

City of Austin 2012 Traffic Fatality Report

Final Report

Prepared by

Austin Transportation Department

Austin Police Department

Public Works Department

April 15, 2013

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EXECUTIVE SUMMARY AND INTRODUCTION

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.

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

This report serves as the Final Report on transportation fatalities within the City of Austin in 2012. Its primary purpose is to summarize existing City of Austin transportation safety initiatives and recommend future transportation safety initiatives. An analysis of crashes was performed in the Interim Report (February 28, 2013) submitted to Austin City Council. The analysis is also provided as an Appendix in this report.

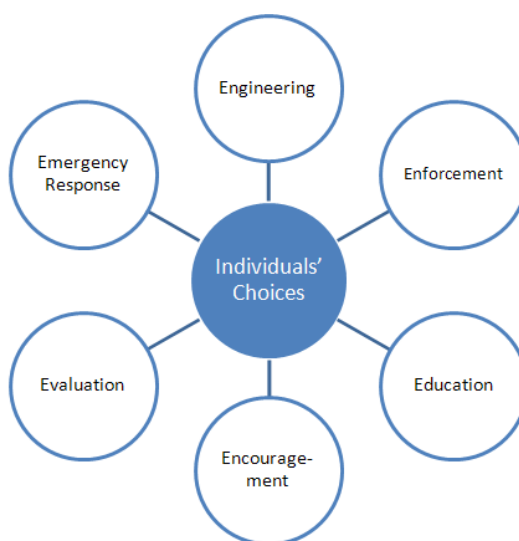
The City is actively involved in more than 35 transportation safety initiatives across the 6 E's:

- *Engineering*
- *Enforcement*
- *Education*
- *Encouragement*
- *Evaluation*
- *Emergency Response*

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.

An important element in reducing crashes is with the individual and the choices they make. Later in this report, you will read that alcohol and other drugs contributed to 51% of all traffic fatalities in Austin during 2012; speeding contributed to 32%; not wearing a seatbelt 18%; and, pedestrians attempting to cross freeway mainlanes represented 23% of all pedestrian fatalities.

The City and other agencies responsible for the safety of the traveling public apply a set of measures to influence safety – the 6 E's: Engineering, Enforcement, Education, Encouragement, Evaluation and Emergency Response. The City is currently implementing over 35 transportation safety initiatives within these categories.



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

Addressing transportation safety requires an interdisciplinary approach. Transportation safety issues are multi-dimensional and require a coordinated and collaborative approach involving both stakeholders and safety professionals throughout the region. Such an approach also requires leadership that the City of Austin staff can provide by developing a culture of safety and cooperation between city departments, other local and state agencies as well as community stakeholders and residents of Austin. Considering the crash analyses presented within this report, discussions among departments preparing the report and existing transportation safety initiatives, the following recommendations emerged:

MISSION:

To be the safest city in the country when travelling as a driver, passenger, pedestrian or bicyclist.

Recommendation 1: Develop a Consolidated Mobility Safety Plan for the City of Austin, consistent with regional efforts

The City of Austin has several initiatives underway among many departments to address transportation safety. Although these initiatives demonstrate that transportation safety is a top priority within the City, they:

- Lack a framework that ties them together within the context of overarching goals, objectives and performance measures; and
- Compete among other priorities and programs for staff time.

Given these issues and the current transportation safety initiatives within the City, it is recommended that a Consolidated Mobility Safety Plan be developed for the City of Austin. The Plan would define a sustainable and multimodal transportation safety program. It should lead to the creation of a transportation safety culture within the Austin community, firmly rooted in the public's expressed desire regarding behaviors that reduce transportation-related deaths and injuries. It would also coordinate with and leverage other regional transportation safety initiatives.

Staff recommends hiring a Consultant/University to develop a successful Consolidated Mobility Safety Plan for the City of Austin. Funding to develop this plan is estimated at \$450,000. This funding level also includes efforts as noted in the following recommendations. ATD will work with affected departments to identify and recommend a funding source and implementation strategy.

Recommendation 2: Pursue strategies to reduce impaired traveling in Austin

Overall, impairment was a factor in more than half of Austin's transportation fatalities in 2012, and it is a leading factor in transportation fatalities for 2013. Half of the pedestrians killed on Austin's roadways in 2012 (13 of 26) were impaired. It is an equal opportunity killer, killing drivers, pedestrians, motorcyclists and bicyclists.

Staff recommends developing an Impaired Traveler Crash Reduction Plan as part of the Consolidated Mobility Safety Plan scope. This comprehensive plan would address impaired traveling from the standpoint of education, enforcement and encouragement. It would also identify resources needed to implement the plan.

Recommendation 3: Develop strategies to address transportation safety along the I-35 corridor

I-35 is consistently represented in the list of top crash locations within Austin

- Eight of the Top 25 crash locations in 2012 were located on I-35
- Fifteen percent (15%, 12 of 78) of the transportation fatalities in 2012 occurred on either the I-35 mainlanes or frontage roads
- Three (3) pedestrian fatalities occurred while attempting to cross I-35 mainlanes
- A substantial number of collisions involving children occur along I-35

The current I-35 Corridor Development Program that was initially funded by the City of Austin through the 2010 Bond will address transportation safety along I-35. Staff recommends continued support of the I-35 Corridor Development Program to address transportation safety along I-35.

Recommendation 4: Increase access to crash data and crash analysis capabilities of City departments

Accessible, timely and accurate crash data is essential for transportation safety practitioners. This data, related analysis tools (software) and trained analytical staff are cornerstones of an effective transportation safety program. They enable practitioners to identify and analyze crash patterns, develop countermeasures and assess how well countermeasures performed after implementation.

Staff recommends including a task within the Consolidated Mobility Safety Plan scope to develop a Crash Data Access and Analysis Action Plan. This plan would identify: opportunities to increase access to crash data; enhancements to software and data processing procedures; actions to enhance and monitor data quality; and, additional staffing needs to perform analyses. This task would also coordinate with related efforts underway by TxDOT and CAMPO.

Recommendation 5: Continue implementing the existing transportation safety initiatives

The City of Austin is involved in more than 35 transportation safety initiatives. Staff recommends continuing the implementation of these initiatives (as appropriate).

Recommendation 6: Prepare an annual transportation safety report to Austin City Council

Staff recommends that the Austin Transportation Department, in collaboration with the Austin Police Department and Public Works Department, deliver an annual transportation safety report to Council. A draft report would be submitted to Council every March. The report would summarize Austin's crash statistics for the preceding year. The final report would follow in the fall (October/November) and include a more thorough analysis and recommendations. Comprehensive crash data for other Texas cities and the nation is not finalized until later in the year. The deadline for the draft report will allow more timely incorporation of funding needs into the annual budgeting process, while the timing of the final report will enable comparisons to be made between Austin and other locations throughout Texas and the nation to better analyze trending.

REPORT PURPOSE

This report serves as the Final Report requested by Austin City Council through Resolution 20130117-057. Its primary purpose is to summarize existing City of Austin transportation safety initiatives and recommend future transportation safety initiatives. An analysis of crashes was performed in the Interim Report (February 28, 2013) submitted to Austin City Council. The analysis is also provided as an Appendix to this report.

TRANSPORTATION SAFETY INITIATIVES

Existing

Austin Transportation Department (ATD), Austin Police Department (APD) and the Public Works Department (PWD) have numerous initiatives underway to increase safety and mitigate crashes. These initiatives are summarized in Exhibit 1 and grouped into the following 6 E's of roadway safety – Engineering, Enforcement, Education, Encouragement, Evaluation and Emergency Response.

The City of Austin is involved in more than 35 transportation safety initiatives.

Engineering

- Fatality Studies – ATD performs an engineering study for each transportation fatality. The study includes a field review of each fatality location, identifies any deficiencies that may have been a contributing factor and documents the findings and recommendations in a report.

The City's initiatives cut across disciplines:

- Federal Highway Administration's (FHWA) Proven Safety Countermeasures – In January 2012, FHWA issued a "Guidance Memorandum on Promoting the Implementation of Proven Safety Countermeasures". This guidance takes into consideration the latest safety research to advance a group of countermeasures that have shown greatly effective in improving safety. Examples of these countermeasures implemented by the City are listed below along with their demonstrated effectiveness based on national research sponsored by the FHWA. All crash reduction statistics are available at: <http://safety.fhwa.dot.gov/provencountermeasures/>.

- Engineering
- Enforcement
- Education
- Encouragement
- Evaluation
- Emergency Response

- Roundabouts:

44-48% reduction in overall crashes; 78-82% reduction in injury and fatal crashes

ATD has identified approximately 40 intersections for possible conversion to roundabouts. The following three are more near-term implementations in various stages of planning: Davis Ln. at Leo St., Pressler St. extension between 5th St. and Cesar Chavez St. and Todd Ln. at St. Elmo Rd.

The City's initiatives target driving, walking and cycling.

- Corridor Access Management:

25-30% reduction in injury and fatal crashes along arterials

The City's corridor studies along N. Lamar Blvd., Burnet Rd. and Airport Blvd. all apply access management strategies (e.g., reducing the number of driveway).

Exhibit 1. City of Austin Existing Transportation Safety Initiatives

Engineering	Enforcement	Education	Encouragement	Evaluation
Fatality Studies	Increase Law Enforcement	Safe Routes to Schools	Safe Walk & Safe Bicycle Campaign	E Crash Software
FHWA Safety Countermeasures: Roundabouts, Corridor Access Management, Backplates w/Retro-reflective Borders, Enhanced Delineation + Friction for Horizontal Curves, Medians + Pedestrian Crossing Islands, Pedestrian Hybrid Beacons, Road Diets	No Refusal Initiatives	Child Safety Program	Safety Messages on Dynamic Message Signs	CAMPO Safety Study
	Increased Highway Enforcement	Car Seat Checks		Transportation Safety Summit
Annual Service Plan for Pavement Preventative Maintenance	Red Light Cameras	Safe Bicycling and Walking Campaign		Crossroads Coalition
School Safety	Traffic Enforcement Initiative	Traffic Skills 101 (for bicyclists)		Emergency Response
Accessible Pedestrian Signals		Defensive Cycling Course		AIMHigh Team
Sidewalk Construction		Austin Bright Cyclist Grant		
Pedestrian Focus City		Bicycle Map (safety info)		
Bicycle Facilities		Response to Citizen Requests for Traffic Control Devices		
311 Customer Service Requests				
Local Area Traffic Management				
Transportation Criteria Manual Revisions				

- Signal Backplates with Retroreflective Borders:

15% crash reduction at urban, signalized intersections

Signal backplates are added to a traffic signal to improve the visibility of the illuminated face by introducing a contrasting background. Visibility is further improved by framing the backplate with a retroreflective border. Together, this is intended to reduce unintentional red-light running crashes. ATD is in the early stages of developing a program to implement this treatment.

- Enhanced Delineation and Enhanced Friction for Roadway Curves:

Enhancing Horizontal Curve Delineation: 13-43% reduction in injury and fatal crashes

Enhancing Friction in Horizontal Curves: 43% reduction in injury and fatal crashes

ATD delineates horizontal curves with advance curve warning signs, chevrons (signs), edge lines, etc. as conditions warrant. PWD's annual roadway maintenance efforts include resurfacing projects which increase the friction of the roadway's surface.

- Medians and Pedestrian Crossing Islands:

39-46% reduction in pedestrian crashes

The City installed pedestrian crossing islands on 34th St. between Shoal Creek Blvd. and Medical Parkway and on St. Elmo Rd. between S. 1st St. and Congress Ave.

- Pedestrian Hybrid Beacons (PHBs):

Up to 69% reduction in pedestrian crashes

PHBs are installed to facilitate pedestrian crossings in a marked crosswalk at an unsignalized location. PHB's allow a pedestrian to receive a walk indication to begin crossing the roadway while traffic on the roadway receives a red signal. PHB's minimize disruption to traffic on the roadway when pedestrians are not present, yet provide improved safety for pedestrians when crossing. ATD has installed 32 PHBs throughout Austin to date.

- Road Diets:

29% reduction in all roadway crashes

A road diet involves reducing the number of lanes where appropriate to better facilitate left turns, reduce pedestrian crossing distances and provide a pedestrian refuge in the center of the roadway as well as space for bike lanes. When modified from four travel lanes to two travel lanes with a two-way left-turn lane,

roadways have experienced a 29 percent reduction in all roadway crashes. The City has implemented road diets on Cameron Rd. from US 290 to 51st St., Steck Ave. between Shoal Creek Blvd. and Burnet Rd. and Exposition Blvd. between Lake Austin Blvd. and 35th St.

- Annual Service Plan for Pavement Preventative Maintenance – PWD Annual Service Plan focuses on improving street pavements in poor condition, which could potentially have potholes or other driving obstructions. Approximately 10% (780 lane-miles) of the inventory receives maintenance each year to preserve and improve street conditions and extend the pavement lifecycle of streets. In FY13, PWD will address 11.9% (894 lane-miles) of the inventory.
- School Safety – This program focuses on coordination between ATD and PWD's Child Safety Program Division for safe flow of school children and motorists in the vicinity of schools. A crossing guard supervisor evaluates the school zones, crosswalks, missing signage and other safety features before school starts each year and continually throughout the year. ATD and PWD Child Safety Program staffs meet with a school's Campus Advisory Committee (CAC) when changes are observed or changes are requested by the CAC. The crossing guard supervisor reports to 3-1-1 any malfunctions of school zones, overgrowth issues and missing signage throughout the year.
- Accessible Pedestrian Signals (APS) – An APS is an integrated device that communicates information about the WALK and DON'T WALK intervals at signalized intersections in non-visual formats (i.e., audible tones and vibro-tactile surfaces) to pedestrians who are blind or have low vision. ATD has currently installed 42 APSs in Austin.
- Sidewalk Construction – Annually, PWD constructs new or improves sidewalks using CIP bond funding. In the last three years, 147,000 linear feet (~28 miles) have been constructed. The primary objectives of the sidewalk construction program addresses accessibility to public facilities, obstructions, slopes, and the absence of curb ramps, while maintaining compliance with the requirements of the American with Disabilities Act (ADA).
- Pedestrian Focus City – Austin is a Federal Highway Administration (FHWA) Pedestrian Focus City, one of five cities in Texas. Texas is one of fifteen Pedestrian Focus states in the country. The program is a partnership between the FHWA and the University of North Carolina's (UNC) Highway Safety Research Center. Focus cities and states are eligible for free technical assistance and training on pedestrian safety, including the development of a Pedestrian Safety Action Plan tailored to their community. ATD, along with the Pedestrian Emphasis Team that emerged from the 2012 Safety Summit,

will develop a Pedestrian Safety Action Plan for Austin. FHWA/UNC will host a 3-day workshop in Austin in early summer to develop a draft plan. The specific date is to be determined.

- Bicycle Facilities – Annually, PWD implements approximately 30-40 miles of new and improved bike lanes both through Capital Improvement Projects and in coordination with routine street maintenance. There are currently over 1,200 miles of bicycle facilities installed throughout the City. Austin’s designation as a Silver-level Bicycle Friendly Community reflects the Program’s commitment to providing safe, efficient, and accessible bicycle facilities for all residents and visitors.
- 311 Customer Service Requests – ATD responds to Customer Service Requests (CSRs) to evaluate concerns from citizens regarding safety on roadways or at intersections. For the traffic safety related requests, an engineering investigation is performed which includes a field visit, review of crash history and recommendations to address the issues raised. Remedial work may include installing or replacing warning or regulatory signs; new or refreshed road markings; installing a new traffic signal and pedestrian hybrid beacon; or re-timing signals. ATD actively promotes the use of the 311 system, effectively deputizing our constituents to be the department’s “boots on the ground” for identifying safety and mobility issues within the transportation system. In 2012, almost 16,000 CSR’s, primarily generated through the 311 system, were completed by ATD with more than 2,000 specifically categorized as a traffic safety request and many others with safety as a primary concern.
- Local Area Traffic Management (LATM) – ATD’s LATM program mitigates adverse levels of speeding on residential streets by installing traffic calming devices like speed humps, speed tables, speed cushions, roundabouts, median islands, chicanes and bulb outs. Approximately 12 to 20 requests are funded annually depending on cost. The annual budget is roughly \$2.5 million and is funded through capital improvement bond funds.
- Transportation Criteria Manual (TCM) – The TCM is being revised to make it more people centric and to address the transportation needs of all modes of transportation. Revisions to the TCM will emphasize a Complete Streets and Context Sensitive approach to roadway design. These design criteria will provide for pedestrian and bicycle safety, as well as motor vehicles and include reducing roadway widths and incorporating traffic calming features, which encourage lower vehicle speeds. The initial revision to Section 1 is expected to be completed by November 2013, with the revision to the entire Transportation Criteria Manual anticipated by spring of 2015.

Enforcement

- Increase Law Enforcement – APD increases law enforcement in high-crash locations.
- No Refusal Initiatives – APD plans “No Refusal” Initiatives throughout the year based on historically high drinking and driving periods (e.g., New Years, Super Bowl, Independence Day). For 2012, there were 20 “No Refusal” nights, centered on eight events. APD plans the same amount of “No Refusal” initiative nights in 2013.
- Increased Highway Enforcement – The Motorcycle Unit (Motors) will maintain focus on traffic management, but will increase focus on traffic enforcement.
 - Motors shifts were expanded to 7 days a week in January 2013 and now include one shift on the weekend. Their focus is traffic enforcement at hot spot crash locations and on high-speed roadways.
 - The Highway Enforcement Division (HEC) will continue to utilize Motor Carrier Safety Assistance Program Grant funds to address aggressive driving on high-speed roadways. Since October 2012, HEC has utilized this grant through the Ticketing Aggressive Cars and Trucks Program to respond to trends in fatal crashes by providing night time patrols on weekends, when fatalities are typically higher.
 - HEC will add a night time highway enforcement shift in June 2013 as a result of the initial reductions seen in types of fatalities, specifically Auto/Pedestrian.
 - Night shift will focus on rigorous enforcement of those violations causing fatal crashes to increase.
- Red Light Cameras – Red Light Cameras are an automated photographic enforcement system for vehicles that proceed into an intersection when the traffic signal is red. Running a red light often results in the most serious of collisions as the offending vehicle impacts the other vehicles driver or passenger side at high speed. It is an effective traffic safety tool as the red light camera allows for citations to be issued for the offense using less manpower than having a police officer active at the intersection. The presence of red light camera’s also acts as a deterrent to running a red light as the system operate continuously. Red Light Cameras are considered for intersections where there has been a history of red-light running and where the camera system can be demonstrated to be effective in reducing the incidence of red-light running, after all other engineering options have been considered. Austin has 10 red light camera installations at seven

intersections, mostly located at frontage road intersections along I-35 and Loop 1 (MoPac). Since the inception of the program on May 23, 2008, there have been 48,423 approved violations.

- Traffic Enforcement Initiative – In response to the increasing number of fatalities on neighborhood roads, APD Regional Patrol units are implementing traffic enforcement initiatives by focusing on crash hotspots. In addition, ATD Engineering coordinates with APD District Representatives for enforcement of the traffic laws and regulations. If necessary, ATD also collects traffic speed and volume data on the roads to document adverse levels of speeding and then coordinates with APD to target enforcement during these times.

Education

- Safe Routes to Schools – This ongoing program is managed by PWD, and it encourages walking and bicycling to school by teaching children, parents and educators safe walking behaviors and providing safety tips. PWD Child Safety Program staff educate and encourage 51,000 students at 97 schools each year on safe street crossing procedures, bike rules of the road, how to enter and exit a bus safely, rail and railroad safety and stranger-danger issues. PWD Child Safety Program staff also attend many community safety fairs each year and conduct “Bike on Wednesday Walk on Wednesday” at 12 to 13 schools each year. Staff also train Walking School Bus Monitors and Bike Train Monitors (who are usually champions from the school community) upon request and provide the monitors with the necessary safety equipment.
- The Child Safety Program – As a part of the ongoing Community Service Program, PWD’s Child Safety Program trains over 47,000 children annually on pedestrian safety and bike safety at all elementary schools in the City of Austin. Program staff also attend and train at community safety fairs as well as conducts bike rodeos throughout the year. The students take a test after each lesson, and there is a 100% passing rate.
- Car Seat Checks – Austin-Travis County EMS performs checks monthly at various locations around Austin and Travis County. The City of Austin Child Passenger Safety program has 20 certified techs who participate in 2-3 seat check events every month. Parents have the opportunity to bring their car seat in to be inspected and ensure it is the correct type of seat and installed properly in the vehicle (www.austintexas.gov/department/child-safety).
- Safe Bicycling and Walking Campaign – This campaign implements portions of the City of Austin Bicycle Master Plan (Ordinance Number 20090611-075). Specifically, this project builds sidewalks to Maplewood and Summit Elementary Schools and Lamar Middle School and creates a safe bicycling

and walking campaign targeting middle and high school students as well as the general public. The sidewalk construction and campaign are both expected to be completed prior to the 2014 school year.

- Traffic Skills 101 (for Bicyclists) – Bicycle Program staff in PWD provide this course to groups and individuals.
- The Defensive Cycling Course – APD and Austin Cycling Association offer this course twice a month. It is also a deferment program that allows cyclists who have received a ticket a way to receive deferred adjudication.
- The Austin Bright Cyclist Grant – In May 2012, PWD and APD were awarded a Texas Traffic Safety Grant that provided almost \$10,000 in bicycle light sets. The majority of those lights (900) were provided to APD to distribute at routine traffic stops when needed. The remaining 400 lights were distributed at events around town.
- The Austin Bicycle Map – In addition to bike routes, the map also provides safety information for cyclists.
- Response to Citizen Requests for Traffic Control Devices – In responding to Customer Service Requests, ATD Engineering staff take the opportunity when contacting citizens to explain the need, purpose and justification of the traffic control devices when addressing traffic safety. Additionally, ATD Engineering staff attends neighborhood association; and school PTA and Campus Advisory Council meetings to talk about traffic safety and stress the importance of obeying traffic signs and regulations.

Encouragement

- Safe Walk & Safe Bicycle Campaign – PWD has received a federal Transportation Enhancement Grant administered through the Texas Department of Transportation to develop and implement of a campaign focused on safe walking and bicycling. The campaign will focus on safe behaviors amongst roadway user groups, and will have a specific multi-media component targeted at middle and high-school aged students. The purpose is to increase the safety of the bicycle and pedestrian networks by promoting positive behaviors. A secondary goal of the campaign is to encourage new users of the bicycle and pedestrian networks in Austin.
- Safety Messages on Dynamic Message Signs – ATD displays transportation safety messages on the City's dynamic message signs to encourage travelers to change behaviors (e.g., YOU TALK YOU TEXT YOU CRASH, DRIVE NOW TALK OR TEXT LATER).

Evaluation

- E Crash Software – E Crash is an electronic crash reporting system being built for APD by Brazos Technology. It enables APD Officers to enter the Texas CR3 crash reports directly into a handheld computer at the scene or through a web interface using the computer in the car or the sub-station. It streamlines the process and has built-in quality control measures. E Crash also allows the electronic submission of CR3 reports directly to TxDOT, thereby further reducing processing and transcription time. The system will undergo testing in April 2013, and upon completion of officer training, the system will be fully implemented during the summer of 2013.
- CAMPO Safety Study – ATD is partnering with CAMPO on a safety study led by CAMPO. The study will develop a state-of-the-practice crash analysis tool to identify locations over represented by particular crash types using the methodologies of the Highway Safety Manual, published by the American Association of State Highway and Transportation Officials. ATD and other City departments are playing a key role in coordinating our municipal efforts with this regional study as it evolves (see Transportation Safety Summit below). The project is expected to be completed in late 2013.
- Transportation Safety Summit – The 2012 Transportation Safety Summit (refer to the Appendix for the Summary Report) commenced a regional discussion of safety concerns relating to all modes of transportation with stakeholders representing engineering, enforcement, education, environment and evaluation. The 2012 Summit, held at the Palmer Events Center, 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 and generated over 1,000 ideas to promote safety. Interdisciplinary teams will be formed in early 2013 to address safety Emphasis Areas identified during the Summit: Impaired Driving, Distracted Driving, Pedestrian Safety and Insufficient Infrastructure. A second Safety Summit is expected during the fall of 2013. The ongoing CAMPO effort will result in a consolidated Regional Travel Safety Plan.
- Crossroads Coalition – The Crossroads Coalition is a new forum for transportation safety practitioners to share information and best practices. It is developing into a broad alliance of organizations across engineering, enforcement, education, encouragement and evaluation to collaborate on initiatives and coordinate communications.

Emergency Response

- AIMHigh Team – The AIMHigh Team is a group of emergency response and related support providers (e.g., TxDOT, Austin Transportation Department). They have adopted a Traffic Incident Management (TIM) Strategic Plan. TIM is a systematic, planned, and coordinated approach to detect, respond and remove traffic incidents and restore traffic capacity as safely and quickly as possible. Involving law enforcement, fire and rescue, emergency medical services, transportation, towing and recovery, and other personnel – TIM is considered to be one of the most effective tools for reducing delay and enhancing safety.

Recommendations

Addressing transportation safety requires an interdisciplinary approach that embraces strategies within the ever-growing number of E's – Engineering, Enforcement, Education, Encouragement and Evaluation. Transportation safety issues are multi-dimensional and require a coordinated and collaborative approach involving both stakeholders and safety professionals throughout the region. Such an approach also requires leadership – leadership that the City of Austin staff can provide by developing a culture of safety and cooperation between City departments, other local and state agencies as well as community stakeholders and the citizens of Austin. Given this introduction, the preceding crash analyses, discussions among departments preparing the report and the City's existing transportation safety initiatives, the following recommendations emerged:

1. Develop a Consolidated Mobility Safety Plan for the City of Austin, consistent with regional efforts
2. Pursue strategies to reduce impaired traveling in Austin
3. Develop an I-35 Transportation Safety Action Plan
4. Increase access to crash data and crash analysis capabilities of City departments
5. Continue implementing the Existing Transportation Safety Initiatives
6. Prepare an annual transportation safety report to Austin City Council

Recommendation #1: Develop a Consolidated Mobility Safety Plan for the City of Austin, consistent with regional efforts

The City of Austin has several initiatives underway within each department to address transportation safety as shown in the preceding section – Existing Transportation Safety Initiatives. Although these initiatives demonstrate that transportation safety is a top priority within the City, they:

- Lack a framework that ties them together within the context of overarching goals, objectives and performance measures; and
- Compete among other priorities and programs for staff time.

Given these issues and the current transportation safety initiatives within the City, it is recommended that a Consolidated Mobility Safety Plan be developed for the City of Austin. The Plan would define a sustainable and multimodal transportation safety program. It should lead to the creation of a transportation safety culture within the Austin community, firmly rooted in the public's expressed desire regarding behaviors that reduce transportation-related deaths and injuries. It would also coordinate with and leverage other regional

MISSION:

To be the safest city in the country when travelling as a driver, passenger, pedestrian or bicyclist.

A framework is needed that ties together the City's existing and future transportation safety initiatives.

The plan needs to lead to a transportation safety culture that reflects the desires of the Austin community.

transportation safety initiatives. There are several elements that are essential to the plan:

- The plan should be strategic in nature, but actionable so that responsibilities are assigned to appropriate entities. There should be an overall vision of the future, goals to reach that vision and specific, measureable actions that accomplish those goals.
- The plan should lead to the development of a transportation safety culture within the City of Austin that cuts across departments including the courts responsible for adjudicating transportation related infractions. Specific staff (regardless of department) would be assigned to work together to improve transportation safety (e.g., a Transportation Safety Office). The safety needs of the traveler, regardless of the manner in which they travel, are paramount.
- The plan should include a repeatable process that identifies and measures key transportation safety issues in Austin, recommends policy and/or location specific countermeasures and assesses the benefits of implemented countermeasures. For example, this process would: (a) identify issues, such as impaired traveling or distracted driving, that are most appropriately addressed by programs involving education, enforcement and encouragement; (b) identify candidate locations for improvement (engineering, evaluation); and, (c) systematically incorporate safety considerations into new facilities (engineering).
- The plan should identify practical metrics so the plan becomes a living process document that is utilized in decision-making.
- The plan should be developed in a collaborative and cooperative fashion. It should involve City staff, regional partners such as CAMPO, TxDOT, CTRMA, Capital Metro, Counties (Travis, Williamson, Hays), other stakeholders and the citizenry.
- The plan should identify the resources and actions needed to implement the community's vision.

The plan needs to be strategic and actionable.

The safety needs of all travelers are paramount.

The plan needs to be developed in collaboration with regional partners.

Approach: Staff recommends hiring a Consultant and/or University to develop a successful Consolidated Mobility Safety Plan for the City of Austin. Given the transportation safety roles of the Austin Transportation Department (ATD), Austin Police Department (APD) and the Public Works Department (PWD), they should serve as a core team guiding the plan development. ATD is able to take the lead in writing the scope of work in collaboration with APD and PWD.

Funding: The cost to develop this plan is estimated at approximately \$450,000. This funding level also includes efforts as noted in the following

recommendations. ATD will work with affected departments to identify and recommend a funding source and implementation strategy.

Recommendation #2: Pursue strategies to reduce impaired traveling in Austin

Overall, alcohol and drug impairment was a factor in more than half of Austin's transportation fatalities in 2012, and it is a leading factor in transportation fatalities for 2013. Half of the pedestrians killed on Austin's roadways in 2012 (13 of 26) were impaired.

Alcohol and drugs are an equal opportunity killer, killing drivers, pedestrians, motorcyclists and bicyclists.

Approach: Staff recommends developing an Impaired Traveler Crash Reduction Plan as part of the Consolidated Mobility Safety Plan scope (recommendation #1). This comprehensive plan would address impaired traveling from the standpoint of education, enforcement and encouragement. It would also identify resources needed to implement the plan.

Recommendation #3: Develop an I-35 Transportation Safety Action Plan

I-35 is consistently represented in the list of top crash locations within Austin.

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- Eight of the Top 25 crash locations in 2012 were located on I-35.
- Fifteen percent (12 of 78) of the transportation fatalities in 2012 occurred on either the I-35 mainlanes or frontage roads.
- Three (3) pedestrian fatalities occurred while attempting to cross I-35 mainlanes.
- As shown earlier in the analyses performed by Children's Optimal Health, a majority of collisions involving children occur along I-35.

The current I-35 Corridor Development Program that was initially funded by the City of Austin through the 2010 Bond will address transportation safety along I-35.

Approach: Staff recommends continued support of the I-35 Corridor Development Program to address transportation safety along I-35. Staff will share this report with the I-35 Corridor Development Program team. The intent is that the crash analyses and findings in the report be considered in developing improvements along I-35.

Recommendation #4: Increase access to crash data and crash analysis capabilities of City departments

Accessible, timely and accurate crash data is essential for transportation safety practitioners. This data, related analysis tools (software) and trained analytical staff are cornerstones of an effective transportation safety program. They enable practitioners to identify and analyze crash patterns, develop countermeasures and assess how well countermeasures performed after implementation.

Crash data, analysis tools and trained analytical staff are essential for an effective transportation safety program.

APD currently maintains crash data for all reported crashes that occur within the City of Austin. Other City departments, like ATD, rely on APD's austere staff to query and analyze the data. The volume of requests and the level of analysis requested from other departments, as well as within APD, stretch the limited staff APD has available for this function. The result is longer response times and occasionally, the inability to deliver information within the requestor's timeframe.

Approach: Staff recommends including a task within the Consolidated Mobility Safety Plan scope (recommendation #1) to develop a Crash Data Access and Analysis Action Plan. This plan would identify:

- a. opportunities to increase access to crash data across City departments;
- b. enhancements to software and data processing procedures to support crash data analysis needs of all departments;
- c. actions to enhance and monitor data quality; and,
- d. additional staffing needs to perform analyses.

Efforts will be coordinated with the Communications and Technology Management Department to facilitate sharing data and analysis tools across departments. This task would also coordinate with TxDOT and CAMPO. TxDOT maintains a statewide Crash Records Information System (CRIS) for all reported crashes. CAMPO has the Texas A&M Transportation Institute (TTI) under contract to create a safety analysis procedure and tool that will enable CAMPO and regional partners to evaluate observed crashes, facility types, traffic volumes, and road characteristics with an objective of identifying candidate locations where safety enhancements would contribute to an improvement in safety along corridors or at specific high crash locations.

Recommendation #5: Continue implementing the Existing Transportation Safety Initiatives as appropriate

The City of Austin is involved in more than 35 transportation safety initiatives. Staff recommends continuing the implementation of these initiatives (as appropriate).

The City continues to implement several initiatives to address transportation safety.

Recommendation #6: Prepare an annual transportation safety report to Austin City Council

Staff recommends that ATD in collaboration with APD and PWD deliver an annual transportation safety report to Council. A draft report would be submitted to Council in March. It would summarize Austin's crash statistics for the preceding year. The final report would follow in the fall (October/November) and include a more thorough analysis and recommendations. Comprehensive crash data for other Texas cities and the nation is not finalized until later in the year. The deadline for the draft report will allow more timely incorporation of funding needs into the annual budgeting process, while the timing of the final report will enable comparisons to be made between Austin and other locations throughout Texas and the nation to better analyze trending.

Staff will prepare an annual transportation safety report to Council.

NEXT STEPS

Staff will present this report to the Austin City Council Comprehensive Planning & Transportation Committee on May 6, 2013. Comments received during this meeting and from the Council on the Final Report will determine how the recommendations will be implemented. Regardless of the outcome, Austin Transportation Department, Austin Police Department and the Public Works Department will continue to work together and with our regional partners to assure transportation safety in Austin by applying the 6 E's: Engineering, Enforcement, Education, Encouragement, Evaluation and Emergency Response.

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 along with the crash analyses previously provided in the Interim Report. Planning for a 2013 Safety Summit is in progress, led by CAMPO. In addition, CAMPO is charged with developing a Regional Safety Program. The City of Austin is assisting CAMPO in this effort and will coordinate the Consolidated Mobility Safety Plan with that effort.

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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 fatal crashes in Austin (75 fatal crashes 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 impairment 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 impaired (13 of 26 pedestrian fatalities) and where this contributed to the fatality.
- 1 of the 3 bicyclists killed in Austin was impaired.
- 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).
- 23% – 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, note: it is unknown whether a helmet would have prevented the fatality).
- 33% – the percentage of all traffic fatalities 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 + incapacitating injuries.
- Saturday and Sunday – days of the week that experienced the highest frequency of fatal crashes.
- Parmer Ln. at Lamar Blvd. – highest crash intersection in Austin during 2012 (34 crashes out of 15,011 crashes across Austin).

CRASH TRENDS

Fatalities

In 2012, Austin experienced 78 transportation fatalities, which is an increase of 42% from 2011 (Exhibit 2). As shown in Exhibit 3, this increase follows a multi-year plateau in traffic fatalities across Austin. The 78 transportation fatalities in 2012 is 25% above the average annual fatality rate of 62.3 experienced between 2004 and 2012.

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

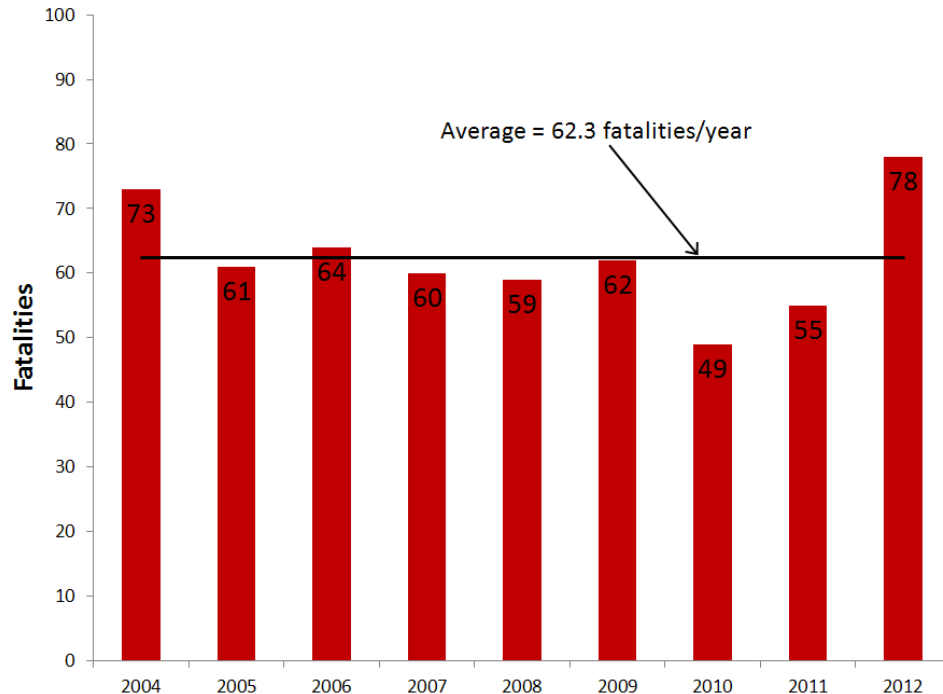
Exhibit 2. Traffic Fatalities

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 3. Annual Traffic Fatalities in Austin

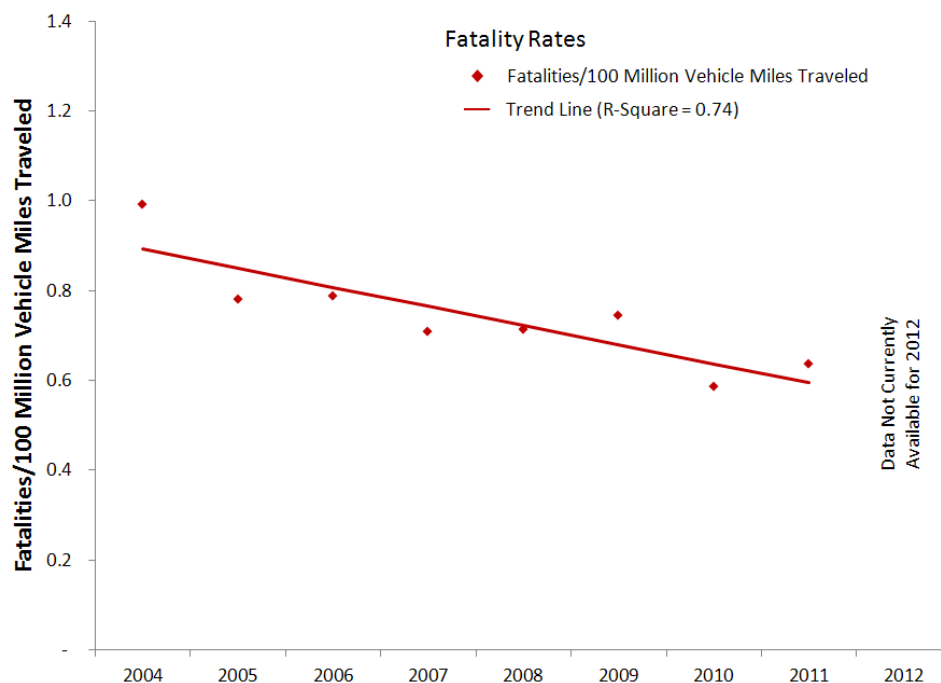


Source: APD crash data

Crash numbers, however, do not tell the entire story. The more time someone spends traveling, the greater their exposure is to being in a crash. 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), also known as an “exposure” factor. When considering “exposure” factor, fatality rates trended down for several years in Austin as illustrated by the trend line in Exhibit 4. An estimate of Austin’s 2012 VMT is not currently available.

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

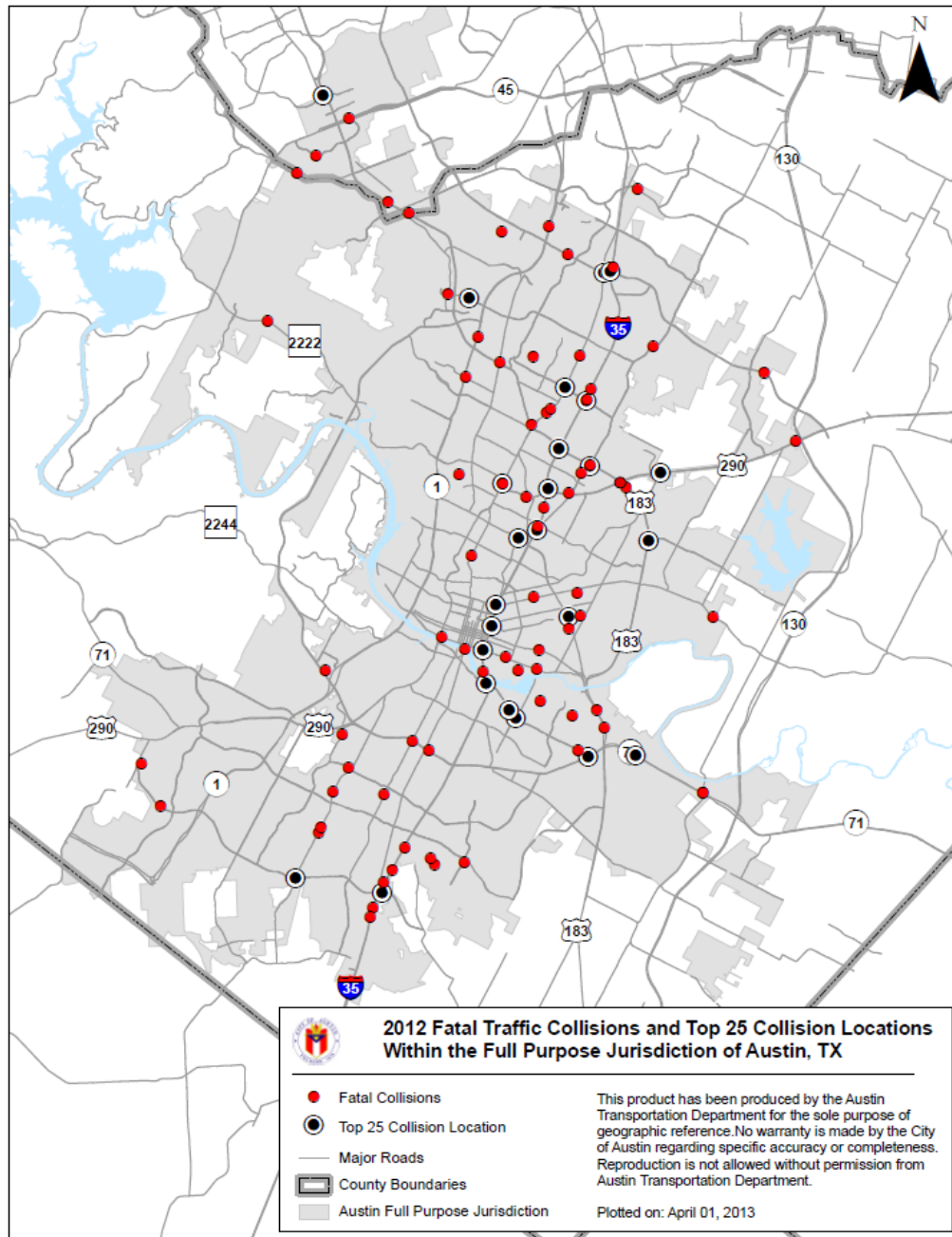
Exhibit 4. Annual Traffic Fatality Rates in Austin



Source: APD crash data, 2012 Texas Transportation Institute Urban Mobility Report estimated vehicle miles traveled for 2011 in Austin

Exhibit 5 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).

Exhibit 5. 2012 Fatality and Top 25 Crash Locations

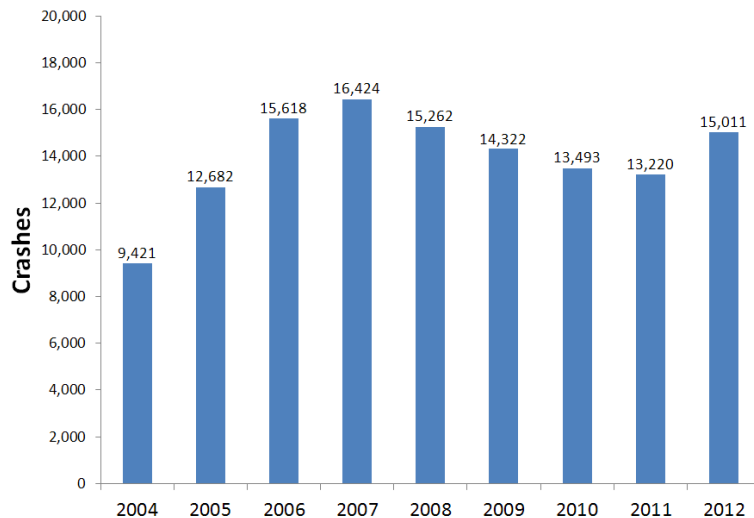


Source: APD crash data (Note: 75 red dots are shown instead of 78 since 3 fatal crashes were double fatalities. A red dot with a concentric black circle indicates a fatality occurred at or near one of the Top 25 crash locations.)

All Crashes

In 2012, 15,011 traffic crashes were reported in Austin (Exhibit 6). This reflects an increase of 14% from 2011.

Exhibit 6. Total Crashes by Year

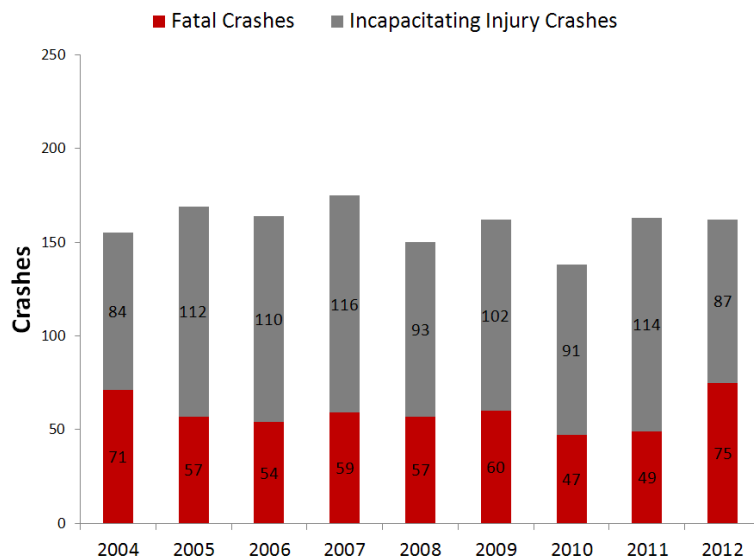


Total crashes increased by 14% in 2012.

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 (Exhibit 7). The proportion of all traffic crashes that resulted in a fatal crash has remained relatively small, ranging between 0.3% and 0.8% 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 7. Fatal and Incapacitating Crashes by Year

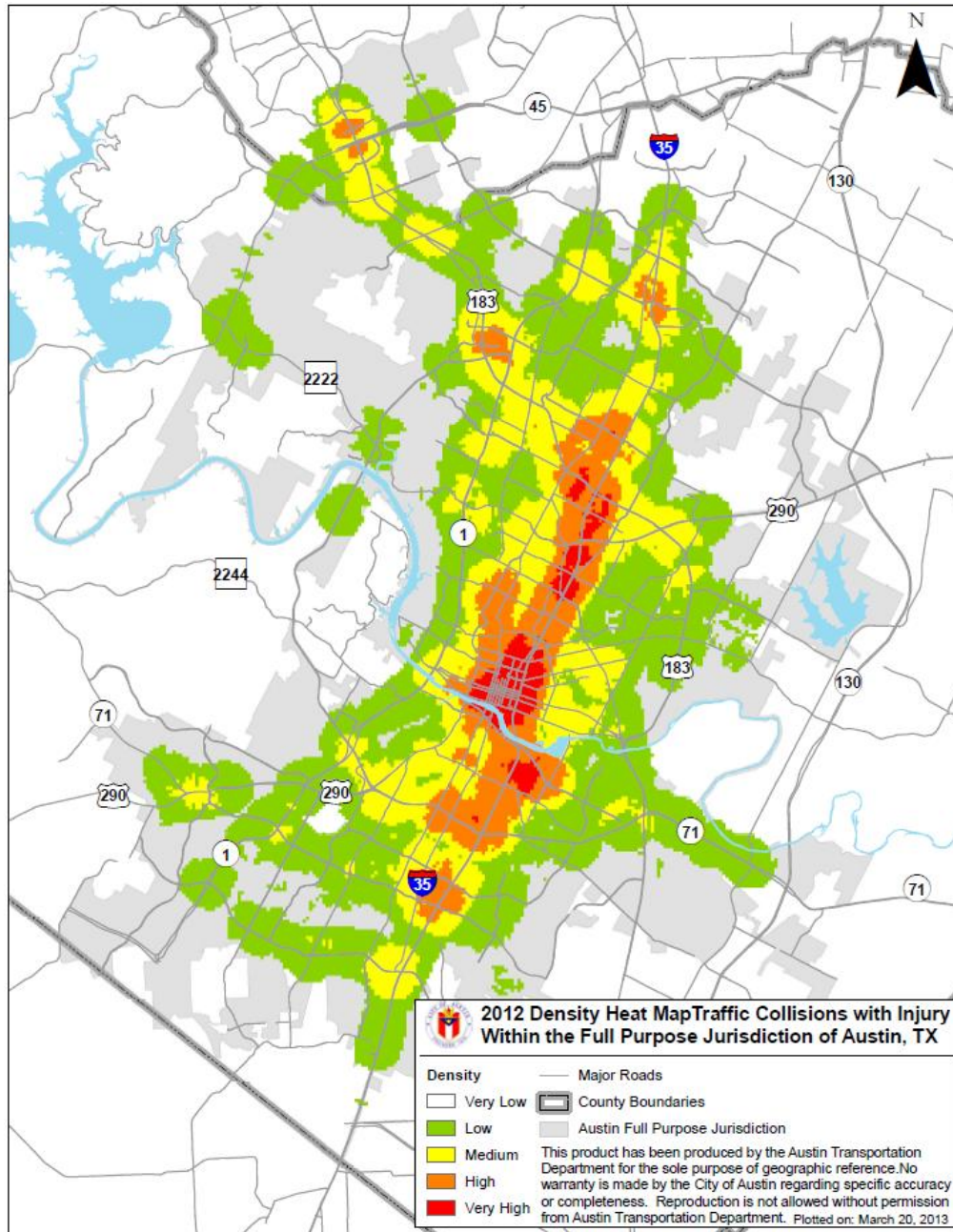


There was a fatality in 1 of every 200 crashes in Austin during 2012.

Source: APD crash data

The map shown in Exhibit 8 illustrates crash densities for injury and fatal crashes. Red and orange areas identify higher crash density locations, which were located along the I-35 corridor, in downtown and along the US 183 corridor.

Exhibit 8. 2012 Crash Density Map



The density of injury and fatal crashes was highest:

- Along I-35
- Within downtown
- Along US 183

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 (Exhibit 9). This finding may indicate that the reasons for the dramatic increase in traffic fatalities during 2012 were not completely unique to Austin.

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

Exhibit 9. Traffic Fatalities by Geographic Regions

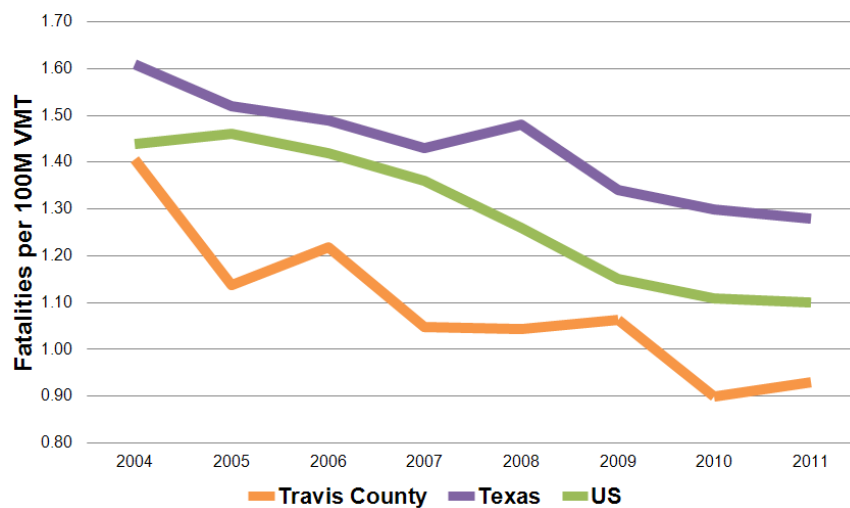
Location	% Change in Traffic Fatalities ¹	
	2004 to 2011	2011 to 2012
City of Austin ¹	-25%	+42%
Texas ²	-19%	+11% ³
U.S.	-24% ⁴	+7% ⁵

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.

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

These trends were also similar when comparing annual fatality rates across geographies (Exhibit 10). 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 10. 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 (Exhibit 11). It is possible that given growth in the City of Austin, the total number of lane miles driven has increased at a rate equal to the increase in fatalities

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

Exhibit 11. Traffic Fatality Comparisons Across Urban Areas in Texas

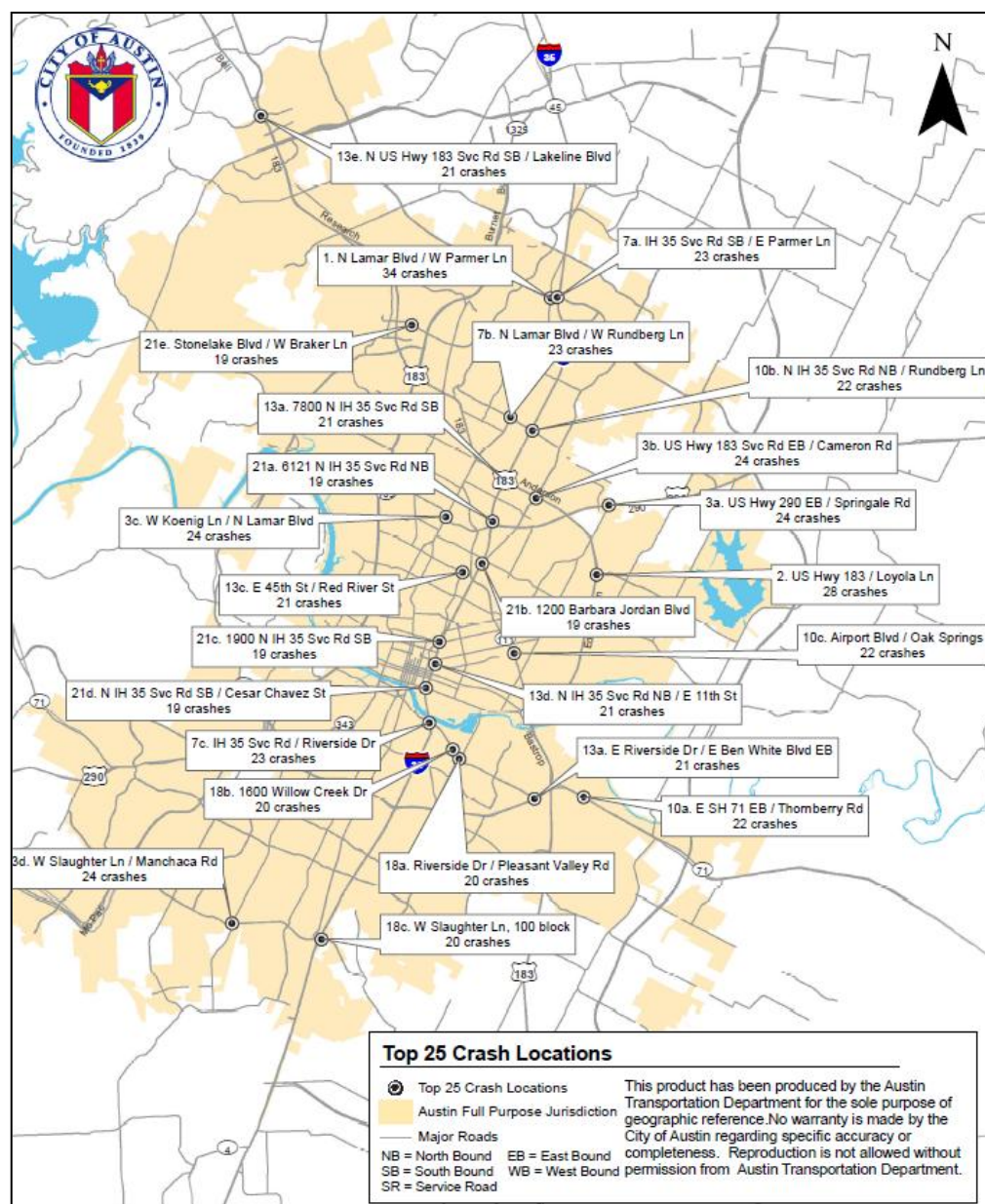
Cities in Texas	Traffic Fatalities		
	2011 ¹	2012 ²	% Change
Austin ³	55	78	+42%
San Antonio	111	137	+23%
Ft. Worth	65	72	+11%
Dallas	110	111	+1%
Texas	3,015	3,350 ⁴	+11%
U.S. ⁵	23,884	25,580	+7%

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 12 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 crash. Additionally, higher speeds tend to lead to more reported crashes as the damage resulting from a crash typically is more severe and thus reported through APD. Minor crashes are often underreported and therefore masked within the data.

Exhibit 12. 2012 Top 25 Crash Locations



Austin's top crash locations are typically 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 13. Locations with the same number of crashes during the year receive the same rank. Exhibits 14 through 17 identify the Top 10 high crash locations for the years 2008 through 2011.

Exhibit 13. 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 th St. / Red River St.	21
	I-35 Service Rd. (NB) / 11 th 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 14. 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 15. 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
6	US 183 Service Rd. (SB) / Lakeline Blvd.	18
7	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 16. 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

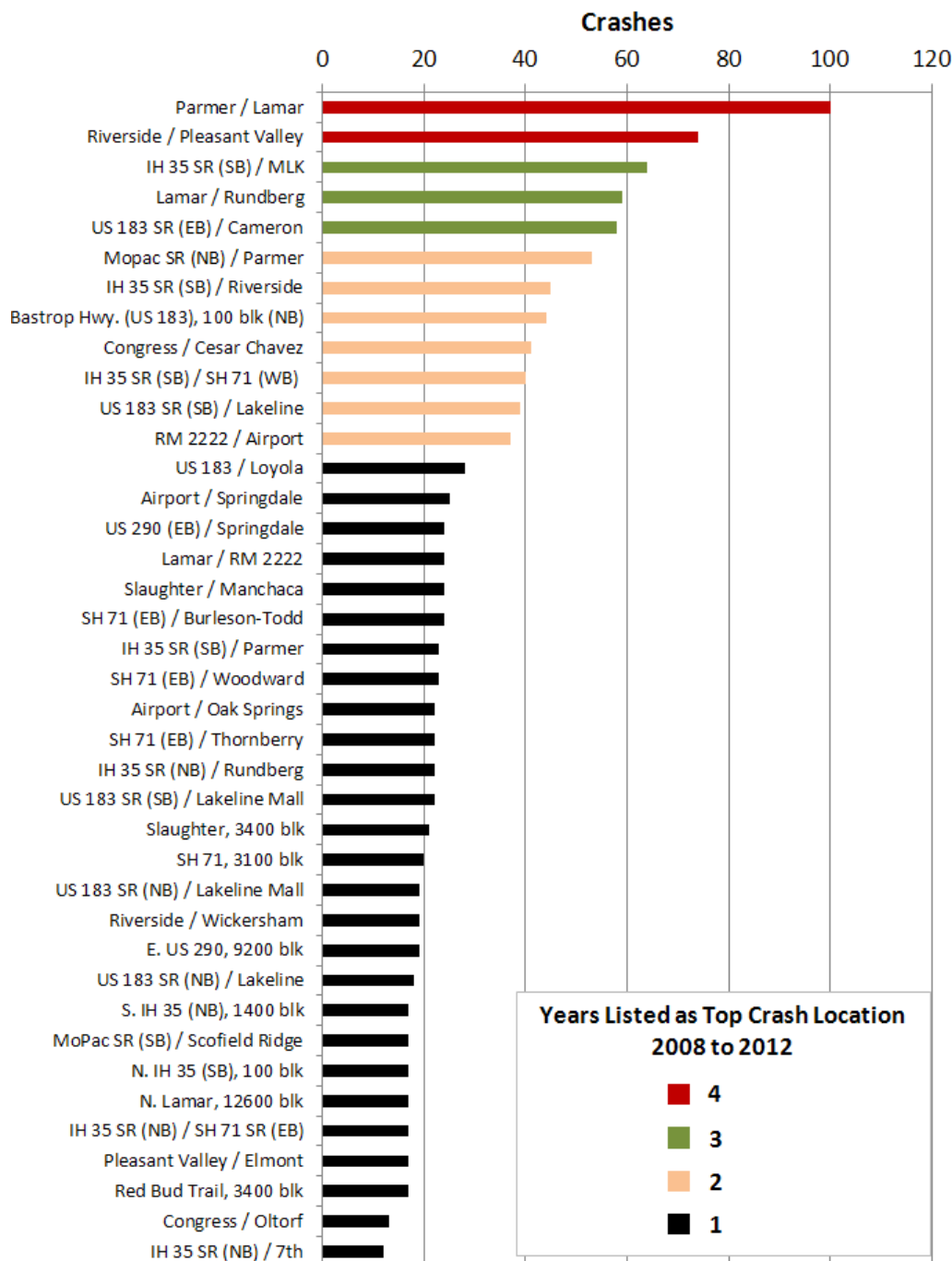
Exhibit 17. Top 10 Crash Locations in Austin, 2008

Rank	2008	Crashes
1	SH 71 (EB) / Burleson 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

The chart below (Exhibit 18) illustrates the cumulative crash frequency for the years that the location was listed as a Top 10 crash location from 2008 to 2012.

Exhibit 18. Crash Frequency at Top Crash Locations from 2008 to 2012



Source: APD crash data

Exhibit 19 depicts Austin's highest crash frequency intersection during four of the last five years – Parmer Lane (FM 734) at Lamar Boulevard (Loop 275). It was also the highest crash intersection in 2012 with 34 crashes. This intersection is located in north Austin and situated 900 feet west (right of image) from I-35.

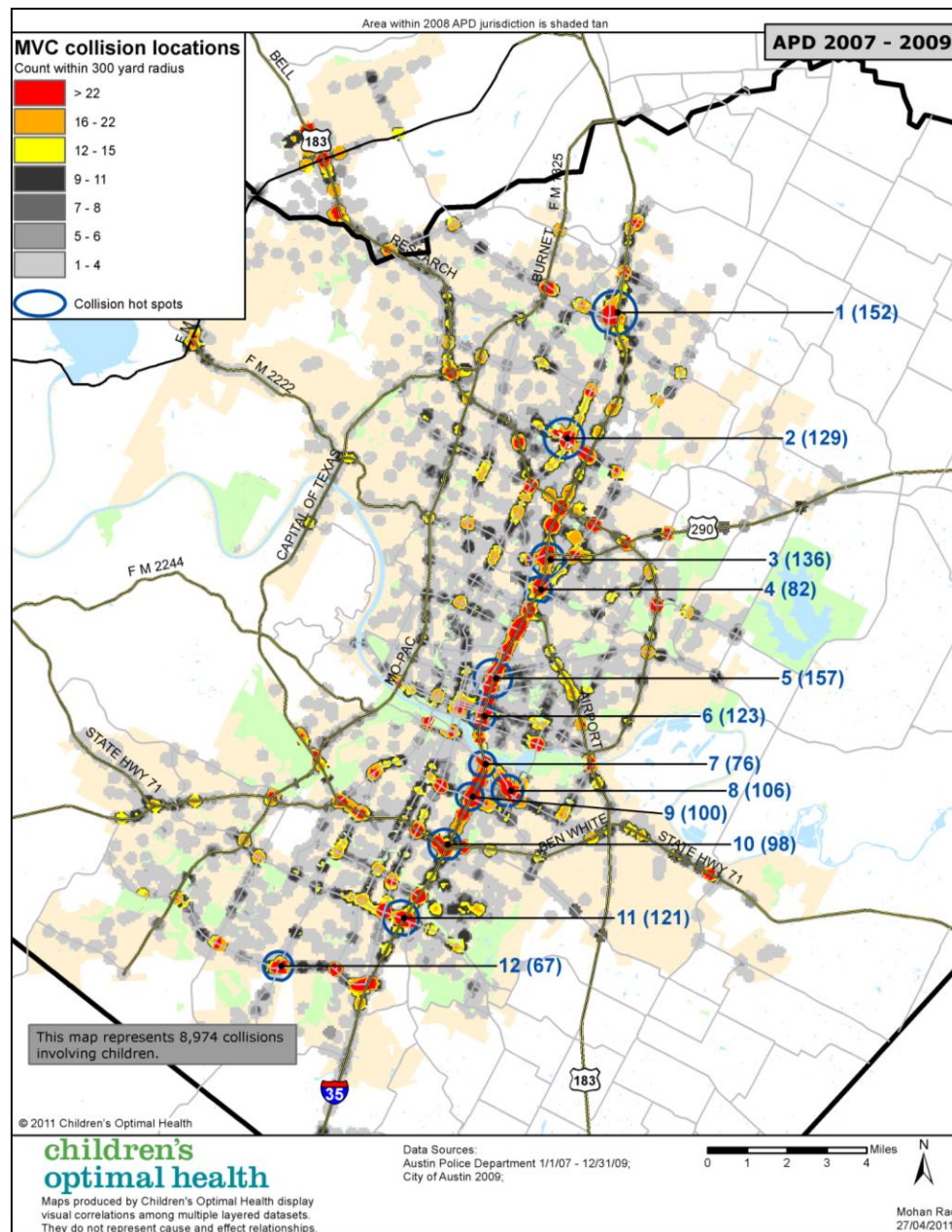
**Exhibit 19. Austin's Highest Crash Intersection in 2012:
Parmer Ln. at Lamar Blvd. (34 crashes)**



A detailed analysis of the crash history at Parmer Lane and Lamar Boulevard is provided in the section titled Analysis of High Crash Locations along with a crash summary for the other top 11 crash locations listed in Exhibit 18.

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 (Exhibit 20) 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



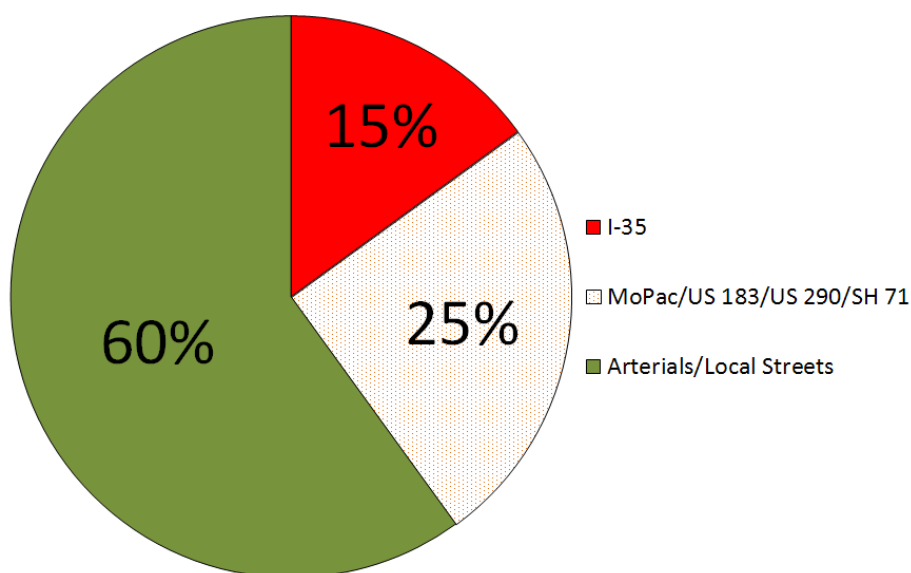
I-35 is a corridor with a high crash frequency involving children.

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

Fatalities by Roadway Type

Arterials and local streets are where 60% of all transportation fatalities occurred in 2012, while 40% of the fatalities occurred on higher speed freeways and highways – I-35, MoPac, US 183, US 290 and SH 71 (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 (data for the year 2011) 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.

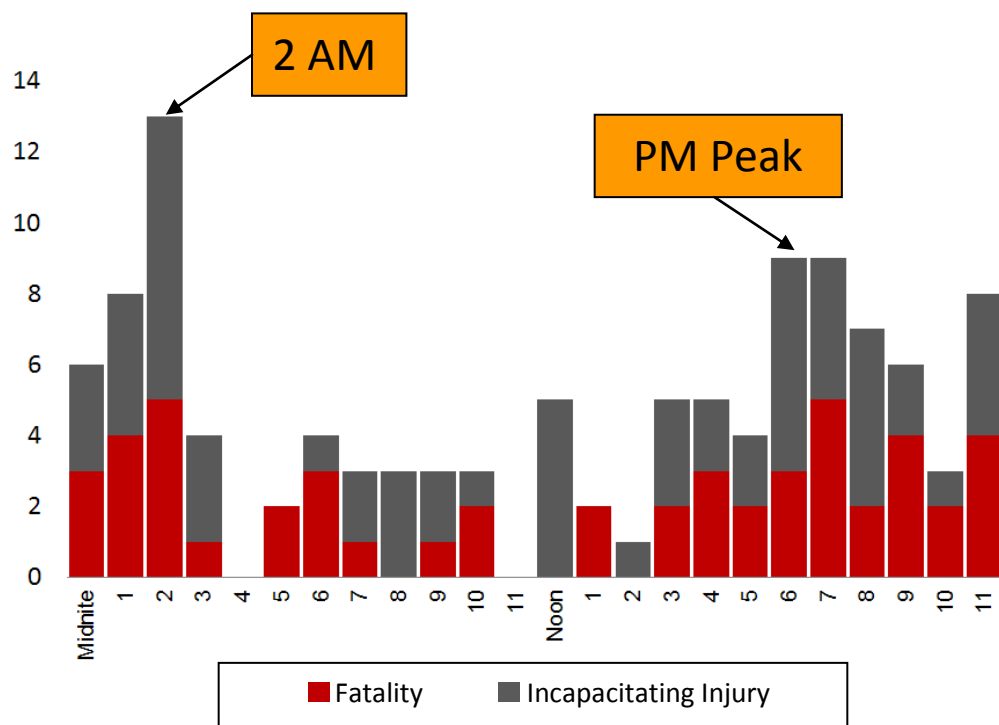
Source: APD crash data

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. (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



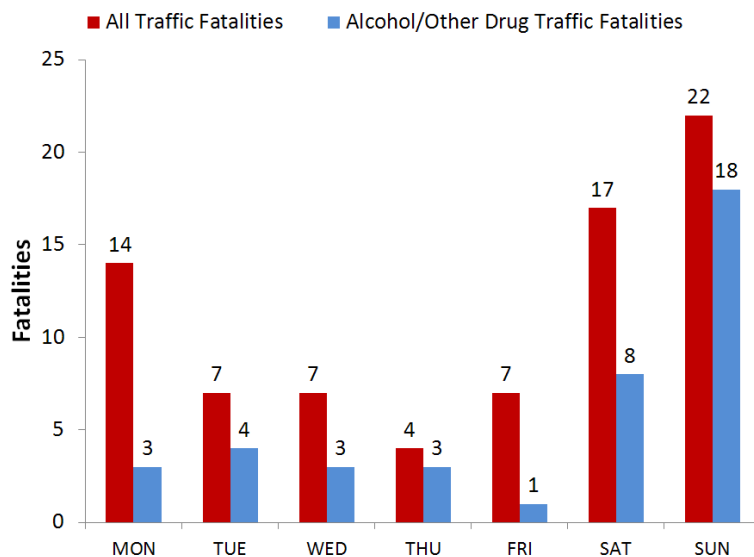
Crash severity begins to increase during the PM-peak drive time and continues through the early morning hours of the following day.

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

Day of Week

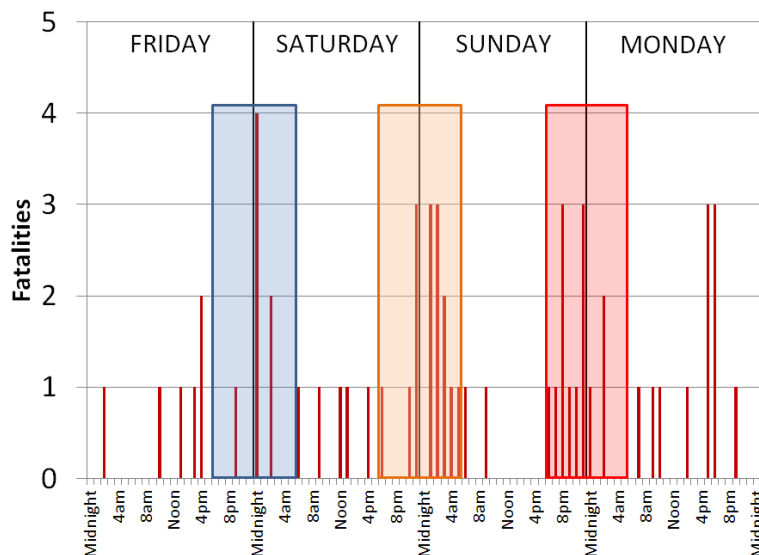
Traffic fatalities typically peaked on weekends as shown in Exhibit 23. This was also when fatalities involving alcohol and drugs were seen to be the greatest. A closer look revealed that these weekend fatalities occurred primarily at nighttime (evening and early morning hours) as indicated by the shaded 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 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.

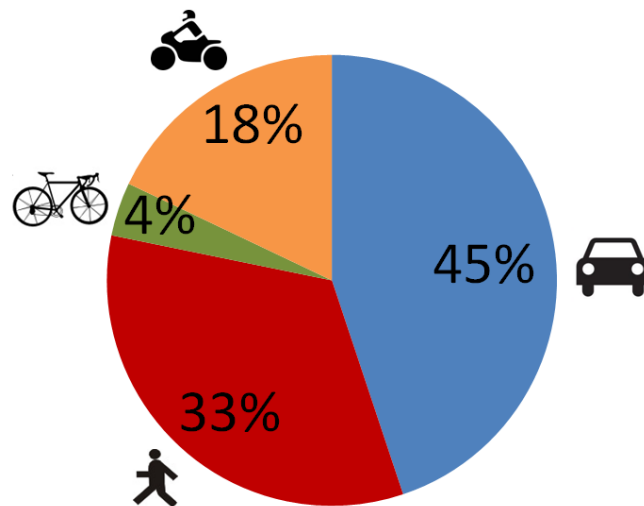
Sunday experienced the greatest number of fatalities which are likely attributable to Saturday night and end-of-the-weekend activities.

Transportation System Users

The distribution of fatalities by transportation system users is illustrated in Exhibit 25. Pedestrians, bicyclists, motorcyclists and motor vehicle occupants all experienced more fatalities in 2012 than in 2011 (Exhibit 26). The spatial distribution of fatalities by transportation mode is shown in Exhibit 27. Individual maps illustrating all crash locations for pedestrians, motorcyclists and bicyclists are provided in the Crash Maps for Pedestrians, Motorcyclists and Bicyclists section of the Appendix.

Exhibit 25. Fatalities by Transportation System User in 2012

1 out of every 3 fatalities was a pedestrian in 2012.



Source: APD crash data

Exhibit 26. Transportation System User Fatalities, 2011 to 2012

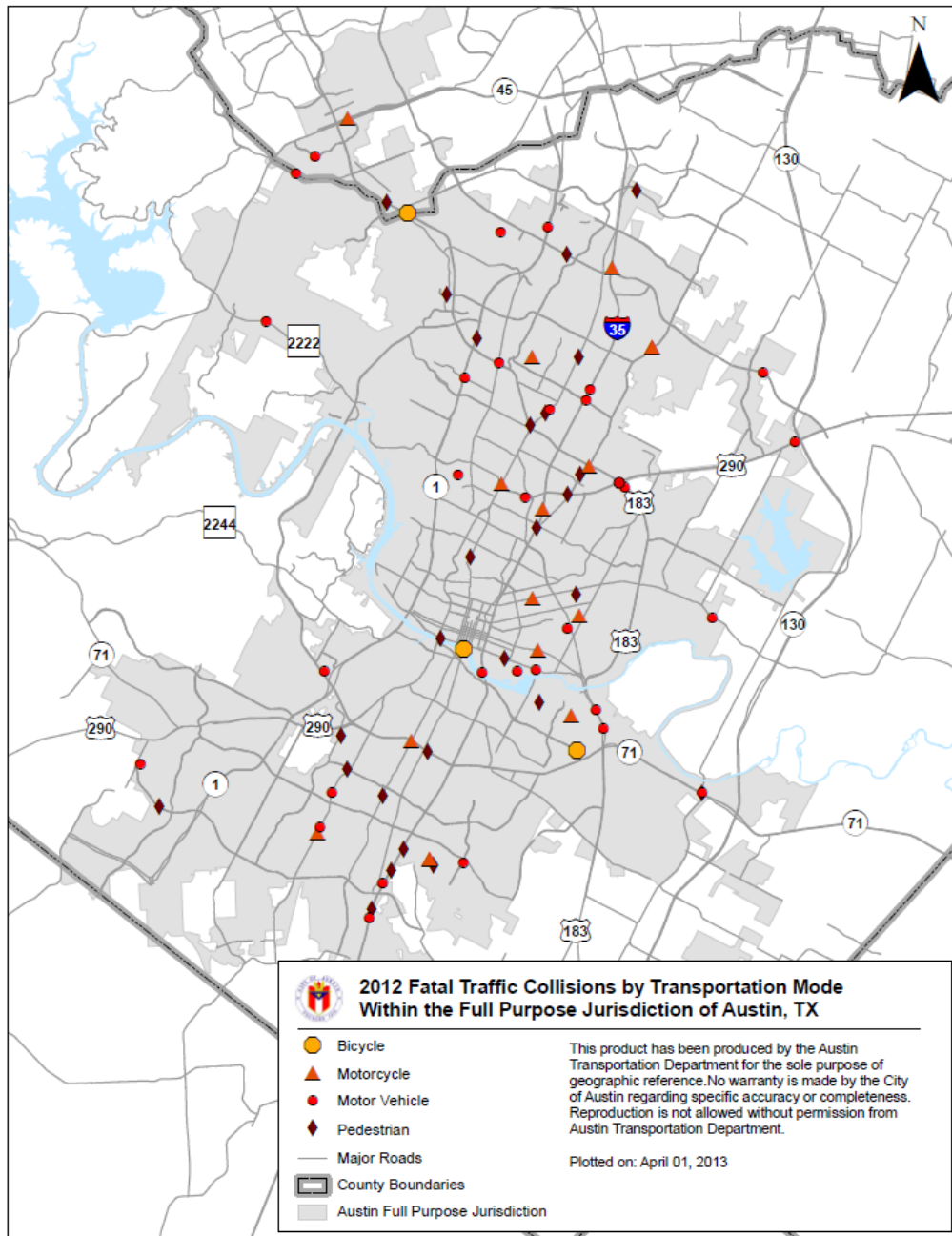
Fatalities increased across all transportation modes in 2012.

Austin Transportation System Users	Fatalities		
	2011	2012	% Change 2011 - 2012
Motor Vehicle Occupants	23	35	+52%
Pedestrians	22	26	+18%
Motorcyclists	9	14	+56%
Bicyclists	1	3	+200%
Total	55	78	+42%

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.

Exhibit 27. Spatial Distribution of Transportation Fatalities by Mode



USER BEHAVIOR CONTRIBUTING FACTORS

An important element in reducing crashes is the individual and the choices they make. Later in this section, you will read that alcohol and other drugs contributed to 51% of all traffic fatalities in Austin during 2012; speeding contributed to 32%; not wearing a seatbelt 18%; and, pedestrians attempting to cross freeway mainlanes represented 23% of all pedestrian fatalities.

Impaired Traveling

The number of transportation fatalities in Austin involving an impaired driver (alcohol or other drugs) increased 93% from 2011 to 2012 (Exhibit 28). 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 transportation deaths in Austin during 2012 (Exhibit 29). When we looked closer at who was impaired (Exhibit 30), we found 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 28. Impaired Drivers

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

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

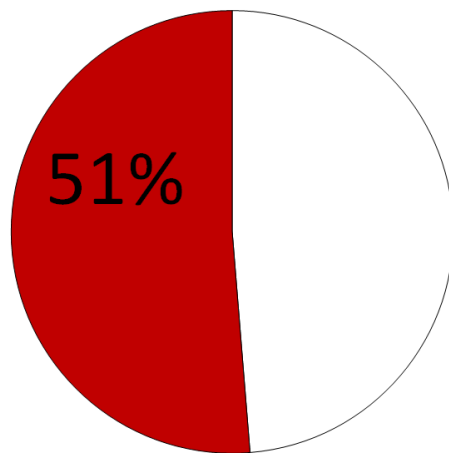
Impaired = alcohol or other drugs

Source: APD crash data

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

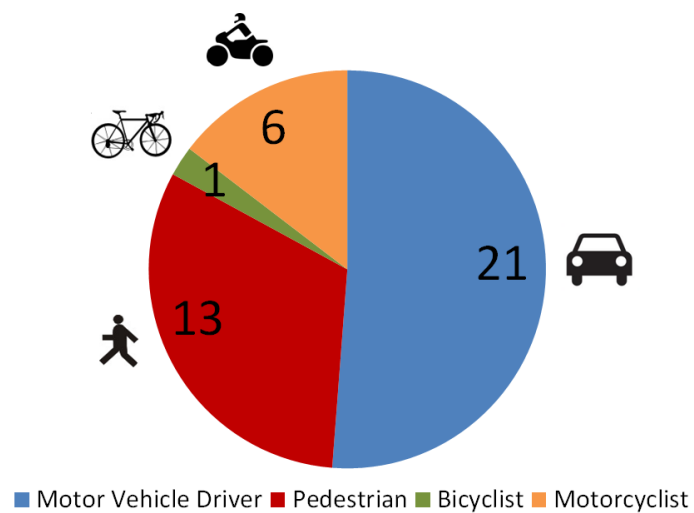
1 of the 3 bicyclists killed in 2012 was impaired.

Exhibit 29. Alcohol and Other Drugs Were a Contributing Factor in 51% of All 2012 Fatalities



Source: APD crash data

Exhibit 30. Who Was Impaired in the Fatality



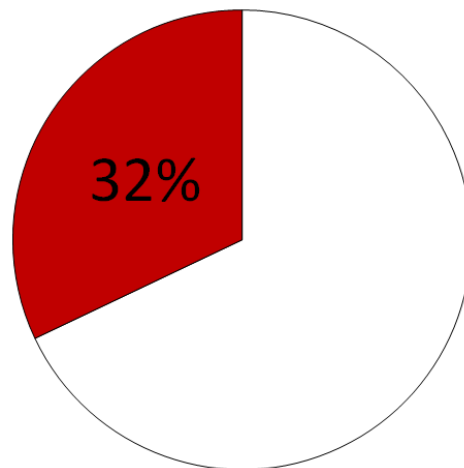
Source: APD crash data (Note: A bike fatality involved both an impaired motor vehicle driver and bicyclist.)

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 (Exhibit 31). As shown in Exhibit 32, the percentage varies by year, but on average over the past three years, speed was a contributing factor in 1 out of 3 fatalities. 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 31. Speeding as a Contributing Factor in 2012 Fatalities



Source: APD crash data

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.

Exhibit 32. Trend in Fatalities Attributed to Speed

	Transportation Fatalities			
	2010	2011	2012	2010 – 2012 Total
Speed as Contributing Factor	25	15	25	65
Total Transportation Fatalities	49	55	78	182
Speed as % of Total	51%	27%	32%	36%

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

Distracted driving is a challenging factor to assess given the lack of physical evidence after a crash. As such, any reference to distracted driving in a crash report is based on an officer's assessment of the crash.

Distracted driving crash statistics are currently unavailable for 2012 given the lack of APD resources available to review crash reports and produce the statistics. As part of the recommendations documented earlier in this report, staff will identify resources needed to produce distracted driving statistics.

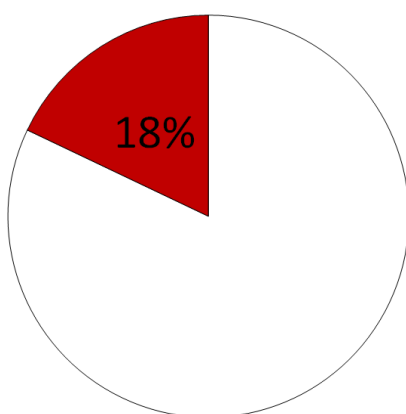
Lack of Restraints/Adequate Protective Devices

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

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

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

Austin (2012)

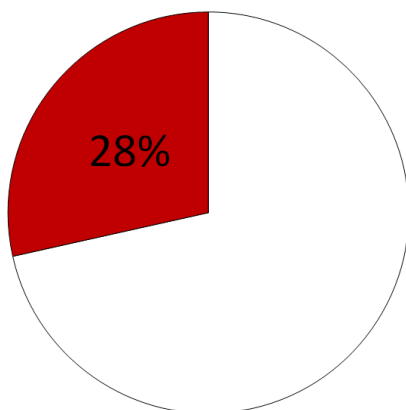


Seatbelts and child safety restraints save lives!

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)



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

Although it is unknown whether the wearing of a helmet would have prevented the fatality, helmets were not worn in all three bicycle fatalities and in 57% of the motorcycle fatalities.

Pedestrians Crossing Freeway Mainlanes

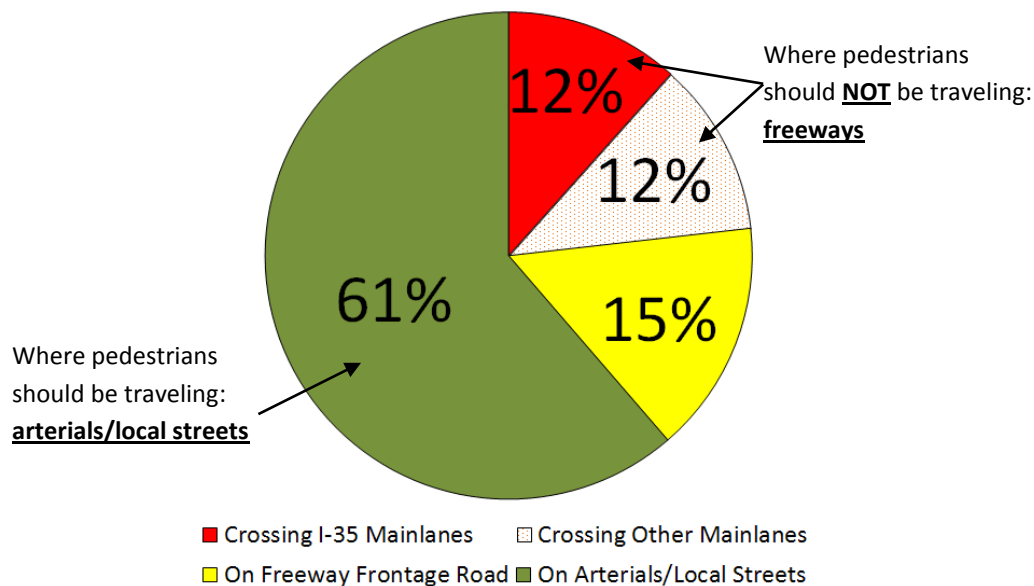
The chart below (Exhibit 34) indicates a troubling statistic that 24% (6) of the pedestrian fatalities occurred while the pedestrian was attempting to cross freeway mainlanes, such as I-35, MoPac, US 290 and SH 71 in 2012. Pedestrians should not be crossing freeway mainlanes. Pedestrians were intoxicated 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



Source: APD crash data

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

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

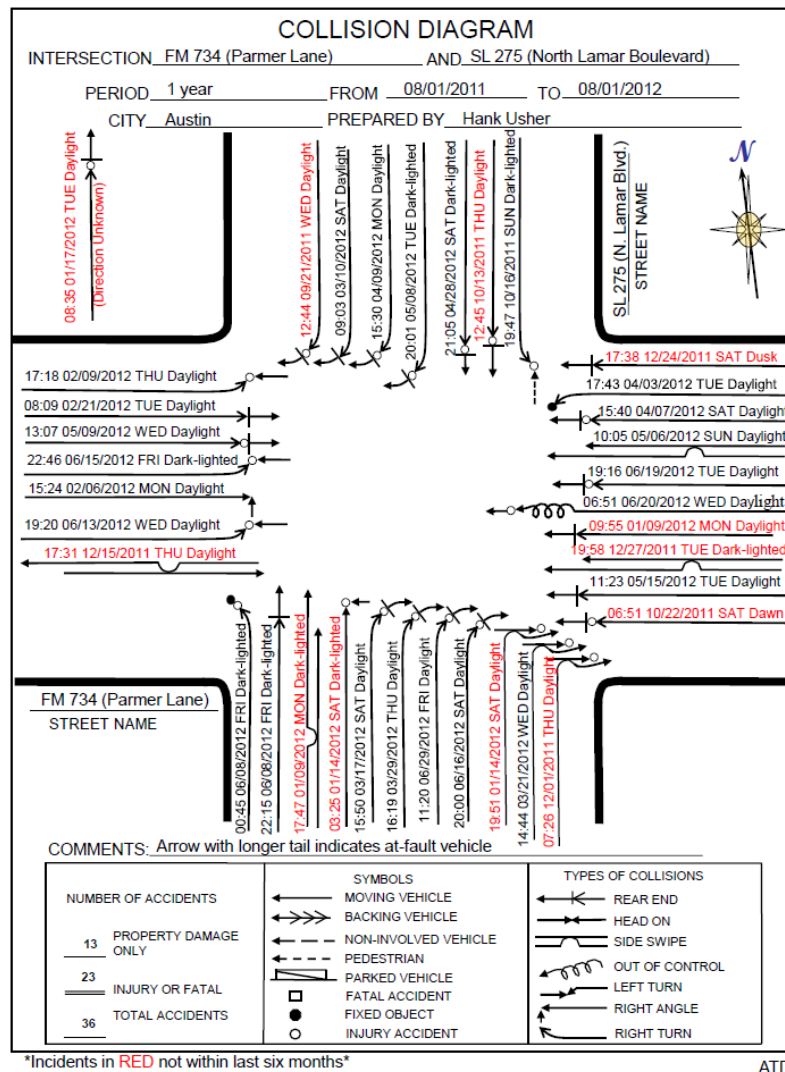
A higher proportion of pedestrian crashes and fatalities are expected along arterials/local streets since this is where pedestrians typically travel given the adjacent land use, the multimodal nature of these roadways (e.g., sidewalks, crosswalks, transit stops) and the number of arterials/local streets relative to freeways.

ANALYSIS OF HIGH CRASH LOCATIONS

Parmer Lane at Lamar Boulevard

Collision diagrams, like the one shown below (Exhibit 35), graphically depict each collision at the intersection including direction of travel, day, date and time of collision, light conditions. By means of symbols, the following are depicted: collision severity (fatal, injury or no injury), the type of collision (rear end, head-on, sideswipe, fixed object, etc.), at-fault vehicle, and other pertinent information, such as a backing or parked vehicle or if a pedestrian was involved.

Exhibit 35. Collision Diagram for Parmer Lane at Lamar Boulevard



Note: The Collision Diagram depicts collisions from August 2011 to August 2012, this total number of collisions (36) varies from the Calendar Year 2012 number (34).

The collision diagram is extremely useful to analyze the collision information at the intersection without having to refer back to individual incident reports. They are,

however, time consuming to create. The collision diagram shown on the preceding page took a Professional Engineer roughly eight (8) hours to create. A collision diagram should be created for each intersection that is analyzed. The following describes the steps to produce a collision diagram:

- Review APD collision database to identify incidents occurring at the intersection.
- Print out all the collision incident reports.
- Read through each individual collision report to determine all the factors needed to characterize the collision on the collision diagram.
- Manually create the collision diagram.

Using the collision diagram for Parmer at Lamar, it is possible to determine:

- Many of the collisions were rear-end type, where the following vehicle collided with the vehicle in front. A number of right-turn rear-end collisions occurred on Lamar Boulevard.
- Three side-swipes occurred when making a right turn.
- Almost two-thirds of the crashes resulted in some type of injury. No fatalities were reported.
- Most of the collisions occurred in daylight.
- One collision involved a pedestrian.
- There was no significant pattern of collisions occurring at a particular time of day, or day of week.

The intersection of Parmer Lane at Lamar Boulevard is located about 900 feet west of the intersection at the I-35 southbound frontage road. This is a busy intersection with a significant volume of traffic turning from the southbound I-35 frontage road to southbound Lamar Boulevard, and northbound from Lamar Boulevard right onto eastbound Parmer Lane.

Several options could be implemented in the short-, medium- and long-term to address these collisions.

Short-Term

- Review signal timings. A number of signal timing strategies exist to reduce crashes (e.g., increasing the all red clearance interval, adding protected left turn phasing). Optimizing the green time may result in fewer stops and thus reduce the potential for rear end collisions. Given the traffic volumes at this

signal, however, the signal timing is reviewed frequently to ensure it operates optimally. A more thorough review of the signal may still prove beneficial.

- Review signs and markings, especially for the high speed “free right turn” where many of the rear end collisions occurred.
- Install raised crosswalks in the “free right turn” lanes. This countermeasure would reduce vehicle speeds when making right turns and provide a safer location for pedestrians to cross.
- Implement one of the FHWA’s nine proven safety countermeasures – Installing back plates with a reflective border around all the signal heads.

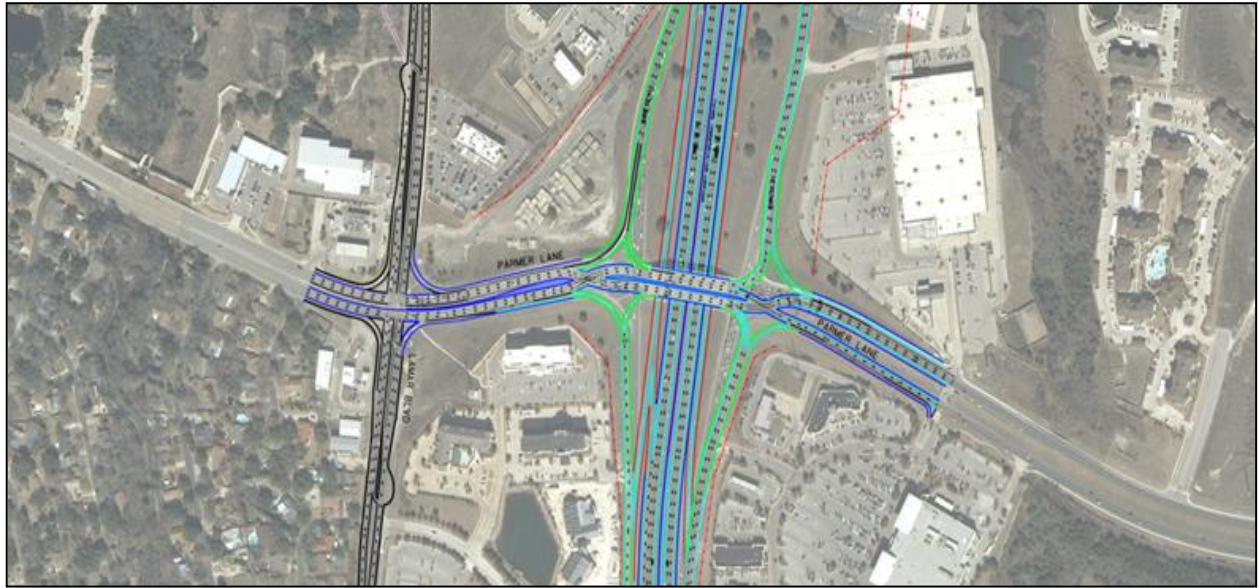
Mid-Term

- The Texas Department of Transportation is proposing to upgrade the signal in 2015.
- Reconstruct part of the intersection to remove the “free right turn” on each corner. This redesign would create a “square” intersection, where all right turning vehicles would have to slow down considerably to make a right turn.

Long-Term

- Improvements to the adjacent intersection of Parmer Lane and I-35 have been suggested that would implement a new concept called a Diverging Diamond Intersection (DDI). Exhibit 36 illustrates the layout of the DDI at this interchange. At a DDI, all the traffic lanes are shifted to the opposite side of the roadway prior to the intersection, and return back to the normal side beyond the intersection. This eliminates the left turning traffic from having to cross the opposing traffic flow, thus reducing the potential for left turn collisions and delays.
- If the DDI was implemented, improvements to the Parmer Lane at Lamar Boulevard intersection would also be needed. To integrate with the DDI, Displaced Lefts could be considered, where the left turning traffic is shifted to the far left side of the roadway in advance of the intersection, and left turns across the opposing traffic flow are eliminated. Alternatively a Super Street layout could be considered where some or all of the left turn movements at the intersection are eliminated. Left turns are made by turning right the intersection, making a U-turn in a specially constructed turn bay, and returning back the opposite way through the intersection, to continue in the desired direction.

Exhibit 36. Diverging Diamond Conceptual Layout along Parmer Ln. at Lamar Blvd.




Top Crash Frequency Locations from 2008 to 2012

Exhibit 37 illustrates a birds-eye view of the 12 top crash frequency locations in Austin during the last five years. The bar chart (Exhibit 18) indicates the number of years that the location was listed. The top 12 locations were listed two or more times during the past five years.

These locations were typically large signalized intersections with many turning movements, located along higher volume/higher speed roads, and not very pedestrian friendly. It is interesting to note that although these intersections had a higher frequency of crashes, the severity was low. Most crashes were minor injury or property damage only as summarized in the accompanying tables. ATD will further analyze these intersections and develop countermeasures to address crash patterns.


Exhibit 37. Top Crash Frequency Locations from 2008 to 2012

1. Parmer / Lamar




	2008	2009	2010	2011	2012	Total
Fatal	0	0	0	0	0	0
Serious	0	1	0	0	0	1
Minor	13	14	4	14	23	68
None	5	4	9	8	11	37
Total	18	19	13	22	34	106

2. Riverside and Pleasant Valley




	2008	2009	2010	2011	2012	Total
Fatal	0	0	0	0	0	0
Serious	1	0	0	0	0	1
Minor	8	13	12	3	12	48
None	10	10	8	4	8	40
Total	19	23	20	7	20	89

3. IH 35 SR (SB) and MLK



	2008	2009	2010	2011	2012	Total
Fatal	1	0	0	0	0	1
Serious	0	0	0	0	0	0
Minor	7	12	15	3	11	48
None	11	10	8	3	8	40
Total	19	22	23	6	19	89

4. Lamar Blvd and Rundberg Lane



	2008	2009	2010	2011	2012	Total
Fatal	0	-	-	0	0	0
Serious	1	-	-	0	0	1
Minor	6	-	-	10	11	27
None	11	-	-	2	12	25
Total	18	0	0	12	23	53

Exhibit 37. Top Crash Frequency Locations from 2008 to 2012 (continued)

5. US 183 SR (EB) and Cameron Road



	2008	2009	2010	2011	2012	Total
Fatal	0	0	-	0	1	1
Serious	0	0	-	0		0
Minor	10	13	-	6	12	41
None	5	9	-	6	11	31
Total	15	22	0	12	24	73

6. Mopac SR (NB) and Parmer Lane



	2008	2009	2010	2011	2012	Total
Fatal	0	0	0	0	0	0
Serious	0	0	0	0	0	0
Minor	5	23	12	3	5	48
None	4	13	5	4	2	28
Total	9	36	17	7	7	76

7. IH 35 SR (SB) and Riverside







	2008	2009	2010	2011	2012	Total
Fatal	0	-	-	0	0	0
Serious	0	-	-	0	0	0
Minor	6	-	-	8	7	21
None	2	-	-	5	16	23
Total	8	0	0	13	23	44

8. Bastrop Highway (US 183), 100blk (NB)



	2008	2009	2010	2011	2012	Total
Fatal	0	0	0	-	0	0
Serious	0	0	0	-	0	0
Minor	4	13	7	-	1	25
None	10	12	12	-	1	35
Total	14	25	19	0	2	60

Exhibit 37. Top Crash Frequency Locations from 2008 to 2012 (continued)

9. Congress Ave and Cesar Chavez St.							10. IH 35 SR (SB) and SH 71 (WB)						
													
	2008	2009	2010	2011	2012	Total		2008	2009	2010	2011	2012	Total
Fatal	-	0	0	0	0	0	Fatal	0	0	0	-	-	0
Serious	-	0	0	0	0	0	Serious	0	0	0	-	-	0
Minor	-	4	9	7	9	29	Minor	13	11	12	-	-	36
None	-	6	11	6	3	26	None	2	10	7	-	-	19
Total	0	10	20	13	12	55	Total	15	21	19	0	0	55
11. US 183 SR (SB) and Lakeline Blvd.							12. RM 2222 and Airport Blvd.						
													
	2008	2009	2010	2011	2012	Total		2008	2009	2010	2011	2012	Total
Fatal	0	1	0	0	0	1	Fatal	0	0	0	-	-	0
Serious	0	0	0	0	0	0	Serious	0	0	0	-	-	0
Minor	4	10	12	7	13	46	Minor	11	7	11	-	-	29
None	6	10	6	4	8	34	None	9	5	6	-	-	20
Total	10	21	18	11	21	81	Total	20	12	17	0	0	49

CRASH MAPS FOR PEDESTRIANS, MOTORCYCLISTS AND BICYCLISTS

Exhibit 38. Pedestrian Crashes in 2012

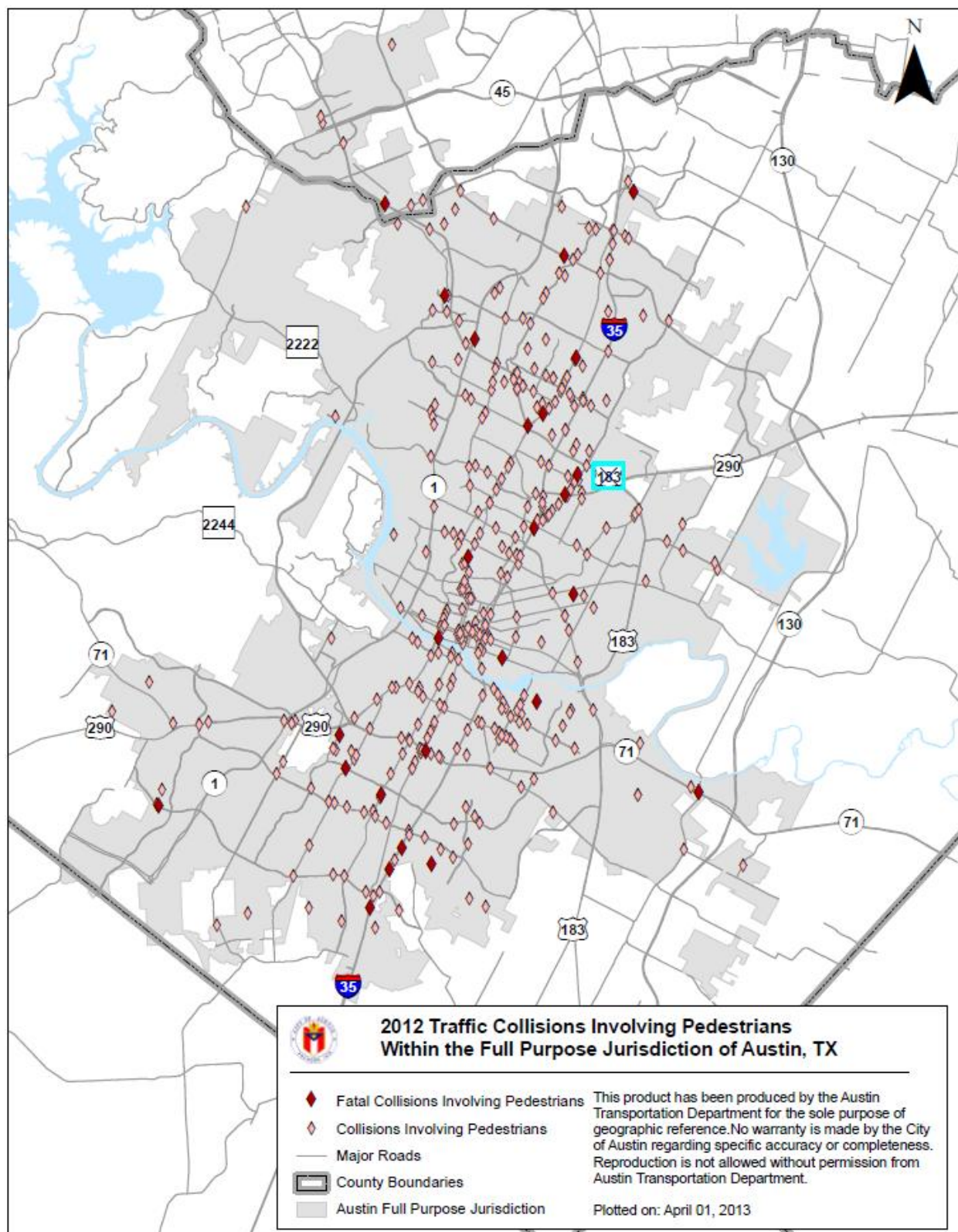


Exhibit 39. Motorcycle Crashes in 2012

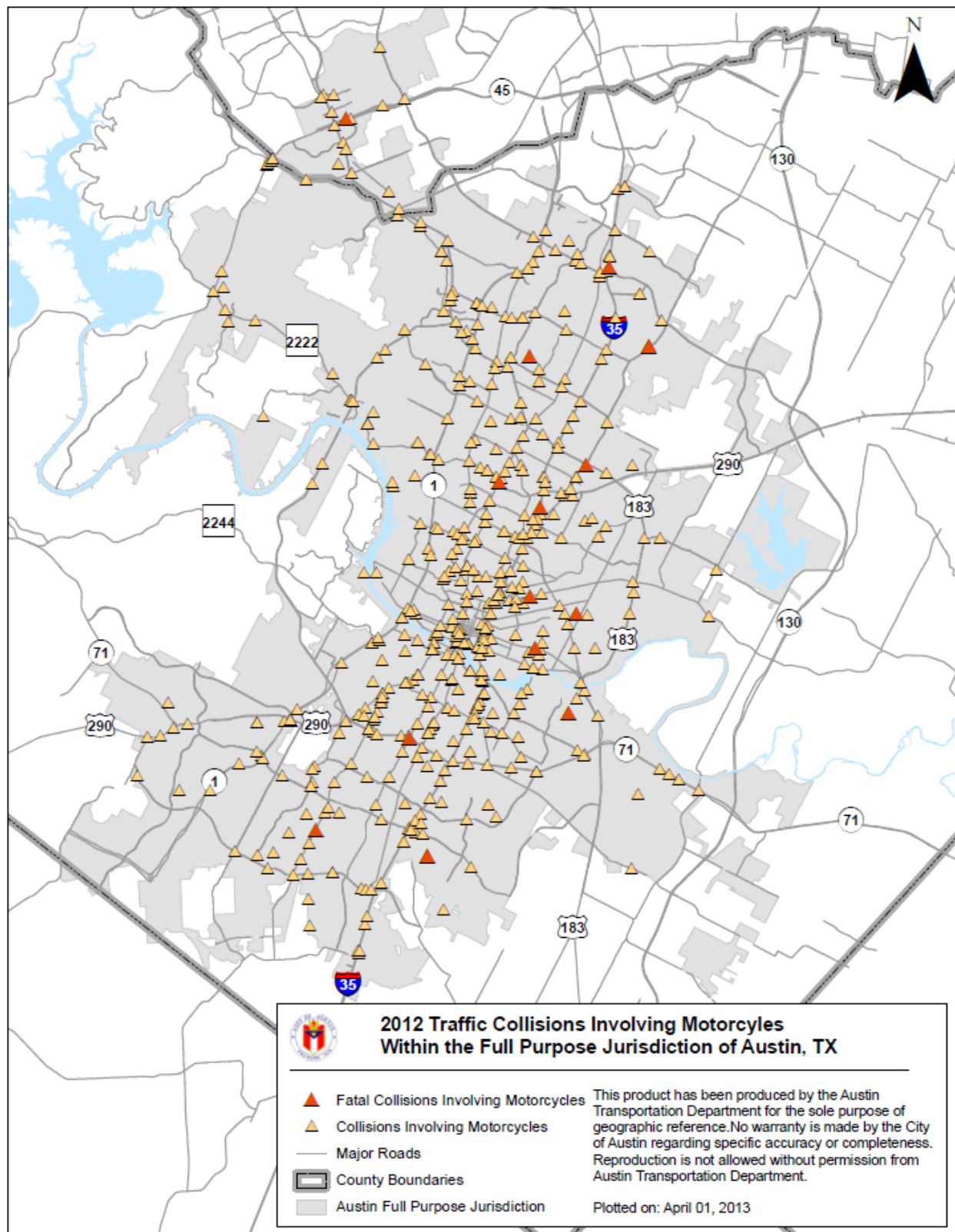
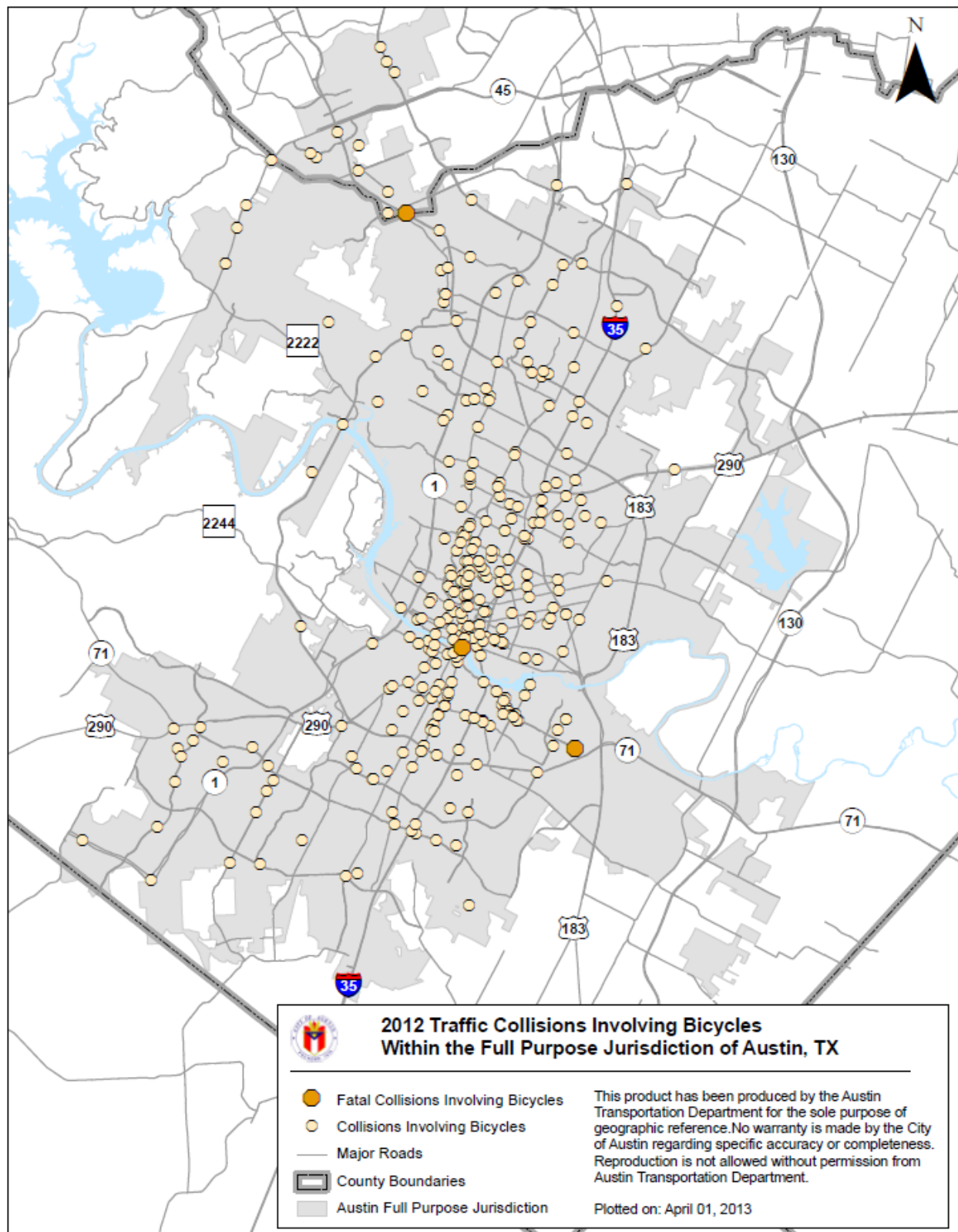


Exhibit 40. Bicycle Crashes in 2012



2012 SAFETY SUMMIT REPORT

2012 Transportation Safety Summit

October 5th, 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.

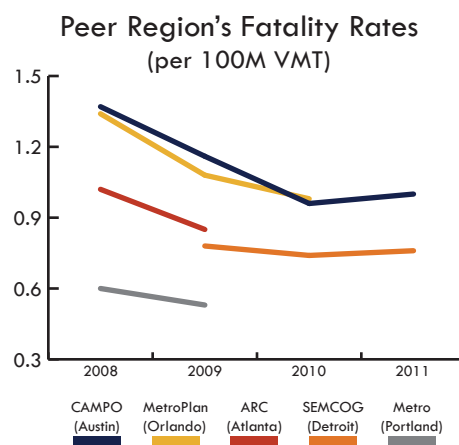
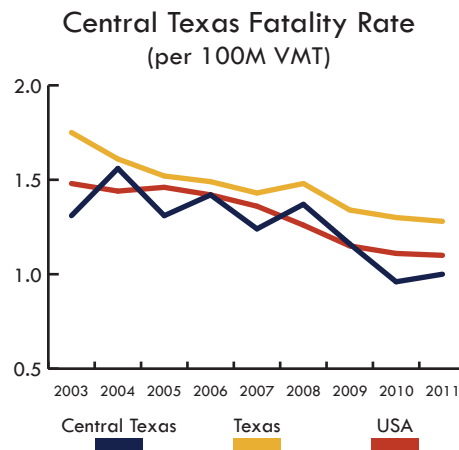
The meeting produced an overwhelming amount of input and ideas for developing interdisciplinary approaches and cross-agency collaborations that will build upon current efforts and propel the region towards achieving new levels of safety.

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

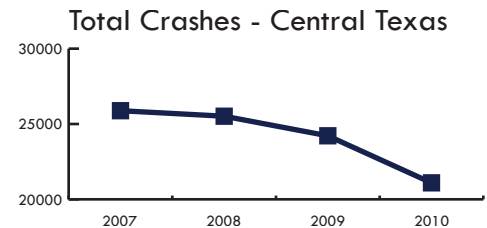
Ms. McCoy noted a decline of fatal crashes by 30% in the region between 2008 and 2010. She also noted total crashes have made similar declines over that period as well but that the estimated costs of crashes still total nearly \$774 million per year, on par with the cost of traffic congestion each year.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



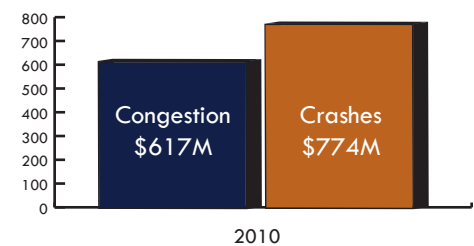
Regional Cost of Crashes

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.

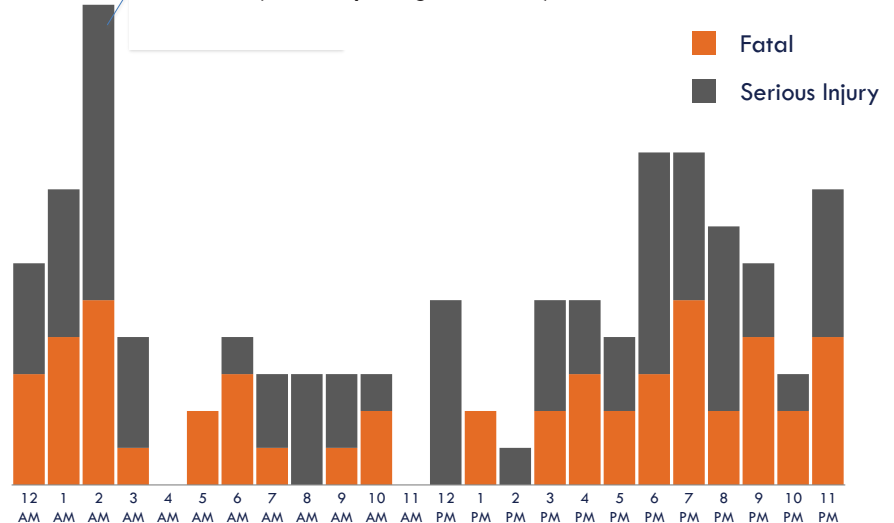
Service	Cap Metro Austin	DART Dallas	Metro Houston	VIA San Antonio
Vehicle Accidents per 100,000 Miles				
Bus	2.0	4.0	4.8	3.5
Paratransit	1.6	1.5	1.1	1.3
Rail	0	8.7	8.9	N/A
Passenger Accidents per 100,000 Miles				
Bus	.76	2.1	2.7	1.2
Paratransit	10	11.6	6.7	7.4
Rail	0	.31	.34	N/A



Commander Pat South - APD

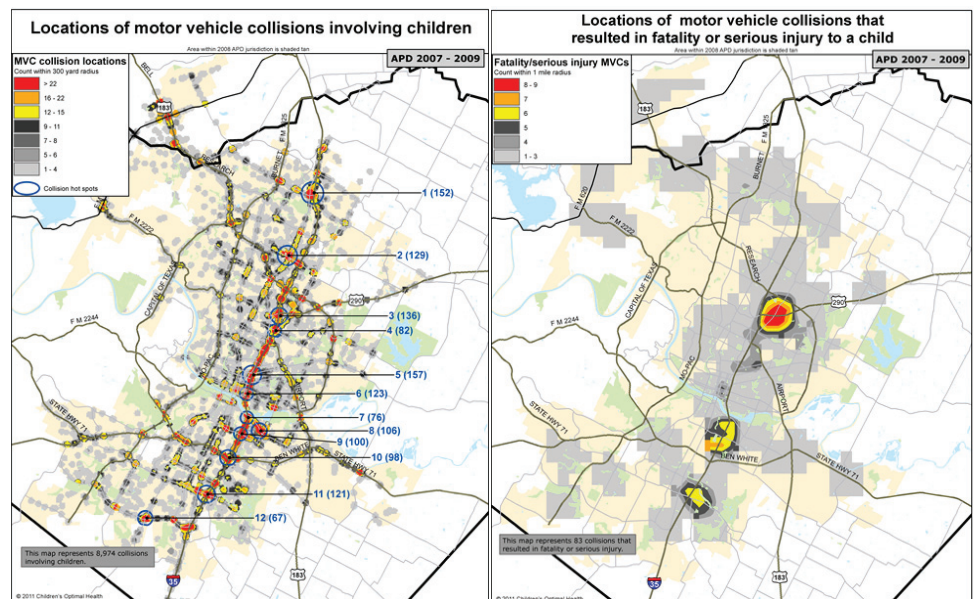
Commander South described the rise in total fatalities that had increased by 24% from the previous year to date and, in particular, auto-pedestrian collisions that had increased by 41%. APD has been taken an analytical approach to focus resources on locations and times of day that have the highest number 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.



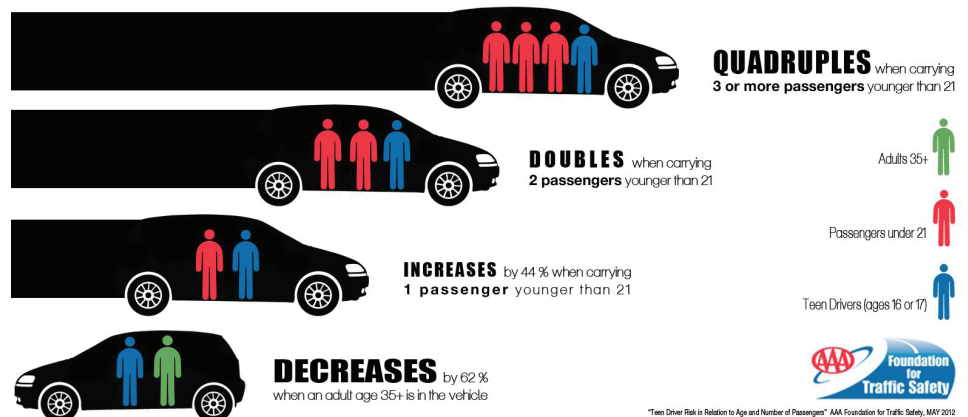
Linda Von Quintas - AAA

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

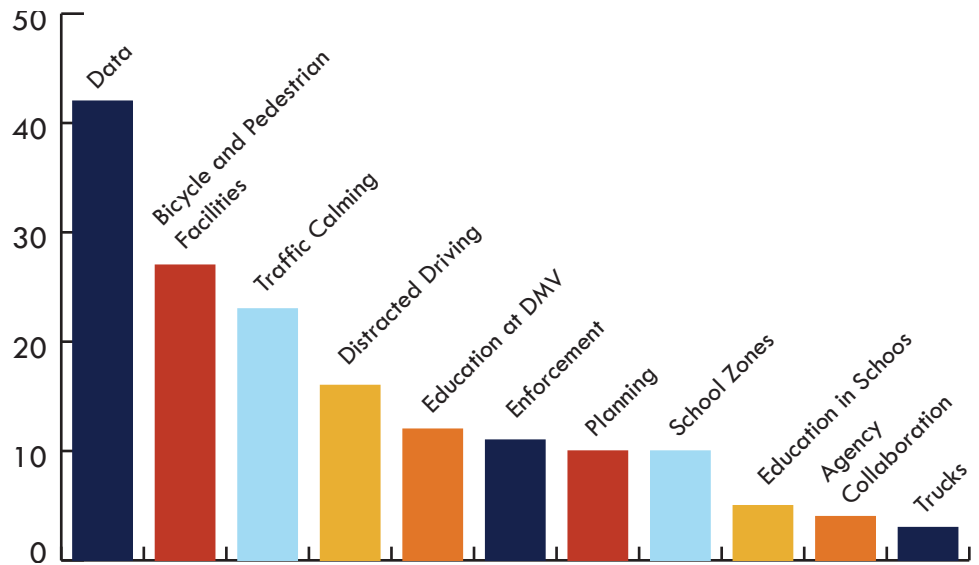
The summit attendees were surveyed and identified the three key emphasis areas for discussion:

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

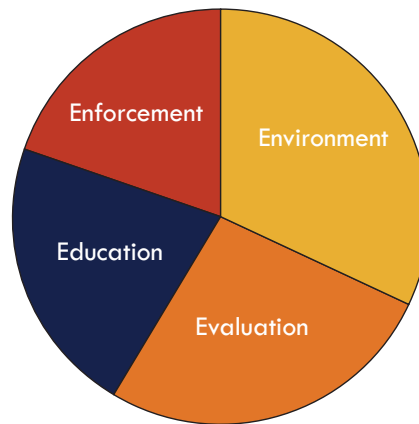
Attendees were then broken out into working groups to develop a safety vision for the region and devise strategies using the four 'E's (Education, Enforcement, Environment, and Evaluation) to achieve it.

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.

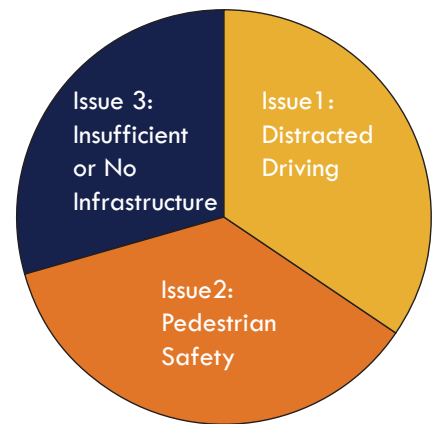
Top Strategies to Reduce Crashes - All Issues



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 police 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

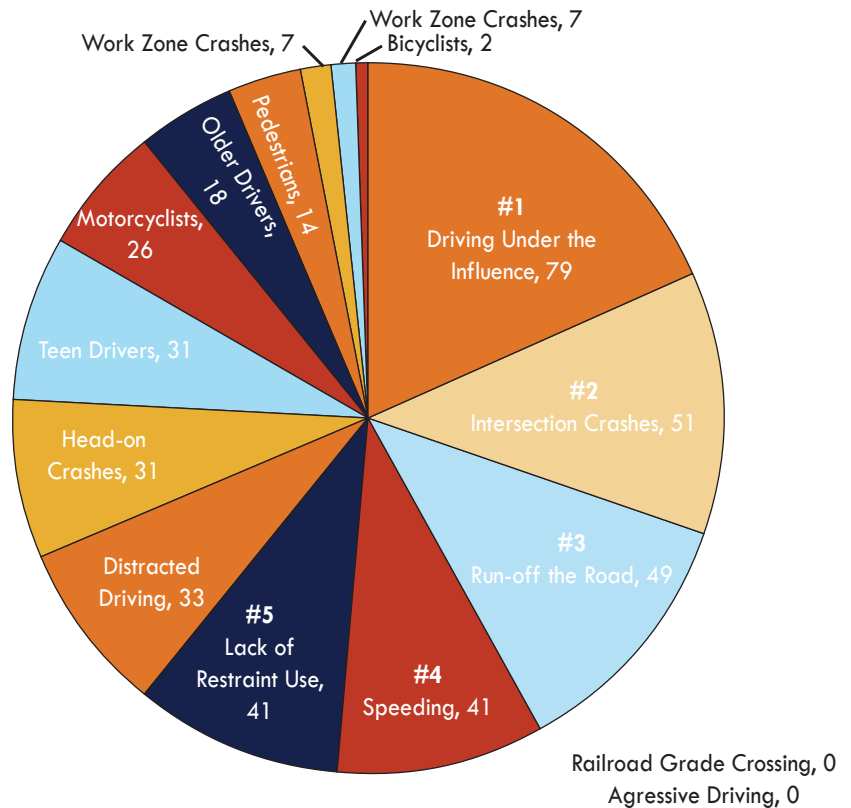
User Behavior

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

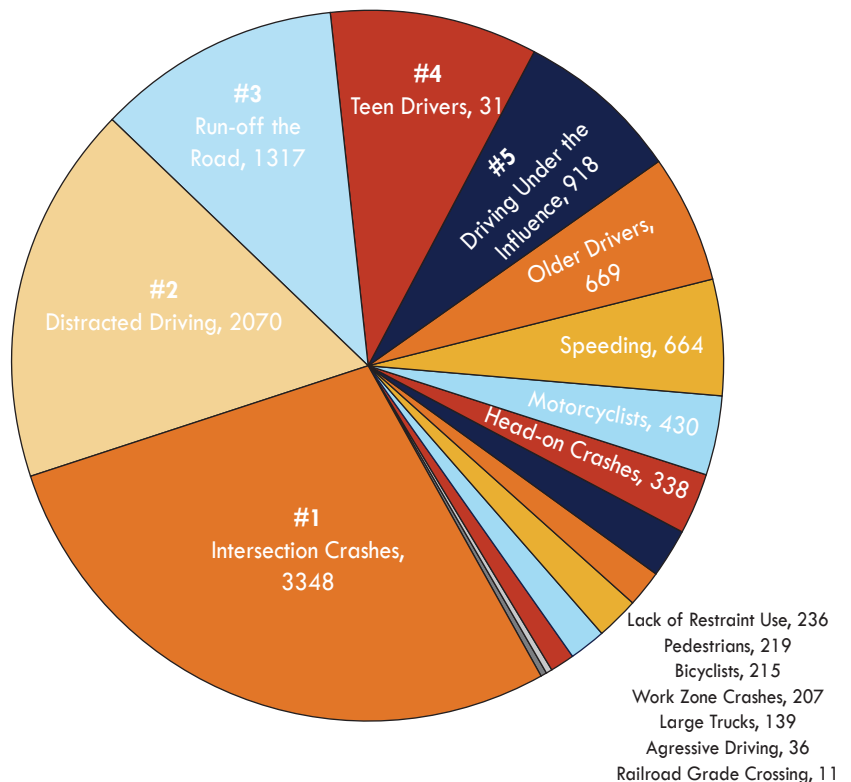
System Administration

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

Fatal Crashes - CAMPO Region (2010)



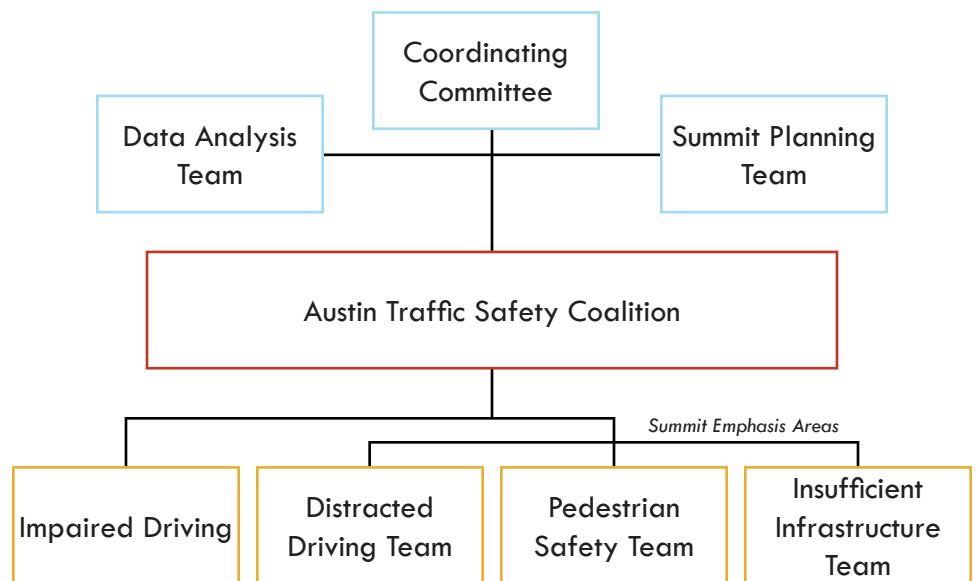
Fatal and Injury Crashes - CAMPO Region (2010)



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

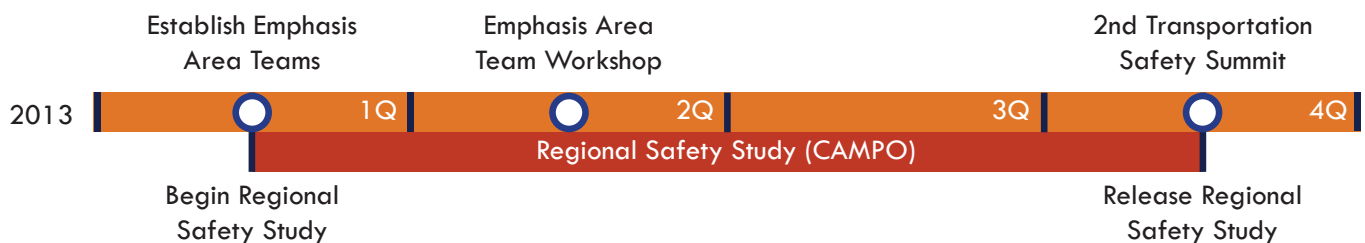
tremendous enthusiasm since the Summit that be carried into creating an unprecedented level of interdisciplinary regional cooperation to reduce crashes.

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.