Vision Zero

Toward a Vision Zero Action Plan for the City of Houston

Houston Tomorrow recommendations for eliminating traffic-related deaths and injuries
Vision Zero: Toward a Vision Zero Action Plan for the City of Houston
A Houston Tomorrow Department of Transportation report
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CONTENTS

1 Executive Summary
3 Background and Impetus
5 What is Vision Zero and How Does it Work?
23 Getting Started and Recommendations
25 Appendix I: Possible Action Steps
33 Appendix II: Other Cities’ Vision Zero Plans
34 Appendix II: Additional Resources
Vision Zero

City of Houston, 2014:

<table>
<thead>
<tr>
<th>Total crashes</th>
<th>Incapacitating injuries</th>
<th>Total traffic deaths</th>
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<tbody>
<tr>
<td>60,472</td>
<td>1,222</td>
<td>227</td>
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Core steps toward a Vision Zero Action Plan

• The City of Houston should lead the regional effort to adopt a Vision Zero goal to reach zero traffic deaths and serious injuries within a decade.

• The City should create a Vision Zero Task Force with multiple departments and outside partners.

• The Vision Zero Task Force should produce an initial Vision Zero Action Plan within 60 or 90 days.

• Mayor and City Council should aggressively pursue ordinance and funding changes this year.

• Various City Departments should identify and pursue short and long term strategies.

13-County Houston region, 2014:

<table>
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<tr>
<th>Total crashes</th>
<th>Incapacitating injuries</th>
<th>Total traffic deaths</th>
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</thead>
<tbody>
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<td>135,170</td>
<td>3,468</td>
<td>667</td>
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What could a Vision Zero Plan do?

• Commit and unify leadership across the region to publicly seek a safer Houston together.

• Redesign streets and efficiently invest in putting safer designs on the ground.

• Change codes to outlaw dangerous behavior like driving while using a handheld device.

• Reduce speed limits, match design speed to lower limits, and seek matching policy across region.

• Introduce new enforcement, messaging & education strategies.

• Analyze data and create broad understanding of causes of deaths and injuries.

• Strengthen long term strategies like complete streets, walkable urbanism, and balanced funding.

• Decrease vehicle miles traveled across the region.

• Invest in sidewalks.


Statistics culled from TXDOT data, available here:
http://www.txdot.gov/government/enforcement/annual-summary.html

The goal is elimination of all traffic fatalities and serious injuries through a comprehensive approach to making streets safer and reducing crashes. Most large cities not doing so already are in the process of considering it.
Background and Impetus (or Why We Need a Vision Zero Action Plan)

Almost as many people die on the streets of the City of Houston as are murdered each year. Our response to this shocking statistic should be simple: We must treat traffic deaths in the Houston region as seriously as we treat homicide, as a major public health and security crisis. Whatever their neighborhood and whatever their mode of transport – car, bus, bicycle, wheelchair or on foot – all Houstonians deserve safe access to the streets.

Recent studies support the need for safer streets for all users. According to the National Complete Streets Coalition of Smart Growth America, Houston is the seventh most likely city in the country for a pedestrian to be hit and killed by a vehicle. Houston has also been categorized as the worst city in the country for red-light-running deaths by the National Coalition for Road Safety. Between 2004 and 2013, there have been 181 red-light-running fatalities in Houston, 50% more than Phoenix, the next city on the list. If Houston is to move toward being more livable (Houston was recently ranked as the 52nd most livable city in the U.S. by WalletHub), we must improve these devastating statistics.

Part of the problem stems from culture that embraces dangerous driving and a lack of enforcement. However, the built environment contributes to safety problems, and exacerbates bad behavior while crippling enforcement efforts. Unnecessarily wide lanes facilitate fast, dangerous driving and place all road users at risk, including motorists. A shortage of properly designed crosswalks, badly maintained sidewalks and a general lack of bicycle and pedestrian infrastructure increase risks for the most vulnerable users, as well as transit riders waiting for the bus or train.

Poorly designed infrastructure that overemphasizes moving vehicles quickly contributes to economic and health problems as well as safety concerns. Dangerous roads cut foot traffic, which hurts small businesses and neighborhood life by limiting access to cultural amenities. Overreliance on cars also increases pollution and reduces physical activity, which has negative and costly effects on public health and the environment.

We must do better. And we can.

Vision Zero does not discriminate based on how you choose to get around. We want people riding in cars to be safe. We want everyone to be able to ride their bike to work safely. We want people walking around town without risk of losing their life or someone they love.

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The City of Houston adopted a philosophy of Complete Streets following Mayor Annise Parker’s Executive Order, but the new administration will oversee the realization of this vision in every neighborhood.

A philosophy of designing streets to prioritize the safety and comfort of all, regardless of age, ability, or mode of transport.

We can have streets that fulfill a diversity of needs, while prioritizing the safety and comfort of all users. For too long, the streets of the Houston region have been designed by engineers who were asked the wrong questions. We have designed perhaps the world’s most remarkable region - for cars.

Instead we can spend the next decade designing Houston so that when people are walking, biking, and driving cars, losing their life isn’t a consequence. We have the smartest engineers in the world and they simply need to be asked the right questions.

The proper deployment of Complete Streets across Houston will be more affordable for both the city itself and the average family than our previous philosophy, which called for too many lane-miles and lanes that are too wide.

It is possible to design streets in a manner that every person drives at safe speeds without thinking about it. Much of this can be achieved with simple elements like planting street trees, painting narrower lanes, and designing intersections with elements such as bulbouts.

Using this concept, the Neighborhood Greenways approach could bring safe streets to every super neighborhood with relative quickness compared to the long task ahead of rebuilding all of our major thoroughfares across town. We would carve out a grid network of neighborhood streets that already have low car traffic and simply make those streets as safe as possible and designed for speeds lower than 25 mph.

When every single ReBuild Houston and CIP project is a Complete Streets project, every neighborhood will find it nicer to walk, easier to bike, and safer to be in a car as each year passes.

If a car hits a vulnerable road user while going 20 miles per hour, the person who is struck will have a 95% chance of surviving that crash. Raise the speed to just 40 mph and the person will have an 80% likelihood of dying.

We can design a city where driving at safe speeds is the default, comfortable choice. We can ask our engineers how to accommodate all of our needs in a system that does not require daily sacrifice from another Houston family.


Find out more about the Houston Coalition for Complete Streets at: http://www.houstoncompletestreets.org


The City of Houston Complete Streets landing page: http://www.houstontx.gov/planning/CompleteStreets
All Texas transportation fatalities by unit - 2014
The vast majority of deaths are people in motor vehicles (82%), followed by pedestrians (8%), people riding in trailers (8%), and people riding bicycles (1%).

Houston region alcohol related fatalities - 2014
More than a third of the deaths on the streets of the Houston region involve drunk driving, despite all of the noble efforts to reduce it. Many public policies encourage drunk driving, like parking requirements at bars and lack of 24 hour BCycle check outs.

Contributing Factors in the Houston region’s traffic fatalities - 2014
Of the 667 deaths in the Houston region in 2014, 247 of them involved alcohol, the largest single contributing factor other than the involvement of a private motor vehicle - which are involved in most deaths. These factors shown below are not mutually exclusive. A pedestrian death may have also involved alcohol and distracted driving, for example. Perhaps less well known is the fact that speed kills almost two hundred people in the Houston region each year, and this factor is the most directly a result of choices in street design.

Annual VMT's per Household by Block Group
This map shows the average Annual Vehicle Miles Traveled for a household with the regional median income and average household size and number of commuters for the region.
Many major cities in the U.S. have adopted Vision Zero plans as well and have had success improving the safety and livability of their streets. The concept was originally deployed nationally in Sweden in 1997, and succeeded in reducing traffic death from 541 deaths annually to 314 by 2011. Based on this success, the concept has spread to a wide variety of major cities across the globe, including London and Montreal.

Many major cities in the U.S. have adopted Vision Zero plans as well and have had success dramatically improving the safety and livability of their streets. These cities include locations in both the Frost Belt and the Sun Belt, and cities from liberal and conservative regions. New York, Portland and Seattle have adopted Vision Zero Plans, but San Diego and San Antonio have as well. Los Angeles, another “car city”, is 30% safer than Houston and has a plan to eliminate traffic fatalities by 2025.

The success that the initiative has had in a wide variety of cities suggests it can be applied in Houston to drastically improve our safety problems and annually prevent hundreds of deaths and thousands of serious injuries.

Vision Zero

Vision Zero is an approach to road safety that can be summarized in one sentence: No loss of life is acceptable.

How Does Vision Zero Work?

Vision Zero sets a goal of reducing traffic deaths to zero over a number of years, usually a decade. To achieve this goal, a city develops a comprehensive plan to gain leverage on the problem from a wide variety of perspectives to keep all road users safe.

1. **Proper metrics of safety and usage, which accurately identify problem areas and track progress toward program goals.**

2. **Education and enforcement of existing policies and laws.**

3. **Introducing new policies and laws and enhancing existing ones to make conditions safer.**

4. **Re-examining the underlying built environment and taking steps to reconstruct it to meet the safety needs of all users.**

The mix of actions implemented to achieve Vision Zero will vary by city depending on its individual circumstances and the wishes of its population. However, each plan will need to have four strategies from four separate arenas to be successful.

Proper metrics lay a critical foundation. It’s difficult to cut down on the number of road deaths and injuries without accurate reports of how many there are. Useful measurements will also detail where and when deaths take place and other pertinent information like weather conditions, whether or not speeding, red-light running or alcohol played a factor. Other statistics include things like the usage and management of parking, which takes up large amounts of space and often privileges drivers over other users for space. Geographic analysis can also reveal details like variance in traffic crashes across differing densities, demographics, and design of neighborhoods.

Educating current road users and improving enforcement of existing laws promotes safe practices for driving a car, riding a bike, or walking the streets. The most effective of these efforts crack down on drunk driving and motorists who speed and fail to yield, rather than on targeting pedestrians and cyclists. Education campaigns focused on traffic safety should emphasize that traffic deaths and injuries are preventable both through personal responsibility and shared community goals and policies.

New policies and laws can allow us to tune our community to our shared priorities, making it safer for all to drive, walk, bike and ride transit. We can set standards for what all Houstonians can expect from their streets. Introducing or enhancing local laws that crack down on dangerous driving habits like driving while distracted create safer conditions for everyone, as do steps like lowering speed limits and matching street design to the actual speed limit. These laws will have to crafted in equitable manners that do not allow for unintended consequences, such as racial profiling, and do not hinder our free market and ability to share in the many riches of Houston.

Re-examining the built environment is a key part of any Vision Zero plan - to step back and consider the fundamental design of our city. Most Houstonians wish they did not have to drive so much. However much we can facilitate use of the less dangerous modes of travel, we can make Houston safer and give people the lifestyle they want. If we design roads correctly to match neighborhood needs, drivers naturally slow down, which again lowers risks to pedestrians and vehicle riders. Providing adequate sidewalks, crosswalks, safer intersections and well-designed bicycle lanes also decreases unsafe actions by pedestrians and cyclists by making their actions more predictable.

Note that these improvements in laws, enforcement and urban design can have positive effects that ripple beyond reducing the death and injury rate from crashes. Better designed streets and housing encourage walking and biking. This improves public health by increasing physical activity and cutting pollution. Improved mass transit systems and better designed housing developments keep transportation affordable for all Houstonians while improving access and supporting local businesses.

The Vision Zero Network recommends including nine key components for a strong Vision Zero Commitment. We agree and have integrated these components throughout our report: http://visionzeronetwork.org/wp-content/uploads/2015/12/VZ-Components-Fact-Sheet.pdf
While many purport that lower deaths per Vehicle Miles Traveled shows progress in our technological prowess over road deaths, this statistic ignores the actual number of people dying on our roads.

**Metrics:**
**Human-Based Crash Statistics**

Many involved in advocating for freeway subsidies prefer to use a certain statistic to assess the safety of our roads - deaths or crashes per vehicle miles traveled (VMT). This is a mistake and this mistake has caused decades of over-investment in new roads across the United States and encouragement of increased vehicle miles traveled. While many purport that lower deaths / VMT shows progress in our technological prowess over road deaths, this statistic ignores the actual number of people dying on our roads.

A human-centric statistic of deaths per capita reveals a different picture.

A simplistic example: a city has 100 people who each drive 20,000 miles each year. Every year 20 people die. This would yield of a rate of 1 death/million VMT.

Suppose half of those people are able to reduce their driving by 10,000 miles annually by moving to walkable neighborhoods with ample transit access, but still 20 people died. This would indicate that the new rate is 1.3 deaths per million VMT, but has the city actually become more dangerous?

Suppose when half of those people move to walkable neighborhoods, safety benefits accrue and only 15 people die per year. This would indicate that the new rate is still 1 death per million VMT. According to a death/VMT metric, no safety benefits are demonstrated over the first scenario. However, the city has actually become safer, as fewer deaths have occurred.

The primary concern should be total fatalities and injuries per capita. This is normally shown as per 100,000 people, which is a standard that agencies like the Centers for Disease Control use.

Moving away from a vehicle-based metric to a human-based metric changes the view significantly.

If we use deaths per capita - which matters most to flesh-and-blood people - the first and second scenario would yield a rate of 0.2 deaths per capita. The third, however, would reveal a rate of 0.15, because it is actually the scenario where it is safest to be a human.

The City of Houston Vision Zero Task Force should use a diversity of statistics and methods for understanding the phenomenon of road violence. However, the primary concern should be total fatalities and injuries per capita. This is normally shown as per 100,000 people, which is a standard that agencies like the Centers for Disease Control use. We must know how dangerous it is for the people of the Houston region and seek to make it safer for them.

This section details one in-depth example from each of the four strategies to be utilized in a plan. We recognize that there are hundreds of policies out there, but we include these to illustrate the type of thinking useful to analyze the problems that Vision Zero confronts.
There has been a greater than doubling of crashes at intersections formerly protected by red light cameras.

Enforcement and Education: Red Light Violations

It is already illegal to drive through red lights, but Houston has been categorized as the worst city in the country for red-light running deaths by the National Coalition for Safer Roads. From 2004 to 2013, there have been 181 red-light-running fatalities in Houston, 50% more than Phoenix, the next city on the list.

As part of Vision Zero, Houston must work to rectify this deadly problem.

Houston Police Department statistics of crash data during and after use of red light cameras present a stark example of how city policies can affect Houstonians lives, with a greater than doubling of crashes at intersections formerly protected by red light cameras before the vote to make streets more dangerous.

We understand that there has been previous opposition to red light cameras in the City of Houston despite the clear positive effects they have had on reducing crashes.

However, there are a number of enforcement and education tools that Houston can use to crack down on red-light running while more efficiently using police forces.

One potential education/enforcement initiative is implementing an annual, or quarterly “Red-Light” week emphasizing the need for motorists to obey traffic signals. A public education campaign might consist of public-service announcements, asking for news media coverage and leaflet handouts at major public gatherings. Red-Light week would also consist of an enforcement heightened police presence at known high-risk intersections throughout the city.

Other tactics include adjustments to intersections and lights to shame red-light runners and ease enforcement. For example, Waco, TX has implemented so called “tattletale lights” on the back of stoplights which flash blue when the light turns red, allowing police officers to see the changing of the lights from any direction.

Another possible enforcement mechanism is sound emanating from a traffic light that activates when someone ignores the signal.

Both of these tactics have educational and enforcement components. First, each alerts violators that they have run a red light. Whether through inducing shame or heightening vigilance, they may decrease red-light running. Each device also eases law enforcement. The lights would be visible from any direction meaning that one police officer could effectively patrol an intersection (permitting more total patrols). The sound could also alert a nearby officer to a red-light runner. Both devices could also be equipped with time-stamps, introducing an element of accountability to a traffic stop for running a red light as well.

Texting while driving doubles the time it takes for a person to react to sudden street occurrences, longer than the reaction time of a drunk driver.

New Legislation: A ban on using handheld electronic devices while driving

According to recent research by the Texas A&M Transportation Institute, texting while driving doubles the time it takes for a person to react to sudden street occurrences, longer than the reaction time of a drunk driver. People are 11 times more likely to miss a flashing stoplight and are less able to maintain their car’s position or a constant speed within their lane when driving distracted. And it’s not just texting - if it’s GPS, music, or something else, driving while actually doing something else is a problem.

These dangerous habits caused 483 deaths and 3,219 incapacitating injuries in the state of Texas in 2014, and 14,097 crashes in 2014 in Harris County alone. As our dependence on electronic devices and the speed of life increases along with traffic deaths and injuries, we need new rules that tackle our new problems and save Houstonians’ lives.

A statewide ban on texting while driving in school zones is already in effect in Texas. However, a proactive policy for the City of Houston would be to pass a ban on using handheld electronic devices while driving in the whole city.

As our dependence on electronic devices and the speed of life increases along with traffic deaths and injuries, we need new rules that tackle our new problems and save Houstonians’ lives.

The cost of enforcing citywide ban on driving while using handheld electronic devices would actually be far cheaper than enforcing the less stringent existing state ban on texting in school zones because of the signage requirement. With a comprehensive city-wide ban, Houston would merely have to install signs at the city limits. In contrast, enforcing the existing schools-only ban would involve putting up or replacing signs around each of the hundreds of private and public schools located within Houston at far greater expense.

As a result, a comprehensive ban will help our city in three ways. First, we can efficiently leapfrog the 5-15 years that other cities have taken to get to a full handheld device ban by simply passing a single comprehensive ordinance. Second, we can save mountains of money in signage costs. And finally and most importantly, we will make the environment safer for all Houstonians.

A major public awareness campaign coupled with enforcement is what will make this ordinance effective. This effort could be undertaken across all platforms and could include traffic-safety related demonstrations, vehicle wraps and leaflets inserted in municipal mailings.

As with any law, we must ensure our police officers enforce this law across demographics and without racial profiling.

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Half of the people of the City of Houston would like to live in a walkable urban neighborhood, but only between 5 and 10% of our housing stock could be considered such.

The Built Environment: Using the MXD model for meaningful traffic impact analysis of urban projects

Many City of Houston policies encourage sprawl development and discourage walkable urbanism, such as the Institute of Traffic Engineers (ITE) traffic impact analysis process for urban projects. The ITE method poorly estimates trip-generation for dense developments, exaggerating likely auto trips and undercounting transit, biking and walking trips, nor is it applied to single family home developments, which when not simply replacing pre-existing homes actually have a much greater impact on traffic than dense projects.

A reasonable City of Houston policy could begin to legalize urbanism and support equitable mixed-use mixed-income transit-oriented development by adopting the MXD method for analyzing traffic impact of urban projects and requiring traffic impact analyses of single family housing developments in the extra territorial jurisdiction (ETJ).

The MXD model, developed by the Environmental Protection Agency, Institute of Transportation Engineers and a dream team of land-use and transportation researchers, estimates the trip-generation impact and benefits of mixed-use developments much more accurately than the currently used ITE model.

The MXD model more adequately accounts for the internal capture and external trip modes of compact development, mix of uses, site design, walkability and transit than ITE and has shown that the traffic impact of most dense developments is a fraction of that generated by single-use suburban developments of similar size and composition.

Half of the people of the City of Houston would like to live in a walkable urban neighborhood, but only between 5 and 10% of our housing stock could be considered such. Policies that will allow the market to begin providing for millions of Houstonians to have greater access while driving substantially less are required in a long range attempt to bring traffic deaths to zero and reduce all crashes.
Programs like ReBuild Houston and CIP repair roads and improve drainage. But they could also redesign streets to add sidewalks and bike lanes, and to create better transit stops based on a Complete Streets philosophy.

Some specific positive steps taken during the last six years:

- Mayor Parker’s Complete Streets Executive Order set the stage for development of a Complete Streets Transportation Plan and significant revisions to the Infrastructure Design Manual which now references Complete Streets and Context Sensitive design.

- Mayor Parker initiated an on-going effort to update the City of Houston’s Bike Plan.

- Codification of a Safe Passing Ordinance motivated the Houston Police Department to undertake efforts to educate the public on sharing roadways.

- The City of Houston Planning and Development Department and Public Works and Engineering Department have worked together to perform Mobility Studies such as the Inner West Loop Mobility Study which recognize the need for safe streets elements.

- Success at Metro evidenced by the New Bus Network, increased transparency, and completion of the most successful modern light rail line in the nation when measured in terms of riders per mile.

Loss of life from traffic crashes is unacceptable and eminently preventable. Embracing Vision Zero gives us a clear goal and will help us develop a Houston-specific plan to get there.

We urge Mayor Turner to continue and build upon these achievements of the last six years by creating a task force to develop a Vision Zero Action Plan that not only continues Mayor Parker’s Complete Streets Executive Order, but codifies it, that not only finishes the Complete Streets Transportation Plan and the Bike Plan, but also funds them, and that not only recognizes but requires safe streets elements for all new street construction projects.

The task force should:

- Include high ranking members from city departments needed to implement the program, as well as community stakeholders representing the interests of all Houstonians.

- Report back with an initial plan within 90 days and create a comprehensive plan update each year.

- Include clear, concrete short and long-term steps to achieve the Vision Zero goal, and establish responsibility for each goal, timelines, and performance metrics.

- Facilitate interaction between key participants and the public to prevent siloing or working at cross purposes.

- Undertake a transparent process to review the plan annually to track progress, hold participants accountable and adjust goals or tactics as necessary.

- Commit to an equitable approach and equitable outcomes with inclusive and representative process that benchmarks and measures safe transportation options for all road users in all parts of the City.
Appendix I: Possible Action Steps

These possible action steps show the breadth of strategies that the City of Houston and partners could adopt to begin saving lives on the streets today.

Various city entities should be involved in Vision Zero implementation. We have bolded a potential set of top priorities for each entity.

This list is neither exhaustive nor inclusive of every policy that might be worth trying. We advocate for each department assessing its own policies and potential strategies to develop the actual Vision Zero Action Plan based upon the reality of Houston. These suggestions can be a start and give a sense of the comprehensive nature of this proposal. Each proposal corresponds to one or more Vision Zero strategy, represented by the numbers 1-4.

City Hall / Task Force

3 • Establish a permanent Vision Zero Task Force in the Mayor’s Office. The heads of multiple departments should be asked to convene a Vision Zero task force immediately and should be asked for an initial report in 60 or 90 days with a comprehensive list of long and short term action items. Provisions should be made for an annual report following the initial report.

1 • Launch a Vision Zero website to gather input from Houstonians and coordinate information about the City’s Vision Zero plans, upcoming events, and provide data.

2 • Conduct Vision Zero presentations across the city.

1 • Publish crash and safety data on a regular basis in open user-friendly formats that allow independent analysis.

2 • Partner with private entities - developers, industry, freight, and employers - to instill a citywide culture of safe streets and expand potential benefits beyond city’s management reach.

4 • Ask B-cycle to extend hours to 24 hours a day.

1 • Collect better data to identify safety hazards and top crash locations.

3, 4 • Prioritize everyone’s ability to walk safely throughout their daily lives, especially vulnerable users such as children, older adults, and people with disabilities.

City Council

4 • Prioritize our missing transportation system: Sidewalks and crosswalks.

4 • Allocate funding for pilot Complete Streets projects in every council district.

3 • Outlaw driving a motor vehicle while using a hand held device.

3 • Work with the Texas legislature to lower the default speed limit to 25 mph.

Fleet Services

1, 2 • Ensure all city fleet vehicles are equipped with technology that records speeding and other dangerous driving behaviors.

2 • Oversee a citywide expansion of Defensive Driver training courses for all employees driving city vehicles.

2 • Participate in task force messaging campaigns, such as bumper stickers and vehicle wraps.
Public Displays of Progress

4 The Chelsea Norman Memorial Trail on Waugh.
4 The Parks Connector Neighborhood Greenway.
4 The South Union / OST Neighborhood Greenway Network.
4 Finish the Downtown Parks Connector from the bayou to MKT.
4 Create a Walking School Bus program.
4 Help neighborhoods install 100’s of Painted Crosswalks.
2, 3 Continue and amplify HPD education and enforcement efforts.
2 Conduct a Silhouette Campaign to pay respect those who died.
3 Pass a ban on driving while using handheld devices.
2, 4 Create a Walkable Super Bowl Task Force.
4 Have a safe Super Bowl and make improvements permanent.

Ideas for the Mayor and Council

4 Create the City of Houston Department of Transportation.
4 Fully fund, begin the Complete Streets and Transportation Plan.
4 Ensure investments like CIP and ReBuild Houston are maximizing safety benefits.
4 Develop funding package for implementing the Houston Bike Plan, including Neighborhood Greenways reaching 85% of homes in the city by 2024.
4 Propose bond election for the above and transit expansion.
4 Dedicate Metro Mobility funds to pedestrian and bicycle access to transit.
4 Prioritize expansion of a regional bike share system.
4 Establish a vision for equitable access to walkable urbanism, including mixed-use mixed-income transit oriented development.
4 Take responsibility for ensuring construction and maintenance of a complete sidewalk network within a decade.

Department of Transportation

1, 2 • Conduct a Comprehensive Multimodal Complete Streets and Transportation Plan as required by Mayor Parker’s Complete Streets Executive Order and called for by PlanHouston.
2 • Undertake a high-quality ad campaign aimed at reducing speeding, failure-to-yield, and other forms of reckless driving.
2 • Increase anti-DWI campaigns in the city.
2 • Increase programmable speedboards for intensive education/enforcement initiative.
2 • Continue to conduct Mobility studies for every part of Houston.
1 • Prioritize strategies to reduce Vehicle Miles Traveled.

Public Works and Engineering

2, 4 • Steps should be taken to put paint and concrete on the ground in every council district this year with newer, safer street designs the Infrastructure Design Manual now embraces. PWE should select the best projects, but bike boxes, brightly painting conflict points, and installing bulbouts and pedestrian crossing speed tables at schools are strong examples.
2, 3, 4 • Wherever possible, neighborhoods should be empowered to improve their own areas, such as fixing crosswalks with vibrant paint, prioritizing 25 mph speed limits, and installing temporary safe treatments as done in the tactical urbanism discipline.
4 • Implement a Neighborhood Greenways network strategy whenever neighborhood streets are rebuilt in ReBuild Houston.
2, 4 • Install more traffic calming measures – such as bulbouts, traffic circles and pedestrian crossing speed tables.
2, 3 • Institute a program for “slow zones” in targeted areas.

Police Department + Department of Transportation

1, 2 • Conduct intensive street-level outreach and enforcement of safety problems and traffic laws, focused on areas with known crash histories.
1, 2, 3 • Convene monthly meetings of the city’s traffic divisions and transportation bureaus to review traffic safety performance and set strategy for improvement.
1 • Develop data-driven citywide enforcement strategy.

Metro

2 • Participate in task force messaging campaigns, such as bumper stickers and vehicle wraps.
3 • Adopt a comprehensive long range plan that includes massive increasing mode share & reduction of VMT.
2 • Collaborate with COH and others on pedestrian safety improvements near transit stations.
2 • Work with local media to improve false perceptions about safety and transit.
1 • Assess metro safety statistics in comparison to other large transit agencies and seek best practices.
4 • Enhance the experience of bus passengers (improve bus stops).
4 • Improve regional connectivity to bus services.
Houston Police Department

2. Increased enforcement against dangerous moving violations, including speeding, failing to yield to pedestrians, signal violations, improper turns/disobeying signage, and distracted driving.
1. Increase speeding enforcement.
2. Update technology for capturing crash data including better records of bicycle and pedestrian involved crashes.
2. Participate in task force messaging campaigns, such as bumper stickers and vehicle wraps.
1. Work with Health Department and data analysts to help give a better understanding of the nature of crashes and deaths.

Planning and Development Department

3. Integrate Vision Zero into PlanHouston.
4. Initiate Urban Corridors II to study best practices and recommend policies for equitable transit-oriented development to allow millions of Houstonians to live within walking distance of high quality transit stations and activity centers by 2025.
1, 3, 4. Work with Department of Transportation on the Complete Streets and Transportation Plan.
1. Allow the MXD traffic impact analysis method for urban projects, which is more accurate than ITE models.
1, 4. Develop fair single family home development traffic impact analysis recognizing that such developments have a greater impact on Houston traffic than dense projects.
4. Seek to replace parking minimum requirements with comprehensive parking management strategies.
4. Work with the Health Department to integrate the principles of Health Impact Assessments into the decision making process of the Planning Commission.
1. Prioritize strategies to reduce Vehicle Miles Traveled.

Parking Management Division

4. Eliminate car parking requirements for bars and restaurants that serve alcohol.
4. Revisit parking sign design and placement.
4. Increase the efficiency of parking usage.

Health Department

1. Conduct public health surveillance on traffic-related hospitalizations and fatalities.
1. Provide Vision Zero task force with public health data to help target traffic safety interventions.
2. Include traffic fatalities and injuries and prevention messages in public health reports.
2. Engage community public health partners in promoting Vision Zero goals.
1, 2. Promote research on walking, driving, motorcycling, and bicycling behaviors and patterns in the city.
4. Work with the Planning Department to integrate the principles of Health Impact Assessments into the decision making process of the Planning Commission.
1, 3, 4. Work with Harris County Public Health and Environmental Services Health Impact Assessment and Built Form Unit to integrate Health Impact Assessments into decision making processes at the Houston - Galveston Area Council Transportation Policy Council.
Improvement of Street Design

Drawing upon worldwide best practices in roadway improvement and regulation strategies, Vision Zero requires Houston to redesign its streets and intersections to improve safety as has already begun with the Public Works and Engineering Departments work since Mayor Parker’s Complete Streets Executive Order. Here are possible street design improvement strategies:

2. Clarify who belongs where on the street through better markings and street design.
4. Add crosswalks (Clarify where pedestrians are crossing through markings).
4. Open up intersections to improve visibility (Remove visual barriers such as parking that can cause traffic crashes and injuries near intersections).
4. Add bike paths and lanes.
4. Use left turn lanes.
4. Eliminate unsafe turn movements (Shift left and right turns to other intersections with better conditions for visibility and traffic).
4. Leading pedestrian intervals (Give pedestrians a head start at the light).
4. Leading bus interval (Give buses a head start at the light) (4).
4. Install traffic calming measures on residential streets to slow traffic.
4. Time traffic signals for green waves (Keep drivers traveling together at consistent speed of travel).
4. Reduce nighttime speeding with signal timing (Cut down opportunities for speeding outside of rush hour).
2, 4. Increase street lighting level (Improve visibility at night in high-crash areas).
4. Pedestrian safety islands (Shorten crossing distance and visual cues for drivers).
4. Extend curbs for pedestrians into the line of sight for drivers (Shorten crossing distances and extends curbs at intersections for better visibility).
3. Lower speed limits (Lower speed limits to send the message that drivers are entering school zones or other areas with heavy pedestrian traffic).
4. Improve accessibility (Make crossing signal buttons accessible and reduce curb height to street level to improve access for people in wheelchairs, with strollers, etc).
Appendix II: Other Cities’ Vision Zero Plans

Vision Zero Network
http://visionzeronetwork.org

Vision Zero Sweden
http://www.visionzeroinitiative.com/en/

New York City Vision Zero Action Plan

Los Angeles Department of Transportation
Great Streets for Los Angeles Strategic Plan
http://ladot.lacity.org/stellent/groups/Departments/@LADOT_Contributor/documents/Con-
tributor_web_content/LACITYP_029076.pdf

The City of San Francisco is planning on implementing Vision Zero and ending traffic
daths by 2024.
http://www.visionzerosf.com

The City of Seattle is planning on implementing Vision Zero by 2030.
http://www.seattle.gov/visionzero

Washington, D.C. is planning on Vision Zero implementation by 2024.
http://ddot.dc.gov/page/vision-zero-initiative

The City of Portland, OR is moving toward Vision Zero implementation in the next 10
years.
http://www.portlandoregon.gov/transportation/40390

The City of Boston has this year announced a task force and implementation of Vision
Zero.

Austin, TX has established a Vision Zero Task Force to plan implementation of Vision
Zero.
http://austintexas.gov/department/vision-zero-task-force

The City of San Jose, CA is working toward Vision Zero implementation.
http://www.sanjoseca.gov/DocumentCenter/View/42849

Leaders in San Diego are pushing implementation of a Vision Zero Plan with the goal of
zero traffic deaths by 2025.
http://www.visionzerosd.com

Appendix III: Additional Resources

US DOT Secretary Anthony Foxx Mayor’s Challenge

US FHWA Toward Zero Deaths
http://safety.fhwa.dot.gov/tzd/

National Strategy on Highway Safety Toward Zero Deaths
http://www.towardzerodeaths.org

Houston Galveston Area Council Transportation Safety Planning
Jeff.Kaufman@h-gac.com
832-681-2533

TXDOT Crash Statistics

Texas Transportation Commission Traffic Safety Task Force
This new effort is being led by Commissioner Jeff Moseley from the Houston region.
There is not currently any information online about this effort other than the initial re-
ports from the TTC twitter account. Contact X for more information.
https://twitter.com/txdotcommission/status/628930645117399041

Center for Active Design
Not-for-profit organization making health a central priority in the design of buildings,
streets, and neighborhoods.
http://centerforactivedesign.org/about/
Houston Tomorrow is an independent 501(c)(3) nonprofit dedicated to improving the quality of life for all the people of the Houston region.

This report was made possible through the support of the individual members of the Houston Tomorrow Department of Transportation.

As part of a package of sustainable transportation initiatives, the Houston Tomorrow Department of Transportation works to support the Houston Coalition for Complete Streets in making the streets of the Houston region safer for all our people, regardless of age, ability, or mode of transport.

HTDOT also supports the Houston transit strategy of putting high quality service where the people and jobs are, by investing in more dedicated lane high capacity transit in our most dense activity centers, installing a regional bus rapid transit system based upon the success of our Downtown HOV Park and Ride system, and maximizing the benefits of the New Bus Network by increasing transit funding to a more balanced position in the region’s transportation spending allocations.

Houston Tomorrow has long given the people of the Houston region independent analysis and ideas for regional transportation funding and planning. With billions spent each year in the region, are our neighborhoods seeing things getting better? Most of us want to concentrate more on walkable urbanism, transit, Complete Streets, and safety than on building new roads on the edges of our region. But that is not what our region is spending our abundance on now. With your help, we’re going to change that.

Support more of this by joining the Houston Tomorrow Department of Transportation here: http://www.classy.org/JoinHTDOT

Toward a regional Vision Zero

Houston Tomorrow plans for 2016 to support the regional movement to end traffic deaths

• Support City of Houston action leading the charge for a safer Houston region however we can.

• Engage a philosophically diverse, regional group of stakeholders to seek a platform for a regional vision zero strategy that our leadership can back.

• Engage a diverse set of analysts to open up potentially available data sources

• Release a series of reports illuminating the true nature of traffic crashes, deaths, and injuries across the region in collaboration with various partners.

• Fund this work

• Choose several other cities with an enthusiastic community based partner pushing for Vision Zero in that city and create a similar report for them.

We will be seeking foundation and individual donor support for this work as well as setting up sponsorship opportunities for events and programs. If you are interested in the potential to help bring the traffic deaths of the Houston region down, please contact us.

Houston Tomorrow will do all that we can for any elected official in the Houston region seeking policies that will bring safe streets, healthier neighborhoods, and happier people. Please contact us for best practices, briefings, and ideas. We are available to do specific analysis and work for hire related to this mission.
Toward a Vision Zero Action Plan for Houston

Houston Tomorrow recommendations for eliminating traffic-related deaths and injuries