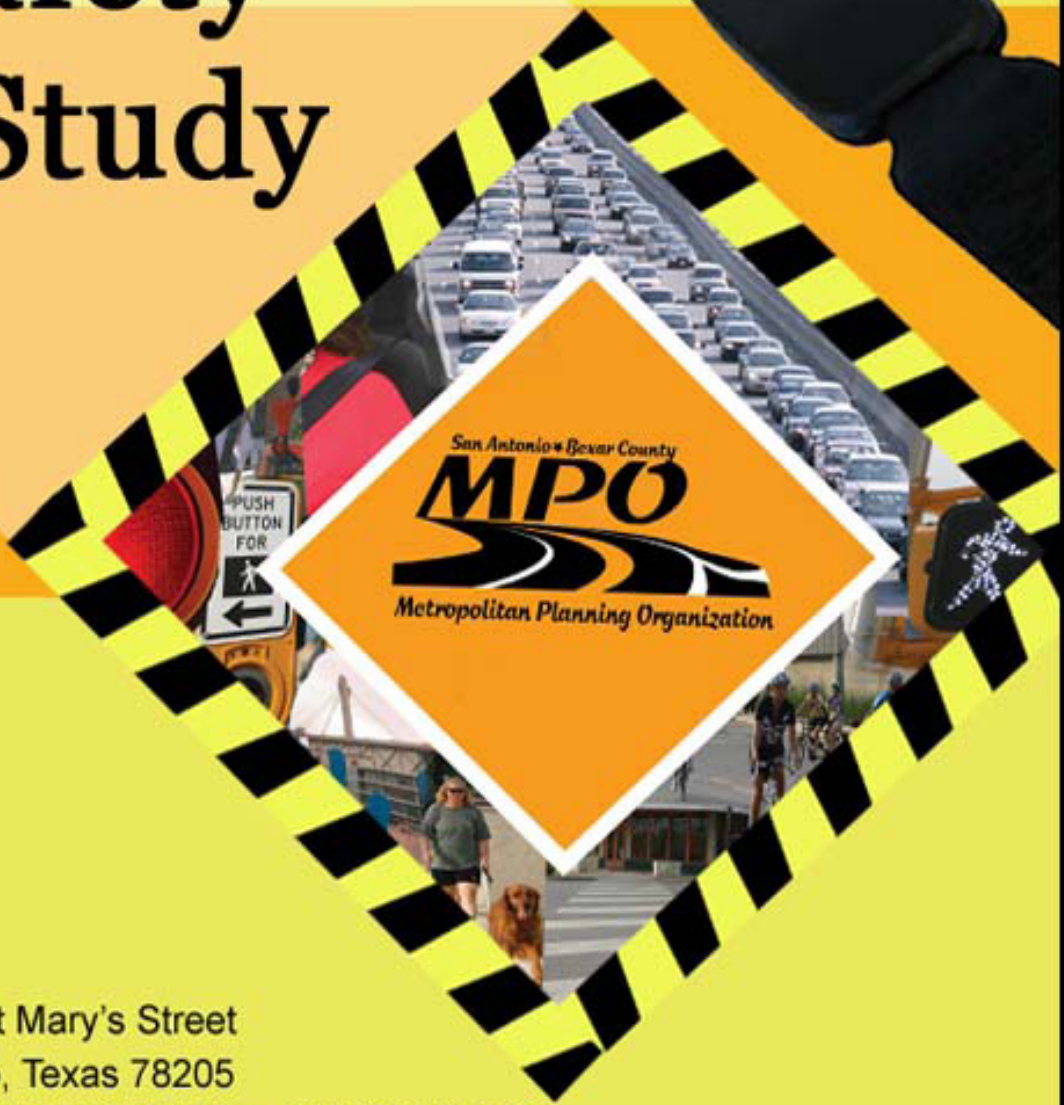
Regional Safety Study



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Introduction

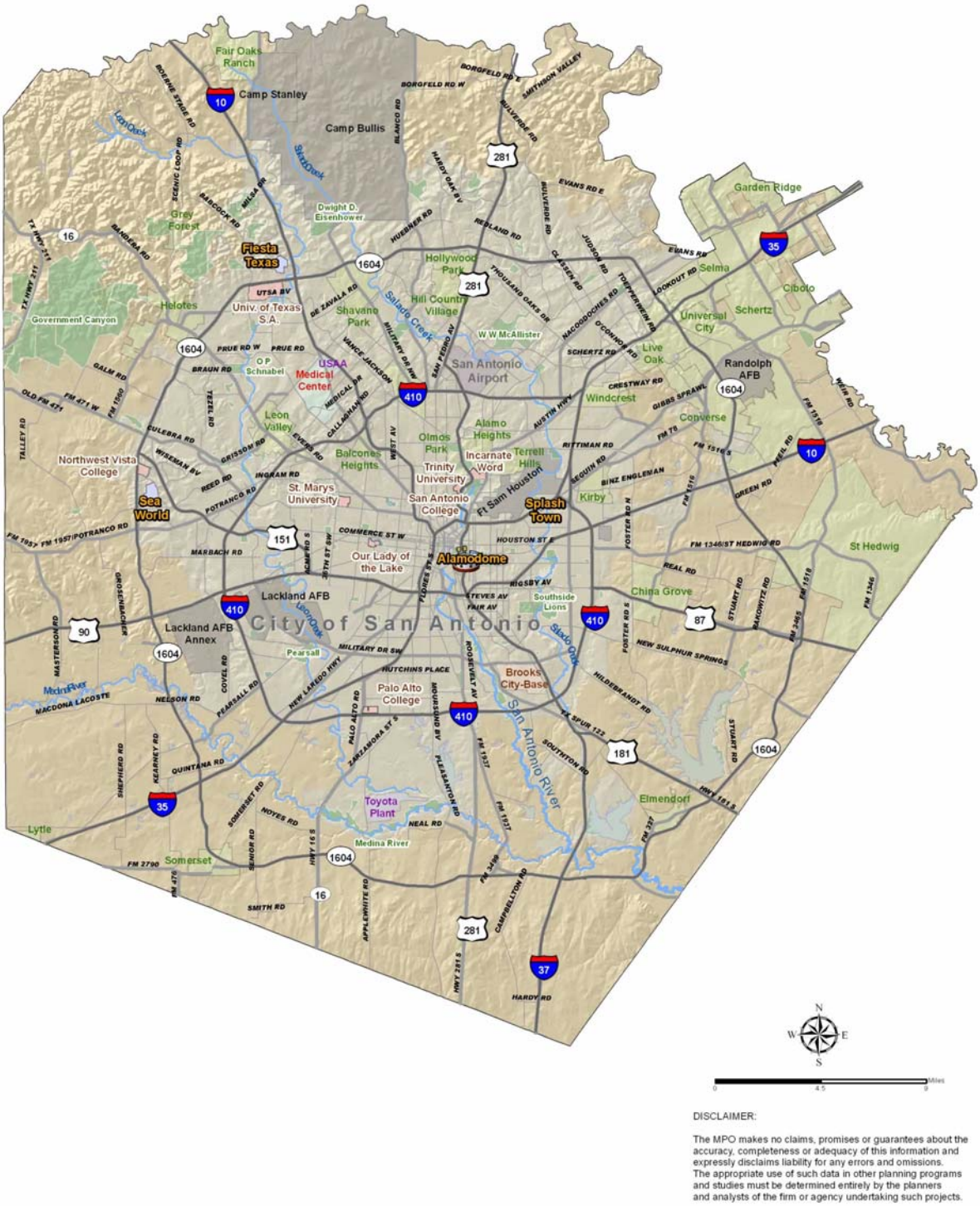
The San Antonio-Bexar County Metropolitan Planning Organization (MPO) is conducting a regional transportation safety study. The MPO sees the study as an extension of its current efforts to improve transportation safety throughout the region. The greater San Antonio area includes a large network of roadway infrastructure, pedestrian and bicycle facilities as well as a number of potential transit options. Keeping people safe when traveling to their destinations throughout our communities is a priority.

The greater San Antonio region will experience exceptional growth over the next 20 years, expecting 600,000 new residents to live and work in our region. As budget constraints limit the ability to build new roads, sidewalks, bicycle facilities and other transportation improvements, traffic safety will become even more of a pressing issue in our region. Efforts to reduce the frequency and severity of crashes have long been underway. This study exists to offer a more coordinated effort across the many local jurisdictions. The Regional Transportation Safety Committee, our partner organizations, and local governments are engaged in numerous activities to address impaired driving, distracted and aggressive driving, bicycle and pedestrian safety, motorcycle safety and dangerous locations in our region. Several initiatives have been implemented ranging from major law enforcement and public education campaigns to deployment of technological innovations.

Transportation safety will not be solved this year or next, and will require continued collaboration with planning, engineering, and advocacy groups who deal with transportation planning and implementation on a daily basis. Changes from the Legislature are also needed to better enable these groups to address the safety problems not only locally, but across the state. Most importantly, it will involve a change in behavior in how the general public chooses to interact and respect each other on the region's roads.

Within this report you will find detailed information for the MPO region for the year 2008. On-going safety information, data and updates for previous and future years will be available online at www.sametroplan.org.

Figure 1: Map of the Region



Transportation Safety in the Planning Process

Keeping safety at the forefront of planning efforts complements the Safe, Accountable, Flexible, Efficient, Transportation Equity Act: A Legacy for Users (SAFETEA-LU). SAFETEA-LU is the federal funding legislation for transportation projects and includes safety as one of the eight goals. SAFETEA-LU instituted a requirement for active, explicit consideration of safety in transportation as part of the traditional planning process. Metropolitan Planning Organizations and other partner agencies form guidelines, plans and conduct studies based on this federal legislation. In addition, as part of SAFETEA-LU MPOs are required to consider the state's Strategic Highway Safety Plan when developing transportation goals and objectives. Safety is an important factor in transportation planning at the federal, state and local levels. There is a need for regional coordination and the SA-BC MPO seeks to conduct the first comprehensive safety analysis for our region.

Current Activities

There have been several safety studies, analyses, plans and programs created at the national, state and local levels.

National:

- National Conference of State Legislators – have produced reports that have focused on motorcycle safety, pedestrian and bicycle safety, teen driving, speed, child restraints and safety belt usage
- National Highway Traffic Safety Administration – have produced an Aggressive Driving Guide, Bicycle Safety Program, hosted a Distracted Driving Summit, created an Impaired Driver Safety Program and Motorcycle Safety Program
- National Transportation Safety Board – produced a report titled, "Actions to Reduce Fatalities, Injuries, and Crashes Involving the Hard Core Drinking Driver"

State:

- Click It or Ticket
- Driving While Intoxicated Prevention Campaign
- Safe Routes to Schools
- Strategic Highway Safety Plan
- Teens in the Driver Seat

Local:

- Defensive Driving – City of San Antonio
- Mothers Against Drunk Driving
- No Refusal Weekends – the Bexar County Sheriff's office and San Antonio Police Department
- San Antonio – Bexar County MPO's Walkable Community Program, which includes bicycle rodeos, bicycle safety classes and Walkable Community Workshops
- San Antonio Police Department Crash and Fatality Report 2007, 2008 and 2009
- San Antonio Council on Alcohol and Drug Abuse
- Traffic Jam Coalition – a local Texas Department of Transportation committee focused on reducing crashes by awarding grants to local entities to improve traffic safety

Regional Safety Committee

MPO staff as well as a regional safety committee composed of representatives from Bexar County, the Texas Department of Transportation, City of San Antonio, San Antonio Police Department, VIA Metropolitan Transit and the Alamo Area Council of Governments all contributed to the development of the 2010 San Antonio – Bexar County MPO Safety Study. Coordination through a Regional Safety Committee was seen as an essential piece in the development of a safety study for the area. Expertise from planners, law enforcement, engineers, and safety program coordinators contributed real world experience with first hand knowledge of transportation and traffic safety issues.

The Regional Safety Committee met initially to identify needs for the region, developed a mission for the committee and study and formed goals and objectives. Later meetings were for coordination and validation of data for the safety study.

Mission

To identify transportation safety needs through a comprehensive regional transportation safety study.

Goals

- Identify transportation safety problem areas and solutions in the short and long term.
- Foster collaboration between different public agencies that have a vested interest in transportation safety.
- Create and maintain an online safety application to provide stakeholders with data using Crash Records Information System (CRIS) and other available crash information.
- Conduct outreach to both gather information and provide information related to transportation safety issues.

Questions

- What elements of the transportation system may present a safety issue? To what extent is the safety issue. Which users does it affect and under what circumstances?
- What elements of users of the transportation system present a safety issue? To what extent, which users and under what circumstances?
- What are the opportunities to reduce or mitigate safety issues in our region?
- What are the costs to solutions and countermeasures that would improve safety?

Methodology

Development of effective strategies to improve safety depends on accurate quantitative and qualitative data, which can be analyzed in multiple ways. This becomes vital in understanding safety trends in the region and identifying the populations, infrastructure and behaviors with the most need for safety improvements.

This safety study identifies transportation safety issues and concerns in the region, and is based on collective observations with partner agencies and extensive research and analysis of crash data. Some observations were supported by agency analyses and studies and other observations were based on perceived risks and intuitive reasoning. The analysis of various types of crashes, trends and patterns was carried out for the year 2008.

The result of the analyses performed throughout the study is meant to provide an overview of the distribution and magnitude of transportation safety issues throughout the greater San Antonio region. The safety study is a starting point and serves as a resource to those involved in transportation and traffic safety.

Information from the study and access to the crash data is meant to provide more accurate transportation safety statistics and information for the region, help in project selection for public agencies, assist in crash pattern identification and aid in the effective deployment of resources such as police officers on duty.

For detailed information on the methodology, please see the **Technical Appendix.**

Crash Records Information System

This study uses data from the Crash Records Information System (CRIS) for year 2008. This database was created and maintained by the Texas Department of Transportation (TxDOT). A CRB-3 (see technical appendix for actual form) form is filled out by local law enforcement at a crash scene. A copy of the form is required to be sent to TxDOT where data is transmitted to the CRIS database. There are several different categories of crashes. Police reports are only required to be filled out for fatalities, incapacitating injuries, non-incapacitating injuries and crashes that exceed $1,000 in physical damage. Bicycle and pedestrian crashes are only reported when a motorized vehicle is involved. The extent of under reporting of crashes is not known, but mostly involves crashes where exchange of information occurs and those involved leave the scene. For the purpose of this safety study MPO staff only analyzed information from the CRIS database and coordinated with TxDOT to determine the particular data fields used for each crash category.

Transportation Safety Survey

MPO staff developed a Transportation Safety Survey to provide additional detailed information from citizens in the region. The survey includes detailed questions regarding actual driver behavior of the survey respondent, observations of other drivers and perceived transportation safety issues. Throughout this study you will find responses to various survey questions. To take the Transportation Safety Survey or view the full survey results visit www.sametroplan.org.

GIS Data

Geographic Information Systems, or GIS, is utilized to analyze and display the multi-modal safety aspect of this study. The study looks at motor vehicles, pedestrians, bicyclists and motorcyclists data. Each of these modes can be analyzed and compared to other related information spatially. For example, in this study we looked at the concentration of crashes in relation to zip codes. By creating visual references, one can more easily identify zip code boundaries of high and low instances of crashes. These high concentrations of crashes or "hot spots" can then be analyzed in more detail using GIS by overlaying infrastructure, aerial photography, demographics and anything that can be geographically referenced on the earth.

Two Major Safety Areas

From the start of the safety study it was clear that transportation safety can be separated into two major categories, structural and behavioral.

Structural:
Roadways should be designed to be as safe as possible. This includes ensuring proper signage, adequate pavement markings, visibility, pedestrian and bicycle facilities and infrastructure, rumble strips, bridges, sufficient traffic signals and signal re-timing.

Behavioral:
A major contributing factor to crashes is behavior. When a person drives a vehicle there is an opportunity to make that trip as safe as possible or not. Contributing behaviors to unsafe driving include drunk driving, speeding, running red lights, not wearing a seatbelt or restraining a child in a car seat, aggressive driving, and distracted driving.

Regional Emphasis Areas/Regional Safety Problems

Developing emphasis areas is a new approach in transportation safety planning, but is crucial when identifying regional safety issues. Emphasis areas may include focusing on certain populations such as old or young drivers, different types of crashes, road hazards such as dangerous intersections or trees, driver behavior, or various modes of travel such as motorcycles or bicycles.

Using the data available for the MPO region and information received from the regional safety committee, the emphasis areas for our region include:

- Alcohol/drug related crashes (impaired driving)
- Distracted Driving
- Road Rage/Aggressive Driving
- Speed
- Cell phone usage and crashes
- Bicycle and pedestrian crashes involving a vehicle
- Motorcycle fatalities and injuries

These emphasis areas were selected by analyzing data and reviewing some of the most frequent contributing factors for crashes in our region. MPO staff also gathered input from the regional safety committee members, and focused on what was gaining momentum and attention at the national, state and local levels. The eight crash categories selected represent 76% of all crashes in the SA-BC MPO region. The remaining 69 crash categories represent the remaining 24% of crashes in the region.

Legislative Information

Legislative action is a major component of traffic safety. Laws and funding to conduct studies and implement safety measures and awareness campaigns are key components to transportation safety.

In the 2009 Texas 81st Legislative session, fifty-one traffic safety bills were proposed. Proving to be a challenging session for transportation safety, only eleven of the fifty-one bills were signed into law. A few of the bills that passed are listed below:

- **Wireless Communication**
  - HB 55 (2009) – Provides that an operator may not use a wireless communication device while operating a motor vehicle within a school crossing zone unless the wireless communication device is used with a hands-free device.

- **Child Passenger Offense**
  - SB 61 (2009) – Provides for fines and court costs related to the offense of failing to secure a child passenger in a motor vehicle.
  - HB 537 (2009) – An operator may not carry another person on a motorcycle unless the other person is at least 5 years of age. Requires all passengers to wear a seat belt in all seats.

- **Motorcycle and Vehicle Operation**
  - SB 1967 (2009) – provides for penalties and a public awareness campaign to promote motorcycle safety.

- **Speed Limits**
  - HB 2682 (2009) – deals with the authority of municipalities to alter speed limits.

- **Driver Education**
  - HB 339 (2009) – Related to required instruction for teen drivers.
  - SB 1107 (2009) – Related to education of distracted driving and wireless communication devices.

- **Blind and Disabled Pedestrians**
  - HB 1343 (2009) – Relates to failure of a motor vehicle operator to yield the right-of-way for blind and disabled pedestrians.

Local Ordinances:

- **Bike Light Ordinance:** Adopted by the City of San Antonio. This ordinance is the same as State of Texas law requirements which require a front white light, and rear red reflector or red rear light on a bicycle.

- **Safe Passing Ordinance:** Adopted by the City of San Antonio. This ordinance sets a requirement of safe passing by motor vehicles for vulnerable road users. Safe passing distance is defined as 3' for cars and 6' for commercial or large trucks (only applies when road conditions allow).

Next Steps

MPO staff will continue to work and coordinate with partner agencies and the public on transportation safety information. The next steps related to the safety study and program include:

- Continue the Regional Safety Study in an in-depth online format with quarterly updates. The online Safety Study will include the most recent data available for three consecutive years in order to identify trends.
- Develop an online application that allows public agencies to directly access and query data. The goal is to act as a liaison for data dissemination and assist other public entities with traffic and transportation data that would help to improve safety in planning, operations, and education and outreach.

The MPO would like to thank the Texas Department of Transportation at the District level as well as in Austin. In addition, all of our local partners have greatly contributed to identifying safety issues and wanting to improve transportation safety in the greater San Antonio region. The MPO looks forward to a continued effort of planning to

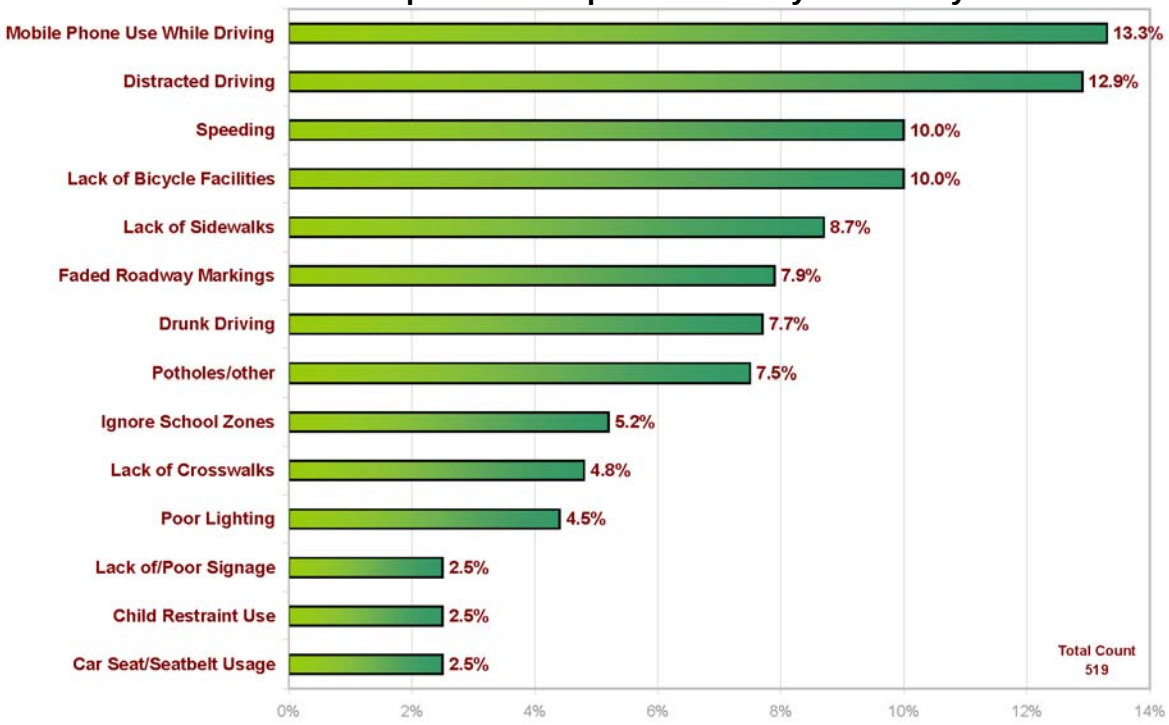
Keep Our Region Moving…. Safely

Regional Crash Assessment

The information below provides an overall assessment of crashes in the MPO study area for 2008.

Throughout this document you will find survey question responses from the MPO's Transportation Safety Survey. Below are the responses indicating the most important safety issues to our citizens. The survey is self selected and not statistically valid, but serves as an indicator of the major local transportation safety issues.

What are the most important transportation safety issues to you?



Did you know?

- In 2008, 161 persons were killed in crashes within the MPO Study area. This is an average of three lives lost per week on our system.
- 43,698 persons were injured in crashes in 2008; 835 or 2% of those injured were known at the time of the crash to have sustained incapacitating injuries.
- Out of the 161 persons killed, 22% (33 pedestrians and 2 bicyclists) were not drivers or passengers of motor vehicles. 20% were motorcycle drivers or motorcycle passengers.
- Of the 161 persons killed, 22% (36) died in impaired related crashes. 45% (73) died in speed related crashes.
- The Daily Vehicle Miles Traveled (DVMT) in 2008 was 44,754,637.
- The total number of registered vehicles in 2008 was 1,564,489.
- The fatality rate per 100 million miles of travel was 1.055.

Figure 2: 2008 Crash Density Map

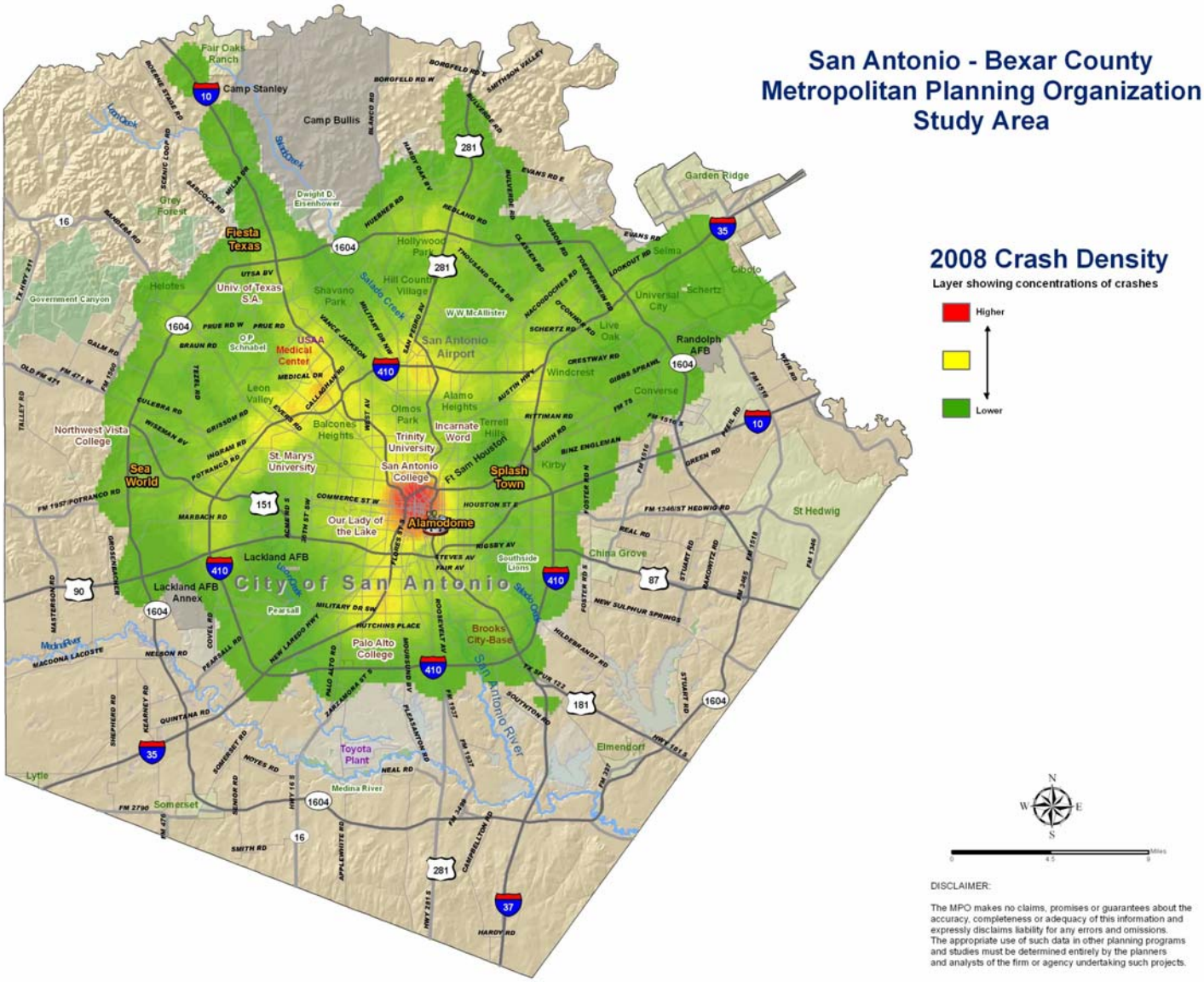


Figure 2 illustrates how a density map can be utilized to provide an overview of crashes within the MPO study area. A density analysis shows the concentration of crash locations within a given area. The red symbolizes higher concentration of crashes and the green shows lower concentrations. Downtown San Antonio and major expressway interchanges can be identified as some of the hot spots of the region.

Table 1: 2008 Crash Data

2008 Crash Data					
Overview of the MPO Study Area - Overview Stats					
		Injuries			
Total Crashes	Deaths	Incapacitating	Non-Incapacitating	Possible Injury	Total Injuries
57,119	161	835	3,522	16,277	20,634
Total Persons	Total Vehicles	Total Impaired	Total Motorcyclist	Total Pedestrian	Total Bicyclist
154,040	112,606	2,570	873	806	207

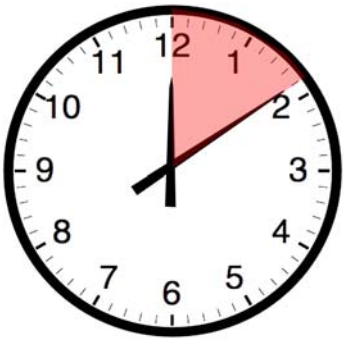
Incapacitating Injury - Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities capable of performing before the injury occurred.

Non-Incapacitating Injury - Any injury, other than a fatal injury or incapacitating injury, which is evident to observers at the scene of the collision in which the injury occurred.

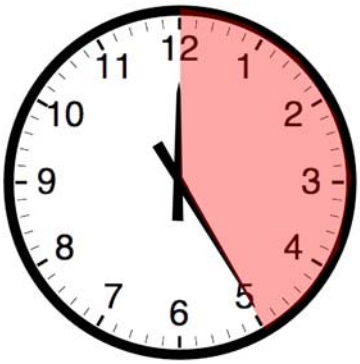
Possible Injury - Any injury that is reported or claimed which is not a fatal injury, incapacitating injury or non-incapacitating injury.

Table 1 provides an overview of the total crashes within the MPO study area. The 835 incapacitating injuries represent any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities he/she was capable of performing before the injury occurred.

Safety Time



On average, one crash happens *every 9 minutes* in our region.



On average, an injury from a crash happens *every 25 minutes* in our region.

Impaired Driving

Impaired driving is a major transportation safety concern for all persons in our region. Every year preventable fatalities and injuries are caused by people getting behind the wheel after drinking or taking some type of drug.

Please note that impaired driving does not represent the 0.08 legal alcohol limit or greater, but includes citations with suspected drinking and/or under the influence as a factors in the crash.

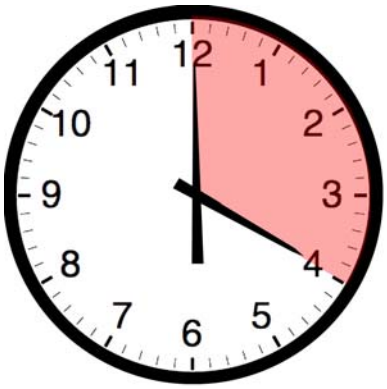
Alcohol Related Crash in Stone Oak Area

Photo Source: San Antonio Express News

Did you know?

- There is a transportation committee sponsored by the Texas Department of Transportation that meets on a monthly basis, called the Traffic Jam Coalition.

- Getting a DUI does not only mean that you have been driving a car under the influence. You can get one from driving a boat, driving a golf cart, riding a bicycle, riding a scooter, or even riding a horse in some places like Texas. (TX Penal Code Ch.49 section 01)



Safety Time

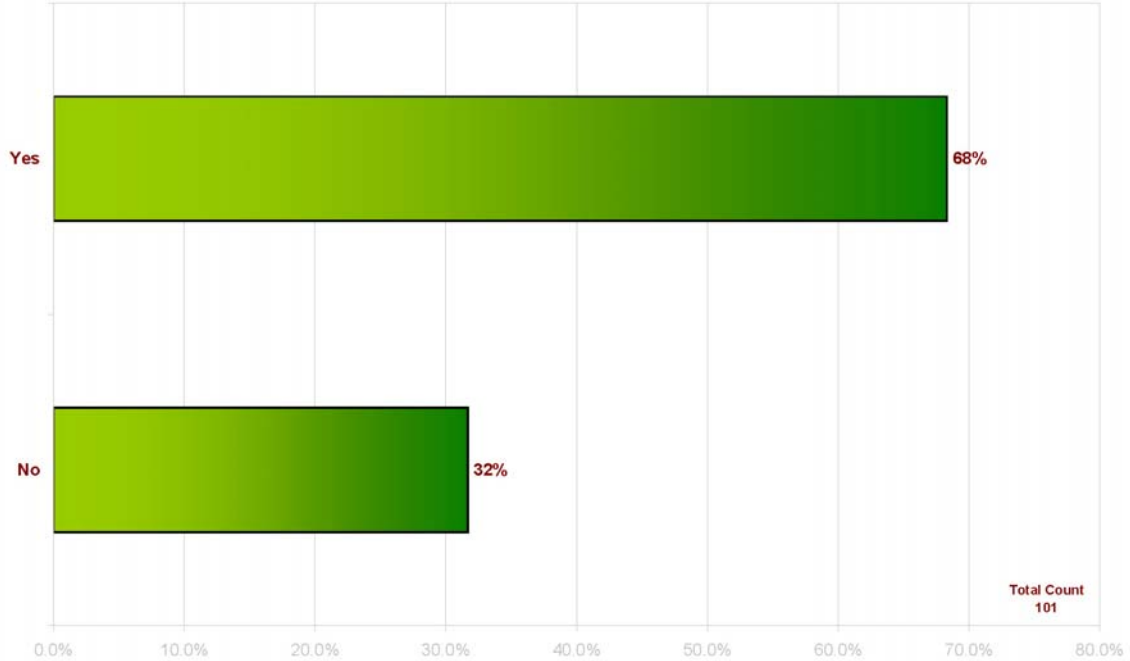
On average, a crash involving an impaired driver happens *every 4 hours* in our region.

Table 2: Impaired Driving

2008 Crash Data					
Overview of the MPO Study Area - Imparied Driving Stats					
		Injuries			
Total Crashes	Deaths	Incapacitating	Non-Incapacitating	Possible Injury	Total Injuries
2,570	36	116	354	658	1,128
Total Persons	Total Vehicles	**Incapacitating Injury** - Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities capable of performing before the injury occurred.			
5,952	4,451	**Non-Incapacitating Injury** - Any injury, other than a fatal injury or incapacitating injury, which is evident to observers at the scene of the collision in which the injury occurred.			
		Possible Injury - Any injury that is reported or claimed which is not a fatal injury, incapacitating injury or non-incapacitating injury.			

MPO Transportation Safety Survey Question:

Have you seen a driver of a vehicle or been in the car with a driver of a vehicle when you thought they might have consumed too much alcohol to drive safely?



An overwhelming majority responded “yes” to seeing or being in a vehicle with a driver where it was thought too much alcohol was consumed.

Figure 3: Impaired Crash Counts by Zip Code

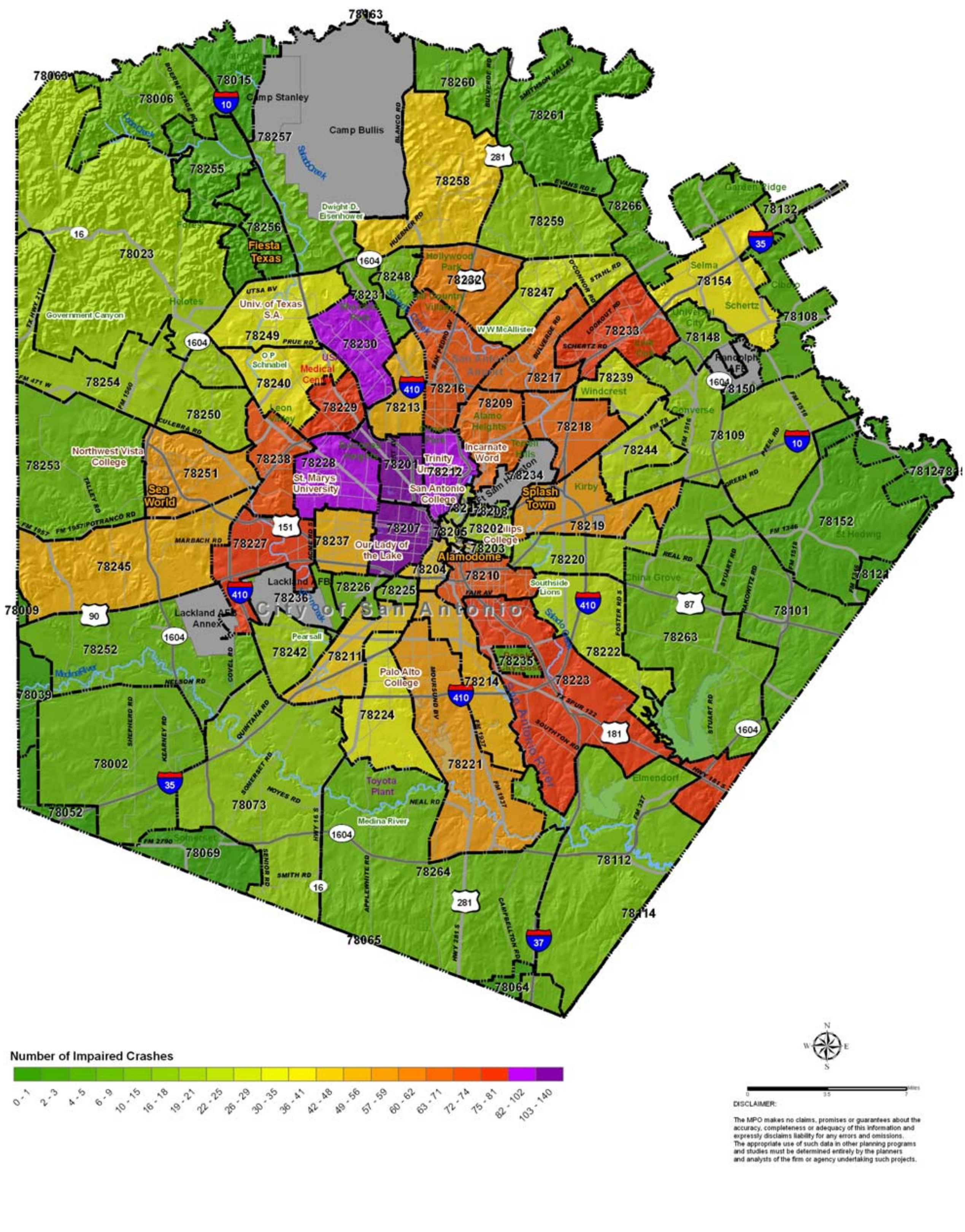
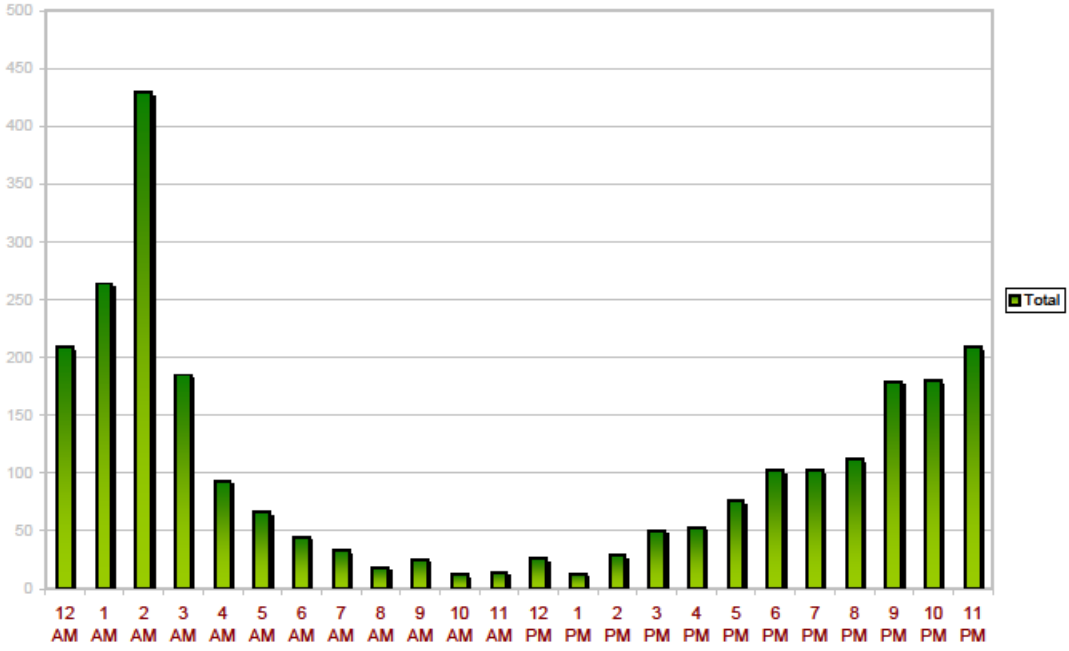
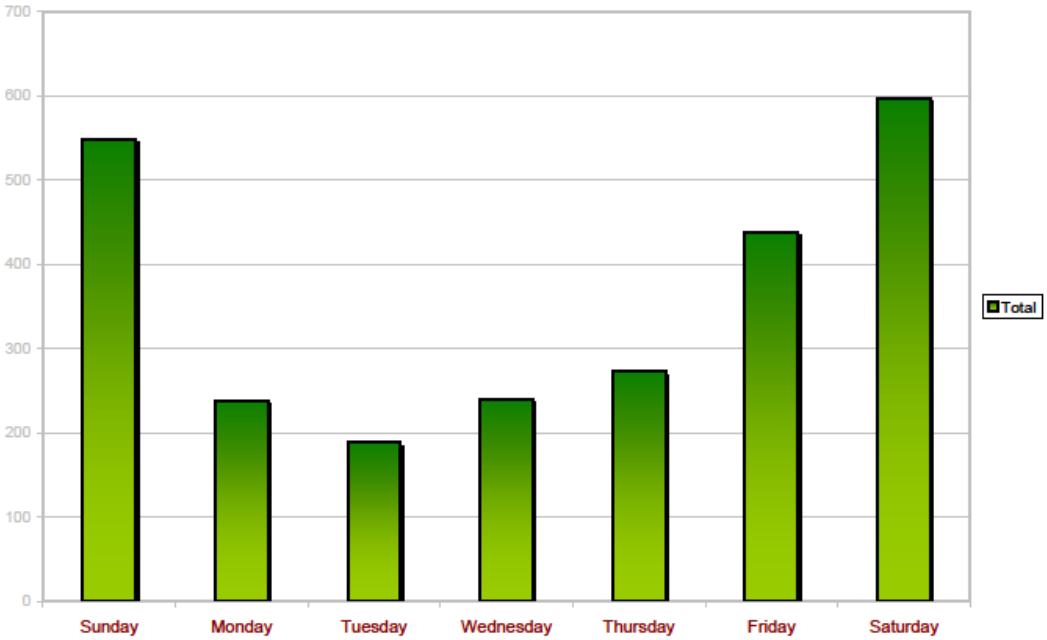


Figure 4: 2008 Impaired Crashes by Time of Day



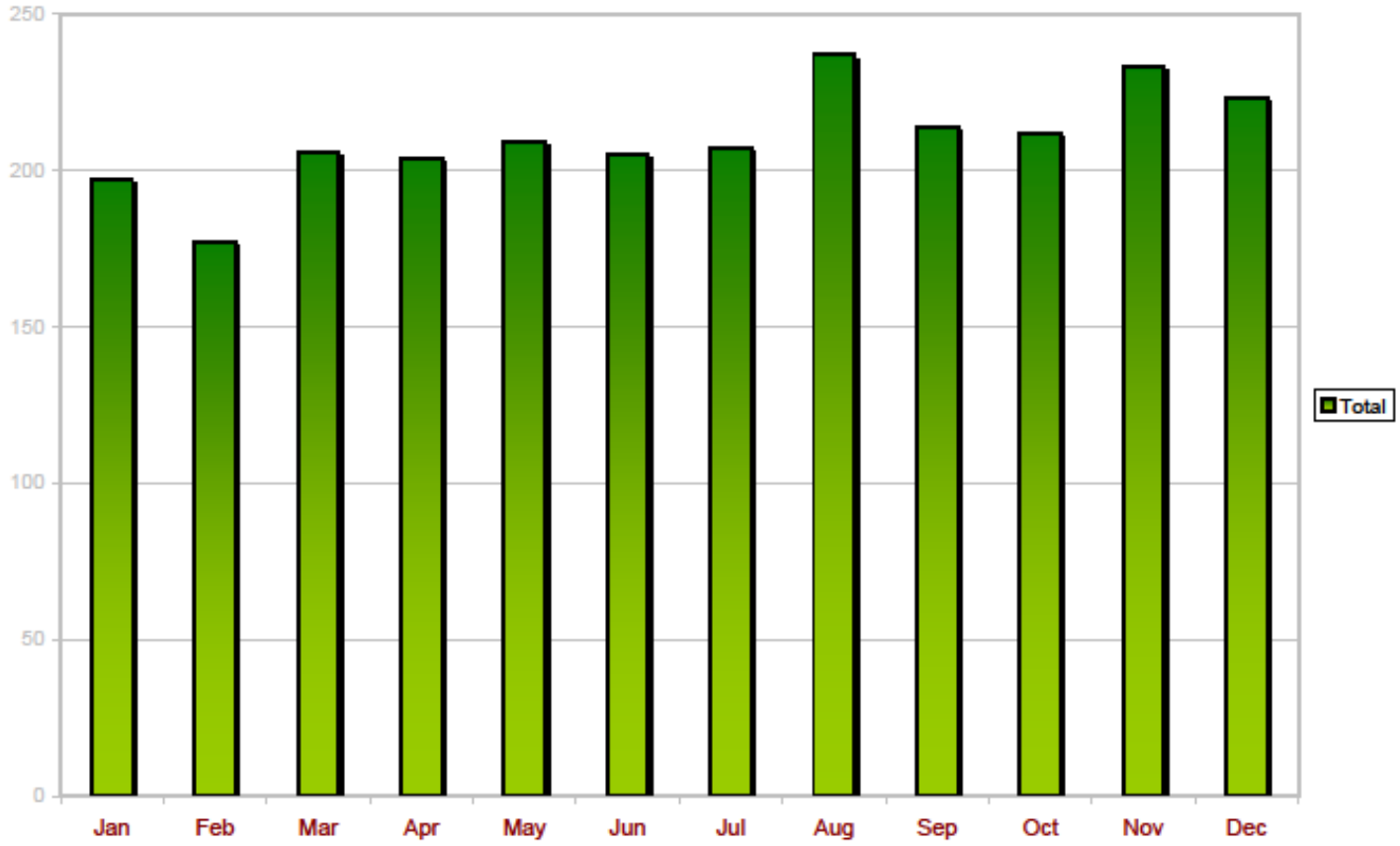
Looking at the 2008 impaired crashes by time of day a dramatic rise in crashes occurs the later in the evening it becomes, with a peak at 2:00 a.m. In the state of Texas, it is required by law for bars and other establishments serving alcohol to shut down by 2:00 a.m.

Figure 5: 2008 Impaired Crashes by Day of the Week



Another trend found in the 2008 crash data was the increase of crashes on Friday, Saturday (peak day of the week) and Sunday.

Figure 6: 2008 Impaired Crashes by Month



In 2008 the number of crashes by month of the year does not vary a great amount; a slight increase can be found in August, November and December.

Distracted Driving

Distracted driving is any non-driving activity a person engages in that has the potential to distract him or her from the primary task of driving and increase the risk of crashing.

There are Three Main Types of Distraction:

Visual: **taking your eyes off the road**
Manual: **taking you hands of the wheel**
Cognitive: **taking your mind off what you're doing**

Did you know?

- Nationally, nearly 6,000 people died in 2008 in crashes involving a distracted driver, and more than half a million were injured. (NHTSA)
- The younger, inexperienced drivers under 20 years old have the highest proportion of distraction-related fatal crashes. (NHTSA)

Table 3: Distracted Driving Crash Data

2008 Crash Data					
Overview of the MPO Study Area - Distracted Driving Stats					
		Injuries			
Total Crashes	Deaths	Incapacitating	Non-Incapacitating	Possible Injury	Total Injuries
30,051	59	354	1,634	8,703	10,691
Total Persons	Total Vehicles	**Incapacitating Injury** - Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities capable of performing before the injury occurred.			
82,657	60,529	**Non-Incapacitating Injury** - Any injury, other than a fatal injury or incapacitating injury, which is evident to observers at the scene of the collision in which the injury occurred.			
		Possible Injury - Any injury that is reported or claimed which is not a fatal injury, incapacitating injury or non-incapacitating injury.			

Safety Time

On average, a distracted related injury happens *every hour* in our region.

Figure 7: Distracted Driving by Zip Code

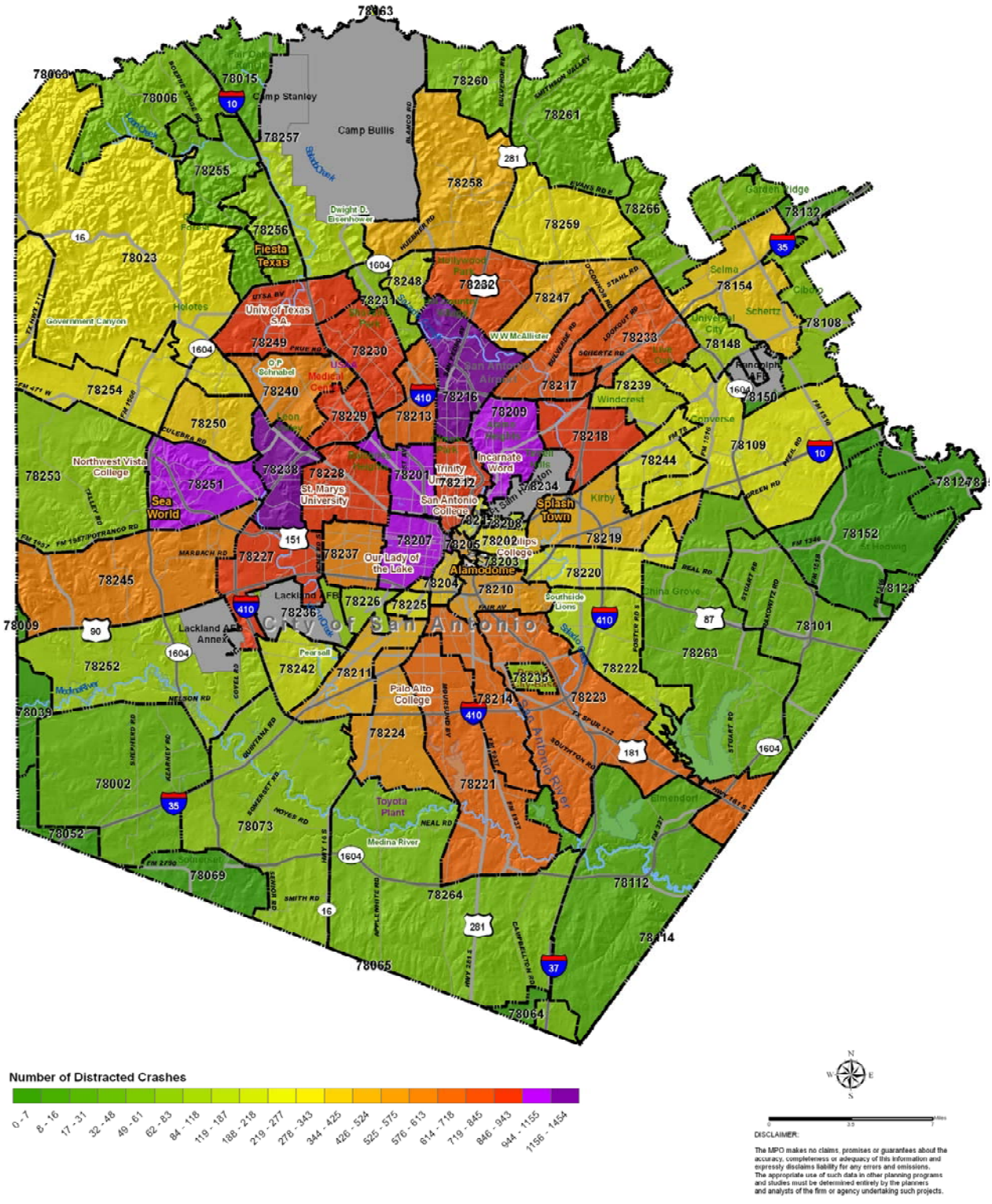
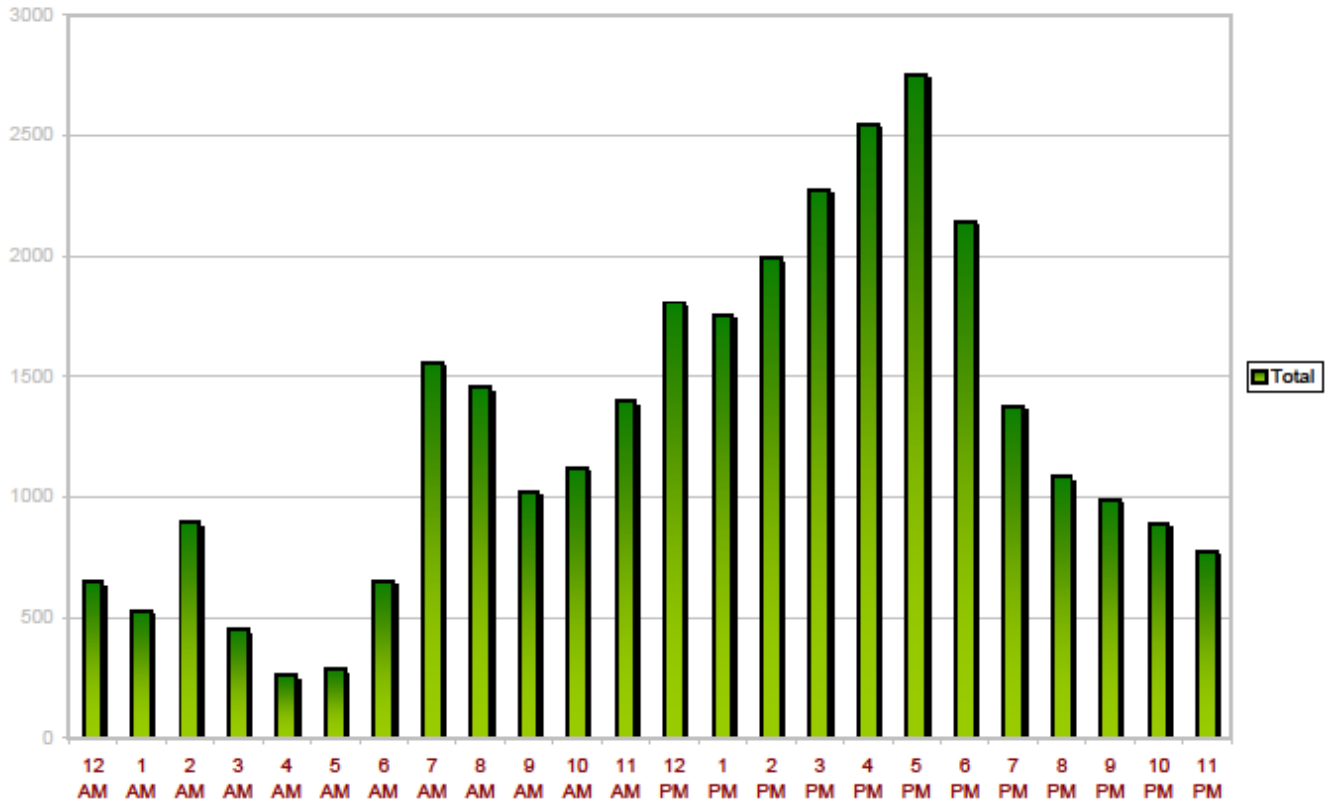
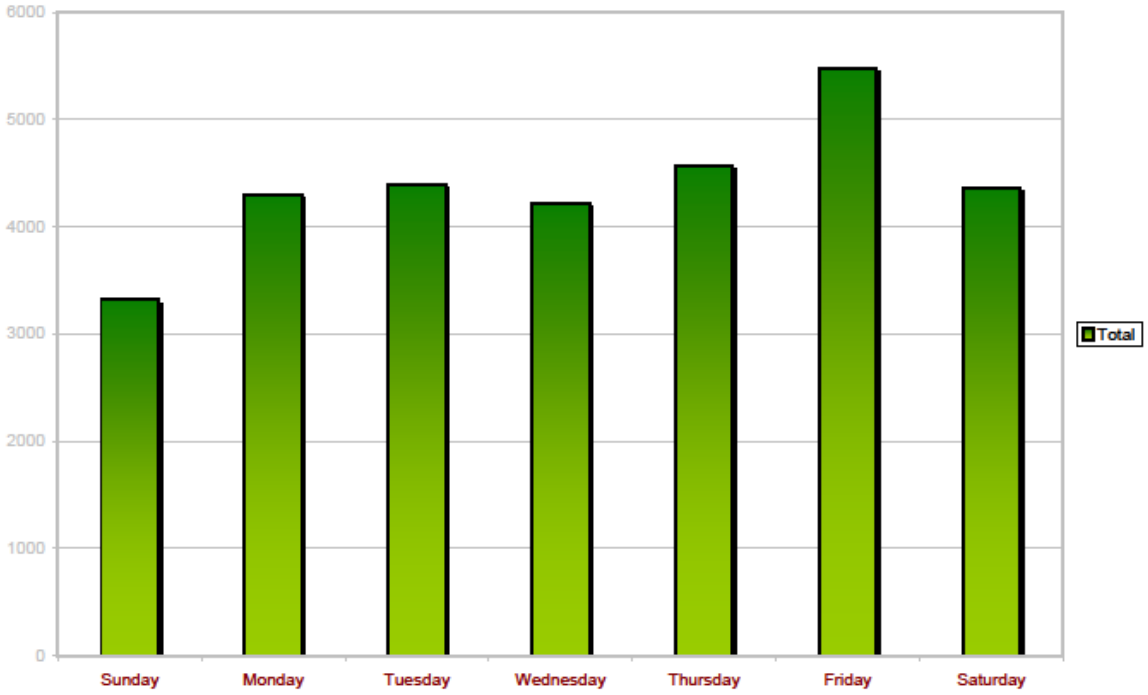


Figure 8: 2008 Distracted Crashes by Time of Day



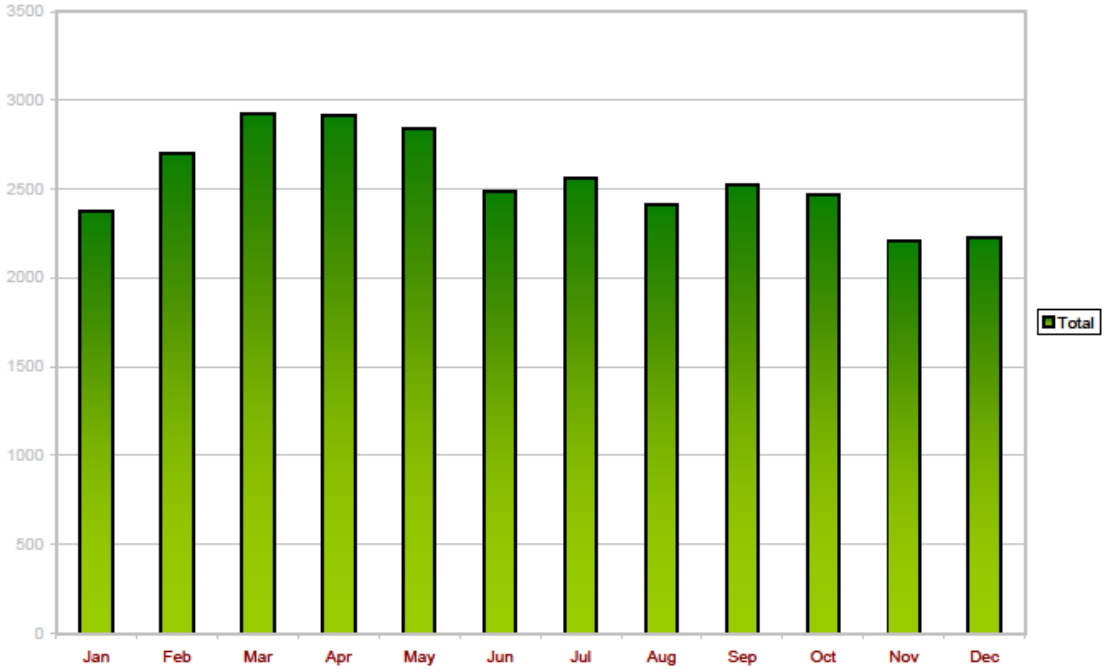
The majority of distracted driving citations are occurring in the afternoon hours, most likely when people are headed home from work.

Figure 9: 2008 Distracted Crashes by Day of the Week



Note in Figure 9 above, Friday has the most distracted driving related crashes of any day of the week.

Figure 10: 2008 Distracted Crashes by Month



Road Rage/Aggressive Driving

Road rage is aggressive or angry behavior by a driver. Behavior might include rude gestures, verbal insults, deliberately driving in an unsafe or threatening manner, or making threats. Road rage can lead to altercations, assaults, and collisions which could result in injuries and even deaths. It is often thought of as an extreme case of aggressive driving.

Did you know?

- The San Antonio Police Department has a special "Road Rage" unit to help deter aggressive driving.
- Nationally, when it comes to aggressive responses, men are more likely than women to do so (54% vs. 46%), as are drivers age 18-24 (67%) versus drivers 65 and older (30%). Drivers with children are more likely to respond aggressively (59%) versus those without children (45%), and cell phone users (59%) versus those who do not use a cell phone while driving (39%). (Road & Travel Magazine May 2010)

Table 4: Road Rage Crash Data

2008 Crash Data					
Overview of the MPO Study Area - Road Rage Stats					
		Injuries			
Total Crashes	Deaths	Incapacitating	Non-Incapacitating	Possible Injury	Total Injuries
199	1	3	10	38	51

Total Persons	Total Vehicles
564	405

Incapacitating Injury - Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities capable of performing before the injury occurred.

Non-Incapacitating Injury - Any injury, other than a fatal injury or incapacitating injury, which is evident to observers at the scene of the collision in which the injury occurred.

Possible Injury - Any injury that is reported or claimed which is not a fatal injury, incapacitating injury or non-incapacitating injury.

Safety Time

On average, a crash involving road rage happens *every other day* in our region.

Figure 11: Road Rage Crashes by Zip Code

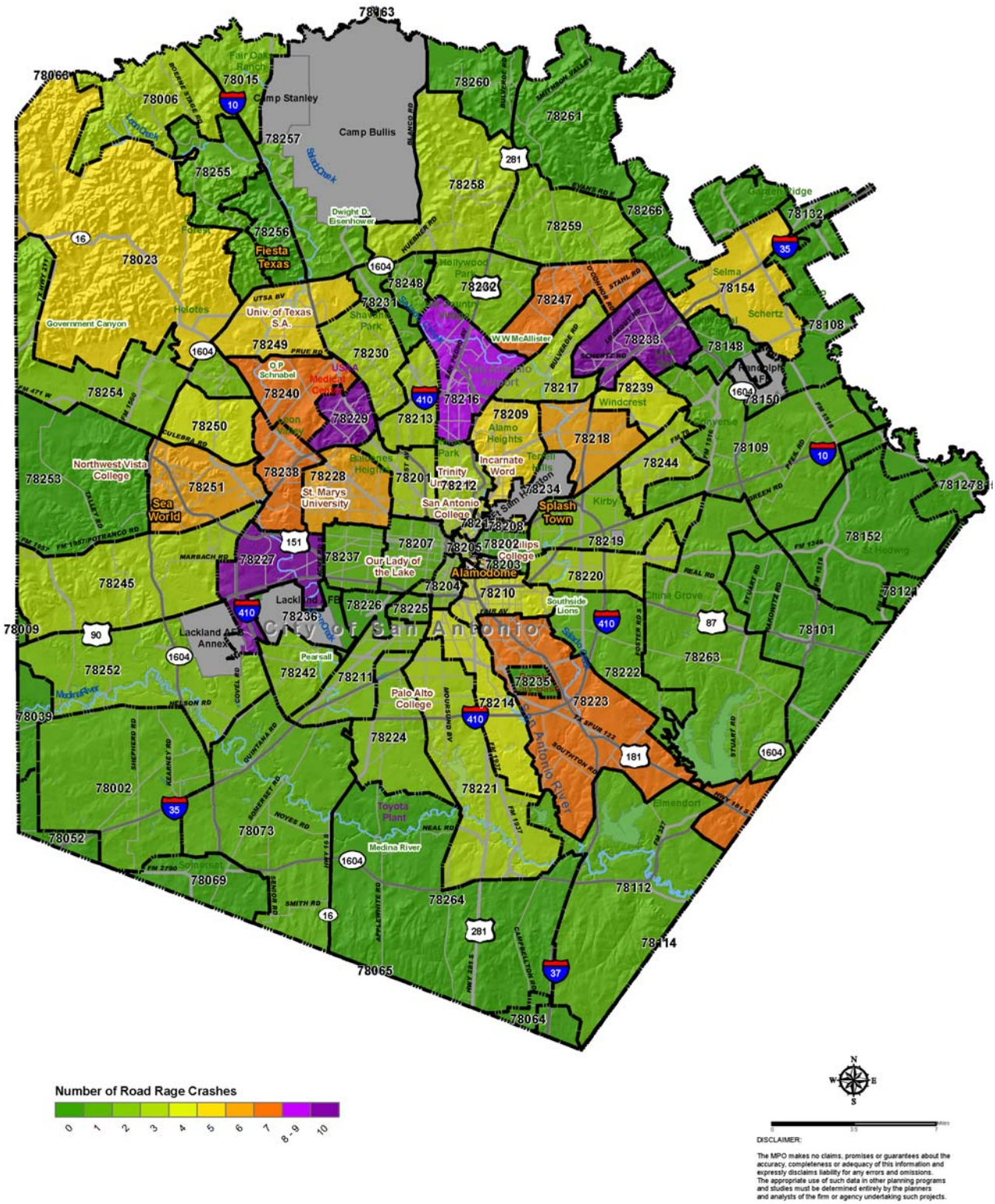
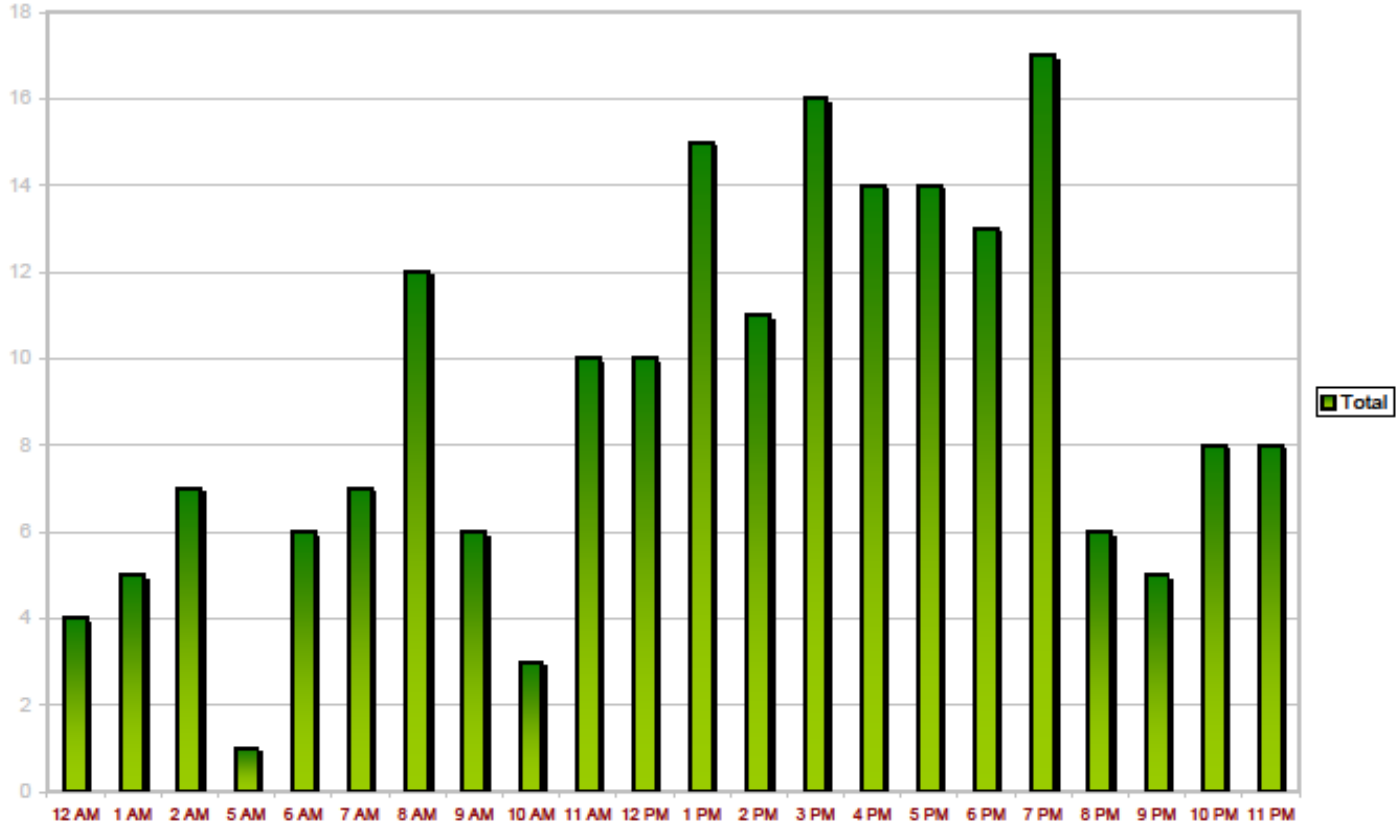
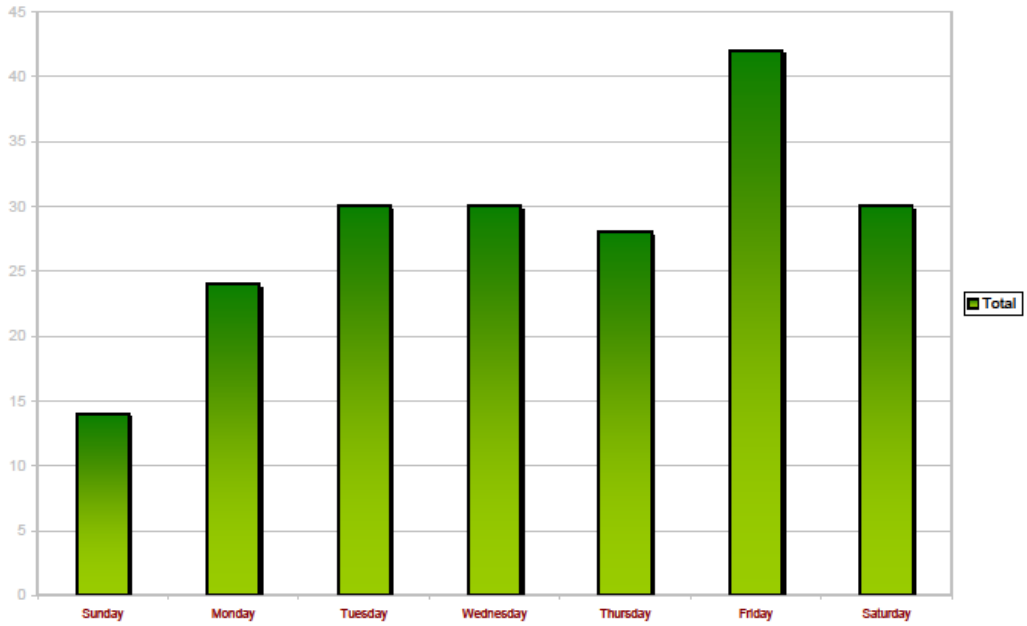


Figure 12: 2008 Road Rage Crashes by Time of Day



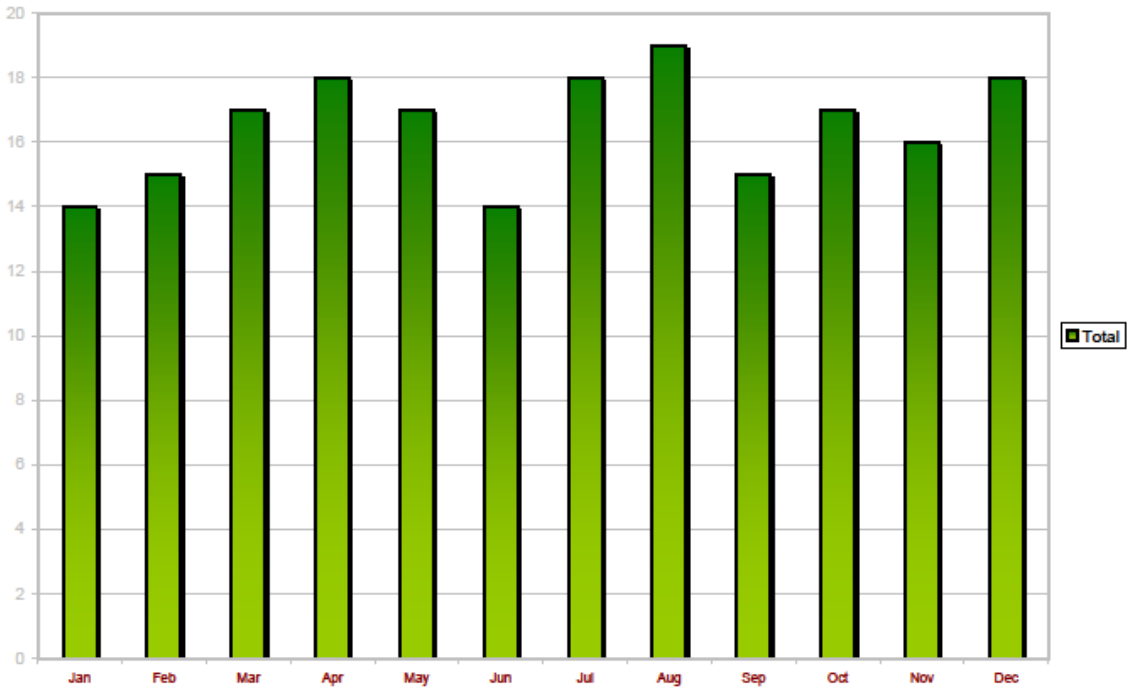
In Figure 12, Road Rage related crashes appear to spike with the times of the day when more motorists are on the road. 8:00 a.m. for the morning commute, 12:00 p.m. for lunch and beginning at 3:00 p.m. when many shift workers begin to leave work for the day and lasting until 7:00 p.m. for the evening commute from work.

Figure 13: 2008 Road Rage Crashes by Day of Week



Note in Figure 13 above that the majority of road rage crashes occur on Friday, the same trend shown in distracted driving crashes.

Figure 14: 2008 Road Rage Crashes by Month



Cell Phone Use

The use of wireless communication devices i.e. mobile and cellular phones while driving has been a topic of interest in the last year. The federal government has taken a huge interest in preventing crashes caused by distracted driving, particularly with the use of mobile phones and other electronic devices.

Did you know?

- In the state of Texas it is now illegal to talk on your cell phone when driving through a school zone. (TX H.B. 55)
- The secretary general of the U.N., banned employees worldwide from texting while driving as have 32 countries around the world. (Washington Post)
- Eight states (California, Connecticut, Delaware, Maryland, New Jersey, New York, Oregon, and Washington) and the District of Columbia have all banned the use of cell phones while driving. (Governor's Highway Safety Association)

Table 5: Cell Phone Crash Data

2008 Crash Data					
Overview of the MPO Study Area - Cell Phone Stats					
		Injuries			
Total Crashes	Deaths	Incapacitating	Non-Incapacitating	Possible Injury	Total Injuries
387	0	5	20	95	120
Total Persons	Total Vehicles	**Incapacitating Injury** - Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities capable of performing before the injury occurred.			
1,000	767	**Non-Incapacitating Injury** - Any injury, other than a fatal injury or incapacitating injury, which is evident to observers at the scene of the collision in which the injury occurred.			
		Possible Injury - Any injury that is reported or claimed which is not a fatal injury, incapacitating injury or non-incapacitating injury.			

Safety Time

On average, one crash occurs *everyday* involving cell phone use in our region.

Figure 15: Cell Phone Related Crashes by Zip Code

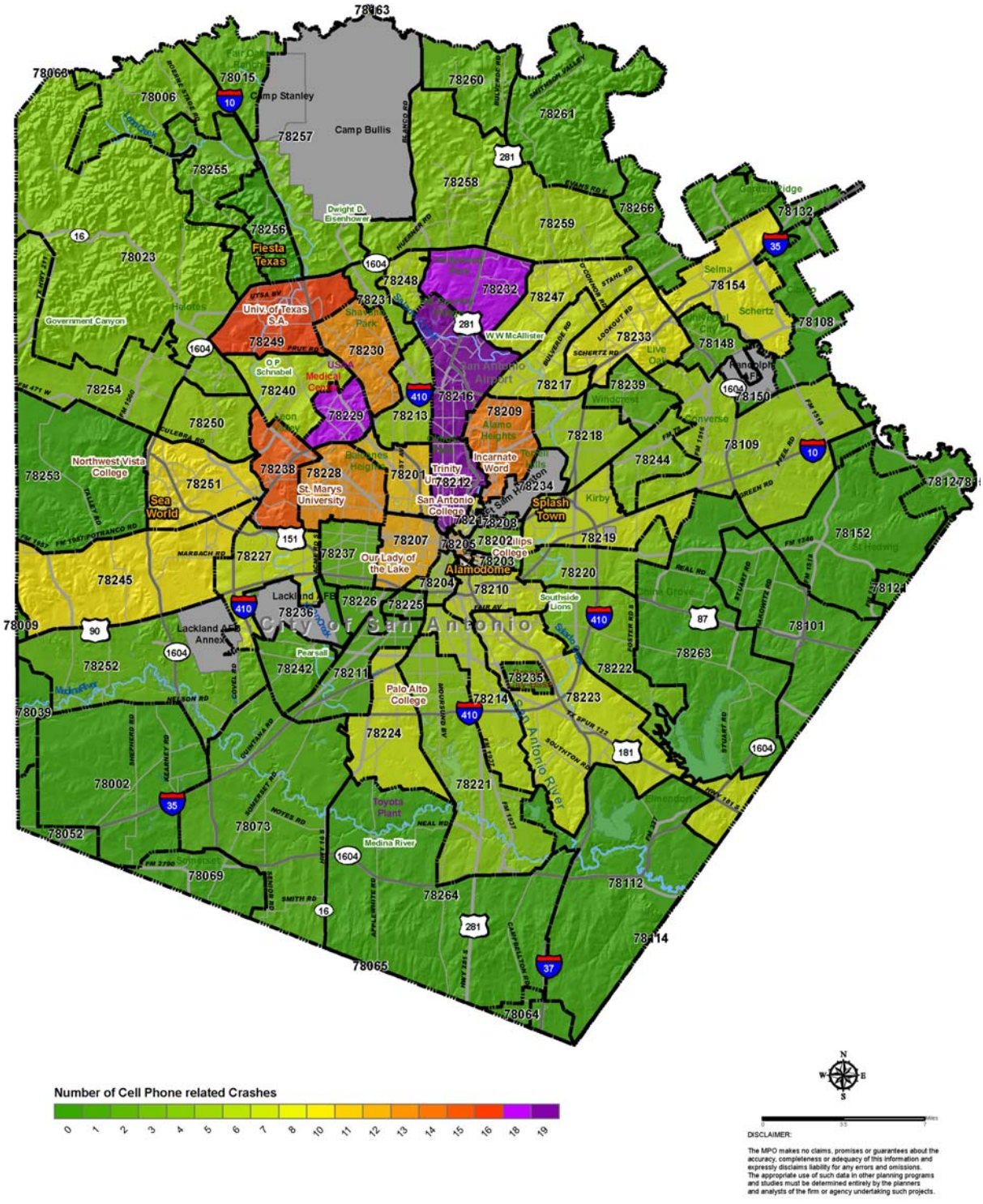
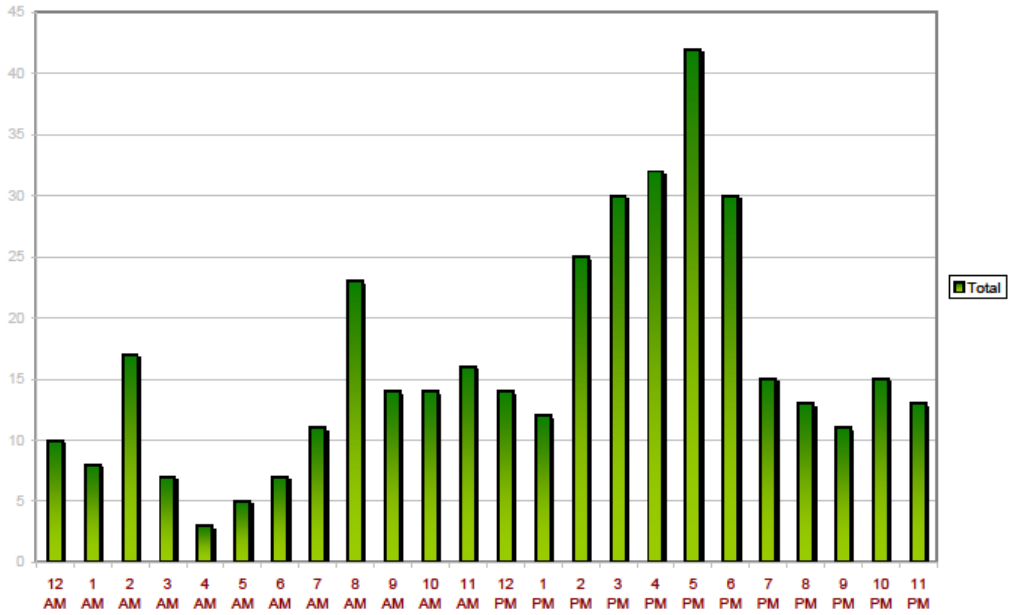


Figure 16: 2008 Total Cell Phone Related Crashes by Time of Day



Note in Figure 16 above, the peak times of cell phone related crashes occur in the morning and late afternoon most likely when people are commuting to and from work. Also note the 2:00 a.m. crashes, again when bars and restaurants that serve alcohol are required to close.

Figure 17: 2008 Total Cell Phone Related Crashes by Day of Week

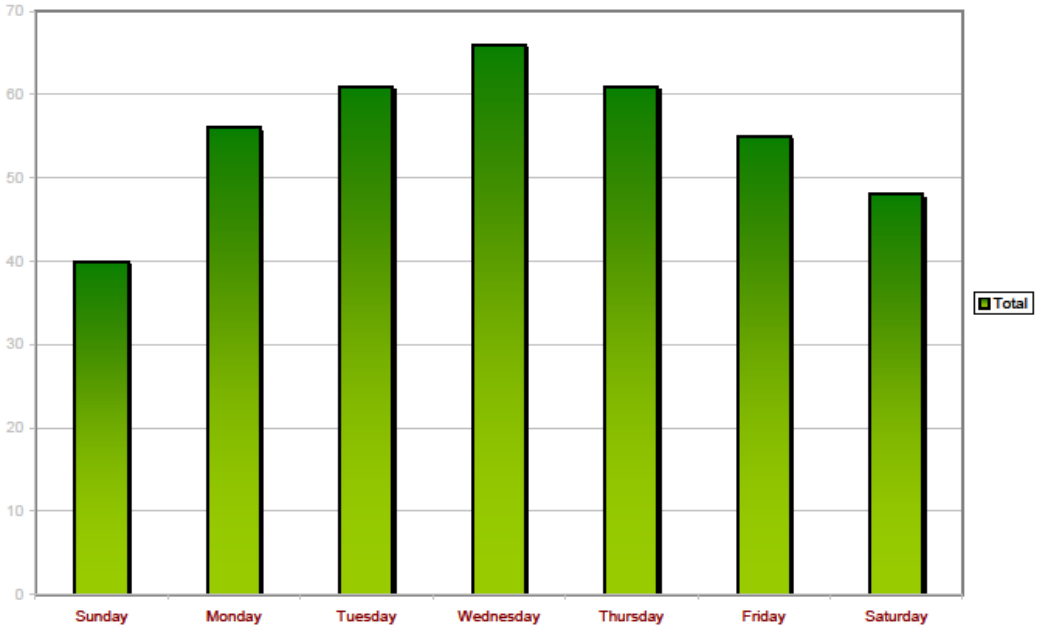
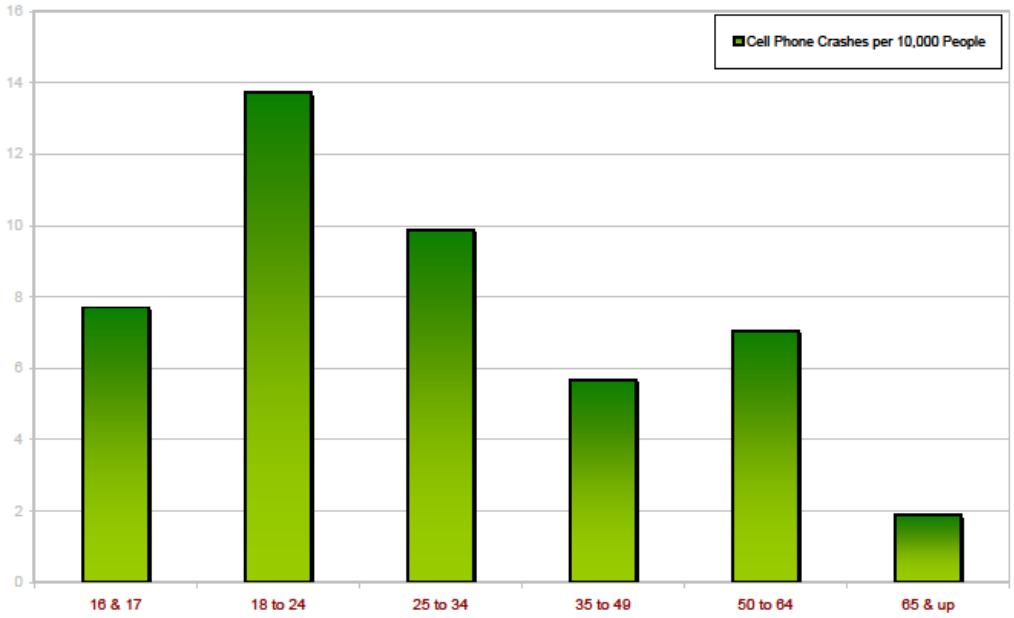


Figure 18: 2008 Cell Phone Related Crashes by Age Per Capita

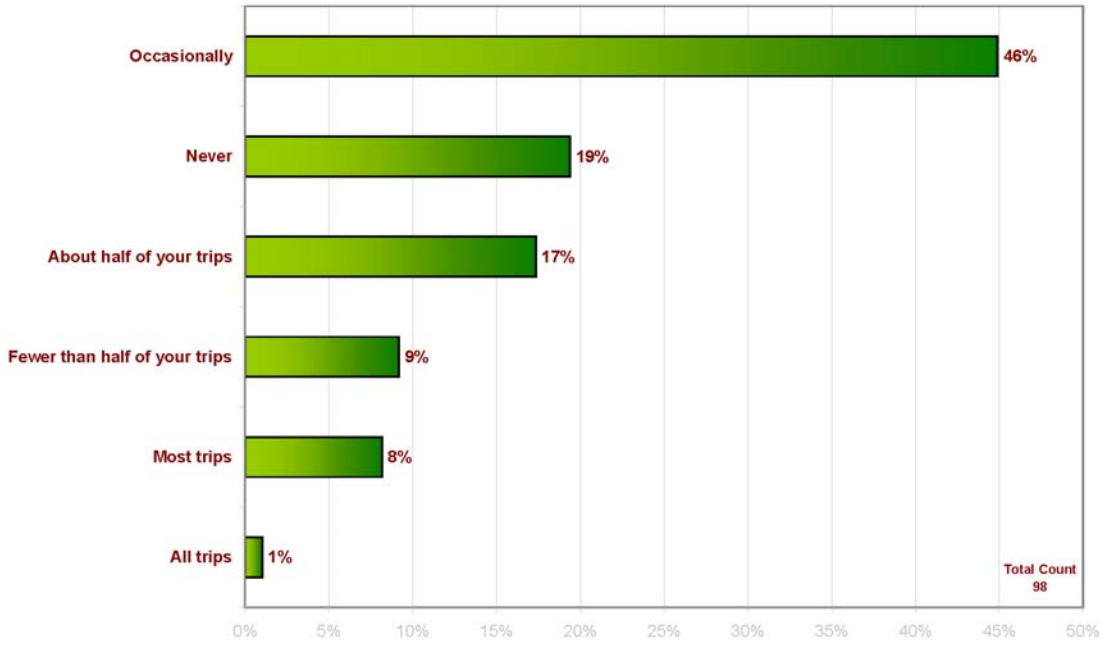


The majority of crashes are occurring within the 18-24 year old age group. The increase of crashes within this age group possibly correlates with the national trend of observing an increase in the use of hand-held electronic devices for drivers 24 years of age and younger (distracteddriving.gov)

MPO Transportation Safety Survey Question:

99 people provided information regarding cell phone use and driving habits.

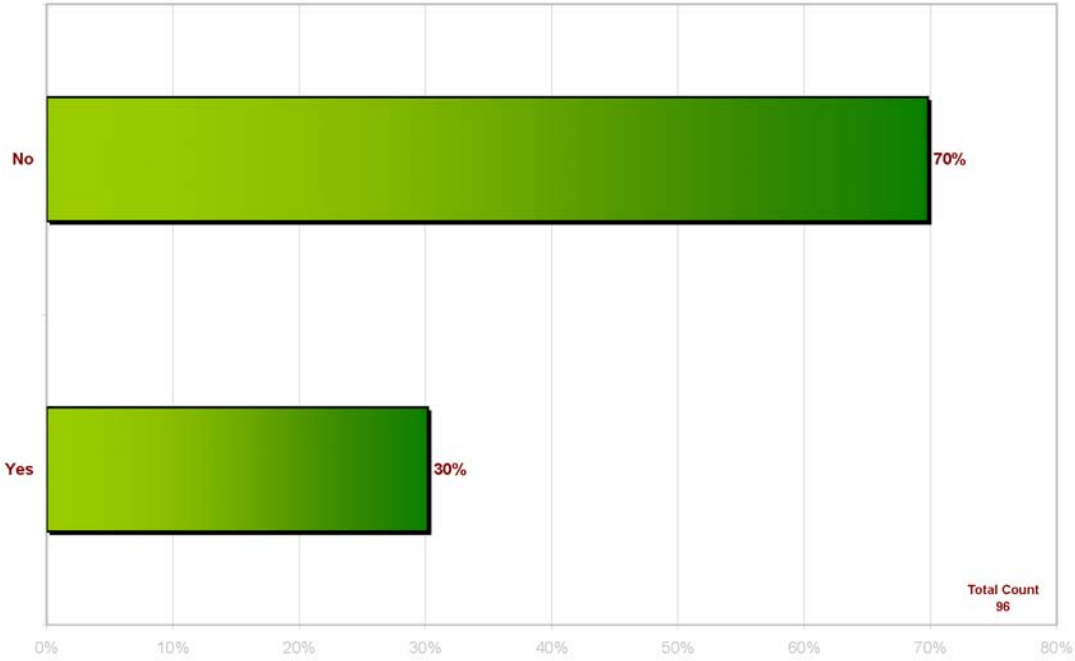
How often do you talk on the phone while driving?



Above, the data collected shows that 80% of survey respondents are using their cell phones at least occasionally when driving their vehicle.

MPO Transportation Safety Survey Question:

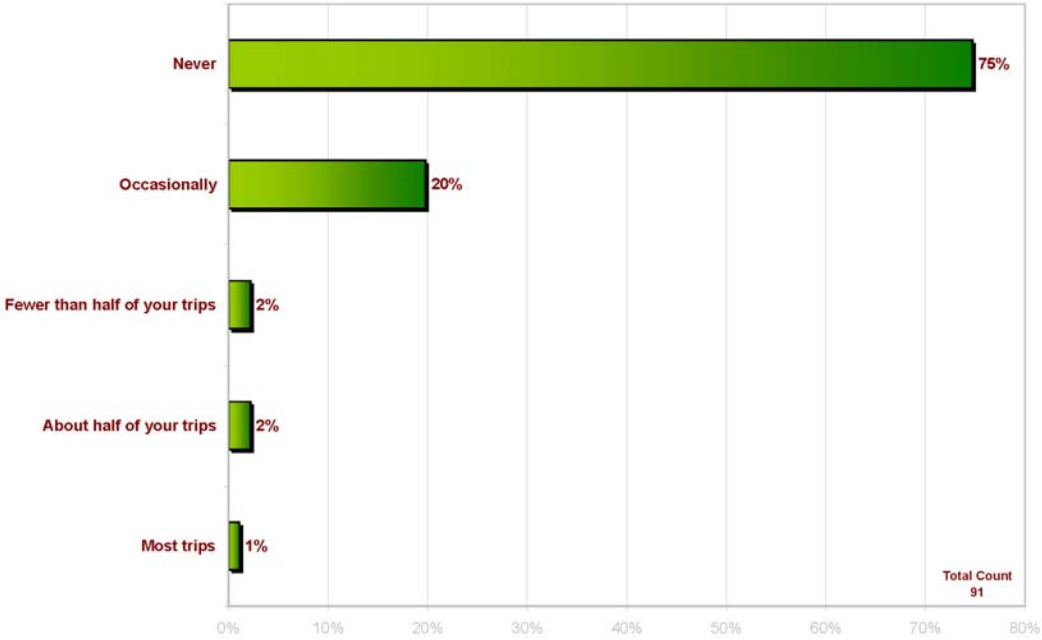
Do you use a hands free device to talk on your wireless phone while driving?



Even though many laws and guidelines across the nation are requiring a hands - free device while driving 70% of the people who responded to the survey do not use a wireless device.

MPO Transportation Safety Survey Question:

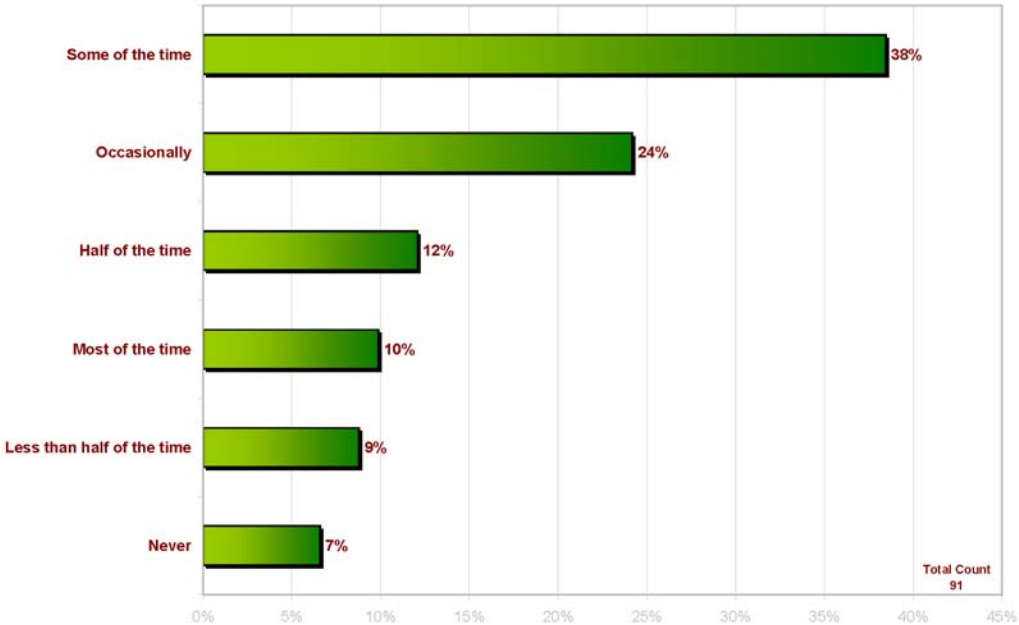
How often do you text on the phone while driving?



25% of survey respondents say they at least occasionally text and drive.

MPO Transportation Safety Survey Question:

How often do you see other drivers texting on the phone while operating a motor vehicle?



93% of respondents say they have seen other drivers of vehicles texting while driving.

Speeding

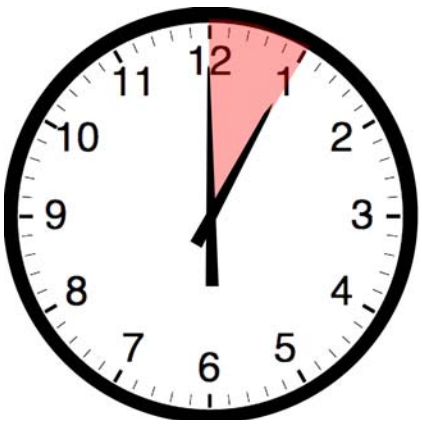
Nationally, speeding is one of the major contributing factors in crashes. The greater San Antonio region is no different and unfortunately experiences its' fair share of speed related crashes each year.

Did you know?

- In March 1974 Congress established a national 55 mph speed limit in response to the oil crisis. (www.safemotorist.com)
- As part of the 1987 U.S. Highway funding bill Congress permitted states to raise their speed limits from 55 mph to 65 mph. (www.safemotorist.com)
- The highest speed limit in Texas is on part of IH 10 West at 80 mph. (www.safemotorist.com)

Table 6: Speed Related Crash Data

2008 Crash Data					
Overview of the MPO Study Area - Speed Stats					
		Injuries			
Total Crashes	Deaths	Incapacitating	Non-Incapacitating	Possible Injury	Total Injuries
8,840	73	275	840	3,140	4,255
Total Persons	Total Vehicles	**Incapacitating Injury** - Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities capable of performing before the injury occurred.			
23,428	16,781	**Non-Incapacitating Injury** - Any injury, other than a fatal injury or incapacitating injury, which is evident to observers at the scene of the collision in which the injury occurred.			
		Possible Injury - Any injury that is reported or claimed which is not a fatal injury, incapacitating injury or non-incapacitating injury.			



Safety Time

On average, one speed related crash happens *every hour* in our region.

Figure 19: Speed Related Crashes by Zip Code

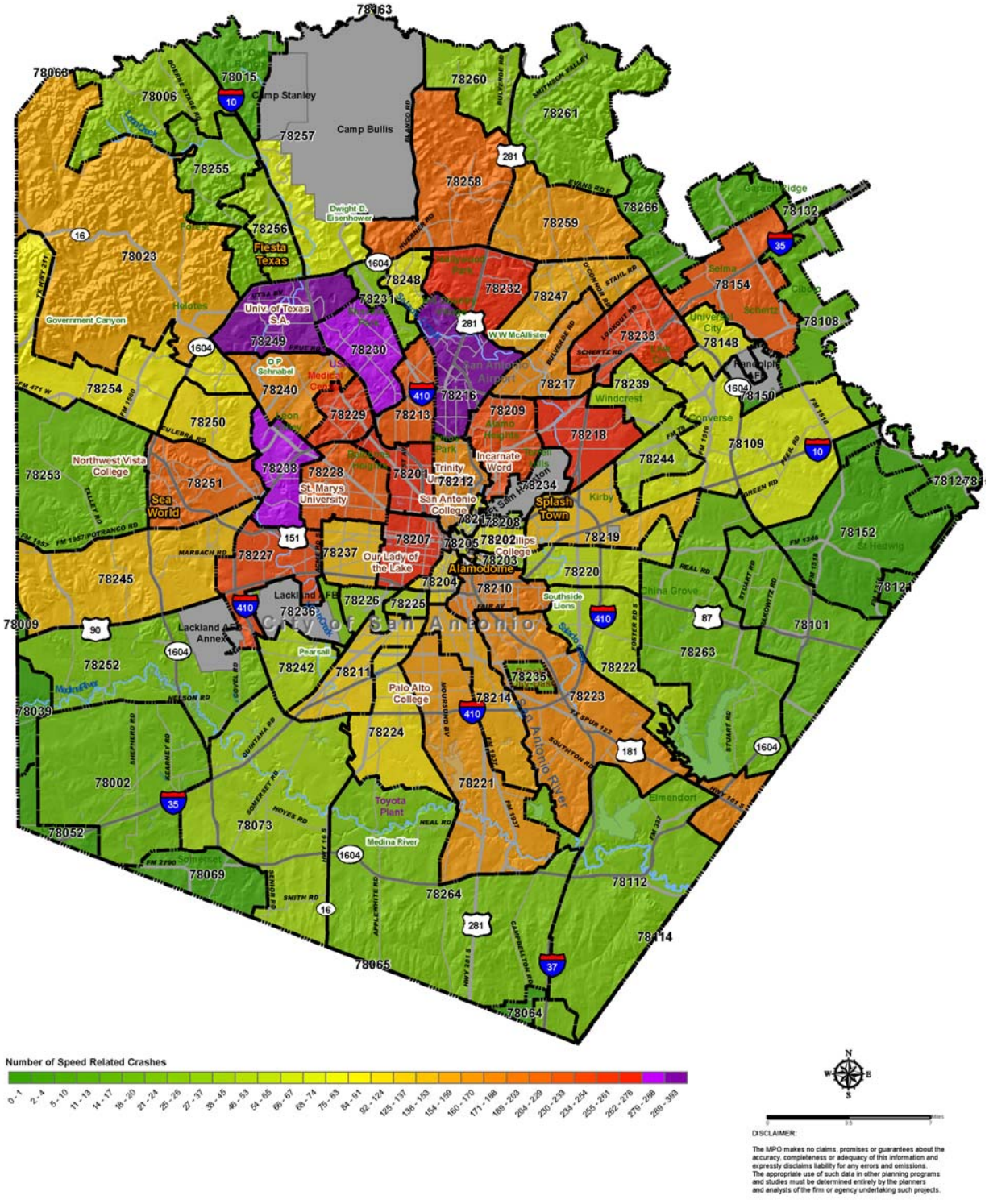
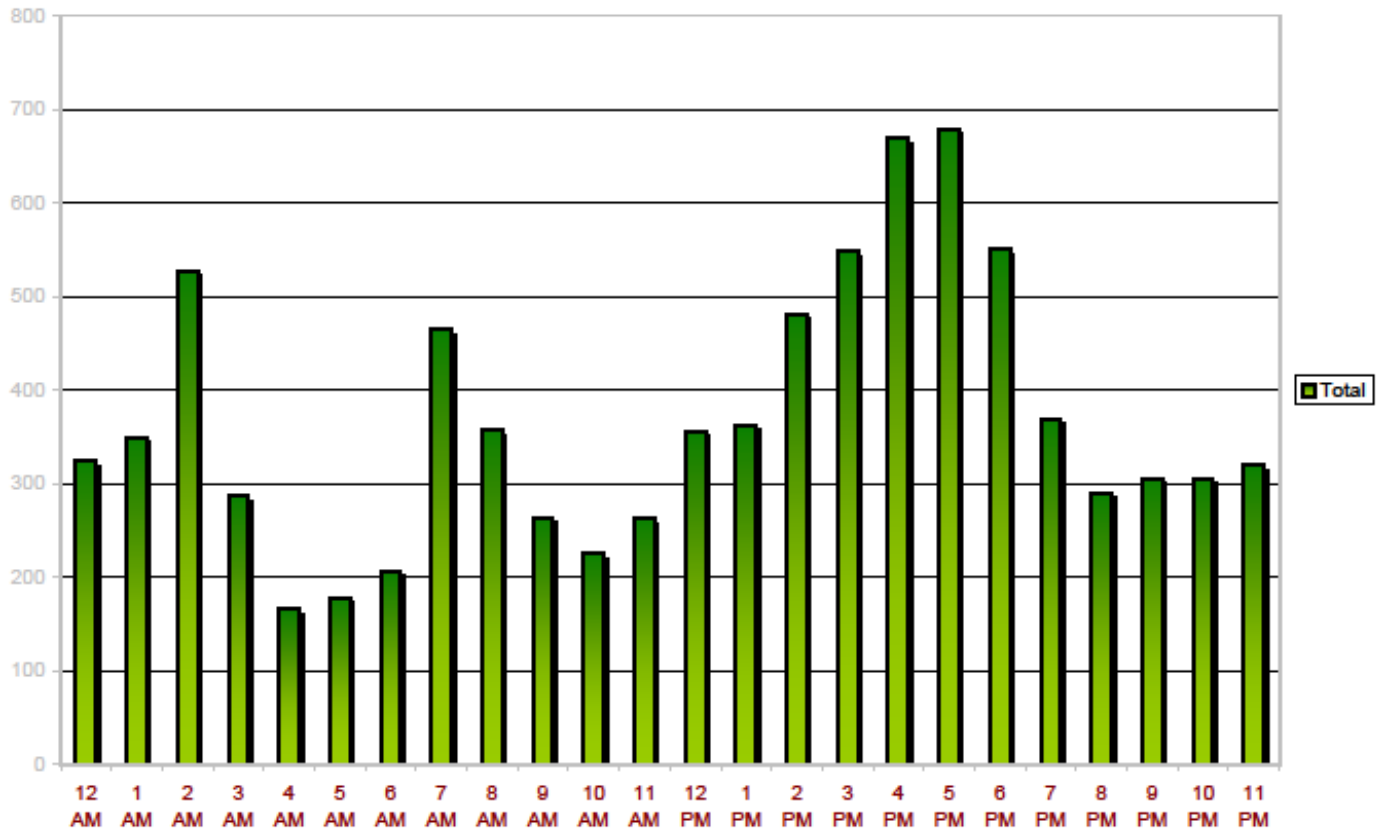


Figure 20: 2008 Total Speed Related Crashes by Time of Day



In Figure 20, above, a trend can be found with speed related crashes occurring during peak commute times in the late afternoon and early morning and at 2:00 a.m. when bars and other establishments that serve alcohol must close down.

Figure 21: 2008 Total Speed Related Crashes by Day of the Week

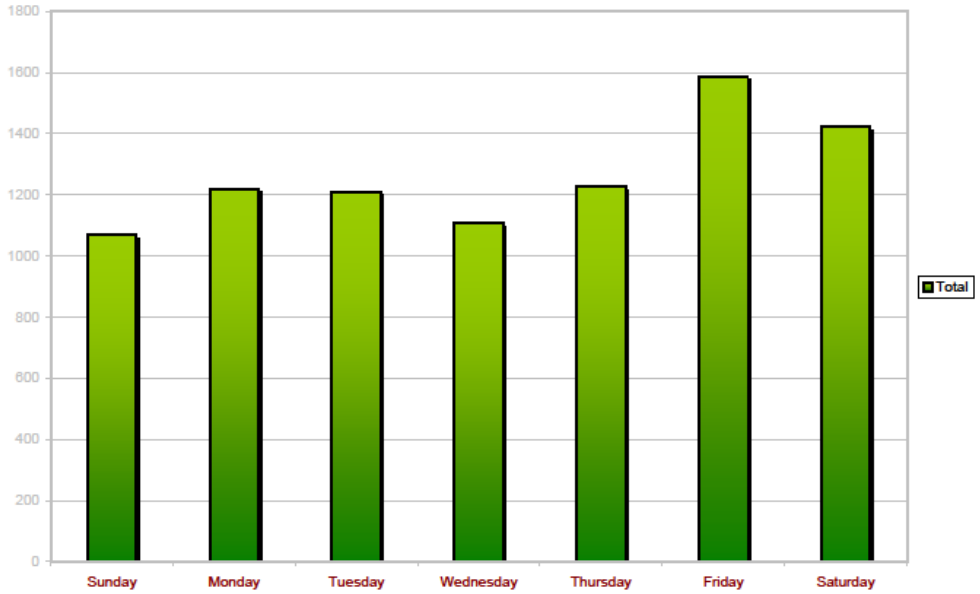
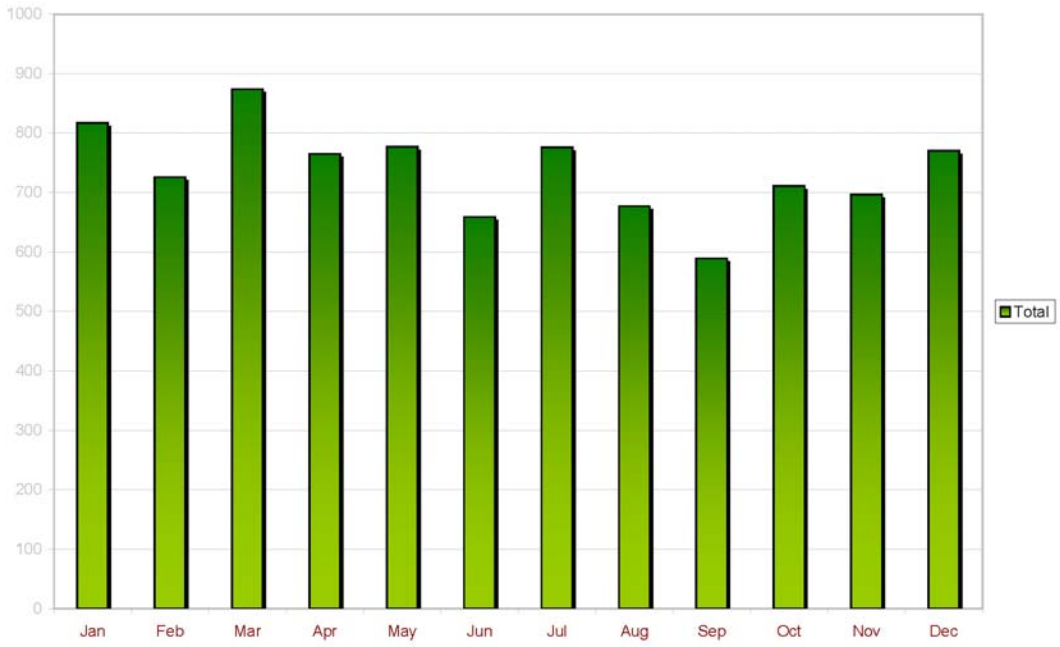


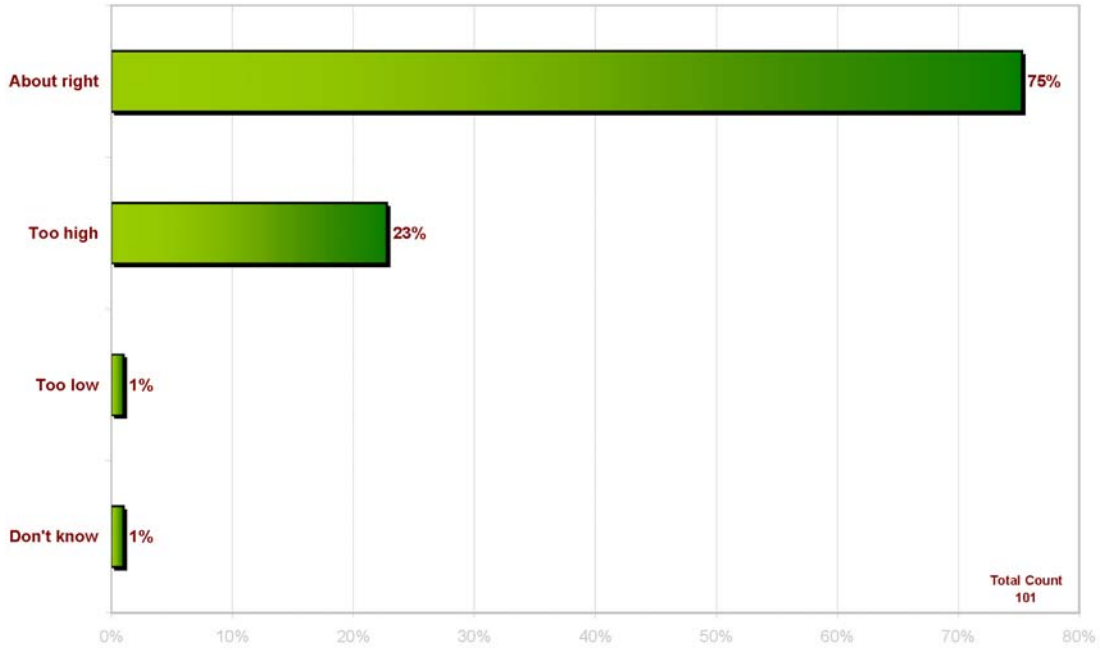
Figure 21 shows that Friday has the most speed related crashes. This same trend is seen with distracted driving and road rage related crashes.

Figure 22: 2008 Total Speed Related Crashes by Month



MPO Transportation Safety Survey Question:

Are residential speed limits, those not on the highway, too low, too high or about right?



The majority of survey respondents, 75% agree with their residential speed limits (most often 30 MPH). However, 23% of respondents believe they are still too high.

Bicycle Crashes

Riding bicycles whether for commuting or leisure is on the rise throughout the San Antonio area. Safety and awareness become even more important with the increase in cyclists and motorists on our roadways. Cyclists can help protect themselves with safety equipment such as helmets, reflectors and headlights. Motorists can be aware of cyclists and abide by the 3 foot passing law for vulnerable road users and both motorists and cyclists can protect each other by obeying the Rules of the Road.

Table 7: Bicyclist Crash Data

2008 Crash Data					
Overview of the MPO Study Area - Bicycle Stats					
		Injuries			
Total Crashes	Deaths	Incapacitating	Non-Incapacitating	Possible Injury	Total Injuries
205	2	14	80	96	190

Total Persons	Total Vehicles
469	211

Incapacitating Injury - Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities capable of performing before the injury occurred.

Non-Incapacitating Injury - Any injury, other than a fatal injury or incapacitating injury, which is evident to observers at the scene of the collision in which the injury occurred.

Possible Injury - Any injury that is reported or claimed which is not a fatal injury, incapacitating injury or non-incapacitating injury.

Did you know?

- The first automobile crash involving a cyclist in the United States occurred in New York City in 1896, when a motor vehicle collided with a bicyclist. (www.cycling.org)
- Cyclists were the highest paid athletes in the U.S. until Babe Ruth joined the Yankees. (www.cycling.org)
- Helmet use has been estimated to reduce head injury risk by 85 percent. Twenty-one states and the District of Columbia have helmet laws applying to young bicyclists; none of these laws applies to all riders. (www.helmets.org)

Safety Time

On average, one bicyclist is involved in a crash with a vehicle *every other day* in our region.

Figure 23: Bicycle Crashes by Zip Code

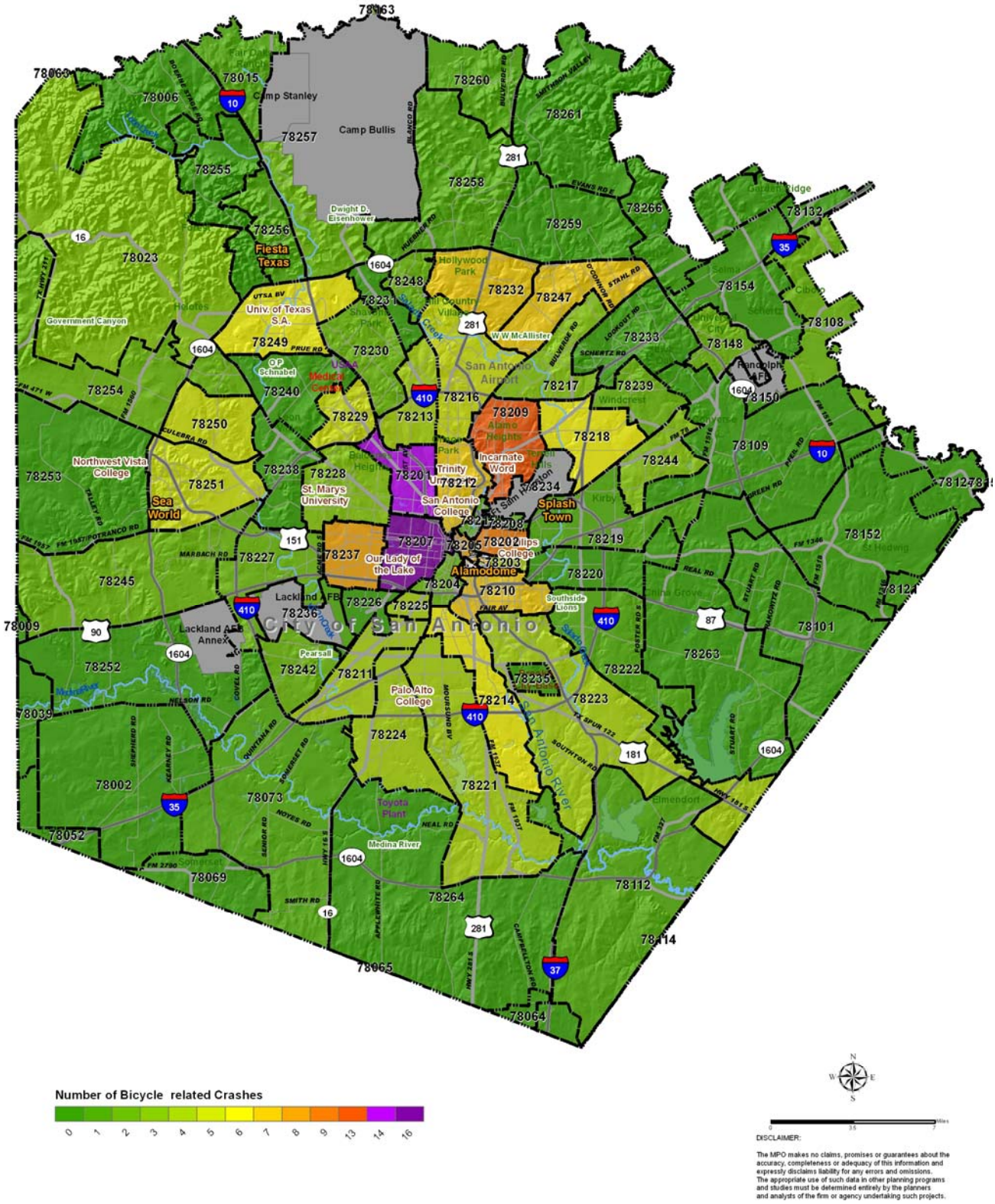
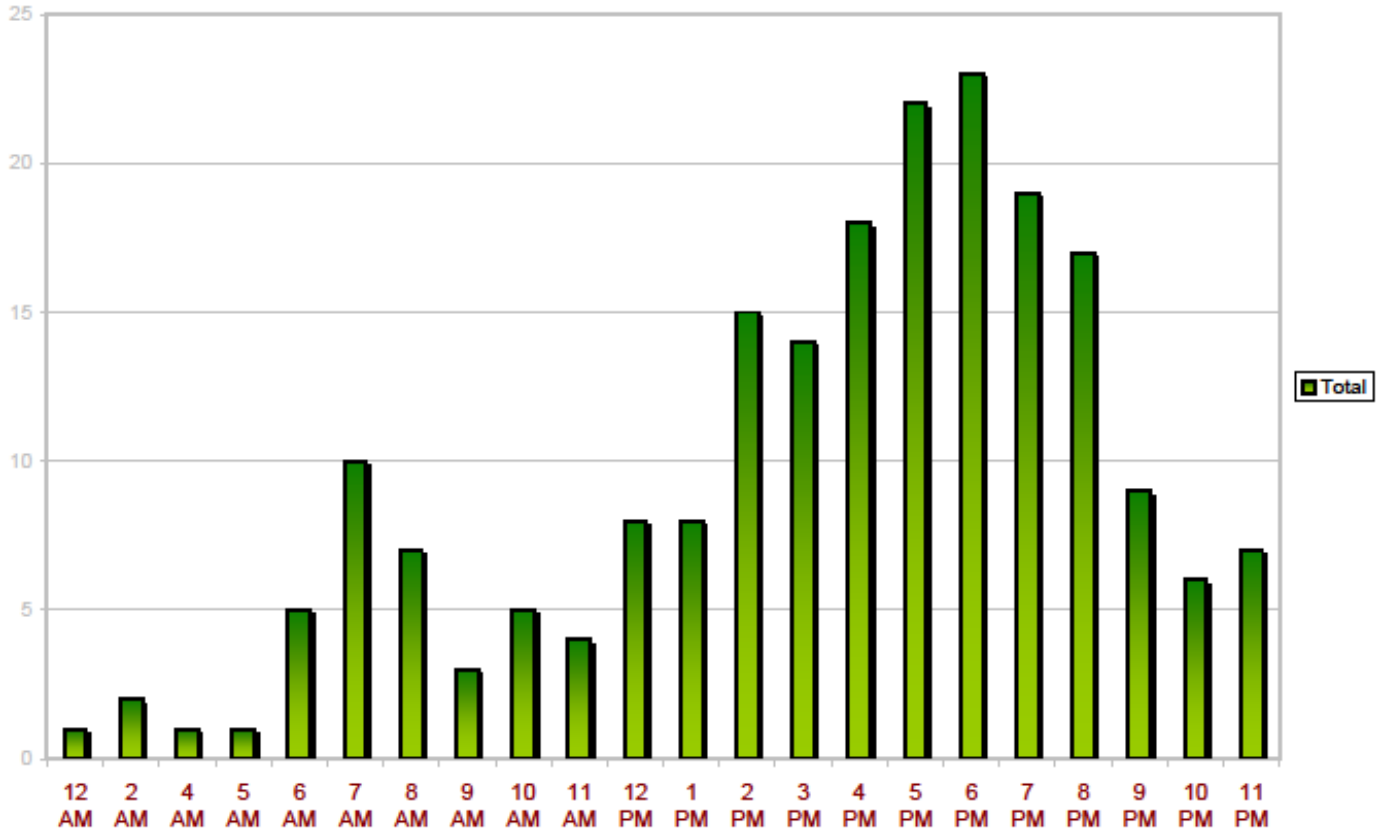


Figure 24: Bicycle Crashes by Time of Day



The majority of bicycle related crashes are later in the afternoon and early evening when many cyclists are out riding and more vehicles are on the road.

Figure 25: 2008 Total Bicycle Related Crashes by Day of the Week

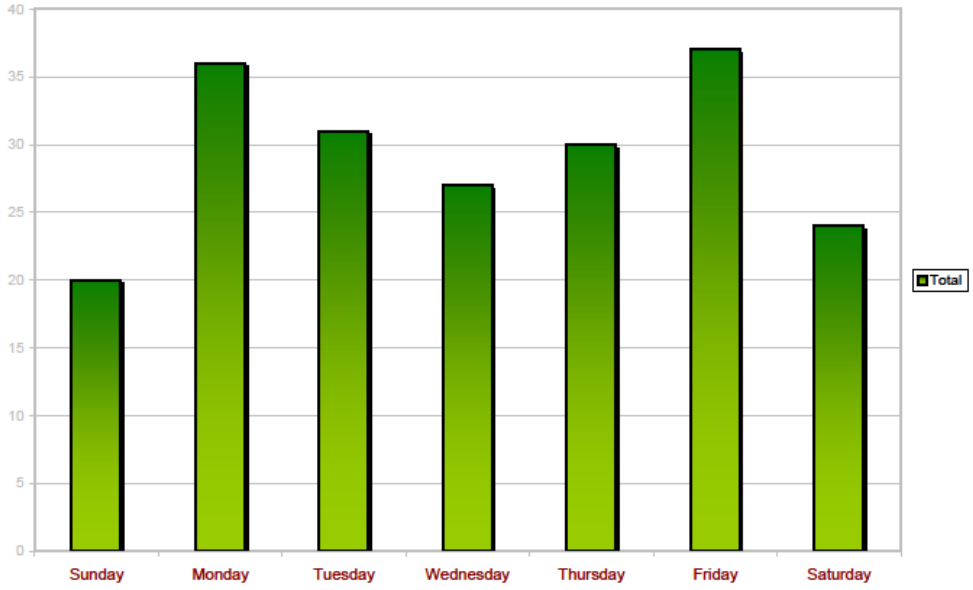
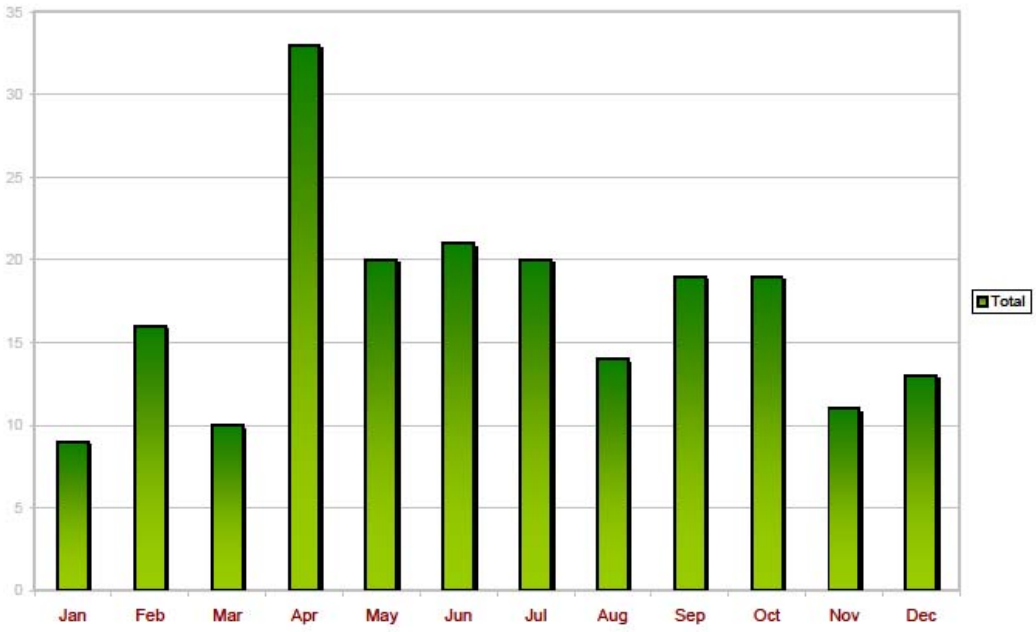
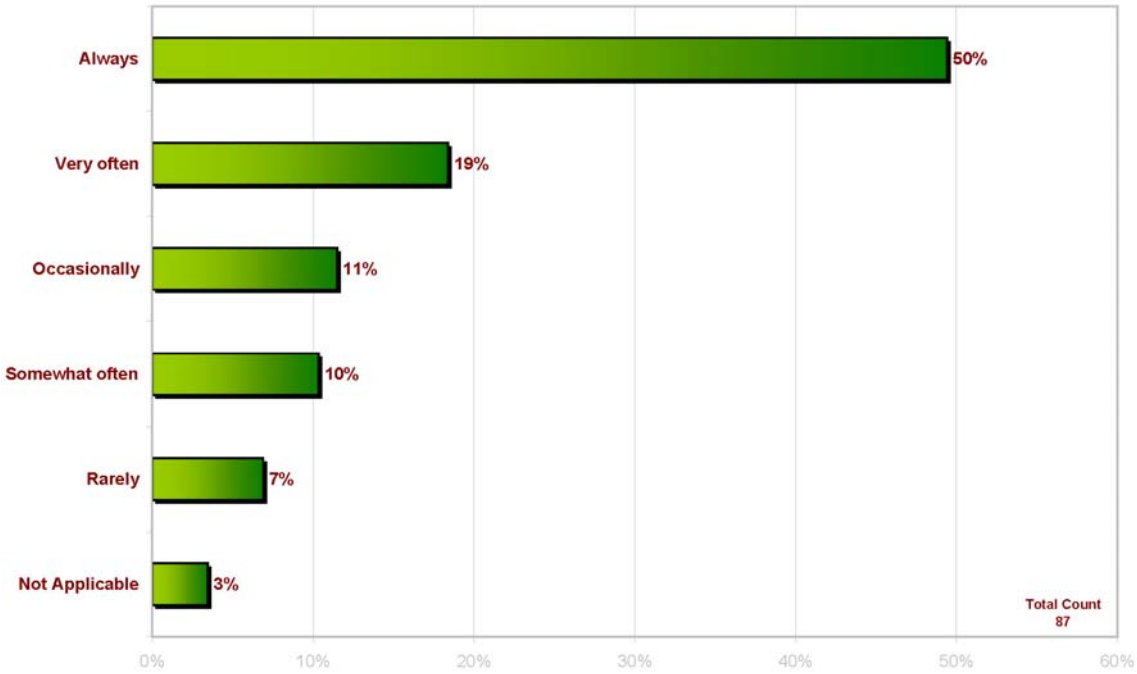


Figure 26: 2008 Total Bicycle Related Crashes by Month of the Year



MPO Transportation Safety Survey Question:

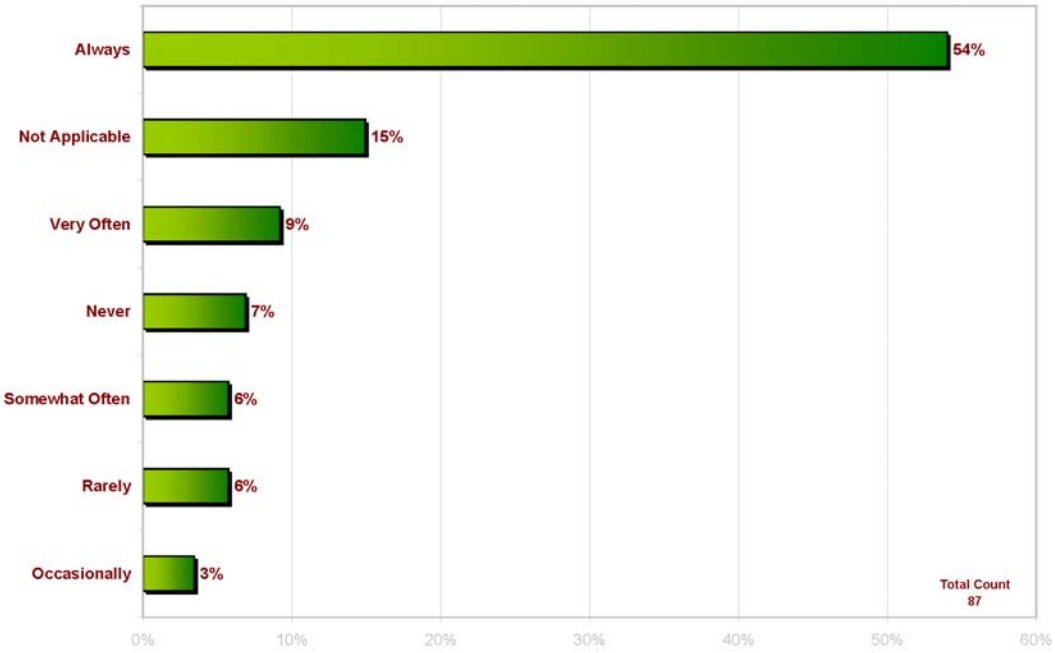
When walking or bicycling to a destination in your area, how often are you concerned about safety?



The majority of cyclists and pedestrians are concerned about safety when trying to reach their destination on a bicycle or by foot.

MPO Transportation Safety Survey Question:

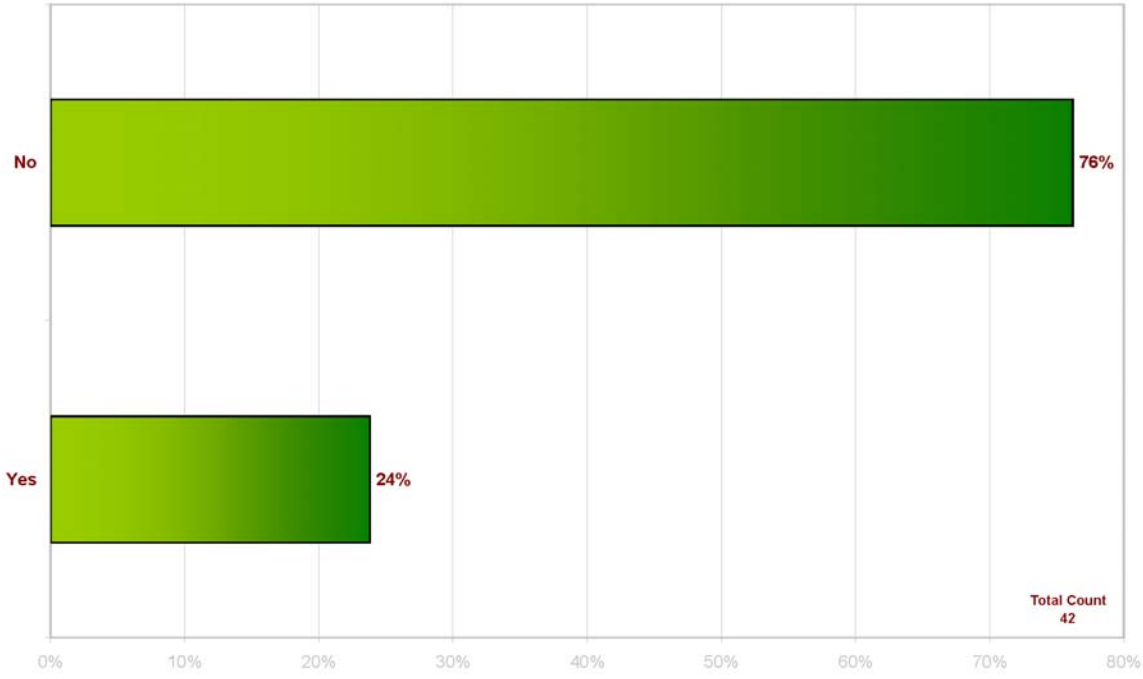
If you are a cyclist, how often do you wear a helmet?



Over half of our survey respondents that are cyclists are always wearing a helmet.

MPO Transportation Safety Survey Question:

If you are cyclist, have you ever been involved in an on-road crash in the previous years (2007, 2008, and 2009)?



Pedestrian Crashes

Walking is the oldest form of transportation and everyone is a pedestrian at some point each day. Programs such as the MPO's Walkable Community Program are educating the public on the importance of routinely including pedestrian projects such as sidewalks and crosswalks in roadway project design.

Did you know?

- According to the National Highway Transportation Safety Administration, on average, a pedestrian is killed almost every 2 hours and injured every 8 minutes.
- Pedestrians ages 65 and older accounted for 18% of all pedestrian deaths and an estimated 10% of all pedestrians injured in 2008. In 2008, one in every five children between the ages of 5 and 9 who were killed in traffic crashes was a pedestrian. (CDC)
- On May 28, 1987 the Golden Gate Bridge closed to vehicles for its 50th birthday; an estimated 300,000 pedestrians jammed the bridge in celebration. (gocalifornia.about.com)

On average, one pedestrian is involved in a crash with a vehicle *every 11 hours* in our region.

Table 8: Pedestrian Related Crash Data

2008 Crash Data					
Overview of the MPO Study Area - Pedestrian Stats					
		Injuries			
Total Crashes	Deaths	Incapacitating	Non-Incapacitating	Possible Injury	Total Injuries
766	33	100	276	360	736
Total Persons	Total Vehicles	**Incapacitating Injury** - Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities capable of performing before the injury occurred.			
1,860	827	**Non-Incapacitating Injury** - Any injury, other than a fatal injury or incapacitating injury, which is evident to observers at the scene of the collision in which the injury occurred.			
		Possible Injury - Any injury that is reported or claimed which is not a fatal injury, incapacitating injury or non-incapacitating injury.			

Figure 27: Pedestrian Crashes by Zip Code

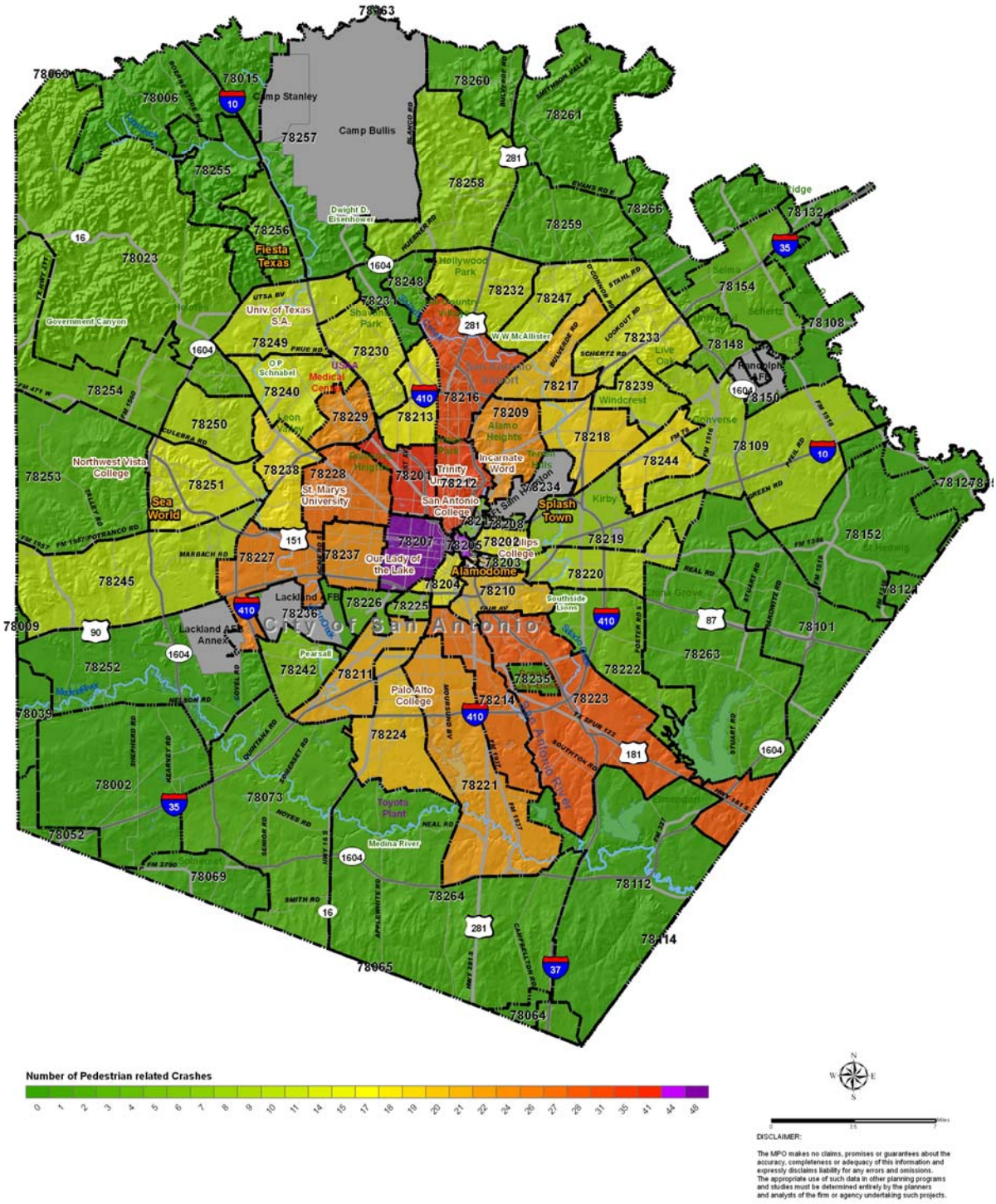


Figure 28: 2008 Total Pedestrian Related Crashes by Time of Day

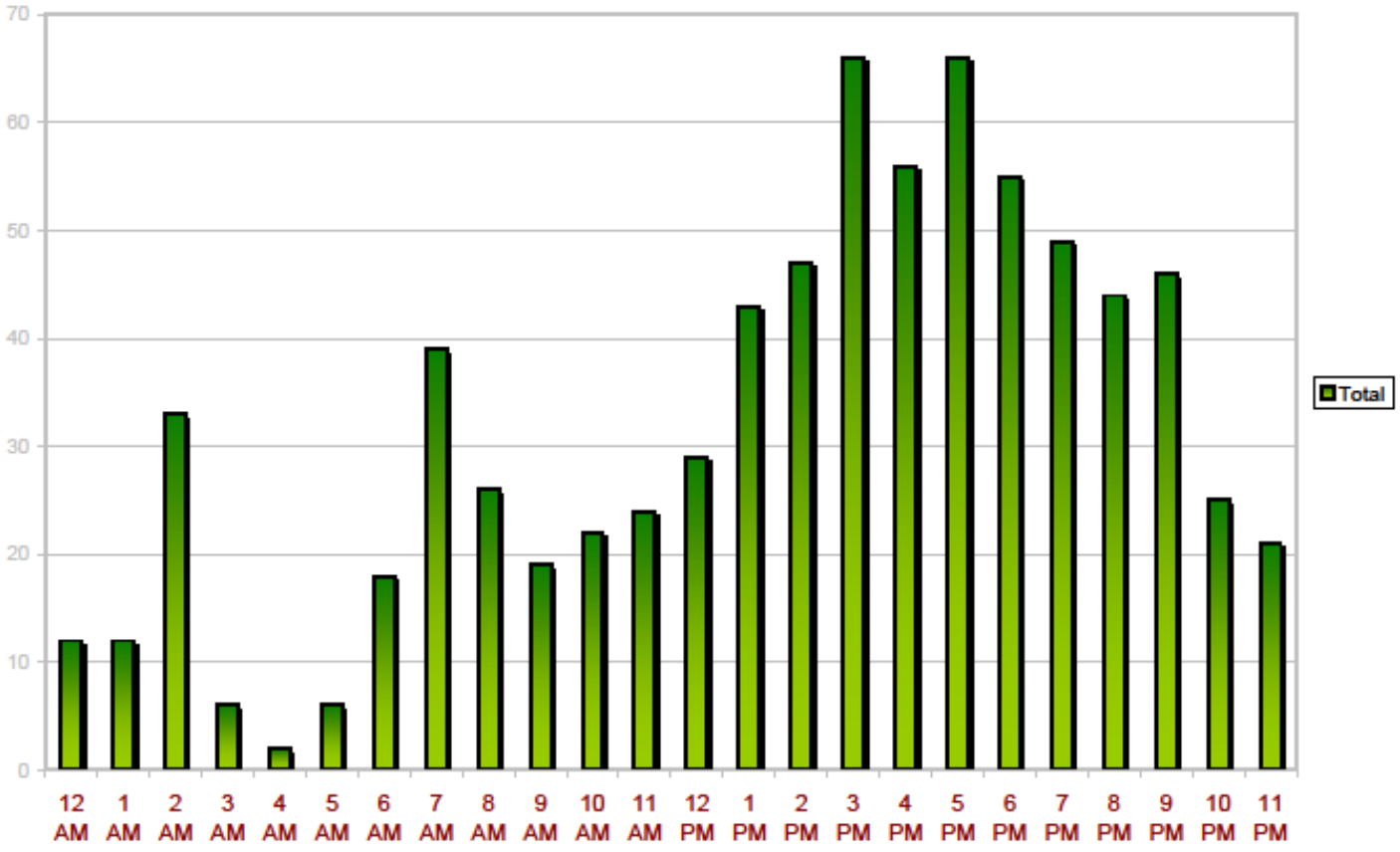
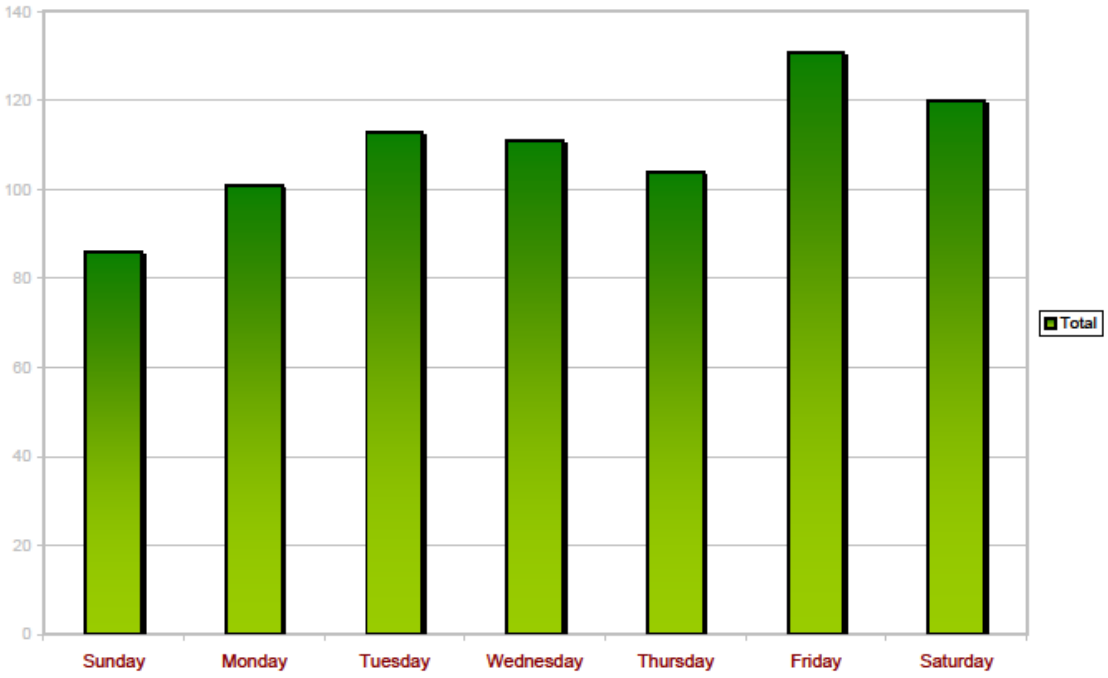
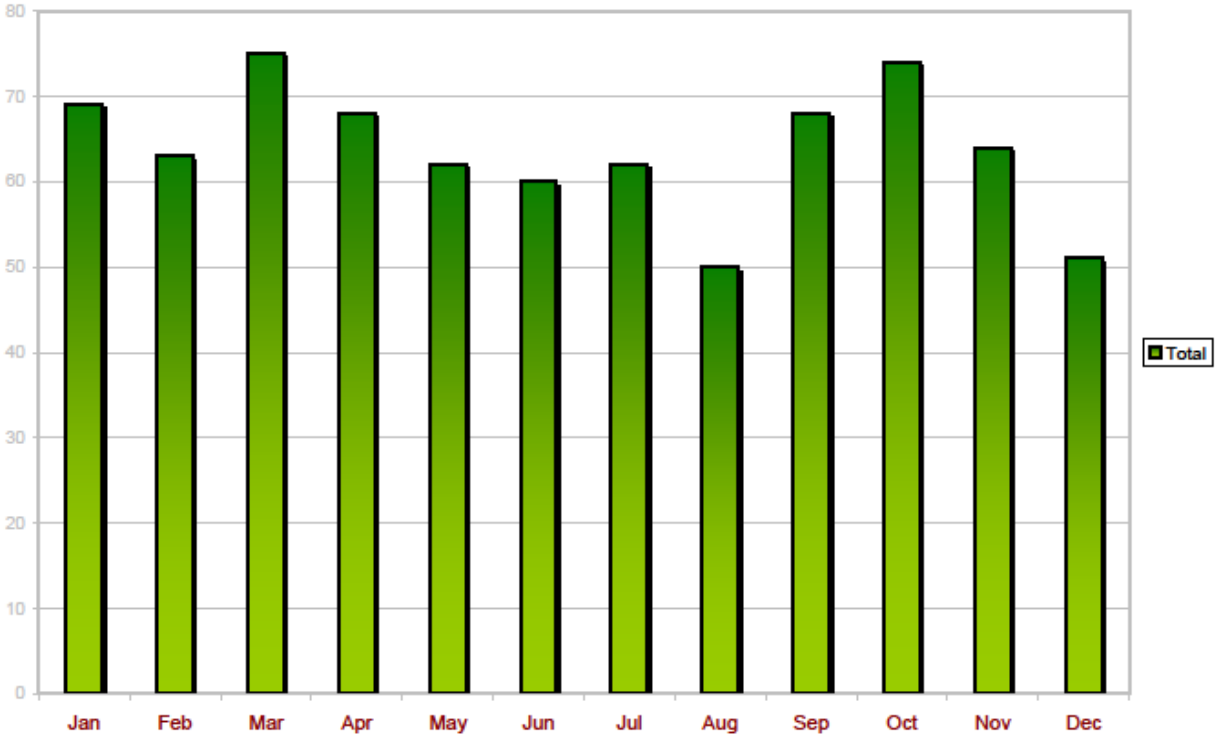


Figure 29: 2008 Total Pedestrian Related Crashes by Day of the Week



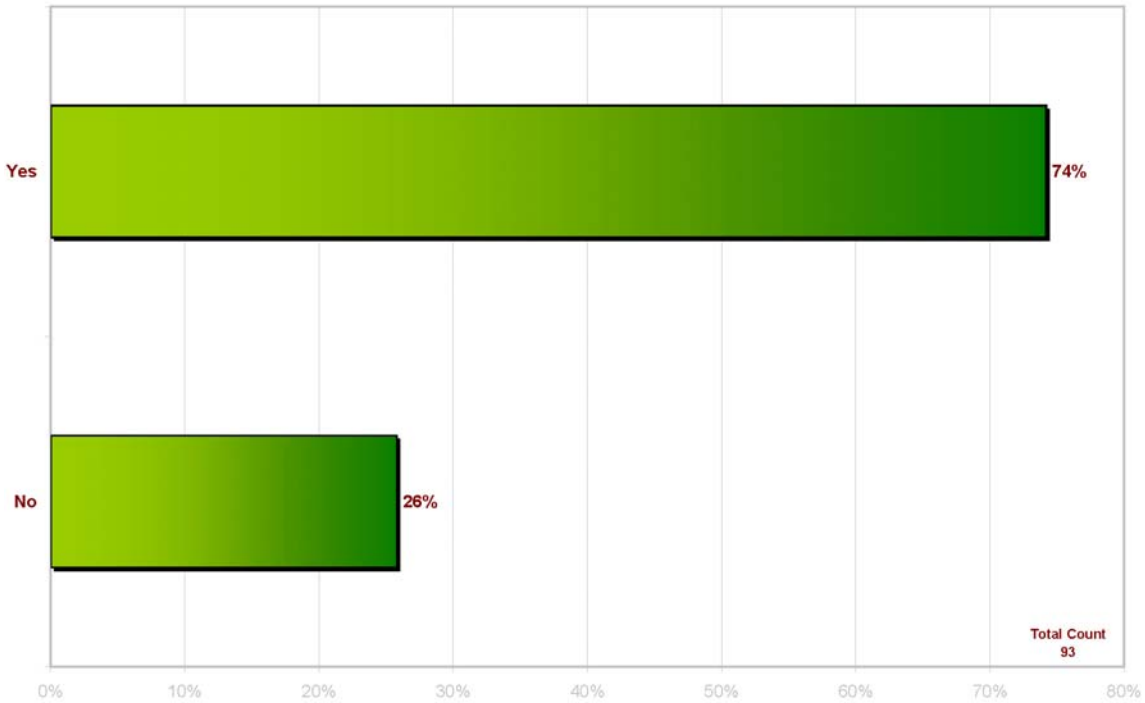
As seen in the other safety areas, Friday is the day of week with the highest number of pedestrian crashes.

Figure 30: 2008 Total Pedestrian Related Crashes by Month of the Year



MPO Transportation Safety Survey Question:

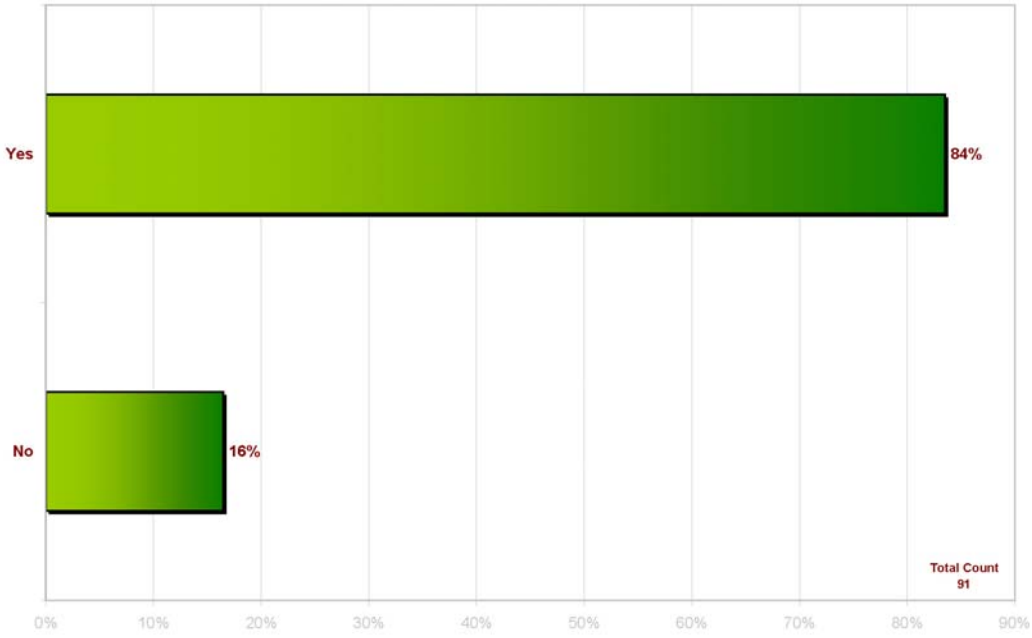
Do crosswalks make you feel safer when walking to a destination?



74% of survey respondents feel safer when a crosswalk is available.

MPO Transportation Safety Survey Question:

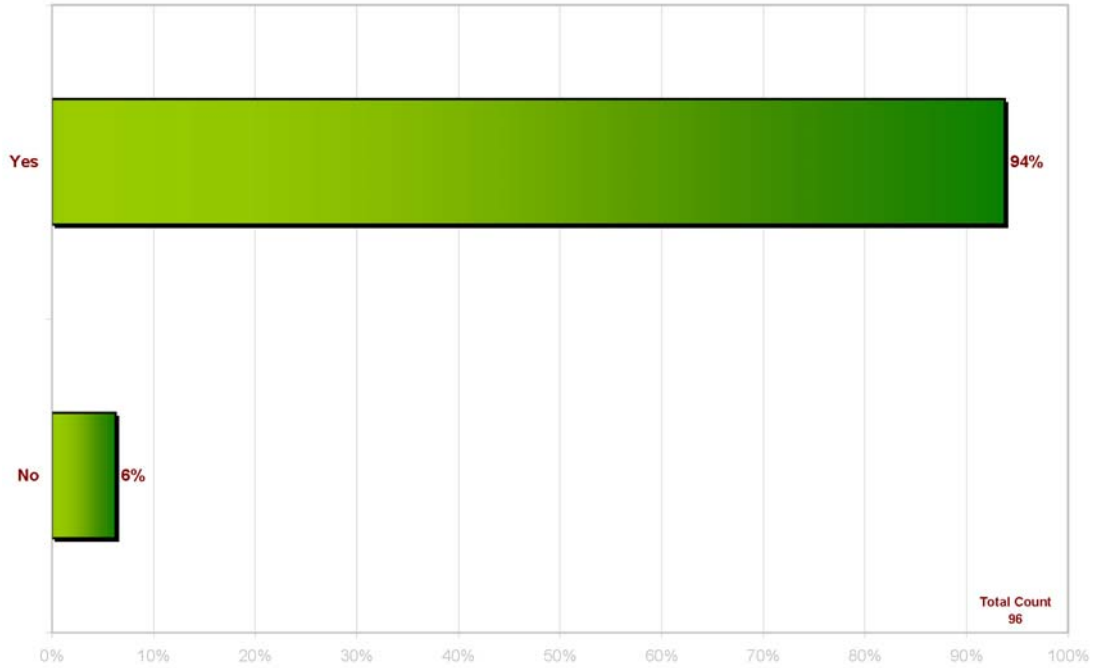
When walking to a destination do you look for crosswalks?



84% of respondents actually look for crosswalks when walking to their destination.

MPO Transportation Safety Survey Question:

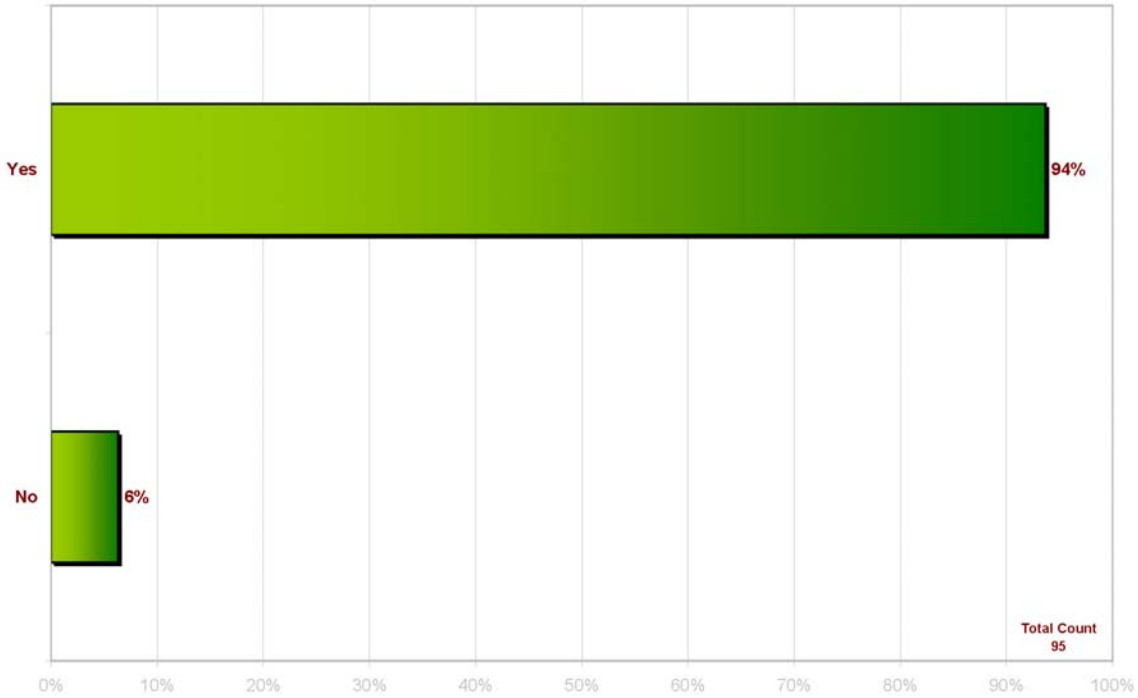
Do sidewalks make you feel safer when walking to a destination?



An overwhelming majority, 94% of respondents feel safer with sidewalks.

MPO Transportation Safety Survey Question:

When walking to a destination, do you look for sidewalks?



People do look for sidewalks when walking to a destination.

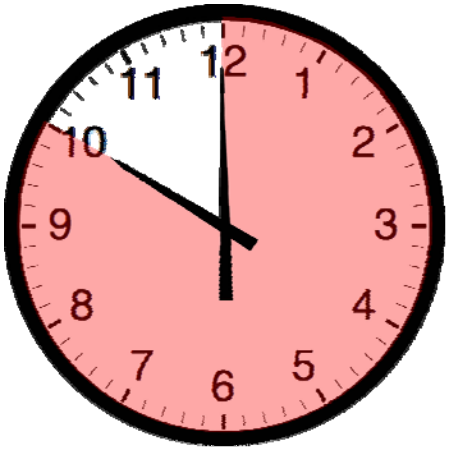
Motorcycle Crashes

Motorcycle drivers and crashes have become a hot topic at both the national and state levels. The downturn in the economy and rise in gas prices made the motorcycle an even more attractive choice for motorists. However, with the increase in motorcyclists, safety becomes a very important part of keeping everyone safe and aware of all roadway users.

Did you know?

- In multiple vehicle accidents, the driver of the automobile violated motorcycle right-of-way and caused the crash two-thirds of the time. ("Motorcycle Accident Cause Factors and Identification of Countermeasures", Volume 1)

- The first Harley Davidson motorcycle built in 1903 is reported to have used a tomato can for a carburetor. (encyclopedia.jrank.org)



Safety Time

On average, one motorcyclist is involved in a crash with a vehicle *every 10 hours* in our region.

Table 9: Motorcycle Crash Data

2008 Crash Data					
Overview of the MPO Study Area - Motorcycle Stats					
		Injuries			
Total Crashes	Deaths	Incapacitating	Non-Incapacitating	Possible Injury	Total Injuries
873	32	50	292	339	681
Total Persons	Total Vehicles	**Incapacitating Injury** - Any injury, other than a fatal injury, which prevents the injured person from walking, driving or normally continuing the activities capable of performing before the injury occurred.			
1,903	1,572	**Non-Incapacitating Injury** - Any injury, other than a fatal injury or incapacitating injury, which is evident to observers at the scene of the collision in which the injury occurred.			
		Possible Injury - Any injury that is reported or claimed which is not a fatal injury, incapacitating injury or non-incapacitating injury.			

Figure 31: Motorcycle Crashes by Zip Code

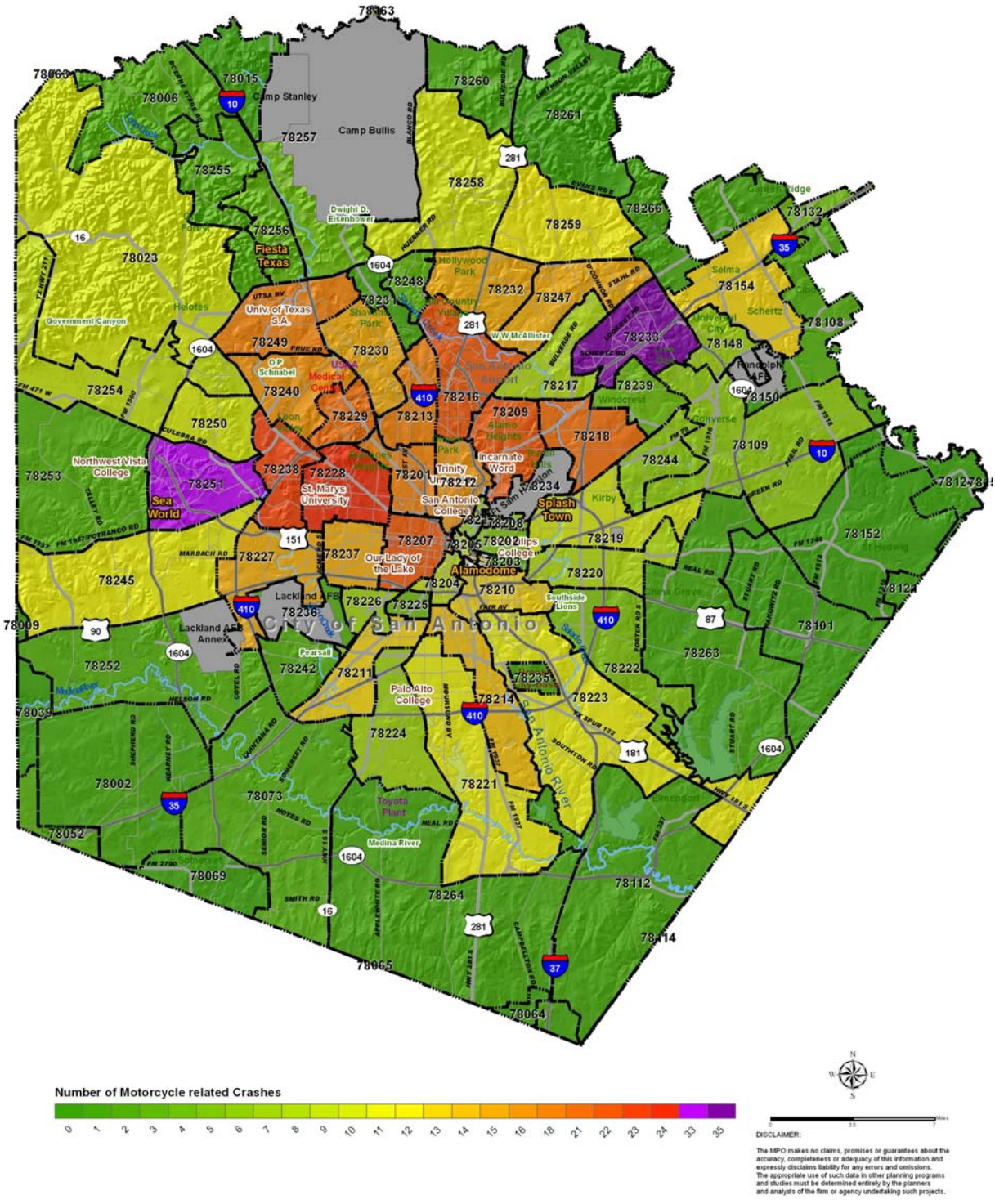


Figure 32: Total Motorcycle Crashes by Time of Day

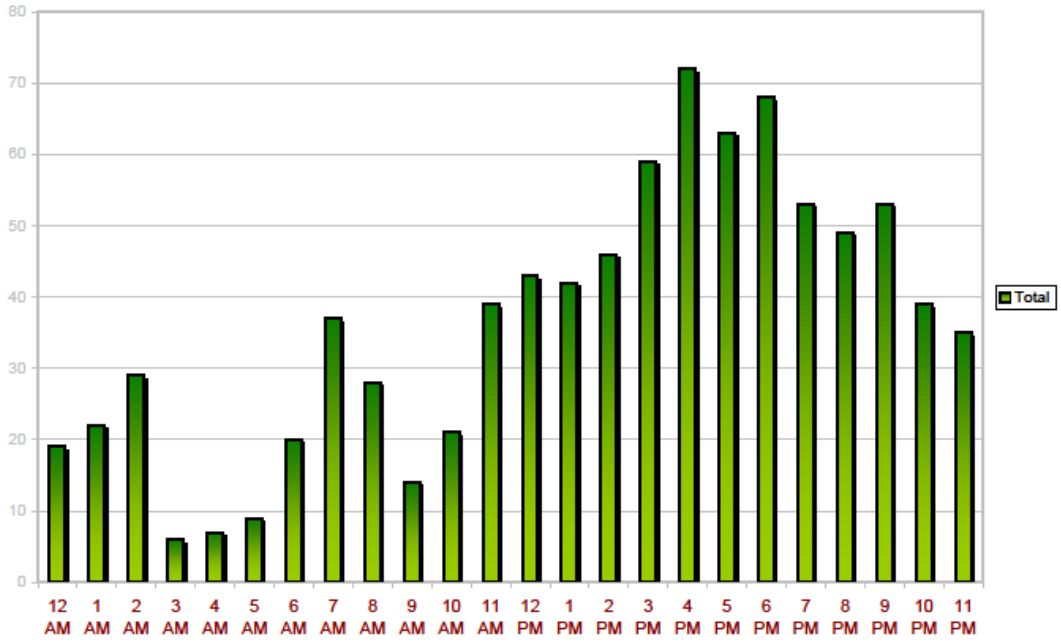
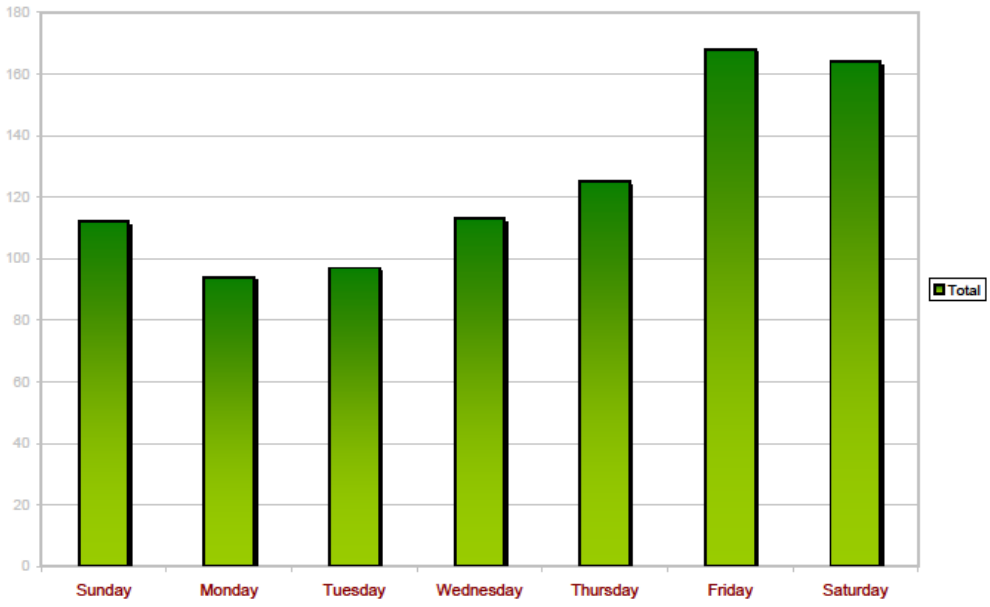


Figure 32 shows the peak of motorcycle crashes occurs later in the afternoon and into the evening hours.

Figure 33: Total Motorcycle Crashes by Day of the Week



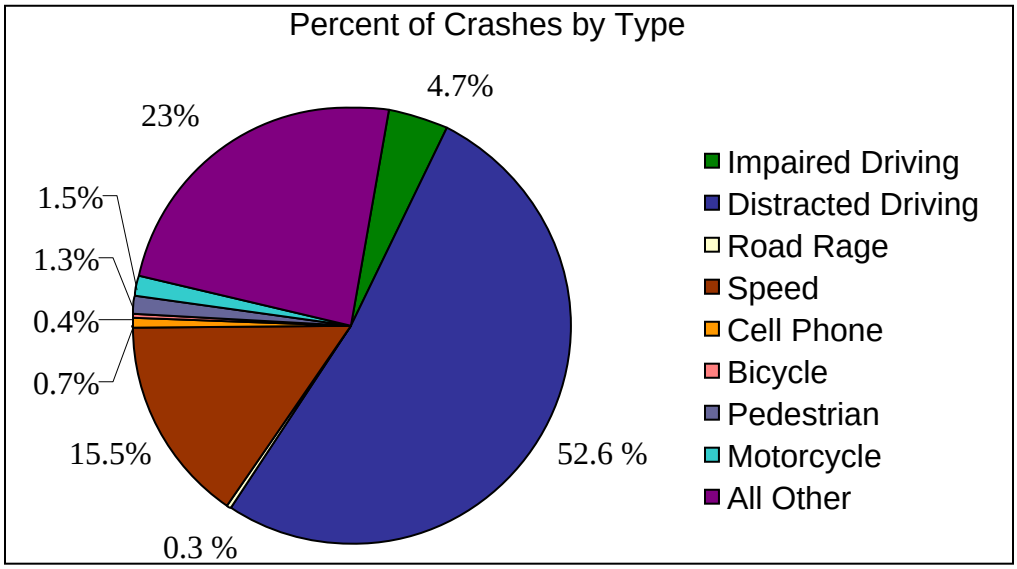
In Figure 33, the trend of more crashes on Friday appears with motorcycles as well. This is the same trend seen with distracted driving, road rage and speeding.

Analysis

The Regional Transportation Safety Study seeks to examine the safety topics that are the most important and will have the greatest effect on helping to improve transportation safety throughout the region. The transportation safety topics selected for this study represent 77% of all crashes in our region. There are contributing factors to crashes that were not included in this study and represent the remaining 23% of crashes.

In total there are 75 different categories of crashes. The 77% of crashes represent 8 of the 75 categories. The remaining 23% of crashes represent the other 67 categories.

Figure 34: Percent of Crashes by Type



When analyzing the eight crash types (impaired driving, distracted driving, road rage, speed, cell phone use while driving, bicycle crashes, pedestrian crashes and motorcycle crashes) certain trends were easily identified. The next six charts show a correlation either between two of the crash types or compare crash types to gender, age or time of travel.

As seen in Figure 35 a spike in pedestrian and impaired driving crashes occurs at the 2:00 a.m. hour when establishments that serve alcohol are required to close.

Figure 35: Pedestrian and Impaired Driving Crashes by Time of Day

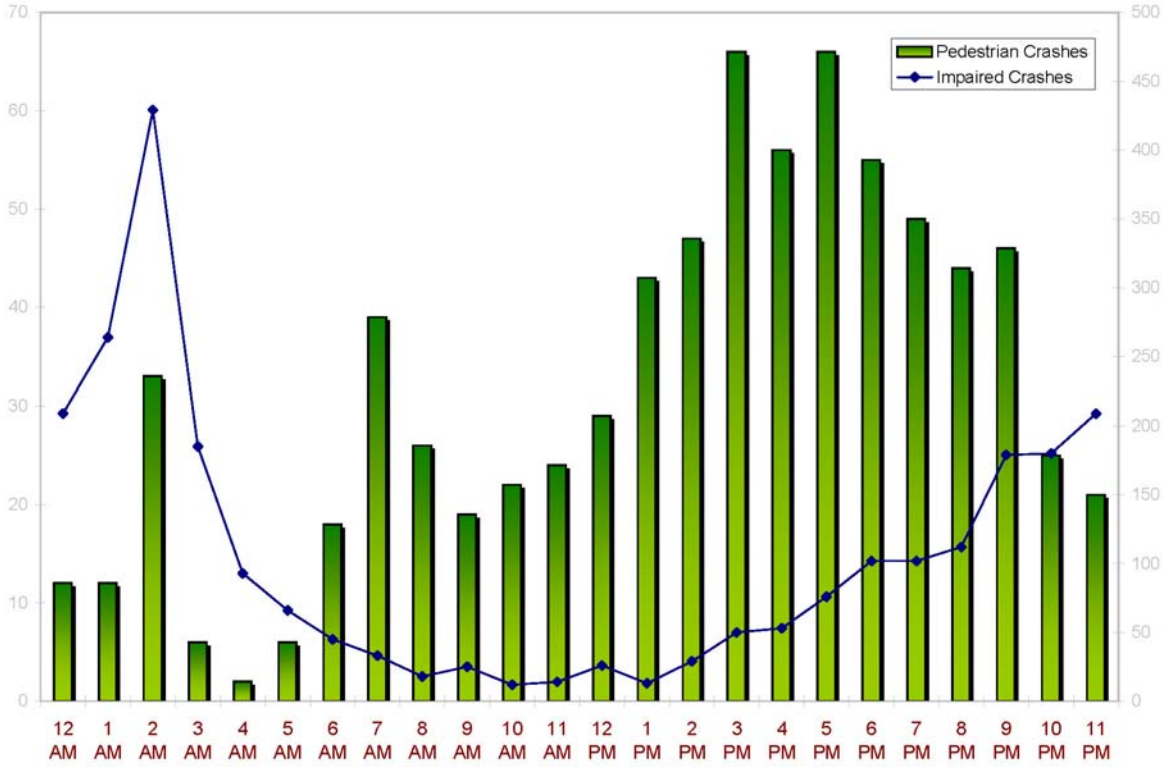
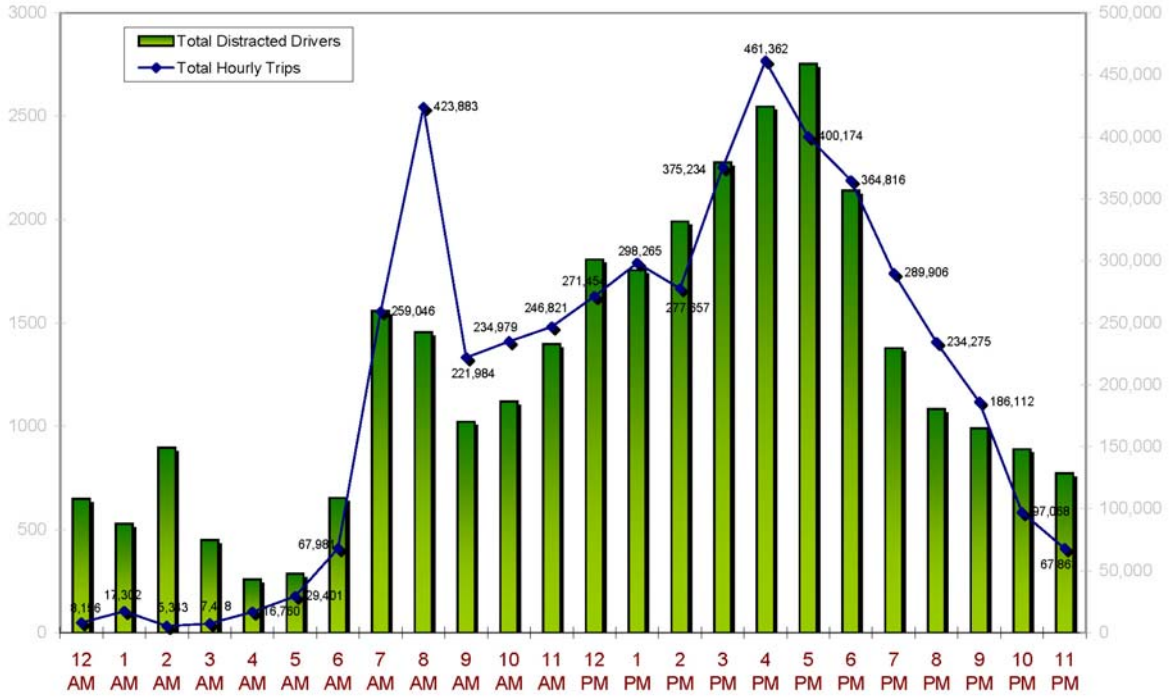
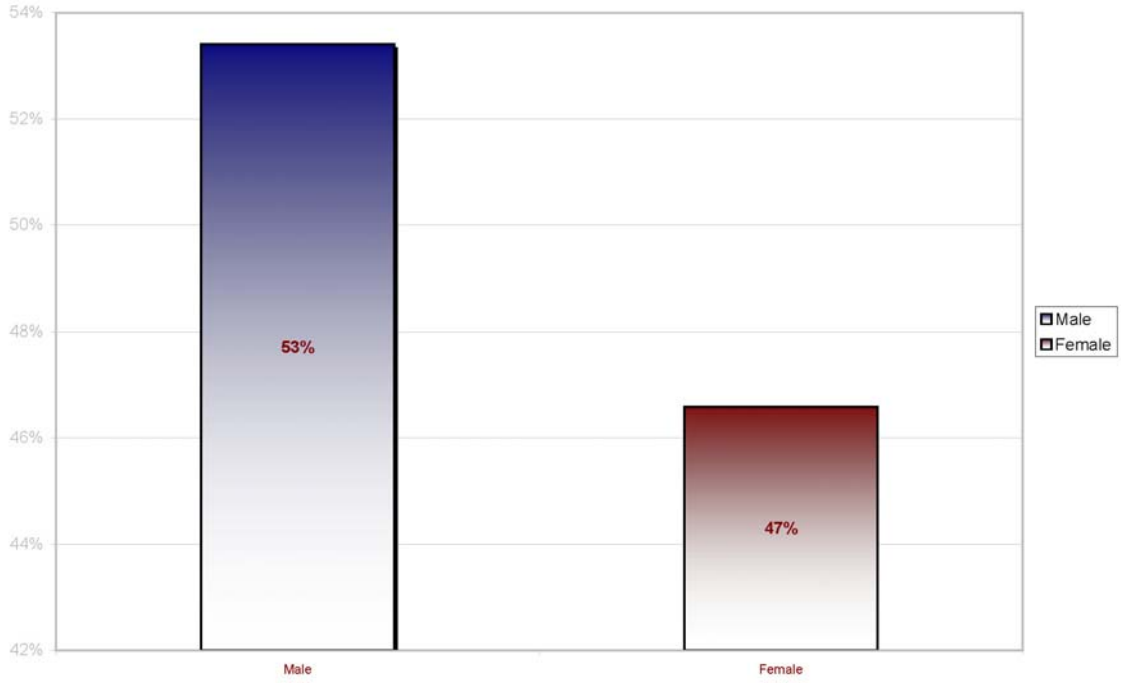


Figure 36: 2008 Distracted Driving Crashes by Time of Day and Hourly Departure



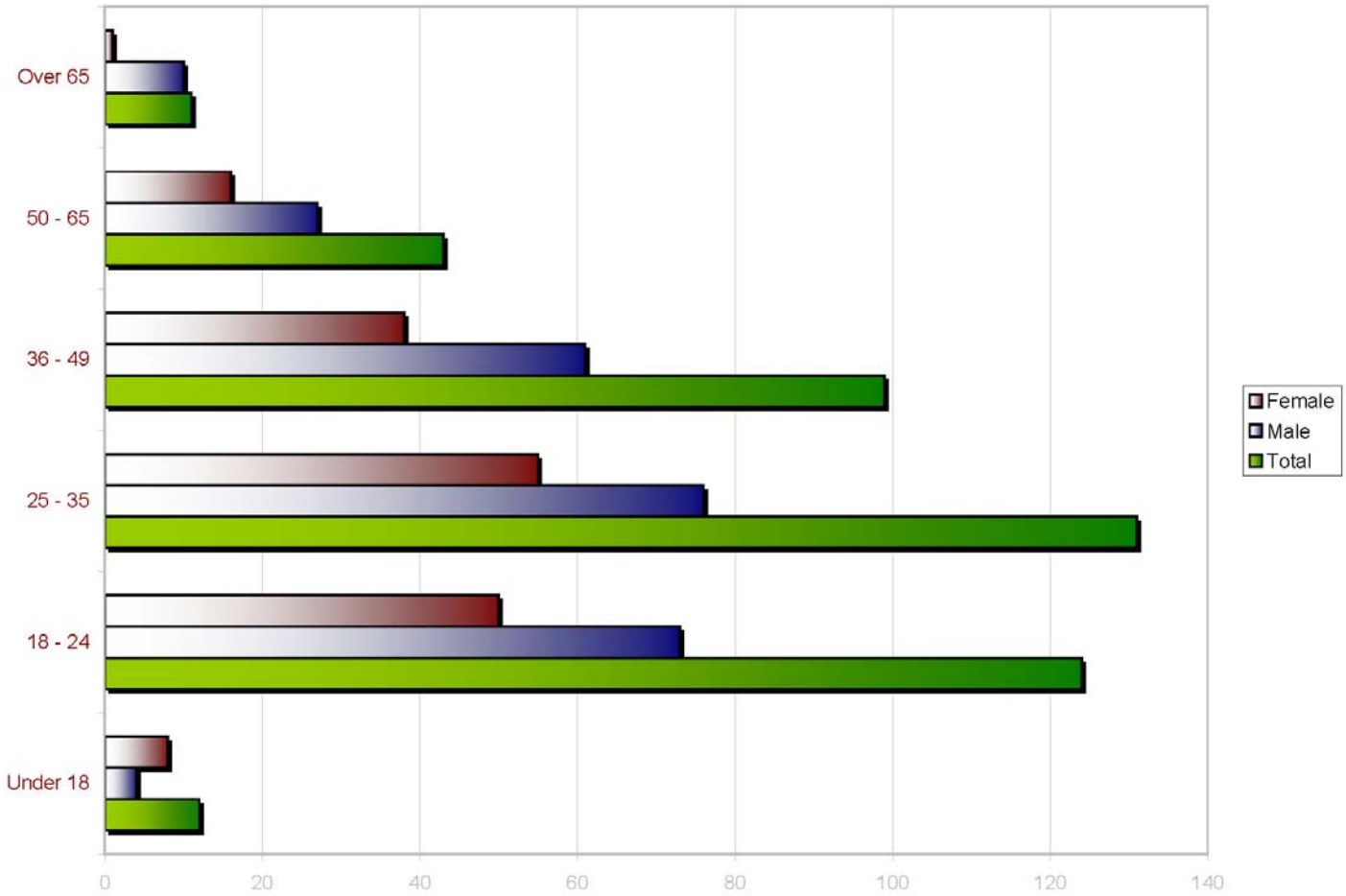
Shown in Figure 36, above, a positive correlation can be found between the number of trips on the roadways at a given hour of time and the total number of distracted drivers. For example, between 4:00 p.m. and 5:00 p.m. when the majority of trips are taken, the highest number of distracted drivers is found.

Figure 37: 2008 Percentage of Road Rage Related Crashes by Gender



As shown in Figure 37 the greater San Antonio region follows the national trend of more males being involved in road rage related crashes than females. (AAA Foundation Aggressive Driving Research Update 2009)

Figure 38: 2008 Road Rage Crashes by Age and Gender



In every age group except under 18 years of age, males are involved in more road rage related crashes.

Figure 39: 2008 Impaired Crashes vs. Speed Related Crashes by Time of Day

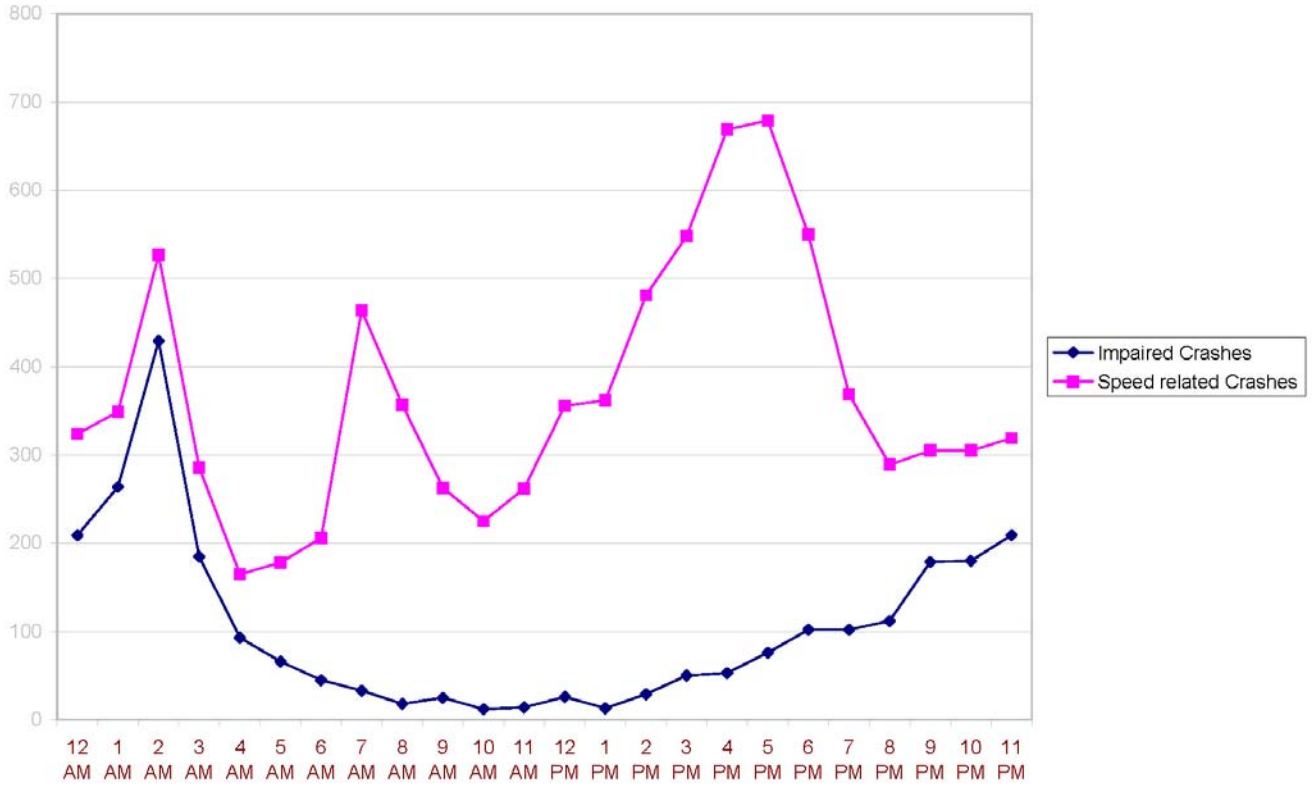


Figure 39 demonstrates a relationship between impaired crashes and speed related crashes in the early morning hours.

Figure 40: Total Motorcycle Crashes and Rate of Motorcycle Crashes per 10,000 People by Age Range

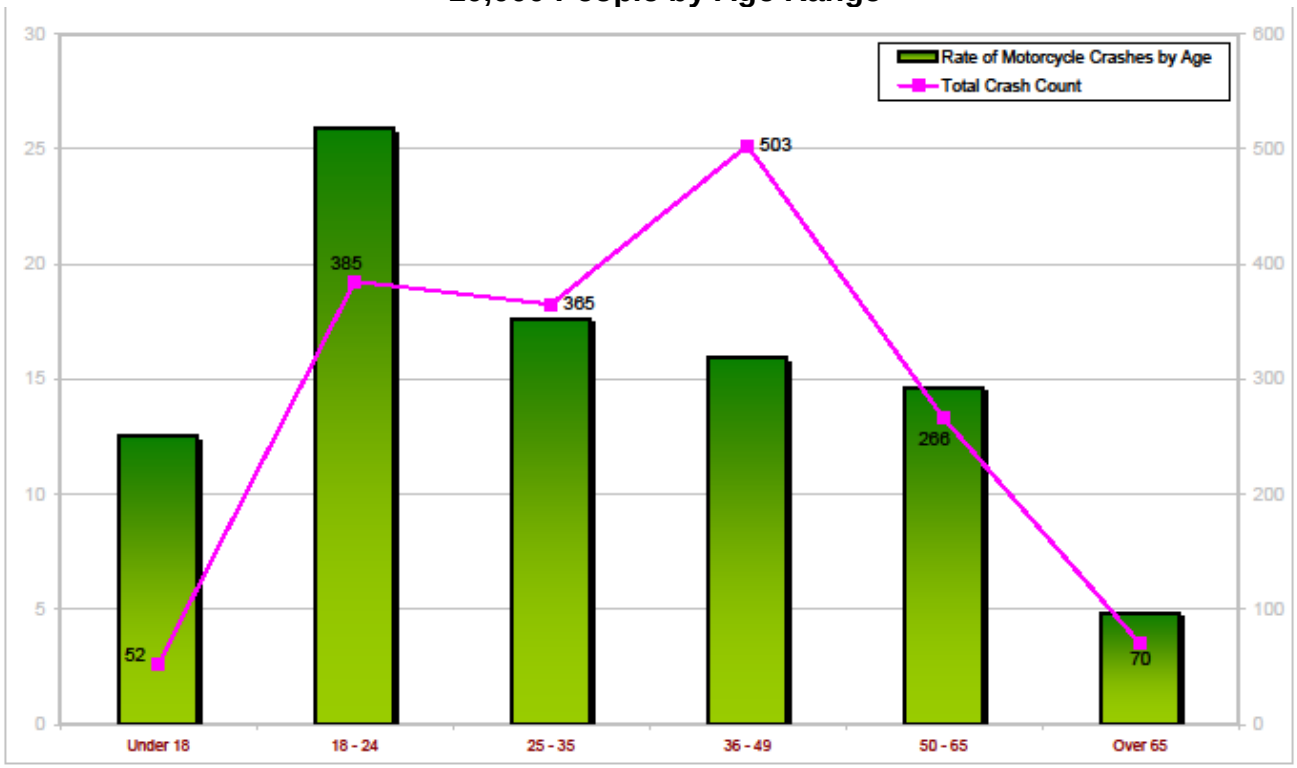


Figure 40 shows that 18-24 year olds have the highest rate of motorcycle crashes in their age range, but 36-49 year olds have the highest actual number of crashes in their age range.

Technical Appendix

Background

The MPO study area is includes San Antonio, Texas and all of Bexar County, parts of Comal County, Guadalupe County, and 21 suburban cities within the listed counties.

The Regional Transportation Safety Study examines crash data collected from year 2008 and identifies trends and specific safety concerns throughout the region.

For the purpose of this study, the Crash Record Inventory System or CRIS dataset, maintained and distributed by the Texas Department of Transportation (TxDOT) was utilized. The data is collected at the local law enforcement level using the CRB-3 form (see page 62) and is transmitted to TxDOT. The CRIS dataset is a collection of state wide level crashes. However, some crashes that did not involve law enforcement or appear to have damage of $1,000.00 or less in damages are not required to fill out the CRB-3 form. Therefore, the most minor crashes are not reported and included in the CRIS dataset.

At the time of this study the CRIS data was provided via compact disc and the data was in a comma separated value (CSV) format or text file. The datasets consisted of six years of data from 2003 to 2008. For the purpose of this study the most recent year was analyzed, 2008.

The CRIS database is comprised of three datasets: information about the Crash, information about the Persons involved in the crash, and information regarding the Vehicles involved in the crash. For one year of statewide crash data (including Crash, Person, and Vehicle data) the average file size was greater than 1.5 gigabytes.

Significant Applications

All three datasets (Crash, Person, and Vehicle) are linked using the field “crash number.” The crash number is a unique number assigned to each crash record. For example, if looking at a crash and wanted to know the ages of each person involved you would use the crash number and match it up in the Person Dataset to find out the ages.

When linking the three datasets in the CRIS database, the number of crashes will automatically increase and represent a false number of crashes. For example, when conducting a query of the number of crashes involving road rage there is a need to link the Crash Dataset with the Person Dataset; in doing so the results will return the number of people involved in road rage crashes and not the number of crashes (there may be five people in two vehicles, but only one crash).

The CRIS database contains city and county fields making it simple to analyze based on these values. However, the SA-BC MPO boundary, as mentioned before, contains limits with partial county boundaries. Geographic Information Systems or GIS was utilized to graphically select all crash records within the study area. This selection was then brought into Microsoft Access and used for the study area analysis.

Within the Vehicle database are several fields which identify 75 potential contributing factors for vehicles and persons involved in a crash. These factors were observed by the officer as a circumstance contributing to the result of the crash. The fields are identified as *Contrib_Factr_1_ID*, *Contrib_Factr_2_ID*, *Contrib_Factr_3_ID*, *Contrib_Factr_P1_ID*, *Contrib_Factr_P2_ID*, and *Contrib_Factr_P3_ID.* When querying for the topics studied in this report where it states contributing factors all six contributing factors fields were queried.

The following topics were selected as areas of concentration for the safety study and include detailed information about how the data was retrieved from the CRIS database.

Impaired Driving

The Impaired Driving section of this study included both alcohol and drug related crashes. All three datasets were used for this analysis.

Crash dataset: provided the location and general information regarding the crash

Person dataset: *Person Blood Alcohol Content Test Results* field was used.
All values **greater than zero** were selected in the field as impaired driving crashes.
Vehicle dataset: The following contributing factor values were used:
Value 45: Had Been Drinking;
Value 62: Taking Medication;
Value 67: Under Influence – Alcohol;
Value 68: Under Influence – Drug.

Five elements were examined to identify "impaired driving." Note, specific care must be taken when looking at this collection of data due to tying and extracting data from of all three datasets.

Distracted Driving
Vehicle dataset: The following contributing factor values were used:
Value 19: Distraction in Vehicle;
Value 20: Driver Inattention.

Road Rage
Vehicle dataset: The following contributing factor value was used:
Value 73: Road Rage.

Cell Phone Use
Vehicle dataset: The following contributing factor value was used:
Value 72: Cell/Mobile Phone Use.

Speeding
Vehicle dataset: The following contributing factor values were used:
Value 60: Speeding – Unsafe (Under Limit);
Value 61: Speeding – Unsafe (Over Limit);
Value 22: Failed To Control Speed.

Bicyclists
Crash dataset: The field Pedcycl_Cnt was used.

This particular field is a total count of pedal cyclist involved in a crash. The query for this field included all values greater than zero, which allowed the identification of all bicycle related crashes.

Pedestrians
Crash dataset: The field Ped_Cnt was used.

This field is a total count of pedestrians involved in a crash. The query for this field included all values greater than zero, which allowed the identification of all pedestrian related crashes.

Motorcycles
Vehicle dataset: The field Veh_type_ID or Vehicle type was used.
Value 13: Motorcycle.

CRB-3 Form

TEXAS PEACE OFFICER'S CRASH REPORT CRB-3 (Rev. 01/06) Submission of Crash Records: This report may be submitted via the CRIS Web Portal, electronically submitted via XML or mailed to the TEXAS DEPARTMENT OF PUBLIC SAFETY, PO BOX 4087, AUSTIN TX 78773-0350. Please see the DPS Instructions to Police for more details regarding these submission methods or look on the CRIS Website at http://www.txdps.state.tx.us/crisproject/index.htm.

☐ FATAL ☐ CMV INVOLVED ☐ SCHOOL BUS RELATED ☐ RAILROAD RELATED ☐ MEDICAL ADVISORY BOARD ☐ HIT AND RUN ☐ AMENDMENT/ SUPPLEMENT

PLACE WHERE CRASH OCCURRED
COUNTY _____ CITY OR TOWN _____
IF CRASH WAS OUTSIDE CITY LIMITS INDICATE FROM NEAREST TOWN _____ MILES ☐ N ☐ S ☐ E ☐ W OF _____
LOC # _____
ORI # _____
DPS # _____

ROAD ON WHICH CRASH OCCURRED _____ (BLOCK NUMBER / STREET OR ROAD NAME / ROUTE NUMBER OR STREET CODE)
CONSTRUCTION ZONE WORKERS PRESENT ☐ YES ☐ NO ☐ YES ☐ NO SPEED LIMIT _____
INTERSECTING STREET OR RR X'ING NUMBER _____ (BLOCK NUMBER / STREET OR ROAD NAME / ROUTE NUMBER OR STREET CODE)
CONSTRUCTION ZONE WORKERS PRESENT ☐ YES ☐ NO ☐ YES ☐ NO SPEED LIMIT _____
NOT AT INTERSECTION _____ ☐ FT. ☐ MI. ☐ ☐ ☐ ☐ N S E W OF _____ (SHOW MILEPOST OR NEAREST INTERSECTING NUMBERED HIGHWAY, IF NONE, SHOW NEAREST INTERSECTING STREET OR REFERENCE POINT)
MILEPOST
LATITUDE _____
LONGITUDE _____

DATE OF CRASH _____ (MONTH / DATE / YEAR) DAY OF WEEK _____ HOUR _____ ☐ AM ☐ PM IF EXACTLY NOON OR MIDNIGHT, SO ST ATE

UNIT # ☐ 1-MOTOR VEHICLE 2-TRAIN 3-PEDALCYCLIST 4-PEDESTRIAN 5-MOTORIZED CONVEYANCE 6-TOWED 7-NON-CONTACT 8-OTHER VIN# _____ ALTERED VEHICLE HEIGHT ☐ YES ☐ NO
YEAR MODEL _____ COLOR & MAKE _____ MODEL NAME _____ BODY STYLE _____ LICENSE PLATE _____ (YEAR / STATE / NUMBER)
DRIVER'S NAME _____ (LAST / FIRST / MIDDLE / ADDRESS (STREET, CITY, STATE, ZIP)) PHONE NUMBER _____
DRIVER'S LICENSE _____ (STATE / NUMBER / CLASS/TYPE / ENDORSEMENTS / RESTRICTIONS / DATE OF BIRTH) LICENSE STATUS ☐ 1-VALID 2-NOT VALID 3-SUSPENDED/REVOKED 4-CANCELLED/DENIED 5-EXPIRED 6-UNKNOWN
DRIVER'S ETHNICITY ☐ 1-WHITE 2-HISPANIC 3-BLACK 4-ASIAN 5-OTHER DRIVER'S SEX ☐ MALE ☐ FEMALE DRIVER'S OCCUPATION _____ POLICE, FIREFIGHTER, EMS, ON EMERGENCY ☐ IF CHECKED, PLEASE EXPLAIN IN NARRATIVE
TYPE OF ALCOHOL SPECIMEN TAKEN 1-BREATH 2-BLOOD 3-URINE 4-NONE 5-REFUSED ☐ TEST RESULTS _____ TYPE OF DRUG SPECIMEN TAKEN 1-BLOOD 2-URINE 3-NONE 4-REFUSED ☐ TEST RESULTS _____ DRUG CATEGORY 1. _____ 2. _____
LESSEE ☐ OWNER ☐ _____ (NAME (ALWAYS SHOW LESSEE IF LEASED, OTHERWISE SHOW OWNER) / ADDRESS (STREET, CITY, STATE, ZIP))
LIABILITY INSURANCE ☐ YES ☐ NO ☐ EXP _____ (INSURANCE COMPANY NAME / POLICY NUMBER) VEHICLE DAMAGE RATING _____

UNIT # ☐ 1-MOTOR VEHICLE 2-TRAIN 3-PEDALCYCLIST 4-PEDESTRIAN 5-MOTORIZED CONVEYANCE 6-TOWED 7-NON-CONTACT 8-OTHER VIN# _____ ALTERED VEHICLE HEIGHT ☐ YES ☐ NO
YEAR MODEL _____ COLOR & MAKE _____ MODEL NAME _____ BODY STYLE _____ LICENSE PLATE _____ (YEAR / STATE / NUMBER)
DRIVER'S NAME _____ (LAST / FIRST / MIDDLE / ADDRESS (STREET, CITY, STATE, ZIP)) PHONE NUMBER _____
DRIVER'S LICENSE _____ (STATE / NUMBER / CLASS/TYPE / ENDORSEMENTS / RESTRICTIONS / DATE OF BIRTH) LICENSE STATUS ☐ 1-VALID 2-NOT VALID 3-SUSPENDED/REVOKED 4-CANCELLED/DENIED 5-EXPIRED 6-UNKNOWN
DRIVER'S ETHNICITY ☐ 1-WHITE 2-HISPANIC 3-BLACK 4-ASIAN 5-OTHER DRIVER'S SEX ☐ MALE ☐ FEMALE DRIVER'S OCCUPATION _____ POLICE, FIREFIGHTER, EMS, ON EMERGENCY ☐ IF CHECKED, PLEASE EXPLAIN IN NARRATIVE
TYPE OF ALCOHOL SPECIMEN TAKEN 1-BREATH 2-BLOOD 3-URINE 4-NONE 5-REFUSED ☐ TEST RESULTS _____ TYPE OF DRUG SPECIMEN TAKEN 1-BLOOD 2-URINE 3-NONE 4-REFUSED ☐ TEST RESULTS _____ DRUG CATEGORY 1. _____ 2. _____
LESSEE ☐ OWNER ☐ _____ (NAME (ALWAYS SHOW LESSEE IF LEASED, OTHERWISE SHOW OWNER) / ADDRESS (STREET, CITY, STATE, ZIP))
LIABILITY INSURANCE ☐ YES ☐ NO ☐ EXP _____ (INSURANCE COMPANY NAME / POLICY NUMBER) VEHICLE DAMAGE RATING _____

DAMAGE TO PROPERTY OTHER THAN VEHICLES
_____ (OBJECT / NAME AND ADDRESS OF OWNER / FEET FROM CURB) $ _____ (DAMAGE ESTIMATE)

IN YOUR OPINION, DID THIS CRASH RESULT IN AT LEAST $1,000.00 DAMAGE TO ANY ONE PERSON'S PROPERTY? ☐ YES ☐ NO

CHARGES FILED
NAME _____ CHARGE _____ CITATION# _____
NAME _____ CHARGE _____ CITATION# _____

TIME NOTIFIED OF CRASH _____ (DATE / HOUR) HOW _____ TIME ARRIVED AT SCENE _____ (DATE / HOUR) DATE OF REPORT _____
TYPED OR PRINTED NAME OF INVESTIGATOR _____ ID# _____ AGENCY _____ DIST/AREA _____ REPORT COMPLETE ☐ YES ☐ NO

SEAT POSITION
1-FRONT LEFT
2-FRONT CENTER
3-FRONT RIGHT
4-SECOND SEAT LEFT
5-SECOND SEAT CENTER
6-SECOND SEAT RIGHT
7-THIRD SEAT LEFT
8-THIRD SEAT CENTER
9-THIRD SEAT RIGHT
10-CARGO AREA
11-OUTSIDE VEHICLE
12-UNKNOWN

SOLICITATION
INDICATES A PERSON'S DESIRE TO RECEIVE CONTACT FROM PERSONS SEEKING PROFESSIONAL EMPLOYMENT AS/FOR ATTORNEY , CHIROPRACTOR, PHYSICIAN, SURGEON, PRIV ATE INVESTIGATOR, OR ANY OTHER PERSON REGISTERED OR LICENSED BY A HEALTH CARE REGULA - TORY AGENCY (Y=SOLICIT, N=NO SOLICIT).

EJECTED
1-NO
2-YES
3-YES, PARTIAL
4-NOT APPLICABLE
5-UNKNOWN

RESTRAINT USED
1-SHOULDER & LAP BEL T
2-SHOULDER BELT ONL Y
3-LAP BELT ONL Y
4-CHILD SEA T, FACING FORWARD
5-CHILD SEA T, FACING REAR
6-CHILD SEA T, UNK
7-BOOSTER SEA T
8-NONE
9-OTHER
10-UNKNOWN

AIRBAG
1-NOT APPLICABLE
2-NOT DEPLOYED
3-DEPLOYED, FRONT
4-DEPLOYED, SIDE
5-DEPLOYED, OTHER
6-UNKNOWN

HELMET USE
1-WORN, DAMAGED
2-WORN, NOT DAMAGED
3-WORN, UNK. DAMAGE
4-NOT WORN
5-UNKNOWN IF WORN

INJURY SEVERITY
K-KILLED
A-INCAPACITATING INJURY
B-NON INCAPACITATING INJURY
C-POSSIBLE INJUR Y
N-NOT INJURED
U-UNKNOWN

UNIT# ____ TOWED DUE TO DISABLING DAMAGE ☐ YES ☐ NO VEHICLE REMOVED TO _____ BY _____

ITEM#	SEAT POSITION	COMPLETE ALL DATA ON ALL OCCUPANTS NAMES, POSITIONS, RESTRAINTS USED, ETC. HOWEVER, IT IS NOT NECESSARY TO SHOW ADDRESSES UNLESS KILLED OR INJURED NAME (LAST, FIRST, MI) ADDRESS	SOL.	EJECTED	RESTRAINT USED	AIRBAG	HELMET	AGE	SEX	INJURY CODE
1										
2										
3										
4										
5										

UNIT# ____ TOWED DUE TO DISABLING DAMAGE ☐ YES ☐ NO VEHICLE REMOVED TO _____ BY _____

ITEM#	SEAT POSITION	COMPLETE ALL DATA ON ALL OCCUPANTS NAMES, POSITIONS, RESTRAINTS USED, ETC. HOWEVER, IT IS NOT NECESSARY TO SHOW ADDRESSES UNLESS KILLED OR INJURED NAME (LAST, FIRST, MI) ADDRESS	SOL.	EJECTED	RESTRAINT USED	AIRBAG	HELMET	AGE	SEX	INJURY CODE
6										
7										
8										
9										
10										

PED., PEDAL., MOT. CONVEY., ETC	COMPLETE IF CASUALTIES NOT IN MOTOR VEHICLE CASUALTY NAME (LAST, FIRST, MI) ADDRESS	SOL.	ALCOHOL SPECIMEN TAKEN	RESULT	DRUG SPECIMEN TAKEN	RESULT	HELMET	AGE	SEX	INJURY CODE

DISPOSITION OF KILLED OR INJURED

ITEM#	TAKEN TO	BY

IF AMBULANCE USED, SHOW

TIME NOTIFIED	TIME ARRIVED AT SCENE	AMBULANCE UNIT#	# OF ATTENDANTS INCLUDING DRIVER	# OF PERSONS TRANSPORTED FOR TREATMENT

COMPLETE THIS SECTION IF PERSON KILLED (If a person dies within 30 days of the crash, please complete this area and mail the supplement to the Crash Records Bureau)

ITEM #	DATE OF DEATH	TIME OF DEATH	ITEM#	DATE OF DEATH	TIME OF DEATH	ITEM#	DATE OF DEATH	TIME OF DEATH	ITEM#	DATE OF DEATH	TIME OF DEATH

INVESTIGATOR'S NARRATIVE OPINION OF WHAT HAPPENED (ATTACH ADDITIONAL SHEETS IF NECESSARY)

DIAGRAM
INDICATE NORTH

☐ 1-TWO-WAY, NOT DIVIDED
2-TWO-WAY, DIVIDED, UNPROTECTED MEDIAN
3-TWO-WAY, DIVIDED, PROTECTED BARRIER
4-ONE WAY
9-UNKNOWN

FACTORS AND CONDITIONS LISTED ARE THE INVESTIGATOR'S OPINION

UNIT#	FACTORS/CONDITIONS CONTRIBUTING			OTHER FACTORS/CONDITIONS MAY OR MAY NOT HAVE CONTRIBUTED			VEHICLE DEFECTS CONTRIBUTING		VEHICLE DEFECTS MAY HAVE CONTRIBUTED	
	1	2	3	1	2	3	1	2	1	2
	1	2	3	1	2	3	1	2	1	2

1-ANIMAL ON ROAD-DOMESTIC
2-ANIMAL ON ROAD-WILD
3-BACKED WITHOUT SAFETY
4-CHANGED LANE WHEN UNSAFE
5-13 SEE VEHICLE DEFECTS
14-DISABLED IN TRAFFIC LANE
15-DISREGARD STOP AND GO SIGNAL
16-DISREGARD STOP SIGN OR LIGHT
17-DISREGARD TURN MARKS AT INTERSECTION
18-DISREGARD WARNING SIGN AT CONSTRUCTION
19-DISTRACTION IN VEHICLE
20-DRIVER INATTENTION
21-DROVE WITHOUT HEADLIGHTS
22-FAILED TO CONTROL SPEED
23-FAILED TO DRIVE IN SINGLE LANE
24-FAILED TO GIVE HALF OF ROADWAY
25-FAILED TO HEED WARNING SIGN
26-FAILED TO PASS TO LEFT SAFELY
27-FAILED TO PASS TO RIGHT SAFELY
28-FAILED TO GIVE SIGNAL OR WRONG SIGNAL
29-FAILED TO STOP AT PROPER PLACE
30-FAILED TO STOP FOR SCHOOL BUS
31-FAILED TO STOP FOR TRAIN
32-FAILED TO YIELD ROW-EMERGENCY VEHICLE
33-FAILED TO YIELD ROW-OPEN INTERSECTION
34-FAILED TO YIELD ROW-PRIVATE DRIVE
35-FAILED TO YIELD ROW-STOP SIGN
36-FAILED TO YIELD ROW-TO PEDESTRIAN
37-FAILED TO YIELD ROW-TURNING LEFT
38-FAILED TO YIELD ROW-TURN ON RED
39-FAILED TO YIELD ROW-YIELD SIGN
40-FATIGUED OR ASLEEP
41-FAULTY EVASIVE ACTION
42-FIRE IN VEHICLE
43-FLEEING OR EVADING POLICE
44-FOLLOWED TOO CLOSELY
45-HAD BEEN DRINKING
46-HANDICAPPED DRIVER (EXP. IN NARRATIVE)
47-ILL (EXP. IN NARRATIVE)
48-IMPAIRED VISIBILITY (EXP. IN NARRATIVE)
49-IMPROPER START FROM PARKED POSITION
50-LOAD NOT SECURED
51-OPENED DOOR TO TRAFFIC LANE
52-OVERSIZE VEHICLE OR LOAD
53-OVERTAKE AND PASS INSUFFICIENT CLEARANCE
54-PARKED AND FAILED TO SET BRAKES
55-PARKED IN TRAFFIC LANE
56-PARKED WITHOUT LIGHTS
57-PASSED IN NO PASSING ZONE
58-PASSED ON RIGHT SHOULDER
59-PED/PEDALCYC/MOT.CONVEY ROW TO VEHICLE
60-SPEEDING UNSAFE (UNDER LIMIT)
61-SPEEDING OVER LIMIT
62-TAKING MEDICATION (EXP. IN NARRATIVE)
63-TURNED IMPROPERLY - CUT CORNER ON LEFT
64-TURNED IMPROPERLY - WIDE RIGHT
65-TURNED IMPROPERLY - WRONG LANE
66-TURNED WHEN UNSAFE
67-UNDER INFLUENCE - ALCOHOL
68-UNDER INFLUENCE - DRUG
69-WRONG SIDE - APPROACH OR IN INTERSECTION
70-WRONG SIDE - NOT PASSING
71-WRONG WAY ONE WAY ROAD
72-CELL/MOBILE PHONE USE
73-ROAD RAGE
74-OTHER FACTOR (WRITE ON LINE)

VEHICLE DEFECTS
5-DEFECTIVE OR NO HEADLAMPS
6-DEFECTIVE OR NO STOP LAMPS
7-DEFECTIVE OR NO TAIL LAMPS
8-DEFECTIVE OR NO TURN SIG. LAMPS
9-DEFECTIVE OR NO TRAILER BRAKES
10-DEFECTIVE OR NO VEHICLE BRAKES
11-DEFECTIVE OR NO STEERING MECH.
12-DEFECTIVE OR SLICK TIRES
13-DEFECTIVE TRAILER HITCH

TRAFFIC CONTROL
1-NONE
2-INOPERATIVE
3-OFFICER
4-FLAGMAN
5-SIGNAL LIGHT
6-FLASHING RED LIGHT
7-FLASHING YELLOW LIGHT
8-STOP SIGN
9-YIELD SIGN
10-WARNING SIGN
11-CENTER STRIPE/DIVIDER
12-NO PASSING ZONE
13-RR GATES/SIGNAL
14-SCHOOL ZONE
15-CROSSWALK
16-BIKE LANE
17-OTHER

ROADWAY RELATION
1-ON ROADWAY
2-OFF ROADWAY
3-SHOULDER
4-MEDIAN

PART OF THE ROADWAY
1-MAIN LANE
2-SERVICE ROAD
3-ENTRANCE RAMP
4-EXIT RAMP
5-CONNECTOR
6-DETOUR
7-OTHER

ROADWAY ALIGNMENT
1-STRAIGHT,LEVEL
2-STRAIGHT, GRADE
3-STRAIGHT, HILLCREST
4-CURVE, LEVEL
5-CURVE, GRADE
6-CURVE, HILLCREST
7-OTHER
8-UNKNOWN

LIGHT CONDITION
1-DAYLIGHT
2-DARK, NOT LIGHTED
3-DARK, LIGHTED
4-DARK, UNK LIGHTING
5-DAWN
6-DUSK
8-OTHER
9-UNKNOWN

TYPE OF ROAD SURFACE
1-CONCRETE
2-BLACKTOP
3-BRICK
4-GRAVEL
5-DIRT
6-OTHER
7-UNKNOWN

WEATHER
1-CLEAR/CLOUDY
2-RAIN
3-SLEET/HAIL
4-SNOW
5-FOG
6-BLOWING SAND/SNOW
7-SEVERE CROSSWINDS
8-OTHER
9-UNKNOWN

SURFACE CONDITION
1-DRY
2-WET
3-STANDING WATER
4-SNOW
5-SLUSH
6-ICE
7-SAND, MUD, DIRT
8-OTHER
9-UNK

CRB-3C (Rev. 01/06) COMMERCIAL MOTOR VEHICLE ENFORCEMENT SUPPLEMENT TO THE TEXAS PEACE OFFICER'S CRASH REPORT

☐ 10,001 LBS. OR MORE ☐ HAZARDOUS MATERIAL ☐ 9 OR MORE PASSENGER CAPACITY (DRIVER INCLUDED)

CRASH INFORMATION

LOC# _____
ORI# _____
DPS# _____

1. COUNTY _____ 2. CITY OR TOWN _____

3. ROAD ON WHICH CRASH OCCURRED _____
BLOCK # STREET OR ROAD NAME ROUTE#

4. DATE OF CRASH _____ _____ _____ 5. HOUR _____ ☐ AM ☐ PM
MONTH DATE YEAR

ROADWAY ACCESS
☐ 1-FULL ACCESS CONTROL
2-PARTIAL ACCESS
3-NO ACCESS

DRIVER INFORMATION

6. NAME _____ 7. DRIVER LICENSE CLASS ☐ 1-A 2-B 3-C 4-D 5-M 6-UNK

CARRIER INFORMATION

8. VEHICLE OPERATION ☐ INTERSTATE COMMERCE ☐ INTRASTATE COMMERCE ☐ NOT IN COMMERCE ☐ GOVERNMENT ☐ PERSONAL

9. CARRIER'S CORPORATE NAME _____

10. CARRIER'S PRIMARY ADDRESS _____
NUMBER STREET CITY STATE ZIP

11. CARRIER ID TYPE ☐ ICC ☐ US DOT ☐ TxDOT ☐ OTHER ☐ NONE 12. CARRIER ID NUMBER _____

MOTOR VEHICLE INFORMATION

13. UNIT NUMBER ON CRB-3 ☐ 14. LICENSE PLATE _____
YEAR STATE NUMBER

15. GROSS VEHICLE WEIGHT RATING (GVWR) ☐
REGISTERED GROSS VEHICLE WEIGHT (RGVW) ☐ _____

16. VEHICLE TYPE

☐
1-PASSENGER CAR (ONLY IF VEHICLE DISPLAYS HM PLACARDS)
2-LIGHT TRUCK (ONLY IF VEHICLE DISPLAYS HM PLACARDS)
3-BUS (SEATS FOR 9-15 PEOPLE, INCLUDING DRIVER)
4-BUS (SEATS FOR >15 PEOPLE, INCLUDING DRIVER)
5-SINGLE UNIT TRUCK (2 AXLES, 6 TIRES)
6-SINGLE UNIT TRUCK (3 OR MORE AXLES)
7-TRUCK TRAILER
8-TRUCK TRACTOR (BOBTAIL)
9-TRACTOR/SEMITRAILER
10-TRACTOR/DOUBLE TRAILER
11-TRACTOR/TRIPLE TRAILER
99-UNKNOWN HEAVY TRUCK OVER 10,000 LBS. (CANNOT CLASSIFY)

17. CARGO BODY STYLE

☐
1-BUS (SEATS FOR 9-15 PEOPLE, INCLUDING DRIVER)
2-BUS (SEATS FOR >15 PEOPLE, INCLUDING DRIVER)
3-VAN/ENCLOSED BOX
4-CARGO TANK
5-FLATBED
6-DUMP
7-CONCRETE MIXER
8-AUTO TRANSPORTER
9-GARBAGE/REFUSE
10-GRAIN, CHIPS, GRAVEL
11-POLE
12-NOT APPLICABLE
98-OTHER _____

18. HAZARDOUS MATERIAL

TRANSPORTING PLACARDABLE HAZARDOUS MATERIAL ☐ YES ☐ NO
1 DIGIT CLASS# ☐ 4 DIGIT ID# ☐☐☐☐

HAZARDOUS MATERIAL RELEASED OR SPILLED ☐ YES ☐ NO (DO NOT INCLUDE FUEL FROM THE VEHICLE FUEL TANK)
1 DIGIT CLASS# ☐ 4 DIGIT ID# ☐☐☐☐

TRAILER NUMBER 1 INFORMATION

19. LICENSE PLATE _____ 20. GROSS VEHICLE WEIGHT RATING (GVWR) ☐
REGISTERED GROSS VEHICLE WEIGHT (RGVW) ☐ _____

TRAILER TYPE ☐ 1-FULL TRAILER 2-SEMI TRAILER 3-POLE TRAILER

TRAILER NUMBER 2 INFORMATION

21. LICENSE PLATE _____ 22. GROSS VEHICLE WEIGHT RATING (GVWR) ☐
REGISTERED GROSS VEHICLE WEIGHT (RGVW) ☐ _____

TRAILER TYPE ☐ 1-FULL TRAILER 2-SEMI TRAILER 3-POLE TRAILER

23. SEQUENCES OF EVENTS - UNIT ____

SEQ 1 ☐ SEQ 2 ☐ SEQ 3 ☐ SEQ 4 ☐

1-NONCOLLISION: RAN OFF ROAD
2-NONCOLLISION: JACKKNIFE
3-NONCOLLISION: OVERTURN (ROLLOVER)
4-NONCOLLISION: DOWNHILL RUNAWAY
5-NONCOLLISION: CARGO LOSS OR SHIFT
6-NONCOLLISION: EXPLOSION OR FIRE
7-NONCOLLISION: SEPARATION OF UNITS
8-NONCOLLISION: CROSS MEDIAN/CENTERLINE
9-NONCOLLISION: EQUIPMENT FAILURE
10-NONCOLLISION: OTHER
11-NONCOLLISION: UNKNOWN
12-COLLISION INVOLVING PEDESTRIAN
13-COLLISION INVOLVING MOTOR VEHICLE IN TRANSPORT
14-COLLISION INVOLVING PARKED MOTOR VEHICLE
15-COLLISION INVOLVING TRAIN
16-COLLISION INVOLVING PEDALCYCLE
17-COLLISION INVOLVING AN ANIMAL
18-COLLISION INVOLVING A FIXED OBJECT
19-COLLISION WITH WORK ZONE MAINTENANCE EQUIPMENT
20-COLLISION WITH OTHER MOVABLE OBJECT
21-COLLISION WITH UNKNOWN MOVABLE OBJECT
98-OTHER _____

24. TOTAL NUMBER OF AXLES ☐

25. TOTAL NUMBER OF TIRES ☐

26. OFFICER'S PRINTED NAME _____ DEPT. _____ DATE _____

GENERAL

A separate commercial supplement is to be completed on **each** commercial motor vehicle involved in a motor vehicle crash. This supplement(s) must be attached to the basic peace officer's crash report. A commercial motor vehicle for supplemental reporting is defined as:

1. Any motor vehicle or towed vehicle with a Gross Vehicle Weight Rating (GVWR) or a Registered Gross Vehicle Weight (RGVW), whichever is greater, of 10,001 lbs. or more, or any combination of vehicles where the Gross Combined Weight Rating (GCWR) or the total RGVW of the combination is 10,001 lbs. or more.
   - 1.1 GVWR and RGVW are both defined as the weight of the fully equipped vehicle plus its net carrying capacity. The GCWR is the combined weight rating of a motor vehicle and a towed unit(s). On occasion, the GVWR and the RGVW will differ. In those situations, the greater weight value will be used to determine if this form must be completed.
   - 1.2 The GVWR of a motor vehicle normally can be found on an information plate on the driver's door or door post. The GVWR of a trailer normally can be found on an information plate near the front left portion of the trailer. If the vehicle does not have an information plate or it is illegible, use RGVW. For combination or token trailers, see 1.6 below.
   - 1.3 On vehicles registered in Texas, the RGVW is shown on the registration receipt under "gross weight." Commercial motor vehicles are required to carry the registration receipt.
   - 1.4 In the event the registration receipt is not available, RGVW can normally be obtained by a **complete** registration check. Exception: If the vehicle has exempt license plates (i.e. owned by a government entity) no RGVW will be shown. In those instances, GVWR must be used.
   - 1.5 If GVWR is used to determine the need to complete this supplement, GVWR for the motor vehicle and each trailer(s) must be obtained and shown in the appropriate blank(s).
   - 1.6 If RGVW is used to determine the need to complete this supplement, the RGVW should be obtained for each motor vehicle and trailer in the combination unless the combination is registered as a **combination/token** vehicle or as an **apportioned** vehicle. In those situations the license plates will indicate combination/token or apportioned. If the vehicle is registered as a combination/token or apportioned vehicle, the entire registered gross weight will be shown on the power unit and the trailer will not carry a RGVW. In those instances, show the RGVW of the combination in the power unit and show zero (0) on the trailer(s).
   - 1.7 RGVW for out-of-state vehicles and trailer(s) may be obtained from registration receipts issued by the licensing state, temporary permits, cab cards or other documents or as in 1.4 above.
2. Any bus, which shall include every motor vehicle with a seating capacity of nine (9) or more passengers **(including the driver)** and used for the transportation of persons. The seating capacity of a bus (excluding school buses) shall be determined by allowing one (1) passenger for each sixteen (16) inches of seat space. The seating capacity of a school bus shall be determined by allowing one (1) passenger for each thirteen (13) inches of seat space.
3. Any motor vehicle hauling hazardous materials which is required to be placarded under the Hazardous Materials Transportation Act.

INSTRUCTIONS FOR COMPLETION OF FORM CRB-3C

Detailed instructions for completion of this supplement are included in the Instructions to Police for Reporting Crashes.

Check Boxes (Top of Report)
Check appropriate box indicating if the vehicle was over 10,001 pounds, Hazardous Material(s), or 9 or more passenger capacity (driver included). More than one box may be checked.

Roadway Access- Code the access control characteristics which best describes the roadway which the vehicle was traveling on at the time of the crash. Full Access Control- is an expressway or freeway where the only means of entry to or exit from the roadway is by ramps connecting to other streets or highways. No Access Control- is a street or highway where driveways provide access to and egress from adjacent properties and where cross streets intersect at a grade. Partial Access Control- is a street or highway which does not clearly fit the above definitions.

CRASH INFORMATION (Items 1-5)
Complete the information in this section exactly as shown on the basic report (CRB-3).

DRIVER INFORMATION (Items 6-7)
Complete items 6 and 7 exactly as shown on the basic report (CRB-3).

CARRIER INFORMATION (Items 8-12)
Indicate whether the operation of the commercial motor vehicle at the time of this crash is defined as an interstate, intrastate, government or personal operation. An interstate operation is one where the transportation of the property originated in one state or country and passed through or terminated in another state or country. An intrastate operation is one where the transportation of the property did not cross a state or international boundary. The bill of lading origin and destination information may be one source available to make this determination. Government and Personal use will be determined through investigation. Indicate the Carrier's corporate name and primary business address in items 9 and 10. The Carrier is defined as the entity responsible for the operation of the vehicle at the time of the crash. This may be the actual owner of the vehicle or the lessee. The information should match Owner/Lessee shown on the CRB-3. Show the type of carrier identification by checking the appropriate box in item 11. Show the ID number in item 12, if applicable.

MOTOR VEHICLE INFORMATION (Items 13-18)
Enter the unit number from the CRB-3 for this motor vehicle in item 13. Show the registration year, state and number in item 14. Enter the GVWR and RGVW as applicable in item 15. Indicate which, GVWR or RGVW, by checking the appropriate box.
Indicate the appropriate number in the box for Vehicle Type in item 16.
Indicate the appropriate number in the box for Cargo Body Style in item 17.
Indicate by checking the appropriate box in item 18 whether this vehicle is hauling hazardous material(s). If yes, enter the class and ID numbers of the hazardous material(s) being transported. Indicate by checking the appropriate box whether hazardous materials were released (spilled, discharged, etc.) The class and ID numbers should be obtained from the bill of lading or shipping papers. If unavailable, the class and ID numbers may be taken from the placard. The class may be located in the lower corner of the diamond shaped placard. The ID numbers may be located on the placard or on an orange label near the placard. (REFER TO DETAILED INSTRUCTIONS).

TRAILER NUMBER 1 & 2 INFORMATION (Item 19-22)
If the commercial motor vehicle reported on this supplement is towing one trailer, complete trailer number 1 section only. If towing 2 trailers, complete both trailer number 1 and 2 sections.
Indicate the registration year, state, and number in item 19, and if applicable item 21. Show the GVWR or RGVW in item 20 and, if applicable, item 22. Indicate which, GVWR or RGVW by checking the appropriate box.
Indicate the appropriate number in the box for Trailer Type (item 20, and if applicable, item 22).
Indicate Sequence of Events (Item 23). Indicate the order and type of crash events which occurred involving this vehicle.
Indicate the Total Number of Axles (Item 24). Indicate the total number of axles on the motor vehicle. (Do not include trailer axles)
Indicate the Total Number of Tires (Item 25). Indicate the total number of tires on the motor vehicle. (Do not include trailer tires)
The person completing this supplement should print name, show department and the date this supplement was prepared in item 26.