



## MEMORANDUM

**TO:** Mayor and Council

**CC:** Marc A. Ott, City Manager  
Robert Goode, P.E., Assistant City Manager  
Michael McDonald, Deputy City Manager

**FROM:** Robert Spillar, P.E., Director, Austin Transportation Department  
Howard Lazarus, P.E., Director, Public Works Department  
Art Acevedo, Chief, Austin Police Department

**DATE:** March 4, 2013

**SUBJECT: CIUR 929 – Interim Status Report on Traffic Fatalities**

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On January 17, 2013, Council approved Resolution 20130117-057 directing the City Manager to work with the Austin Transportation Department, the Austin Police Department, the Public Works Department, other departments and agencies as needed to perform an analysis of the causes of the increase traffic fatalities in 2012 and develop countermeasures to prevent future traffic-related fatalities.

Austin Transportation Department took the engineering lead on this first report with support from Public Works and Austin Police Departments. The three departments continue to collaborate on the final report that will include actions to address the safety characteristics identified in this report.

Attached please find the Interim Status Report as requested on the resolution. Its purpose is to provide an analysis of crashes occurring in Austin during 2012. The subsequent Final Report will be prepared and submitted to Council by April 15, 2013. This report will build on these analyses, draw conclusions and recommend actions to take for the City of Austin and its partners to strengthen transportation safety efforts.

# City of Austin 2012 Traffic Fatality Report

# DRAFT

## Interim Status Report

Prepared by  
Austin Transportation Department  
Austin Police Department  
Public Works Department

February 28, 2013

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## EXECUTIVE SUMMARY AND INTRODUCTION

An important element in reducing crashes is the individual and the choices they make. Later in this report, you will read that alcohol and other drugs contributed to 50% of all traffic fatalities in Austin during 2012; distracted driving (e.g., texting) contributed to 33%; speeding 32%; pedestrians attempting to cross freeway mainlanes 25%; not wearing a seatbelt 18%; and, helmets were not worn in all three bicycle fatalities and 57% of motorcycle fatalities.

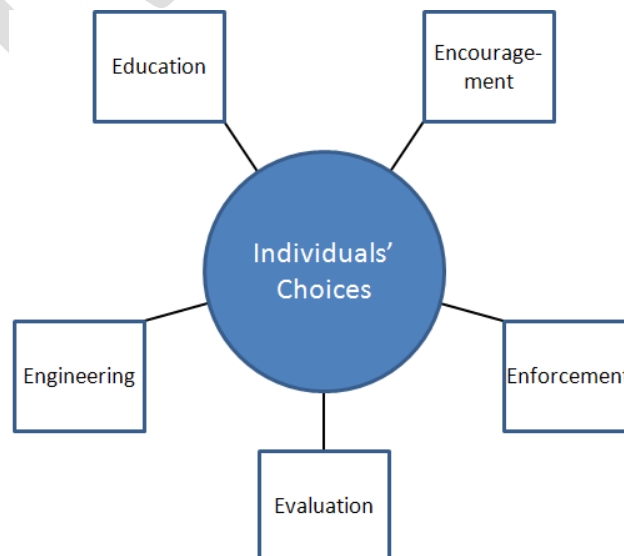
Austin experienced 78 traffic fatalities in 2012 - a 42% increase from 2011. On January 17, 2013, Austin City Council, through Resolution 20130117-057, directed:

*...the City Manager to work with the Austin Police Department, the Transportation Department, the Public Works Department and other city departments or state agencies as needed to perform an analysis of the causes of the increase in traffic fatalities in 2012 and develop countermeasures to prevent future traffic-related fatalities. This should be reported to the City Council in an interim status report by February 28, 2013, and in a final report by April 15, 2013.*

This report serves as the Interim Status Report. Its primary purpose is to provide an analysis of crashes occurring in Austin during 2012. Based in this preliminary analysis, an action plan will be developed and reported to Council by April 15, 2013.

Public safety is one of the primary responsibilities of local government. This responsibility cuts across City Departments, regional transportation agencies, emergency responders, and others committed to public safety. After several years of stability or even modest reductions, the rise in fatalities and crashes in 2012 has heightened the concern, even more so if it is the start of a sustained upward trend.

Those responsible for the safety of the traveling public apply a set of measures to influence safety – the 5 E's: Engineering, Enforcement, Education, Encouragement and Evaluation. The subsequent Final Report will address actions that the City of Austin and its Partners will take to strengthen these 5 E's and address the increase in transportation fatalities seen in 2012.



***The role of the individual whether a motorist, passenger, motorcyclist, pedestrian or bicyclist in reducing Austin's traffic fatalities cannot be overstated.***

*78 traffic fatalities occurred in the City of Austin during 2012 – a 42% increase from 2011.*

*This report serves as the Interim Status Report on 2012 traffic fatalities in Austin.*

*A final report is due to Council on April 15, 2013.*

***The City is actively applying measures to address transportation safety through the 5 E's:***

- Engineering
- Enforcement
- Education
- Encouragement
- Evaluation

## AUSTIN'S 2012 TRAFFIC CRASHES: QUICK FACTS

- 78 – the number of traffic fatalities in Austin during 2012;
- 42% – the percent increase in traffic fatalities on Austin's roads from 2011 to 2012;
- 1 in 200 – the average rate of fatalities in Austin during 2012 (78 fatalities out of 15,011 crashes);
- 93% – the percent increase in impaired drivers (alcohol/other drugs) involved in fatalities from 2011 to 2012;
- 51% – the percentage of all traffic fatalities with alcohol or other drugs cited as contributing factors (40 of 78 traffic fatalities) – includes those incidents where one or more of the drivers, pedestrians or bicyclists was impaired;
- 50% – the percentage of all pedestrian traffic fatalities where the pedestrian was intoxicated or under the influence of other drugs (13 of 26 pedestrian fatalities) and where this contributed to the fatality;
- 1 of the 3 bicyclists killed in Austin was intoxicated;
- 33% – the percentage of all traffic fatalities where distracted driving (e.g., texting or other behavior) was estimated to be a contributing factor (26 of 78 traffic fatalities);
- 32% – the percentage of fatalities where speeding was cited as a contributing factor (25 of 78);
- 18% – the percentage of fatalities where a seatbelt was not worn and thus contributed to the fatality (14 of 78);
- 24% – the percentage of pedestrian fatalities where a pedestrian attempted to cross the freeway mainlanes (6 of 26 pedestrian fatalities, 3 on I-35);
- 65% – the percentage of fatalities where a helmet was not worn by either a motorcyclist or bicyclist (11 of 17);
- Parmer Ln. at Lamar Blvd. – highest crash intersection in Austin during 2012 (34 crashes);
- 33% – the percentage of all traffic fatalities in 2012 where a pedestrian was killed (26 of the 78 fatalities were pedestrians);
- 2 a.m. to 3 a.m. – Austin's peak hour for all fatalities and incapacitating injuries during 2012.
- Friday, Saturday, Sunday – days in the week when fatalities can be most expected.

## **INTERIM STATUS REPORT PURPOSE**

This report serves as the Interim Status Report requested by Austin City Council through Resolution 20130117-057. Its primary purpose is to provide an analysis of crashes occurring in Austin during 2012. The subsequent Final Report will build on these analyses, draw conclusions and recommend actions for the City of Austin and its Partners to take to strengthen transportation safety efforts.

DRAFT

## CRASH TRENDS

### Fatalities

In 2012, Austin experienced 78 traffic fatalities, an increase of 42% from the previous year (refer to Exhibit 1). As shown in Exhibit 2, this increase follows a multi-year plateau in traffic fatalities across Austin.

*78 traffic fatalities occurred on Austin's roads in 2012 – a 42% increase over 2011.*

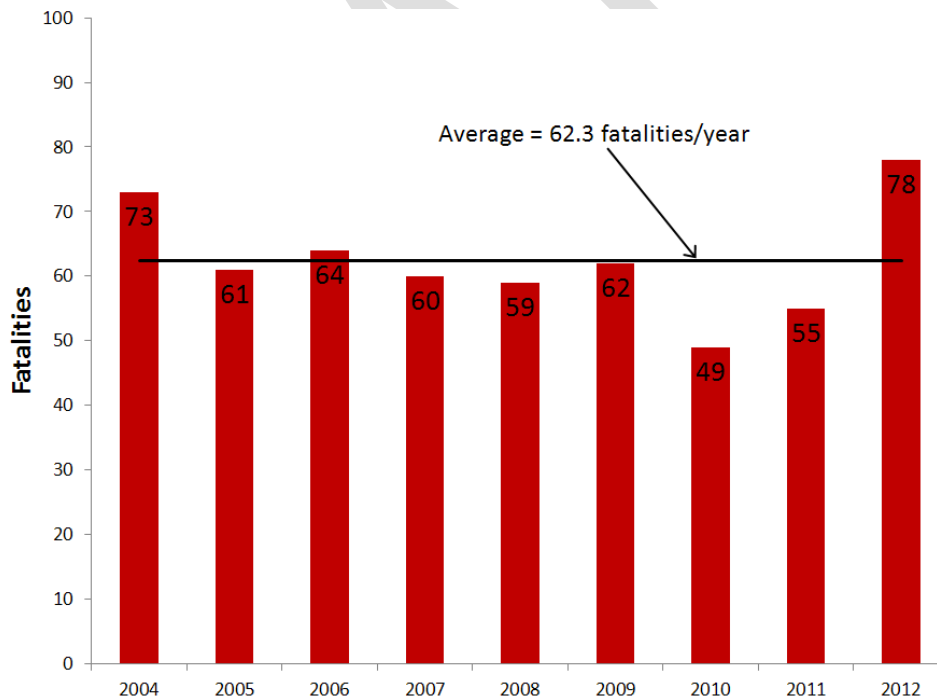
#### Exhibit. 1 Traffic Fatalities

City of Austin Traffic Fatalities	2004	2011	2012	% Change 2011 to 2012
Persons Killed	73	55	78	+42%
Fatal Crashes	71	49	75	+53%

Source: APD crash data

*It is unclear whether 2012 is the beginning of an upward trend or simply a one year spike.*

#### Exhibit 2. Annual Traffic Fatalities in Austin

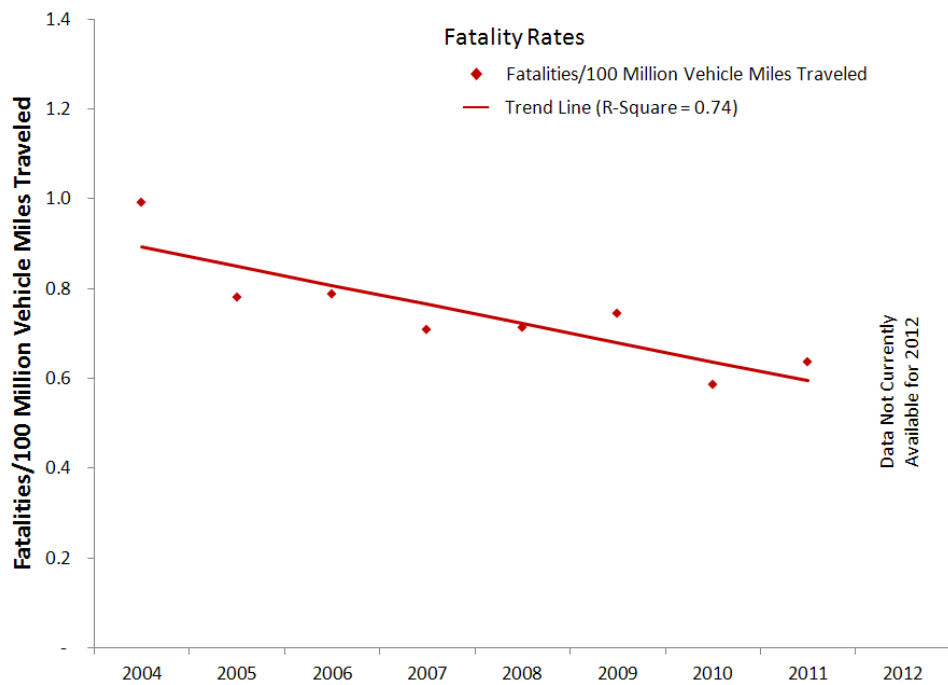


Source: APD crash data

Crash numbers, however, do not tell the entire story. As more people travel within an area, their exposure to being in a crash increases. Therefore, a common method to more accurately assess traffic fatalities is to factor in the number of miles driven within a geographic area. When doing this, we arrive at a rate expressed in fatalities per 100 million vehicle miles traveled (VMT). When considering this “exposure” factor, fatality rates have trended down for several years in Austin as illustrated by the trend line in Exhibit 3. An estimate of Austin’s 2012 VMT is not currently available.

*Austin has experienced a downward trend in traffic fatality rates between 2004 and 2011.*

**Exhibit 3. Annual Traffic Fatality Rates in Austin**

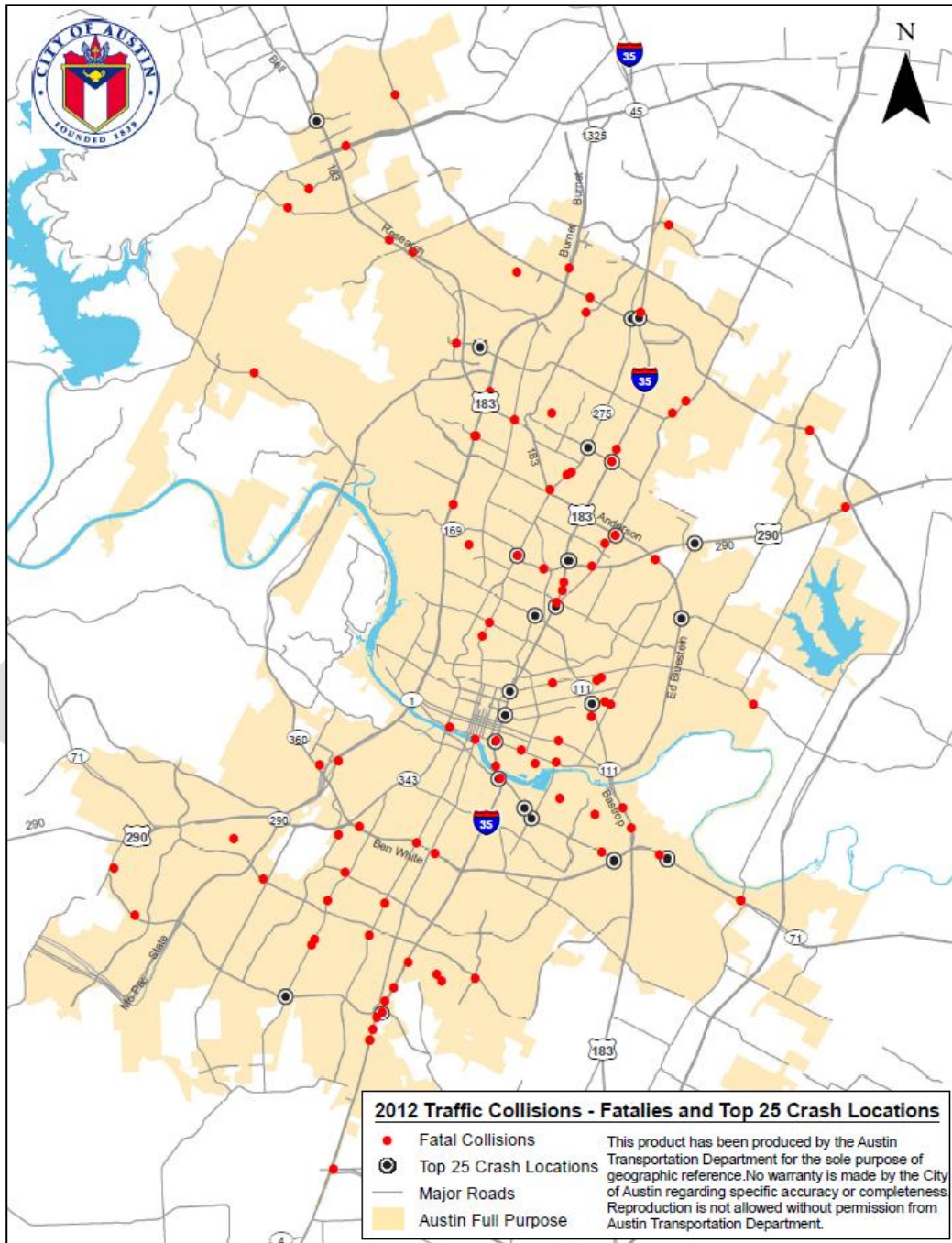


Source: APD crash data, 2012 Texas Transportation Institute Urban Mobility Report estimated vehicle miles traveled in Austin



Exhibit 4 below illustrates the location of the 78 traffic fatalities (red dots) that occurred in Austin during 2012. The Top 25 crash locations are also shown (black dots with a concentric circle). Closely spaced fatality and Top 25 crash locations signify locations where a trend is possibly forming. A more detailed analysis will be provided in the Final Report.

**Exhibit 4. 2012 Fatality and Top 25 Crash Locations**

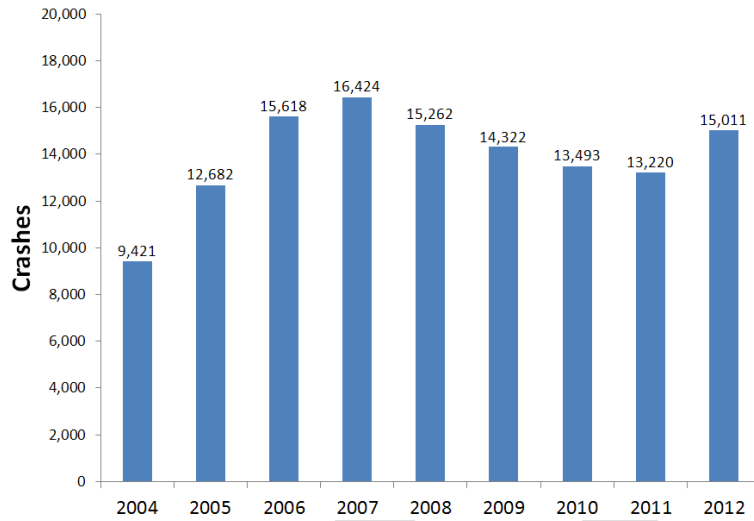


Source: APD crash data

## All Crashes

In 2012, 15,011 traffic crashes were reported in Austin. This reflects an increase of 14% from 2011. The trend in annual crashes is illustrated in Exhibit 5.

**Exhibit 5. Total Crashes by Year**

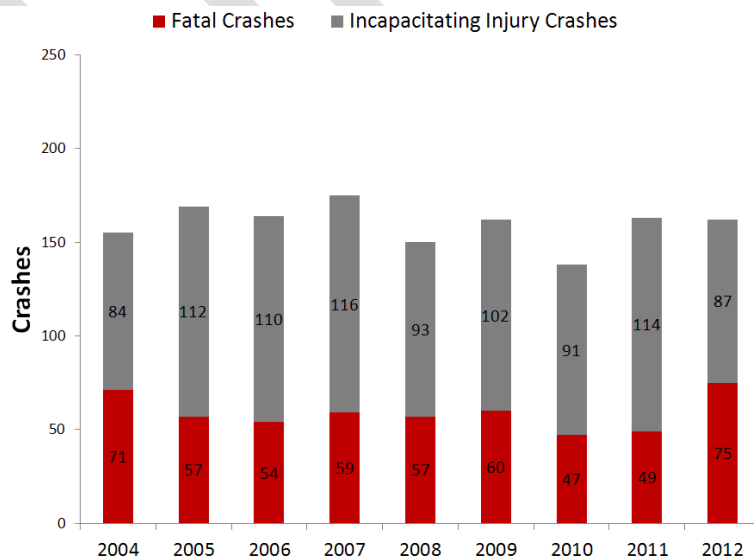


*Total crashes increased by 14% in 2012.*

Source: APD crash data

The total number of serious crashes, defined as an incapacitating injury or fatal crash, remained relatively constant between 2004 and 2012 (refer to Exhibit 6). The proportion of all traffic crashes that resulted in a fatal crash has remained relatively small, averaging between 0.3% and 0.8% of all crashes since 2004. It is worth noting, however, that of those crashes identified as serious, the proportion of fatal crashes increased in 2012 when compared to recent years.

**Exhibit 6. Fatal and Incapacitating Crashes by Year**



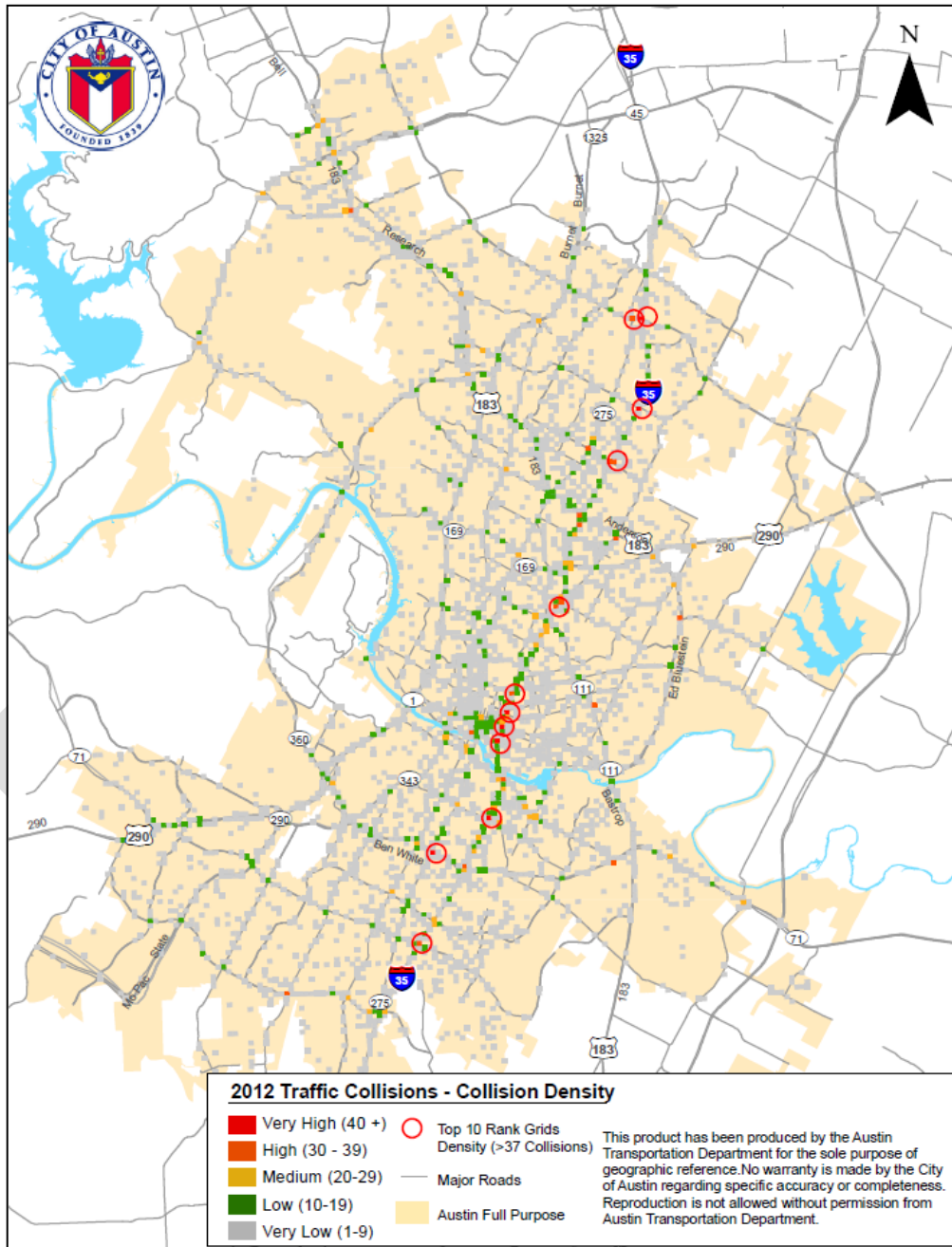
*1 in every 200 crashes in Austin resulted in a fatality during 2012.*

Source: APD crash data

The map shown in Exhibit 7 illustrates crash densities. Densities are measured by totaling the number of crashes during 2012 that occurred across a grid of ½-mile squares. Red squares identify very high crash locations (40 or more crashes during 2012). Red circles are used to further highlight the Top 10 squares. These circles are predominantly located along I-35. The legend at the bottom of the map explains the remaining color coding.

**Exhibit 7. 2012 Crash Density Map**

*The density of crashes was highest along I-35 during 2012.*



Source: APD crash data

## Comparisons

Austin’s fatality trends were similar to those seen throughout Texas and the U.S., where both geographies experienced a decrease in traffic fatalities between 2004 and 2011 followed by an increase in 2012 (refer to Exhibit 8). This finding may indicate that the reasons for the dramatic increase in traffic fatalities during 2012 were not completely unique to Austin, but possibly related to an improving economy or other systemic factors that cannot be explained.

*Reasons for the dramatic increase in traffic fatalities are not completely unique to Austin.*

**Exhibit 8. Traffic Fatalities by Geographic Regions**

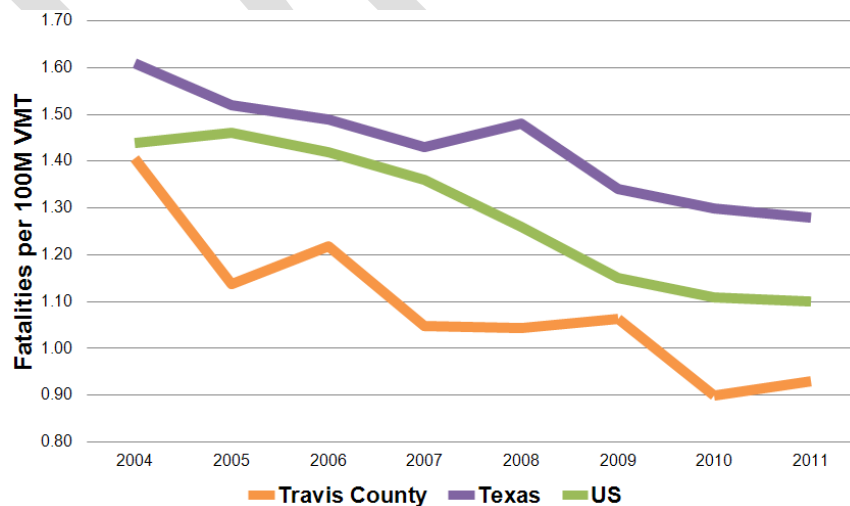
Location	% Change in Traffic Fatalities <sup>1</sup>	
	2004 to 2011	2011 to 2012
City of Austin <sup>1</sup>	-25%	+42%
Texas <sup>2</sup>	-19%	+11% <sup>3</sup>
U.S.	-24% <sup>4</sup>	+7% <sup>5</sup>

*Texas experienced 11% more fatal crashes in 2012 than in 2011.*

1. City of Austin crash data provided by APD.
2. Texas crash data provided by TxDOT, <http://txdot.gov/inside-tdot/forms-publications/drivers-vehicles/publications/crash-reports.html>.
3. 2012 crash estimate provided by Safety Construction Programs & Data Analysis Branch, Traffic Engineering Section, Traffic Operations Division, TxDOT.
4. National Highway Traffic Safety Administration (NHTSA), <http://www.nhtsa.gov/NCSA>.
5. NHTSA estimate for first nine months of 2012, US DOT Publication HS 811 706.

These trends were also similar when comparing annual fatality rates across geographies (refer to Exhibit 9). Fatality rates are expressed in fatalities per 100 million vehicle miles traveled (VMT). Travis County data is used as an approximation for Austin. Comparisons to 2012 cannot yet be made as fatality and vehicle miles traveled (VMT) data are still being compiled at the state and national levels.

**Exhibit 9. Traffic Fatality Rates by Geographic Region**



Source: CAMPO

Between 2011 and 2012, Austin experienced a greater 1-year increase in traffic fatalities than other urban areas in Texas and greater than the state and nation as a whole (refer to Exhibit 10).

**Exhibit 10. Traffic Fatality Comparisons Across Urban Areas in Texas**

Cities in Texas	Traffic Fatalities		
	2011 <sup>1</sup>	2012 <sup>2</sup>	% Change
Austin <sup>3</sup>	55	78	+42%
San Antonio	111	137	+23%
Ft. Worth	65	72	+11%
Dallas	110	111	+1%
Texas	3,015	3,350 <sup>4</sup>	+11%
U.S. <sup>5</sup>	23,884	25,580	+7%

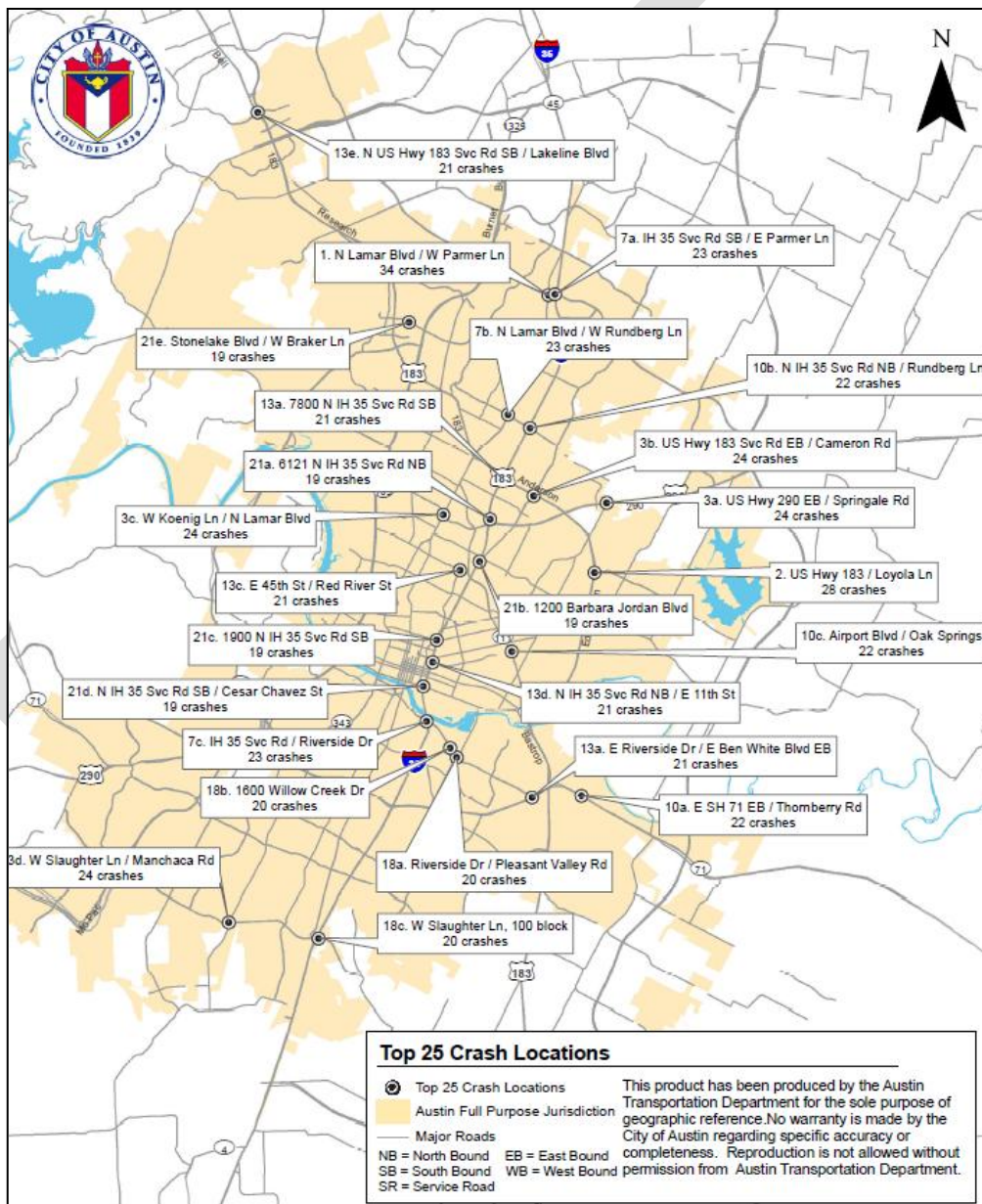
*Although several urban areas in Texas experienced an increase in fatalities in 2012, Austin experienced one of the greater increases in fatalities.*

1. TxDOT, <http://txdot.gov/inside-txdot/forms-publications/drivers-vehicles/publications/crash-reports.html> unless otherwise noted.
2. APD query of other City Police Departments unless otherwise noted.
3. APD crash data.
4. 2012 crash estimate provided by Safety Construction Programs & Data Analysis Branch, Traffic Engineering Section, Traffic Operations Division, TxDOT.
5. NHTSA estimate for first nine months of 2012, US DOT Publication HS 811 706.

## Locations

Exhibit 11 identifies the Top 25 high crash locations in Austin during calendar year 2012. These locations are predominantly at intersections, and for the most part, along higher volume and higher speed roadways including I-35, US 183, and Lamar Blvd. As traffic volumes increase in a particular location, so does the probability of a collision. Additionally, higher speeds tend to lead to more reported collisions as the damage resulting from a collision typically is more severe and thus reported through APD. Minor crashes are often underreported and therefore masked within the data.

### Exhibit 11. 2012 Top 25 Crash Locations



*Austin's top crash locations are more often seen along higher volume and higher speed roadways.*

*Top crash locations are primarily located along:*

- I-35
- US 183
- Lamar Blvd.
- SH 71
- E. US 290

Source: APD crash data

The City of Austin's Top 25 high crash locations for 2012 are listed in Exhibit 12. Locations with the same number of crashes during the year receive the same rank. Exhibits 13 through 16 identify the Top 10 high crash locations for the years 2008 through 2011.

**Exhibit 12. City of Austin's Top 25 Crash Locations in 2012**

Rank	2012	Crashes
1	Parmer Ln.(FM 734) / Lamar Blvd. (Loop 275)	34
2	US 183 / Loyola Ln.	28
3	E. US 290 (EB) / Springdale Rd.	24
	US 183 Service Rd. (EB) / Cameron Rd.	24
	Lamar Blvd. (Loop 275) / RM 2222 (Koenig Ln.)	24
	Slaughter Ln. / Manchaca Rd.	24
4	I-35 Service Rd. (SB) / Parmer Ln.	23
	Lamar Blvd. (Loop 275) / Rundberg Ln.	23
	I-35 Service Rd. (SB) / Riverside Dr.	23
5	SH 71 (EB) / Thornberry Rd.	22
	I-35 Service Rd. (NB) / Rundberg Ln.	22
	Airport Blvd. / Oak Springs Dr.	22
6	SH 71 / Riverside Dr.	21
	N. I-35 Service Rd., 7800 block (SB)	21
	45 <sup>th</sup> St. / Red River St.	21
	I-35 Service Rd. (NB) / 11 <sup>th</sup> St.	21
	US 183 Service Rd. (SB) / Lakeline Blvd.	21
7	Riverside Dr. / Pleasant Valley Rd.	20
	Willow Creek Dr., 1600 block	20
	W. Slaughter Ln., 100 block	20
8	N. I-35 Service Rd. (NB), 6121	19
	Barbara Jordan Blvd., 1200 block	19
	N. I-35 Service Rd. (SB), 1900 block	19
	N. I-35 Service Rd. (SB) / Cesar Chavez St.	19
	Braker Ln. / Stonelake Blvd.	19

Source: APD crash data

*TxDOT owns the roadway right-of-way (ROW) at most of the high crash locations.*

*TxDOT and the City manage the signs and markings on their own ROW, while the City primarily operates the signals at each intersection.*

*TxDOT and the City need to work together to apply engineering measures (signs, markings, signals, etc.) aimed at reducing crashes.*

**Exhibit 13. Top 10 Crash Locations in Austin, 2011**

Rank	2011	Crashes
1	Parmer Ln. (FM 734) /Lamar Blvd. (Loop 275)	29
2	I-35 Service Rd. (SB) / Riverside Dr.	22
3	Congress Ave. / Cesar Chavez St.	21
4	Lamar Blvd. (Loop 275) / Rundberg Ln.	18
	US 183 Service Rd. (NB) / Lakeline Blvd.	18
5	S. I-35 (NB), 1400 block	17
6	Congress Ave. / Oltorf St.	13
7	US 183 Service Rd. (EB) / Cameron Rd.	12
	I-35 Service Rd. (NB) / 7th St.	12
	Riverside Dr. / Pleasant Valley Rd.	12

Source: APD crash data

**Exhibit 14. Top 10 Crash Locations in Austin, 2010**

Rank	2010	Crashes
1	Airport Blvd. / Springdale Rd.	25
2	I-35 Service Rd. (SB) / MLK Dr.	23
3	US 183 Service Rd. (SB) / Lakeline Mall Dr.	22
4	Congress Ave. / Cesar Chavez St.	20
	Riverside Dr. / Pleasant Valley Rd.	20
5	Bastrop Hwy. (US 183), 100 block (NB)	19
	I-35 Service Rd. / SH 71 (WB)	19
	US 183 Service Rd. (SB) / Lakeline Blvd.	18
6	MoPac Service Rd. (SB) / Scofield Ridge Pkwy.	17
	RM 2222 (Koenig Ln) / Airport Blvd.	17
	MoPac Service Rd. (NB) / Parmer Ln. (FM 734)	17
	Red Bud Trail, 3400 block	17

Source: APD crash data



**Exhibit 15. Top 10 Crash Locations in Austin, 2009**

Rank	2009	Crashes
1	MoPac Service Rd. (NB) / Parmer Ln. (FM 734)	36
2	Bastrop Highway (US 183), 100 Block (NB)	25
3	Riverside Dr. / Pleasant Valley Rd.	23
4	US 183 Service Rd. (EB) / Cameron Rd.	22
	I-35 Service Rd. (SB) / MLK Dr.	22
5	US 183 Service Rd. (SB) / Lakeline Blvd.	21
	Slaughter Ln. 3400 Block	21
	I-35 Service Rd. (SB) / SH 71 Service Rd. (WB)	21
6	Parmer Ln. (FM 734) / Lamar Blvd. (Loop 275)	19
	E. US 290, 9200 block	19
	Riverside Dr. / Wickersham Ln.	19

Source: APD crash data

**Exhibit 16. Top 10 Crash Locations in Austin, 2008**

Rank	2008	Crashes
1	SH 71 (EB) / Burlleson Rd.-Todd Ln.	24
2	SH 71 (EB) / Woodward St.	23
3	SH 71, 3100 block	20
	RM 2222 (Koenig Ln.) / Airport Blvd.	20
4	US 183 Service Rd. (NB) / Lakeline Mall Dr.	19
	Riverside Dr. / Pleasant Valley Rd.	19
	I-35 Service Rd. / MLK Dr.	19
5	Parmer Ln. (FM 734) / Lamar Blvd. (Loop 275)	18
	Lamar Blvd. (Loop 275) / Rundberg Ln.	18
6	N. I-35, 100 block (SB)	17
	N. Lamar Blvd. (Loop 275), 12600 block	17
	Pleasant Valley Rd. / Elmont Dr.	17
	I-35 Service Rd. (NB) / SH 71 Service Rd. (EB)	17

Source: APD crash data







Exhibit 17 depicts Austin’s highest crash intersection during 2012 – Parmer Lane (FM 734) at Lamar Boulevard (Loop 275) with 34 crashes. This intersection is located in north Austin and situated 900 feet west (right of image) from I-35. Parmer Lane runs from the left to the right across the image. Lamar Boulevard runs from the top to the bottom of the image.

**Exhibit 17. Austin’s Highest Crash Intersection in 2012:  
Parmer Ln. at Lamar Blvd. (34 crashes)**









Exhibit 18 illustrates a bird's eye view of the Top 10 crash locations in 2012. These intersections possess common characteristics. They are typically large intersections with many movements, located along higher volume and higher speed roadways and not very pedestrian friendly.

**Exhibit 18. 2012 Top 10 Crash Locations in Austin**

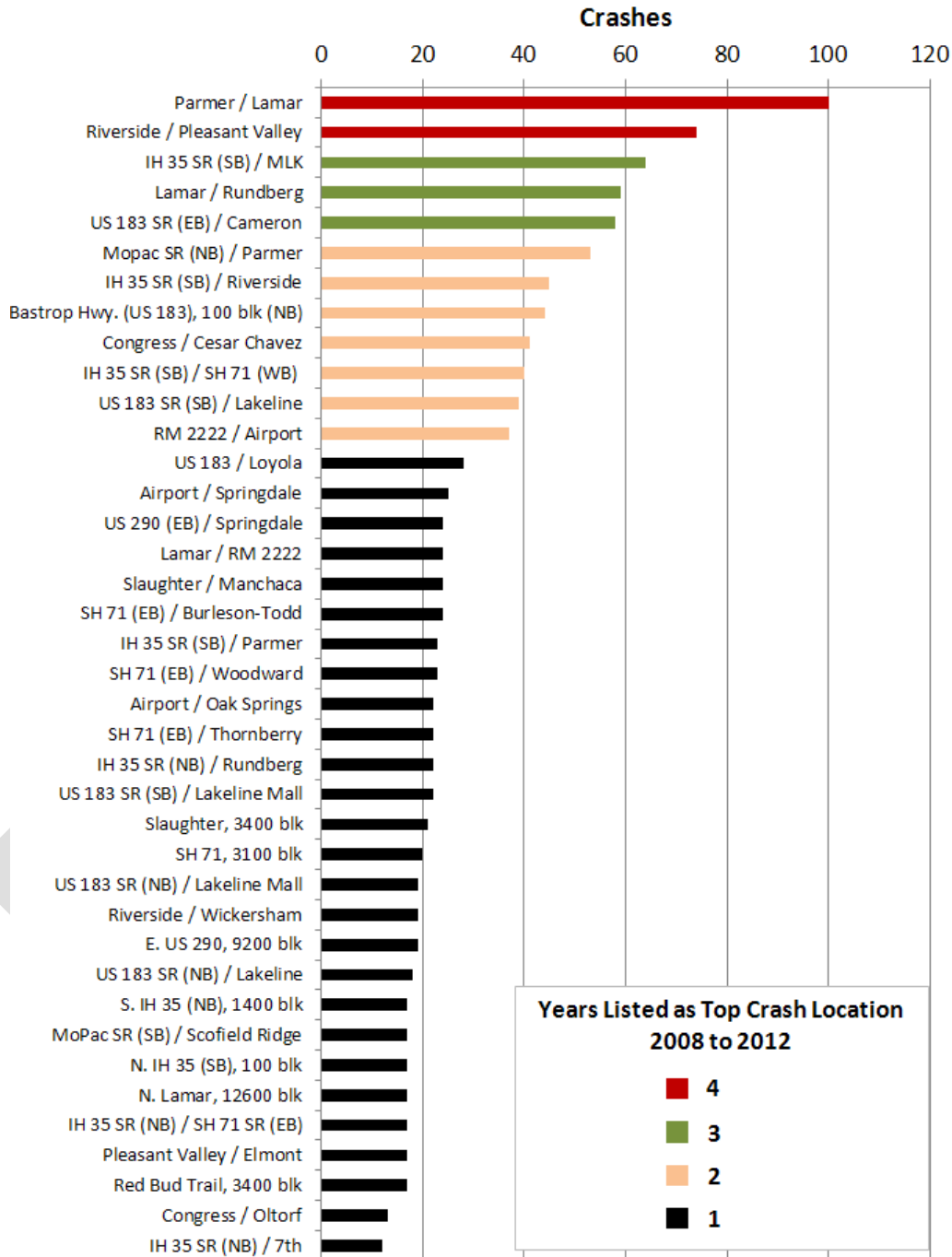
<p>1. Parmer / Lamar</p>	<p>2. US 183 / Loyola Ln.</p>
	
<p>3 (tie). E. US 290 (EB) / Springdale Rd.</p>	<p>3 (tie). US 183 Service Rd. (EB) / Cameron Rd.</p>
	
<p>3 (tie). Lamar Blvd. / RM 222 (Koenig Ln.)</p>	<p>3 (tie). Slaughter Ln. / Manchaca Rd.</p>
	

**Exhibit 18. 2012 Top 10 Crash Locations in Austin (continued)**

<p>4 (tie). I-35 Service Rd. (SB) / Parmer Ln.</p>	<p>4 (tie). Lamar Blvd. / Rundberg Ln.</p>
	
<p>4 (tie). I-35 Service Rd. (SB) / Riverside Dr.</p>	<p>5 (tie). E. SH 71 (EB) / Thornberry Rd.</p>
	
<p>5 (tie) I-35 Service Rd. (NB) / Rundberg Ln.</p>	<p>5 (tie). Airport Blvd. / Oak Springs Dr.</p>
	

The chart below (refer to Exhibit 19) illustrates the cumulative crash frequency for the years that the location was listed as a top crash location from 2008 to 2012.

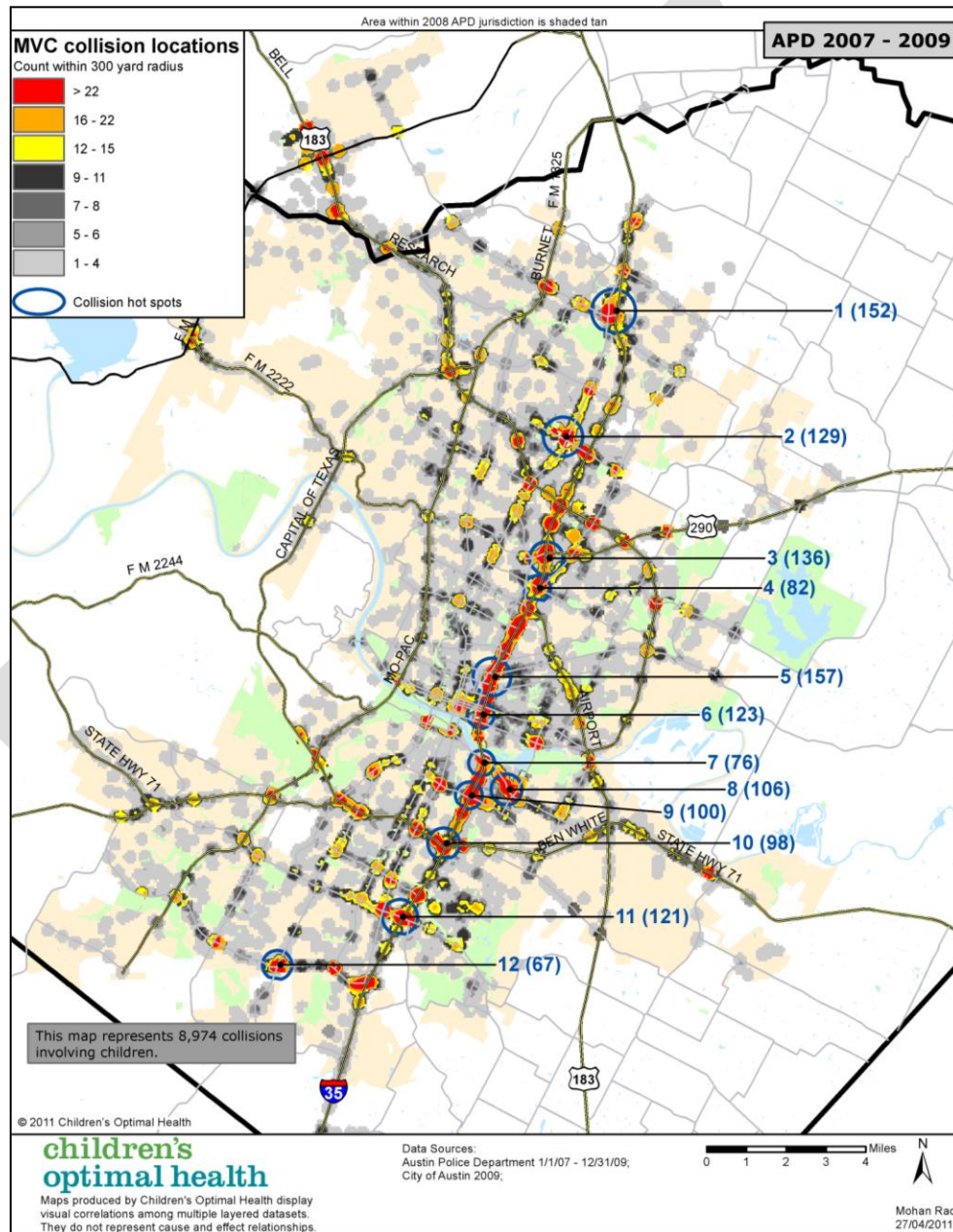
**Exhibit 19. Crash Frequency at Top Crash Locations from 2008 to 2012**



Source: APD crash data

Similarly, Children’s Optimal Health in cooperation with Dell Children’s Hospital has performed analyses of collisions involving children in Austin from the years 2007 to 2009. The map below represents the locations of 8,974 collisions that involved children (0-17 years old, driving or riding) from 2007 to 2009 (Source: APD crash data). Locations with a higher concentration of child-involved collisions appear in red with the top 12 locations circled. As with the City of Austin’s top crash location analysis, I-35 is identified by Children’s Optimal Health as a corridor with a high crash frequency involving children, as indicated by the red areas and hot spots (blue circles).

**Exhibit 20. Locations of Motor Vehicle Crashes Involving Children**



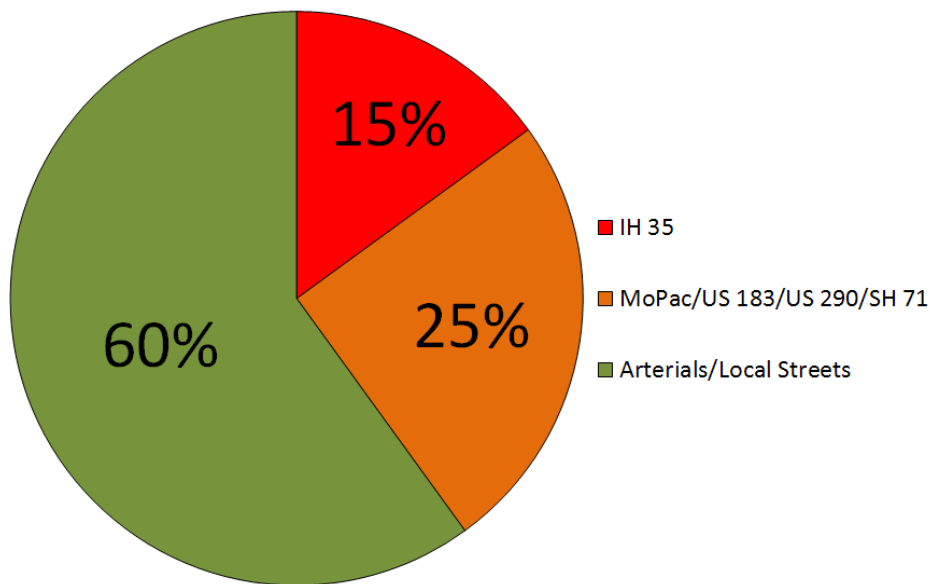
*A majority of Austin’s collisions involving children occur along the I-35 corridor.*

Source: Children’s Optimal Health (2011) Transportation Related Child Injury 2007-2009. Volume 1. Austin, Texas. [www.childrensoptimalhealth.org](http://www.childrensoptimalhealth.org)

## Fatalities by Roadway Type

Arterials and local streets account for 60% of all traffic fatalities in 2012 while fatalities on higher speed freeways and highways – I-35, MoPac, US 183, US 290 and SH 71 – accounted for 40% (refer to Exhibit 21). These proportions are consistent with the amount of travel (exposure) along each roadway type. Arterials and local streets account for roughly 57% of the total vehicle miles traveled in Austin and freeways account for 43%. These estimates are based on data provided in the Texas Transportation Institute’s 2012 Urban Mobility Report and the Federal Highway Administration Functional Classification Guidance Update (2011).

**Exhibit 21. Fatalities by Roadway Type**



*60% of Austin’s 2012 fatalities occurred on arterials and local streets while 40% occurred along freeways and highways.*

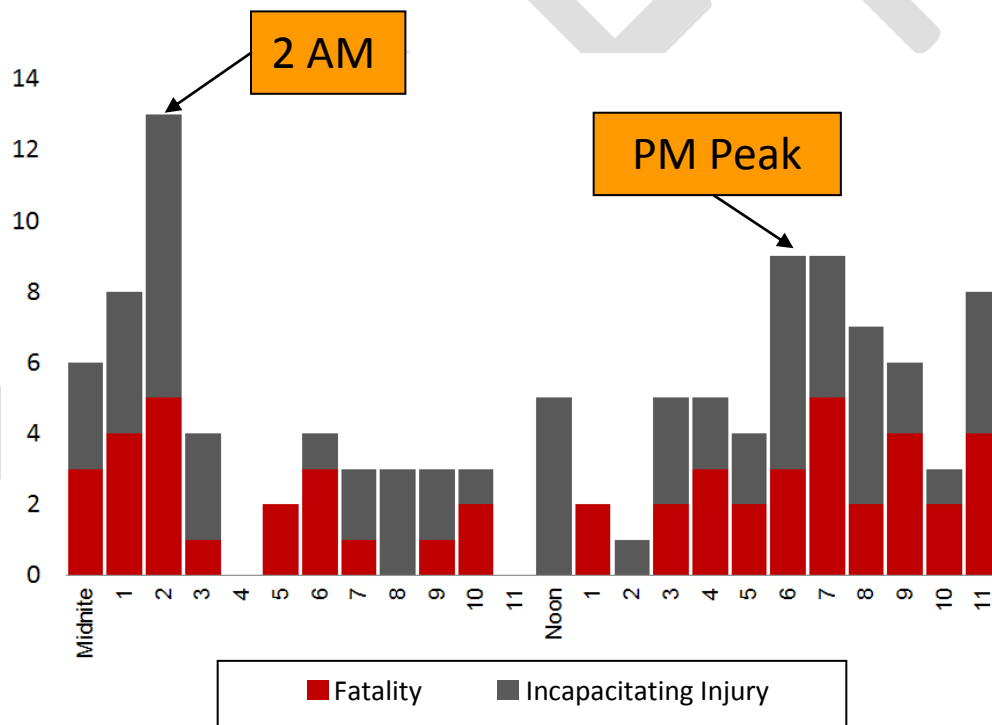
Source: APD crash data

## Time of Day

Fatalities and incapacitating injuries increase during the late night and early morning hours, peaking between 2 a.m. and 3 a.m. (refer to Exhibit 22). This hour coincides with the closing time of many establishments that serve alcohol. The PM-peak drive time also shows an increase in fatalities and incapacitating injuries. The Austin Police Department’s analysis shows these patterns are consistent when comparing similar crash severities going back to 2002. Although enforcement efforts aimed at reducing crashes should consider the entire day, concentrating efforts during the PM-peak period through the early morning hours could yield the greatest benefits overall.

*Fatalities and serious injuries peak between 2-3 a.m. – the hour after establishments that serve alcohol close.*

**Exhibit 22. Fatalities and Incapacitating Injury Crashes by Time of Day**



*Crash severity begins to increase during the PM-peak drive time and continues through the early morning hours of the following day.*

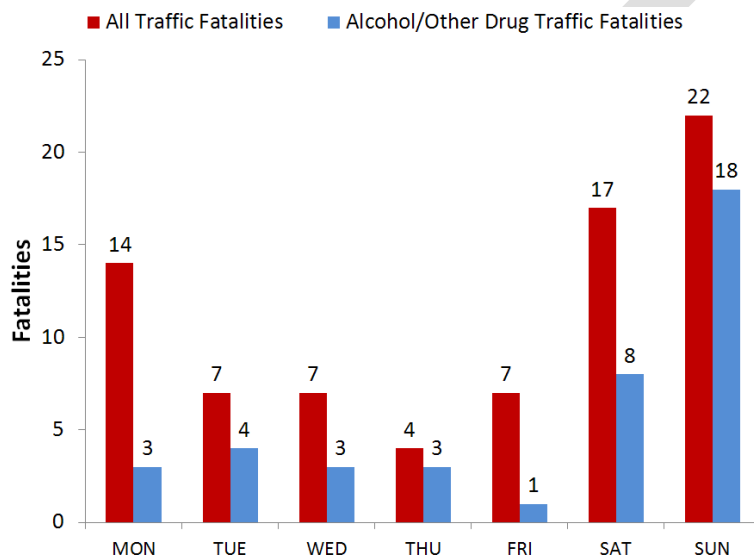
Source: APD, 2012 Safety Summit, data for January – August 2012



## Day of Week

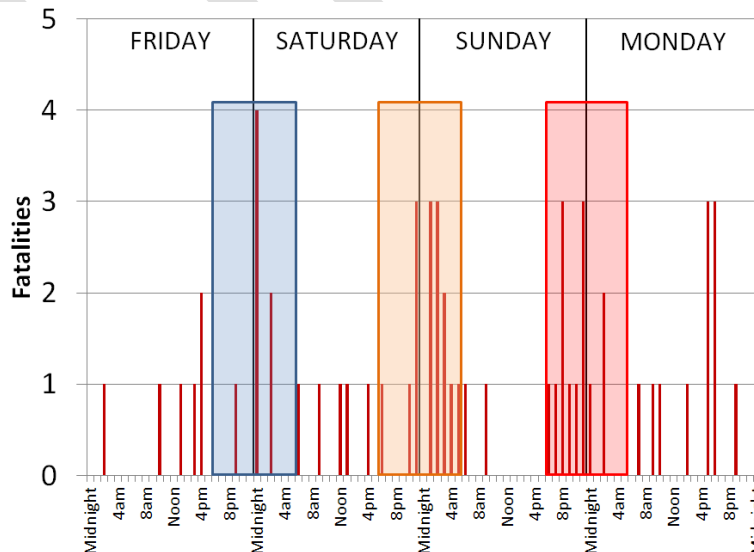
Traffic fatalities typically peaked on weekends as shown in Exhibit 23. This was also when fatalities involving alcohol and drugs were seen to be the greatest. A closer look revealed that these weekend fatalities occurred primarily at nighttime (evening and early morning hours) as indicated by the shaded areas in Exhibit 24. Based on 2012 data, fatalities on Sunday typically involved either alcohol or drugs. Nearly half of the Sunday fatalities occurred early in the morning (likely a result of Saturday night activities) while the other half were during the evening.

**Exhibit 23. Fatalities by Day of Week**



Source: APD crash data

**Exhibit 24. Weekend Fatalities – Late Night/Early Morning**



Source: APD crash data

*Weekends were when most of the traffic fatalities occurred in Austin*

*and*

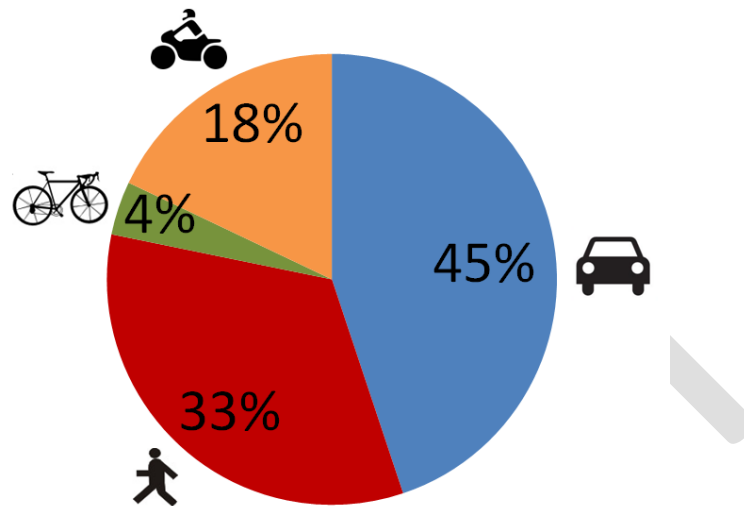
*when most of the traffic fatalities due to alcohol/other drugs occurred.*

*Sunday experienced the greatest number of fatalities which is likely attributable to Saturday night and end-of-the-weekend activities.*

## Transportation System Users

In 2012, motor vehicle occupants accounted for 45% of the fatalities, pedestrians 33%, motorcycles 18% and bicyclists 4% (refer to Exhibit 25). Pedestrians, bicyclists, motorcyclists and motor vehicle occupants all experienced more fatalities in 2012 than in the previous two years (refer to Exhibit 26).

**Exhibit 25. Fatalities by Transportation System User in 2012**



*1 out of every 3 fatalities involved a pedestrian in 2012.*

Source: APD crash data

**Exhibit 26. Transportation System User Fatalities, 2011 to 2012**

Austin Transportation System Users	Fatalities		
	2011	2012	% Change 2011 - 2012
Motor Vehicle Occupants	23	35	+52%
Pedestrians	22	26	+56%
Motorcyclists	9	14	+18%
Bicyclists	1	3	+200%
<b>Total</b>	<b>55</b>	<b>78</b>	<b>+45%</b>

*Fatalities increased across all transportation modes in 2012.*

Source: APD crash data

Due to the low number of bicyclist fatalities, the two additional fatalities in 2012 create a seemingly large percentage change (200%). It should also be noted that cycling as a means of commuting has doubled over the same period of data while maintaining a relatively low fatality count.

## USER BEHAVIOR CONTRIBUTING FACTORS

### Alcohol and Other Drugs

The number of traffic fatalities in Austin involving an impaired driver (alcohol or other drugs) increased 93% from 2011 to 2012 (refer to Exhibit 27). This increase was substantial given that the total increase in fatalities was 42% during this time. Overall, alcohol and other drugs were a factor in more than half (51%) of all traffic deaths in Austin during 2012 (refer to Exhibit 28). This statistic was higher than the average for Texas – 44% (2010). When we look closer at who was impaired in Austin’s traffic fatalities (refer to Exhibit 29), we find 21 motor vehicle drivers were impaired; 13 pedestrians were impaired; six (6) motorcyclists were impaired, and one (1) bicyclists. It is prudent to note that impairment data for 2012 may change since investigations are still underway and a number of toxicology reports remain in process.

*93% – the percentage increase in impaired drivers involved in fatalities from 2011 to 2012 in Austin.*

**Exhibit 27. Impaired Drivers**

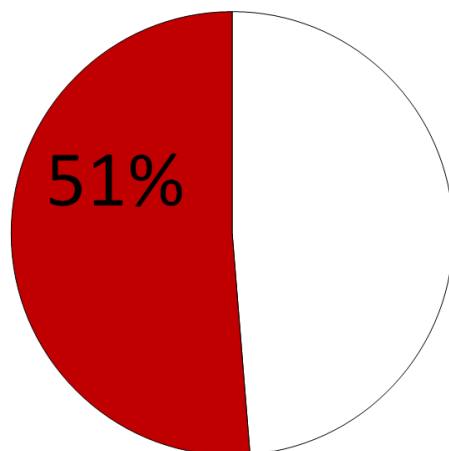
Austin Traffic Fatality Factors	2011	2011	2012	2011 to 2012 % Change
Impaired Drivers	26	14	27	+93%
Total Fatalities	49	55	78	+42%

*Impaired = alcohol or other drugs*

*Source: APD crash data*

*51% of all traffic deaths in 2012 cited alcohol or other drugs as contributing factors.*

**Exhibit 28. Alcohol and Other Drugs Were a Contributing Factor in 51% of All 2012 Fatalities**

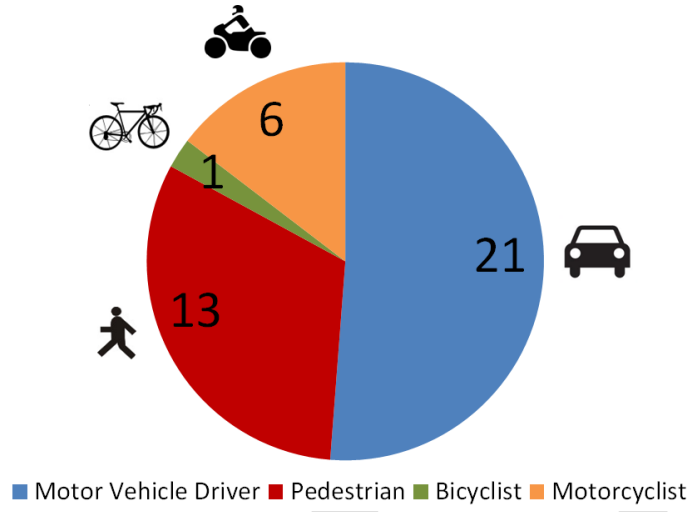


*50% of the pedestrians killed on Austin roads in 2012 were impaired.*

*1 of the 3 bicyclists killed in 2012 was intoxicated.*

*Source: APD crash data*

**Exhibit 29. Who Was Impaired in the Fatality  
(Number of Fatalities with an Impaired Operator)**



Source: APD crash data

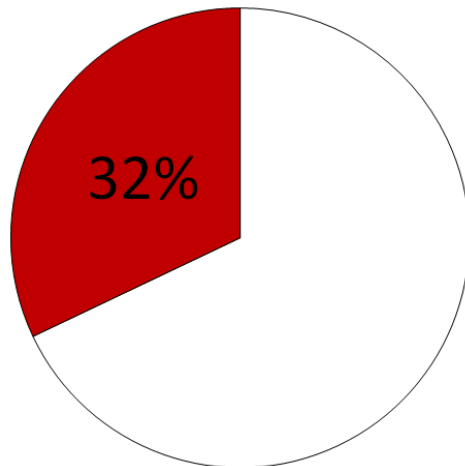
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## Speed

Speeding directly contributes to the severity of a crash. In 2012, 32% (25 of 78) of the fatalities on Austin roadways involved speeding, unsafe speeds (e.g., too fast for weather conditions) or failure to control speed (refer to Exhibit 30). As shown in Exhibit 31, the percentage varies by year, but the average over the past three years tended toward this same result: In 1 out of 3 fatalities, speed was a contributing factor. Austin’s experience was similar to averages seen across the U.S. Speeding was involved in about 1/3 of all U.S. traffic fatalities (US DOT, Publication HS 811 672).

*Speeding was a factor in 1 out of every 3 fatalities on Austin roadways in 2012.*

**Exhibit 30. Speeding as a Contributing Factor in 2012 Fatalities**



*Austin is similar to the rest of the U.S. in regards to speeding contributing to traffic fatalities.*

*56% of traffic fatalities attributed to speed also involved alcohol or other drugs.*

Source: APD crash data

**Exhibit 31. Trend in Fatalities Attributed to Speed**

	Traffic Fatalities			
	2010	2011	2012	2010 – 2012 Total
Speed as Contributing Factor	25	15	25	65
Total Traffic Fatalities	49	55	78	182
<b>Speed as % of Total</b>	<b>51%</b>	<b>27%</b>	<b>32%</b>	<b>36%</b>

Source: APD crash data

## Distracted Driving

Research has shown that driver distraction and driving inattention may be involved in as many as 78% of passenger vehicle crashes nationwide (US DOT Publication FMCSA-RRR-09-042). Distracted driving includes behaviors, such as:

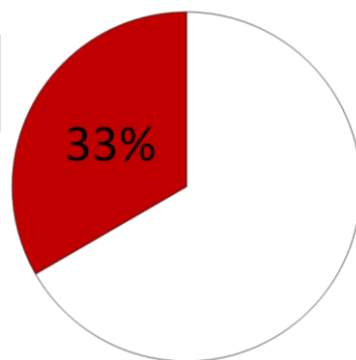
- Texting and using a cell phone
- Eating and drinking
- Talking to passengers
- Grooming
- Reading (e.g., maps)
- Using a navigation system
- Watching a video
- Adjusting a radio

*33% of Austin's 2012 fatalities are estimated to be a result of distracted driving.*

*Text messaging increases your crash risk by 23 times.  
(US DOT Pub. FMCSA-RRR-09-042)*

Although distracted driving was “not identified” as a significant source of fatalities in Austin’s 2012 data, that does not mean it was not happening. It only means that this particular cause was not cited as a contributing factor. Distracted driving is a challenging factor to assess given the lack of physical evidence after a crash. For this report, an indirect measure for distracted driving was estimated using the frequency that reckless driving and driver fault (e.g., not paying attention) were cited as contributing factors. Given this estimation approach, 33% (26 of 78) of Austin’s fatalities involved a distracted driver (refer to Exhibit 32).

### Exhibit 32. Distracted Driving as a Contributing Factor in 2012 Fatalities



*Distracted Driving = reckless driving or driver fault*

*Source: APD crash data*

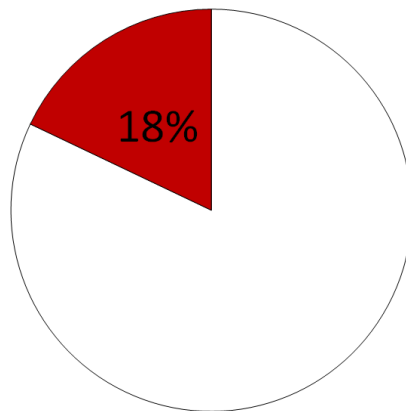
## Lack of Restraints/Adequate Protective Devices

Lack of restraints (e.g., seatbelts or car seat) was a contributing factor in 18% of the traffic fatalities in Austin during 2012 (refer to Exhibit 33). This percentage is below the statewide average of 28% (TxDOT Texas Motor Vehicle Crash Statistics, 2011). Strategies targeted at increasing seatbelt usage could reduce Austin's fatalities where seatbelts were not worn.

*18% - the number of fatalities in Austin where the lack of restraints, such as seatbelts, were cited as a contributing factor.*

**Exhibit 33. Lack of Restraints as a Contributing Factor in Traffic Fatalities**

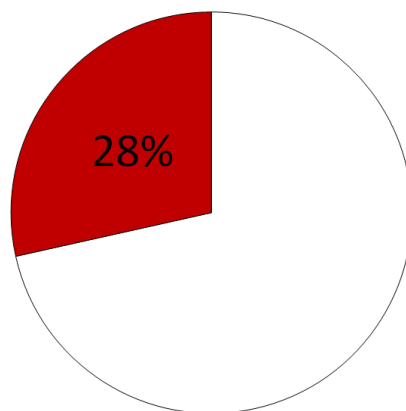
### Austin (2012)



*Seatbelts save lives!*

*Wearing a seatbelt is the single most effective step a person can take to protect themselves in a crash.  
(US DOT Publication HS 811 257)*

### Texas (2011)



*All 3 bicyclists killed in 2012 were not wearing helmets.*

Source: Austin – APD crash data, Texas – TxDOT Texas Motor Vehicle Crash Statistics, 2011

*57% of motorcyclists killed in 2012 were not wearing helmets.*

It is worth noting that all three bicyclists killed on roadways in Austin were not wearing helmets. In addition, 57% (8 of 14) of the motorcyclists killed in 2012 were not wearing helmets.

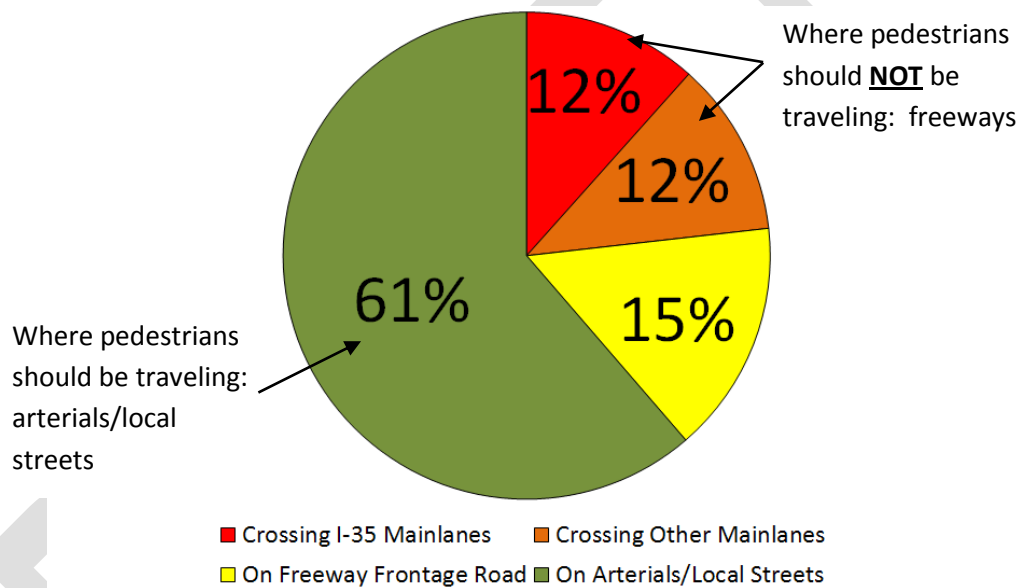
## Pedestrians Crossing Freeway Mainlanes

The chart below (refer to Exhibit 34) indicates a troubling statistic that 24% (6) of the pedestrian fatalities occurred while the pedestrian was attempting to cross freeway mainlanes, such as I-35, MoPac, US 290 and SH 71 in 2012. Pedestrians should not be crossing freeway mainlanes. Pedestrians were intoxicated in five of these fatalities. Half (3) of the six incidents occurred while trying to cross I-35 mainlanes. These fatalities did not appear to be cases of pedestrians leaving a stranded vehicle, but rather people choosing to cross the mainlanes for other purposes.

**Nearly 25% of all pedestrian fatalities occurred while attempting to cross the mainlanes of a freeway.**

- 3 occurred while attempting to cross I-35.
- 5 of the 6 pedestrians were intoxicated when trying to cross freeway mainlanes.

**Exhibit 34. Pedestrian Fatalities by Roadway Type**



**39% of all pedestrian fatalities occurred along a freeway, highway or frontage road.**

Source: APD crash data

Note: "Other mainlanes" refers to MoPac, US 290 and SH 71

A higher proportion of pedestrian crashes and fatalities are expected along arterials/local streets since this is where pedestrians typically travel given the adjacent land use, the multimodal nature of these roadways (e.g., sidewalks, crosswalks, transit stops) and the number of arterials/local streets relative to freeways. Pedestrians should not be traveling on freeways.



## **NEXT STEPS**

Austin Transportation Department, Austin Police Department and the Public Works Department continue to work together and with our regional partners to assure transportation safety in Austin by applying the 5 E's: Engineering, Enforcement, Education, Encouragement and Evaluation. The 5 E's approach, used in conjunction with location specific analyses, will guide the development of specific recommendations.

In 2012, the City of Austin led a Regional Safety Summit in cooperation with the Capital Area Metropolitan Planning Organization (CAMPO). A draft report from the Summit is located in the Appendix. Planning for a 2013 Safety Summit is kicking off, led by CAMPO. In addition, CAMPO is charged with developing a Regional Safety Program. The City of Austin is assisting CAMPO in this effort.

Staff is continuing to analyze crash data to deliver a Final Report to Council on April 15, 2013. The Final Report will build on the analyses presented in this Interim Status Report, draw conclusions and recommend actions for the City of Austin and its Partners to take to strengthen safety efforts.

**APPENDIX – 2012 SAFETY SUMMIT REPORT**

DRAFT

# 2012 Transportation Safety Summit

October 5<sup>th</sup>, 2012

## Summary Report



Prepared by City of  
Austin Transportation  
Department & CAMPO



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# Safety Summit

The 2012 Transportation Safety Summit commenced a regional discussion of safety concerns relating to all modes of transportation with stakeholders from across the 4 E's of safety - **Environment, Education, Enforcement, and Evaluation**. It was the largest meeting to date in Central Texas focused on improving transportation safety. The 2012 Summit, held at the Palmer Events Center in Austin, was organized by the City of Austin with support from CAMPO, Dell Children's Hospital, AAA Texas, Capital Metro, TxDOT and many others. Over 70 representatives from agencies across the region and beyond participated in the summit.

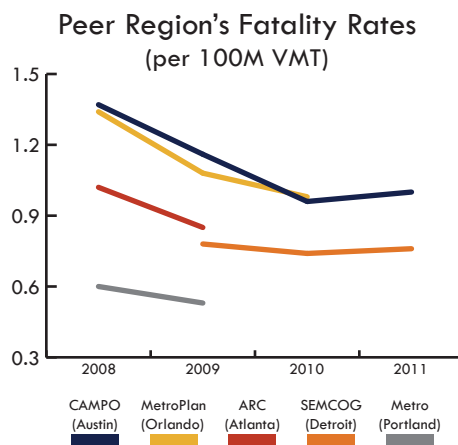
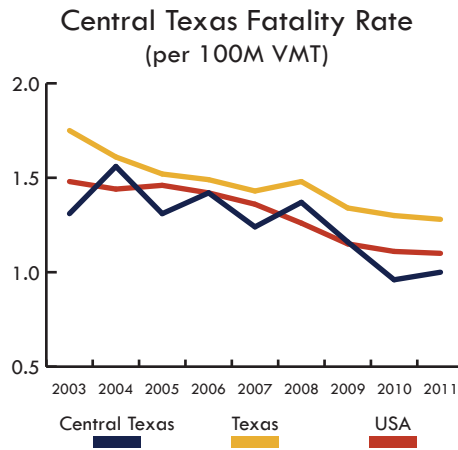
The meeting produced an overwhelming amount of input and ideas for developing interdisciplinary approaches and cross-agency collaborations that will build upon current efforts and propel the region towards achieving new levels of safety.

The Safety Summit is the start of a sustained initiative to improve safety for all users and stem the rise in traffic fatalities. Attendees have agreed to continue to meet and develop plans to implement the strategies highlighted at the summit over the course of 2013 and years to come.

## Keynote Speakers

### Maureen McCoy - CAMPO

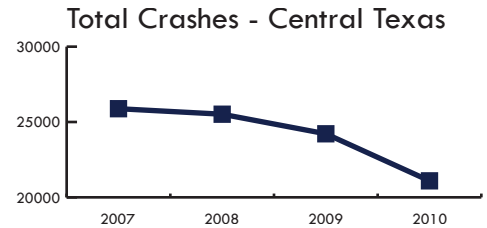
Ms. McCoy noted a decline of fatal crashes by 30% in the region between 2008 and 2010. She also noted total crashes have made similar declines over that period as well but that the estimated costs of crashes still total nearly \$774 million per year, on par with the cost of traffic congestion each year. She highlighted other regions who have reduced their crash rates further and who can provide a model for Central Texas.



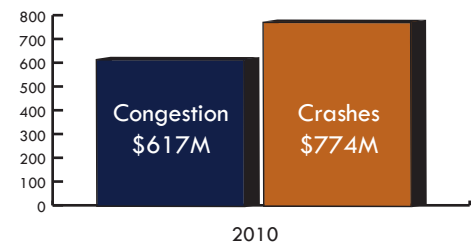
## Regional Cost of Crashes

2007	2008	2009	2010
\$907M	\$918M	\$808M	\$774M

Source: FHWA Motor Vehicle Accident Costs, 1994



## Safety vs. Congestion Impacts



'Congestion Impact' - TTI Urban Mobility Report 2010

## Elaine Timbes - Capital Metro

Ms. Timbes with Capital Metro highlighted the gains that the agency has made in reducing both total vehicle and passenger accident rates. It exceeds all other major Texas transit agencies in most indicators of safety performance.

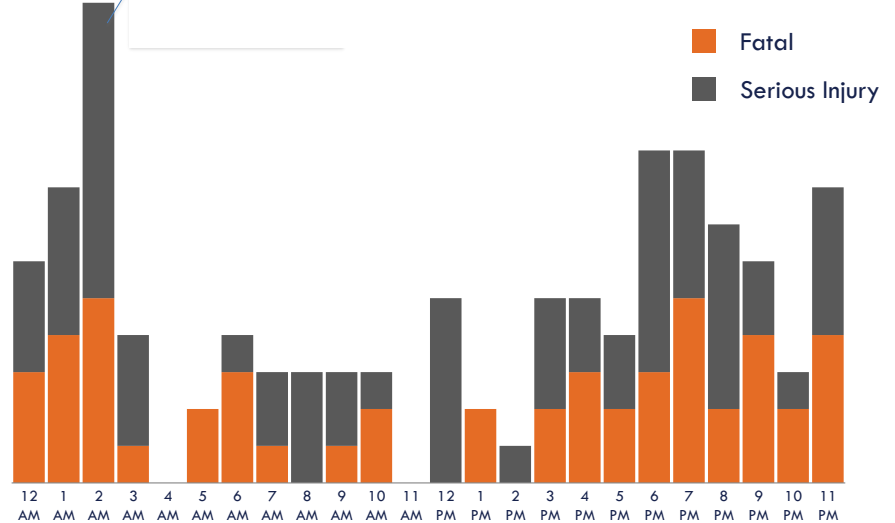
Service	Cap Metro Austin	DART Dallas	Metro Houston	VIA San Antonio
<b>Vehicle Accidents per 100,000 Miles</b>				
Bus	2.0	4.0	4.8	3.5
Paratransit	1.6	1.5	1.1	1.3
Rail	0	8.7	8.9	N/A
<b>Passenger Accidents per 100,000 Miles</b>				
Bus	.76	2.1	2.7	1.2
Paratransit	10	11.6	6.7	7.4
Rail	0	.31	.34	N/A



## Commander Pat South - APD

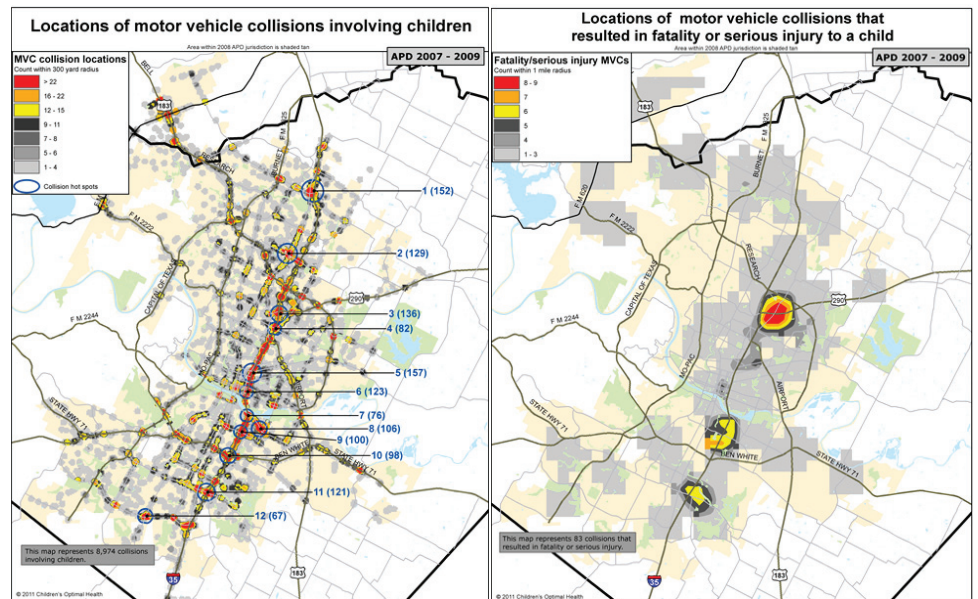
Commander South described the rise in total fatalities that had increased by 24% from the previous year to date and, in particular, auto-pedestrian collisions that had increased by 41%. APD has been taken an analytical approach to focus resources on locations and times of day that have the highest number of fatal crashes. 2 AM is the highest and rush hour has increasingly become a higher crash period from 2002-2012.

Fatalities & Serious Injuries by Time of Day (January-August 2012)



## Stewart Williams - Dell Childrens Hospital

Mr. Williams provided a public health perspective for traffic safety. For children and young adults, crashes are the greatest cause of death. Childrens Optimal Health has analyzed high crash locations and public health records to highlight priority areas to increase efforts to improve the use of child restraint seats and recognize where bicycle and pedestrian safety needs greater attention.



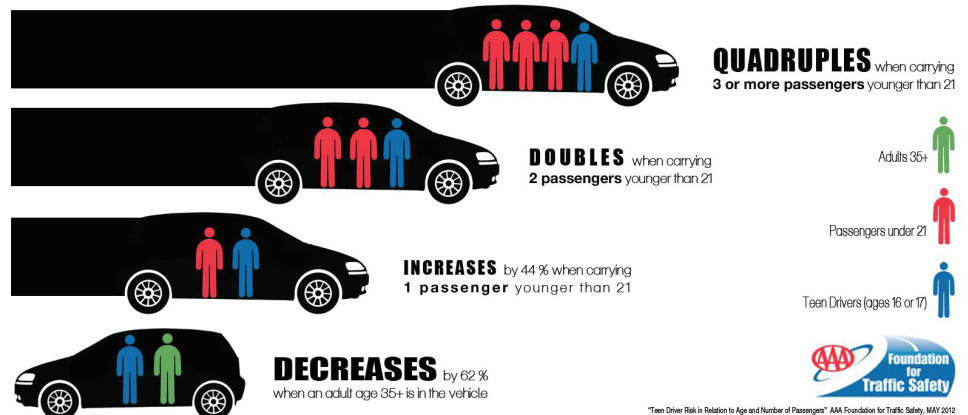
## Linda Von Quintas - AAA

Ms. Von Quintas illustrated that teenagers have the highest fatal crash rates of all age groups. She noted that a 16- or 17-year old driver's risk of being killed in a crash increases when there are young passengers in the same car. AAA has been a leader in promoting measures to reduce impaired driving and improving adult supervision for teenage drivers.

## Teen Drivers Risk Death with Young Passengers

A 16- or 17-year-old driver's **RISK OF BEING KILLED IN A CRASH** increases when there are young passengers in the vehicle.

Compared to driving without any passengers, **THE RISK:**



# Working Groups

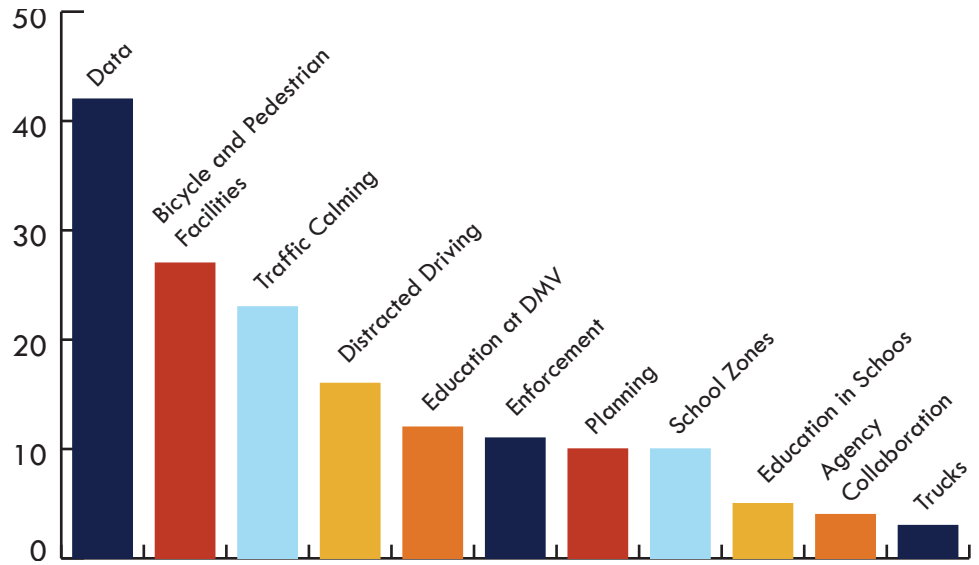
The summit attendees were surveyed and identified the three key emphasis areas for discussion:

1. **Distracted Driving**
2. **Pedestrian Safety**
3. **Insufficient of No Infrastructure**

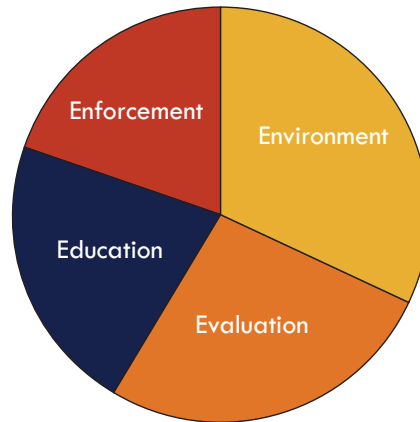
Attendees were then broken out into working groups to develop a safety vision for the region and devise strategies using the four 'E's (Education, Enforcement, Environment, and Evaluation) to achieve it.

There were over 1,000 ideas to promote safety generated amongst the groups. All the ideas were presented in an open format for review and discussion. Summit attendees used sticker ballots to select the top proposals. Improving data availability was the highest ranked idea across all issues. Increasing bicycle and pedestrian facilities and implementing traffic calming on roadways were the next suggestions.

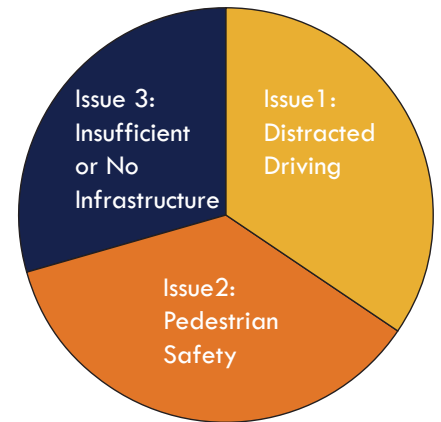
**Top Strategies to Reduce Crashes - All Issues**



**Total Strategies by 'E'**



**Strategies by Issue**



## Vision for 2020

Working groups were asked to come up with a vision for traffic safety in 2020. Attendees enthusiastically endorsed the goal that by 2020 the region will have eliminated traffic fatalities from its roadways. They envisioned the region being recognized as the nation's safest for drivers, bicyclists, pedestrians, and transit riders alike.

There was a shared belief that with increased collaboration and fostering a culture of safety the goal could undoubtedly be achieved.

### Top Ideas on SpeakUp Austin

1. **Educate on and enforce policies to share the road for all users**
2. **Enforce traffic controls, especially speed limits**
3. **Educate and enforce policies on distracted driving**
4. **Release crash data to the public**
5. **Prioritize and Target Enforcement**

"Enforcement efforts need to be directed at the behaviors that cause accidents."

"Publish maps online that identify recommended routes for cyclists to use. This would help cyclists pick safe routes for their ability."

– Citizen Comment on SpeakUp Austin

# Safety Strategies - Top Summit Strategies by Issue

## Distracted Driving

### Education

- Promote distracted driving campaigns and pledges toward teenagers in schools
- Require that all new and existing license holders complete a distracted drivers safety training
- Expand public safety announcements on electronic highway signs
- Encourage public and private sector organizations to adopt internal distracted driving policies

### Environment

- Increase regulation of outdoor advertising, especially digital billboards
- Increase signage and awareness of bicyclists and pedestrians, especially near school zones

### Enforcement

- Enact local regulations on driving with wireless devices
- Promote statewide regulations on driving with wireless devices
- Expand enforcement of current driving with wireless device laws in school zones
- Train police officers to investigate and record cell phone usage as a contributing crash factor

### Evaluation

- Analyze crash data to determine hot spots for distracted driving
- Develop shared database of distracted driving crashes with geographic data
- Develop a baseline for crashes related to wireless device use
- Encourage collaboration between planners, engineers, and police to incorporate distracted driving countermeasures into their plans

## Pedestrian Safety

### Education

- Develop programs to encourage safe walking rather than driving for appropriate trips
- Provide automobile-pedestrian safety training during drivers license renewal
- Promote education through increased enforcement

### Environment

- Construct sidewalks in urban areas where they are incomplete or missing
- Improve pedestrian environments through traffic calming
- Increase the number of 'HAWK' pedestrian crossing signals
- Increase sight distance to and from intersections and increase lighting at crosswalks

### Enforcement

- Increase penalties for both pedestrian and drivers for offenses resulting in crashes
- Lower speed limits in high pedestrian areas
- Increase enforcement to prevent pedestrians crossing at prohibited locations
- Increase enforcement of public intoxication laws

### Evaluation

- Analyze crash data to determine hot spots for pedestrian crashes
- Develop shared database of pedestrian crashes with geographic data
- Develop a baseline for pedestrian crashes
- Encourage collaboration between planners, engineers, and police to incorporate pedestrian safety into their plans

## Insufficient Infrastructure

### Education

- Ensure that driver education programs include information on run-off the road, intersection, and head-on crashes
- Increase awareness of HERO roadside assistance program

### Environment

- Install shoulders and rumble strips
- Install more roundabouts at intersections
- Install more concrete and cable median barriers
- Widen roadways to increase control and recovery areas
- Develop separated bicycle and pedestrian facilities
- Implement a Road Safety Audit program

### Enforcement

- Increase DUI and speed enforcement in rural to urban areas
- Expand the use of red light cameras
- Encourage alternate routes for trucks during peak travel periods

### Evaluation

- Analyze crash data to determine hot spots for run-off the road, intersection, head-on, and other crashes resulting from insufficient infrastructure
- Develop shared database of these crash types with geographic data
- Develop a baseline for these crash types
- Encourage collaboration between planners, engineers, and police to incorporate safety for areas of insufficient infrastructure into their plans

# Statewide

## Initiatives

In 2012, the revised **Texas Strategic Highway Safety Plan** established statewide goals, objectives, and key emphasis areas in consultation with Federal, State, local, and private sector safety stakeholders. It serves as a guide for safety coordination and implementation across the 4 E's to reduce fatal and injury crashes across all modes on the transportation network. The Emphasis Areas identified at the Summit correspond to the Texas SHSP and are demonstrated areas of particular importance.

## Emphasis Areas

### Crash Type & Location

- Run-off the Road
- Head-on
- Intersection
- Work Zone
- Railroad Grade Crossing

### System Users

- Older Drivers
- Teen Drivers
- Motorcyclists
- Bicyclists
- Pedestrians
- Large Trucks

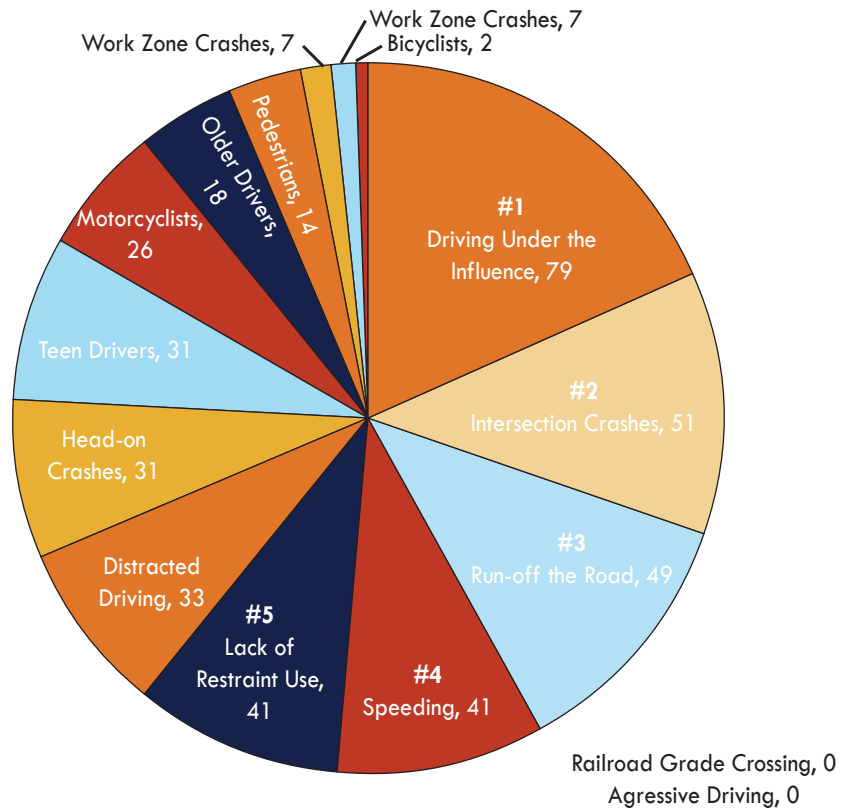
### User Behavior

- Driving Under the Influence
- Speeding
- Lack of Restraint Use
- Aggressive Driving
- Distracted Driving

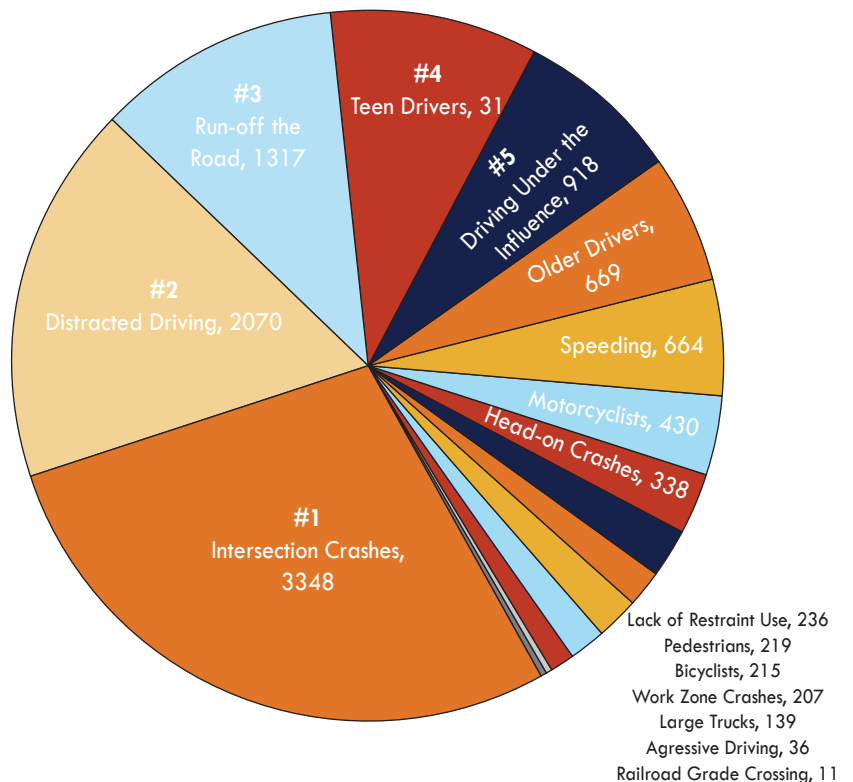
### System Administration

- Traffic/Crash Records
- E 911 Reporting Systems
- Public Awareness
- Policy Maker Awareness

**Fatal Crashes - CAMPO Region (2010)**



**Fatal and Injury Crashes - CAMPO Region (2010)**

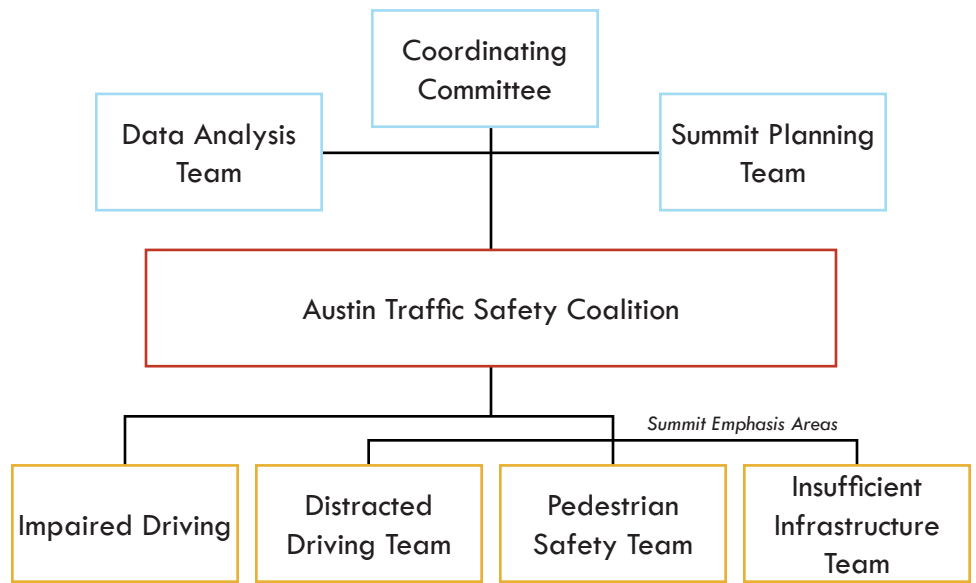




# Next Steps

The Transportation Safety Summit was envisioned as a kick-off for a new regional safety initiative. The first task is to convene interdisciplinary teams for the Emphasis Areas identified during the Safety Summit - **Distracted Driving**, **Pedestrian Safety**, and **Insufficient Infrastructure**. Numerous participants committed their time and agency support to initiate these collaborative efforts. **Impaired Driving**, due to its role as a leading cause of fatalities has been added as an Emphasis Area.

In 2013, the TxDOT-Austin District has begun to convene the **Austin Traffic Safety Coalition**, a monthly meeting of regional safety partners. Together, CAMPO,



TxDOT, the City of Austin, and other regional partners will work to develop a cohesive and effect transportation safety alliance. There has been

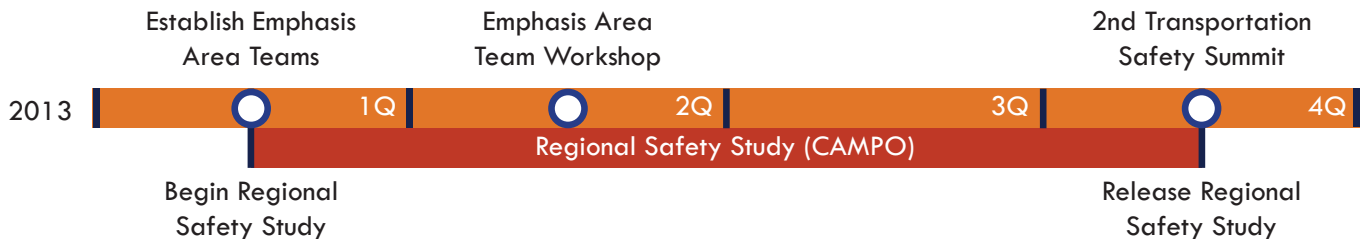
tremendous enthusiasm since the Summit that be carried into creating an unprecedented level of interdisciplinary regional cooperation to reduce crashes.

## CAMPO Regional Safety Study

The CAMPO Regional Safety Study will be an analysis of regional transportation safety trends and a foundation for a more integrated Transportation Safety Management Process. CAMPO will partner with the Center for Transportation

Safety (CTS) at the Texas A&M Transportation Institute to develop the **CAMPO Safety Tool** that will provide a systemic safety assessment of locations that are over-represented by certain crash types using the methodologies in the newly-adopted Highway Safety Manual (HSM).

The safety study providing state-of-the-practice analysis for Emphasis Area Teams to guide coordinated, collaborative activities amongst partners. The study develop a replicable process for annual monitoring and reporting of transportation safety metrics that will assess the region's crash reduction progress.



CAMPO will host an **Emphasis Area Team Workshop** at a special meeting of the Coalition in Spring 2013. Teams will begin to discuss efforts that can be implemented in the short-term and plan for longer-term projects in that will have an impact on improving safety.

A 2nd annual **Transportation Summit** is proposed for Fall 2013 when progress on crash reduction and the work of the Coalition can be presented to a wider audience. CAMPO will have the results of the Regional Safety Study available to present at the Summit.