

2008
ANNUAL CRASH REPORT
for the Cheyenne Urban Area



EVENTS - ALCOHOL - WEATHER - LIGHT - DATES - DRIVERS - INJURIES - VEHICLES - INTERSECTIONS



2008 ANNUAL CRASH REPORT FOR THE CHEYENNE URBAN AREA

March 2010

The purpose of this report is to disseminate yearly crash information for the Cheyenne Urban Area to a wide audience including the public, local law enforcement agencies, educators and policy makers. The report describes trends, conditions, and identifies “hot spots.” Detailed information about individual crashes and locations is available upon request to the Cheyenne Metropolitan Planning Organization (MPO).

The data for this report is obtained from the WYDOT Safety Branch and is compiled by WYDOT from the Cheyenne Police, Laramie County Sheriff, and the Wyoming Highway Patrol collision reports. The crashes reported in this document are within the Cheyenne urban area, which includes the City of Cheyenne and surrounding county lands. Crashes on private property are included only when related to an access or intersection within a public roadway. The MPO did not request identification information, thereby maintaining privacy for individuals involved in the crashes.

According to an amendment to Wyoming Statute §31-5-1106, the driver of a vehicle involved in a collision after July 1, 1999 which results in injury, death, or property damage of at least \$1,000 must report the crash to the police, sheriff, or highway patrol, depending where the crash occurred. Prior to July 1, 1999, the monetary amount was \$500. The comparisons between years may be skewed because of this change.

Not all accidents in the database are represented geographically. If an accident location could not be determined within 50 feet from the written crash report description, no geographic coordinates are assigned. However, 100% of all the reported crashes are in the tabular database.

The MPO is very appreciative of the data and help provided by the WYDOT Safety Branch.

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QUICK FACTS ABOUT 2008 CRASHES

How many *crashes* were there in 2008? There were 1735 crashes in 2008. This is about a 6% decrease from 2007 in which there were 1851. (1836 in 2006)

How many *people* died or were injured in crashes in 2008? 2 people died in separate crashes. There were 565 people injured in 391 separate crashes. This compares to 5 fatalities in 2007 and 720 injuries in 469 separate crashes.

How many *drivers* were involved in crashes in 2008? There were 2,981 drivers involved in crashes. (3,277 in 2007)

How many *vehicles* were involved in crashes in 2008? There were 3,232 vehicles involved in crashes. (3,543 in 2006)

What *month* did most crashes occur in 2008? December with 171 crashes followed by February (154), July (152), January (150), May (149), August (148), October (145), March (143), November (139), September (130), April (127), and June (127)

What *day of the week* did most crashes occur in 2008? Friday with 321 crashes followed by Thursday (271), Wednesday (258), Tuesday (252), Saturday (240), Monday (219), and Sunday (174).

What *type* of crash was the most prevalent? Rear End crashes.

How many *hit-and-run* crashes were there in 2008? 224. (234 in 2007)

How many *pedestrians* were hit by cars in 2008? 17. (14 in 2007)

How many *bicyclists* were hit by cars in 2008? 11. (18 in 2007)

How can I learn more about crashes in the Cheyenne Area? Call the MPO office at 638-4308 for more information.

TRANSPORTATION SAFETY MANAGEMENT PLAN IMPLEMENTATION INITIATIVE

In 2007, the Cheyenne Metropolitan Planning Organization took a leadership role as one of the first MPOs in the country to develop a regional transportation safety plan. The MPO has since moved on to implementing several strategies identified in the plan. The MPO has been actively supported in its safety efforts by its regional safety partners and WYDOT Office of Highway Safety. The Cheyenne MPO safety efforts utilize crash data extensively from the annual MPO crash reports as well as data provided by WYDOT. The MPO has also actively pursued federal highway safety grants which have helped fund several implementation projects.

In 2008, the MPO received two separate grants from WYDOT. The first grant was used to organize a Law Enforcement Occupant Protection Summit. The second grant came through WYDOT Planning Department to conduct an Intersection Safety Study with field visits.

The MPO convened the Law Enforcement Occupant Protection Summit in May of 2009. Officers from Cheyenne Police Department, the Laramie County Sheriff's Office and Wyoming Highway Patrol were invited. Twelve officers attended the event. The purpose of organizing this summit was to talk about the issue of safety belt use in the Cheyenne area and support the efforts of enforcement officers in trying to increase safety belt use.

Wyoming has a low safety belt usage rate and lags behind most of the other states in the US. Wyoming also does not have a primary seatbelt law. It has been seen that for states that do not have a primary seatbelt law, enforcement has been instrumental in increasing seatbelt use. The speakers shared occupant protection data with the officers. There was a peer-to-peer presentation by an officer. Also, WYDOT programs, resources and incentives were discussed. Finally, facilitated



Officers participating at the Summit

group discussions were done to identify barriers to writing citations. This event was coordinated with the May Mobilization efforts in Wyoming. The MPO did a follow up analysis on citations written in the period between May 14th and July 6th. There were over 200 seatbelt citations written for the Cheyenne area in 2009 in comparison to 25 in 2008.

The MPO worked on an Intersection Safety Study with national safety experts. The study included a data driven process to identify typical crash patterns at several intersections in the Cheyenne metropolitan area. A total of twenty intersections were prioritized and field visits were done at these

locations. A multidisciplinary team helping the MPO with intersection safety also accompanied the consultants to several of the sites where field visits were done. After completion of field visits, safety countermeasures for each of these



Intersection Safety Analysis

20 intersections were identified and provided in the report. This study will assist City, County and State to invest in intersection safety improvements which could potentially decrease crashes at these locations.

The MPO with help from the TSAC (Transportation Safety Advisory Committee) and the Safety Emphasis Teams continues to plan for future activities which help implement the Transportation Safety Management Plan strategies. Based on the number of fatalities and injuries, the TSAC had selected 6 AASHTO emphasis areas for focus in Cheyenne, which are Impaired Driving (primarily alcohol), Distracted Drivers, Intersections and Other Hazardous Locations, Occupant Protection, Older Drivers and Younger Drivers. The MPO holds periodical Emphasis Team Meetings to review crash data and evaluate its progress. The teams also revisits the Transportation Safety Management Plan and identifies future action steps that help implement strategies identified in the plan. As a result of the efforts of the Safety Emphasis Teams, the MPO was awarded two grants in 2009 to implement strategies in the occupant protection emphasis area.

ESTIMATING THE COST OF INJURIES, 2008

Adapted from the National Safety Council

The National Safety Council makes estimates of the average costs of fatal and nonfatal unintentional injuries to illustrate their impact on the nation's economy. The costs are a measure of dollars spent and income not received due to accidents, injuries, and fatalities.

Cost estimation is not exact -- it can only be approximated. The estimates depend on many factors.

The figures provided by NSC can be used to estimate the actual costs to the Cheyenne area of deaths and injuries. The comprehensive cost figures (discussed below) should be used for cost benefit analyses.

The calculable costs of motor-vehicle crashes are wage and productivity losses, medical expenses, administrative expenses, motor vehicle damage, and employer costs. In addition to the economic cost components listed above, the following comprehensive costs also include a measure of the value of lost quality of life which was obtained through empirical studies of what people actually pay to reduce their safety and health risks.

More information about estimating the cost of injuries is available at the National Safety Council website at www.nsc.org.

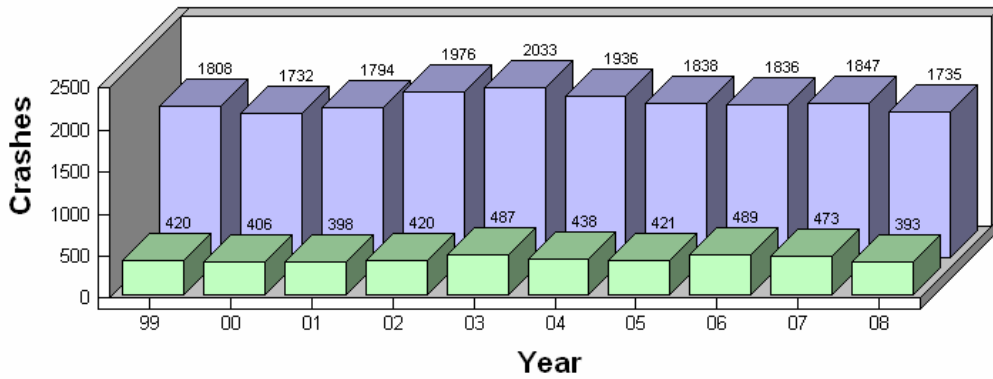
Cost of Injury Report for Cheyenne Crashes, 2008			
Type of Injury	Cost Per Event*	Number of Events	Total by Type of Injury
Death	\$4,100,000	2	\$8,200,000
Incapacitating	\$208,500	43	\$8,965,500
Non-Incapacitating Evident	\$53,200	204	\$10,852,800
Possible Injury	\$25,300	327	\$8,273,100
No Injury	\$2,300	3689	\$8,484,700
Total		4265	\$44,776,100

INCAPACITATING INJURIES An incapacitating injury is any injury that prevents a person from walking, driving, or continuing normal activities the person was capable of performing before the injury occurred. If the person is not able to leave the crash scene unassisted, that person is incapacitated.

NON-INCAPACITATING INJURIES A non-incapacitating injury is any injury that is not incapacitating, but is evident to anyone at the crash site such as, a lump on the head, abrasions, bruises or minor lacerations.

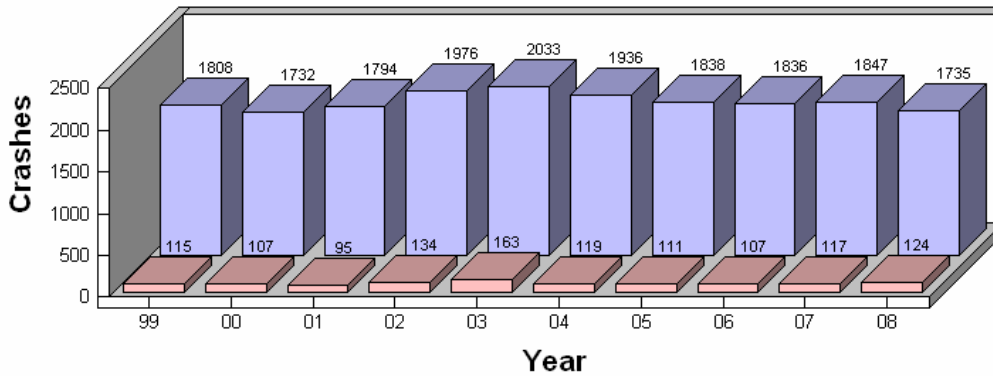
POSSIBLE INJURIES A possible injury is any injury that is not incapacitating, or non-incapacitating, but is reported by the person such as, limping, momentary unconsciousness, pain, nausea, hysteria, etc.

Total Crashes 1999-2008



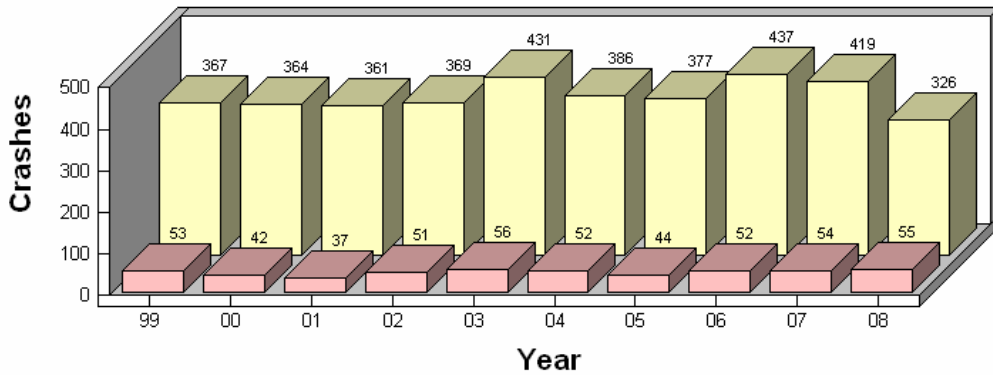
■ Injury & Fatal Crashes (4,345)
 ■ Total Crashes (18,535)

Total & Alcohol Crashes 1999-2008



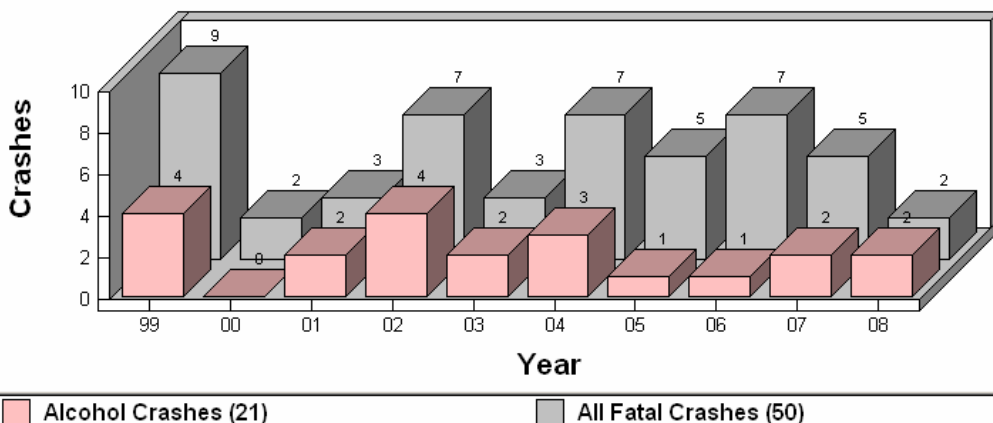
■ Alcohol Related (1,192)
 ■ Total Crashes (18,535)

Injury & Fatal Crashes 1999-2008

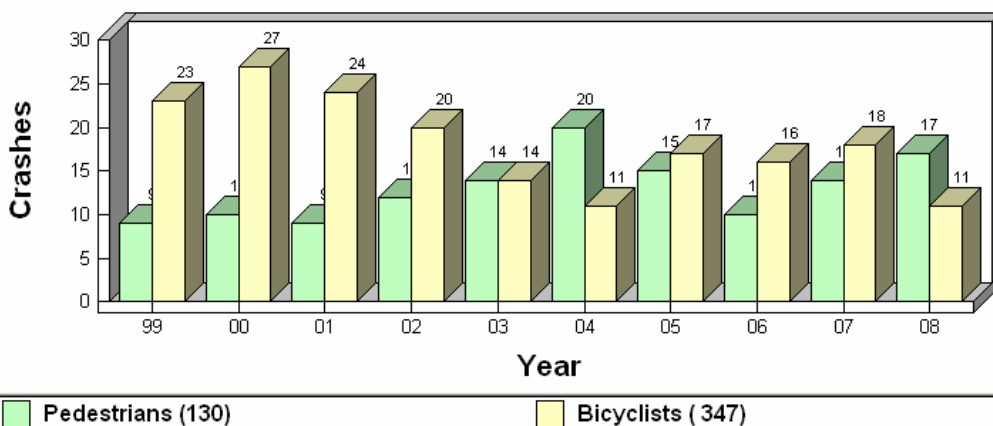


■ Alcohol Related (496)
 ■ Non Alcohol Related (3,837)

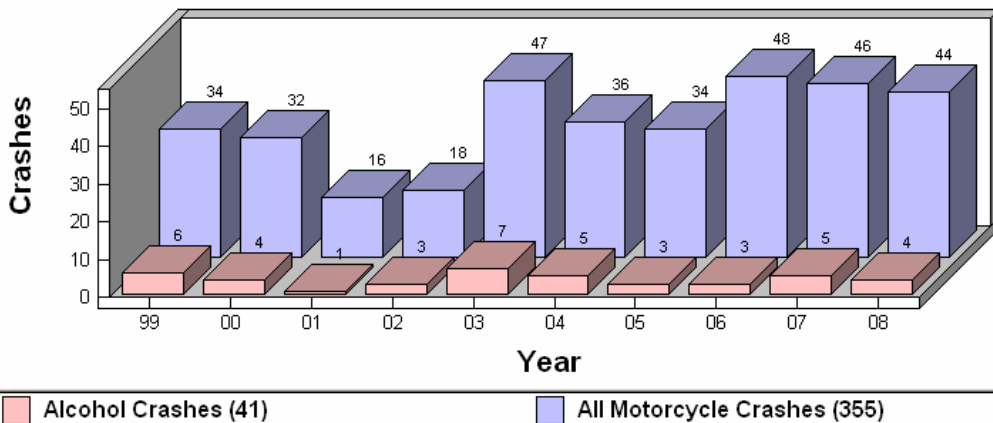
Fatal Crashes 1999-2008



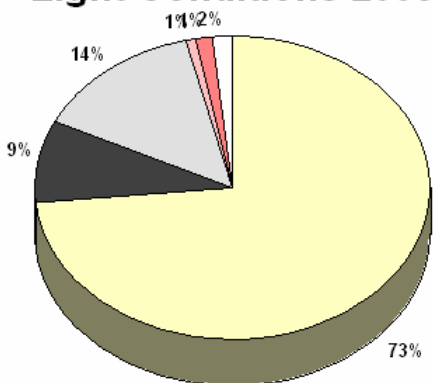
Pedestrian & Bicycle Crashes 1999-2008



Motorcycle Crashes 1999-2008

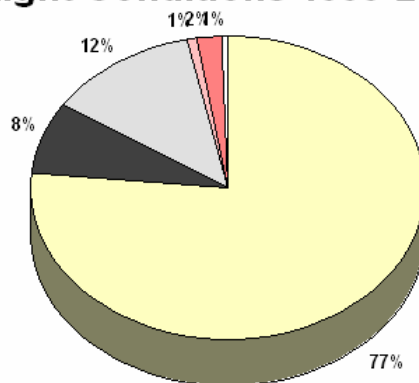


Light Conditions 2008



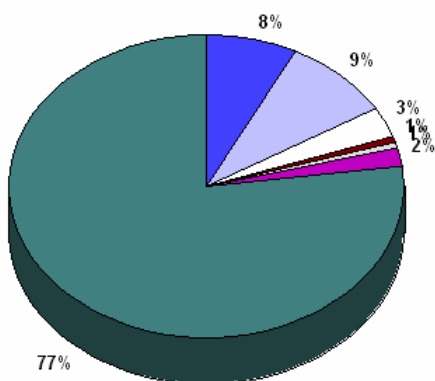
Daylight (1,271) Dark Unlighted (155)
 Dark Lighted (242) Dawn (15)
 Dusk (23) Unknown (29)

Light Conditions 1999-2008



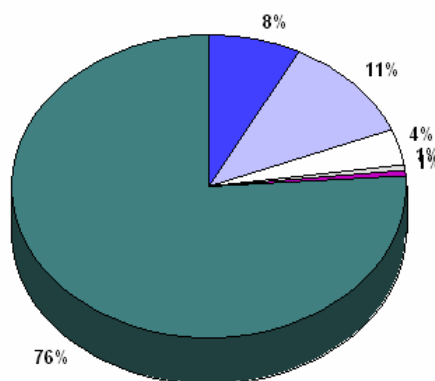
Daylight (14,185) Dark Unlighted (1,449)
 Dark Lighted (2,284) Dawn (152)
 Dusk (365) Unknown (100)

Road Conditions 2008



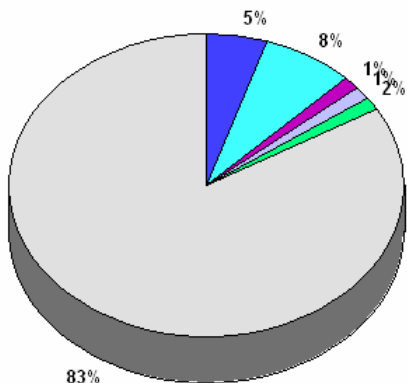
Wet (131) Ice-Frost (153) Snow (56)
 Gravel (12) Slush (11) Unknown (34)
 Dry (1,338)

Road Conditions 1999-2008



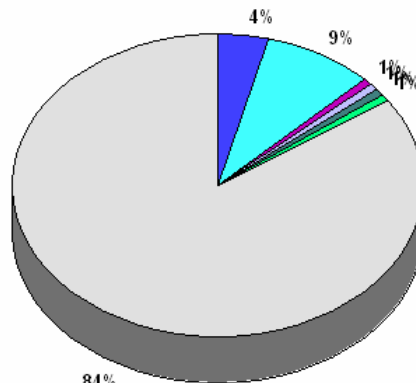
Wet (1,436) Ice-Frost (153) Snow (708)
 Gravel (55) Slush (124) Unknown (106)
 Dry (14,048)

Weather Conditions 2008



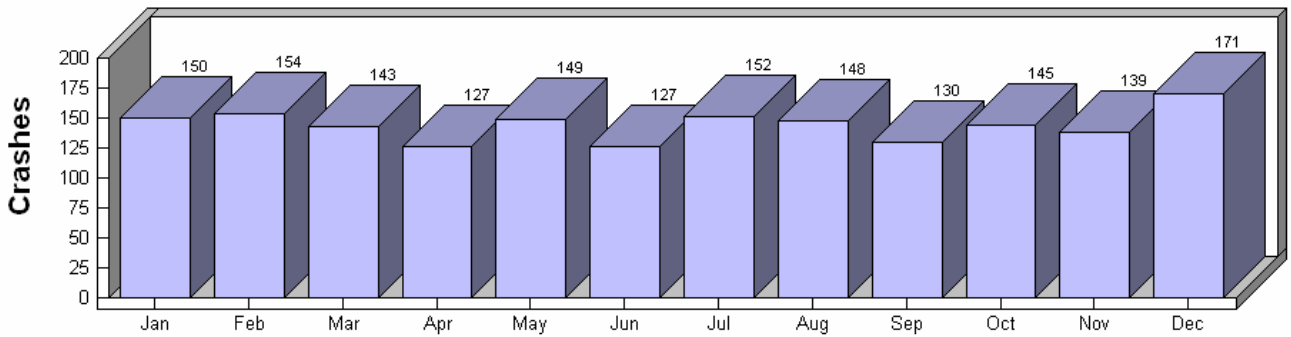
Raining (88) Snowing (131)
 Fog (2) Dust (1)
 Severe Wind (24) Blizzard (19)
 Sleet-Hail (7) Unknown (27)
 Clear or Cloudy (1,436)

Weather Conditions 1999-2008

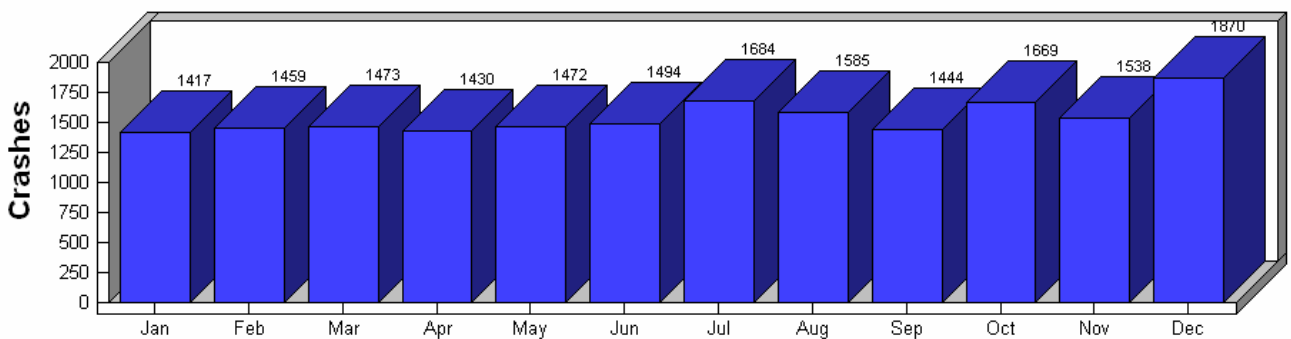


Raining (757) Snowing (1,592)
 Fog (73) Dust (1)
 Severe Wind (165) Blizzard (123)
 Sleet-Hail (126) Unknown (113)
 Clear or Cloudy (15,585)

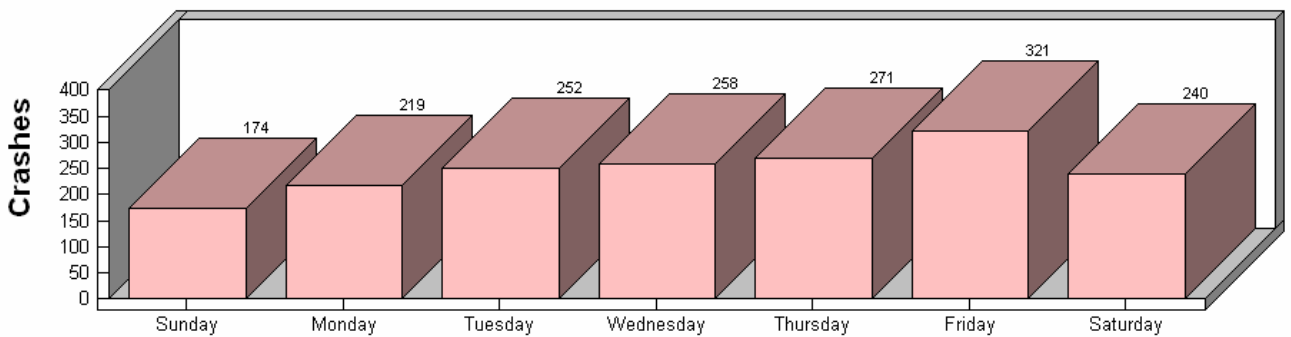
Crashes by Month 2008



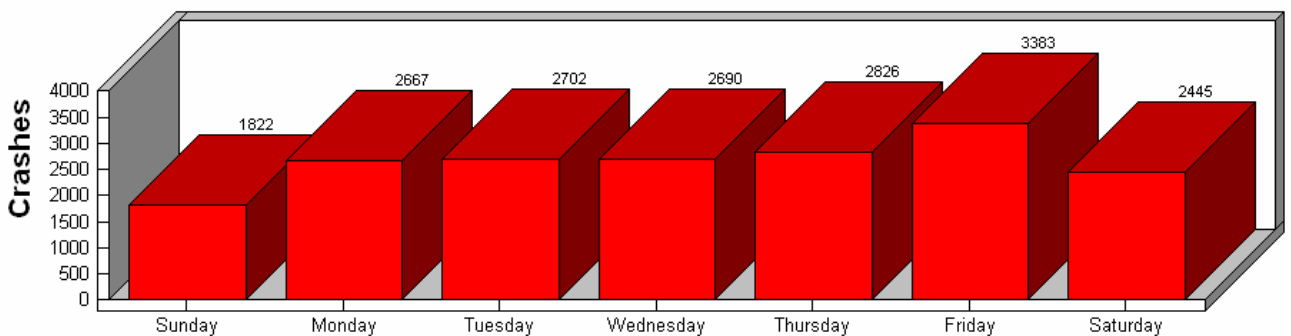
Crashes by Month 1999-2008



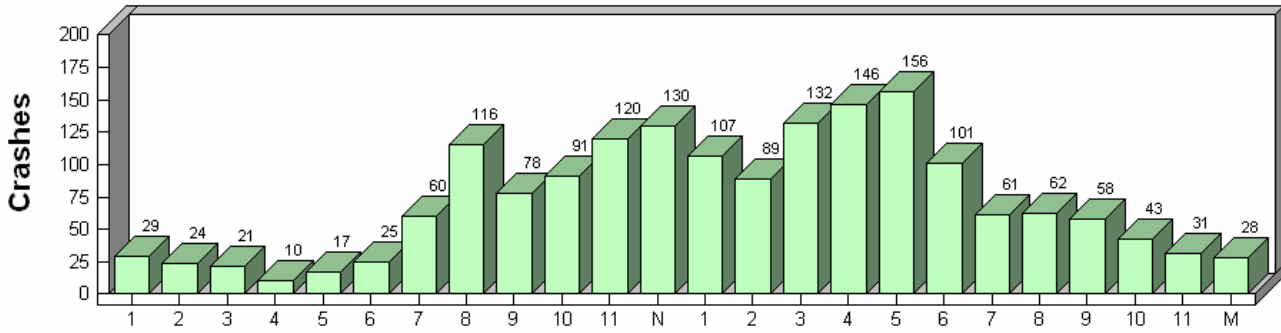
Crashes by Day of Week 2008



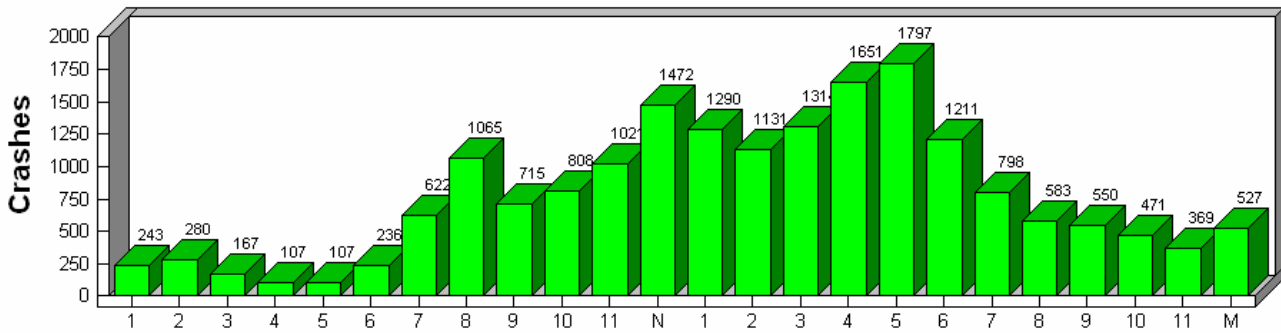
Crashes by Day of Week 1999-2008



Crashes by Time of Day 2008



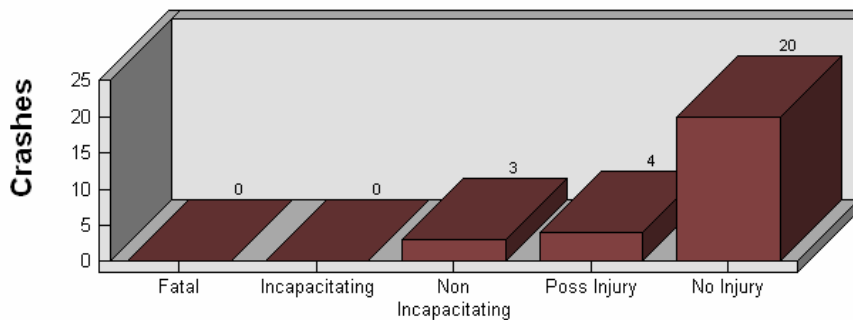
Crashes by Time of Day 1999-2008



Crashes on Dell Range, 2004-2008						
	Total	% Change from Previous Year	Injury Crashes	% Change from Previous Year	Injuries	% Change from Previous Year
2008	187	- 15.0%	49	- 26.8%	88	- 17.8 %
2007	220	- 5.2%	66	- 10.8%	107	- 14.4%
2006	232	4.9%	74	21.3%	125	11.6%
2005	221	1.8%	61	7.0%	112	28.7%
2004	217	5.8%	57	- 3.4%	87	3.6%

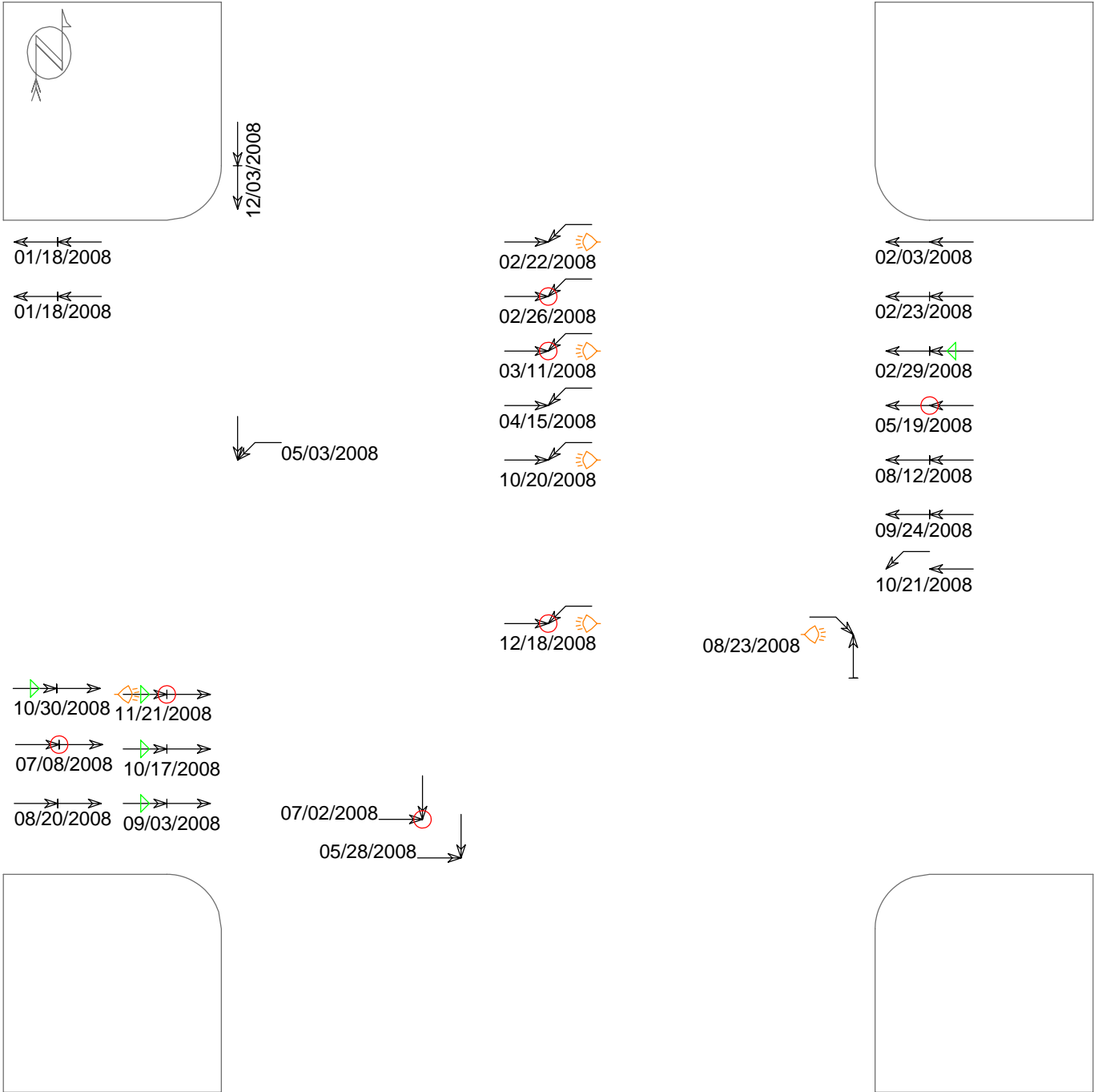
Intersection Crashes at Converse Ave & Dell Range Blvd, 2004-2008					
Year	Total	% Change	Injury Crashes	% Change	Collision Type
2008	27	- 20.6%	7	-36.4%	55% of the Crashes at this intersection were Rear End Crashes
2007	34	- 12.8%	11	- 42.1%	
2006	39	18%	19	46%	
2005	33	- 23%	13	- 13%	
2004	43	59%	15	67%	

**Converse Ave & Dell Range Blvd 2008
Crash Severity**



Converse Ave & Dell Range Blvd

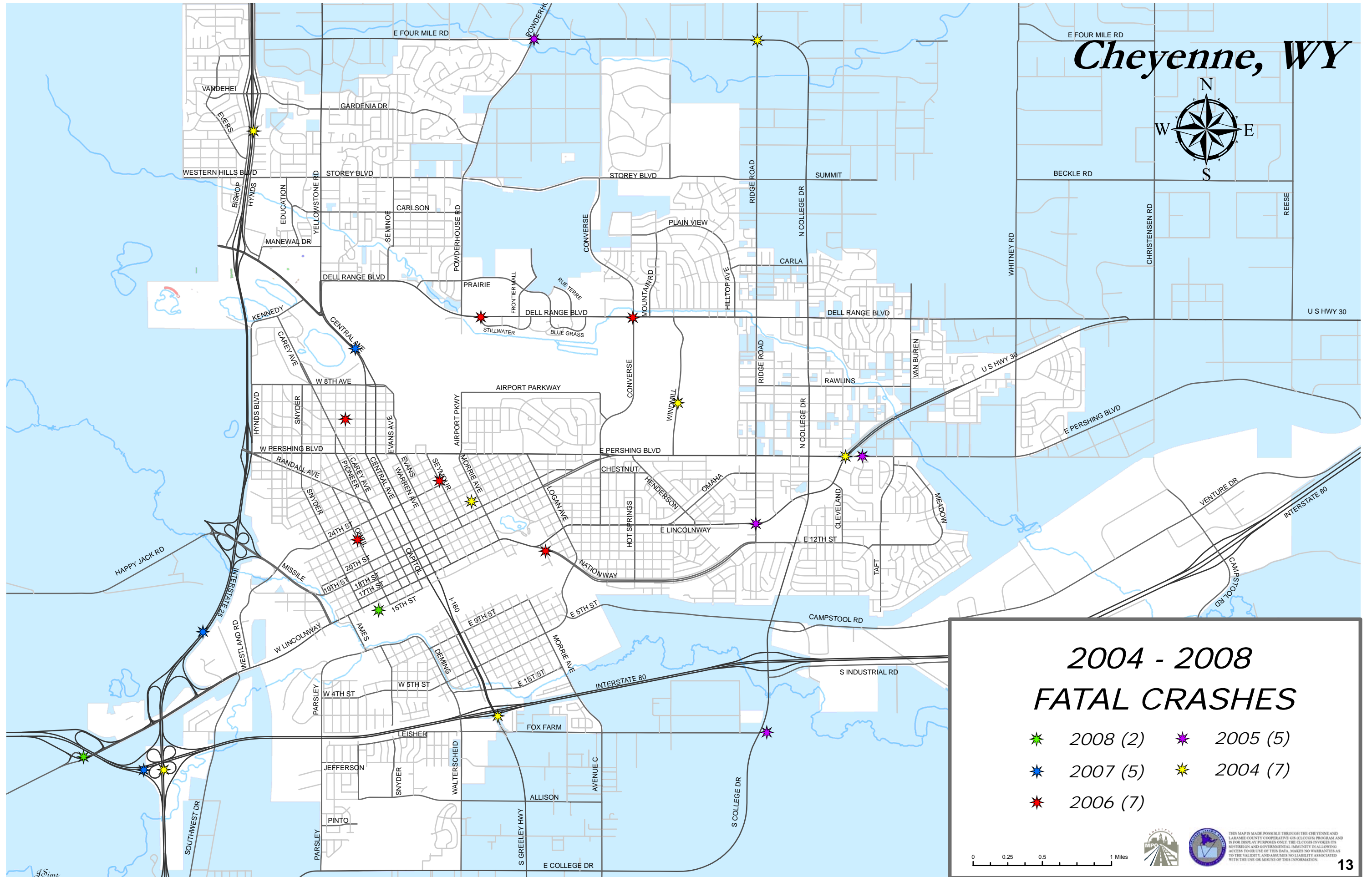
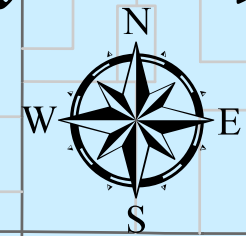
27 Accidents 01/01/08 - 12/31/08



(clear filter), (1) accidents with insufficient data for display

- | | | | | |
|--------------|------------------|--------------|----------------|----------|
| ← Straight | ▭ Parked | × Pedestrian | Fixed objects: | |
| ← Stopped | ⚡ Erratic | ⊗ Bicycle | □ General | ⊠ Pole |
| ← Unknown | ⚡ Out of control | ○ Injury | ⊞ Signal | ⊞ Curb |
| ↔ Backing | ↘ Right turn | ⊙ Fatality | ⊞ Tree | ⊞ Animal |
| ↔ Overtaking | ↙ Left turn | ⚡ Nighttime | ◀ 3rd vehicle | |
| ↔ Sideswipe | ↺ U-turn | ⚡ DUI | * Extra data | |

Cheyenne, WY



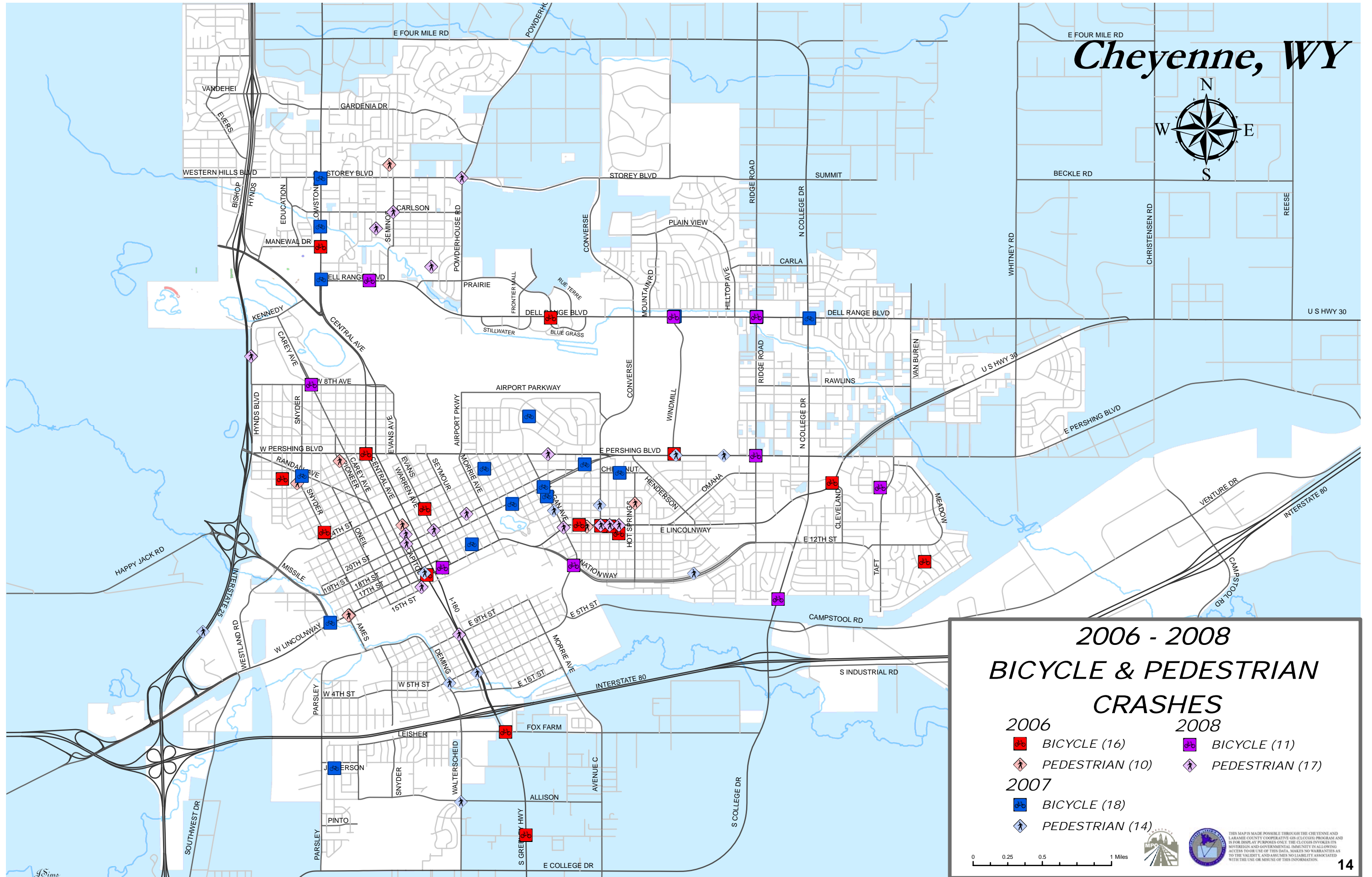
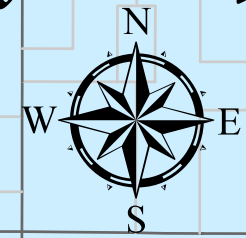
2004 - 2008 FATAL CRASHES

- ★ 2008 (2) ★ 2005 (5)
- ★ 2007 (5) ★ 2004 (7)
- ★ 2006 (7)

0 0.25 0.5 1 Miles

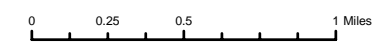
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Cheyenne, WY



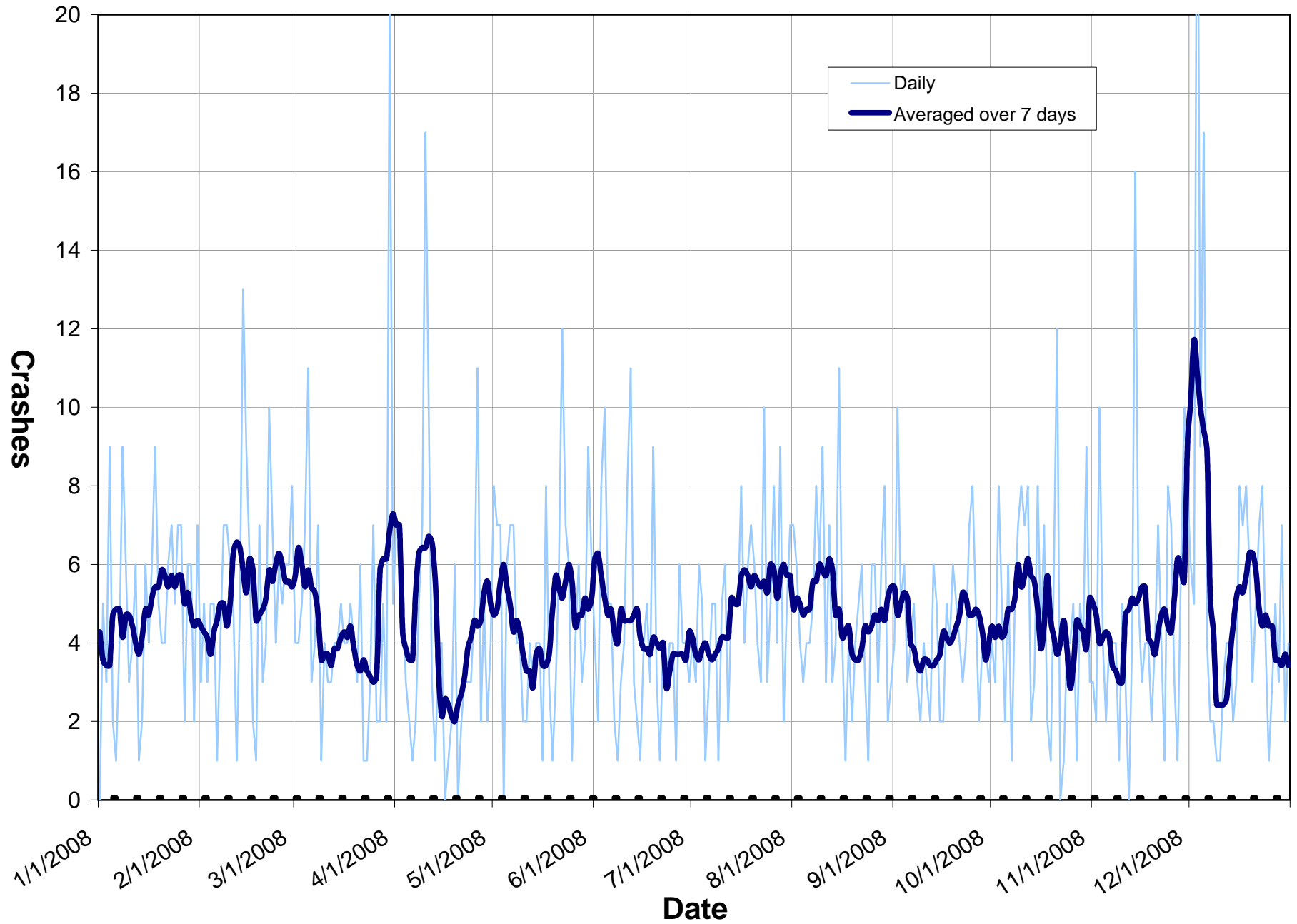
2006 - 2008 BICYCLE & PEDESTRIAN CRASHES

- | | |
|-----------------|-----------------|
| 2006 | 2008 |
| BICYCLE (16) | BICYCLE (11) |
| PEDESTRIAN (10) | PEDESTRIAN (17) |
| 2007 | |
| BICYCLE (18) | |
| PEDESTRIAN (14) | |



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2008 Crashes by Date



Accident Summary Report 2008

Greater Cheyenne Area

Severity		Multi-Vehicle		Month					
PDO: 1342		One Vehicle: 351		Jan: 150	Apr: 127	July: 152	Oct: 145		
INJ: 391 565 :Injured		Two Vehicles: 1283		Feb: 154	May: 149	Aug: 148	Nov: 139		
FAT: 2 2 :Killed		Three or More: 101		Mar: 143	June: 127	Sept: 130	Dec: 171		
Manner of Collision			First Harmful Event						
Head On: 42			Pedestrians: 17		Overtuned: 55				
Rear End: 446			Bicycle: 11		Jackknife: 9				
Angle Same Direction: 165			Domestic Animal: 1		Parked Motor Vehicle: 201				
Angle Opp Direction: 142			Wild Animal: 22		Berm/Ditch/Embankment: 9				
Angle Right: 334			Light/Utility Pole: 16		Tree/Shrub/Rock: 6				
Angle Unk Direction: 14			Sign: 11		Jump/Pushed/Thrown: 2				
Sideswipe (Same): 120			Guard Rail/Cable: 51		Traffic Barrier: 16				
Sideswipe (Opposite): 14			Bridge Structure: 3		Wall/Building: 5				
Other Collision: 74			Culvert/Headwall: 1		Mailbox: 4				
Not Collision: 334			Fence: 27		Other Fixed Object: 14				
Unknown: 28			Raised Median/Curb: 19		Involving Other Object: 16				
			Delineator Post: 6		Other Non Collision: 28				
Road Conditions		Weather Conditions		Road Description		Lighting Conditions			
Dry: 1338		Clear or Cloudy: 1436		At Intersection: 628		Daylight: 1271			
Wet: 132		Rain: 88		At Driveway Access: 129		Dawn or Dusk: 38			
Muddy/Dirt: 12		Snowing: 149		Intersection Related: 302		Dark-Lighted: 242			
Snowy: 56		Fog: 2		Non Junction: 522		Dark-Unlighted: 155			
Icy: 154		Snow/Sleet/Hail: 7		Ramp: 42		Unknown: 29			
Slushy: 11		Wind: 24		Other: 7					
Other: 7		Blizzard: 1		Unknown: 105					
Unknown: 32		Unknown: 28		Hit & Run		Drinking			
				Hit & Run: 224		Yes: 124 No: 1509			
Vehicle Type		Veh 1 Veh 2		Vehicle Movement		Veh 1 Veh 2		Time of Day	
Passenger Car: 830		700		Going Straight: 952		712		12am-3am: 75	
Pickup: 330		280		Slowing Down: 73		52		3am-6am: 51	
SUV: 226		177		Stopped in Traffic: 47		252		6am-9am: 231	
Passenger Van: 74		76		Making a Right Turn: 85		34		9am-12pm: 319	
Cargo Van: 11		1		Making a Left Turn: 263		74		12pm-3pm: 318	
School Bus: 1		2		Making a U-Turn: 12		1		3pm-6pm: 424	
Other Bus: 6		2		Passing: 11		11		6pm-9pm: 203	
Construction Machine: 2		0		Backing Up: 66		18		9pm-12am: 114	
Motorcycle < 150cc: 6		0		Enter/Leave Parked: 10		3		Day of the Week	
Motorcycle > 150cc: 21		18		Entering Lane: 32		6		Sunday: 174	
Scooter: 1		0		Parked: 14		197		Monday: 219	
Light Truck: 8		5		Changing Lanes: 51		6		Tuesday: 252	
Medium Truck: 4		6		Negotiating Curve: 46		7		Wednesday: 258	
Heavy truck > 26,000: 60		34		Other Action: 0		1		Thursday: 271	
Other Type: 5		3		Driverless: 8		3		Friday: 321	
Unknown: 48		9		Unknown: 52		7		Saturday: 240	
Total Accidents: 1,735									

10 Year Accident Summary Report

1/1/1999 - 12/31/2008
Greater Cheyenne Area

Severity		Multi-Vehicle		Month			
PDO: 76.6%		One Vehicle: 15.7%		Jan: 7.6%	Apr: 7.7%	July: 9.1%	Oct: 9.0%
INJ: 23.2% 6517 :Injured		Two Vehicles: 77.6%		Feb: 7.9%	May: 7.9%	Aug: 8.6%	Nov: 8.3%
FAT: 0.3% 52 :Killed		Three or More: 6.6%		Mar: 7.9%	June: 8.1%	Sept: 7.8%	Dec: 10.1%
Manner of Collision		First Harmful Event					
Head On: 2.4%		Pedestrians: 0.7%		Overturned: 2.4%			
Rear End: 25.8%		Bicycle: 1.0%		Jackknife: 0.0%			
Angle: 22.9%		Domestic Animal: 0.1%		Parked Motor Vehicle: 11.3%			
Sideswipe (Same): 9.4%		Wild Animal: 0.7%		Vehicle Trans on Rd: 71.1%			
Sideswipe (Opposite): 1.4%		Light/Utility Pole: 1.3%		Berm/Ditch/Embankment: 0.5%			
Other Collision: 20.4%		Sign: 0.8%		Tree/Shrub/Rock: 0.4%			
Not Collision: 1.8%		Guard Rail/Cable: 2.5%		Traffic Barrier: 0.3%			
Unknown: 15.9%		Bridge Structure: 0.5%		Wall/Building: 0.4%			
		Culvert/Headwall: 0.1%		Mailbox: 0.1%			
		Fence: 1.4%		Other Fixed Object: 0.3%			
		Raised Median/Curb: 1.0%		Involving Other Object: 0.8%			
		Delineator Post: 0.4%		Other Non Collision: 1.3%			
Road Conditions	Weather Conditions		Road Description		Lighting Conditions		
Dry: 75.8%	Clear or Cloudy: 84.1%		At Intersection: 33.2%		Daylight: 76.5%		
Wet: 7.7%	Rain: 4.1%		At Driveway Access: 10.1%		Dawn or Dusk: 2.8%		
Muddy/Dirt: 0.3%	Snowing: 8.6%		Intersection Related: 25.4%		Dark-Lighted: 12.3%		
Snowy: 3.8%	Fog: 0.4%		Non Junction: 30.7%		Dark-Unlighted: 7.8%		
Icy: 11.1%	Snow/Sleet/Hail: 0.7%		Other: 0.0%		Unknown: 0.5%		
Slushy: 0.7%	Wind: 0.9%		Unknown: 0.6%				
Unknown: 0.6%	Blizzard: 0.7%				Drinking		
	Unknown: 0.6%				Yes: 6.4% No: 93.0%		
Vehicle Type	Veh 1	Veh 2	Vehicle Movement	Veh 1	Veh 2	Time of Day	
Passenger Car:	63.5%	54.5%	Going Straight:	59.6%	42.7%	12am-3am: 4.2%	
Pickup:	20.8%	18.3%	Slowing Down:	4.6%	4.2%	3am-6am: 2.1%	
Passenger Van:	5.8%	5.4%	Stopped in Traffic:	2.7%	16.1%	6am-9am: 11.7%	
Cargo Van:	0.1%	0.0%	Making a Right Turn:	5.3%	2.3%	9am-12pm: 15.8%	
School Bus:	0.1%	0.1%	Making a Left Turn:	14.7%	4.8%	12pm-3pm: 20.3%	
Other Bus:	0.2%	0.2%	Making a U-Turn:	0.7%	0.1%	3pm-6pm: 26.2%	
Construction Machine:	0.2%	0.2%	Passing:	0.8%	0.4%	6pm-9pm: 11.6%	
Motorcycle < 150cc:	0.0%	0.0%	Backing Up:	3.8%	1.2%	9pm-12am: 8.1%	
Motorcycle > 150cc:	1.2%	0.7%	Enter/Leave Parked:	1.4%	0.2%	Day of the Week	
Motor Home:	0.1%	0.1%	Entering Lane:	0.2%	0.0%	Sunday: 9.8%	
Light Truck:	0.0%	0.0%	Parked:	0.1%	11.6%	Monday: 14.4%	
Medium Truck:	0.9%	0.6%	Changing Lanes:	2.6%	0.7%	Tuesday: 14.6%	
Heavy Truck > 26,000:	2.3%	2.0%	Negotiating Curve:	0.2%	0.0%	Wednesday: 14.5%	
Emergency Veh:	0.3%	0.4%	Other Action:	1.7%	0.3%	Thursday: 15.2%	
Other Type:	0.4%	0.7%	Driverless:	0.0%	0.0%	Friday: 18.3%	
Unknown:	3.5%	0.7%	Unknown:	1.7%	0.1%	Saturday: 13.2%	
Total Accidents: 18,535							