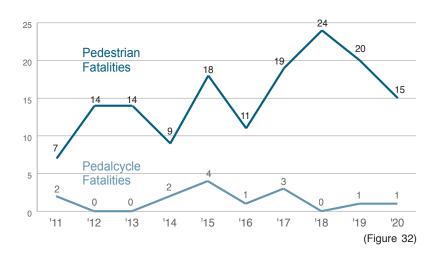




# **Pedestrian and Pedalcycle Crashes**

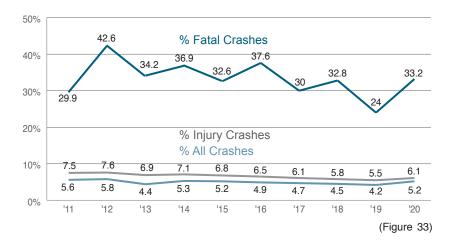
Both pedestrian and pedalcyclist crashes have been trending downward in recent years. Pedestrian crashes fell from 342 in 2019 to 259 in 2020. Pedalcyclist crashes decreased by 26.9%, going from 238 in 2019 to 174 in 2020. Pedestrian fatalities dropped to 15 in 2020; this is a 25% decrease from the 20 pedestrian fatalities in the previous year and a 37.5% decrease from the decade-high of 24 fatalities recorded in 2018. There was one pedalcyclist fatality in 2020.





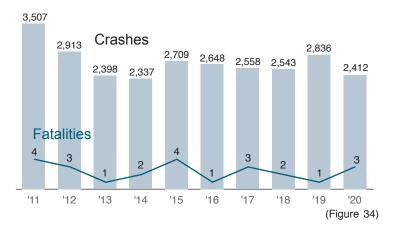
#### **Alcohol Involvement in Crashes**

Figure 33 shows the percentage of alcohol involvement by crash severity type. Alcohol testing is mandatory in fatal crashes, but optional for injury and property damage only crashes. Thus the extent of alcohol's role in non-fatal crashes is likely understated. Alcohol involvement in fatal crashes increased from 24% in 2019 to 33.2% in 2020.



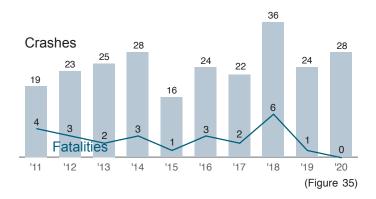
## **Animal Crashes**

The number of crashes involving animals, over the last 10 years, is depicted in Figure 34. In 2020, animal crashes decreased from 2,836 to 2,412. Deer are the most frequently involved animals in motor vehicle/animal crashes. Animal crashes resulted in 3 fatalities during 2020.



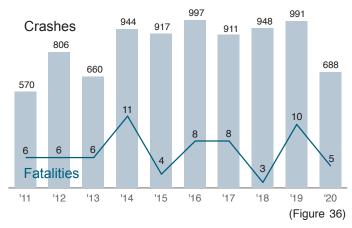
#### **Railroad Crashes**

The number of motor vehicle/railroad crashes increased in 2020, from 24 to 28. There were no railroad fatalities in 2020.



#### **Work Zone Crashes**

Drivers need to be particularly alert when going through highway work zones. When a road is not in its usual condition due to construction, it is a good idea to slow down. Fines for speeding are double in work zones when workers are present. Work zone crashes are dangerous to both highway workers and motorists. Most work zone crashes are rear-end collisions, resulting from speeding or inattentive driving. Work zone crashes decreased in 2020, from 991 to 688. In addition to the usual factors, the annual number of work zone crashes is also highly dependent on the amount and location of construction.





Additional information about the material contained in this publication may be obtained from:

Nebraska Department of Transportation Traffic Engineering Division Highway Safety Section PO BOX 94759 LINCOLN NE 68509-4759 402-479-4645

This report is also available on the NDOT website dot.nebraska.gov

Nebraska Department of Transportation Highway Safety Section PO Box 94759 Lincoln NE 68509-4759

27-6900