Revised DRAFT Vision Zero Action Plan

[Note: his is a review draft. The final plan will be formatted with all graphics and citations].

Executive Summary

Vision Zero refers to a traffic safety concept that aims to reduce fatalities and serious injuries on roadways to zero. On November 20th, 2014, the Austin City Council approved Resolution 20141120-103 calling for the City Manager to create a Vision Zero Task Force to study this policy and to produce a report, along with any recommendations, to the Council. This plan is a result of the Task Force's effort. Eliminating traffic deaths and serious injuries will require long-term efforts. This plan articulates an ambitious two-year strategy to begin reducing traffic deaths as Austin works toward the goal of zero deaths and serious injuries by 2025. The actions in this plan should be evaluated and refined on an on-going basis.

The plan is underpinned by several key principles:

- Traffic deaths and injuries are a preventable, public health issue. Any traffic death is too many.
- People will make mistakes; the transportation system should be designed so those mistakes aren't fatal.
- Safety is the primary consideration in transportation decision-making.
- Traffic safety solutions must be addressed holistically, through:
 - Education and culture change,
 - o Enforcement and prosecution, and
 - o Land use and transportation engineering.

In a typical year, 64 people lose their lives on Austin's streets; for each person killed, eight more are seriously injured. Half of these deaths are people riding a bicycle or motorcycle or people walking, even though these modes only make up about 6.5 percent of all commuters. A larger proportion of minority groups and homeless individuals make up these numbers. In addition to the human loss, the costs of these injuries and fatal crashes cost Austinites more than \$500 million annually. The interplay of multiple factors is likely involved in most crashes, but the top contributing factors from crash reports of fatal or incapacitating crashes from 2010 to 2014 have clear implications on safety. The contributing factors to theses crashes are: speed, improper maneuvers, failure to yield, distraction, impairment, failure to stop.

This plan builds upon ongoing safety efforts by the Austin Police Department, Austin Transportation Department and other regional agencies. It recognizes that these enforcement and engineering efforts must be supported by reforms to the courts, service industry, land use regulation and mental health services.

To reduce crashes that result in deaths or serious injuries, the Vision Zero Task Force has identified critical path actions for 2016-2018 organized them into five key themes:

EVALUATION: Collect, analyze, communicate and share data that documents fatal and incapacitating crashes and top contributing factors.

ENFORCEMENT: Strengthen the ability to focus enforcement on hotspot locations of crashes resulting in deaths or incapacitating injuries.

ENGINEERING: Bolster key initiatives for which Complete Street Design, Traffic Engineering, and Transportation Planning can prevent deadly or incapacitating collisions.

EDUCATION: Create a targeted public education campaign to raise awareness of the severity of the problem and solutions and integrate Vision Zero principles into existing educational initiatives.

POLICY: Identify and advocate for policies that will strengthen the ability to achieve Vision Zero.

Implementation of the Vision Zero Action Plan will be led by a Vision Zero Program and the Vision Zero Task Force. The City of Austin will staff and fund a program dedicated to improved transportation safety with guidance and involvement of the Vision Zero Task Force. A planning level cost estimate for all actions accompanies this plan in Appendix A. The City will report on progress through an annual report card that measures the community's progress towards achieving Vision Zero.

Austin joins several other U.S. cities in making this commitment including Seattle, New York City, San Francisco and San Antonio. By making a commitment to reduce deaths and serious injuries to zero by 2025, Austin will become a safer, more livable city for generations to come.

I. Introduction

The Austin City Council charged the Vision Zero Task Force with addressing the ongoing tragedy on Austin's streets: in an average year, 64 people are killed in crashes. The past year underscores the urgency of action: 102 people died on Austin roads in 2015.

This is a quiet crisis that remains muted in the background for most people, until it is inescapably front and center for another person, another family. For each person killed, eight more victims of crashes are seriously injured, changing their lives forever. The physical and emotional trauma for victims, survivors, and loved ones left to mourn makes it a moral imperative that we end this violence.

The causes of these crashes are known—speed, impairment, distraction, failing to yield or stop, and dangerous and improper maneuvers—and there are measures in place to address many of them. But in the past, these crashes were seen as discrete problems with discrete solutions. Vision Zero frames transportation safety differently: deaths and injuries are the result of a larger, systemic problem—, requiring a coordinated and collaborative effort on the part of all City departments, partnering agencies, and community groups.

Vision Zero's goal is simple: zero traffic deaths and serious injuries in Austin by 2025. The goal can only be zero, and achieving it will take all Austinites. Getting there will not be easy.

Over the course of 2015, the Vision Zero Task Force took a comprehensive approach to transportation safety, looking at current initiatives, research, and best practices. These encompass education and culture change, enforcement and prosecution, and land use, urban design, complete street design, and transportation planning and engineering. The Task Force's recommendations in this Action Plan are the start of an ongoing effort by the City, its partners, and the Task Force, and will be continuously evaluated and refined to get closer to the goal of eliminating deaths and serious injuries. Vision Zero is an overarching effort to end traffic deaths and serious injuries, uniting and refining existing efforts, identifying new initiatives and tools- and evaluating progress and holding all stakeholders accountable for continuously moving closer to the goal.

The effort starts by changing the way society perceives traffic deaths and injuries: no longer are they "accidents" or the unfortunate, but unavoidable, cost of doing business. People will make mistakes—whether walking, bicycling, or driving—but our coordinated and comprehensive efforts can prevent those mistakes from being fatal. To save lives and prevent injuries, safety must be the primary consideration when making land use and transportation decisions.

Successes will be incremental and changes in land use patterns and street design will take time and resources, but this must start today. Collecting more robust data and analyzing and sharing that data can help to direct resources where they are most needed. Media must elevate the magnitude of this problem to raise awareness and shape safer behaviors. These two short-term actions can influence ongoing, system-wide change.

Enforcement must be prioritized where it can have the greatest effect immediately. Dangerous violations, especially those resulting in injuries or deaths, must also be prosecuted. The Police Department serves as the front line for preventing injuries and deaths through enforcement initiatives. It is critical that enforcement be targeted at crash hotspot locations and on top dangerous behaviors that cause fatal and serious injury crashes.

In 2015-2016, Austin Transportation Department initiated its Safety Improvement Program, focusing on -five intersections with high crash rates that can be made safer with engineering improvements. The Transportation

Department will continue to evaluate crash hotspot locations and look for opportunities for rapid implementation of engineering safety improvements.

Many city policies, practices, rules and regulations shape the design of our streets, which are part of the fabric of our city. Project planning and designs that takes a complete streets approach, integrated transportation and land use planning, the land use code and other regulations, urban design practices, and planning initiatives all can be viewed through a Vision Zero lens, and shaped so that they contribute to safer streets.

Culture change is also necessary. Educating people about safe driving and changing how people view streets—not just as conduits for cars, but as places for people—is crucial. As inactivity and obesity increase among the population, fear for safety should not be a barrier to walking or bicycling.

To ensure people can walk or bike safely, the definition of "high speed" must change. Approximately 30 percent of pedestrians struck at 25 miles per hour sustain severe or worse injury and about 12% die. At 35 miles per hour, nearly half of all pedestrians (47%) sustain a severe or worse injury, and one in five (20%) are killed. At 40 mph, 79% of struck pedestrians sustain a severe or worse injury and 45% die **(Brian Tefft, 2011, Impact Speed and a Pedestrian's Risk of Severe Injury or Death, AAA Foundation for Traffic Safety)[1]. Higher speeds, even when relatively slow from a driver's perspective, have consequences of increasing severity when crashes do happen. Slower streets are safer streets for all users.

The Vision Zero Task Force, its member departments, agencies, and community groups, are united in a goal of stemming the tragic toll of deaths and injuries. This initial Action Plan is a coordinated effort toward making Austin's streets safer. As this plan is implemented, the Task Force will evaluate the effectiveness of the actions outlined in this Action Plan and refine strategies to continually work towards eliminating deaths and serious injuries.

Zero deaths and serious injuries is a bold goal, but it is achievable: the causes of traffic deaths and injuries are unequivocally preventable.

The Vision Zero Task Force honors the lives lost or irrevocably altered by working toward zero. Any traffic death or injury is too many.

What is Vision Zero?

Vision Zero is a proven, data-driven approach to reducing transportation-related injuries and saving lives. Vision Zero is a goal of working toward the only acceptable number of traffic deaths and serious injuries: zero. The Vision Zero concept originated in Sweden in 1997 and has since been adopted in countries around the globe, and across the U.S. More than 30 states and the US Department of Transportation have adopted Vision Zero as a national strategy, called "Toward Zero Deaths." More recently, cities including New York, Chicago, Boston, San Francisco, Seattle, Portland, San Diego, have adopted Vision Zero policies and short term Action Plans at the time of publishing. In Texas, San Antonio is also developing a Vision Zero Action Plan.

Austin's Vision for Safer Streets

Austin embraces Vision Zero as a holistic approach that elevates safe mobility as the top priority for the transportation system by setting the goal of zero deaths & zero serious injuries while traveling. People will make

Formatted: Font color: Red

mistakes; the transportation system should be designed so those mistakes are not fatal. Vision Zero builds on multiple existing safety initiatives, facilitates greater collaboration, leverages limited resources between City departments, agencies, and community partners, and requires a concerted, multi-pronged approach that includes:

- A holistic approach to land use and transportation
- A complete streets approach to street design
- Traffic engineering and infrastructure,
- · Enforcement and prosecution;
- · Education and culture change
- Public health, equity, and related issues
- Policy analysis and changes at the local and regional level

Traffic deaths and injuries are a preventable, public health issue. By adopting Vision Zero, the City commits to a goal of eliminating transportation-related deaths and serious injuries by 2025.

Successes Elsewhere

Vision Zero has proven successful in reducing traffic deaths. The cities and countries that have embraced Vision Zero have seen a reduction in traffic deaths and serious injuries through comprehensive efforts including addressing speed, rethinking road design, targeting enforcement of dangerous driving, and raising awareness.

Sweden and the Netherlands have some of the lowest transportation-related fatality rates in the world.1 Vision Zero has also demonstrated its effectiveness in the U.S. After adopting their Vision Zero Action Plan, New York City had the lowest number of traffic deaths on record. [ENDNOTE: 2]

In Utah, which has development patterns more similar to Austin's, Vision Zero helped the state reduce traffic deaths by 48 percent since adoption in 2003.[3] Provo, Utah also shows that preventing all deaths is possible; in 2011 not a single person died on Provo's roads, [[ENDNOTE: 4]]

Map with callouts for NYC, Sweden, SF, Utah

Austin Needs Vision Zero

Austin is a great place to live. Austin is regularly highly ranked on "best of" cities lists, whether for jobs, music, barbecue, or just about anything else. As the Austin Business Journal said, Austin is "Best for everything and everyone." [ENDNOTE 5] Unfortunately, the city is also on some far less desirable lists. Austin ranks as the 13th most dangerous city for traffic for cities with a population over 500,000. [6] On average, 64 people are killed on Austin's roads and 200 are seriously injured each year. This means more people lose their lives in crashes in Austin than to gun violence.

Last year was a particularly deadly year: 102 Austinites were killed in traffic collisions in 2015. These deaths and injuries are more than numbers: each one of these lives lost is a tragedy to the families and loved ones left behind. Each serious injury is a person's life forever changed. Each is a part of a city, state, national, and worldwide public health crisis.

Formatted: Font color: Red

Formatted: Font color: Red Formatted: Font color: Red

Formatted: Font color: Red

Formatted: Font color: Red

Each is preventable. Through the coordinated efforts of Vision Zero, Austin's goal is to eliminate traffic deaths and serious injuries by 2025.

(Not) an accident waiting to happen

Many crashes occur at the intersection of design and human error. As the chair of National Transportation Safety Board said regarding the 2013 crash of the Seastreak ferry in New York City, "Accidents, like a fraying rope, are always a series of missed opportunities, but the blame typically falls on the final strand in a rope that breaks - often it is the human being" (2014, https://app.ntsb.gov/news/speeches/hersman/daph140408c.html). [7]

Dangerous driver choices are attributed as a cause in more than 90 percent of fatal or incapacitating injury crashes in Austin, but in many cases, design may influence behavior. Taking responsibility for one's safety and the safety of others is necessary to achieve Vision Zero, but key to Vision Zero is acknowledging and anticipating that people will make mistakes. The transportation system must be designed to prevent those mistakes from being fatal.

Addressing speed through street design

Research clearly links higher speeds to increased crash occurrence and severity of crashes, FOOTNOTE: 168] A study by the Institute of Transport Economics found, "There is a very strong statistical relationship between speed and road safety. It is difficult to think of any other risk factor that has a more powerful impact on accidents or injuries than speed" (http://www.trg.dk/elvik/740-2004.pdf)[9]. Higher speed increases stopping distance, making it harder to avoid a crash and increasing the severity of crashes. At higher speeds, a driver's field of vision narrows, inhibiting their ability to see and react to potential hazards. Even when speed is not a cause of a crash, it is the key variable influencing the severity of injuries and damage. The Institute of Transport Economics (2004) advises that "if government wants to develop a road transport system in which nobody is killed or permanently injured, speed is the most important factor to regulate". [FOOTNOTE 1610]

Caption: Streets can influence vehicle speeds through their design. Narrower street widths, changes in road alignment, and traffic calming devices such as medians, pinchpoints, roundabouts, and chicanes can reduce travel speeds (adapted from NACTO Urban Street Design Guide).

The influence of land use and -urban design

Development patterns play an important role in the safety of our streets. The less people drive, and the shorter their trips, the less likely it is that vehicle crashes will occur. Sprawling, disconnected land use patterns continue to encourage driving to the detriment of walking, bicycling, and taking transit. Lower density, longer blocks, large parking lots and free or low cost parking, frequent driveways, and lack of street connectivity directly contribute to higher traffic deaths. [11] These development patterns shape how people get around, but more critically, expose Austinites to greater risks while traveling. A complete streets approach, combined with c compact-and-connected development patterns that support transportation options; can help to reverse this trend.

Formatted: Font color: Red

Comment [FR1]: add graphic example

Formatted: Font color: Red

The Surgeon General 's "Step it Up!" call to action promotes walking and walkable communities, highlighting the important role physical activity has in overall health. The call to action cites safety concerns—both real and perceived—and the design of communities as barriers to walking.

[http://www.surgeongeneral.gov/library/calls/walking-and-walkable-communities/exec-summary.html] The design of streets and development patterns play an immediate role in the safety of streets, influencing crash risk and severity. They can be deadly in insidious ways—such as heart disease, stroke, diabetes, and depression—as well.

Compact and connected development patterns — featuring shorter blocks, connected street networks, and mixed land uses — can reduce crash risk by making it viable and attractive for people to drive less. Shorter trip distances make walking, biking, and transit viable options for more Austinites and reduce vehicle miles travelled. Compact, mixed-use urban form —e.g. fine-grained urban fabric with narrower streets, buildings close to the street, active facades and patios, few driveways, and wide sidewalks with street trees — can slow driving speeds. This in turnThese elements work together to reduces the severity of injuries. —A

Failure to Yield

Austin Police Department (APD) identified failure to yield the right-of-way as one of the top contributing factors in data from 2010-2014. Of the fatal or incapacitating crashes where failure to yield was cited as a factor, the majority were pedestrians failing to yield to vehicles (58%), followed by drivers making left turns (24%), and failing to yield at private drives (12%).

Changing land use patterns and code, street design, and signalization all could help to -reduce incidents of "failure to yield." For example, street designs the that improve the configuration for left turns can eliminate conflict points.

The issue of pedestrians failing to yield the right of way requires further exploration and analysis. The issue of placing responsibility on the pedestrian is a topic of ongoing discussion. Behavior and street design/engineering affect one another, and solutions for those crash types will be multi-pronged, including engineering, education, and enforcement

For example, Austin Police Department (APD) compiled -fatality crash profiles for traffic deaths in 2015. There were 28 pedestrian deaths during the period between January 1 and November 30, 2015. In analyzing them, APD found that 93 percent of fatal crashes involved the pedestrian crossing in a prohibited location. Especially on high-speed roads, which tend to have longer block lengths and fewer crossings, a scarcity of safe and legal crossings is an issue. People are more likely to cross in an unprotected area in the middle of the road under those conditions; adding features such as pedestrian-activated signals with crosswalks is an example of an engineering solution that can improve safety. Completing the street network by strategically adding capacity and thereby increasing connectivity and also shortening block lengths is an example of how transportation planning can contribute to solutions.

Dangerous Behaviors

Often coupled with design, hHuman error plays a huge-role in crashes. Between 2010 and 2014, six key behaviors were listed in Austin Police Department crash reports, for fatal or incapacitating crashes with a recorded contributing factor. These six dangerous behaviors are:

- 1. Improper movements;
- 2. Driver inattention or distraction;
- 3. Failure to yield right of way;
- 4. Speeding;
- 5. Driving Under the Influence (DUI)
- 6. Failure to stop.

Human error plays a huge role in crashes.—Vision Zero includes efforts to get people to change their behaviors; it also includes street design and engineering changes that anticipate and help prevent human error.

[CALL OUT BOX] Driving Under the Influence (DUI) of alcohol and/or drugs was a contributing factor in about half of all traffic fatalities over the past few years. In 2015, 75 percent of driver deaths involved an intoxicated driver and 53 percent of pedestrian fatalities involved an inebriated pedestrian.

The role of human error underscores the personal responsibility each and every traveler has in reducing serious injuries and fatalities. By making the right choice to designate a sober driver, put the phone down, and maintain safe speeds, we protect both ourselves and the public at large.

Who is Affected?

Traffic deaths and injuries are a worldwide public health issue affecting all road users and all communities. In 2013, 32,719 people died in traffic collisions in the United States[712]—equivalent to a 747 plane falling out of the sky every week. In Texas, there has not been a fatality-free day in the last 15 years [13] (TXDOT, http://www.txdot.gov/inside-txdot/media-center/psas/end-streak.html). In 2014, someone was killed every 2 and a half hours and someone was injured every 2 minutes 13 seconds on Texas roads [14] (TXDOT, 2014, http://ftp.dot.state.tx.us/pub/txdot/trf/crash-statistics/2014/01.pdf).

Despite those bleak numbers, streets have become safer overall thanks to safer roadway design, safety features in vehicle design, such as airbags, and cultural shifts such as increases in seatbelt use and reductions in drinking and driving. However, while these safety improvements are saving the lives of people traveling within motor vehicles, it is a different story for people outside of them. In particular, people traveling by modes other than driving, minority groups, people with lower incomes, and people experiencing homelessness are more likely to be killed or injured in traffic collisions.

Nationally, pedestrian and bicycle fatalities have held constant or increased slightly. As a result, bicycle and pedestrian deaths have increased as a percentage of total traffic deaths. Across the US, people walking accounted for 14 percent of all traffic fatalities in 2012, up from 11 percent in 2007. In Austin this disparity is especially severe: pedestrians make up almost a third of all traffic fatalities. People walking or riding bicycles or motorcycles make up over half of all traffic deaths, despite accounting for less than 7 percent of commute travel.8[15]

In 2012, Austin ranked seventh in the number of pedestrians killed in U.S. cities with populations more than 500,000, and had a fatality rate of 2.97 pedestrians killed per 100,000 residents. [ENDNOTE 916] The Federal Highway Administration identified Austin as a Pedestrian-Bicycle Focus City due to this high fatality rate for pedestrians. This provides Austin with technical support and professional training opportunities on best practices in transportation safety improvement strategies. [INSERT LINK TO PROGRAM]

The fatality rates for the largest US cities shown in the graph above also demonstrates an important and often overlooked factor in transportation safety: land use patterns. Decades of developing around driving has created spread out, disconnected land use patterns that encourage driving to the detriment of other modes. Less density, longer blocks, lots of driveways, and lack of street connectivity directly contribute to higher traffic deaths. [FOOTNOTE 1017]

Development patterns may also have a connection to some of our most vulnerable populations. Research reveals disparities in safety for minorities, people with lower income, and for those with less education 1814, groups who are increasingly priced out of Austin's most urban neighborhoods that often have shorter blocks, narrower street widths, trees, and a gridded street network, all of which contribute to slower and safer streets. Traffic deaths and injuries may be colorblind, but Black and Hispanic communities are disproportionately affected, and many of the corridors with high numbers of injuries and deaths are located in areas with higher poverty rates.

People experiencing homelessness—a group often pushed to live in some of the least desirable locations, including along high-speed roads—are one of the largest portions of traffic victims. An Austin-American Statesman investigation found that 14 percent of deaths within the homeless population between 2013 and 2014 were caused by vehicles. [12] Between January 1 and August 31, 2015, people walking made up more than 30 percent of traffic deaths and of those, 43 percent were people experiencing homelessness. In the majority of these tragedies, the victim was attempting to cross an arterial street or other high-speed road. 199 In many locations where pedestrian failing to yield was cited between 2010-2014, the street lacked sidewalks. These high-speed roads also often have long distances between legal and safe crossings.

For Austin to achieve zero deaths and zero serious injuries by 2025, we will need to focus resources on vulnerable populations. Improving the safety of these vulnerable populations will require measures beyond street design and engineering, enforcement, and conventional education or media. Collecting robust data will help to better understand the social, economic, and geographic disparities of traffic deaths and serious injuries. As this data is collected and understanding is refined, resources must be directed to address these disparities. These communities should be involved during the planning, implementation, and evaluation of safety efforts, and extra care should be taken that solutions do not incur unintended consequences for these communities. This Action Plan calls for representatives from these groups to be a part of the continuing Vision Zero Task Force to ensure these disparities are addressed in the implementation of this Action Plan.

Cost of Collisions

Formatted: Font color: Red

Formatted: Font color: Red

Formatted: Font color: Auto

Comment [FR2]: Map plus graphics

As acknowledged in this Action Plan, enacting the recommendations aimed at eliminating traffic deaths and injuries will take time and money. But society pays either way: with infrastructure, enforcement, and education, or with the emotional *and* financial costs of injuries and deaths.

Formatted: Font: Italic

Formatted: Font color: Auto

Safety is expensive, but not nearly as expensive as injuries and deaths. In addition to the tragedy and trauma suffered by victims of traffic collisions and their loved ones, traffic collisions are also an expensive drain on the economy. Fatal and injury crashes in Austin are estimated to cost our community over half a billion dollars annually, when health care and other related hard costs are included. [FOOTNOTE 14[20]?

What if half a billion dollars was invested into education, enforcement, and street design and engineering strategies to prevent injuries and deaths from crashes?

For example, \$500 million would fund over 800 miles of new sidewalks (35% of our 2,270 missing miles) [FOOTNOTE 1[215] or over 6,600 new pedestrian hybrid beacons (PHBs), []. FOOTNOTE16[22]- It could also buy 500 thirty-second safety commercials during the Super Bowl [http://ftw.usatoday.com/2016/02/how-much-doessuper-bowl-ad-cost].

A Need for Safer Streets

The Imagine Austin Comprehensive Plan is the community's vision for Austin and how it will manage growth and change. The Imagine Austin Comprehensive Plan envisions an Austin that is more walkable, bikeable, and transit-friendly. It calls for an array of safe, convenient travel options for people of all ages, abilities, and incomes so that they can meet their daily needs within a short trip — whether walking, bicycling, taking transit, riding a motorcycle, or driving. A well-connected, safe travel network is foundational to achieving the goals in the Imagine Austin Comprehensive Plan and for promoting public health, safety, and welfare. In October 2015, the City Council amended the Imagine Austin Comprehensive Plan to include Vision Zero as a policy goal. The Austin Strategic Mobility Plan is a forthcoming proposed amendment to Imagine Austin that will further develop and incorporate Vision Zero goals into its planning process.

Building on Success

The City of Austin is already addressing many aspects of transportation safety. These include continuous improvements to the design and engineering of our streets, for people of all ages and abilities traveling by all modes, led by Austin Transportation Department,—to implement the City's Complete Streets Policy. Other examples include the enforcement efforts of Austin Police Department and ordinances such as Distracted Driving and the Vulnerable Users/three-foot passing law which requires three feet of space when passing a cyclists, or six feet if the vehicle is a large truck. The City has also made land use changes, such as transit-oriented development around commuter rail stations, the Mueller redevelopment on the former airport, and changes to the Land Development Code, to create more compact development patterns that encourage walking, bicycling, and transit.

Despite these successes, the City recognizes that more must be done. The 2012 Traffic Fatality Report, produced by the Transportation, Police, and Public Works Departments noted that although the many initiatives underway by multiple departments demonstrate a commitment to traffic safety, these initiatives "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." The Vision Zero Action Plan addresses this need by providing an overarching goal and framework to unite the community's transportation safety efforts.

The Vision Zero Action Plan is designed to bolster the efforts already underway, as well as to identify new strategies, for preventing injuries and saving lives. By approaching transportation safety holistically, this Vision Zero Action Plan specifically encourages collaboration between departments, agencies, and the wider community to achieve safer streets for everyone.

The Austin City Council appointed a Vision Zero Task Force to make the recommendations for improving safety contained in this Vision Zero Action Plan. This multidisciplinary Task Force included representatives from multiple City departments, Federal and State agencies, research institutions, and community groups, all of whom are collaborating to identify solutions. The Vision Zero Action Plan is the culmination of the Vision Zero Task Force's work over the past year and an initial step in an ongoing collaborative effort to reduce injuries and save lives.

II. Critical Actions

Transportation-related injuries and deaths are a multifaceted problem that will require continuous, coordinated, and collaborative efforts to eradicate. The initial Vision Zero Action Plan identifies steps the City of Austin, other agencies, and the community should take in the first two years; subsequent evaluation and future Action Plans should refocus actions as needed and further develop longer-term solutions. The Action Plan focuses on ongoing and shorter-term actions targeting the top contributing factors to injuries and deaths, uniting transportation safety initiatives across departments, partners, and solutions, as well as creating a framework for monitoring and improving the efficacy of transportation safety actions. The Action Plan also identifies medium- and long-term actions, which will take longer to implement, but the City and its partners should begin laying the groundwork for those actions now. The timeframes listed for key progress metrics indicate when actions should be completed. Critical path-actions for 2016-2018 are organized in terms of these categories: Evaluation, Engineering, Enforcement, and Policy. Each critical action is explained in further detail in Appendix A along with existing initiatives, responsible agencies, cost estimate for completion, and the amount of funding currently available.

1. Evaluation: Collect, analyze, communicate and share data that documents fatal and incapacitating crashes and top contributing factors.

[CALL OUT BOX] A data-driven approach to safety is necessary to achieve Vision Zero. Directing resources to address injuries and deaths within our transportation system requires good data. Accurate information and thoughtful analysis of the data will result in better- enforcement, establishing needs and priorities for street design and engineering, and more effective educational campaigns. This initial Vision Zero Action Plan includes information on top contributing factors of injury and fatal collisions and crash locations, but this data must be continuously refined and reevaluated in order to best direct the prioritization of specific interventions given limited resources.

EVALUATION ACTIONS: [numbers to be assigned when order is confirmed]

Key Actions

DEVELOP better analytical tools and metrics:

- collect bike/pedestrian counts.
- Action X: Establish Integrate state and local tools into a common crash analysis tool that can identify/report on crash patterns and trends across the region as well as along a roadway and within/at an intersection and automatically generate collision diagrams.
- Action X: Hire at least one injury prevention epidemiologist position at the Austin/Travis County Health and Human Services Department (HHSD).
- Action X: Develop a better method of collecting information on the ground at crash locations.
- Action X: Collect geospatial data for citations from the municipal court and include that data in crash analysis.
- Action X: Continue to coordinate information and analysis of crash sites between APD and ATD.
- Action X: Work with TxDOT to link crash data and draw down Health and Human Services and hospital/trauma registry data.
- Action X: Develop Coordinate a data-driven procedure (and enhance tools as necessary) to prioritize high crash locations based on industry best practices and to focus limited resources.
- evidence.

Action X: Develop metrics to measure the success of existing and new programs that affect transportation safety, including evaluating changes in injury and fatal crash averages. Action X: Publicize and review crash analysis methodologies to improve the quality, consistency and transparency of analysis across agencies.

APPLY existing data to focus resources:

- Action X: Identify and investigate Incorporate state DOT datasets to analyze, map, and/or improve for better understanding of factors contributing to fatal and serious injury crashes.
- Action X: Create a platform and/or process to better share data, including geospatial data and maps, across City departments, agencies that are affected by transportation safety
- Use-Create a grant resource to facilitate City, agency, and community applications data to apply for local, state, and federal grant funding.
- Continue analysis of victims and suspects involved in fatal crashes, including demographics, to target education and enforcement efforts, including and policy changes.
- Continue interdepartmental collaboration of crash reviews
- Continue to use crash analysis in planning efforts,
- Continue data analysis, including geospatial analysis and mapping.
- Evaluate the effectiveness of education, enforcement, and street design and engineering improvements. Update data and crash maps in subsequent action plans.
- Conduct before/after studies of safety improvements to assess effectiveness and refine future
- Share data across City departments, with agencies, and with the public-.

Formatted: Font: +Body (Calibri), 10 pt

Formatted: Indent: Left: 0.5", No bullets or numbering

Action X: Provide additional resources to the current bicycle/pedestrian monitoring program to regularly collect bike/pedestrian counts.

Formatted: Font: +Body (Calibri), 10 pt

Formatted: Normal, No bullets or numbering

Formatted: Font color: Black

Key Progress Metrics

Completed in the short-term (0-3 years)

- Level of funding Funding provided to regularly collect bicyclist/pedestrian counts.
- Hire at least one injury prevention epidemiologist position at the Austin/Travis County Health and Human Services Department (HHSD).
- Provide technology and training for officers to better record and preserve crash details and site evidence.
- Create an interactive online mapping tool to display crash data and Vision Zero-related projects.
- Map and analyze the source of alcohol in DWI crashes.
- Create a Vision Zero reporting smartphone application or integrate into the 3-1-1 app.
- Create a grant management resource to facilitate City, agency, and community applications for local, state, and federal grant funding.

Formatted: Font color: Auto

Formatted: List Paragraph, Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

Formatted: Font: +Body (Calibri), 10 pt

2. Enforcement: Strengthen the ability to focus enforcement on hotspot locations of crashes resulting in deaths or incapacitating injuries.

[CALL OUT BOX] Distraction

Between 2010 and 2014, "driver inattention" was the highest reported contributing factor in police crash reports (15,378 crashes), and was second only to "failed to control speed" as a single contributing factor in deadly or incapacitating injury crashes.

Distracted driving is an especially pervasive problem as smartphones have become ubiquitous. Nationally, in 2013, more than 3,000 people were killed in crashes involving distracted drivers.17 High numbers of people report texting while driving18—a seemingly harmless way of multitasking—but research clearly shows texting while driving drastically increases the likelihood of being involved in a collision. Researchers have found that drivers using cellphones exhibited a level of impairment on par with driving drunk. Austin has taken important steps toward discouraging distracted driving by banning handheld use of electronic devices while driving or bicycling.

Hands-free use of cell phones may not go far enough. Research, including studies compiled by the National Safety Council, shows that our brains have difficulty simultaneously processing movement and languages, so much so that drivers "looked, but failed to see" up to 50 percent of their surroundings when they were using a device, regardless of whether they were using a hands-free devices or not. Laboratory and on-road research shows that talking on a hands-free cell phone or using a speech-to-text email system reduces drivers' available mental resources that can be dedicated to driving. This cognitive distraction can lead drivers to miss visual cues, have slower reaction times, and see in tunnel vision.19

Key Actions

ENFORCEMENT ACTIONS

TARGET enforcement where it is needed most

- Action X: Target enforcement on high injury and fatal roadways and on top contributing factors dangerous driving behaviors.
- Action X: Enforce driver behavior around traffic calming devices and crossing devices,
- Action X: Coordinate enforcement across all Law Enforcement (LE) agencies and coordinate to increase prosecution of repeat offenders.
- Action X: Work with the Austin Police Department to continue enforcement of transit priority lanes.
- Action X: Establish server training to reduce risks associated with the retail alcohol environment.

INCREASE capacity for enforcement and prosecution

- repeat offenders.
- Action X: Increase the number of prosecutors who handle traffic violations and create a group specifically for prosecuting DUI/DWI.
- Austin X: Frame traffic offenses as a leading, but preventable, public health and safety problem and educate judges, legislators, and the public to ensure punishments are appropriate.
- Action X: Fund and expand the DWI Unit.
- Action X: Fund new Highway Enforcement positions, including a dedicated Night Highway Response Team.
- Action X: Install red light cameras at 20 new authorized locations.
- Action X: Enhance the current City Ordinance for areas unsafe to pedestrians.
- pedestrians.
- Action X: Work with courts to create graduated penalties for repeat offenders.

- Action X: Pursue legislative changes for automated speed enforcement in school zones
- Action X: Establish a sobriety center as an alternative to jail for the dangerously intoxicated. Action X: Design assurances against racial profiling and targeting of enforcement of top contributing factors.

Formatted: Font: (Default) +Body (Calibri), 10

Formatted: Bulleted + Level: 1 + Aligned at:

Formatted: Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

Key Progress Metrics

Completed in the short-term (0-3 years)

- Incentivize server training to reduce risks associated with the retail alcohol environment
- Fund DWI Unit (see Action 10)
- Fund new HEC Unit and/or positions (see Action 10)
- Fund red light cameras (see Action 16)
- Create legislative workgroup to discuss safety issues

Completed in the medium-term (3-7 years)

- Establish new DWI Unit
- Create new positions at HEC
- Select red light camera locations and install cameras
- Fund a sobriety center
- Fund more prosecutors
- Fund a DWI prosecution unit
- Establish a DWI prosecution unit

Formatted: Font: (Default) +Body (Calibri), 10

0.25" + Indent at: 0.5"

Formatted: Font: (Default) +Body (Calibri), 10

Add AISD officers to help enforcement of school zones

Completed in the long-term (7-10 years)

- Make changes to law via the legislature
- Establish a sobriety center

Formatted: List Paragraph, Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

Formatted: Font: (Default) +Body (Calibri), 10

Formatted: Font: 12 pt, Bold

Formatted: Indent: Left: 0", Hanging: 0.25"

ENGINEERING: Bolster key initiatives for which Complete Street Design, Traffic Engineering, and Transportation Planning can prevent deadly or incapacitating collisions.

[CALL OUT BOX] The Complete Streets Policy [ordinance 20120612] adopted by Austin City Council establishes a multimodal approach for the design of streets and the safety of all travelers. It states:

"Safety, including a reduction in hazards for pedestrians and bicyclists on Austin roadways, is a fundamental consideration of this Complete Streets Policy."

Complete Streets Principles stated that relate to Vision Zero goals include:

- Complete Streets serve all users and modes. The City of Austin commits to design, operate and maintain the community's streets and right-of-way so as to promote safe, comfortable and convenient access and travel for people of all ages and abilities. This is the core intent of this policy. All streets and roadways within the city shall provide basic safe access and crossings for all allowed categories of users people traveling as pedestrians and by bicycle, transit riders, motorists and others. ... The City recognizes that children, seniors, and persons with disabilities may require inclusive accommodations.
- Complete Streets require connected travel networks. The City of Austin shall prioritize opportunities to create a complete transportation network that provides connected facilities to serve all people and modes of travel, now and in the future. Streets shall be connected to create complete street networks that provide travelers with multiple choices of travel routes and that help to reduce congestion on major roadways. This network includes off-street hard-surface trails for biking and walking. All roadways and routes need not be optimized for all modes; however, people using each mode require a network of safe and convenient travel routes and crossings throughout the city.

Formatted: Space After: 0 pt, Line spacing: single, Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 0" + Tab after: 0.28" + Indent at: 0.28", Don't adjust space between Latin and Asian text, Don't adjust space between Asian

Key Actions

IMPLEMENT Safety-Related Policies, Plans and Programs

- Action X: direct engineering, enforcement, and education resources to high injury and fatal crash hotspot locations. Implement at least five major safety engineering projects annually at top crash prone locations.
- Action X: Implement low-cost, high-impact safety improvements throughout the city based on safety
 engineering studies. Work with CAMPO and TXDOT for funding opportunities.
- Action X: Revise transportation municipal codes (transportation criteria manual) to focus on safety and
 thorough review of transportation development projects. Create an interim policy for implementing the
 Complete Streets Policy in every construction, reconstruction and/or development project and accelerate
 the process to create a Complete Streets design guide.

Formatted: Space After: 10 pt, Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

Formatted: Font: +Body (Calibri), 10 pt, Not Highlight

Formatted: Font: 10 pt

text and numbers

Formatted: Font: 10 pt

• Action X: Conduct Engineering Studies:

- Conduct speed studies at locations with speeding issues as identified in collision analysis.
- Study crash-prone locations where right-on-red or left turn movements were factors.
- Identify locations with pedestrian safety issues using collision analysis maps and consider traffic control devices to allow safer crossings.
- Study and expand exclusive pedestrian crossing time on high injury network for people walking.
- Study locations and implement speed feedback warning to reinforce education and enforcement initiatives and encourage speed compliance.

• Action X: Capital Metro Safety Improvement Initiatives:

- Evaluate need for potential adjustments to interior lighting of buses for improved safety during nighttime operations including reducing glare for operators.
- Capital Metro will continue working with City of Austin/Austin Energy to evaluate need for lighting along transit corridors and at intersections.
- Continue evaluating transit collision hotspots and work with partner organizations to improve safety conditions at those locations.
- Action X: Work with all school districts within the City of Austin's jurisdiction as well as charter and private schools and the City's Safe Routes to Schools program to set a goal for safe, active travel to schools.
- Action X: Capital Metro will work with the University of Texas and the City of Austin to consider safer vehicle parking methods to reduce collisions along transit corridors through campus.
- Action X: Capital Metro will continue to collaborate with the City of Austin to ensure safe pedestrian access to transit stops.
- Evaluate new and existing bus stops to reduce rear-end collisions at intersections,

Action X: Apply Technology in Safety Improvement Initiatives:

- Evaluate opportunities to expand existing and/or implement new transit priority treatments.
- Implement new transit vehicle engineering principles (e.g. rear-of-vehicle chevrons, right-side illumination during turns, lane departure technology) to reduce collisions..
- Work to equip all City fleet vehicles with safety related devices, designs, and technology that record dangerous driving behaviors.
- Continue to work with Google, Rocky Mountain Institute, and other tech companies to pioneer autonomous vehicle testing and adoption to improve safety.
- Enhance signal system software and equipment to detect red light running and use data for enforcement and engineering.
- Deploy next generation emergency vehicle preemption to reduce response times and increase safety.
- Conduct a pilot project to assess feasibility of advanced detection techniques to estimate the frequency and type of near-miss collisions within signalized intersections
- Action X: direct engineering, enforcement, and education resources to high injury and fatal crash *
 hotspot locations,
- Action X: Continue to implement the Complete Streets Policy.

Formatted: Font: 10 pt

Formatted: Font: 10 pt

Formatted: Font: 12 pt

Formatted: Indent: Left: 1", No bullets or

numbering

Formatted: Font: 10 pt

Formatted: Indent: First line: 0", Bulleted + Level: 1 + Aligned at: 0.5" + Indent at: 0.75"

Formatted: Font: 12 pt

Formatted: Font: (Default) +Body (Calibri), 10 pt

Formatted: Bulleted + Level: 1 + Aligned at: 0.75" + Indent at: 1"

Formatted: Indent: Left: 0.5", No bullets or numbering

Formatted: Font: (Default) +Body (Calibri), 10 pt

Formatted: Bulleted + Level: 1 + Aligned at:

0.75" + Indent at: 1"

Formatted: Font: (Default) +Body (Calibri), 10 pt

Formatted: Indent: First line: 0", Bulleted + Level: 1 + Aligned at: 0.5" + Indent at: 0.75"

Formatted: Font: +Body (Calibri), 12 pt

Formatted: Indent: Left: 0.5", No bullets or numbering

romatteu. Font. 10 p

 Action X: Fund and build infrastructure improvements included in the Bicycle Master Plan, Sidewalk Master Plan, and Urban Trails Master Plan.

Action X: Work with CAMPO and TxDOT for funding opportunities for safety improvements.

•

Action X: Apply Technology in Safety Improvement Initiatives:

Evaluate opportunities to expand existing and/or implement new transit priority treatments.

— Implement new transit vehicle engineering principles (e.g. rear-of-vehicle chevrons, right-side illumination during turns, lane departure technology) to reduce collisions...

— Work to equip all City fleet vehicles with safety related devices, designs, and technology that record dangerous driving behaviors.

— Continue to work with Google, Rocky Mountain Institute, and other tech companies to pioneer autonomous vehicle testing and adoption to improve safety.

— Enhance signal system software and equipment to detect red light running and use data for enforcement and engineering.

— Deploy next generation emergency vehicle preemption to reduce response times and increase safety.

Conduct a pilot project to assess feasibility of advanced detection techniques to estimate the frequency and type of near miss collisions within signalized intersections.

Key Progress Metrics

Completed in the short-term (0-3 years)

 Establish a dedicated Traffic Safety Engineering team (consisting of 6 FTEs) with financial resources to work on safety engineering projects and transportation development projects.

Ongoing

- Number of safety engineering projects completed
- Miles of safe bike lanes, sidewalk, and trails constructed
- Conduct before and after studies of safety improvements to assess effectiveness and refine future applications

4. Education: Create a targeted, branded Vision Zero education and media campaign raising awareness of the severity of the problem and solutions, including behavior changes.

[CALL OUT BOX] Preventing injuries and death on Austin's roads will take everyone's efforts. The Vision Zero media campaign will provide a common brand and unite all of the traffic safety initiatives and related marketing in the region. An ongoing conversation about dangerous driving behaviors (Top Contributing Factors), improving travel education, and rethinking how we design our transportation systems will require all Austinites and include important discussions about the tradeoffs between the choices one must make. Targeted outreach and educational campaigns geared towards specific audiences (e.g., bicyclists, drivers, pedestrians and motorcyclists) will provide information about how each can safely interact with the other while traveling on Austin's roadways.

Formatted: Font: 10 pt

Formatted: Font: 10 pt, Not Highlight

Formatted: Font: +Body (Calibri), 12 pt

Formatted: Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

Formatted: Font: 10 pt

Formatted: Indent: Left: 0.75", No bullets or

numbering

Formatted: Font: +Body (Calibri), 12 pt

Formatted: Indent: Left: 0"

Formatted: Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

Formatted: Font: +Body (Calibri), 12 pt, Font color: Auto

Formatted: Indent: Left: 0"

Formatted: List Paragraph, Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

Formatted: Font: +Body (Calibri), 12 pt, Font color: Auto

Formatted: Font color: Black
Formatted: Font color: Black

Formatted: Font: +Body (Calibri), 12 pt, Font color: Auto

Formatted: Font: +Body (Calibri), 12 pt, Font color: Auto

Formatted: List Paragraph

Formatted: List Paragraph, Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

Vision Zero Taskforce agencies will partner with local, state, federal and community organizations on educating people who travel in Austin and how they can change their behavior to make traveling safer. The Vision Zero media campaign should focus on helping public information officers (PIOs) and others deliver standard messaging regarding traffic safety in the news media, including standard Vision Zero messages and responses to questions about crashes.

A strong, branded, Vision Zero educational media campaign should use data to educate all Austinites on the severity of the problem and the dangerous traveling behaviors that lead to serious injuries and death (from the top contributing factors, including impaired driving and speed), in order to start changing attitudes and behaviors. The media campaign should be inclusive, culturally-sensitive, and tailored to the diversity of people (e.g., all ages, races, ethnicities, socio-economic groups) in Austin. City staff will pursue funding for the educational campaign, such as TxDOT/NHTSA Section 402 grants and other sources. Using data and mapping, Vision Zero Taskforce agencies will partner to produce events in "hotspot" areas, around the top contributing factors, to focus on changing behaviors in those areas.

EDUCATION ACTIONS

Key Actions

IMPLEMENT a comprehensives, citywide, Vision Zero public education campaign

- Action X: Create a cross-departmental safety education team, with dedicated staff and funding, with membership from APD, ATD, HHSD, PAZ, EMS, AFD, PWD.
- Action X: Create a Vision Zero training module and train all staff that review, design, or implement
 projects to reiterate that all staff are responsible for transportation safety.
- Action X: Continue safety messaging onboard buses and at/around bus stops through partnership with KUT and other media outlets

Action X: Lead by example by adopting Vision Zero policies for City fleets and through education and training targeting public and private employers. Develop-This should include an online safety training program for all modes on line training video module that utilizes includes the existing "Ride Kind, Drive Kind" video to help ground transportation livery drivers understand how to interact safely with vulnerable road users. Action X: Lead by example by adopting Vision Zero policies for fleets and through education and training targeting public and private employers.

Action X: Create online safety training program for all modes.

Action X: Provide defensive travel training for all modes at vocational and college orientations and in student housing to educate new students how to travel safely in the city. <u>Action X: Work with-the University of Texas</u>area colleges to create and implement a new pedestrian/transit safety campaign.

Action X: Provide targeted outreach and training when adding <u>pedestrian or</u> bike facilities to teach
residents how to use the facility and how to drive near people using the facility.

- Action X: Lead by example by adopting Vision Zero policies for fleets and through education and training targeting public and private employers.
- Action X: Create online safety training program for all modes.
- Action X: Work with the University of Texas to create and implement a new pedestrian/transit safety

Formatted: Font: (Default) +Body (Calibri), 10 pt

Formatted: Font: (Default) +Body (Calibri), 10

- Action X: Require defensive driving for all top contributing factors citations. Train all participating agencies' staff that interface with media on Vision Zero messaging.
- Hire or consult with community education/cultural competence expert(s) to make sure that our outreach
 and education efforts are truly inclusive and effective.
- Action X: Evaluate the knowledge of laws and regulations possessed by those convicted of crimes related to dangerous driving and explore targeted education.

INTEGRATE Vision Zero principles into existing safety education

- Action X: Work with social service providers to improve safety of people experiencing homelessness, including educational outreach, improving visibility, and establishing safe crossings.
- Action X: Encourage print, television, and social media leaders to frame traffic crashes as tragic and preventable occurrences when reporting on them.
- Action X: Incorporate Vision Zero for all modes into City's defensive driving classes and curriculum.
- Action X: Require City employees to renew defensive driving training every year for commercial drivers and every two years for non-commercial drivers.
- Action X: Shorten driver's license renewal from 6 years to 4 years and require defensive driving or driver's education. Incorporate Vision Zero messaging into existing media training for such staff.

-Action X: Require defensive driving for all top contributing factors citations.

.

Key Progress Metrics

Completed in the short-term (0-3 years)

- Number of staff trained with the Vision Zero training module
- Number of safety advertisements
- Number of organizations we form partnerships with
- Number of organizations using the online video/module/number of unique visitors

5. Policy

[CALL OUT] Policy changes will be necessary to support many of the actions and bolster the work already underway.

Key Actions

POLICY ACTIONS

PURSUE policy change necessary to achieve Vision Zero

- Action X: Work at the local and, state, and federal level toward adopting a safe system approach of lowering default speed limits congruent with research on speed and best practices.
- Action X: Pursue Housing First model of ending homelessness to address larger societal issues contributing to crashes involving homeless persons crossing the roadway.
- —Action X: Shorten driver's license renewal from 6 years to 4 years and require defensive driving or driver's education for all top contributing factors.

Formatted: Font: +Body (Calibri), 10 pt

Formatted: Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

Formatted: Font: +Body (Calibri), 10 pt

Formatted: Font: +Body (Calibri), 10 pt

Formatted: List Paragraph, Indent: Left:

0.25", Bulleted + Level: 1 + Aligned at: 1.5" + Indent at: 1.75"

Formatted: Font color: Black

Formatted: Font color: Black

Action X: Include Vision Zero principles and land use, urban design, and multimodal street design and
engineering strategies in coordinated revisions to the Land Development Code (CodeNEXT) and the City
Transportation Criteria Manual (TCM) and policies.

• Action X: Continue transportation safety plans and efforts Develop action plans for vulnerable user groups and coordinate these more specific plans with the Vision Zero Action Plan.

- Action X: Continue to build on Traffic Demand Management (TDM) strategies.
- Action X: Through the City's update to the Land Development Code (CodeNEXT process), ensure that road signs, poles, and other right-side fixed objects are maintained at least 18" from the curb along transit corridors.
- Action X: Meet the community's short term goals to house Austinites experiencing homelessness.

RESEARCH opportunities for policy change

- Action X: Consider changing the cite-and-release policy for people who drive without a license or with a suspended license
- Action X: Research enforcement techniques from other cities to enhance compliance with the Distracted Driving Ordinance.
- Action X: Explore requiring bars to serve food or partner with food trucks to provide food.
- Action X: Explore prohibiting motor vehicles passing from the left and turning right in front of a bus within 100 ft. of an intersection.
- Action X: Consider the impact of limiting the number or density of alcohol-serving establishments in certain areas.
- Action X: Consider the effect of implementing (or increasing) a City liquor tax (to decrease the amount of alcohol people drink).
- Action X: Consider the traffic safety effects of a ban on (A) right turns on red and (B) left turns across traffic and/or when pedestrians have a walk signal in effect.
- Action X: Consider the effect of a 24/7 sobriety program for those convicted of alcohol-related crimes.
- Action X: Explore allowing prosecutors to work county and district cases (misdemeanor and felony cases),
 as is done in the field of family violence law.
- Action x: Pursue legislative changes for automated speed enforcement in school zones.

•

Key Progress Metrics

- Working with ECHO, Front Steps, ATCIC, and other social service providers, meet the community's short term goals to house Austinites experiencing homelessness.
- Effect of Transportation Demand Management program on Vehicle Miles Traveled (VMT)

III. Implementation

Formatted: Font: +Body (Calibri), 10 pt

Formatted: Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

Comment [FR3]: move to appendix

Formatted: Indent: Left: 0.5", No bullets or numbering

Formatted: Font: +Body (Calibri), 10 pt

Comment [WE4]: Matt suggested something similar but was hesitant to propose it as an enforcement action without checking with the involved parties. If it doesn't make the enforcement list, it should be in the policy research list

Formatted: Font: +Body (Calibri), 10 pt

Formatted: Font: +Body (Calibri), 12 pt, Bold

Formatted: Normal, No bullets or numbering

Formatted: Font: +Body (Calibri), 10 pt

Formatted: List Paragraph, Bulleted + Level: 1 + Aligned at: 0.25" + Indent at: 0.5"

Formatted: Font: +Body (Calibri), 10 pt

Formatted: Font: 10 pt
Formatted: Font: 10 pt
Formatted: Font: 10 pt

Formatted: Font: +Body (Calibri), 10 pt

Develop a Vision Zero Program: The City of Austin will staff and fund a program dedicated to improved

transportation safety, with a focus on enforcement, multimodal street design and engineering, and education.

The Austin City Council directed the City Manager to convene a Vision Zero Task Force in November 2014 to make recommendations to improve traffic safety in Austin. The Vision Zero Task Force has brought together different City departments, state and federal agencies, institutions, and community groups to provide a holistic approach to traffic safety. This forum has already led to increased collaboration and innovative ideas and actions.

Vision Zero Program and Task Force

The City of Austin will establish a Vision Zero Program that provides the necessary professional staff, expertise and funding to carry out the actions identified in the Vision Zero Action Plan. Vision Zero Program staff will convene the Vision Zero Task Force to ensure the continued interdepartmental, interagency, and community coordination necessary to work towards Austin's goal of zero deaths and serious injuries by 2025.

The Task Force will continue to be an interagency and interdepartmental group with representation from key community groups, including advocates for the most vulnerable road users. Representatives from the pedestrian, bicycling, and motorcycling groups; minority communities including the African American, Asian American and Spanish-speaking communities; the homeless population and homeless services; and advocates for older adults, people with disabilities, and social workers who work with at-risk communities will work with government members of the Task Force to ensure their constituents' concerns and needs are addressed. An Executive Committee composed of the Planning and Zoning, Transportation, Police, Health and Human Services, Public Works, EMS, Law, and Fire departments will oversee and coordinate implementation of City actions in the Action Plan.

Member city departments and agencies will implement the actions within this Action Plan and make regular reports to the Task Force. City staff will produce an annual Vision Zero Report Card, to be reviewed by the Task Force and the City Council, evaluating the effectiveness of actions and tracking implementation progress.

Vision Zero in the Austin Strategic Mobility Plan

The Austin Strategic Mobility Plan will pull multiple mobility programs and plans into one comprehensive vision and apply an integrated approach to planning for all modes of our transportation network. The Vision Zero Action Plan will serve as a key driver for integrating safety into the ASMP. This plan will be formed over the life of the Vision Zero Action Plan with the aim to fully integrate Vision Zero principles into the ASMP.

Annual Vision Zero Report Card

The annual Vision Zero Report Card will track the City's progress toward the goal of zero deaths and serious injuries by 2025 and inform changes and new actions in subsequent Action Plans. This Report Card will look at the safety improvements, enforcement operations, and education and outreach accomplished, but will focus on the metrics that matter: are our streets getting safer?

The report card will track:

- total fatal and incapacitating injury crashes;
- · fatal and incapacitating injury crashes by mode;
- fatal and incapacitating injury crashes at hotspot locations with targeted interventions;

Formatted: Font: 10 pt

- fatal and incapacitating injury crashes involving top contributing factors; and
- progress metrics for actions toward the goal of zero deaths by 2025.

These metrics will guide implementation efforts in the second year of the Action Plan and inform actions included in subsequent Action Plans.

A cost estimate accompanies this plan and provides a planning level cost estimates for actions described in this plan. This is an initial estimate that will be evaluated as part of the annual Vision Zero Report Card.

Task Force Meeting Frequency & Work Plan

The Task Force will continue to meet at least quarterly. It will work with agencies and representatives of community constituencies to share, use, and evaluate data, resources, and partnerships. The Task Force will continue to review analysis of crash and injury data and research best practices to inform implementation. To ensure transparency and accountability, the Task Force will monitor, evaluate, and review updates on the progress of the implementation of the Vision Zero Action Plan.

The Task Force member departments and agencies will work on additional mapping and analysis (Critical Action #3) to inform an educational media campaign (Critical Action #2), focus on key enforcement and street design and engineering initiatives that target the top contributing factors of serious and fatal injury collisions (Critical Action #1). Building on the combined efforts of ATD and APD in investigating crashes, the Task Force should also analyze fatal crashes and make recommendations on actions such as design improvements, outreach and education, or policy changes.

Conclusion & Summary

The Vision Zero Action Plan provides an initial set of actions for the City, other agencies, and community partners as we work toward our goal of preventing serious traffic injuries and deaths.

Cities that have implemented Vision Zero plans and programs have seen improvements in transportation safety. Reaching zero is achievable. In the US, the cities of Ann Arbor, Michigan; Lakewood, Washington; El Monte, California; -and Provo, Utah have all had at least one year without traffic deaths. 2[230] These cities are smaller than Austin, but prove that traffic deaths are not inevitable.

A goal of zero deaths and serious injuries by 2025 is simple and straightforward, but getting there will not be easy. It will take fresh approaches to education and behavioral change, laws and enforcement, street design and engineering, policy and regulatory changes, and land use and connectivity. It will take careful evaluation and continuous improvement. It will take all Austinites.

Pledge

We pledge to actively work to reduce fatal and serious-injury crashes on Austin streets through a coordinated, holistic approach. We recognize that changes to land use patterns and street designs will take time and money, but

we commit to start today. We will engage in robust data collection, analysis, and sharing to identify needs and priorities, and inform decisions to direct resources where they are most needed. We will continuously evaluate and improve our actions toward our goal of eliminating serious injuries and deaths.

We will prioritize enforcement where it can have the greatest effect in saving lives and preventing serious injuries. We will target law enforcement efforts to locations with a high rate of fatal and serious injury crashes and to address the most dangerous behaviors.

Traffic deaths and injuries are preventable; therefore, none are acceptable. We commit the following City departments and undersigned agencies to continuing the work of the Vision Zero Task Force as we strive toward eliminating serious injuries and deaths by 2025.

| Mayor, City of Austin | | | |
|--|-----------------|--|--|
| City Manager, City of Austin | | | |
| Capital Metro | | | |
| Texas Department of Transportation, A | Austin district | | |
| Federal Highway Administration, Texas | s Division | | |
| Travis County District Attorney's Office | 2 | | |

References

- 1 Brian Tefft, 2011, Impact Speed and a Pedestrian's Risk of Severe Injury or Death, AAA Foundation for Traffic Safety
- 1 World Resources Institute, Cities Safer by Design, http://www.wri.org/sites/default/files/CitiesSaferByDesign_final.pdf
- 2 New York City, April 2015, Vision Zero: One Year Report, http://www.nyc.gov/html/visionzero/assets/downloads/pdf/vision-zero-1-year-report.pdf
- 3 http://www.nhtsa.gov/About+NHTSA/Press+Releases/2014/traffic-deaths-decline-in-2013
- 4 http://www.heraldextra.com/news/local/central/provo/provo-achieves-vision-zero-one-of-largest-cities-to-have/article_f639586f-cca6-52de-8cbb-5971d7ea2f7e.html. 115 other US cities and towns over 50,000 people also went at least one year with no deaths: http://www.dekra-vision-zero.com/map/
- 5 Colin Pope, June 2012, Austin Business Journal
- 6 National Highway Traffic Safety Administration, 2013, http://www-nrd.nhtsa.dot.gov/Pubs/812139.pdf

2014, https://app.ntsb.gov/news/speeches/hersman/daph140408c.html

- 7 National Highway Traffic Safety Administration, 2013, http://www-nrd.nhtsa.dot.gov/Pubs/812139.pdf
- 8 Census, American Community Survey Journey to Work Data (2013 5-year aggregate). This does not include noncommute trips and may undercount parts multimodal trips (for instance a bike-bus-bike trip may be counted as transit).

(http://www.trg.dk/elvik/740-2004.pdf)

- 9 National Highway Traffic Safety Administration, 2014, "Traffic Safety Facts: 2012 Data: Pedestrians", http://www-nrd.nhtsa.dot.gov/Pubs/811888.pdf
- $10 \ Ewing, Schieber, and \ Zegeer, 2003, Urban \ sprawl \ as \ a \ risk \ factor \ in \ motor \ vehicle \ occupant \ and \ pedestrian \ fatalities, \ http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448007/$
- ${\tt 11\ http://www.governing.com/topics/public-justice-safety/gov-pedestrian-deaths-analysis.html}$
- 12 Austin American Statesman, http://projects.statesman.com/news/homeless-deaths/index.html
- 13 Austin Police Department
- ¹⁴ Calculated by multiplying the cost of fatal (\$2,600,000), incapacitating (180,000), evident (36,000), and possible Injuries (19,000) by the number of each crash types between 2010-2014 and dividing by 5 years. Crash costs from http://safety.fhwa.dot.gov/facts_stats/t75702.cfm
- 15 Sidewalks cost an average of \$24.14 per square foot. The City of Austin has completed half of its sidewalk network (about 2,360 miles) and needs an additional 2,270 miles. It will take almost 200 years to complete the network based on current funding levels.

 $16\ Pedestrian\ hybrid\ beacons\ cost\ \$75,000\ each.\ http://austintexas.gov/page/pedestrian-hybrid-beacons$

16 Richards, D. C. 2010, Relationship between Speed and Risk of Fatal Injury: Pedestrians and Car Occupants, Transport Research Laboratory,

http://nacto.org/docs/usdg/relationship_between_speed_risk_fatal_injury_pedestrians_and_car_occupants_richa rds.pdf; and Tefft, Brian. 2011. Impact Speed and a Pedestrian's Risk of Severe Injury or Death, AAA Foundation for Traffic Safety https://www.aaafoundation.org/sites/default/files/2011PedestrianRiskVsSpeed.pdf

16 Elvik, R, et al, 2004, Speed and Road Accidents, an evaluation of the Power Model, TOI, Norway, http://www.trg.dk/elvik/740-2004.pdf

17 http://www.distraction.gov/stats-research-laws/facts-and-statistics.html

18 http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6210a1.htm?s_cid=mm6210a1_w

19 http://www.distraction.gov/downloads/pdfs/a-comparison-of-the-cell-phone-driver-and-the-drunk-driver.pdf

20 http://www.dekra-vision-zero.com/map/

21 US Government Accountability Office, Pedestrian and Cyclists: Cities, States, and DOT are Implementing Actions to Improve Safety, http://www.gao.gov/assets/680/673782.pdf and Ewing, R. et al., 2003, Urban sprawl as a risk factor in motor vehicle occupant and pedestrian fatalities, http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448007/

APPENDIX A: VISION ZERO ACTIONS

EVALUATION ACTIONS

| SH | ORT TERM ACTIONS (0-3 YRS) | CONCEPTUAL | UNDERWAY | | Agency(s) responsible | Cost and Percent Funded |
|----|---|------------|----------|---|---|--|
| 1 | Integrate state and local tools into a common crash analysis tool that can identify/report on crash patterns and trends across the region as well as along a roadway and within/at an intersection and automatically generate collision diagrams. | | • | • | ATD, TxDOT | \$350,000 for Vision Zero Program Team (3 FTE's: Program Manager, Project Coordinator and Research Analyst and commodities for new FTEs); future costs to be determined. 33% Funded (Program Manager) |
| 2 | Develop a better method of collecting information on the ground at crash locations. | ~ | | | APD | Conceptual action; cost to be determined. 0% Funded. |
| 3 | Collect geospatial data for citations and include that data in crash analysis. | ~ | | | ATD, APD, Municipal Court | Vision Zero Program Team (see Action1) |
| 4 | Work with TxDOT to link crash data and draw down Health and Human Services and hospital/trauma registry data. | • | | | ATD, HHS, EMS, TxDOT and Trauma Centers (Seaton, Dell Children's, Brackenridge) | Vision Zero Program Team (see Action1) plus another \$190,000 for epidemiologist. |
| 5 | Coordinate a data-driven procedure (and enhance tools as necessary) to prioritize high crash locations based on industry | • | | | ATD | Conceptual action; cost to be determined. |

| SH | ORT TERM ACTIONS (0-3 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | Agency(s) responsible | Cost and Percent Funded |
|----|--|------------|----------|--------|-------------------------------|--|
| | best practices and to focus limited resources. | | | | | 0% Funded. |
| 6 | Incorporate state DOT datasets to analyze, map, and/or improve for better understanding of factors contributing to fatal and serious injury crashes. | | • | • | ATD, TxDOT | Vision Zero Program Team (see Action1) |
| 7 | Continue analysis of victims and suspects involved in fatal crashes, including demographics, to target education, enforcement efforts, and policy changes. | | • | • | ATD, PAZ, HHS | Vision Zero Program Team (see Action1) |
| 8 | Evaluate the effectiveness of education, enforcement, and street design and engineering improvements. Update data and crash maps in subsequent action plans. | | • | • | Taskforce, ATD, PAZ | Vision Zero Program Team (see Action1) |
| 9 | Share data across City departments, with agencies, and with the public. | | • | • | APD, ATD, HHS, CTM, Taskforce | \$100,000 annual costs for maintaining permanent bike/ped counters, applications and annual data collection contracts + Vision Zero Program Team (see Action1) |
| 10 | Map and analyze the source of alcohol in serious crashes and incidents of DWI. | | | | ATD | Vision Zero Program Team (see Action1) |

ENFORCEMENT ACTIONS

| SHORT TERM ACTIONS (0-3 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | Existing initiatives | Agency(s) responsible | Cost and Percent |
|--|------------|----------|--------|---|--------------------------|--|
| Target enforcement on high injury and fatal roadways and on top contributing factors dangerous driving behaviors (improper movement, in attention, failure to yield, speed, intoxication, failure to stop. Metric: Fund and expand the DWI Unit (e.g., to more "No Refusal" events or going full time 24/7) Metric: Fund new Highway Enforcement positions, including a dedicated Night Highway Response Team. | | • | • | Highway Enforcement Command (HEC) Speeding Initiatives, Arrive Alive, STEP, Regional & Regular Patrol | APD | Targeted Enforcement: \$1,640,838 annual costs for 16 additional FTE's plus overtime. Expanded DWI Unit: \$150,000 in additional overtime funds dedicate for DWI No Refusal Initiatives. Additional DV Corporal/Officer FTEs (1 Cpl and 10 Ofcs total) = \$1,003,258.00 in annual salary. Additional Police vehicles in relation to the above FTEs. 11 unmarker Ford U/V police interceptors(with DWI Stealth Markings; half cages w/printers) = \$625,955.00 onetime cost. |

| SHORT TERM ACTIONS (0-3 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | Existing initiatives | Agency(s) responsible | Cost and Percent Funded |
|--|------------|----------|--------|--|---|--|
| | | | | | | Night Highway Response Team: \$1,575,288 in annual salaries for 18 new FTE's plus \$620,050 one-time cost for vehicles. \$266,086 for 2 additional prosecutors +\$10,000 onetime costs. 0% Funded. |
| Enforce driver behavior around traffic calming devices (speed bumps, humps, cushions chicanes) and crossing devices, including crosswalks, Pedestrian Hybrid Beacons (PHB) and Rectangular Rapid Flash Beacons (RRFB). | | • | • | Local Area Traffic Management Program, Pedestrian Hybrid- Beacon Program, Rectangular Rapid Flashing Beacon Program | APD, ATD | \$50,000 in annual overtime costs. 0% Funded. |
| Coordinate enforcement across all Law Enforcement (LE) agencies and coordinate to increase prosecution of repeat offenders. | • | | | DWI unit, Arrive Alive, No Refusal events | APD, Government Relations Travis County, Courts | Conceptual action; cost to be determined. 0% Funded. |
| Frame traffic offenses as a leading, but preventable, public health and safety problem and educate judges, legislators, and the public to ensure punishments are appropriate. | • | | | | APD, Courts | Conceptual action; cost to be determined. 0% Funded. |

| Sł | HORT TERM ACTIONS (0-3 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | Existing initiatives | Agency(3) | Cost and Percent Funded |
|----|--|------------|----------|--------|---|---------------------------------|--|
| 15 | Continue enforcement of transit priority lanes. | | , | | | , | Costs unknown at this time. |
| 16 | Design assurances against racial profiling and targeting of enforcement of top contributing factors. Ensure that communities of color, police agencies, and community leaders are included in the decision making and development of enforcement plans and policies. | • | | | African American Resource Advisory, Asian American Quality of Life Advisory, Hispanic / Latino Quality of Life Advisory, Join Inclusion | Commissions listed to the left. | \$5,000 in initial outreach, additional cost to be determined. 0% Funded. |
| 17 | Consider the effect of a 24/7 sobriety program for those convicted of alcohol-related crimes. | • | | | | | Conceptual action; cost to be determined. 0% Funded. |
| 18 | Design assurances against racial profiling and targeting of enforcement of top contributing factors. | | • | | | , | Coordinated with existing staff and resources. |

| M | EDIUM TERM ACTIONS (3-7 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | Existing initiatives | Agency(s) responsible | Cost and Percent Funded |
|----|---|------------|----------|--------|--|--------------------------|--|
| 19 | Target enforcement on high injury and fatal roadways and on top contributing factors dangerous driving behaviors (improper movement, in attention, failure to yield, speed, intoxication, failure to stop. Metric: Install red light cameras at 20 new authorized locations. | | • | • | Highway Enforcement Command (HEC) Speeding Initiatives, Arrive Alive, STEP, Regional & Regular Patrol | APD, ATD | \$487,580 annual costs for 5 additional FTE's plus overtime. \$300,000 for red light cameras. 0% Funded. |
| 20 | Enforce driver behavior around traffic calming devices (speed bumps, humps, cushions chicanes) and crossing devices, including crosswalks, Pedestrian Hybrid Beacons (PHB) and Rectangular Rapid Flash Beacons (RRFB). | | • | ~ | Local Area Traffic Management Program, Pedestrian Hybrid- Beacon Program, Rectangular Rapid Flashing Beacon Program | APD, ATD | \$50,000 in annual overtime costs. 0% Funded. |
| 21 | Enhance the current City Ordinance for areas unsafe to pedestrians. | • | • | | | APD | Coordinated with existing staff and resources. |

ENGINEERING ACTIONS

| SHORT TERM ACTIONS (0-3 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | Existing initiatives | 1801107(0) | Cost and Percent Funded |
|------------------------------|------------|----------|--------|----------------------|------------|----------------------------|
|------------------------------|------------|----------|--------|----------------------|------------|----------------------------|

| Ī | | Direct engineering, enforcement, and education resources to high | | • | ~ | Initial mapping included in this Plan; | ATD, | \$16,500,000 for |
|-----|----|---|---|---|---|--|----------|---------------------------|
| | | injury and fatal crash hotspot locations. Implement at least five | | | | Top 5 intersections funded for safety | APD, | engineering |
| | | safety engineering projects annually at top crash prone locations. | | | | improvements in Fiscal Year 2016. | DSD, PWD | improvements over 5 |
| | | Implement low-cost high impact safety improvements throughout | | | | | TXDOT | years. |
| | | the roadway network within the City of Austin based on safety | | | | | | |
| | | engineering studies. Work with CAMPO and TxDOT for funding | | | | | | 20% funded (100% year 1 |
| | | opportunities for safety improvements. | | | | | | of 5 years funding for |
| | | | | | | | | engineering |
| | | Conduct Engineering Studies: | | | | | | improvements at five |
| | | | | | | | | intersections at \$3.3M) |
| | | - Conduct speed studies at locations with speeding issues as | | | | | | |
| | | identified in collision analysis. | | | | | | \$732,000 for 6 FTE's + |
| | | Study crash-prone locations where right-on-red or left turn movements were factors. | | | | | | \$300,000 annual contract |
| 2 | 22 | - Identify locations with pedestrian safety issues using | | | | | | for additional data |
| | | collision analysis maps and consider traffic control devices | | | | | | collection capacity; |
| | | to allow safer crossings. | | | | | | \$1,500,000 annually for |
| | | Study and expand exclusive pedestrian crossing time on | | | | | | pedestrian crossing |
| | | high injury network for people walking. | | | | | | program; \$100,000 for 20 |
| | | - Study locations and implement speed feedback warning to | | | | | | additional speed feedback |
| | | reinforce education and enforcement initiatives and | | | | | | warning signs to expand |
| | | encourage speed compliance. | | | | | | pilot program. |
| | | | | | | | | |
| | | | | | | | | 18% Funded (Safety |
| | | | | | | | | Engineer Position) and 15 |
| | | | | | | | | PHB's are funded with |
| | | | | | | | | grant funds starting in |
| | | | | | | | | FY17 (\$2.4 M) |
| - 1 | | | 1 | l | 1 | T. Control of the Con | 1 | |

| | Revise transportation municipal codes (transportation criteria manual) to focus on safety and thorough review of transportation | ~ | • | Traffic Engineering and Complete Streets Program | ATD, Development | |
|----|---|---|---|---|---------------------|--|
| 23 | development projects. Continue to implement to Complete Streets Policy in every construction, reconstruction and/or | | | o o | Services Division | Coordinated with existing |
| | development project. Fund and build infrastructure improvements included in the Bicycle | | | Mayor's Challenge for Safer People, | 1 | staff and resources. \$150 M for Short-Term All |
| 24 | Master Plan, Sidewalk Master Plan, and Urban Trails Master Plan. | , | | Safer Streets. Bicycle, Sidewalk and Urban Trails Master Plans, Pedestrian | | Ages and Abilities Bicycle Network and Tier 1 Urban |
| 24 | | · | | Safety Action Plan | | Trails; other plans in development. Less than 1% funded. |

| 26 | Capital Metro Safety Improvement Initiatives: - Evaluate need for potential adjustments to interior lighting of buses for improved safety during nighttime operations including reducing glare for operators. - Capital Metro will continue working with City of Austin/Austin Energy to evaluate need for lighting along transit corridors and at intersections. - Continue evaluating transit collision hotspots and work with partner organizations to improve safety conditions at those locations. - Capital Metro will work with the University of Texas and the City of Austin to consider safer vehicle parking methods to reduce collisions along transit corridors through campus. - Capital Metro will continue to collaborate with the City of Austin to ensure safe pedestrian access to transit stops. - Evaluate new and existing bus stops to reduce rear-end collisions at intersections. | v | Transit Priority Working Group; Cap Metro Systems Safety Team | Funding to be identified for minor concrete work, signalization and striping as opportunities arise. Lighting costs \$7,000 per pole (pole, luminaire, foundation & wire) Funding provided by Capital Metro is not included in City Estimate Additional needs to be identified. No additional personnel needed. |
|----|--|---|---|--|
| | | | | 0% funded (infrastructure) |

| Apply Technology in Safety Improvement Initiatives: | | | \$2.78 M to upgrade to a |
|--|---|----------|--|
| Evaluate opportunities to expand existing and/or implement new transit priority treatments. Implement new transit vehicle engineering principles (e.g. rear-of-vehicle chevrons, right-side illumination during turns, lane departure technology) to reduce collisions Work to equip all City fleet vehicles with safety related devices, designs, and technology that record dangerous driving behaviors. Continue to work with Google, Rocky Mountain Institute, and other tech companies to pioneer autonomous vehicle testing and adoption to improve safety. Enhance signal system software and equipment to detect red light running and use data for enforcement and engineering. Deploy next generation emergency vehicle preemption to reduce response times and increase safety. Conduct a pilot project to assess feasibility of advanced detection techniques to estimate the frequency and type of near-miss collisions within signalized intersections | · | ` | Central based system for all signals and monitor for red light running Establish a pilot project that would utilize existing CCTV cameras to monitor intersections for nearmisses between vehicles and pedestrians: \$150,000 Advanced Vehicle Location (AVL) (\$1200 x 120 = \$145,000.00 onetime cost and 120 x \$20 = \$2400.00 monthly fees); Back-up cameras (\$600 x 80 = \$48000.00 onetime cost); Technology that record dangerous driving behaviors (Drive Cam \$400 x 120 units = \$48,000.00 onetime cost); Mobile Radios and outside speakers (100 x \$6000 = \$60,000.00); LED strobe lighting upgrades to 30% of units (40 x \$4500 = \$18,000.00) |

| 28 | Work with CAMPO and TxDOT for funding opportunities (e.g., CAMPO regular program calls, TxDOT district funds, and TxDOT/FHWA HSIP annual funds for projects that are dedicated for safety improvements). | • | • | , | CAMPO, TXDOT, FHWA | Coordinated with existing staff and resources. Funding to be determined based on source (grant, district funds). |
|----|---|---|---|---|-----------------------|--|
| 29 | Work with all school districts within the City of Austin's jurisdiction as well as charter and private schools and the City's Safe Routes to Schools program to set a goal for safe, active travel to schools. Invest in infrastructure improvements (LATM, PHBs, School Zones) to support those goals. | • | | Safe Routes to School Program, Local Area Traffic Management Program, Pedestrian Hybrid Beacon Program, School Zones, Active Transportation Program | AISD, PWD, ATD | Total first year impact - \$330,000 for 4 FTE (3 PWD, 1 ATD) plus Annual recurring impact - \$20,000 0% funded beyond existing operations. |

EDUCATION ACTIONS

| SH | ORT TERM ACTIONS (0-3 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | Existing initiatives | Agency(s) responsible | Cost and Percent Funded |
|----|--|------------|----------|--------|--|--|---|
| 30 | Create a cross-departmental safety education team, with dedicated staff and funding, with membership from APD, ATD, HHSD, PAZ, EMS, AFD, PWD. Train all participating agencies' staff that interface with media on Vision Zero messaging. | | • | • | Fatality Review Board | APD, ATD, HHS, PAZ, EMS, AFD, PWS | \$175,000.0 for FY16 campaign; \$1,000,000 for FY17-18 mass media campaign. FY16 100% funded. |
| 31 | Create a Vision Zero training module and train all staff that review, design, or implement projects to reiterate that all staff are responsible for transportation safety. | ~ | | | Imagine Austin Compact and Connected Training; Vision Zero Network Cities Initiative | PAZ, PWD, ATD, AE, AWU, DSD | Conceptual action; cost to be determined. 0% Funded. |
| 32 | Continue safety messaging onboard buses and at/around bus stops through partnership with KUT and other media outlets | | | | Systems Safety Team, Get Home Safe website | Capital Metro | Funding to be provided by Capital Metro. Not included in City Estimate |
| 33 | Lead by example by adopting Vision Zero policies for City fleets and through education and training targeting public and private employers. This should include an online safety training program for all modes that includes the existing "Ride Kind, Drive Kind" video to help ground transportation drivers understand how to interact safely with vulnerable road users. | | • | • | | City of Austin, Capital Metro, AISD | Coordination underway. Additional resources to be identified. |
| 34 | Provide defensive travel training for all modes at vocational and college orientations and in student housing to educate new | • | | | | Austin-area colleges and Universities, Cap | Conceptual action; cost to be determined. |

| SH | IORT TERM ACTIONS (0-3 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | Existing initiatives | Agency(s) responsible | Cost and Percent Funded |
|----|--|------------|----------|--------|---|---|---|
| | students how to travel safely in the city. | | | | | Metro, ATD ATD, Capital Metro, Task Force | 0% Funded. |
| 35 | Provide targeted outreach and training when adding pedestrian or bike facilities to teach residents how to use the facility and how to drive near people using the facility. | | | ~ | Protected bicycle lane education piece developed by ATD | ATD | \$104,000 for 1 FTE educator position. 0% funded. |
| 36 | Hire or consult with community education/cultural competence expert(s) to make sure that outreach and education efforts are truly inclusive and effective. | , | | | | ATD, PAZ | Conceptual action; cost to be determined. 0% Funded. |
| 37 | Work with social service providers to improve safety of people experiencing homelessness, including educational outreach, improving visibility, and establishing safe crossings. Convene a focus group of social service providers and people experiencing homelessness to learn how the City and its partners can better service and outreach to people experiencing homelessness | | • | • | | ECHO, ATCIC, ATC | Coordination underway. Additional resources to be identified. |
| 38 | Evaluate the knowledge of laws and regulations possessed by those convicted of crimes related to dangerous driving and explore targeted education. | , | | | | TBD | Conceptual action; cost to be determined. 0% Funded. |

| ME | EDIUM TERM ACTIONS (3-7 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | | , 1801107(0) | Cost and Percent Funded |
|----|---|------------|----------|--------|----------------------------------|----------------------|--|
| 39 | Encourage print, television, and social media leaders to frame traffic crashes as tragic and preventable occurrences when reporting on them. | • | | | | COA PIO, HHS, ATD | Conceptual action; cost to be determined. 0% Funded. |
| 40 | Incorporate Vision Zero for all modes into City's defensive driving classes and curriculum and require City employees to renew defensive driving training every year for commercial drivers and every two years for non-commercial drivers. | • | | | COA Defensive Driving course(s). | COA HR, ATD | Conceptual action; cost to be determined. 0% Funded. |

POLICY ACTIONS

| SH | ORT TERM ACTIONS (0-3 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | Existing initiatives | Agency(s) responsible | Cost and Percent Funded |
|----|--|------------|----------|--------|--------------------------------|------------------------|---|
| 41 | Develop action plans for vulnerable user groups and coordinate these more specific plans with the Vision Zero Action Plan. | • | | | | ATD, PAZ, ECHO | Coordinate using existing resources and partnerships. |
| 42 | Continue to build on Traffic Demand Management (TDM) strategies, including those identified in the 2015 Traffic Congestion Action Plan (Traffic CAP). Encourage transportation alternatives to driving into Downtown and other Imagine Austin Activity Centers to reduce the risks associated with driving. Require TDM plans for special events. Educate, publicize, encourage and incentivize alternative travel options. Decrease rate of people driving alone by 2 percent per year as measured by the American Community Survey. Reduce total VMT per capital by 1% per year in Austin. | | • | • | Traffic Congestion Action Plan | ATD, Cap Metro, PAZ | Coordination underway. Additional resources to be identified. |
| 43 | Consider changing the cite-and-release policy for people who drive without a license or with a suspended license. | , | | | | APD, Courts | Coordinate using existing resources and partnerships. |
| 44 | Research enforcement techniques from other cities to enhance compliance with the Distracted Driving Ordinance. | • | | | Hands-Free Ordinance | Task Force | Study issue using existing resources and partnerships. |
| 45 | Explore requiring bars to serve food or partner with food | ~ | | | | Task Force | Study issue using |

| SH | ORT TERM ACTIONS (0-3 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | Existing initiatives | Agency(s) responsible | Cost and Percent Funded |
|----|---|------------|----------|--------|----------------------|------------------------|---|
| | trucks to provide food. | | | | | | existing resources and partnerships.; cost to be determined. 0% Funded. |
| 46 | Explore prohibiting motor vehicles passing from the left and turning right in front of a bus within 100 ft. of an intersection to reduce the risk of ped/bike and vehicle collisions. | • | | | | Cap Metro, ATD, APD | Coordination required. Additional costs not anticipated. |
| 47 | Consider the impact of limiting the number or density of alcohol-serving establishments in certain areas. | • | | | | TBD | Conceptual action; cost to be determined. 0% Funded. |
| 48 | Consider the effect of implementing (or increasing) a City liquor tax (to decrease the amount of alcohol people drink). | • | | | | TBD | Conceptual action; cost to be determined. 0% Funded. |

| ME | DIUM TERM ACTIONS (3-7 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | | Ageney(3) | Cost and Percent Funded |
|----|---|------------|----------|--------|----------|-----------|---|
| 50 | Include Vision Zero principles and land use, urban design, and multimodal street design and engineering strategies in coordinated revisions to the Land Development Code (CodeNEXT) and the City Transportation Criteria Manual (TCM) | | • | ~ | CodeNext | PAZ, ATD | Coordination underway. Additional resources to be identified. |

| ME | EDIUM TERM ACTIONS (3-7 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | Existing initiatives | Agency(s) responsible | Cost and Percent Funded |
|----|--|------------|----------|--------|----------------------|--------------------------|--|
| | and other policies. | | | | | | |
| 51 | Consider the traffic safety effects of a ban on (A) right turns on red and (B) left turns across traffic and/or when pedestrians have a walk signal in effect. | • | | | | ATD | Coordination required. Additional costs not anticipated. |
| 52 | Explore allowing prosecutors to work county and district cases (misdemeanor and felony cases), as is done in the field of family violence law. | • | | | | Government Relations | Conceptual action; cost to be determined. 0% Funded. |

| LO | NG TERM ACTIONS (7-10 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | Existing initiatives | Agency(s) responsible | Cost and Percent Funded |
|----|--|------------|----------|--------|----------------------|-----------------------|---|
| 53 | Work at the local, state, and federal level toward adopting a safe system approach of lowering speed limits. Pursue legislative changes for automated speed enforcement in school zones. | | • | • | | Taskforce | Coordination underway. Additional resources to be identified. |
| 54 | Pursue Housing First model of ending homelessness to address larger societal issues contributing to crashes involving homeless persons crossing the roadway. Reduce the number of people | • | • | | | ECHO, ATCIC | Coordination underway. Additional resources to be identified. |

| LO | NG TERM ACTIONS (7-10 YRS) | CONCEPTUAL | UNDERWAY | EXPAND | Existing initiatives | 1,601.03(0) | Cost and Percent Funded |
|----|--|------------|----------|--------|----------------------|-------------|--|
| | experiencing homelessness in Austin to functional zero by 2025. | | | | | | |
| 55 | Shorten driver's license renewal from 6 years to 4 years and require defensive driving or driver's education for all top contributing factors citations. | • | | | | TOICE | Conceptual action; cost to be determined. 0% Funded. |

APPENDIX B: COMMUNITY FEEDBACK

[THIS SECTION WILL CONTAIN A SPREADSHEET OF ALL COMMENTS & RESPONSES]