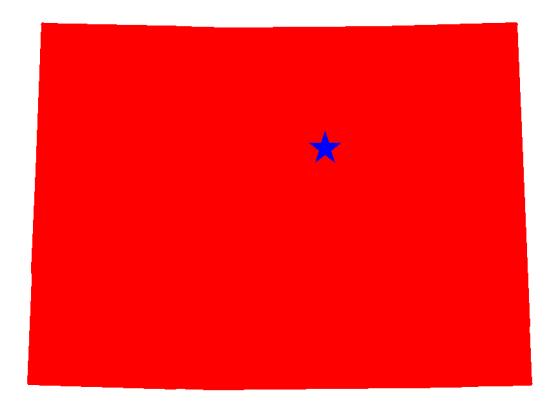


# Traffic Safety Facts Colorado 2005-2009



This Report Contains Data From the Following Sources:

Fatality Data - NCSA Fatality Analysis Reporting System (FARS): 2005-2008 Final File and 2009 Annual Report File (ARF) Observed Safety Belt Data - NCSA National Occupant Protection Use Survey (NOPUS) and the Colorado State Survey Vehicle Miles of Travel Data and Motorcycle Registrations - Federal Highway Administration (FHWA) Population Data - U.S. Bureau of the Census





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#### U.S. Department of Transportation National Highway Traffic Safety Administration

### Traffic Safety Performance (Core Outcome) Measures\* For Colorado

Core Outcome Measure	00			Year		
Core Outcome Measure	<b>5</b>	2005	2006	2007	2008	2009
Traffic Fatalities	Total	606	535	554	548	465
	Rural	333	306	316	296	252
	Urban	273	229	238	252	213
	Unknown	0	0	0	0	0
Fatalities Per 100 Million Vehicle Miles Driven	Total	1.26	1.10	1.14	1.15	1.00
	Rural	2.23	1.98	2.02	1.89	1.73
	Urban	0.83	0.69	0.72	0.78	0.67
Passenger Vehicle Occupant Fatalities (All Seat Positions)	Total	444	368	367	378	304
(All Seat Fositions)	Restrained	188	139	161	186	125
	Unrestrained	250	226	193	173	168
	Unknown	6	3	13	19	11
Alcohol-Impaired Driving Fatalities (BAC=.08+	<b>)</b> **	206	179	167	176	158
Speeding-Related Fatalities		204	182	224	210	171
Motorcyclist Fatalities	Total	87	74	90	98	88
	Helmeted	4	13	33	30	27
	Unhelmeted	83	61	57	68	60
	Unknown	0	0	0	0	1
Drivers Involved in Fatal Crashes	Total	847	721	789	712	653
	Aged Under 15	1	2	2	1	1
	Aged 15-20	107	97	85	86	63
	Aged Under 21	108	99	87	87	64
	Aged 21 and Over	727	614	696	617	586
	Unknown Age	12	8	6	8	3
Pedestrian Fatalities		48	59	58	43	47

\*These Performance Measures Were Developed By The National Highway Traffic Safety Administration (NHTSA) and the Governors Highway Safety Association (GHSA) (See Publication: DOT HS 811 025) \*\*Based on the BAC of All Involved Drivers and Motorcycle Riders (Operators) Only





### Fatality Rates: Colorado , U.S. and Best State

	Year	Fatalities	Total Vehicle Miles Traveled (Millions)	Fatalities Per 100 Million Vehicle Miles Traveled	Total Population	Fatalities Per 100,000 Population
2005	Colorado	606	47,962	1.26	4,660,780	13.00
	US	43,510	2,989,430	1.46	295,753,151	14.71
	Best State*			0.80		6.83
2006	Colorado	535	48,641	1.10	4,753,044	11.26
	US	42,708	3,014,371	1.42	298,593,212	14.30
	Best State*			0.78		6.34
2007	Colorado	554	48,713	1.14	4,842,259	11.44
	US	41,259	3,031,124	1.36	301,579,895	13.68
	Best State*			0.79		6.54
2008	Colorado	548	47,860	1.15	4,935,213	11.10
	US	37,423	2,976,528	1.26	304,374,846	12.30
	Best State*			0.67		5.56
2009	Colorado	465	46,276	1.00	5,024,748	9.25
	US	33,808	2,953,501	1.14	307,006,550	11.01
	Best State*			0.61		4.84

\*State (or States) With Lowest Rates: Lowest VMT and Population Rates Could Be in Different States



# Fatalities By The Highest Blood Alcohol Concentration (BAC) in the Crash\*\*: Colorado , U.S. and Best State (Old Definition)

	Year		Highest BAC level in the Crash								
i Gai		Total Fatalities in all Crashes	Number	Percent	Per 100 Million VMT	Number	Percent	Per 100 Million VMT			
2005	Colorado	606	252	42	0.53	222	37	0.46			
	US	43,510	17,590	40	0.59	15,102	35	0.51			
	Best State*			14	0.16		12	0.14			
2006	Colorado	535	227	42	0.47	193	36	0.40			
	US	42,708	17,738	42	0.59	15,144	35	0.50			
	Best State*			24	0.26		20	0.22			
2007	Colorado	554	224	40	0.46	195	35	0.40			
	US	41,259	17,158	42	0.57	14,603	35	0.48			
	Best State*			24	0.27		21	0.23			
2008	Colorado	548	220	40	0.46	190	35	0.40			
	US	37,423	15,449	41	0.52	13,258	35	0.45			
	Best State*			21	0.21		16	0.16			
2009	Colorado	465	198	43	0.43	178	38	0.38			
	US	33,808	14,188	42	0.48	12,233	36	0.41			
	Best State*			23	0.22		18	0.16			

\*State (or States) With Lowest Percents: Lowest Percents Could Be in Different States

\*\*Based on the BAC of All Involved Drivers, Motorcycle Riders (Operators), Pedalcyclists and Pedestrians



#### Alcohol-Impaired Driving Fatalities\*\*: Colorado , U.S. and Best State (New Definition)

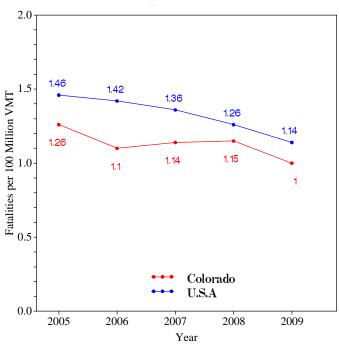
	Year	Total	Alcohol-Impaired Driving Fatalities (BAC = .08+)					
		Fatalities in all Crashes	Number	Percent	Per 100 Million VMT			
2005	Colorado	606	206	34	0.43			
	US	43,510	13,582	31	0.45			
	Best State*			12	0.13			
2006	Colorado	535	179	33	0.37			
	US	42,708	13,491	32	0.45			
	Best State*			18	0.20			
2007	Colorado	554	167	30	0.34			
	US	41,259	13,041	32	0.43			
	Best State*			19	0.21			
2008	Colorado	548	176	32	0.37			
	US	37,423	11,711	31	0.39			
	Best State*			16	0.16			
2009	Colorado	465	158	34	0.34			
	US	33,808	10,839	32	0.37			
	Best State*			16	0.15			

\*State (or States) With Lowest Percents: Lowest Percents Could Be in Different States
\*\*Based on the BAC of All Involved Drivers and Motorcycle Riders (Operators) Only



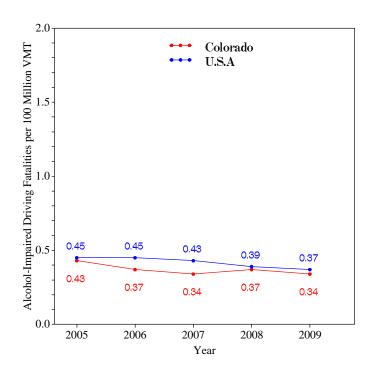


### Fatalities per 100 Million VMT



Alcohol-Impaired Driving Fatalities per 100 Million VMT

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#### Blood Alcohol Concentration (BAC) Reporting Rates For Drivers/Motorcycle Riders (Operators) Involved in Fatal Crashes: Colorado, U.S. and Best State

		Driv	Surviving ers/Motor Riders	•	Killed [	Orivers/Mo Riders	otorcycle	Total D	Total Drivers/Motorcycle Riders			
Year		With Blood Alcohol Concentration (BAC) Results Reported to FARS			With Blood Alcohol Concentration (BAC) Results Reported to FARS			With I Alco Concer (BA Res Repor	ohol ntration AC) ults ted to			
		Total	Number	Percent	Total	Number Percent		Total	Number	Percent		
2005	Colorado	453	32	7	394	259	66	847	291	34		
	US	31,729	7,415	23	27,491	18,773	68	59,220	26,188	44		
	Best State*			77			98			84		
2006	Colorado	384	55	14	337	243	72	721	298	41		
	US	30,498	7,482	25	27,348	18,911	69	57,846	26,393	46		
	Best State*			81			99			85		
2007	Colorado	437	37	8	352	308	88	789	345	44		
	US	29,449	7,631	26	26,570	19,434	73	56,019	27,065	48		
	Best State*			82			100			84		
2008	Colorado	351	38	11	361	289	80	712	327	46		
	US	26,162	7,656	29	24,254	18,415	76	50,416	26,071	52		
	Best State*			81			99			85		
2009	Colorado	341	37	11	312	248	79	653	285	44		
	US	23,432	6,372	27	21,798	15,505	71	45,230	21,877	48		
	Best State*			86			97			90		

\*State (or States) With Highest Percents: Highest Percents Could Be in Different States



#### Daytime Front Seat (Outboard Only) Passenger Vehicle Occupants, Aged 5 and Over, by Restraint Use:

#### Fatalities and Observed Colorado, U.S. and Best State

	Year	Fatalities - Restrained**	Observed - Restrained***
	Teal	Percent	Percent
2005	Colorado	55	79
	US	55	82
	Best State*	88	95
2006	Colorado	47	80
	US	55	81
	Best State*	100	96
2007	Colorado	59	81
	US	57	82
	Best State*	82	98
2008	Colorado	62	82
	US	56	83
	Best State*	78	97
2009	Colorado	58	81
	US	58	84
	Best State*	77	98

\*State With Highest Percent. Fatal Crash and Observed Percents Can Be Different States \*\*Percent Based Only Where Restraint Use Was Known

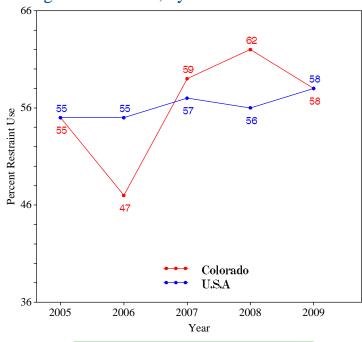
\*\*\*USA Data: National Occupant Protection Use Survey. Colorado Data: State Survey

Note: The Purpose of this Table is to Compare (as closely as possible) the Use of Restraint Systems by Fatally Injured Occupants with Occupants in all Driving Situations





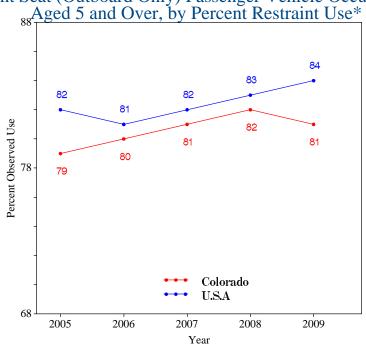
Daytime Front Seat (Outboard Only) Passenger Vehicle Occupant Fatalities, Aged 5 and Over, by Percent Restraint Use\*



\*Percent Based Only Where Restraint Use Was Known

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Daytime Front Seat (Outboard Only) Passenger Vehicle Occupants Observed,



\*USA Data: National Occupant Protection Use Survey. Colorado Data: State Survey



# Passenger Vehicle Occupant Fatalities Age 5 and Above by Restraint Use and Lives Saved Estimates

		Fata	alities Age 5 ar	nd Above		Lives Saved Estimates**		
Year	Total	Restrained	Unrestrained	Unknown Restraint Use	Percent Known Restrained*	Lives Saved at Current Belt Use	Additional Lives Savable at 100% Belt Usage	
2005	433	179	248	6	42	216	87	
2006	362	134	225	3	37	168	74	
2007	364	159	192	13	45	201	82	
2008	371	181	171	19	51	233	88	
2009	300	125	164	11	43	163	68	

\*Percent Based Only Where Restraint Use Was Known

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#### Passenger Vehicle Occupant Fatalities Age 4 and Under by Restraint Use and Lives Saved Estimates

		Fat	alities Age 4 ar	nd Under		Lives Saved Estimates**
Year	Total Restrained Unrestraine		Unrestrained	Unknown Restraint Use	Percent Known Restrained*	Lives Saved at Current Seat Belt and Child Safety Seat Usage
2005	10	9	1	0	90	10
2006	6	5	1	0	83	8
2007	3	2	1	0	67	2
2008	7	5	2	0	71	8
2009	4	0	4	0	0	0

\*Percent Based Only Where Restraint Use Was Known

\*\*Lives Saved Estimates

<sup>\*\*</sup>Lives Saved Estimates (Sum of columns may not equal other published numbers due to rounding)



# Motorcyclist Fatalities by Helmet Use and Lives Saved Estimates

			Fatalities	1		Lives Saved Estimates**		
Year	Total	Helmeted	Unhelmeted	Unknown Helmet Ihelmeted Use		Lives Saved at Current Helmet Use	Additional Lives Savable at 100% Helmet Usage	
2005	87	4	83	0	5	2	31	
2006	74	13	61	0	18	8	23	
2007	90	33	57	0	37	20	21	
2008	98	30	68	0	31	18	26	
2009	88	27	60	1	31	16	23	

\*Percent Based Only Where Helmet Use Was Known

<sup>\*\*</sup>Lives Saved Estimates (Sum of columns may not equal other published numbers due to rounding)



## Fatalities by Person Type

	Porcen Type	20	05	20	06	20	07	20	08	20	09
	Person Type	#	%*	#	%*	#	%*	#	%*	#	%*
Occupants	Passenger Car	252	42	180	34	189	34	178	32	138	30
	Light Truck - Pickup	85	14	83	16	73	13	80	15	58	12
	Light Truck - Utility	89	15	79	15	84	15	88	16	89	19
	Light Truck - Van	18	3	25	5	21	4	32	6	19	4
	Light Truck - Other	0	0	1	0	0	0	0	0	0	0
	Large Truck	16	3	19	4	22	4	10	2	10	2
	Other/Unknown Occupants	2	0	2	0	1	0	0	0	2	0
	Total Occupants	462	76	389	73	390	70	388	71	316	68
Motorcyclists	Total Motorcyclists	87	14	74	14	90	16	98	18	88	19
Nonoccupants	Pedestrian	48	8	59	11	58	10	43	8	47	10
	Bicyclist and Other Cyclist	8	1	10	2	11	2	12	2	10	2
	Other/Unknown Nonoccupants	1	0	3	1	5	1	7	1	4	1
	Total Nonoccupants	57	9	72	13	74	13	62	11	61	13
Total	Total	606	100	535	100	554	100	548	100	465	100

\*Sum of Percents May Not = 100 Due to Individual Cell Rounding



# Fatalities by Crash Type

Crash Type	2005	2006	2007	2008	2009
Total Fatalities (All Crashes)*	606	535	554	548	465
- (1) Single Vehicle	346	315	306	314	279
- (2) Involving a Large Truck	68	67	82	68	40
- (3) Involving Speeding	204	182	224	210	171
- (4) Involving a Rollover	256	227	225	204	186
- (5) Involving a Roadway Departure	364	306	307	323	274
- (6) Involving an Intersection (or Intersection Related)	149	119	149	125	98

<sup>(1)</sup> Crash Involved Only One Coded Vehicle

<sup>(2)</sup> Crash Involved at Least One Large Truck

<sup>(3)</sup> Crash Involved at Least One Vehicle Speeding

<sup>(4)</sup> Crash Involved at Least One Vehicle That Rolled Over

<sup>(5)</sup> Crash Involved at Least One Vehicle That Departed the Roadway (FHWA Definition)

<sup>(6)</sup> Crash Occured Within an Intersection or Within the Approach to an Intersection

<sup>\*</sup>A Fatality Can Be in More Than One Category. Therefore Sum of the Individual Cells Will Not Equal the Total Due to Double Counting



## Motorcyclist Fatalities by Age

Year			A	ge			
i eai	<20	20-29	0-29 30-39 40-4		50-59	>59	Total
2005	2	18	19	18	21	9	87
2006	3	13	13	25	13	7	74
2007	4	15	15	27	18	11	90
2008	5	25	17	22	19	10	98
2009	3	19	9	17	25	15	88

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#### Motorcyclist Fatalities Per 100,000 Registered Motorcycles

Year	Motorcyclist Fatalities	Total Motorcycle Registrations*	Motorcyclist Fatalities Per 100,000 Motorcycle Registrations
2005	87	117,159	74.26
2006	74	117,159	63.16
2007	90	111,468	80.74
2008	98	118,486	82.71
2009	88	94,746	92.88

\*Data Source: FHWA



## Fatalities by Person Type and Race/Hispanic Origin

Person Type k	2005	2006	2007	2008	
Occupants (All Vehicle Types)	Hispanic	103	87	92	115
	White Non-Hispanic	417	334	357	340
	Black, Non-Hispanic	16	18	24	11
	American Indian, Non-Hispanic/Unknown	4	8	3	5
	Asian, Non-Hispanic/Unknown	0	1	0	3
	All Other Non-Hispanic or Race	7	12	4	12
	Unknown Race and Unknown Hispanic	2	3	0	0
	Total	549	463	480	486
Non-Occupants (Pedestrians, Pedalcyclists and Other/Unknown NonOccupants)					
	Hispanic	14	25	22	14
	White Non-Hispanic	35	43	46	38
	Black, Non-Hispanic	5	2	4	6
	American Indian, Non-Hispanic/Unknown	2	2	0	3
	Asian, Non-Hispanic/Unknown	0	0	0	1
	All Other Non-Hispanic or Race	0	0	2	0
	Unknown Race and Unknown Hispanic	1	0	0	0
	Total	57	72	74	62
Total	606	535	554	548	

2009 Race/Hispanic Origin Data is Not Yet Complete





## 5 Year Trend For The Top 10 Counties of 2009 - Fatalities

Counties by 2009 Ranking		Fatalities					Percent of Total				
		2005	2006	2007	2008	2009	2005	2006	2007	2008	2009
1	El Paso County	47	31	39	47	42	8	6	7	9	9
2	Weld County	46	38	47	45	39	8	7	9	8	8
3	Denver County	53	35	39	46	36	9	7	7	8	8
4	Arapahoe County	35	40	36	44	29	6	7	7	8	6
5	Jefferson County	47	45	39	39	28	8	8	7	7	6
6	Larimer County	27	28	25	26	27	4	5	5	5	6
7	Adams County	54	38	39	39	22	9	7	7	7	5
8	Pueblo County	16	15	23	26	22	3	3	4	5	5
9	Boulder County	23	18	15	23	19	4	3	3	4	4
10	Mesa County	19	24	29	14	17	3	4	5	3	4
Sub Total 1.*	Top Ten Counties	374	318	332	356	281	62	59	60	65	61
Sub Total 2.**	All Other Counties	230	217	218	190	183	38	41	40	35	39
Total	All Counties	604	535	550	546	464	100	100	100	100	100

\*This Sub Total is the Total for the Top Ten Counties

\*\*This Sub Total is the Total for all Counties Outside the Top Ten



### 5 Year Trend For The Top 10 Counties of 2009 - Fatalities Year to Year Percent Change

Counties by 2009 Ranking		Fatalities					Percent Change From Previous Year			
		2005	2006	2007	2008	2009	2006	2007	2008	2009
1	El Paso County	47	31	39	47	42	-34	26	21	-11
2	Weld County	46	38	47	45	39	-17	24	-4	-13
3	Denver County	53	35	39	46	36	-34	11	18	-22
4	Arapahoe County	35	40	36	44	29	14	-10	22	-34
5	Jefferson County	47	45	39	39	28	-4	-13	0	-28
6	Larimer County	27	28	25	26	27	4	-11	4	4
7	Adams County	54	38	39	39	22	-30	3	0	-44
8	Pueblo County	16	15	23	26	22	-6	53	13	-15
9	Boulder County	23	18	15	23	19	-22	-17	53	-17
10	Mesa County	19	24	29	14	17	26	21	-52	21
Sub Total 1.*	Top Ten Counties	374	318	332	356	281	-15	4	7	-21
Sub Total 2.**	All Other Counties	230	217	218	190	183	-6	0	-13	-4
Total	All Counties	604	535	550	546	464	-11	3	-1	-15

\*This Sub Total is the Total for the Top Ten Counties

\*\*This Sub Total is the Total for all Counties Outside the Top Ten



#### Median Rate for all U.S. Counties: 18.23

5 Year Trend For The Top 10 Counties of 2009 - Fatality Rates

Counties by 2009 Ranking		Fatalities Per 100,000 Population							
		2005	2006	2007	2008	2009			
1	Kiowa County	72.20	147.06	153.26	314.47	323.10			
2	Baca County	125.66	204.50	26.04	132.21	161.16			
3	Lincoln County	73.11	18.77	19.06	96.01	154.77			
4	Mineral County	650.05	0.00	207.68	105.26	109.65			
5	Custer County	51.56	51.77	50.45	50.71	100.00			
6	Costilla County	59.35	0.00	30.28	92.42	95.30			
7	Sedgwick County	80.94	0.00	42.92	0.00	85.98			
8	Huerfano County	51.53	77.18	64.89	51.51	79.39			
9	Jackson County	70.32	0.00	146.09	223.88	73.05			
10	Ouray County	0.00	142.21	45.45	43.59	65.19			
Sub Rate 1.*	Top Ten Counties	119.63	110.25	90.15	94.79	111.62			
Sub Rate 2.**	All Other Counties	12.40	10.26	10.99	10.53	8.63			
Total Rate	All Counties	13.10	11.38	11.49	11.19	9.34			

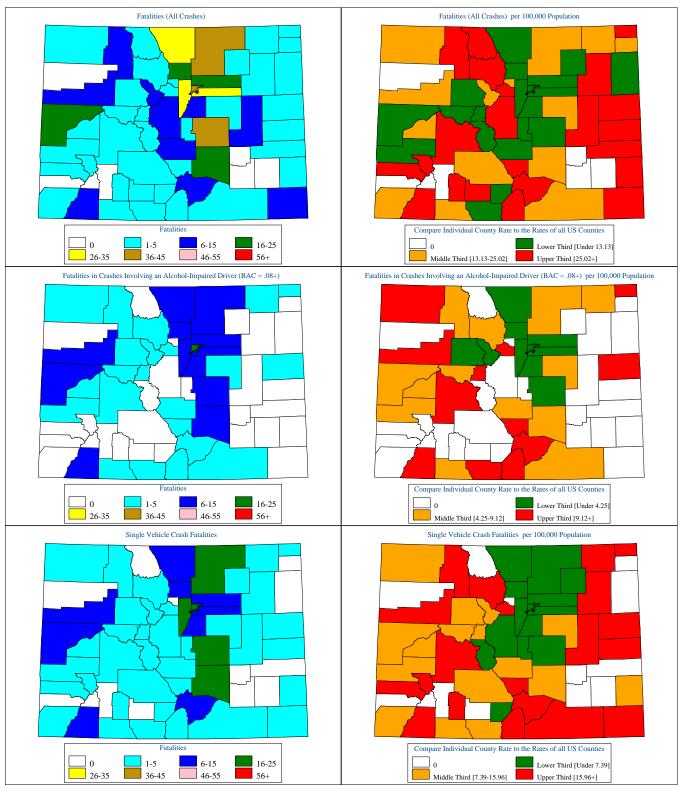
\*This Sub Rate is the Rate for the Top Ten Counties

\*\*This Sub Rate is the Rate for all Counties Outside the Top Ten





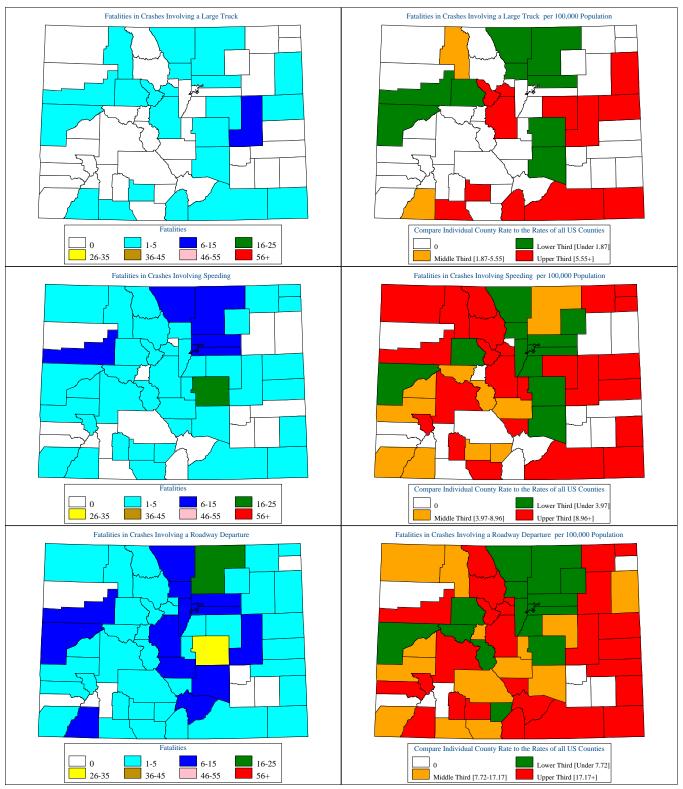
#### Colorado Motor Vehicle Crash Fatality Maps for 2009







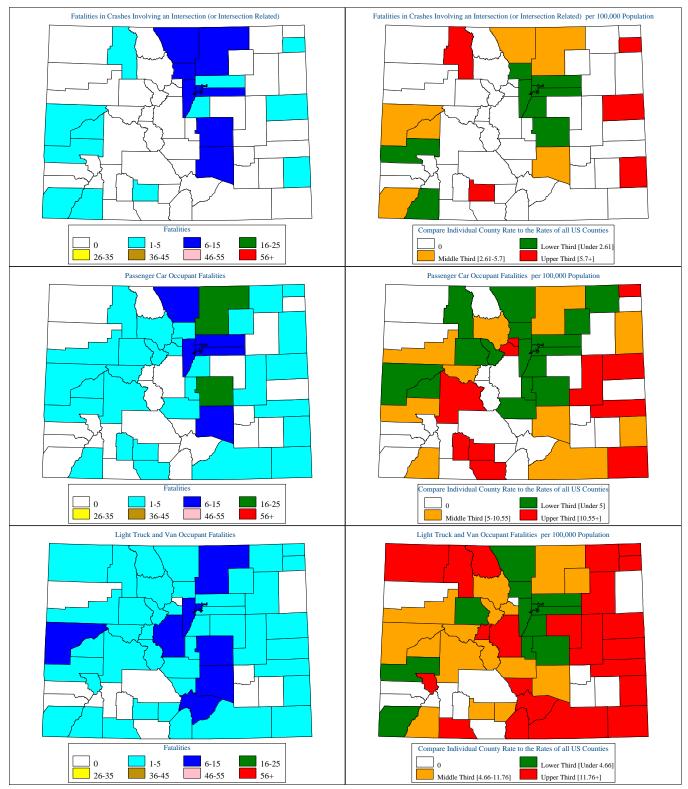
#### Colorado Motor Vehicle Crash Fatality Maps for 2009







#### Colorado Motor Vehicle Crash Fatality Maps for 2009







#### Colorado Motor Vehicle Crash Fatality Maps for 2009

