

New Mexico Motorcycle Crash Data

New Mexico Motorcycle
Safety Program Committee Meeting



Prepared for the NMDOT Traffic Safety Division
Under Contract 5801

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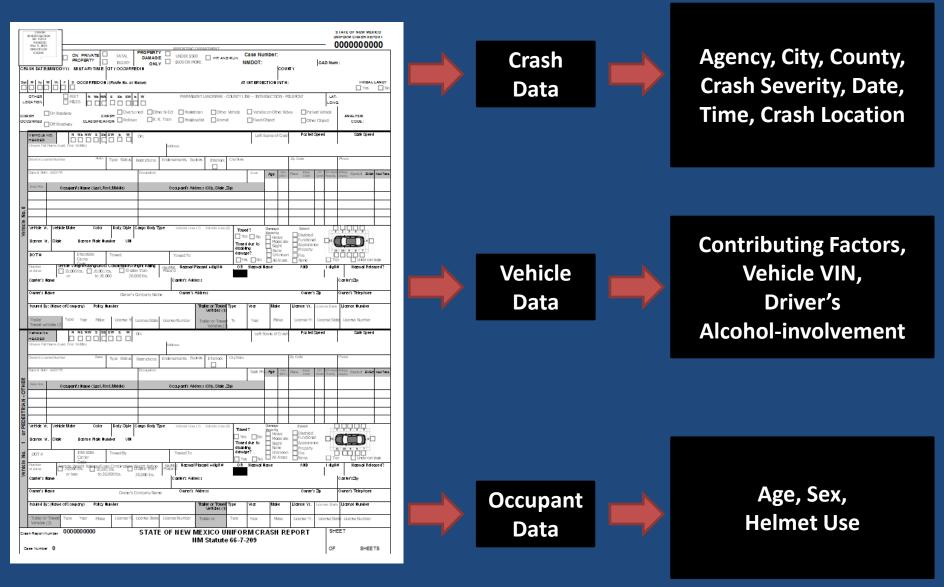
Photo by NMDOT

Agenda

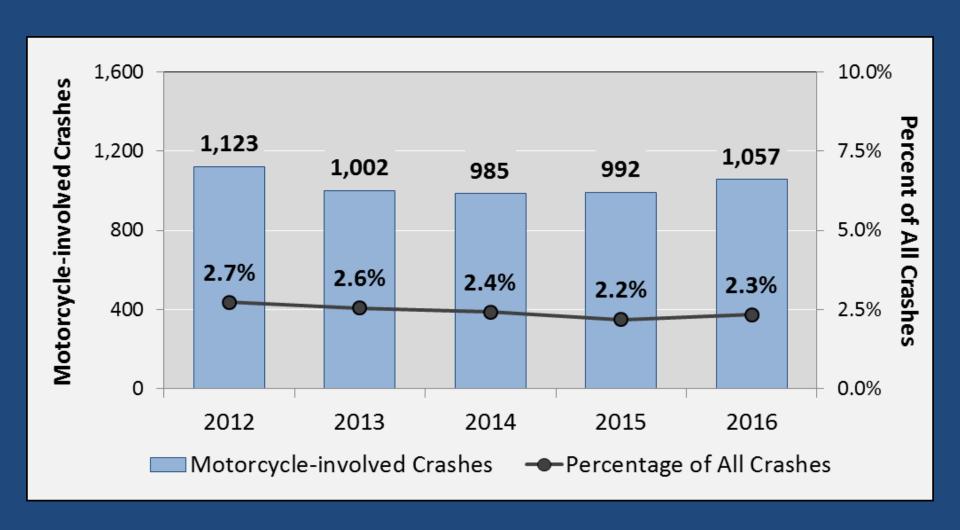
- Crashes and Injuries
- Motorcycle Crash Maps
- Alcohol Involvement
- Driver Crash Rates
- Distribution by Age Group
- Motorcycle Vehicle Types
- Driver Behavior
- Helmet Usage

- All data exclude ATVs
- Data sources:
 - NMDOT Crash Databases
 - Final 2016 data
 - NMDOT Fatal Log
 - Preliminary 2017 data, as of Jan 2018
 - NM MVD License File
 - July 2016
 - NHTSA Product Information
 Catalog and Vehicle Listing (vPIC)

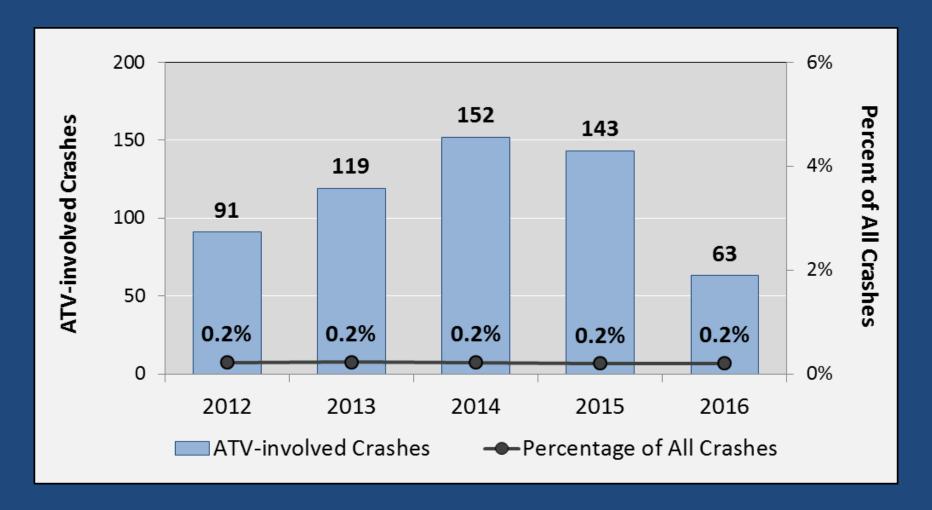
New Mexico Crash Report - NMDOT Crash Database



Motorcycle-involved Crashes



ATV-involved Crashes

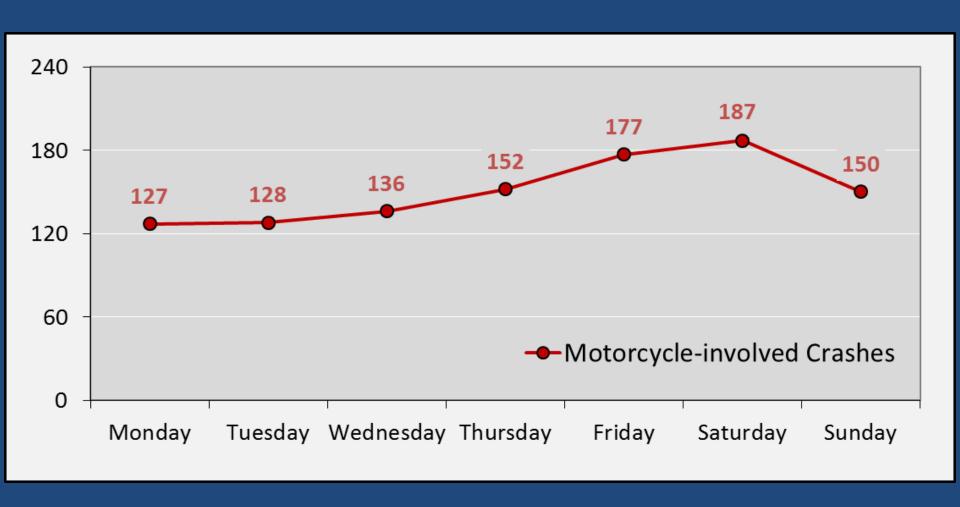


ATVs are excluded from all data in this presentation.

2016	County		Mot	orcycle Cra	shes	
Rank	,	2012	2013	2014	2015	2016
1	Bernalillo	430	373	410	442	456
2	Doña Ana	115	128	92	110	101
3	Santa Fe	80	58	77	61	66
4	Otero	54	51	39	37	48
5	San Juan	48	45	45	39	45
6	Sandoval	41	61	43	50	39
7	Eddy	31	25	34	26	37
8	Chaves	54	21	21	22	28
9	Curry	32	19	20	16	26
10	Valencia	17	26	28	19	25
10	Lea	29	27	26	22	25
12	Lincoln	18	13	17	14	18
13	Rio Arriba	19	8	9	18	17
14	Colfax	18	15	9	9	16
15	Cibola	10	13	13	12	15
16	Grant	19	28	19	13	14
17	McKinley	18	16	18	11	12
18	Sierra	7	4	3	6	9
18	San Miguel	9	12	6	10	9
20	Taos	17	10	6	5	8
Al	Others	57	49	50	50	43
	Total	1,123	1,002	985	992	1,057

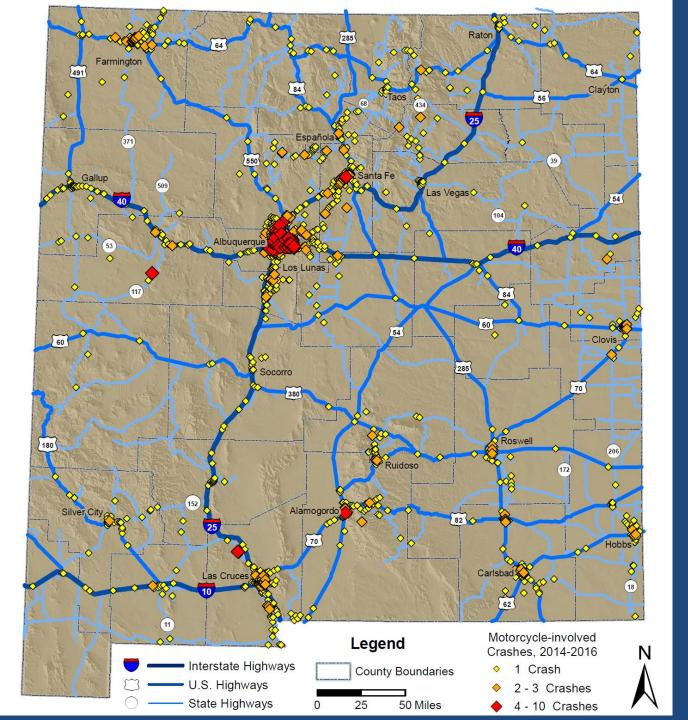
Top 20
Counties
Ranked by
Number of
Motorcycle
Crashes

Motorcycle-involved Crashes by Day of Week, 2016

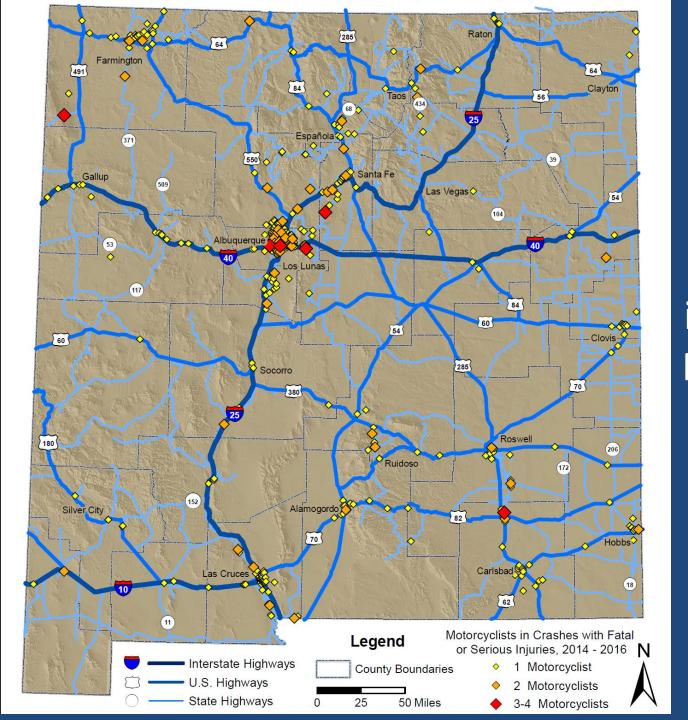


			Motorcycle Crashes, 2016											
	onth and y of Week	EARLY AM (12am - 3am)	DAWN (4am - 7am)	MORNING (8am - 11am)	AFTERNOON (12pm - 3pm)	EVENING (4pm - 7pm)	LATE NIGHT (8pm - 11pm)	Day of Week Total	Month Total					
	Monday	0	0	0	1	1	2	4						
	Tuesday Wednesday	0	1	1	3	1	0	6						
JAR	Thursday	0	0	0	0	0	0	1	39					
	Friday	0	0	2	2	2	1	7	33					
_	Saturday	0	0	1	4	7	1	13						
	Sunday	0	0	0	2	2	0	4						
	Monday	0	0	4	1	4	1	10						
	Tuesday	0	0	2	0	1	0	3						
JAR	Wednesday	0	1	1	7	6	0	15 5	74					
FEBRUARY	Thursday Friday	0	0	0	2	4	2	12	74					
	Saturday	0	0	4	8	5	2	19						
	Sunday	1	0	1	2	4	2	10						
	Monday	0	1	1	0	2	5	9						
	Tuesday	0	0	1	2	5	2	10						
퓿	Wednesday Thursday	0	0	2	6	4	0	12 20	103					
MARCH	Friday	0	0	2 2	8 7	7	2 2	22	103					
	Saturday	0	1	2	5	6	8	22						
	Sunday	2	0	1	3	1	1	8						
	Monday	0	1	2	2	1	1	7						
	Tuesday	0	1	1	6	2	0	10						
늹	Wednesday	0	0	3 2	1 4	7	4 2	13 18	79					
	Thursday Friday	0	0	2 2	0	0	1	3	/9					
	Saturday	0	0	2	2	8	3	15						
	Sunday	1	1	0	7	3	1	13						
	Monday	0	1	7	2	3	3	16						
	Tuesday	1	0	1	5	5	2	14						
>	Wednesday	1	1	1	5	4	2	14	110					
	Thursday Friday	0	0 2	5 4	1 5	7 9	1 4	14 24	118					
	Saturday	0	0	11	7	1	0	19						
	Sunday	2	1	3	5	6	0	17						
	Monday	1	0	2	4	2	2	11						
	Tuesday	2	0	2	2	2	3	11						
¥	Wednesday	0	2	1	3	7	2	15	105					
	Thursday Friday	0 2	0	1 4	6 5	3 7	6 5	16 23	105					
	Saturday	2	2	1	3	3	4	15						
	Sunday	2	0	1	3	4	4	14						
	Monday	0	0	5	2	5	4	16						
	Tuesday	2	1	5	6	3	4	21						
	Wednesday Thursday	0	1 3	1	3	3 2	2 4	11	119					
3	Friday	0	6	3	3	3	2	17	119					
	Saturday	3	0	4	3	5	7	22						
	Sunday	1	1	6	5	3	3	19						
	Monday	0	1	5	1	2	1	10						
	Tuesday Wednesday	0	0	5 2	4	3 5	1	14 17						
	Thursday	3	2	1	2	4	3	15	97					
A	Friday	0	1	2	5	3	1	12						
	Saturday	0	1	4	6	3	2	16						
	Sunday	1	0	0	2	9	1	13						
	Monday Tuesday	0	0	6 2	3	4 2	2	15 12						
3ER	Wednesday	0	1	2	3	5	2	13						
EM	Thursday	2	3	4	5	7	2	23	127					
EPI	Friday	1	0	2	7	15	2	27						
	Saturday	0	0	5	6	8	1	20						
	Sunday	0	2	3	4 5	3	0	17 15						
	Monday Tuesday	1	2	3	2	3	3	15						
#	Wednesday	0	1	1	2	3	1	8						
Ö	Thursday	0	0	0	6	8	1	15	96					
	Friday	0	0	3	2	9	1	15						
	Saturday	0	0	2 4	2 5	1	3	8						
	Sunday Monday	3	0	0	3	2	0	21 9						
[Tuesday	1	1	1	3	3	0	9						
NOVEMBER	Wednesday	0	0	1	4	3	1	9						
VEN.	Thursday	0	1	0	1	4	0	6	58					
NO	Friday	0	0	2	2	4	0	8						
	Saturday Sunday	3	0	1	0 2	2	1 1	8						
	Monday	0	1	1	2	1	0	5						
	Tuesday	0	0	1	1	0	0	2						
HH.	Wednesday	0	1	0	1	0	2	4						
=	Thursday	0	0	2	2 2	1	0	5	36					
CEME						2	0	7						
DECEM	Friday	0	0											
		0 0 1	0 0 1	2	4	2	1	9						

Handout chart:
Motorcycle-involved Crashes
by Month, Day of Week,
and Hour, 2016



Motorcycle-involved
Crashes,
2014-2016



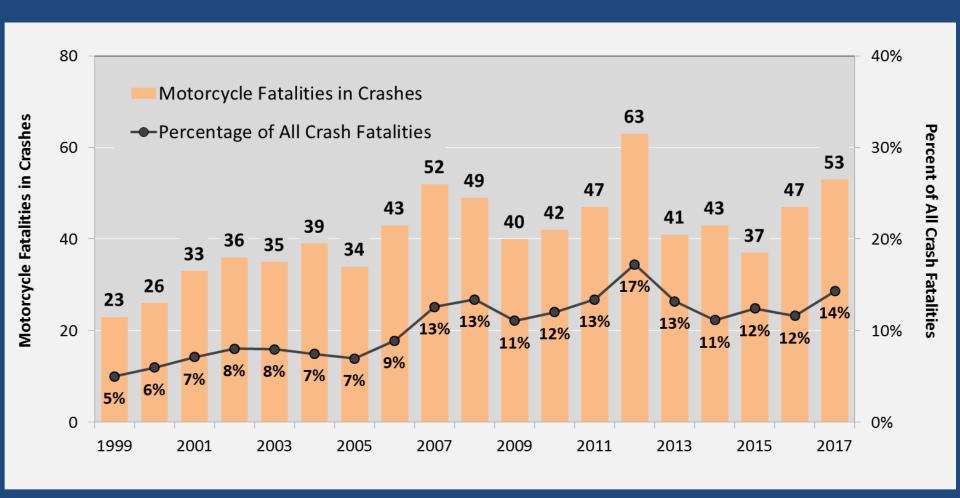
Motorcycle
Riders
in Crashes with
Fatal or Serious
Injuries,
2014-2016

Motorcycle Riders in Crashes by Severity of Injury

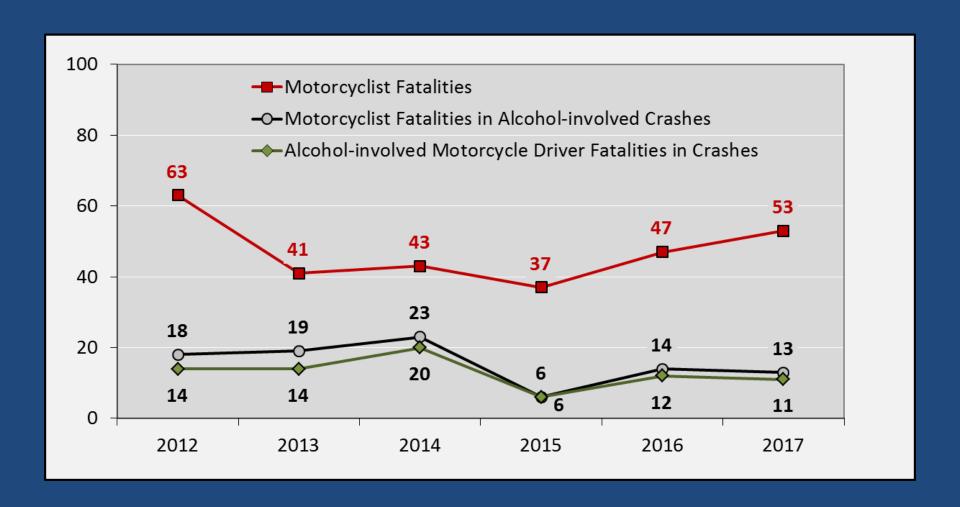
	9	Severity	of Injurie	es to Mo	torcyclis	ts (Drive	rs & Pas	sengers)	in Crash	es		
Year	Fatalities (Class K)		Suspected Serious Injuries (Class A)		Suspected Minor Injuries (Class B)		Possible Injuries (Class C)		No Apparent Injuries (Class O)		Total Motorcycle Riders	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
2012	63	5.0%	204	16.1%	441	34.8%	234	18.5%	324	25.6%	1,266	100%
2013	41	3.6%	170	14.9%	474	41.5%	174	15.2%	282	24.7%	1,141	100%
2014	43	3.9%	173	15.8%	460	41.9%	192	17.5%	230	20.9%	1,098	100%
2015	37	3.3%	145	13.1%	504	45.6%	157	14.2%	262	23.7%	1,105	100%
2016	47	4.0%	158	13.4%	517	43.9%	191	16.2%	265	22.5%	1,178	100%

Comparison Note: For all people in crashes in all vehicles in 2016: 0.4% killed, 1% serious injury, 4% minor injury, 13% possible injury, and 82% uninjured.

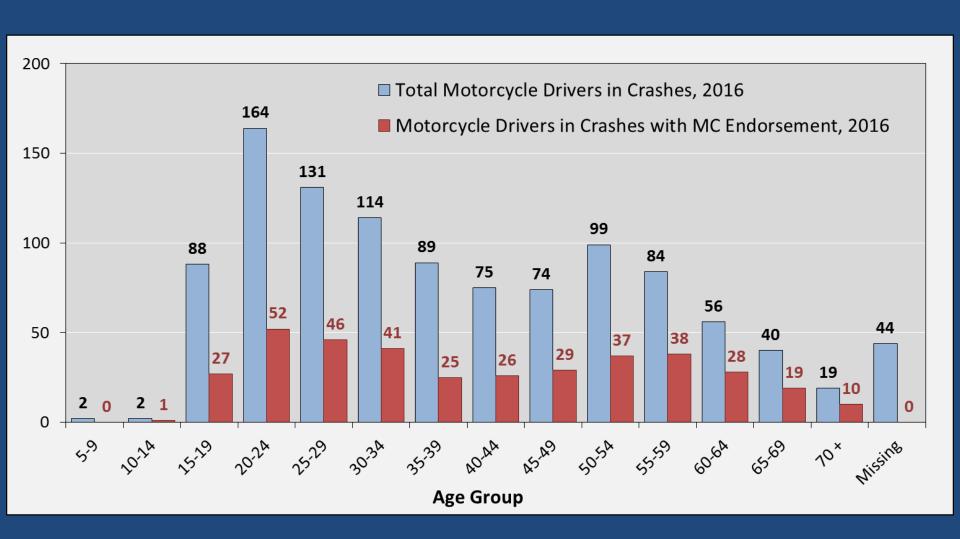
Motorcycle Fatalities in Crashes



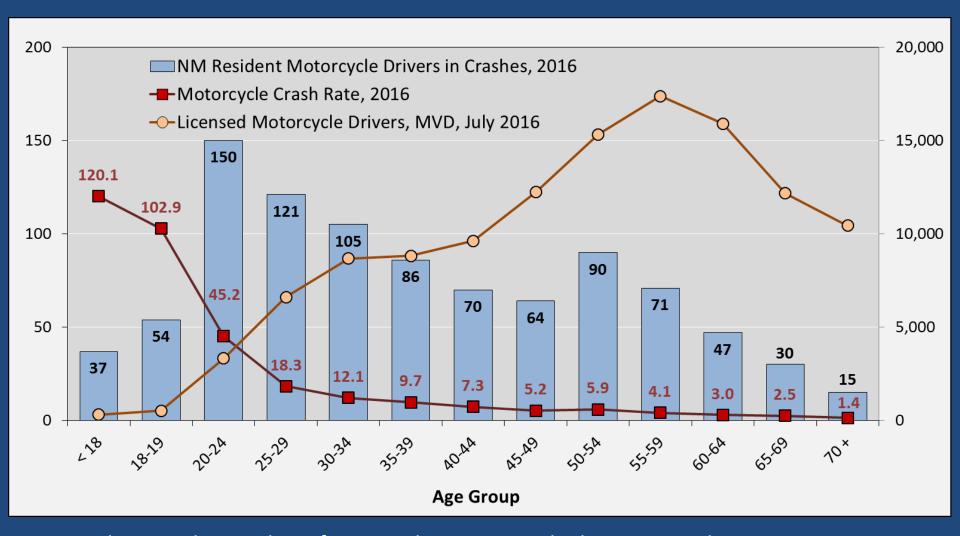
Motorcyclist Fatalities in Crashes



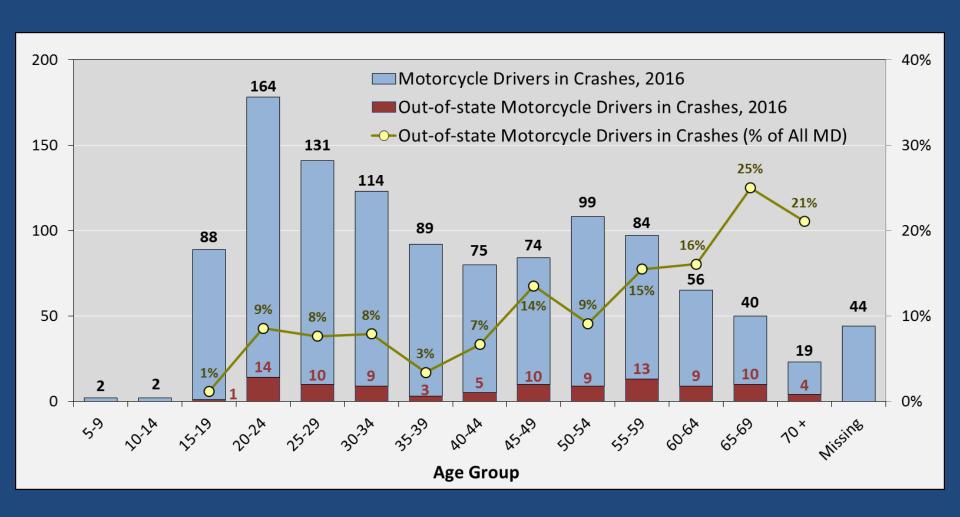
Motorcycle Drivers in Crashes by Age Group and License Type, 2016



Motorcycle Crash Rates by Age Group, 2016



Motorcycle Drivers in Crashes by Age Group and Residence, 2016



Motorcycle Drivers in Crashes by Driver Age Group and Manufacturer, 2012 - 2016

Driver Age	N	/lotorcycle \	/ehicles ir	Crashes	by Driver Age	e Group	and Manufa	cturer, 20	12 - 2016		Total
Group	HARLEY DAVIDSON	YАМАНА	HONDA	SUZUKI	KAWASAKI	BMW	TRIUMPH	DUCATI	VICTORY	OTHER	Vehicles
5-9	0	1	2	0	0	0	0	0	0	0	3
10-14	0	7	9	1	4	0	0	0	0	2	23
15-19	24	70	72	36	61	3	7	4	0	14	291
20-24	85	176	146	110	148	7	15	8	1	31	727
25-29	134	131	135	82	93	8	15	6	1	26	631
30-34	148	73	71	70	52	4	8	7	5	25	463
35-39	173	57	52	36	35	7	3	2	4	12	381
40-44	191	45	51	33	36	8	8	3	3	15	393
45-49	213	44	51	32	15	10	7	1	1	18	392
50-54	285	43	66	21	32	16	7	4	3	22	499
55-59	218	35	53	19	19	16	8	0	0	10	378
60-64	151	19	50	8	17	19	3	0	2	16	285
65-69	69	17	27	4	11	12	4	0	1	6	151
70 +	47	13	27	3	6	6	2	2	1	5	112
Missing	51	26	27	13	17	8	2	2	2	8	156
Total	1,789	757	839	468	546	124	89	39	24	210	4,885

Motorcycle Riders in Crashes by Age Group and Vehicle Type, 2012 - 2016

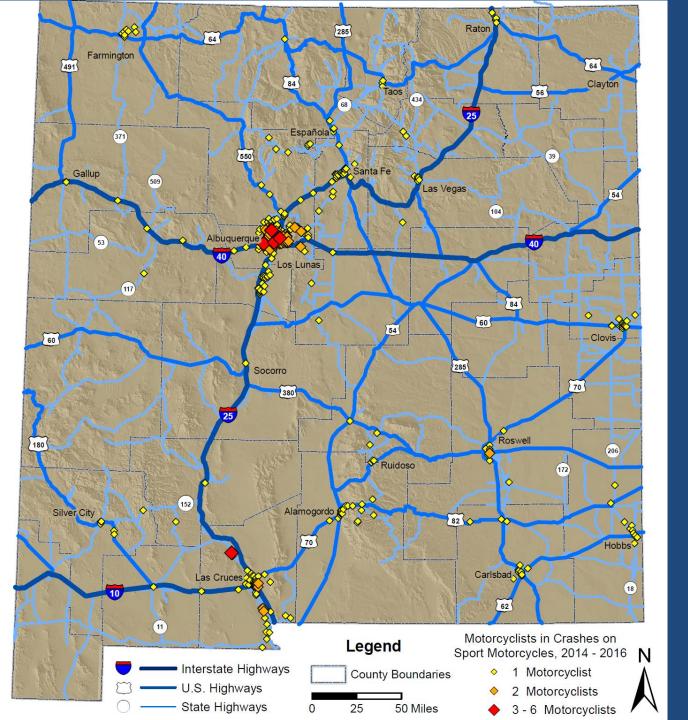
		Motorcyc	le Riders	in Crashe	s by Vehic	le Type a	nd Age Gro	oup, 2012 - 20	16	
Age Group	Cruiser	Touring / Touring Sport	Custom	Sport	Standard	Street	Moped / Scooter	Dirt Bike / Dual Sport / Off-Road	Trike / Unenclosed 3-Wheeled	Total Riders
0-4	0	0	0	1	0	0	0	0	0	1
5-9	1	0	2	0	0	0	1	2	0	6
10-14	2	6	3	3	1	0	4	11	0	30
15-19	23	8	19	142	11	15	13	16	0	247
20-24	52	21	69	366	18	48	21	27	0	622
25-29	62	42	98	229	8	58	20	18	0	535
30-34	49	58	93	127	10	42	15	13	0	407
35-39	42	77	92	65	6	31	16	3	0	332
40-44	49	93	100	44	5	28	12	7	0	338
45-49	50	112	105	36	7	28	10	9	0	357
50-54	57	169	104	13	5	20	17	20	6	411
55-59	51	156	77	10	8	18	8	6	2	336
60-64	31	99	47	4	8	22	10	9	4	234
65-69	19	58	22	4	6	9	4	2	4	128
70 +	16	35	15	2	5	5	6	2	2	88
Missing	8	33	23	39	4	10	2	6	0	125
Riders	512	967	869	1,085	102	334	159	151	18	4,197

Out-of-State Motorcycle Drivers in Crashes by Age Group and Vehicle Type, 2012 - 2016

	Out-of-	-State Mot	orcycle D	rivers i	n Crashes b	y Vehicl	e Type and	d Age Group,	2012 - 2016	
Age Group	Cruiser	Touring / Touring Sport	Custom	Sport	Standard	Street	Moped / Scooter	Dirt Bike / Dual Sport / Off-Road	Trike / Unenclosed 3-Wheeled	Total Drivers
15-19	0	0	1	1	0	0	0	0	0	2
20-24	5	1	3	23	2	3	1	1	0	39
25-29	6	3	6	13	2	3	0	1	0	34
30-34	1	7	9	8	0	0	0	3	0	28
35-39	4	5	6	4	1	1	0	1	0	22
40-44	3	11	5	2	0	0	0	0	0	21
45-49	2	17	7	7	1	2	0	0	0	36
50-54	4	20	10	1	0	4	1	2	1	43
55-59	3	23	5	3	1	5	1	1	0	42
60-64	1	28	3	0	2	2	0	2	1	39
65-69	4	16	2	1	1	1	1	1	2	29
70 +	2	8	2	1	1	2	2	0	1	19
Missing	0	2	1	0	0	0	0	0	0	3
Drivers	35	141	60	64	11	23	6	12	5	357

Motorcycle Riders in Crashes by Severity of Injury and Vehicle Type, 2012 - 2016

	Sev	erity of Inj	juries to l	Motorcycl	e Riders i	n Crashes	, 2012 - 2	016		
Vehicle Type	Fatalities (Class K)		Suspected Serious Injuries (Class A)		Other Injuries (Class B and C)		No Apparent Injuries (Class O)		Total Motorcycle Riders	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Cruiser	15	3%	76	15%	313	61%	108	21%	512	100%
Touring / Touring Sport	50	5%	144	15%	532	55%	241	25%	967	100%
Custom	41	5%	144	17%	489	56%	195	22%	869	100%
Sport	51	5%	156	14%	648	60%	230	21%	1,085	100%
Standard	7	7%	20	20%	52	51%	23	23%	102	100%
Street	11	3%	50	15%	198	59%	75	22%	334	100%
Moped / Scooter	1	1%	12	8%	119	75%	27	17%	159	100%
Dirt / Dual / Off-Road	3	2%	28	19%	95	63%	25	17%	151	100%
Three-Wheeled	3	17%	2	11%	5	28%	8	44%	18	100%
Total Riders	182	4%	632	15%	2,451	58%	932	22%	4,197	100%



Motorcycle
Riders
in Crashes
on Sport
Motorcycles,
2014-2016

Top Contributing Factor of Motorcycle Driver	Motorcycl in Cra		Motorcycle Drivers in Crashes with Fatal or Serious Injuries			
, , , , , , , , , , , , , , , , , , ,	Count	Percent	Count	Percent		
Behavior	596	55.1%	128	69.0%		
Alcohol/Drug Involved	69	6.4%	32	17.1%		
Avoid No Contact - Other	40	3.7%	3	1.6%		
Avoid No Contact - Vehicle	36	3.3%	1	0.5%		
Disregarded Traffic Signal	16	1.5%	4	2.1%		
Driver Inattention	99	9.2%	9	4.8%		
Drove Left Of Center	10	0.9%	4	2.1%		
Excessive Speed	126	11.7%	42	22.5%		
Failed to Yield Right of Way	28	2.6%	5	2.7%		
Following Too Closely	40	3.7%	5	2.7%		
Improper Backing	5	0.5%	0	0.0%		
Improper Lane Change	8	0.7%	2	1.1%		
Improper Overtaking	16	1.5%	4	2.1%		
Made Improper Turn	10	0.9%	1	0.5%		
Other Improper Driving	53	4.9%	9	4.8%		
Passed Stop Sign	5	0.5%	1	0.5%		
Speed Too Fast for Conditions	29	2.7%	6	3.2%		
Vehicle Skidded Before Brake	6	0.6%	0	0.5%		
Vehicle	23	2.1%	1	0.0%		
Inadequate Brakes	4	0.4%	0	0.0%		
Defective Steering	3	0.3%	0	0.0%		
Defective Tires	3	0.3%	0	0.0%		
Other Mechanical Defect	13	1.2%	1	0.0%		
Environmental	14	1.3%	2	1.1%		
Road Defect	13	1.2%	1	0.5%		
Traffic Control Not Functioning	1	0.1%	1	0.5%		
Other	448	41.4%	56	29.9%		
None / No Driver Error	386	35.7%	46	24.6%		
Missing Data	62	5.7%	10	5.3%		
Total Drivers	1,081	100.0%	187	100.0%		

Motorcycle Driver Behavior, 2016

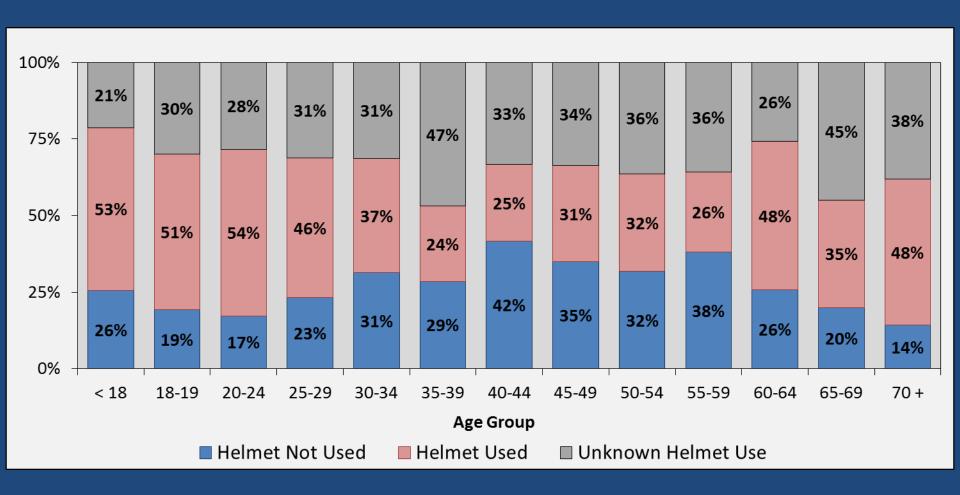
Top Contributing Factor of Non-Motorcycle Driver	Non-Motorcy	-	Non-Motorcycle Drivers in Crashes with Fatal or Serious MC Injuries			
	Count	Percent	Count	Percent		
Behavior	380	58.2%	34	56.7%		
Alcohol/Drug Involved	15	2.3%	3	5.0%		
Avoid No Contact - Other	8	1.2%	0	0.0%		
Avoid No Contact - Vehicle	9	1.4%	1	1.7%		
Disregarded Traffic Signal	17	2.6%	1	1.7%		
Driver Inattention	88	13.5%	3	5.0%		
Drove Left Of Center	6	0.9%	0	0.0%		
Excessive Speed	9	1.4%	1	1.7%		
Failed to Yield Right of Way	152	23.3%	20	33.3%		
Following Too Closely	20	3.1%	0	0.0%		
Improper Backing	6	0.9%	0	0.0%		
Improper Lane Change	10	1.5%	0	0.0%		
Improper Overtaking	3	0.5%	0	0.0%		
Made Improper Turn	20	3.1%	3	5.0%		
Other Improper Driving	8	1.2%	2	3.3%		
Passed Stop Sign	8	1.2%	0	0.0%		
Pedestrian Error	1	0.2%	0	0.0%		
Speed Too Fast for Conditions	0	0.0%	0	0.0%		
Vehicle	6	0.9%	1	1.7%		
Inadequate Brakes	1	0.2%	0	0.0%		
Defective Tires	0	0.0%	0	0.0%		
Other Mechanical Defect	5	0.8%	1	1.7%		
Environmental	2	0.3%	1	1.7%		
Traffic Control Not Functioning	2	0.3%	1	1.7%		
Other	265	40.6%	24	40.0%		
None / No Driver Error	223	34.2%	20	33.3%		
Missing Data	42	6.4%	4	6.7%		
Total Drivers	653	100.0%	60	100.0%		

Behavior of Non-Motorcycle Drivers in Motorcycle Crashes, 2016

Motorcycle Riders in Crashes by Helmet Usage, 2012-2016

Vaan				Total Motorcyclists				
Year	Y	es	N	lo	Missir	ng Data	in Cr	ashes
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
2012	549	43%	402	32%	315	25%	1,266	100%
2013	530	46%	397	35%	214	19%	1,141	100%
2014	375	34%	312	28%	411	37%	1,098	100%
2015	358	32%	284	26%	463	42%	1,105	100%
2016	447	38%	315	27%	416	35%	1,178	100%

Motorcycle Riders in Crashes by Helmet Usage and Age Group, 2016



Motorcycle Riders in Crashes by Helmet Usage and Severity of Injury, 2016

			Total					
Severity of Injury (Injury Class)	Yes		No		Missing Data		Motorcyclists	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent
Fatalities (K)	26	5.8%	21	6.7%	0	0.0%	47	4%
Suspected Serious Injuries (A)	59	13.2%	51	16.2%	48	11.5%	158	13%
Suspected Minor Injuries (B)	193	43.2%	154	48.9%	170	40.9%	517	44%
Possible Injuries (C)	94	21.0%	40	12.7%	57	13.7%	191	16%
No Apparent Injuries (O)	75	16.8%	49	15.6%	141	33.9%	265	22%
Total Motorcyclists	447	100.0%	315	100.0%	416	100.0%	1,178	100%

Motorcyclist Fatalities in Crashes by Helmet Usage, 2012-2017

			Motorcyclist Fatalities						
Year	Υ	es	No		Missir	ng Data	in Crashes		
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	
2012	10	16%	49	78%	4	6%	63	100%	
2013	7	17%	34	83%	0	0%	41	100%	
2014	8	19%	35	81%	0	0%	43	100%	
2015	15	41%	22	59%	0	0%	37	100%	
2016	26	55%	21	45%	0	0%	47	100%	
2017	18	34%	32	60%	3	6%	53	100%	

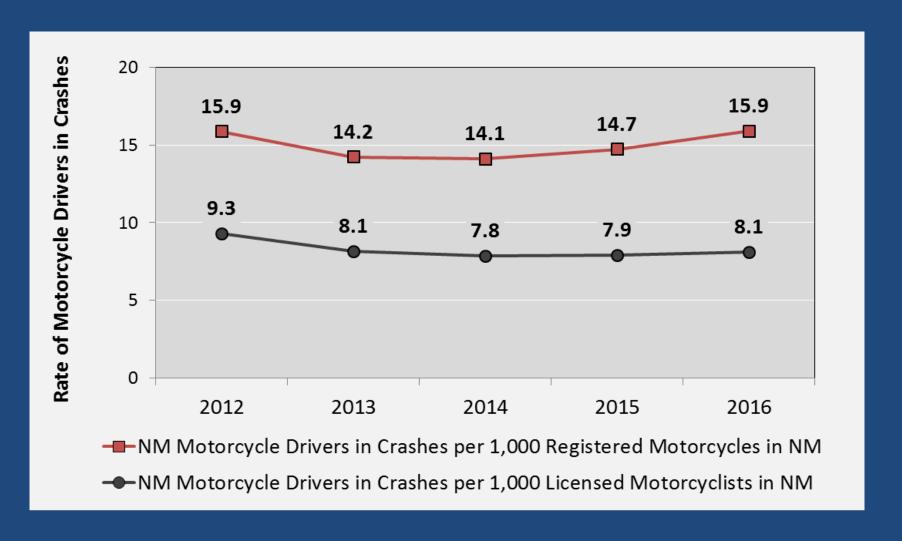
Data from 2017 is preliminary.

Age	Helmeted Motorcyclist Fatalities in Crashes								
Group	2012	2013	2014	2015	2016	2017			
15-19	0	0	2	0	2	1			
20-24	0	0	2	2	3	4			
25-29	1	1	1	1	8	1			
30-34	1	2	0	2	2	1			
35-39	2	0	0	1	1	0			
40-44	2	0	0	0	0	4			
45-49	1	0	0	3	2	0			
50-54	0	1	3	1	0	1			
55-59	0	1	0	1	2	0			
60-64	2	0	0	2	2	1			
65-69	0	0	0	2	4	2			
70+	1	2	0	0	0	3			
Total	10	7	8	15	26	18			

Helmeted Motorcyclist Fatalities in Crashes, 2012-2017

Vehicle Type	Helmeted Motorcycle Fatalities						
venicle Type	2012	2013	2014	2015	2016		
Cruiser	0	1	0	1	1		
Touring / Touring Sport	3	0	0	2	3		
Custom	1	1	0	2	1		
Sport	4	2	4	3	12		
Standard	0	1	0	2	2		
Street	1	0	0	2	1		
Dirt / Dual / Off-Road	0	0	1	1	0		
Trike / Enclosed 3-Wheeled	0	0	0	0	2		
Missing Data	1	2	3	2	4		
Total	10	7	8	15	26		

Motorcycle Driver Crash Rates





Shiprock, NM. Photo by Pierce Martin, CC BY 2.0.





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Annually Published Motorcycle Crash Data Website: tru.unm.edu