

# **COMMERCIAL VEHICLE SAFETY IN LOUISIANA**

## **An Analysis of Truck Crashes for 2009**

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## Summary

In 2009, the total number of reported CMV crashes decreased by 16% compared to 2008. The number of fatal CMV crashes decreased from 102 in 2008 to 74 in 2009, a decline of 27%. The number of injury CMV crashes decreased from 1,950 to 1,594 during the same period, an 18% decline. The decline in CMV crashes from 2008 to 2009 was considerable larger than the decline in fatal and injury crashes involving all types of vehicles. This decline was 12% and 5%, respectively.

The percentage of CMV drivers in fatal crashes cited for violations decreased in 2009 compared to 2008. The percentage of violations in fatal crashes that went to the CMV driver was the lowest in the past 5 years, namely 29%. Careless operation was the most frequent citation. In injury and property damage crashes, the driver of the CMV was cited for violations 51% and 52% of the time, respectively. Within this same year, careless operation accounted for the majority of violations committed in association with commercial vehicle crashes. Careless operation made up 34.7% of all violations given to either the driver of the CMV or the driver of the other vehicle. Other violations with relatively high occurrence rates were following too closely at 10.6% and failure to yield at 12.5%.

The manner of collision most common in CMV crashes are rear-end types at 31% and non-collision types (single vehicle crashes) at 17%. For fatal crashes, the types were right angle collisions at 19%, rear-end at 27%, non-collision at 7%, and head-on collisions at 26%.

During 2009, 25% of all CMV crashes in Louisiana occurred on interstates, 36% occurred on state highways, and 21% occurred on U.S. highways. In 2008, the respective percentages were 27%, 37%, and 21%. From 2008 to 2009, the number of fatal crashes declined from 26 to 22, a decline of 15%. US highway experienced a decline in fatal crashes of 38% and state highways saw a decline of 27%.

Although there was a considerable decline in CMV crashes across almost all areas and types of crashes on Louisiana roads over the year 2009, there was one part where CMV crashes increased considerably. Fatal CMV crashes in work zones increased by 67% from 2008 to 2009. For 2009, 26.4% of all CMV crashes on interstates occurred in a work-zone (45% of fatal crashes, 26% of injury crashes and 26% of PDO crashes). When 5 miles are added before and after the work zone these percentages increase to 54% for all CMV crashes, 82% for fatal CMV crashes, 55% for injury CMV crashes, and 52% for PDO CMV crashes.

## Overview

Table 1 depicts CMV crashes from 2006 to 2009 and shows that the fatal CMV crashes have declined by 27% from 2008 to 2009. The 5-year decline in fatal CMV crashes was 45%. The injury and PDO crashes also declined by 27% and 16% respectively. Although non-CMV crashes also declined considerably from 2008 to 2009, this decline was much less. Subsequently, fatal CMV crashes as percentage of all fatal crashes have decreased in 2009 by 2 percentage points from 2008 and the CMV injury as percent of all injury crashes decreased by 0.6 percentage points from 2008 to 2009.

**Table 1: CMV Crashes 2005-2009**

	Year	2005	2006	2007	2008	2009	1-Year % Change	5-Year % Change
CMV Crashes	Fatal	134	105	118	102	74	-27%	-45%
	Injury	2197	1922	2120	1950	1596	-18%	-27%
	PDO	2171	2093	2110	2115	1816	-14%	-16%
	Total CMV	4502	4120	4348	4167	3486	-16%	-23%
CMV Crash Percentages	Fatal	3.0%	2.5%	2.7%	2.4%	2.1%	-0.3%	-0.9%
	Injury	49%	47%	49%	47%	46%	-1.0%	-3.0%
	PDO	48%	51%	49%	51%	52%	1.3%	3.9%
	Total CMV	2.84%	2.54%	2.72%	2.64%	2.29%	-0.34%	-0.5%
All crashes	Fatal	874	890	900	820	726	-11.5%	-17%
	Injury	49,500	48,800	48,200	46,500	44,200	-4.9%	-11%
	PDO	108,100	112,500	110,700	110,700	107,000	-3.3%	-1%
	Total	158,474	162,190	159,800	158,020	151,926	-3.9%	-4%
% CMV	Fatal	12%	12%	13%	12%	10%	-2.2%	-1.9%
	Injury	4.4%	3.9%	4.4%	4.2%	3.6%	-0.6%	-0.8%
	PDO	2.0%	1.9%	1.9%	1.9%	1.7%	-0.2%	-0.3%
	Total	2.8%	2.5%	2.7%	2.6%	2.3%	-0.3%	-0.5%

**Figure 1: CMV Crashes 2005-2009**

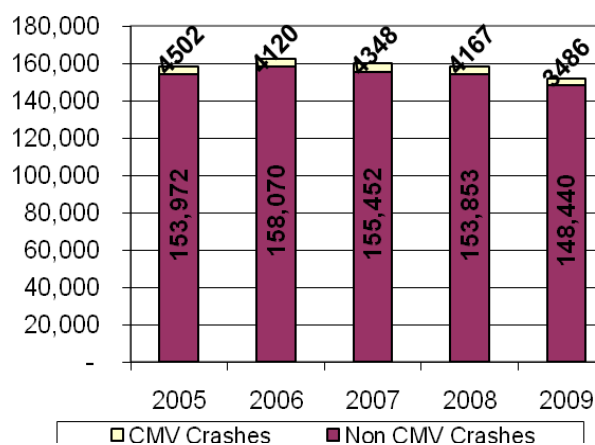


Figure 1 highlights the number of all crashes and CMV crashes from 2005 to 2009. Although CMV crashes make up only 2% of all crashes in 2009, CMV crashes accounted for 16% of the decline in crashes over the past five years. There were 1,016 fewer CMV crashes since 2005 and 5,532 fewer non-CMV crashes. Also, CMV crashes accounted for 2.3% of all crashes in 2009 down by 0.3 percentage points, namely 2.6% in 2008.

**Figure 2: CMV Crashes by Severity: 2005-2009**

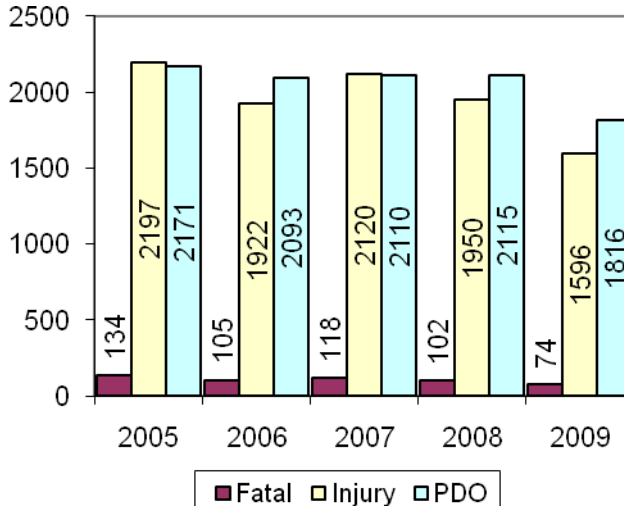


Figure 2 shows CMV crashes by severity. While all injury crashes declined by 4.9% from 2008 to 2009, CMV injury crashes fell by 18% in the same time period.

CMV property-damage-only crashes decreased by 14% from 2008 to 2009, while all CMV crashes combined declined by 16%.

**Figure 3: CMV and Non-CMV Fatal Crashes: 2005-2009**

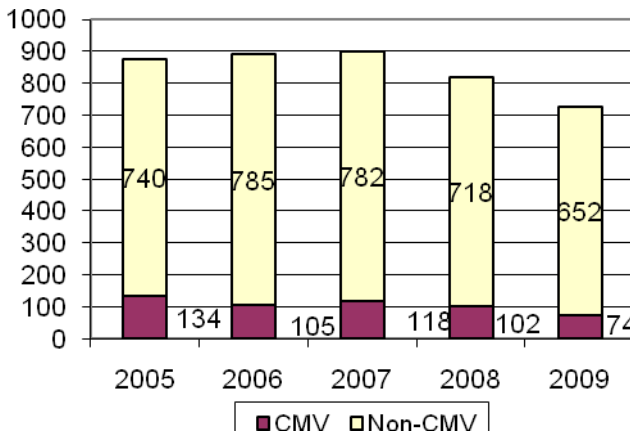


Figure 3 illustrates fatal CMV crashes and all fatal crashes during 2005 - 2009. The decline in the number of CMV fatal crashes was considerably larger than the decline in non-CMV fatal crashes, namely 27% for CMV crashes compared to 9.2% for non-CMV crashes. The graphs also show that the number of fatal CMV crashes has been declining over the past two years.

**Figure 4: Fatal CMV Crashes by Year: 2005-2009**

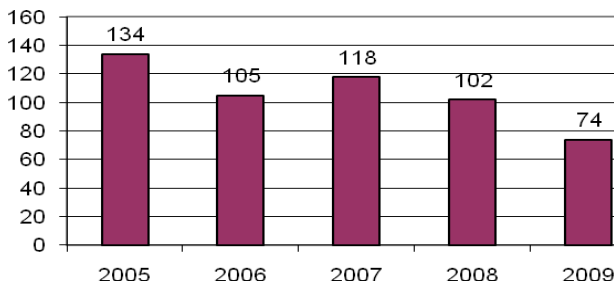


Figure 4 shows the trend of fatal CMV crashes. The number of fatal CMV crashes in 2009 was 23% lower than in 2005.

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Due to a steady increase in Louisiana traffic over the years, the number of crashes should be adjusted by the vehicle miles traveled (VMT). The vehicle miles traveled were obtained from the FMCSA website. The 2008 and 2009 data are not available yet and the VMT likely changed considerably in 2008 and 2009 from the 2007 level. Thus, 2007 VMT data was used to compute the following rates. Table 2 depicts the estimated crashes per 100 million miles traveled. Based on this data, the fatal CMV crash rate has declined from 1.9 in 2008 to 1.4 in 2009. It is also noteworthy to point out that the CMV fatal crash rate is 0.2 percentage points lower than the overall crash rate for all automobiles. However, the CMV vehicle miles traveled have likely declined in 2009 compared to 2007. Thus, the actual rates for 2008 and 2009 are likely higher than shown in Table 2.

**Table 2: CMV and all Crashes 2005-2009 per 100 Million Miles Traveled**

Year	CMV Crashes				All crashes			
	Fatal	Injury	PDO	Total CMV	Fatal	Injury	PDO	Total
2005	2.8	45.8	45.3	93.9	1.9	110.0	240.2	352.2
2006	2.0	36.1	39.3	77.4	2.0	107.5	247.8	357.2
2007	2.2	39.5	39.3	81.1	2.0	106.2	243.8	352.0
2008	1.9	36.4	39.4	77.7	1.8	103.3	246.0	351.2
2009	1.4	29.8	33.9	65.0	1.6	98.2	237.8	337.6

### Analysis of Crashes by Month

Table 3 displays CMV crash information for 2009 by month. As the data in Table 3 indicates, January had the highest number of fatal crashes accounting for over 18% of the total fatal CMV crashes for 2009. Although November was one of the deadliest months with 12 fatalities, it had a relatively low number of fatal crashes in 2009.

**Table 3: CMV Crashes by Month in 2009**

MONTH	FATAL CRASHES	TOTAL KILLED	INJURY CRASHES	PDO	TOTAL CRASHES	TOTAL TRUCKS AND BUSES	% CRASHES
JANUARY	14	17	129	159	302	314	9%
FEBRUARY	4	4	149	139	292	310	8%
MARCH	8	9	134	152	294	316	8%
APRIL	8	10	127	140	275	292	8%
MAY	8	8	130	137	275	293	8%
JUNE	2	2	105	142	249	265	7%
JULY	6	8	125	134	265	280	8%
AUGUST	8	8	152	142	302	318	9%
SEPTEMBER	4	4	134	150	288	306	8%
OCTOBER	5	5	126	171	302	320	9%
NOVEMBER	4	12	146	173	323	340	9%
DECEMBER	3	3	139	177	319	336	9%
TOTAL	74	90	1596	1816	3486	3690	100%

## Violations

The percentage of CMV drivers in fatal crashes who received a citation has declined by 5 percentage points from 2008 to 2009 and the percentage of citations in fatal crashes going to the CMV driver has also declined by 4 percentage point. In 2009, of all CMV drivers in fatal crashes, 27% were cited for a violation and 29% of the citations went to the CMV driver compared to 33% in 2008. For injury and property damage crashes, the driver of the CMV was cited for a violation 51% and 49% of the time, respectively.

**Table 4: Violations as Percentage of Drivers and Percent of all Violations**

As Percentage of Drivers	VIOLETIONS	FATAL CRASHES		INJURY CRASHES		PDO		TOTAL CRASHES	
		Truck Driver	Passenger Car Driver	Truck Driver	Passenger Car Driver	Truck Driver	Passenger Car Driver	Truck Driver	Passenger Car Driver
	2004	34%	54%	54%	50%	52%	55%	52%	52%
	2005	31%	47%	52%	44%	47%	50%	49%	47%
	2006	32%	66%	50%	50%	50%	54%	49%	52%
	2007	35%	68%	47%	53%	48%	53%	47%	54%
	2008	32%	78%	49%	49%	48%	55%	48%	53%
	2009	27%	66%	51%	48%	49%	53%	49%	51%
As Percentage of Violations	VIOLETIONS	FATAL CRASHES		INJURY CRASHES		PDO		TOTAL CRASHES	
		Truck Driver	Passenger Car Driver	Truck Driver	Passenger Car Driver	Truck Driver	Passenger Car Driver	Truck Driver	Passenger Car Driver
	2004	36%	64%	54%	46%	55%	45%	54%	46%
	2005	37%	63%	39%	61%	40%	60%	39%	61%
	2006	30%	70%	50%	50%	53%	47%	51%	49%
	2007	38%	62%	48%	52%	53%	47%	50%	50%
	2008	33%	67%	50%	50%	51%	49%	50%	50%
	2009	29%	71%	51%	49%	52%	48%	51%	49%



**Figure 5: CMV and Non-CMV Driver Violations: 2005-2009**

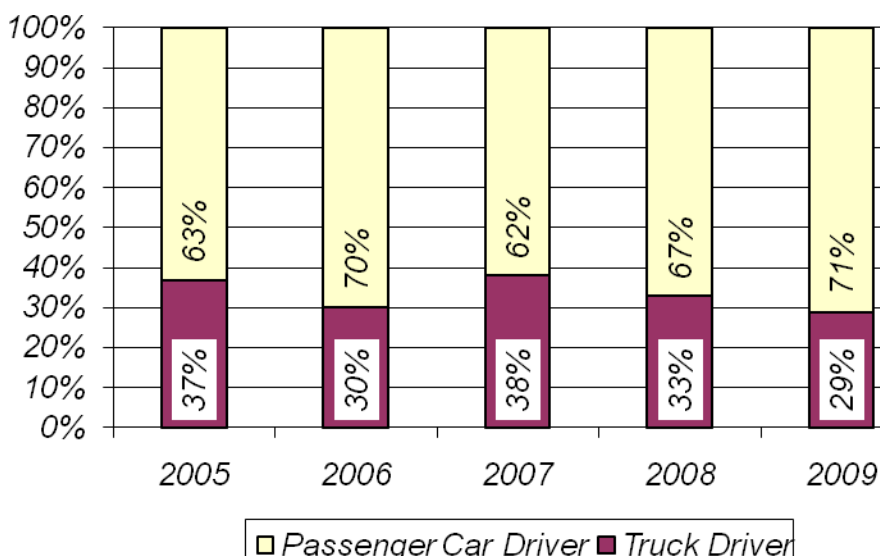


Figure 4 shows that there was a 4 percentage point shift from the CMV driver receiving a violation to the driver of the other vehicle from 2008 to 2009. In non-fatal crashes, the violations remain evenly distributed among the CMV driver and the driver of the other vehicle.

**Table 5: Type of Violation of CMV Driver**

VIOLATIONS	FATAL CRASHES	INJURY CRASHES	PDO	TOTAL CRASHES
OVER STATED SPEED LIMIT	0	3	1	4
OVER SAFE SPEED LIMIT	1	6	15	22
FAILURE TO YIELD	4	120	103	227
FOLLOWING TOO CLOSELY	1	114	77	192
DRIVING LEFT OF CENTER	0	11	21	32
CUT IN/IMPROPER PASS	0	25	27	52
DISREGARDED TRAF CNTL	0	34	27	61
FAILED TO DIM HEADLTS	0	0	0	0
VEHICLE CONDITION	1	27	49	77
DRIVER CONDITION	0	12	9	21
CARELESS OPERATION	10	285	334	629
IMPROPER BACKING	1	24	40	65
NO VIOLATION	60	825	982	1867
OTHER	3	81	106	190
TOTAL VIOLATION	22	847	942	1811
COLUMN % OF VIOLATIONS IN CRASH	27%	51%	49%	49%
ROW % OF VIOLATIONS IN CRASH	29%	51%	52%	51%

Table 5 shows the types of violations drivers receive. In 2009, careless operation accounts for the majority of violations (10) in association with fatal commercial vehicle crashes. Other violations

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with relatively high occurrence rates were failure to yield at 12.5% and following too closely at 10.6%.

### Manner of Collision

Table 6 shows the manner of collision. “Head-on”, “right angle”, and “rear-end” collisions make up more than 77.9% [(19+14+20) / (73-5)] of all fatal multi-vehicle CMV crashes.

**Table 6: Manner of Collision**

MANNER OF COLLISION	FATAL CRASHES		INJURY CRASHES		PDO		TOTAL CRASHES	
	Count	Percentage	Count	Percentage	Count	Percentage	Count	Percentage
HEAD-ON	19	26%	36	2%	21	1%	76	2%
LEFT TURN - ANGLE	2	3%	56	4%	60	3%	118	3%
LEFT TURN - OPPOSITE DIRECTION	2	3%	48	3%	36	2%	86	3%
LEFT TURN - SAME DIRECTION	2	3%	36	2%	33	2%	71	2%
NON-COLLISION WITH MOTOR VEHICLE	5	7%	200	13%	380	21%	585	17%
OTHER	4	6%	141	9%	177	10%	322	9%
REAR END	20	27%	525	33%	510	28%	1055	31%
RIGHT ANGLE	14	19%	254	16%	235	13%	503	15%
RIGHT TURN - OPPOSITE DIRECTION	0	0%	9	1%	2	0%	11	0%
RIGHT TURN - SAME DIRECTION	0	0%	13	1%	25	1%	38	1%
SIDESWIPE - OPPOSITE DIRECTION	3	4%	61	4%	56	3%	120	4%
SIDESWIPE - SAME DIRECTION	2	3%	197	13%	262	15%	461	13%
<b>TOTAL</b>	<b>73</b>	<b>100%</b>	<b>1576</b>	<b>100%</b>	<b>1797</b>	<b>100%</b>	<b>3446</b>	<b>100%</b>

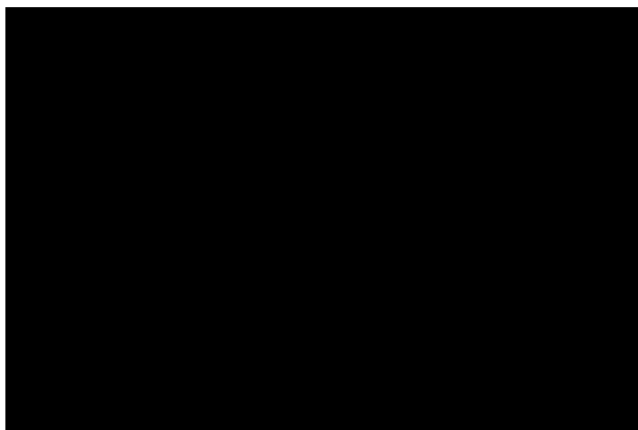
### Interstate Corridors

There are two main corridors in Louisiana, (1) Interstate 10/12 corridor in south Louisiana from the Texas state line to the Mississippi state line and (2) Interstate 20 corridor in north Louisiana from the Texas state line to the Mississippi state line. Both corridors have significant interstate traffic.

#### Interstate 10/12 Corridor

Interstate 10/12 corridor includes 16 parishes, and these parishes accounted for over half of all truck crashes in the past three years.

**Figure 6: Interstate 10 Corridor**



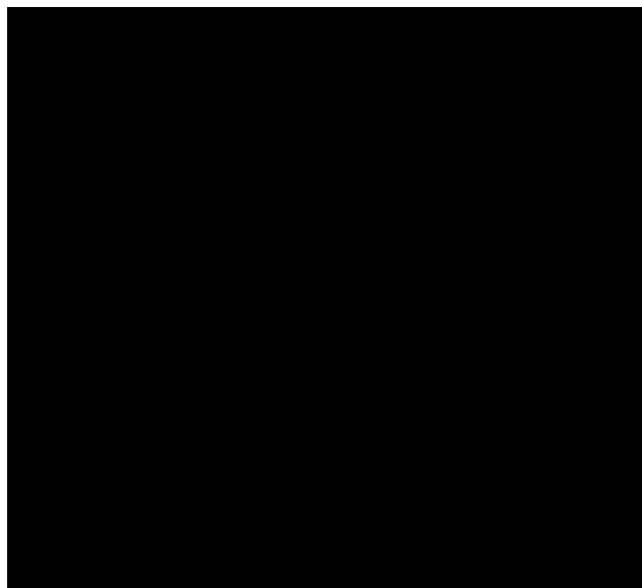
The corridor includes Louisiana Interstates 10, 110, 210, 310, 610, 12, 55, 59 and parts of Interstate 49 as shown in Figure 6. The major US Highways along the corridor are US 90, 190 and 61.

**Figure 7: Cumulative Percentage of Interstate 10 Crashes**



Figure 7 shows the cumulative frequency of commercial vehicle crashes for 2009 and 2008 by milepost on Interstate 10 along with all fatal crashes. The comparison between 2008 and 2009 shows that the percentage of crashes within the first 50 miles of interstate 10 has decreased slightly from 30% to 27%.

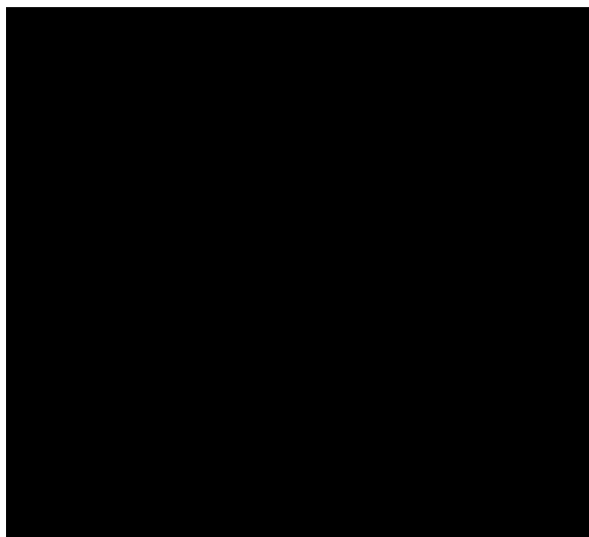
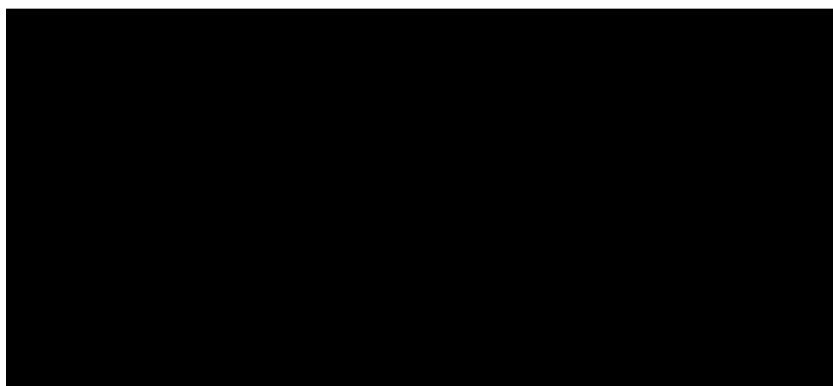
There are two other areas where the frequencies of commercial and non-CMV vehicle crashes are high, namely in Baton Rouge and New Orleans. These are areas with very high commuter traffic.



**Figure 8: Interstate 10 at Milepost 160**

They are in Baton Rouge with high number of crashes on Interstate 10 is between milepost 150 to 160 (depicted in Figure 8) and New Orleans. Figure 7 shows that a large percentage of crashes on I10 occur near the milepost of the I10-I12 split. Figure 9 shows the cumulative frequency of CMV crashes along with the cumulative frequency of all crashes for Interstate 12 for 2009 and 2008. The comparison between 2008 and 2009 shows that the percentage of crashes in the first 20 miles of interstate 12 has remained constant at 35%.

**Figure 9: Cumulative Percent of Interstate 12 Crashes**



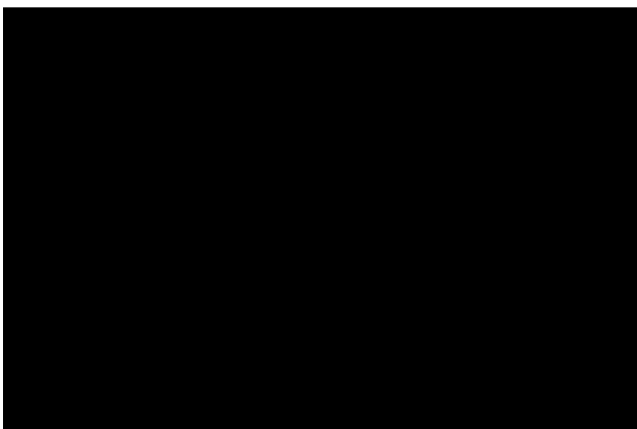
**Figure 10: Interstate 12 at Milepost 38**

Areas of high crashes on Interstate 12 include mileposts 0 to 10 and 35 to 45, depicted in Figure 10. The latter includes the intersection of I12 and I55.

The number of crashes within a mile of the intersection at milepost 38 has decreased from 11 crashes in 2007 and 11 crashes in 2008 to 5 crashes in 2009.

**Interstate 20 Corridors**

**Figure 11: Interstate 20 Corridor**



The Interstate 20 corridor includes 10 parishes. These parishes account for 15% of all commercial vehicle crashes in the last three years. As illustrated in Figure 11, the corridor includes Interstates 20, 220 and parts of Interstate 49. The major US Highways along the corridor are US 61, 65, 71, 80, 165 and 167.

**Figure 12: Cumulative Frequency of CMV Crashes on Interstate 20**



Figure 12 shows the cumulative frequency of commercial motor vehicle crashes by milepost on Interstate 20 along with all crashes. The percentage of CMV crashes within the first 50 miles of interstate 20 increased from 50% in 2008 to 53% in 2009.

## Work-Zone Crashes

Table 7 shows the number of CMV crashes in work zones for 2009 and the number of CMV crashes within 5 miles of a construction zone. Table 7 shows that the number of fatal CMV crashes on all interstates decreased from 26 in 2008 to 22 in 2009 and the number of fatal crashes in construction zones increased from 6 in 2008 to 10 in 2009. When miles and days under construction are taken into account, fatal crashes increased from 14.7 fatalities per day-mile in 2008 to 18.7 fatal crashes per day-mile in 2009.

**Table 7: Work -Zone CMV Crashes on Interstates (2008-2009)**

	WHERE	2009				2008			
		FATAL	INJURY	PDO	ALL	FATAL	INJURY	PDO	ALL
ALL CMV CRASHES ON INTERSTATES	Count	22	350	503	875	26	476	631	1133
	PER 100,000 Day-MILES	6.7	107	154	268	8.0	146	193	347
CONSTRUCTION ZONES	Count	10	90	131	231	6	121	132	259
	PER 100,000 Day-MILES	18.7	168	244	431	14.7	297	324	636
WITHIN 5 MILES OF CONSTRUCTION ZONES	Count	18	193	263	474	14	255	298	567
	PER 100,000 Day-MILES	10.9	117	159	287	10.6	194	226	430
IN 5 MILES OF CONSTRUCTION ZONE	Count	8	103	132	243	8	134	166	308
	PER 100,000 Day-MILES	7.2	92	118	218	8.8	147	182	338

The number of fatal crashes in the 5 miles before and after construction zones remained constant at 8. The number of fatal crashes per day mile decreased from 8.8 in 2008 to 7.2 in 2009. Also seen in Table 7 is a decline in all crashes within the 5 miles before and after construction zones, i.e., from 567 in 2008 to 474 in 2009, while the number of crashes within construction zones also decreased from 430 in 2008 to 287 in 2009.

## Seat Belt Usage

Table 8 shows that in 2009, 60% of CMV drivers killed in a crash did not wear a seat belt while 63% of all drivers killed in all crashes were not wearing a seat belt. However, since the number of CMV drivers killed is relatively small, this percentage varies greatly from year to year. As seen in Table 8, the percentage of CMV drivers killed in crashes while not wearing a seatbelt was 29 % in 2006. On average, CMV drivers killed used seat belts at a higher rate than those drivers killed while driving other cars.

**Table 8: Seat Belt Usage**

Year	CMV Drivers						All Drivers					
	# of Drivers Killed w/o Seatbelt	Total # of Drivers Killed*	% of Drivers Killed w/o Seatbelt	# of Drivers Seriously Injured w/o Seatbelt	Total # of Drivers Injured*	% of Drivers Seriously Injured	# of Drivers Killed w/o Seatbelt	Total # of Drivers Killed*	% of Drivers Killed w/o Seatbelt	# of Drivers Seriously Injured w/o Seatbelt	Total # of Drivers Injured*	% of Drivers Seriously Injured
2001	8	12	67%	4	12	33%	294	461	64%	249	794	31%
2002	2	6	33%	3	10	30%	270	422	64%	279	876	32%
2003	5	8	62%	3	16	19%	290	452	64%	239	739	32%
2004	6	9	67%	3	8	38%	290	495	59%	213	717	30%
2005	8	11	73%	5	19	26%	237	391	61%	187	703	27%
2006	2	7	29%	2	13	15%	284	457	62%	177	690	26%
2007	14	20	70%	2	8	25%	247	399	62%	183	727	25%
2008	9	16	56%	2	11	18%	222	346	64%	181	659	27%
2009	3	5	60%	5	11	45%	218	345	63%	151	574	26%
Average	6	10	61%	3	12	28%	261	419	63%	207	720	28%

\*Total includes only drivers where seatbelt use is known.

## Hazardous Material

CMV crashes involving trucks carrying hazardous material are of particular interest due to their potential danger to the environment and community when hazardous materials are released. Over the past eight years, on average, about one out of five crashes involving hazardous material results in a release of the hazardous material. The actual percentage of release may be higher since many of the trucks identified as transporting hazardous material may actually be returning with an empty load, thus the percentage of releases based on crashes with full loads of hazardous material may be much higher than the 19% shown in Table 9 for 2009.

**Table 9: Hazardous Material Crashes**

Year	Transport	Released	% Released
2002	96	19	20%
2003	82	13	16%
2004	58	15	26%
2005	86	15	17%
2006	102	19	19%
2007	127	20	16%
2008	94	16	17%
2009	102	19	19%

The interstates accounted for 33% of all crashes involving hazardous materials in 2009. Specifically, Interstate 10 accounts for 55% of all hazardous material crashes on interstates in 2009. US highways account for 20% of all hazardous material crashes in 2009, with US 90 accounting for 38% of hazardous material crashes on US highways. State highways accounted for 23% of all hazardous crashes in 2009.

The types of hazardous material reported in CMV crashes are displayed in Table 10. On average, 56% of the hazardous material crashes involve flammable liquids and 16% involve flammable gases.



**Table 10: Type of Hazardous Material in CMV Crashes**

PLC	Material	2004		2005		2006		2007		2008		2009	
		Trans	Rel.	Trans	Rel.	Trans	Rel.	Trans	Rel.	Trans	Rel.	Trans	Rel.
	CORROSIVE GASES (CANADA)	0	0	0	0	1	1	0	0	0	0	0	0
80	CORROSIVE MATERIALS	9	3	19	2	17	3	29	3	18	2	17	5
	DANGEROUS WASTES (CANADA)	0	0	0	0	0	0	0	0	0	0	0	0
	DANGEROUS WHEN WET MATERIALS	0	0	0	0	0	0	0	0	0	0	0	0
92	ENVIRON HAZARDOUS SUBSTANCES(CANADA)	0	0	1	0	0	0	4	1	0	0	0	0
11	EXPLOSIVES-MASS EXPLOXION HAZARD	0	0	0	0	1	0	1	0	0	0	0	0
14	EXPLOSIVES WITH A NO SIGNIFICANT BLAST HAZARD	1	0	0	0	1	0	0	0	1	0	0	0
	EXPLOSIVES WITH A PREDOMINANTLY A FIRE HAZARD	2	0	0	0	2	0	1	1	1	0	0	0
12	EXPLOSIVES-PROJECTION HAZARD	0	0	0	0	0	0	0	0	0	0	0	0
	EXTREMELY INSENSITIVE DETONATING ARTICLES	0	0	0	0	0	0	0	0	0	0	0	0
21	FLAMMABLE GASSES	8	2	1	0	13	1	21	3	23	2	17	4
30	FLAMMABLE LIQUIDS	26	7	56	10	59	13	53	8	74	13	58	6
41	FLAMMABLE SOLIDS	0	0	0	0	1	0	0	0	4	0	3	1
23	GASES TOXIC BY INHALATION	0	0	0	0	1	0	2	0	1	0	0	0
	INFECTIOUS SUBSTANCES	0	0	0	0	0	0	1	0	0	0	0	0
	MISC DANGEROUS GOODS(CANADA)	4	1	1	0	1	0	4	1	0	0	0	0
91	NON-FLAM, NON-TOXIC COMPRESSED GASES	3	1	7	2	5	1	8	2	7	0	5	1
22	ORGANIC PEROXIDES	0	0	0	0	0	0	0	0	0	0	0	0
	OXIDIZERS	0	0	0	0	0	0	0	0	1	0	2	2
51	RADIOACTIVE MATERIALS	0	0	0	0	0	0	0	0	1	0	0	0
70	SPONTANEOUSLY COMBUSTIBLE MATERIALS	0	0	1	1	0	0	0	0	2	1	0	0
42	TOXIC MATIERALS	4	0	0	0	0	0	3	1	5	0	0	0
	Total	57	14	86	15	102	19	127	20	138	18	102	19

## Distractions

Although distractions play an important role in all crashes, including CMV crashes no fatal CMV crashes were reported in 2009, where cell phone usage was the cause of distraction. Table 11 shows the breakdown of crashes by type of distraction.

**Table 11: Distractions**

	FATAL	INJURY	PDO	TOTAL
CELL PHONE	0	5	6	11
OTHER ELECTRONIC DEVICE	0	4	5	9
OTHER INSIDE THE VEHICLE	1	30	23	54
OTHER OUTSIDE THE VEHICLE	3	43	38	84
NOT DISTRACTED	65	1337	1585	2987
UNKNOWN	13	247	251	511

**Figure 13: Cell Phone Use as a Distraction**

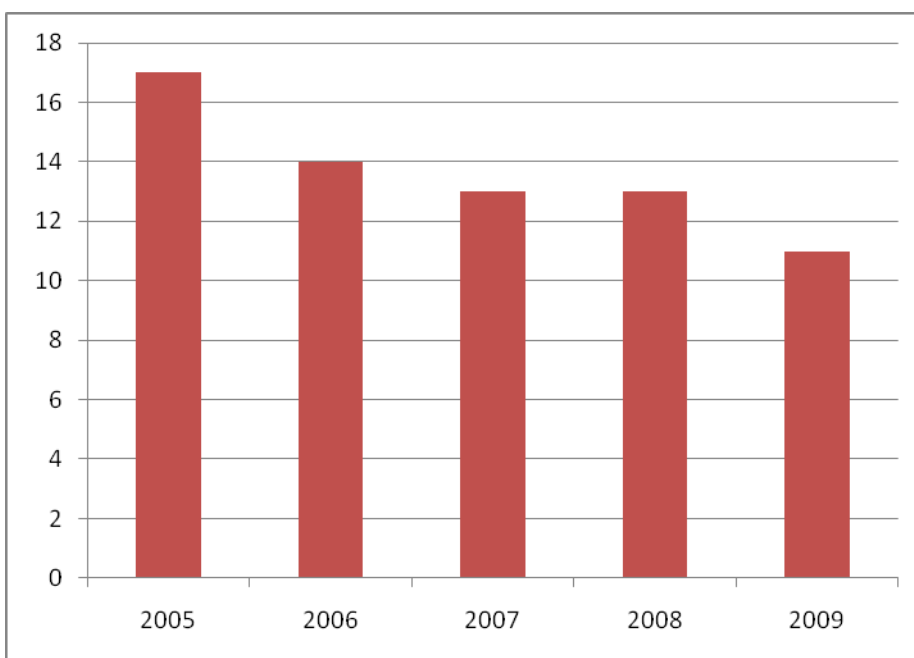


Figure 13 shows that crashes involving cell phone usage of CMV drivers have decreased by 35% from 2005 to 2009, namely from 17 in 2005 to 11 in 2009.

## Changes of Number of Crashes by Parish

The 15 parishes with highest number of CMV crashes are listed in Table 12. In 2009, Louisiana experienced a significant decrease in CMV crashes along the I10/I12 corridor. St. Tammany, Tangipahoa, Livingston and West and East Baton Rouge Parishes have all shown decreases in CMV crashes ranging from 16% to 33%. The exception was Orleans Parish, which had a 2% increase in CMV crashes. Caddo and Bossier Parish also had an increase in CMV crashes, with 6% and 11%, respectively.

**Table 12: CMV Crashes by Parishes**

PARISH	FATAL CRASHES		TOTAL CRASHES		2009-2008	
	2009	2008	2009	2008	Diff	% Change
EAST BATON ROUGE	3	6	300	368	-68	-18%
JEFFERSON	1	2	203	297	-94	-32%
CALCASIEU	2	6	202	266	-64	-24%
LAFAYETTE	1	4	185	244	-59	-24%
ST. TAMMANY	4	2	126	175	-49	-28%
TANGIPAHOA	0	4	103	153	-50	-33%
CADDO	5	8	186	176	10	6%
ORLEANS	0	3	218	213	5	2%
LAFOURCHE	4	8	107	158	-51	-32%
LIVINGSTON	1	1	85	101	-16	-16%
RAPIDES	3	1	108	105	3	3%
TERREBONNE	2	2	83	91	-8	-9%
BOSSIER	4	4	113	102	11	11%
OUACHITA	2	6	94	126	-32	-25%
WEST BATON ROUGE	3	0	63	89	-26	-29%

## Rural CMV Crashes

Table 13 displays the count of crashes on rural roads by highway type. Although the data shows that rural roads account for most fatal and injury crashes, rural roads make up the majority of the roadway sections. All CMV crash severity types declined considerably from 2008 to 2009. For instance, the fatal CMV crashes on US highways declined by 38%, the fatal CMV crashes on state highways declined by 27%, and the fatal CMV crashes on interstates declined by 15%. Similar declines were also observed for injury and PDO crashes. For instance, interstates had a 26% decline of injury crashes and a 20% decline of PDO crashes. US highways experienced a 13% decline of injury crashes and a 19% decline of PDO crashes, while state highways had declines of 22% and 14% for injury and PDO crashes, respectively. Overall, the decline on rural roads was higher than on city streets which lead to a slight decrease in the percentage of total CMV crashes on rural roads, namely from 85% to 82%. The interstates had the highest percentage reduction of CMV crashes, namely 23% followed by state highways with 18%.

**Table 13: CMV Crashes by Highway Type 2009**

HIGHWAY TYPE	FATAL CRASHES			INJURY CRASHES			PDO			TOTAL		
	2009 CRASH	2008 CRASH	Difference	2009 CRASH	2008 CRASH	Difference	2009 CRASH	2008 CRASH	Difference	2009 CRASH	2008 CRASH	Difference
INTERSTATE	22	26	-15%	350	476	-26%	503	631	-20%	875	1133	-23%
US HIGHWAY	15	24	-38%	379	434	-13%	335	413	-19%	729	871	-16%
STATE HIGHWAY	32	44	-27%	575	740	-22%	632	731	-14%	1239	1515	-18%
PARISH ROAD	3	7	-57%	96	108	-11%	157	150	5%	256	265	-3%
CITY STREET	2	1	100%	187	183	2%	172	182	-5%	361	366	-1%
TOTAL	74	102	-27%	1587	1941	-18%	1799	2107	-15%	3460	4150	-17%
% Interstates	30%	25%	4%	22%	25%	-2%	28%	30%	-2%	25%	27%	-2%
% US	20%	24%	-3%	24%	22%	2%	19%	20%	-1%	21%	21%	0%
% State	43%	43%	0%	36%	38%	-2%	35%	35%	0%	36%	37%	-1%
State&Interstate	93%	92%	1%	82%	85%	-3%	82%	84%	-3%	82%	85%	-3%

**Table 13a: Percentage of Rural CMV Crashes 2009**

	Fatal	Injury	PDO	Total
Interstates	80%	54%	64%	59%
US	63%	55%	58%	56%
State	97%	71%	74%	73%
Parish	67%	90%	93%	91%
City	0%	1%	3%	2%
Total	84%	62%	67%	60%

## Commercial Vehicle Safety – 2009

Table 13a gives a different perspective of rural versus urban crashes. The crash report does not permit us to determine if a crash was urban or rural. The only indicator that may be used is the city code. Table 13a shows the percentage of crashes by severity and highway type that were coded with city code 00. This code is most often used by the state police to identify crashes that occurred outside of city limits. However, some crashes worked by state police could have been inside city limits. For instance, there are a small percentage of city roads coded as rural and about 33% of fatal CMV crashes and 10% of injury crashes on parish roads coded as rural. This likely is due to state police having worked the crash. About 80% of the fatal interstate CMV crashes occurred on rural areas and about 54% of the injury interstate CMV crashes occurred on rural areas.

### Bus Crashes

The number of CMV bus crashes, injuries, and fatalities is depicted in Table 14. In 2009, there was no one killed in a large bus but 140 people were injured. There were 48 people injured in small buses and 462 injured in school buses. Overall, there were 3 people killed and 836 people injured in bus crashes, of which the three fatalities and 186 injuries occurred outside the bus.

**Table 14: CMV Bus Crashes in 2009**

Year		Vehicle Type	School Bus	Small Bus	Large Bus	Total
2005	Inside Bus	Number of Crashes	176	47	104	327
		Number Killed	0	0	1	1
		Number Injured	404	45	289	738
	In Bus Crash	Number Killed	3	0	5	8
		Number Injured	637	87	478	1202
2006	Inside Bus	Number of Crashes	156	37	53	246
		Number Killed	0	0	0	0
		Number Injured	262	34	91	387
	In Bus Crash	Number Killed	2	1	0	3
		Number Injured	403	57	129	589
2007	Inside Bus	Number of Crashes	185	31	71	287
		Number Killed	0	1	0	1
		Number Injured	381	50	86	517
	In Bus Crash	Number Killed	3	2	0	5
		Number Injured	533	71	128	732
2008	Inside Bus	Number of Crashes	170	28	76	274
		Number Killed	0	0	2	2
		Number Injured	286	22	160	468
	In Bus Crash	Number Killed	1	1	3	5
		Number Injured	463	45	251	759
2009	Inside Bus	Number of Crashes	176	34	84	294
		Number Killed	0	0	0	0
		Number Injured	462	48	140	650
	In Bus Crash	Number Killed	2	0	1	3
		Number Injured	569	73	194	836

**Figure 14: Bus Crashes by Year**

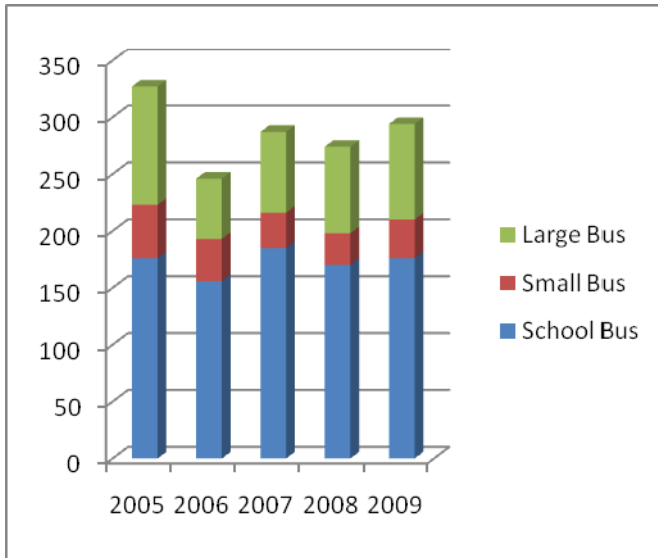
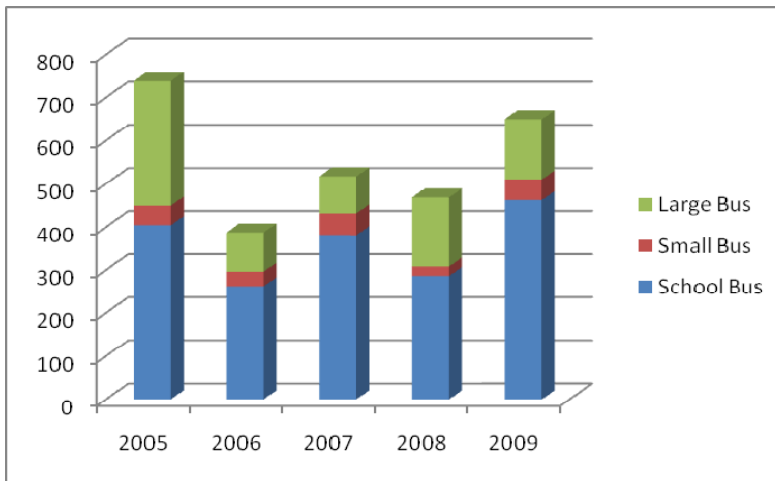


Figure 14 shows the trend in bus crashes. Generally, bus crashes have been declining with a slight increase across all bus types in 2009. The 2006 year was marked by the post Katrina clean-up and thus the number of crashes was relative low because of less bus traffic.

**Figure 15: Bus-Crash Injuries by Year**



Although the injuries in large buses have declined from 2008 to 2009, overall, the bus injuries have increased in the same time period. The years 2005 and 2006 were affected by hurricane Katrina and thus may not be suitable for comparisons.

*Note: Definition of Reportable Truck Crashes: To qualify for reporting to the SafetyNET, the crash has to involve a private or public motor carrier, a truck weight of at least 10,001 pounds or above, a tow of one of the vehicles, or the transportation of a person to medical treatment away from the crash scene, or a fatality.*