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**Special  
Focus**

**Red-Light-Running  
Heavy Truck/Bus**



## RED-LIGHT-RUNNING CRASHES

INTERSECTION CRASH TYPE	Crashes	Fatal	MOST SEVERE OUTCOME IN CRASH			PDO
			Injury			
			A	B	C	
Related to intersection	119,361	306	2,640	6,930	20,702	88,783
In intersection	60,323	243	1,862	4,622	11,918	41,678
With traffic control signal	27,146	81	808	2,091	5,875	18,291
With hazardous action	<b>7,843</b>	37	346	823	2,127	4,510

“Related to intersection” captures crashes that were related to or within 150 feet of an intersection. This corresponds to the crash information on page 139, *Intersection Crashes by Traffic Control Type*.

“In intersection” captures crashes within all types of intersections.

“With signal” captures crashes within the intersection and with a traffic control signal present.

“With hazardous action” captures crashes within the intersection, with a traffic control signal and with a hazardous action cited as “disregard of traffic control.” Information pertaining to red-light-running in the following tables is derived from this subset of **7,843** crashes.





## RED-LIGHT-RUNNING - MOST SEVERE OUTCOME IN CRASH

MOST SEVERE OUTCOME IN CRASH

SPEED LIMIT	Crashes	Fatal	Injury			PDO
			A	B	C	
5 miles per hour	1	0	0	1	0	0
20 miles per hour	7	0	1	0	3	3
25 miles per hour	936	0	18	78	222	618
30 miles per hour	1,401	6	61	110	388	836
35 miles per hour	2,052	6	60	205	561	1,220
40 miles per hour	1,046	6	56	112	298	574
45 miles per hour	1,596	9	92	214	435	846
50 miles per hour	274	1	19	36	73	145
55 miles per hour	345	9	34	49	94	159
65 miles per hour	1	0	0	0	0	1
70 miles per hour	2	0	0	0	0	2
Unknown	182	0	5	18	53	106
Total	7,843	37	346	823	2,127	4,510

MOST SEVERE OUTCOME IN CRASH

CRASH TYPE	Crashes	Fatal	Injury			PDO
			A	B	C	
Single Vehicle	42	3	4	11	14	10
Head on	81	0	3	11	27	40
Head on left	733	7	35	90	184	417
Angle	6,632	25	294	684	1,830	3,799
Rear end	38	0	1	1	7	29
Rear end left	9	0	0	0	2	7
Rear end right	3	0	0	0	0	3
Sideswipe same direction	80	0	3	3	13	61
Sideswipe opposite direction	52	0	0	4	7	41
Other	139	2	5	16	34	82
Unknown	34	0	1	3	9	21
Total	7,843	37	346	823	2,127	4,510

# RED-LIGHT-RUNNING

## RED-LIGHT-RUNNING - MOST SEVERE OUTCOME IN CRASH (continued)

SPECIAL CIRCUMSTANCES*	MOST SEVERE OUTCOME IN CRASH					
	Crashes	Fatal	Injury			PDO
			A	B	C	
School Bus Involved/Associated	23	0	1	4	5	13
Drinking Involved	267	6	39	54	75	93
Pedestrian Involved	42	3	9	11	15	4
Bicyclist Involved	48	1	6	17	18	6
Snowmobile Involved	1	0	0	0	1	0
Motorcycle Involved	23	1	6	9	5	2
Train Involved	0	0	0	0	0	0
Truck/Bus Involved	285	4	20	36	73	152
Emergency Vehicle Involved	54	2	2	6	13	31
Driver Hazardous Citation	4,618	6	206	547	1,343	2,516

\*Crashes may involve more than one special circumstance.

POSSIBLE CONDITIONS OF DRIVER*	MOST SEVERE OUTCOME IN CRASH					
	Conditions Coded by Police	Fatal	Injury			PDO
			A	B	C	
Appeared Normal	6,189	10	243	632	1,715	3,589
Had Been Drinking	231	3	34	50	71	73
Illegal Drug Use	3	0	2	0	0	1
Sick	22	0	1	2	12	7
Fatigue	12	1	1	1	2	7
Asleep	10	0	1	2	5	2
Medication	12	0	1	2	5	4
Driver Distracted	146	0	12	21	40	73
Using Cellular Phone	47	0	3	3	15	26
Unknown	410	16	22	45	84	243

\*Drivers may have more than one condition, including "Appeared Normal".

## HEAVY TRUCK/BUS

The crashes highlighted in this section all involve a heavy truck/bus - defined as having a Gross Vehicle Weight Rating (GVWR) over 10,000 lbs. These vehicles require a Commercial Driver's License (CDL).

Heavy truck/bus crashes differ from other vehicle crashes in a number of ways, many reflecting the size and use of these vehicles. When compared to the overall crash picture, heavy truck/bus crashes involve:

- More turning, backing, and changing lanes (see Driver Action Prior)
- More separation of units, fire/explosion, jackknife, cargo loss/shift, and other non-collisions (see Most Harmful Event)
- Fewer single-vehicle crashes but more sideswipes (see Crash Type)
- Fewer drivers indicated to be speeding and failing to yield, but more drivers indicated to be making backing, lane use, and turning errors (see Hazardous Action, Citation)
- More on road crashes (see Relationship to Roadway - Location of First Impact in Crash - On Road)
- More crashes between the hours of 6:00 AM and 2:59 PM, but fewer crashes between 3:00 PM and 5:59 AM (see Time of Day)
- More weekday crashes (see Day of Week)



## HEAVY TRUCK/BUS INVOLVED CRASHES

HEAVY TRUCK/BUS DRIVER ACTION PRIOR TO CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Going straight ahead	7,874	45.9	84	71.8	1,711	53.8
Turning left	1,492	8.7	3	2.6	181	5.7
Turning right	1,402	8.2	0	0.0	145	4.6
Stopped on roadway	1,171	6.8	9	7.7	228	7.2
In prior crash	20	0.1	0	0.0	12	0.4
Changing lanes	712	4.1	3	2.6	89	2.8
Backing	1,070	6.2	3	2.6	47	1.5
Slowing/stopping on roadway	1,141	6.6	1	0.9	291	9.1
Slowing/stopping other	23	0.1	0	0.0	4	0.1
Starting up on roadway	390	2.3	2	1.7	99	3.1
Starting up other	12	0.1	0	0.0	0	0.0
Entering parking	33	0.2	0	0.0	1	0.0
Leaving parking	45	0.3	0	0.0	6	0.2
Entering roadway	172	1.0	0	0.0	42	1.3
Leaving roadway	20	0.1	0	0.0	4	0.1
Making U-turn	51	0.3	0	0.0	10	0.3
Overtaking or passing	116	0.7	0	0.0	17	0.5
Avoiding object	17	0.1	0	0.0	5	0.2
Avoiding animal	14	0.1	0	0.0	3	0.1
Avoiding pedestrian	3	0.0	0	0.0	1	0.0
Avoiding vehicle (front/back)	219	1.3	1	0.9	59	1.9
Avoiding vehicle (angle)	87	0.5	5	4.3	20	0.6
Driverless moving	27	0.2	0	0.0	5	0.2
Parked	359	2.1	5	4.3	66	2.1
Crossing at intersection	3	0.0	0	0.0	1	0.0
Crossing not at intersection	0	0.0	0	0.0	0	0.0
Getting on/off vehicle	1	0.0	0	0.0	1	0.0
In roadway with traffic	0	0.0	0	0.0	0	0.0
In roadway against traffic	0	0.0	0	0.0	0	0.0
Standing/lying in roadway	1	0.0	0	0.0	0	0.0
Pushing/working on vehicle	0	0.0	0	0.0	0	0.0
Other working in roadway	0	0.0	0	0.0	0	0.0
Playing in roadway	0	0.0	0	0.0	0	0.0
In roadway other reason	0	0.0	0	0.0	0	0.0
Not in roadway	0	0.0	0	0.0	0	0.0
Other	7	0.0	0	0.0	1	0.0
Unknown	684	4.0	1	0.9	133	4.2
<b>Total</b>	<b>17,166</b>	<b>100.0</b>	<b>117</b>	<b>100.0</b>	<b>3,182</b>	<b>100.0</b>

## HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

MOST HARMFUL EVENT IN A NONCOLLISION	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Loss of control	47	0.3	0	0.0	9	0.3
Cross center/median	23	0.1	0	0.0	1	0.0
Ran off road left	22	0.1	0	0.0	0	0.0
Ran off road right	41	0.2	0	0.0	7	0.2
Re-enter road	0	0.0	0	0.0	0	0.0
Overturn	230	1.3	2	1.7	95	3.0
Separation of units	48	0.3	0	0.0	7	0.2
Fire/explosion	45	0.3	3	2.6	4	0.1
Immersion	4	0.0	0	0.0	1	0.0
Jackknife	105	0.6	0	0.0	15	0.5
Downhill runaway	3	0.0	0	0.0	0	0.0
Cargo loss/shift	258	1.5	0	0.0	15	0.5
Individual fell off	6	0.0	1	0.9	2	0.1
Other noncollision	212	1.2	0	0.0	23	0.7
<b>NONCOLLISION Subtotal</b>	<b>1,044</b>	<b>6.1</b>	<b>6</b>	<b>5.1</b>	<b>179</b>	<b>5.6</b>

MOST HARMFUL EVENT IN A COLLISION WITH A NONFIXED OBJECT	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Pedestrian	46	0.3	9	7.7	31	1.0
Bicyclist	17	0.1	2	1.7	11	0.3
Motor vehicle in transport	12,089	70.4	88	75.2	2,504	78.7
Parked motor vehicle	644	3.8	1	0.9	27	0.8
Railway train	8	0.0	0	0.0	2	0.1
Animal	455	2.7	1	0.9	3	0.1
Other nonfixed objects	218	1.3	1	0.9	17	0.5
<b>COLLISION NONFIXED Subtotal</b>	<b>13,477</b>	<b>78.5</b>	<b>102</b>	<b>87.2</b>	<b>2,595</b>	<b>81.6</b>

## HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

MOST HARMFUL EVENT IN A COLLISION WITH A FIXED OBJECT	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Bridge/pier/abutment	113	0.7	1	0.9	11	0.3
Bridge parapet end	4	0.0	0	0.0	0	0.0
Bridge rail	19	0.1	0	0.0	5	0.2
Guardrail face	54	0.3	0	0.0	10	0.3
Guardrail end	14	0.1	1	0.9	1	0.0
Median barrier	48	0.3	1	0.9	13	0.4
Highway traffic sign post	71	0.4	0	0.0	2	0.1
Signal post	19	0.1	0	0.0	1	0.0
Luminaire/light support	47	0.3	1	0.9	4	0.1
Utility pole	119	0.7	0	0.0	10	0.3
Other pole	44	0.3	0	0.0	3	0.1
Culvert	8	0.0	1	0.9	3	0.1
Curb	17	0.1	0	0.0	2	0.1
Ditch	136	0.8	1	0.9	31	1.0
Embankment	28	0.2	0	0.0	9	0.3
Fence	23	0.1	1	0.9	3	0.1
Mailbox	17	0.1	0	0.0	0	0.0
Tree	134	0.8	0	0.0	34	1.1
Rail crossing signal	38	0.2	0	0.0	0	0.0
Building	25	0.1	0	0.0	2	0.1
Traffic island	1	0.0	0	0.0	0	0.0
Fire hydrant	40	0.2	0	0.0	1	0.0
Impact attenuator	0	0.0	0	0.0	0	0.0
Other fixed object	218	1.3	0	0.0	10	0.3
<b>COLLISION FIXED Subtotal</b>	<b>1,237</b>	<b>7.2</b>	<b>7</b>	<b>6.0</b>	<b>155</b>	<b>4.9</b>

	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Total
Unknown Event	1,408	8.2	2	1.7	253	8.0
<b>TOTAL MOST HARMFUL EVENT</b>	<b>17,166</b>	<b>100.0</b>	<b>117</b>	<b>100.0</b>	<b>3,182</b>	<b>100.0</b>

## HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

CRASH TYPE	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
Single Vehicle	2,321	13.5	14	12.0	314	9.9
Head On	289	1.7	28	23.9	109	3.4
Head On - Left Turn	174	1.0	4	3.4	63	2.0
Angle	2,861	16.7	31	26.5	809	25.4
Rear End	3,899	22.7	22	18.8	1,026	32.2
Rear End - Left Turn	156	0.9	0	0.0	47	1.5
Rear End - Right Turn	162	0.9	0	0.0	29	0.9
Sideswipe - Same Direction	4,305	25.1	4	3.4	418	13.1
Sideswipe - Opposite Direct	974	5.7	3	2.6	123	3.9
Other	1,852	10.8	11	9.4	219	6.9
Unknown	173	1.0	0	0.0	25	0.8
<b>Total</b>	<b>17,166</b>	<b>100.0</b>	<b>117</b>	<b>100.0</b>	<b>3,182</b>	<b>100.0</b>

HAZARDOUS ACTION OF HEAVY TRUCK/BUS	Truck/Bus Crashes		Fatal Crashes		Injury Crashes		Hazardous Citation Issued	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury	Number of Heavy Trucks	% of Issued
None	7,936	46.2	81	69.2	1,623	51.0	11	0.4
Speed too fast	524	3.1	4	3.4	147	4.6	210	7.7
Speed too slow	10	0.1	0	0.0	3	0.1	6	0.2
Failed to yield	840	4.9	1	0.9	209	6.6	370	13.6
Disregard traffic control	201	1.2	3	2.6	87	2.7	112	4.1
Drove wrong way	12	0.1	0	0.0	1	0.0	1	0.0
Drove left of center	83	0.5	1	0.9	5	0.2	22	0.8
Improper passing	119	0.7	0	0.0	9	0.3	24	0.9
Improper lane use	901	5.2	3	2.6	93	2.9	279	10.3
Improper turn	725	4.2	1	0.9	50	1.6	193	7.1
Improper/no signal	26	0.2	0	0.0	0	0.0	4	0.1
Improper backing	862	5.0	2	1.7	24	0.8	225	8.3
Unable to stop in assured clear distance	1,553	9.0	3	2.6	475	14.9	685	25.3
Reckless driving	14	0.1	0	0.0	3	0.1	6	0.2
Careless/Negligent driving	365	2.1	5	4.3	88	2.8	180	6.6
Other	1,663	9.7	7	6.0	167	5.2	337	12.4
Unknown	1,332	7.8	6	5.1	198	6.2	47	1.7
<b>Total</b>	<b>17,166</b>	<b>100.0</b>	<b>117</b>	<b>100.0</b>	<b>3,182</b>	<b>100.0</b>	<b>2,712</b>	<b>100.0</b>

## HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

RELATIONSHIP TO ROADWAY (LOCATION OF FIRST IMPACT IN CRASH)	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
On Road	15,551	90.6	108	92.3	2,854	89.7
Median	89	0.5	0	0.0	31	1.0
Shoulder	557	3.2	6	5.1	129	4.1
Outside of Shoulder/Curb	619	3.6	2	1.7	122	3.8
Gore	24	0.1	1	0.9	7	0.2
Other/Unknown	326	1.9	0	0.0	39	1.2
<b>Total</b>	<b>17,166</b>	<b>100.0</b>	<b>117</b>	<b>100.0</b>	<b>3,182</b>	<b>100.0</b>

TIME OF DAY IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
12:00 mid. - 02:59 a.m.	462	2.7	11	9.4	105	3.3
03:00 a.m. - 05:59 a.m.	593	3.5	8	6.8	136	4.3
06:00 a.m. - 08:59 a.m.	2,993	17.4	24	20.5	559	17.6
09:00 a.m. - 11:59 a.m.	3,516	20.5	16	13.7	636	20.0
12:00 noon - 02:59 p.m.	3,671	21.4	21	17.9	620	19.5
03:00 p.m. - 05:59 p.m.	3,288	19.2	18	15.4	621	19.5
06:00 p.m. - 08:59 p.m.	1,144	6.7	13	11.1	218	6.9
09:00 p.m. - 11:59 p.m.	678	3.9	3	2.6	129	4.1
Unknown	821	4.8	3	2.6	158	5.0
<b>Total</b>	<b>17,166</b>	<b>100.0</b>	<b>117</b>	<b>100.0</b>	<b>3,182</b>	<b>100.0</b>

ROADWAY TYPE IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
Interstate Routes	1,925	11.2	18	15.4	446	14.0
U.S. & Michigan Roads	3,811	22.2	52	44.4	750	23.6
County & City Roads	11,430	66.6	47	40.2	1,986	62.4
<b>Total</b>	<b>17,166</b>	<b>100.0</b>	<b>117</b>	<b>100.0</b>	<b>3,182</b>	<b>100.0</b>

## HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

DAY OF WEEK IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
Sunday	510	3.0	2	1.7	107	3.4
Monday	3,346	19.5	23	19.7	590	18.5
Tuesday	3,178	18.5	16	13.7	605	19.0
Wednesday	3,097	18.0	30	25.6	562	17.7
Thursday	3,026	17.6	20	17.1	541	17.0
Friday	3,096	18.0	18	15.4	589	18.5
Saturday	913	5.3	8	6.8	188	5.9
Total	17,166	100.0	117	100.0	3,182	100.0

DRIVER GENDER IN CRASH	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
Male	14,004	81.6	105	89.7	2,650	83.3
Female	1,764	10.3	5	4.3	300	9.4
Unknown	1,398	8.1	7	6.0	232	7.3
Total	17,166	100.0	117	100.0	3,182	100.0

NUMBER OF OCCUPANTS in Heavy Truck/Bus	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Total	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
1 occupant	13,036	75.9	97	82.9	2,374	74.6
2 occupants	1,297	7.6	11	9.4	271	8.5
3 occupants	251	1.5	1	0.9	53	1.7
4 occupants	147	0.9	0	0.0	32	1.0
5 occupants	100	0.6	0	0.0	18	0.6
6 + occupants	878	5.1	1	0.9	197	6.2
0 occupants	344	2.0	6	5.1	70	2.2
Unknown	1,113	6.5	1	0.9	167	5.2
Total	17,166	100.0	117	100.0	3,182	100.0

## HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

VEHICLE TYPES Involved in Crash with Heavy Truck/Bus	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Vehicles	% of Subtotal	Number of Vehicles	% of Fatal	Number of Vehicles	% of Injury
Passenger Car and Station Wagon	10,725	71.9	84	63.6	2,377	71.1
Van and Motorhome	1,224	8.2	11	8.3	289	8.7
Pickup	1,973	13.2	16	12.1	427	12.8
Small Truck (under 10,000 lbs.)	376	2.5	2	1.5	76	2.3
Motorcycle	26	0.2	2	1.5	16	0.5
Moped	7	0.0	0	0.0	4	0.1
Go Cart	0	0.0	0	0.0	0	0.0
Snowmobile	7	0.0	2	1.5	1	0.0
Off Road Vehicle	1	0.0	0	0.0	1	0.0
Other	94	0.6	1	0.8	19	0.6
Unknown	488	3.3	14	10.6	131	3.9
<b>Subtotal</b>	<b>14,921</b>	<b>100.0</b>	<b>132</b>	<b>100.0</b>	<b>3,341</b>	<b>100.0</b>

HEAVY TRUCK/BUS VEHICLE TYPES	All Crashes		Fatal Crashes		Injury Crashes	
	Number of Heavy Trucks	% of Subtotal	Number of Heavy Trucks	% of Fatal	Number of Heavy Trucks	% of Injury
Commercial Vehicle: Group A	7,724	45.0	75	64.1	1,478	46.4
Commercial Vehicle: Group B	3,482	20.3	25	21.4	686	21.6
Commercial Vehicle: Group C	510	3.0	1	0.9	116	3.6
Other Truck	911	5.3	7	6.0	186	5.8
Unknown Truck	4,539	26.4	9	7.7	716	22.5
<b>Subtotal</b>	<b>17,166</b>	<b>100.0</b>	<b>117</b>	<b>100.0</b>	<b>3,182</b>	<b>100.0</b>

<b>Total Vehicle Types in Heavy Truck/Bus Crashes</b>	<b>32,087</b>		<b>249</b>		<b>6,523</b>	
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Group "A" is any vehicle that is towing a vehicle or trailer that has a gross vehicle weight rating (GVWR) over 10,000 lbs.

Group "B" is any single vehicle (including buses) with a GVWR of 26,001 lbs. or more. This would include a combination of vehicles with a combined GVWR over 26,000 lbs. when towing a trailer that has a GVWR of 10,000 lbs. or less.

Group "C" is any single vehicle with a GVWR of less than 26,001 lbs. or a combination of vehicles having a combined GVWR under 26,001 lbs. when the vehicle is required to display placards for hazardous material or designed to carry 16 passengers (including driver). Group "C" is also any vehicle carrying 15 or less people (including driver) transporting children to or from school and home on a regular basis for compensation.

## HEAVY TRUCK/BUS INVOLVED CRASHES (continued)

Hazardous Citation Issued	Heavy Truck/Bus			Passenger Vehicles Involved with Heavy Trucks						
	Single Vehicle Crash		Multi-Vehicle Crash	Single Vehicle Crash		Multi-Vehicle All Crashes		Multi-Vehicle Heavy Truck /Bus Involved Crash		
	Number of Vehicles	% of citation	Number of Vehicles	% of citation	Number of Vehicles	% of citation	Number of Vehicles	% of citation	Number of Vehicles	% of citation
None	1	0.2	10	0.5	59	0.3	417	0.4	15	0.6
Speed too fast	148	26.2	62	2.9	8,411	42.2	3,609	3.8	287	11.5
Speed too slow	1	0.2	5	0.2	36	0.2	208	0.2	6	0.2
Failed to yield	3	0.5	367	17.1	85	0.4	28,726	29.9	558	22.4
Disregard traffic control	12	2.1	100	4.7	154	0.8	6,930	7.2	147	5.9
Drove wrong way	0	0.0	1	0.0	28	0.1	114	0.1	5	0.2
Drove left of center	2	0.4	20	0.9	188	0.9	910	0.9	50	2.0
Improper passing	2	0.4	22	1.0	66	0.3	1,135	1.2	86	3.5
Improper lane use	34	6.0	245	11.4	378	1.9	3,965	4.1	213	8.6
Improper turn	38	6.7	155	7.2	97	0.5	2,308	2.4	58	2.3
Improper/no signal	0	0.0	4	0.2	14	0.1	136	0.1	8	0.3
Improper backing	37	6.6	188	8.8	1,169	5.9	1,542	1.6	28	1.1
Unable to stop in assured clear distance	22	3.9	663	30.9	963	4.8	38,852	40.4	642	25.8
Reckless driving	3	0.5	3	0.1	808	4.1	416	0.4	13	0.5
Careless/Negligent driving	114	20.2	66	3.1	4,360	21.9	2,422	2.5	197	7.9
Other	134	23.8	201	9.4	2,684	13.5	3,155	3.3	141	5.7
Unknown	13	2.3	34	1.6	438	2.2	1,346	1.4	36	1.4
<b>Total Cited Vehicles</b>	<b>564</b>	<b>100.0</b>	<b>2,146</b>	<b>100.0</b>	<b>19,938</b>	<b>100.0</b>	<b>96,191</b>	<b>100.0</b>	<b>2,490</b>	<b>100.0</b>
<b>Percent of Total Vehicles</b>		<b>15.7</b>		<b>15.8</b>		<b>11.5</b>		<b>22.1</b>		<b>18.6</b>
<b>Vehicles with No Citation Issued</b>	<b>3,032</b>	<b>84.3</b>	<b>11,402</b>	<b>84.2</b>	<b>153,604</b>	<b>88.5</b>	<b>338,618</b>	<b>77.9</b>	<b>10,863</b>	<b>81.4</b>
<b>Total Vehicles Involved</b>	<b>3,596</b>	<b>100.0</b>	<b>13,548</b>	<b>100.0</b>	<b>173,542</b>	<b>100.0</b>	<b>434,809</b>	<b>100.0</b>	<b>13,353</b>	<b>100.0</b>

