VISION ZERØ

SAFER STREETS FOR ALEXANDRIA

Action Plan

Fall 2017

CITY OF ALEXANDRIA VIRGINIA

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ALEXANDRIA'S COMMITMENT

Vision Zero is a traffic safety policy that takes an ethics-based approach to achieving safety for all modes of transportation on a jurisdiction's roads with the understanding that transportation systems affect human life and that no traffic-related loss of life is acceptable. The goal of all Vision Zero initiatives is to design strategies based on data, engineering, enforcement, and education ultimately to get to zero traffic deaths and serious injuries.

Vision Zero is an ambitious goal for any city or jurisdiction to undertake. It involves a commitment to an approach to safety that is based on data collection. This action plan and its contents serve as The City of Alexandria's (the City or Alexandria) commitment to building a safer city where human life and safety is valued above all else. With this plan, we acknowledge that we all have a role in the safety of our transportation system as the government, policy and decision-makers, residents, visitors, and employees traveling within the City both through our individual actions and in looking out for one another on the roads. The goal of zero deaths and serious injuries by 2028 has been set and, with this plan, the City can achieve it.

CITY COUNCIL PLEDGE

This document is the plan for the City of Alexandria to achieve zero traffic-related fatalities and serious injuries by 2028. As your elected leaders, we take this commitment very seriously. We are proud to represent the Alexandria community as we undertake this shift in our thinking about transportation safety and achieving Vision Zero. However, this commitment is not ours alone to make; we encourage you ALL to take the pledge with us. Together, we can get to zero.

MESSAGE FROM THE CITY MANAGER

This document is the plan for the City of Alexandria to achieve zero traffic related fatalities and serious injuries by 2028. You will see that our departmental leadership has all signed onto this initiative and are committed to doing their part to achieve this goal. As your government, we take this commitment very seriously. I am proud to help lead the City of Alexandria as we undertake this shift in our thinking about how we behave on our streets and get to zero. This commitment to traffic safety, however, is not ours alone to make.

We need you, our residents, employees, visitors, business owners, and community groups to do your part to make the roadways safer. At the end of this action plan, there is an individual pledge that outlines what each of us can do in our daily lives to make our streets safer. I encourage all of you to join me in taking the Vision Zero pledge and live by it as we make traffic safety a top priority. Together, we can get to zero.

Mark Jinks, City Manager

DEPARTMENTAL COMMITMENT

Multiple City departments collaborated to build this Action Plan, devoting staff time, policies, and program focus to achieve the important Vision Zero initiative.

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Source: Evan Michio Cantwell

Executive Summary

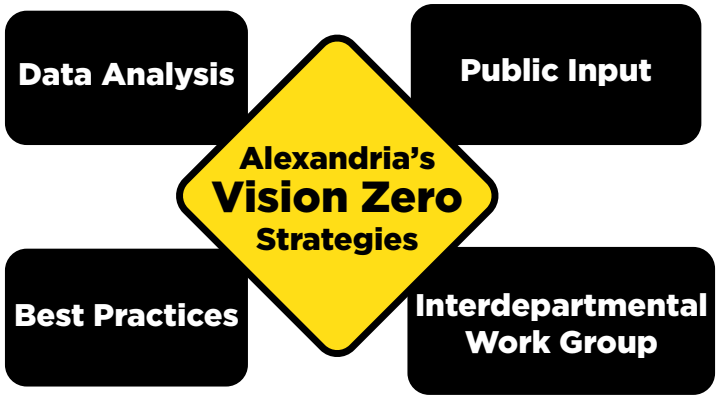
EXECUTIVE SUMMARY

THE GOAL

ZERØ TRAFFIC DEATHS AND SERIOUS INJURIES BY 2028

Vision Zero is a data driven, all-hands-on-deck approach to eliminate ALL traffic deaths and serious injuries. The City of Alexandria's goal is to achieve Vision Zero by 2028 through better data, education, enforcement, and engineering.

THE PROCESS



The City used a four-part process to build the action plan: data analysis, public involvement, evaluating best practices, and an interdepartmental working group.

PUBLIC INPUT

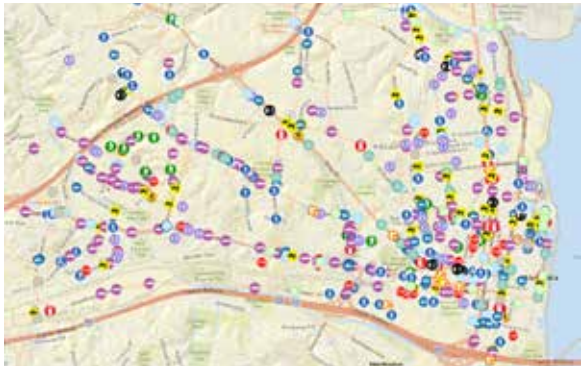
Over 1,000 residents, visitors, employees, and business owners participated in the Vision Zero Action Plan process.

TOP 3 CONCERNS REPORTED

Distracted Driving

Speeding

People running red lights or stop signs



THE PUBLIC GAVE NEARLY **700** COMMENTS ON AN INTERACTIVE SAFETY MAP.

THE WORK GROUP

The City created an interdepartmental working group (IWG) to best coordinate planning efforts, identify current programs, assess the feasibility of best practices, and to determine action items. This group met multiple times throughout the process. In order to implement the action items outlined in this plan, the IWG will continue working in groups: Data, Enforcement, Engineering, Education and Communications, Legislation & Policy.

THE DATA

To support the Vision Zero planning effort, the Alexandria Office of Performance and Accountability conducted an analysis of crash data provided by the Alexandria Police Department.

HIGH INJURY NETWORK

The City identified six high-injury corridors for serious or fatal crashes.

PEDESTRIAN CRASHES ARE ON THE RISE...

People walking or biking have a higher chance of serious injury or fatalities when involved in crashes as shown in the graphic below. These and other vulnerable users are a safety priority in Vision Zero.

CHANCE OF SERIOUS INJURY OR FATALITY BY MODE DURING A CRASH

PEDESTRIAN	BICYCLE	VEHICLE ONLY
13%	8%	2%

Note: Total KSI crashes for each mode are: Pedestrian (64), Bicycle (10), and Vehicle Only (146).

THE STRATEGIES

The interdepartmental group worked to develop the following guiding principles and strategies:

PROMOTE A CULTURE OF SAFETY

- Craft a successful public education campaign to inform the public of Vision Zero and Topic Areas
- Strengthen traffic safety enforcement policies and practices
- Create a network of Vision Zero partnerships
- Encourage city staff to incorporate Vision Zero into everyday practices
- Inform the public of Vision Zero efforts

BUILD SAFE STREETS FOR EVERYONE

- Develop and implement infrastructure policies to reduce KSIs
- Improve prioritization of safety treatments to inform implementation

IMPROVE DATA COLLECTION AND EVALUATION

- Enhance data collection and coordination efforts
- Make information easily available to the public
- Evaluate success of existing and planned programs to determine best way to allocate resources for change

ENHANCE CITY PROCESSES AND COLLABORATION

- Evaluate City policy and administrative guidelines to improve safety outcomes
- Support and encourage statewide legislative efforts to implement stricter traffic safety laws

THE PATH FORWARD

COMMUNITY SUPPORT

The City needs everyone to take part in achieving Vision Zero through individual pledges and looking out for each other on the road.

FUNDING

Funding for Vision Zero needs to come from existing budgets, grants, as well as regional, state, and federal sources.

REGIONAL SUPPORT

A regional commitment to Vision Zero will be crucial to our individual jurisdictional successes.

STATE SUPPORT

We need state support to amend our plans, policies, and laws to align with Vision Zero principles.

TEY-1907

1 Efforts Toward Vision Zero

Source: Boys and Girls Club

1 EFFORTS TOWARD VISION ZERO

For the City of Alexandria, Vision Zero is not a new concept– its underlying intent has long been part of the way the City thinks about and designs roadways to improve safety. In the past, the City departments have focused on safety efforts individually or through partnerships. The City Council's adoption of the Vision Zero Policy, however, presented the opportunity to work collaboratively across departments to consider traffic safety through different lenses that will ultimately improve livability, walkability, and public health. Vision Zero in Alexandria prioritizes safety and uses a people-first approach to eliminate deaths and serious injuries for people using the City's transportation network.

WHAT IS VISION ZERO?

The concept of Vision Zero started in the late 1990s in Sweden. It is a traffic safety policy that takes an ethics-based approach to achieving safety for all modes of transport on a jurisdiction's roads with the understanding that transportation systems affect human life and that no traffic-related loss of life is acceptable. Through its effort toward Vision Zero, Sweden has cut its traffic deaths in half and is one of the safest countries in the world when it comes to transportation safety. The goal of all Vision Zero initiatives is to design strategies based on data, engineering, enforcement, and education ultimately to get to zero traffic deaths and serious injuries.

Vision Zero carries with it five fundamental beliefs:

- Traffic deaths and severe injuries are acknowledged to be preventable.
- Human life and health are prioritized within all aspects of transportation systems.
- Acknowledgment that human error is inevitable, and transportation systems should be forgiving.
- Safety work should focus on systems-level changes above influencing individual behavior.
- Speed is recognized and prioritized as the fundamental factor in crash severity.[1]

In 2015, 35,092 people lost their lives in the U.S. due to traffic related crashes.[2] That is a 7.2 percent increase from 2014, the largest percent increase in nearly 50 years.

1 Vision Zero Network. Moving from Vision to Action: Fundamental Principles, Policies & Practices to Advance Vision Zero in the US (Feb 2017)

2 National Highway Transportation Safety Administration, 2015 Motor Vehicle Crashes: Overview, August 2016

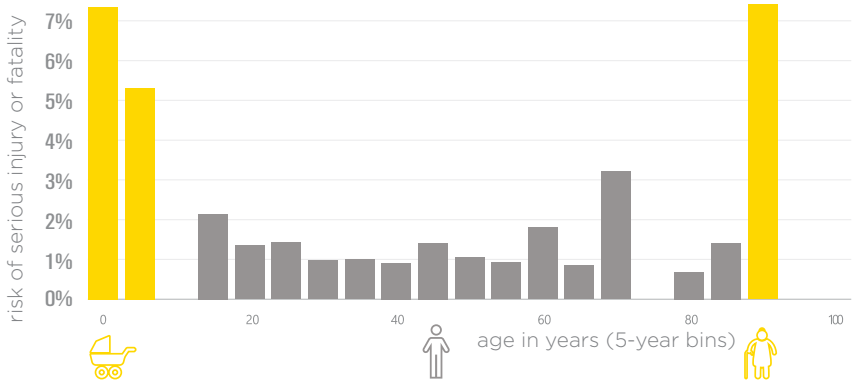
WHY VISION ZERO?

Traffic-related injuries and fatalities pose a serious public health risk that cannot be tackled by one group or City department alone. Each year, an average of 37 people in Alexandria are killed or seriously injured while using the City's streets. After several years of decline, the percent of all crashes that resulted in death or serious injuries rose in 2016 for all travel modes. The solution to this grave situation requires an intensive, collaborative effort from police, transportation engineers, elected officials, and, most important, each and every person who walks, bikes, wheels, and drives in Alexandria. The City departments and the Alexandria community will join forces to combat traffic injuries and fatalities from all angles.

In Alexandria those who are the most vulnerable roadway users – the young, the elderly, bicyclists and pedestrians – have the highest rates of fatalities and serious injuries, as shown in Figure 1. Pedestrians and bicyclists are involved in 6% of all traffic crashes but represent 34% of crashes that result in serious injury or death. The young (ages 10 and under) and the elderly (ages 91 and higher) have a higher risk of serious injury or death if involved in a crash. These conditions are not consistent with the core values that make Alexandria a

RISK BY AGE

older and younger people have a higher risk of serious injury or fatality if involved in a crash



VULNERABLE ROAD USERS

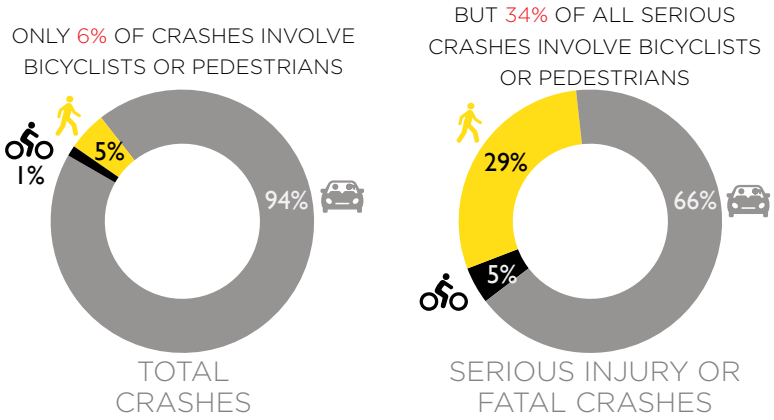


Figure 1.
Graphics showing data results for the most vulnerable users: pedestrians, bicyclists, children, and the elderly

great city where people of all ages and backgrounds can safely live, work, and visit.

Traffic crash data reveals a critical finding in Alexandria and around the world: speed matters. As seen in the Figure 2, below, vehicle speed plays a significant role in the severity of crashes, particularly for vulnerable road uses like pedestrians. The City will re-evaluate how we design roadways, increase education and communication efforts, and target equitable enforcement efforts that focus on dangerous behaviors to help make Alexandria a safer place to drive, walk, wheel, bike, and live.

Motivated by these trends and alongside cities around the world that have adopted Vision Zero, Alexandria has set an ambitious goal to achieve zero deaths and serious injuries from traffic related crashes by 2028. Increasing the safety of our streets will not only save lives and prevent life-long injuries, but it will make the streets more appealing places to engage in physical activity, walk or ride a bike, and contribute to a dynamic and inviting environment for everyone to share. As a community, we must come together to recognize that the routine loss of life and serious injuries due to traffic related crashes are not acceptable in Alexandria.

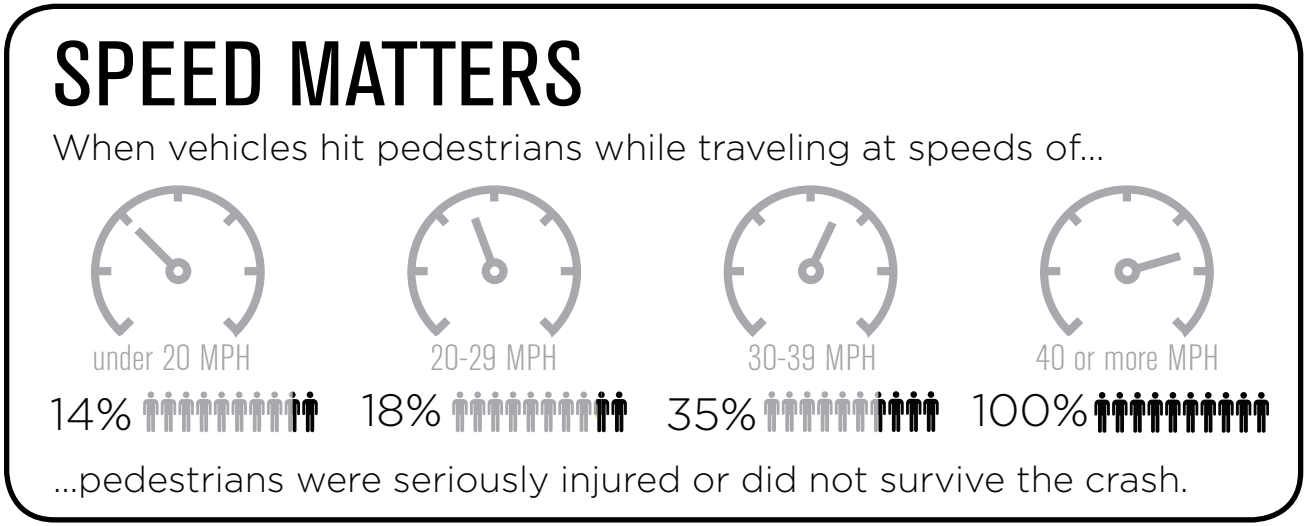


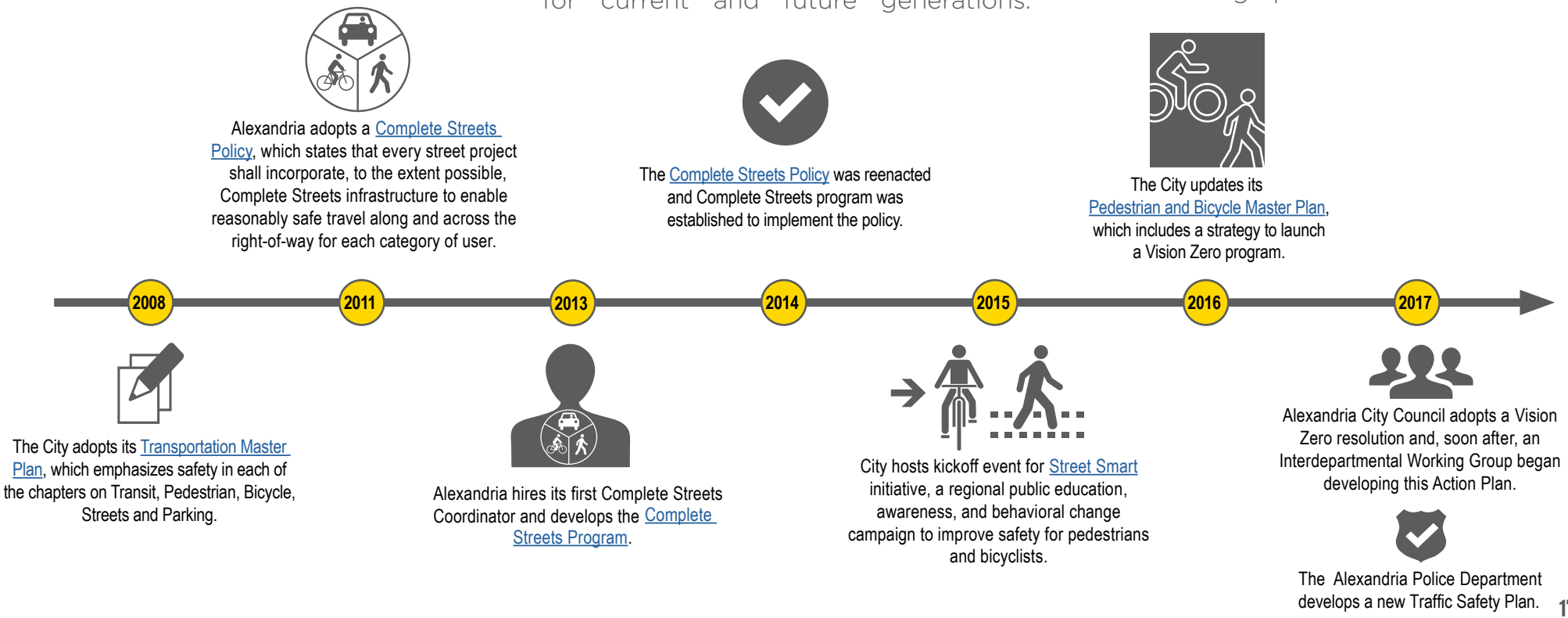
Figure 2.
Graphic showing the rate of survival of pedestrians based on crashes in Alexandria at different speed levels.

This plan presents the City's strategy for reaching its goal of zero traffic fatalities and serious injuries by 2028. Many City departments are joining forces to coordinate existing and new programs focused on safety. At the same time, this plan represents a Call to Action for everyone who travels in and through Alexandria. By recognizing that crashes are preventable and cannot be viewed as a price to pay for mobility, we can work together to create a safer and better Alexandria for current and future generations.

FOCUS ON TRAFFIC SAFETY

An intensive focus on traffic safety is not a new concept in Alexandria. The City has prioritized traffic safety in many of its planning, engineering, and police-led programs for decades. Traffic safety is a paramount consideration in all roadway design decisions and is at the heart of the everyday work of the Alexandria Police Department. A few recent City-led initiatives related to traffic safety are shown in the graphic below.

Figure 3.
Timeline of key traffic safety policies, programs, and plans that have increased the focus on traffic safety



CRASHES ARE NOT ~~ACCIDENTS~~

The Vision Zero initiative calls collisions "crashes" rather than "accidents" because traffic deaths and serious injuries are preventable.

An average of 37 people in Alexandria are killed or seriously injured each year using the City's streets. These people are friends and neighbors, husbands, wives, coworkers, children, and grandparents.

2 Building an Action Plan

2

BUILDING THE ACTION PLAN

The purpose of building an action plan for Vision Zero is to coordinate interdepartmental efforts and ideas, evaluate crash data, and consider public concerns to identify actions that will reduce traffic deaths and serious injuries to zero by 2028. Since Vision Zero is a data-driven approach to traffic safety, qualitative and quantitative data were used to develop the strategies and action items set forth in this plan. Planning these efforts is important in outlining a clear pathway of activities to reach the goal of zero.

OUR APPROACH

The City used a four-part process, as illustrated in Figure 4, to build the action plan: data analysis, public involvement, evaluating best practices, and an interdepartmental working group.

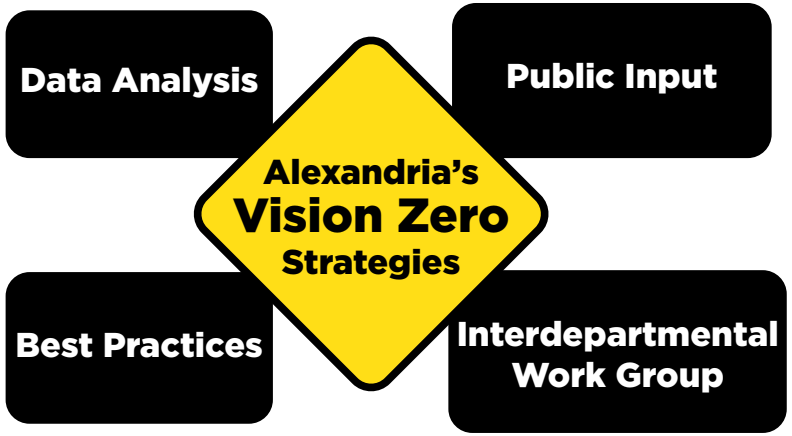


Figure 4. Process to develop Alexandria's Vision Zero Action Plan

Vision Zero is a data-driven process and to be true to this, the Office of Performance and Accountability (OPA) used state crash data to evaluate crashes. These crashes were analyzed for crash types, severity, locations, modes, and environmental conditions that may have influenced the incident and severity. To engage the public, the City held in-person events on the streets of Alexandria to gather feedback on residents' top safety concerns and experience with crashes in the City. In addition, the City hosted an interactive map on Alexandria's Vision Zero website to gather location-specific concerns from the public. Best practices were gleaned from many U.S cities that have been implementing Vision Zero initiatives over the last two decades. The Vision Zero team evaluated other jurisdictions' action plans and implementation reports to determine which strategies had been successful and were applicable to the City of Alexandria. The City created an interdepartmental working group to coordinate planning efforts, identify active programs, develop new strategies, and determine the feasibility of best practices.

2

PLANNING OUR ACTIONS

The data analysis, public involvement, evaluation of best practices, and interdepartmental working group were all key parts of building the action plan. Each element contributed valuable information to the development of the action plan and the final strategies.

INTERDEPARTMENTAL WORK GROUP

Fifteen departments in the City joined forces to chart a strategy for reaching Vision Zero. The Interdepartmental Work Group (IWG) includes the City departments shown on the right. Each of these departments oversee a diverse portfolio of programs and initiatives that serve the public in some form, and many of these programs relate to traffic safety, transportation, or public awareness about health and safety topics. The IWG was formed to create unilateral alignment and coordination across all facets of City government in support of Vision Zero.

Figure 5. List of Departments involved in the IWG

Figure 6. IWG Meeting

To view the full OPA data analysis CLICK HERE

From April to November 2017, the IWG met to review national best practices, discuss existing traffic safety programs in Alexandria, review trends from crash data, and develop the strategies presented in this plan. Each of these departments, alongside additional community partners, have made a commitment to do their part to achieve Vision Zero. Upon adoption of the plan and during implementation, the IWG will continue to work in smaller, focused groups: Data, Enforcement, Engineering, Education and Communications, Legislation & Policy.

DATA ANALYSIS

To support the Vision Zero planning effort, the Alexandria Office of Performance Accountability (OPA) conducted an analysis of traffic data provided by the Alexandria Police Department (APD) from the Traffic Records Electronic Data System (TREDS)[1]. The analysis only includes crash reports from the APD, meaning that crashes where State agencies responded (such as on an interstates) or minor collisions that did not involve a police report were not recorded. The collision data provided were for crashes occurring from 2011 to 2016 with a reported injury, or a minimum of $1,500 in damage. OPA staff mapped the locations of crashes to provide further context regarding traffic infrastructure and traffic volume. To support the Vision Zero planning effort, OPA conducted an in depth analysis into the high-risk conditions and situations leading to serious crashes in

1 www.treds.virginia.gov/Mapping/Map/CrashesByJurisdiction

2

Alexandria. The consultant team highlighted the data trends that are presented in this Action Plan about the state of the problem regarding serious crashes.

Key variables were reviewed and analyzed to determine factors that contribute to serious injury and fatal crashes.

VARIABLES	NOTES
Number of crashes over time	Total number of crashes
Geographic location of crashes	Data includes latitudinal and longitudinal coordinates that can be used to identify corridors or roads that have higher rates of crashes
Environmental location of crashes	This variable includes conditions such as weather, lighting, and roadway conditions
Speeding	Whether the speed of the vehicle involved in the crash was reported exceeding the posted speed limit (This variable includes the posted speed limit and estimated speed the vehicle was traveling at the time of the crash)
Infrastructure conditions	This variable relates to traffic control devices, including traffic signals, marked lanes, no traffic control, stop or yield signs
Pedestrian and vehicle action	Crashes involving pedestrian had associated actions such as crossing with signal, crossing within a crosswalk, and crossing intersections without a traffic signal Recorded vehicle movements such as motorists making a left turn, a right turn, or going straight at the time of the crash
Primary event	This variable describes the primary type of crash (Crash events include angle, rear end, sideswipe, and pedestrian- or motorcycle-involved)
Vehicle maneuvers	Vehicle maneuvers such as making a left turn, going straight, making right turns, and stopping in a traffic lane were recorded for vehicle involved in a crash
Age	The age of people involved in the reported crash
Personal choices	This variable includes whether a person was wearing a seat belt and if a person was under the influence of alcohol

The variables listed above were analyzed using the following definitions:

- ***PEDESTRIAN INVOLVED CRASHES:*** Crashes that involved at least one pedestrian.
- ***BICYCLE INVOLVED CRASHES:*** Although the police crash report form doesn't include a specific box for whether a bicyclist was involvement in a crash, APD reviewed additional crash narratives to identify all crashes during this period involving a bicycle.
- ***VEHICLE ONLY CRASHES:*** Crashes that are not classified as either pedestrian involved or bicycle-involved crashes.

The analysis was limited due to data availability and quality. Data quality depends on how uniformly crash reports are completed by the responding officer. Inconsistent spelling of street names, misspellings, or fields that are not filled out can lead to diminished quality or missing data. Also, some information included in crash records can be subjective and may contribute to data inconsistencies. For example, for environmental conditions the officer can only enter one condition; if there are compounding conditions, such as poor lighting, poor road conditions, and rain, only one of those conditions may be noted, leading to the other factors not being recorded. Missing data and errors may also occur during the data entry

process, which historically involved technicians manually entering in the crash reports into the traffic record data system (TREDS) software. The APD has initiated a new record management system that will address some of these challenges moving forward. Officers are also being retrained on the crash reporting software to ensure accurate and consistent data entry.

HIGHLIGHTED DATA TRENDS

The data analysis highlighted several trends of crashes shown in the graphics below. Overall, crashes have been declining in Alexandria, as has the number and proportion of crashes that are KSI crashes. However, 2016 data indicate a slight up-tick in the number and proportion of KSI crashes as seen

KSI- "Killed or Seriously injured" this is the acronym for the most crucial types of crashes that Vision Zero seeks to eliminate.

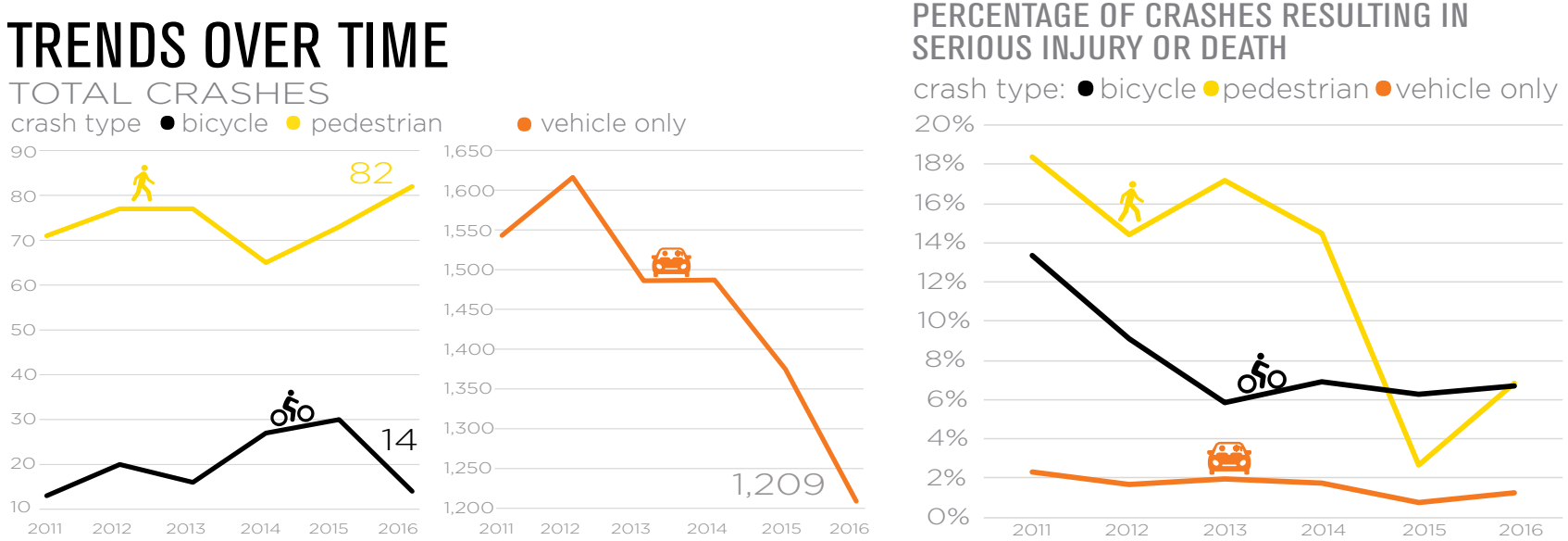


Figure 7. Crash Trends in Alexandria

Note: Crash data provided by the Alexandria Police Department. Figures only include reports from the Alexandria Police Department, meaning that crashes where State agencies responded (such as on an interstate) or minor collisions that did not involve a police report are not recorded.

in Figure 7. Pedestrians and bicyclists have a higher chance of serious injury of death resulting from a crash. Additionally, 13 percent of all pedestrian crashes and 8 percent of all bicycle crashes result in a serious injury or fatality compared to two percent of vehicle only crashes. High risk behaviors include those that might be predictable causes of serious injuries and fatalities like speeding, driving under the influence of alcohol, and not wearing a seat belt. One trend is a seasonality effect for bicycle-involved crashes, such that the proportion of the crashes that are KSI increases in the summer and fall.

Figure 8. High Risk condition trends found in crash data

HIGH RISK CONDITIONS

SPEEDING

17% of all fatal or serious injury crashes

WEATHER

13% of fatal or serious injury vehicle only crashes

19% of fatal or serious injury pedestrian crashes and 14% of all pedestrian crashes

POOR LIGHTING

8% of fatal or serious injury vehicle only crashes

15% of fatal or serious injury pedestrian crashes

DRINKING

16% of fatal or serious injury vehicle only crashes

4% of fatal or serious injury pedestrian crashes

11% of fatal or serious injury bicycle crashes

MOTORCYCLE INVOLVED

6% of fatal or serious injury vehicle only crashes

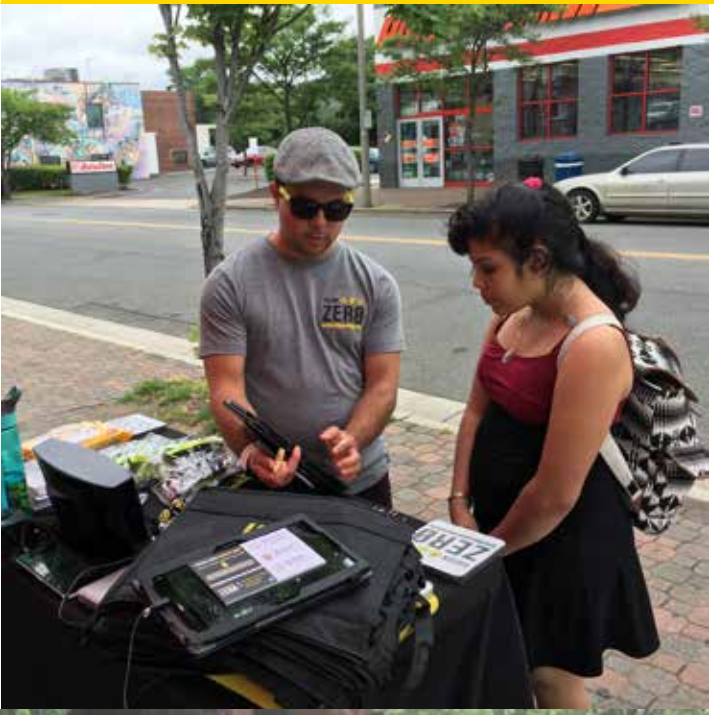
NOT WEARING A SEATBELT

13% of fatal or serious injury vehicle only crashes

HIGH INJURY NETWORK

The data showed the most damaging crashes were geographically distributed throughout the whole of Alexandria. However, Old Town, the West End, and Fairlington have a high density of KSI crashes compared to other areas. At the street level, traffic corridors that have higher numbers of KSI crashes include Duke Street, George Washington Parkway, West Glebe Road, and Jefferson Davis Highway. Higher speed crashes occur throughout the City, though the West End has a higher rate of speed-involved crashes that resulted in a death or serious injury. This geographic distribution has resulted in the High Injury Network (HIN) seen below.

Figure 9. High Injury Network (HIN)



PUBLIC INVOLVEMENT

The purpose and goal of public involvement was to structure the engagement efforts to reach a wider sample of Alexandria's population than traditionally seen at established public meetings. The team created a digital survey and online interactive map to gather feedback.

STREET MEETINGS

The city held seven on-site events, or street meetings, across Alexandria to talk to residents, visitors, and youth and to encourage participation and engagement through the interactive map and survey. The map below shows the event locations.

GATHERING INPUT

At each street meeting and online, the City asked about participants' top three traffic safety concerns, if the person or someone they know had experienced a crash, details about that crash, and to identify where in the city they had experienced traffic safety issues through an online interactive map.

USING THE INFORMATION

With the survey results, comments, and interactive map information, the Vision Zero team built strategies aimed at addressing and prioritizing these concerns.

Figure 10. Street Meeting Outreach Event Locations

2

PUBLIC INVOLVEMENT KEY FINDINGS

Over **1,000** residents, visitors, employees, and business owners were engaged in the Vision Zero Action Plan process. The following are the key findings:

TOP 3 SAFETY CONCERNS REPORTED

Distracted Driving

Speeding

People running red lights or stop signs

CRASHES EXPERIENCED

16%

of survey participants were seriously injured or knew someone that had been seriously injured or killed in a traffic crash in Alexandria

PRIMARY CRASH FACTORS REPORTED:

Distracted Driving

Speeding

People running red lights or stop signs

SELF-REPORTED CRASHES INVOLVED:

People walking or driving

CRASHES REPORTED OF OTHERS INVOLVED:

People driving or riding a bike

TOP 3 CONCERNS: DIFFERENCES

PARTICPANTS IN ARLANDRIA, THOSE AGED 30-50 YEARS, AND TITLE VI POPULATIONS NOTED...

Drivers not stopping for people walking or in wheelchairs

...IN THEIR TOP THREE CONCERNS

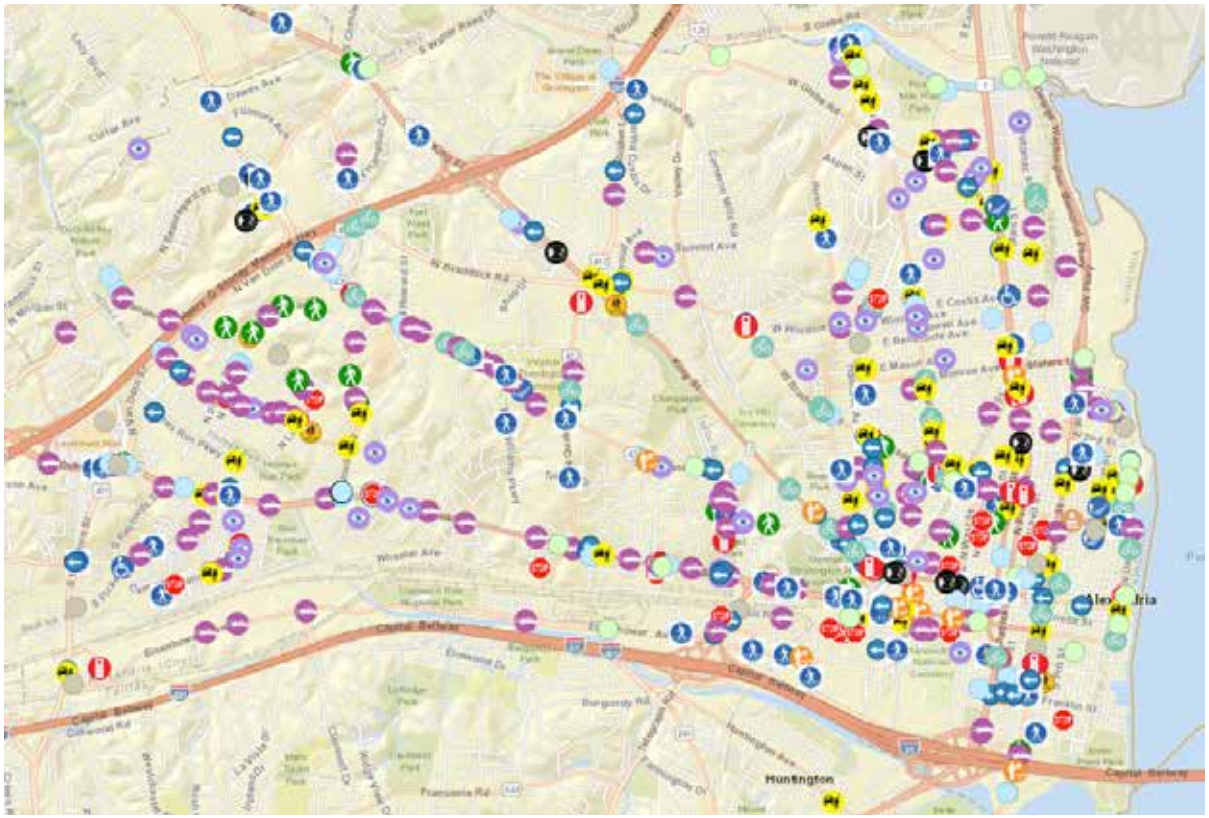
Title VI Populations include any participants that identified as minority, low-income, and Limited- or No-English Proficiency.

A detailed version of the results from the online survey and street meetings can be viewed in Appendix B.

THE PUBLIC NOTED NEARLY 700 SAFETY CONCERNS ON THE INTERACTIVE MAP.

Figure 11. The team featured the interactive map at the street meetings using a printed map and sticky notes

INTERACTIVE MAP



Most frequent comments noted:

- Speeding
- Drivers not stopping for people walking or in wheelchairs across the street
- People running red lights or stop signs
- Needs for improved pedestrian infrastructure
- Poor accessibility due to sidewalk and other infrastructure
- Confusing traffic patterns

2

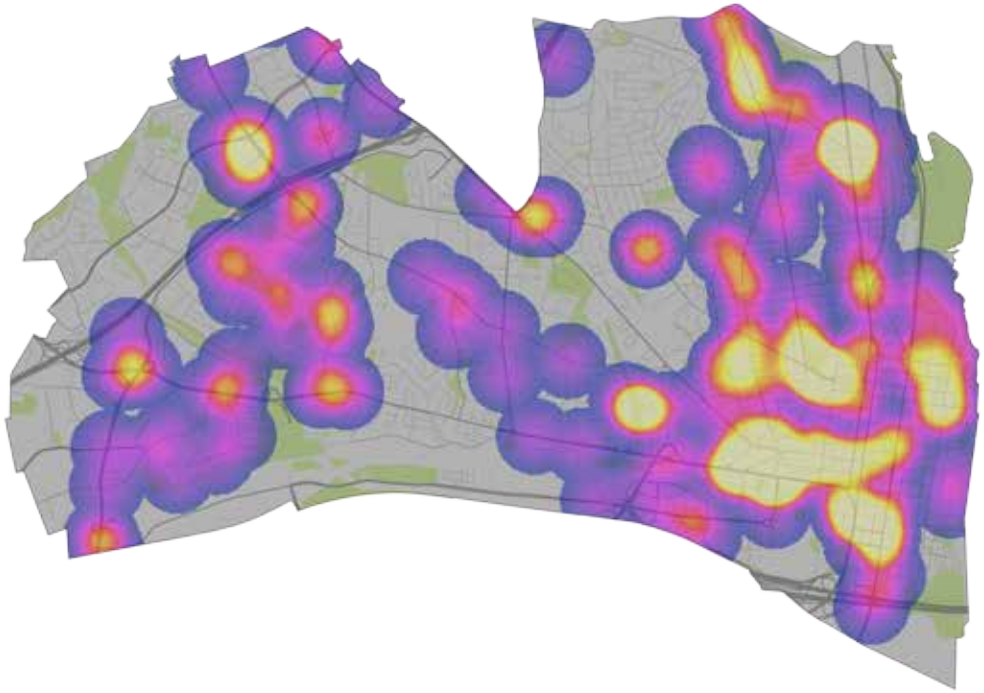
CRASH LOCATIONS

One key component of traffic safety is the perception of safety in the street. This has an effect on the public's confidence to use alternate modes of transportation like walking, biking, or transit to reach their destinations. The following maps show the reported issues of people walking (pedestrians), people biking (bicyclists), and people driving (vehicle only) compared to actual crashes over the last 5 years. The areas in which there are more comments than actual crashes will require further examination to determine the nature and cause of these comments as well as potential actions that would improve safety.

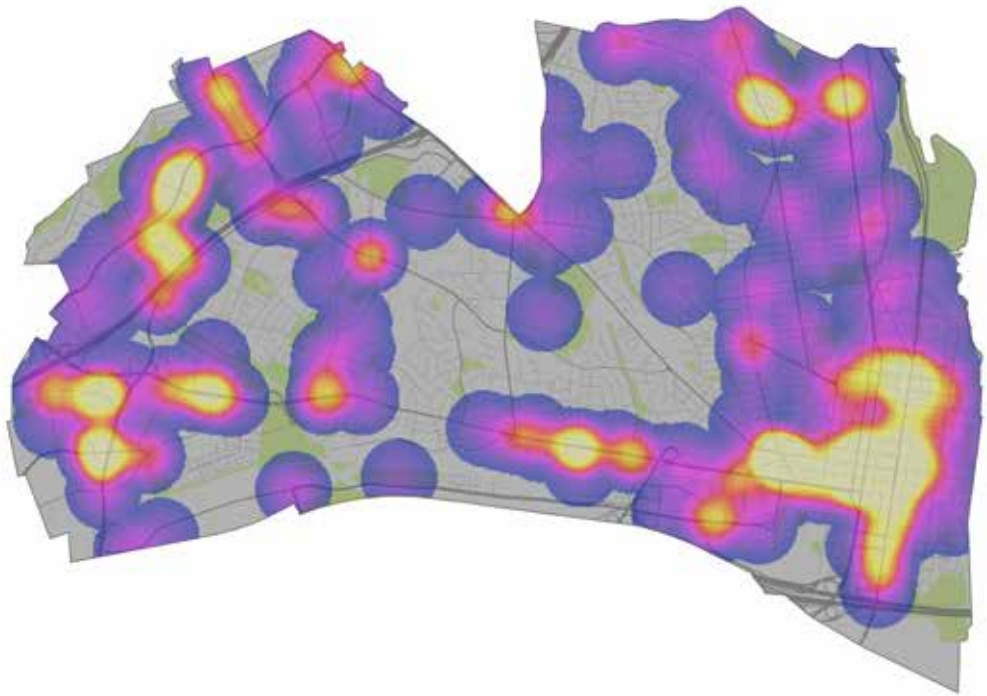
KSI Crashes

The map here shows all crashes resulting in a death or serious injury (KSI crashes) over the last 5 years. These locations were used to determine Alexandria's High Injury Network (HIN) seen on page 28. With the goal of Vision Zero being to eliminate traffic related deaths and serious injuries over the next 10 years, the HIN will be used to focus safety improvements through implementation.

PUBLIC COMMENTS VS. CRASHES FOR PEOPLE WALKING



COMMENT ISSUES MAPPED



ACTUAL CRASHES (ALL CRASHES)

The maps here show a comparison of the feeling of safety for people walking in Alexandria versus actual pedestrian crash locations. The feeling of safety, primarily for people walking and biking can be a barrier to taking these alternate means of transportation. Key areas that do not have as many crashes, but people reported feeling unsafe walking are:

- Quaker Lane and Janneys Lane/Seminary Road
- Fort Williams Parkway and Seminary Road
- Cameron Station Neighborhood
- Potomac Yard near the intersetion of Route 1 and East Glebe Road

Further investigation into the nature of these comments and field observation is needed to determine if these are near-misses or other potential conditions.

2 PUBLIC COMMENTS VS. CRASHES FOR PEOPLE BIKING

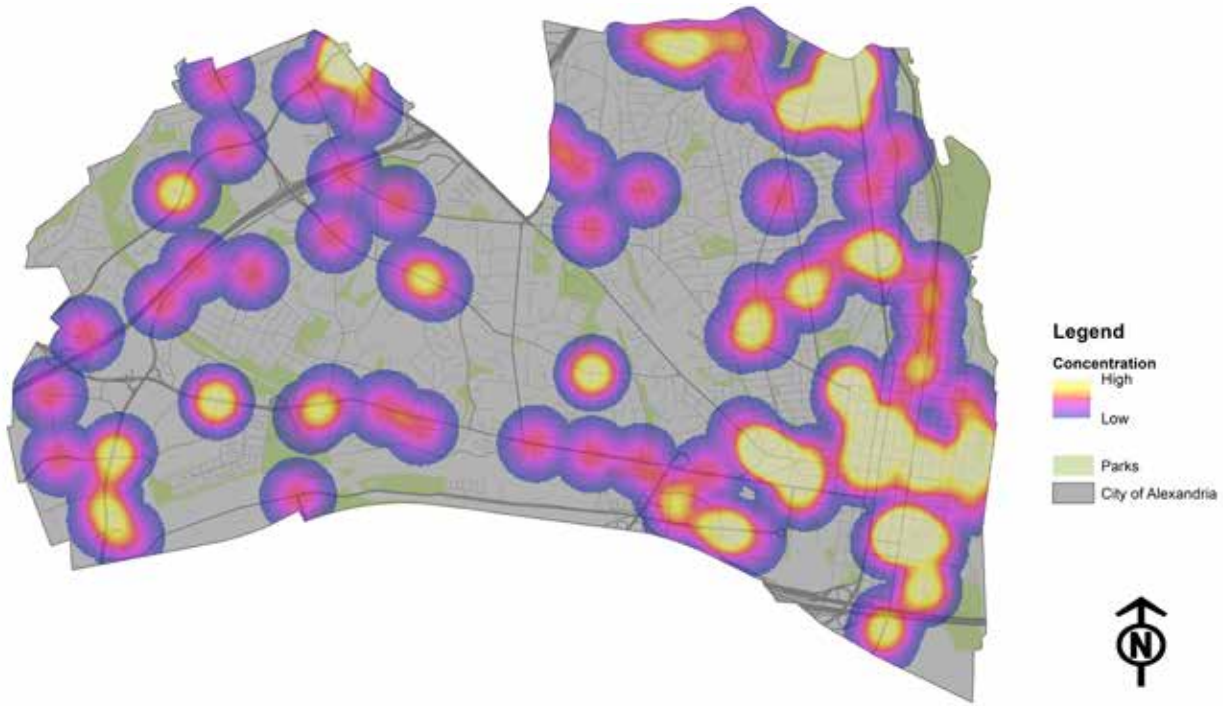
The maps here show a comparison of the feeling of safety for people biking versus actual bicycle crash locations. The feeling of safety, primarily for people walking and biking, can be a barrier for people considering these alternate means of transportation. Key areas that have a disproportionate number of comments to actual crashes for people biking are:

- Braddock and Russell Road
- Mount Vernon Ave and Braddock Road
- Old Town North neighborhood along the Mount Vernon Trail
- The area around TC Williams High School

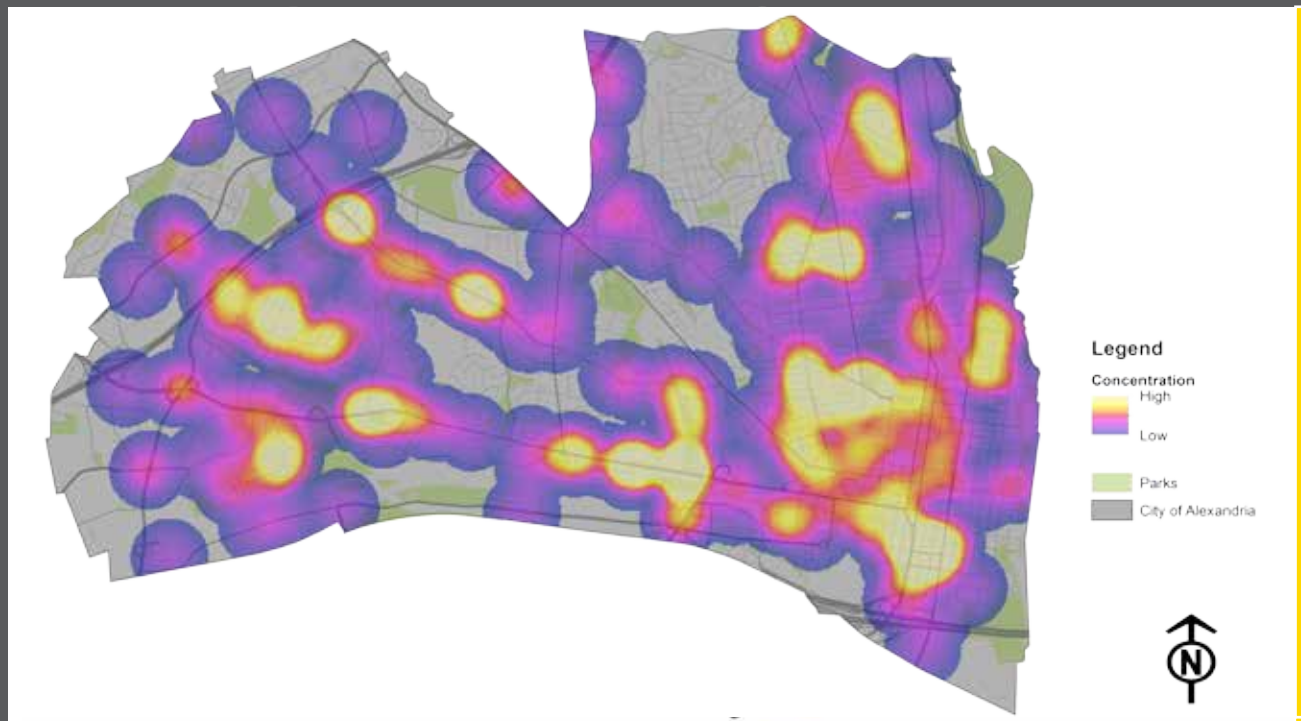
More examination will be conducted to determine the issues and needs of these areas.

COMMENT ISSUES MAPPED

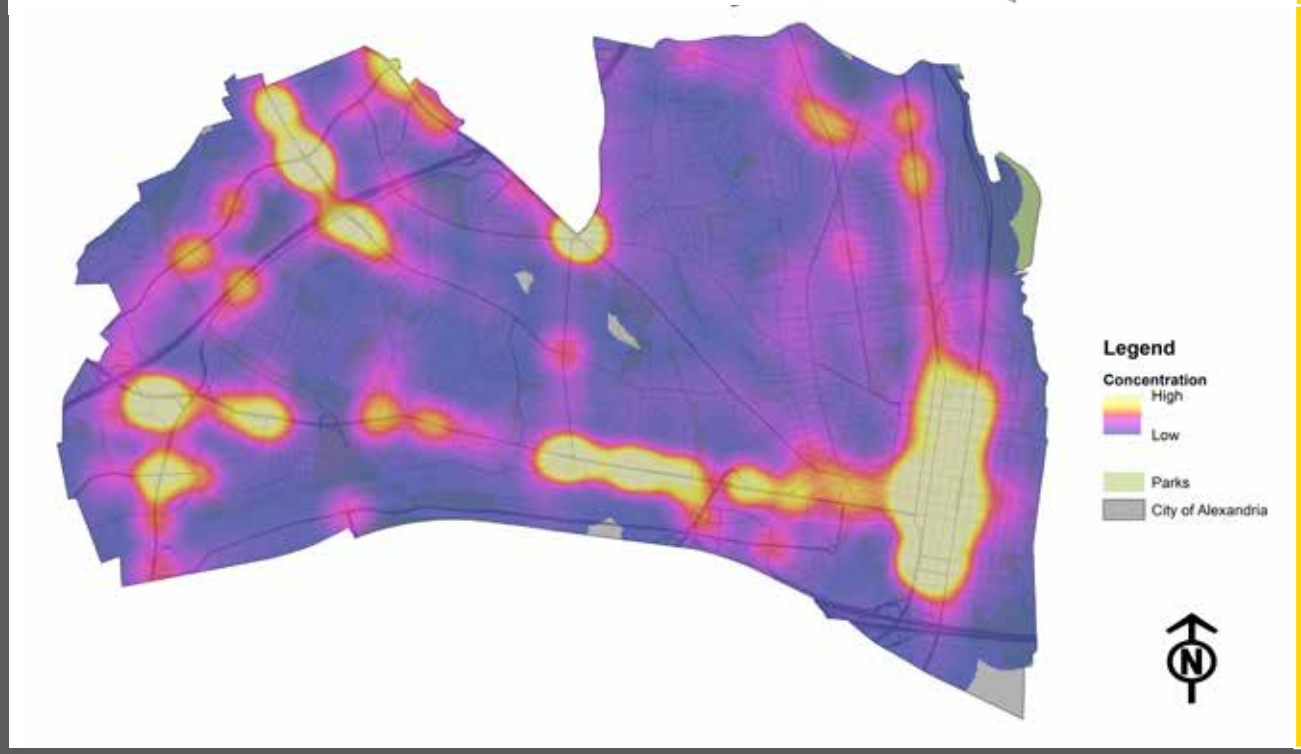
ACTUAL CRASHES (ALL CRASHES)



PUBLIC COMMENTS VS. CRASHES FOR PEOPLE DRIVING



COMMENT ISSUES MAPPED



ACTUAL CRASHES (ALL CRASHES)

The maps here show a comparison of the feeling of safety for people driving versus actual vehicle crash locations. Key areas that have a disproportionate number of comments to actual crashes for people driving are:

- Del Ray Neighborhood
- Potomac and Potomac West Neighborhoods
- Cameron Station Neighborhood
- Potomac Yard near the intersetion of Route 1 and East Glebe Road

These are areas that can be examined and studied for traffic calming installations, road and/or intersection redesign, and other traffic safety interventions. Interventions that keep drivers focused on the roads should be prioritized to deter distracted driving.

2

BEST PRACTICES

A rich network of existing U.S. Vision Zero cities, as seen in Figure 12, provided a long list of strategies and practices that have been effective in these communities. A Vision Zero City must meet the folowing minimum standards:

- Sets clear goal of eliminating traffic fatalities and severe injuries
- Mayor has publically, officially committed to Vision Zero
- Vision Zero plan or strategy is in place, or Mayor has committed to doing so in clear time frame
- Key city departments (including Police, Transportation and Public Health) are engaged.

The Vision Zero team combed the Action Plan strategy lists and used them as a benchmark to gain insight into creative and effective actions that could be implemented.

Figure 12.
Vision Zero Network
Map of Vision Zero Cities

CITIES USED AS PRECEDENTS

The cities used as precedents were chosen either for their regional proximity, similar size and character to Alexandria, or innovative strategies. Each city is listed below.

DISTRICT OF COLUMBIA

As one of the most recent cities to adopt Vision Zero, Washington, DC is a precedent for regional comparison and context. Reviewing and including some of their strategies in this Action Plan can create regional cohesion and coordination as residents of Virginia, the District, and Maryland flow daily between borders.

Source: Vision Zero Network

CITIES SIMILAR IN CHARACTER

Eugene, Oregon; Austin, Texas; Fort Lauderdale, Florida; and Portland Oregon are similar in character or urban form to Alexandria. These cities are smaller in population than that of New York or Los Angeles and often have a historic downtown core.

INNOVATIVE PRACTICES FROM LARGE CITIES

Los Angeles, San Francisco, Boston, Denver, and Seattle were used as precedents for innovative practices and programs that could be applied to Alexandria.

OVERVIEW OF BEST PRACTICES

1. ADMINISTRATIVE ACTIONS

Strategies often focused on administrative activities like forming task forces, conducting an internal review of city fleet crashes, updating existing plans and ensuring the inclusion of Vision Zero principles for safety in future plans. There was a focus on empowering existing groups or organizations to have a stake in the creation of the plan as well as taking on a strategy to help the City achieve Vision Zero. Safety becomes more of a focus for new developments to both manage multimodal traffic during construction and at completion.

2. EDUCATIONAL ACTIONS

In many cases, the best educational practice was to have an ongoing conversation about traffic safety and Vision Zero to ensure effective implementation and to update the public on progress. Capitalizing on captive audiences and using existing resources to show educational videos or place materials has been proven to be effective at raising awareness of Vision Zero and traffic safety campaigns. Public art has also proven to be a key component of communicating more complex messaging.

3. ENFORCEMENT ACTIONS

One of the key elements to more effective enforcement is to collect better, more specific data. Giving officers traffic safety 'cheat sheets' and educational materials to use during traffic stops is effective at spreading the Vision Zero message or specific

campaign. Increased automated enforcement has been used to enforce speeds or traffic signals in areas with high numbers of children or people walking, biking, or traveling in wheelchairs. Another important factor is making enforcement data more readily available to the public to ensure a transparent process.

4. ENGINEERING ACTIONS

Most engineering actions focused on environmental conditions that lead to hazardous conditions. These include focuses on better lighting, sidewalks, Americans with Diabilities Act (ADA) facilities, and signage. Slow zones (Figure 13) that are implemented around schools, recreation centers, libraries, or areas of high residential land uses.

5. LEGISLATIVE ACTIONS

All legislative actions focus on changing policies to enhance education and increase fines for the most dangerous infractions. Policies around driver education are also updated to ensure more frequent and adequate information on new policies. Using various policies to deter dangerous driving like enabling the use of speed and/or red light cameras and reducing the citywide speed limit has shown to be effective at improving safety in the streets.

6. EVALUATION ACTIONS

Collecting more data and linking data is often the focus of evaluation best practices. More data collected and linked through the hospital system, police department, and crash data can show the effectiveness of Vision Zero measures and also allow the city to better evaluate hazardous conditions. Engaging the public in data analysis (Figure 14) is also effective in ensuring transparency in the process, crowdsourcing information, and analyzing the data available for information city staff may not be able to analyze.

Figure 13. An Engineering Action like the Slow Zones, seen above, can help manage speeds in neighborhoods or areas with schools, senior centers, or other uses that draw vulnerable users. (Source: NYC Streetsblog)

Figure 14. DC Vision Zero Hackathon hosted by the District Department of Transportation (Source: DDOT)

3 Path to Zero

Source: Dan Reed

3 PATH TO ZERO

This plan's subtopics and action items were formed through a mix of all four components of the Vision Zero Process: data analysis, public input, the interdepartmental work group, and analysis of best practices. All of the strategies in this chapter have been assessed by the interdepartmental group for their effectiveness, applicability, and ability to be implemented. In Appendix C, you will find the full list of strategies, action items, corresponding agencies and time frames for these actions.

DEVELOPING STRATEGIES

During the Vision Zero process, four overarching goals emerged for Alexandria. These are to:

- Promote a Culture of Safety
- Build Safer Streets for Everyone
- Improve Data Collection and Evaluation
- Enhance City Processes and Collaboration

Within each goal, related subtopics and subsequent action items have been developed. Action items are the specific implementation strategies that each department will undertake to enhance traffic safety and help achieve Vision Zero.

Strategies and Action Items

PROMOTE A CULTURE OF SAFETY

Vision Zero is not just a one-time initiative - it's a community mindset. Traffic safety should become intuitive and ingrained in the daily lives of Alexandria community members and visitors. Alexandria should be known for its culture of safety and protection of all roadway users, regardless of travel mode. By the end of the first five years of our effort, safety will become second-nature for everyone traveling on Alexandria streets.

Source: Evan Michio Cantwell

Source: Smilla4 (Flickr)

CRAFT A SUCCESSFUL EDUCATION CAMPAIGN TO INFORM THE PUBLIC OF VISION ZERO AND TOPIC AREAS

- Display safety "campaign" messages at additional government facilities and on City fleet.
- Use signs and electronic messaging for PSAs such as related to "campaign" messages.
- Provide handouts for APD to distribute at traffic stops educating the public on safety.
- Develop a program to foster and teach safe driving habits to teen drivers.
- Work with other local governments to develop regional and City-based "campaigns" with messaging that focuses on topic area(s) of importance (e.g. Speeding, Distracted Driving, and Driving Under the Influence).
- Increase distribution of safety equipment including bike lights, helmets, bells, and reflectors at City

STRENGTHEN TRAFFIC SAFETY ENFORCEMENT POLICIES AND PRACTICES

- Increase fines for infractions that result in crash with a pedestrian in a marked crosswalk.
- Require all Alexandria Police officers to participate in the NHTSA's pedestrian training for law enforcement.
- Reduce driving under the influence through a collaboration with transit, taxi companies, transportation network companies, bar owners and other

retail outlets, especially targeting hot spot locations.

- Develop data-driven process to determine high crash intersections where red light violations are frequent, and install and rotate maximum allowed automated red light enforcement cameras.

- Increase enforcement on roadways with higher speeds and target education campaigns about speeding in these areas (i.e. - message boards).

- Regularly deploy high-visibility DUI enforcement in high-priority areas on nights with higher concentrations of severe and fatal crashes and major community events.

- Increase the number of crossing guards at schools through a volunteer training program.

CREATE A NETWORK OF VISION ZERO PARTNERSHIPS

- Develop a network of "civic partners" who pledge to support Vision Zero through the dissemination of safety and educational information to their networks.

- Develop a network of "Coalition partners" who pledge to support Vision Zero through implementation of one or more action items.

- Form interdepartmental subgroups of Vision Zero Stakeholders as necessary, to ensure successful implementation of the plan.

- Initiate a regional Vision Zero Task force to identify path toward regional Vision Zero Policy.

ENCOURAGE CITY STAFF TO INCORPORATE VISION ZERO INTO EVERYDAY PRACTICES

- Continue and enhance recognition programs for safe driving of school buses, transit, and City fleet vehicles.
- Add Vision Zero education to defensive driving courses to training for all City employees receiving fleet driving permissions. Require employees to update this training certifications every 2 years.
- Develop walking and biking curriculum for elementary school students (ACPS SRTS Coordinator).

INFORM THE PUBLIC OF VISION ZERO EFFORTS

- Maintain a comprehensive website to provide information on the projects, programs, and progress of Vision Zero to include dashboard and annual reports.
- Utilize social media to share information and promote dialog.
- Provide Vision Zero logo, goal and message on back of parking receipts and City email signatures.
- Work with media partners to more accurately report traffic crashes to avoid victim-blaming, and report crashes in the context of Vision Zero.

BUILD SAFE STREETS FOR EVERYONE

Street design has an impact on both perception of safety when driving, biking, walking, or wheeling as well as the actual rate of crashes. Street design focuses largely on the engineering, streetscaping, and urban planning that determine traffic behaviors. It's been proven that reconfiguring roadways for lower speeds and designing intersections for pedestrian safety reduces both the number and severity of crashes for all modes.

The graphics on these two pages show the common types of motor vehicle and pedestrian crashes that occur in Alexandria. The data showed that vehicles involved in KSI crashes in the City were on average traveling faster than the posted speed. A crash involving a speeding vehicle significantly increased risk of KSI in vehicle-only crashes and pedestrian-involved crashes (especially when there is adverse weather for vehicle only crashes). Most of these can be addressed through road design and engineering practices.

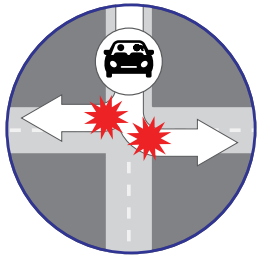
Designing roads that have narrower lanes, alert drivers to traffic changes or intersections, or provide horizontal or vertical shifts force drivers to slow down and become more aware of their surroundings. These also deter distracted driving. Roadway design that focuses on the safety of people walking makes it safer for all other modes as well.

FROM 2011-2016, there were **9,328** **CRASHE ONLY M**

1 in 50 **CRASHES RESULTED IN A FATALITY OR SERIOUS INJURY**

COMMON MOTOR VEHICLE

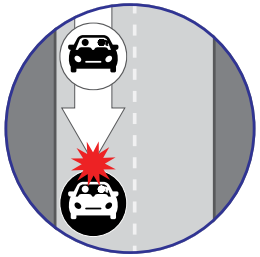
ANGLE



46% of all reported crashes were angle crashes. 2% of all angle crashes resulted in serious injury or loss of life.

SIDE

REAR END

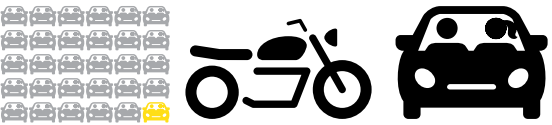


11% of all reported crashes were rear end crashes. 1% of all rear end crashes resulted in serious injury or loss of life.

N

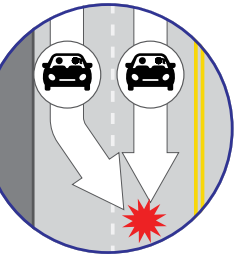
*No other crash types comprised more than 3% of the datas total crashes.

ES INVOLVING OTOR VEHICLES



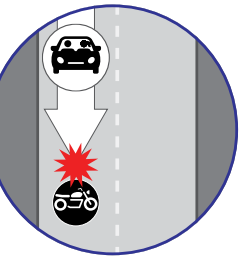
CRASH TYPES*

SWIPE, SAME DIRECTION



26% of all reported crashes were sideswipe, same direction crashes. 1% of all these crashes resulted in serious injury or loss of life.

MOTORCYCLIST



27% of crashes involving a motorcyclist resulted in a serious injury or fatality and accounted for less than 1% of all crashes.

set. Crash types listed have the highest percent share of

FROM 2011-2016,

445 PEDESTRIANS WERE INVOLVED IN CRASHES

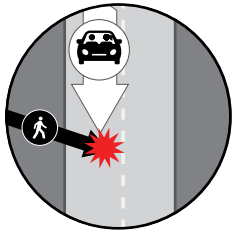
1 in 7 CRASHES RESULTED IN A FATALITY OR SERIOUS INJURY

COMMON PEDESTRIAN CRASH TYPES

LEFT-TURN CRASH AT SIGNALIZED INTERSECTION

10 people suffered serious injuries or fatalities

PEDESTRIAN CROSSING MID-BLOCK



12 people suffered serious injuries or fatalities

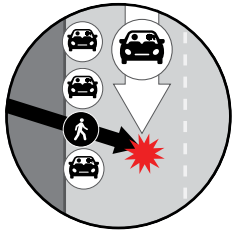
RIGHT-TURN CRASH AT SIGNALIZED INTERSECTION

4 people suffered serious injuries or fatalities

LEFT-TURN CRASH AT UNSIGNALIZED INTERSECTION

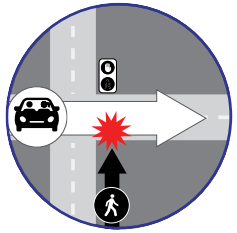
6 people suffered serious injuries or fatalities

PEDESTRIAN CROSSING FROM BEHIND PARKED CARS



4 people suffered serious injuries or fatalities

PEDESTRIAN CROSSING AGAINST SIGNAL



3 people suffered serious injuries or fatalities

Note: Crash data provided by the Alexandria Police Department does not include information on why the pedestrian chose to cross the street. or if there were factors that forced the pedestrians to cross the street.

DEVELOP AND IMPLEMENT INFRASTRUCTURE POLICIES TO REDUCE KSIs

- Incorporate Vision Zero data and recommendations into Transportation elements of future Small Area Plans.
- Use the data that identifies high KSI crash corridors and intersections to help prioritize engineering and education efforts, and require comprehensive safety improvements when designing these corridors and intersections.
- Update the Streets and Transit Chapters of the Transportation Master Plan to prioritize the reduction of KSI crashes and elevate crash data as a priority in decision-making.
- Develop neighborhood slow zone program with selection criteria, a request process, and launch an application-based program, through engineering and design improvements to reduce vehicle speeds.
- When new public school facilities open or relocate to a new site, ensure appropriate agencies continue to work together to develop a transportation plan that prioritized safey for the new school facility.
- Explore a Citywide 25mph speed limit.

Source: FHWA

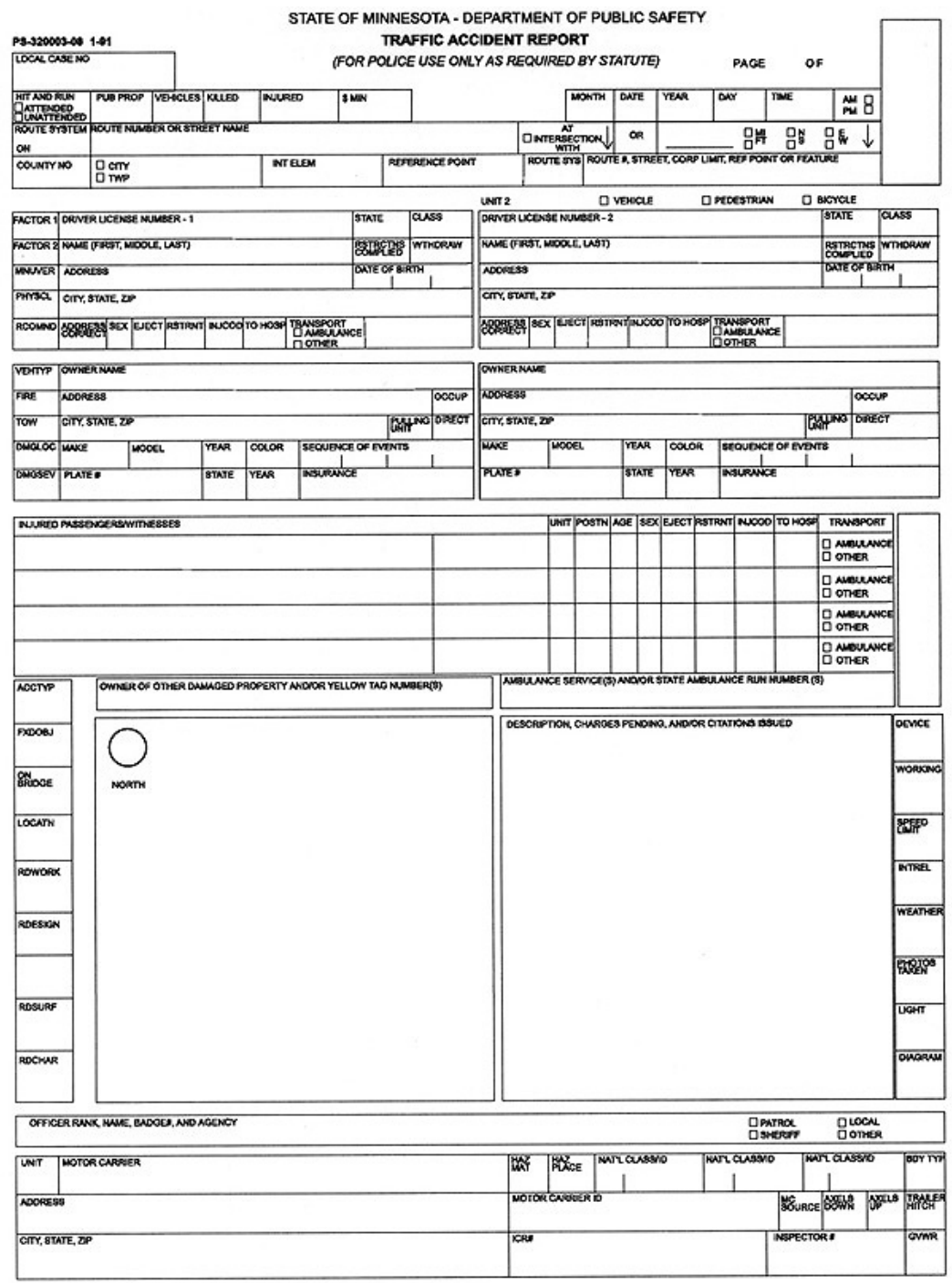
Leading Pedestrian Intervals (LPIs)
are a part of traffic signal timing that gives pedestrians waiting to cross a few seconds head-start in front of vehicles making turns.

IMPROVE PRIORITIZATION OF SAFETY TREATMENTS TO INFORM IMPLEMENTATION

- Identify criteria for installation of "No Right on Red" and LPIs for intersections and outline process for implementing changes.
- Reduce delivery timelines for safety improvements by implementing near-term, temporary treatments for priority Pedestrian & Bicycle Master Plan and Safe Routes to School engineering recommendations.
- Develop pedestrian safety criteria for transit stations, apply these to City transit stations, and develop a plan to implement safety improvements at the most critical stations first.
- Use most recent crash data to continually prioritize implementation of recommendations from Pedestrian & Bicycle Master Plan.

IMPROVE DATA COLLECTION AND EVALUATION

Evaluating the impacts of Vision Zero efforts and keeping ourselves accountable is critical to ensuring that the initiative is successful. To this end, the City will improve data collection, evaluation and dissemination regarding all projects, including enforcement efforts and education campaigns. All information must be easily accessible not only to the City, but the public as well. The City will be creative in finding the resources needed to make this process efficient and effective.


STATE OF MINNESOTA - DEPARTMENT OF PUBLIC SAFETY
TRAFFIC ACCIDENT REPORT
(FOR POLICE USE ONLY AS REQUIRED BY STATUTE)
PS-320003-09 1-91
LOCAL CASE NO
PAGE OF
HIT AND RUN ATTENDED UNATTENDED | PUB PROP | VEHICLES | KILLED | INJURED | $ MIN | MONTH | DATE | YEAR | DAY | TIME | AM PM
ROUTE SYSTEM ON | ROUTE NUMBER OR STREET NAME | AT INTERSECTION WITH | OR | MI FT | N S | E W
COUNTY NO | CITY TWP | INT ELEM | REFERENCE POINT | ROUTE SYS | ROUTE #, STREET, CORP LIMIT, REF POINT OR FEATURE
UNIT 2 VEHICLE PEDESTRIAN BICYCLE
FACTOR 1 | DRIVER LICENSE NUMBER - 1 | STATE | CLASS | DRIVER LICENSE NUMBER - 2 | STATE | CLASS
FACTOR 2 | NAME (FIRST, MIDDLE, LAST) | RSTRCTNS COMPLIED | WTHDRAW | NAME (FIRST, MIDDLE, LAST) | RSTRCTNS COMPLIED | WTHDRAW
MNUVER | ADDRESS | DATE OF BIRTH | ADDRESS | DATE OF BIRTH
PHYSCL | CITY, STATE, ZIP | CITY, STATE, ZIP
RCOMND | ADDRESS CORRECT | SEX | EJECT | RSTRNT | INJCOD | TO HOSP | TRANSPORT AMBULANCE OTHER
VEHTYP | OWNER NAME | OWNER NAME
FIRE | ADDRESS | OCCUP | ADDRESS | OCCUP
TOW | CITY, STATE, ZIP | PULLING UNIT | DIRECT | CITY, STATE, ZIP | PULLING UNIT | DIRECT
DMGLOC | MAKE | MODEL | YEAR | COLOR | SEQUENCE OF EVENTS | MAKE | MODEL | YEAR | COLOR | SEQUENCE OF EVENTS
DMGSEV | PLATE # | STATE | YEAR | INSURANCE | PLATE # | STATE | YEAR | INSURANCE
INJURED PASSENGERS/WITNESSES | UNIT | POSTN | AGE | SEX | EJECT | RSTRNT | INJCOD | TO HOSP | TRANSPORT
AMBULANCE OTHER
ACCTYP | OWNER OF OTHER DAMAGED PROPERTY AND/OR YELLOW TAG NUMBER(S) | AMBULANCE SERVICE(S) AND/OR STATE AMBULANCE RUN NUMBER (S)
FXDOBJ | NORTH | DESCRIPTION, CHARGES PENDING, AND/OR CITATIONS ISSUED | DEVICE
ON BRIDGE | WORKING
LOCATN | SPEED LIMIT
RDWORK | INTREL
RDESIGN | WEATHER
PHOTOS TAKEN
RDSURF | LIGHT
RDCHAR | DIAGRAM
OFFICER RANK, NAME, BADGE#, AND AGENCY | PATROL SHERIFF | LOCAL OTHER
UNIT | MOTOR CARRIER | HAZ MAT | HAZ PLACE | NAT'L CLASS/ID | NAT'L CLASS/ID | NAT'L CLASS/ID | BDY TYP
ADDRESS | MOTOR CARRIER ID | MC SOURCE | AXELS DOWN | AXELS UP | TRAILER HITCH
CITY, STATE, ZIP | ICR# | INSPECTOR # | GVWR

Source: NHTSA

ENHANCE DATA COLLECTION AND COORDINATION EFFORTS

- Continue building and expanding electronic citation database pending funding and resources.
- Work with VDOT and State Pedestrian Task Force to revise crash reporting standards and information captured to better inform data analysis leading to projects and programs.
- Investigate extent of pedestrians crashes not reconciled with Fire & EMS data and AHD report.
- Standardize and establish definitions and training on crash reporting methods.
- Improve existing Multi-department Response Team for all KSI crashes and develop T&ES crash form to document contributing crash factors related to street design.
- Work with the State to update crash reporting methods to differentiate between alcohol and drug related crashes.
- Continue existing and inverstigate new opportunities for partnerships with universities, technology companies, and researchers to develop a comprehensive traffic crash prediction and traffic exposure model.

MAKE INFORMATION EASILY AVAILABLE TO THE PUBLIC

- Publish an annual report card on the progress of Vision Zero, present it to the Transportation Commission, and publish it on the Vision Zero website.
- Provide annual citation data for infractions that potentially lead to serious injuries and deaths.
- Establish dashboard for all crash and safety data on the Vision Zero website.

Vision Zero

On January 24, 2017, the City of Alexandria adopted Vision Zero with the goal of eliminating all traffic deaths and serious injuries by 2028.

Page updated on Nov 2, 2017 at 2:02 PM

ON THIS PAGE

- What is Vision Zero?
- Vision Zero Action Plan
- Why Vision Zero?

What is Vision Zero?

Vision Zero is about saving lives on Alexandria's streets.

Vision Zero is a multidisciplinary, multi-national traffic safety concept that aims to achieve a transportation system with no deaths and serious injuries. It began in Sweden in 1997 and has since been adopted by other countries and cities around

VISION ZERO

Source: OZinOH (Flickr)

ENHANCE CITY PROCESSES AND COLLABORATION

Vision Zero is an all-hands-on-deck initiative that will take more than just one department to get to the goal of zero traffic related fatalities or serious injuries. Multiple agencies and departments will need to help with education, encourage legislative intervention, lead enforcement, and improve data collection and management. Moreover, all departments will be responsible for evaluating and improving efforts together as the City moves into implementation.

EVALUATE CITY POLICY AND ADMINISTRATIVE GUIDELINES TO IMPROVE SAFETY OUTCOMES

- Develop system to track, manage, respond to, and prioritize resident and customer requests for safety improvements.
- Support work with courts to create graduated penalties for repeat offenders.
- Evaluate Traffic & Parking Board charter and consider revisions to make traffic safety a primary focus of the Board.
- Encourage and promote national and regional senior driving education programs, such as the "We Need to Talk" program.
- Evaluate Maintenance of Traffic (MOT) Plan requirements and revise to prioritize safe, accessible, and convenient routes for bicyclists and pedestrians. Enforce MOT plans in work zones.

Source: Virginia.gov

SUPPORT AND ENCOURAGE STATEWIDE LEGISLATIVE EFFORTS TO IMPLEMENT STRICTER TRAFFIC SAFETY LAWS

- Support statewide efforts to reform Driving Under the Influence (DUI) standards related to Blood Alcohol Content, arrest and adjudication process, and repeat offenders.
- Pursue and support state legislation to allow the use of fixed automated enforcement cameras for speed violations.
- Support statewide efforts to revise distracted driving laws, including increase of fines.
- Pursue and support state legislation to require drivers to stop, rather than yield, for pedestrians in the crosswalk.

3 WHAT WILL IT TAKE TO ACHIEVE ZERO?

The City has taken on the challenge of accomplishing the goal of Vision Zero within ten years of the adoption of this Action Plan. Each of the strategies and action items have been prioritized and assigned to departments that will lead and support each item, which can be found in Appendix C. However, City Staff cannot accomplish these goals alone.

COMMUNITY SUPPORT

Part of the success of this plan is having our residents, visitors, businesses, and workers take responsibility for their individual actions, look out for one another on the roads, and embrace the culture of safety Alexandria is trying to build. Many Coalition Partners, highlighted later in this plan, have signed on to do their part to achieve Vision Zero. What can you do?

- Take the pledge to make safe choices when moving through the city streets and make these actions a part of your daily life
- Help the City spread the word about Vision Zero by talking to your friends, neighbors and community groups
- Attend and help promote Vision Zero and other city events in the future
- Join or become active in a civic group focused on your neighborhood

Figure 15. Vision Zero Funding Table (in Thousands)

Vision Zero Funding	**Current**
	FY 2018
Capital	
East Glebe & Route 1	$3,200
King & Beauregard Intersection Improvements	$1,900
Citywide Transportation Mang't Technologies	
Fixed Transportation Equipment	$1,150
Holmes Run Trail Connector	$800
Complete Streets	$730
Ped/Bike Study	
King Street Ped/Bike Safety Improvements	
Seminary & Howard	$400
Old Cameron Run Trail	$2,845
Shared Use Paths	$150
Sidewalk Maintenance	$300
Transportation Master Plan	$340
Van Dorn/Beauregard Bike	
Backlick Run Paths	
Duke Street Corridor	

	Short Term		Mid-Term		Long Term	
	Year 1 FY 19	*Year 2*	*Year 3*	*Year 4*	*Year 5 FY 23*	*Year 6+*
	$1,400					
	$250		$250		$250	$250
	$850	$850	$850	$850	$2,350	$2,675
	$830	$830	$830	$830	$830	
	$340					
					$1,000	
	$102	$1,409	$1,360			
	$0	$300	$0	$300	$0	$600
	$600	$300	$600	$300	$600	$1,800
			$500			
	$250	$1,171				
			$118	$2,000	$4,382	
				$2,000	$3,000	$14,000

FUNDING

The strategies outlined in this plan provide the roadmap to reach the goal of zero traffic-related fatalities and serious injuries. To achieve this goal by 2028, the City and each department has committed staff resources and departmental focus for the action items they are assigned.

Implementation of the strategies outlined in this plan will require dedicated staff time, support from community and partner agencies, and the alignment of a variety of existing and new funding sources. The City's Approved Capital Improvement Plan (FY 2018 – FY 2027) already includes a number of projects that are aligned with this plan, including, but not limited to the projects seen in Figure 15 to the left.

In addition to reallocating internal resources and shifting priorities to incorporate Vision Zero into existing work, additional funding will be needed to accomplish the goals of this plan. Annual funding will be determined through the budget process and will be guided by the annual work plan for implementing Vision Zero. The estimated additional funding needed to implement this plan includes up to $200,000 per year in operating funds and up to $1,300,000 per year in capital funding. These figures do not include Alexandria Police Department (APD) staff time or costs for the implementation of the APD traffic safety plan, which will be estimated through a separate effort. It is likely that a combination of City funds and outside funding (i.e. grants) will be needed to achieve these funding levels. Also, coordination with other City efforts, such as the Pedestrian and Bicycle Master Plan, will allow the City to

target resources toward projects that support cross-cutting goals.

INTERNAL COORDINATION

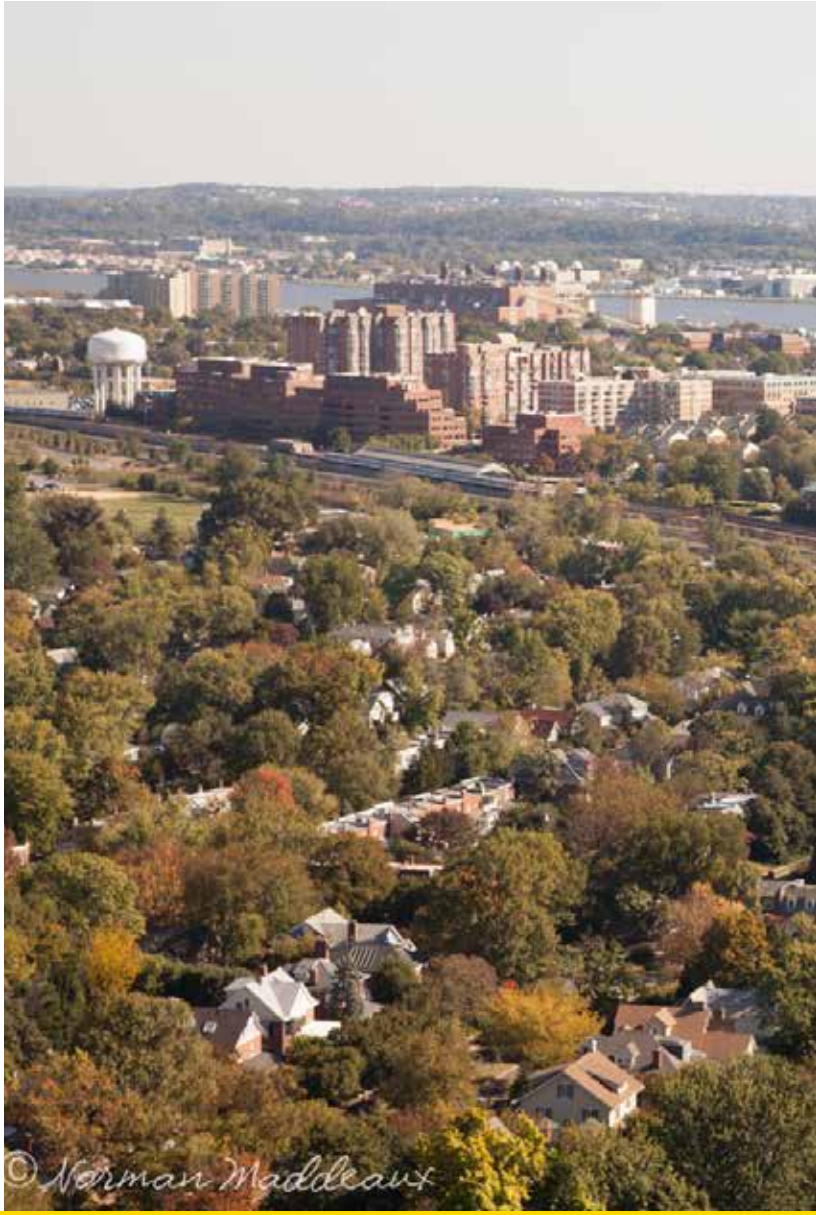
In order to accomplish the action items outlined in this plan as well keep the goal of Vision Zero in mind, city staff will develop a 3-year work plan that will help break the implementation of these items into measurable milestones. The work plan will include an outline for each action item that details the timeframe, budget, staff resource allocation and leading department.

REGIONAL SUPPORT

The City of Alexandria is part of the larger Washington metropolitan region and many residents cross state and local borders on a daily basis for school, work, and leisure activities. Through public campaigns and other communication channels, the City will educate residents of other jurisdictions who use Alexandria streets to promote our culture of safety. However, because of our regional draw of visitors and workers, it will take more than the City's efforts alone to achieve Vision Zero. It is for this reason that the City will initiate and take part in discussions with the other jurisdictions in Virginia, DC, and Maryland about creating a regional Vision Zero plan. A multi-jurisdiction strategy would help align transportation priorities across borders, building a regional culture of safety.

STATE SUPPORT

Part of the success of this plan depends on State support



for amending policies, procedures, and laws. City staff will work with state partners and advocates to explore a state-wide Vision Zero program, in conjunction with the State's Strategic Highway Safety Plan.

MEASURING SUCCESS

The Vision Zero movement is focused on one central performance metric: reducing serious traffic injuries and deaths to zero. On the one hand, that makes the success of Vision Zero fairly easy to measure. However, it is critically important for the City to continually evaluate the impact of various Vision Zero strategies over time, so that they can be refined, revised and targeted for better outcomes. The City will develop and publish an annual report to summarize progress on Vision Zero activities and report trends in traffic-related fatalities and serious injuries. As the Alexandria Police Department implements a new data management system, it will become increasingly easier to analyze traffic crash data with greater frequency, which could lead to the development of additional programs in response to new trends. While this Action Plan targets the next five years, the City will assess the progress toward Vision Zero after their third annual report has been published so they can assess the status of the 3-year work plan and adjust the plan to address new data and emerging trends in crashes.

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4 Call to Action

4 CALL TO ACTION

Vision Zero is an ethics-based approach to traffic safety, meaning that human life is prioritized above all else in our transportation system and that no loss of life is acceptable. We are all residents, visitors, employees, or employers that move around Alexandria. Our individual actions contribute to the whole of traffic safety on our streets, sidewalks and trails. Therefore, it is the responsibility of all users of these spaces to follow the rules of the road and look out for one another.

In this section you will see more pledges and commitments made by City leaders and Coalition Partners with the promise to do their part in to accomplish Vision Zero. This plan serves as the City's commitment and pledge to help prevent traffic deaths and serious injuries with the goal of reaching zero in the coming decade, but we cannot do it alone.

We call upon everyone traveling in Alexandria and around the DC Metro region to take the pledge on the following pages and do your part to help us reach the goal of Vision Zero.

Together, we can get to zero.

VISION ZERO

SAFER STREETS FOR ALEXANDRIA

CITY OF ALEXANDRIA VIRGINIA

Source: Evan Michio Cantwell

COALITION PARTNER PLEDGE

VISION ZERO

SAFER STREETS FOR ALEXANDRIA

The Vision Zero Action Plan lays the foundation for upcoming years and solidifies the City of Alexandria's long term commitment to achieve zero traffic fatalities by 2028. Alexandria continually strives to provide a traffic system that prioritizes safe and excellent transportation choices for all of our residents, employees and visitors. Along with our community stakeholders, we commit to work together in partnership with City departments to be of assistance with the implement these action items where we can and incorporate the concepts of Vision Zero into the work we do related to mobility. We will be a resource to the City staff and a bridge to the community we represent to reach our goal of zero traffic fatalities and severe injuries.

ORGANIZATION: _____

DATE: _____

SIGNATURE: _____

To sign your organization up to support Vision Zero CLICK HERE

These Coalition Partners have already taken the pledge:

Partnership for a Healthier Alexandria

Washington Area Bicyclist Association

Alexandria Bicycle and Pedestrian Advisory Committee

Boys and Girls Club of Alexandria

Alexandria Commission on Aging

4 I WILL DO MY PART TO GET TO ZERO...

These residents, visitors, business owners, and employees have taken the pledge to help the City get to zero traffic deaths and serious injuries by 2028. Will you take the pledge?

Take the Pledge to add your photo here!

This could be you! Follow these 3 easy steps...

Step 1: Read the plan and commit to moving safely around Alexandria

Step 2: Print and sign your pledge and snap a selfie

Step 3: Send your photo to
Hillary.Orr@alexandriava.gov

I WILL DO MY PART TO GET TO ZERØ

Vision Zero is a data-driven, all-hands-on-deck approach to eliminate ALL traffic deaths and serious injuries. Alexandria's goal is to achieve Vision Zero by 2028 through better data, education, enforcement, and engineering.

Safer streets for Alexandria starts with you. Take the PLEDGE to become a safer driver, bicyclist, and pedestrian and help us achieve Vision Zero.

- I pledge to slow down and observe posted speed limits.
- I pledge to give pedestrians the right of way at all times.
- I pledge to keep my hands on the wheel and my eyes on the road, not my phone.
- I pledge to be aware of people walking and riding their bikes.
- I pledge to never drink and drive.
- I pledge to stop at all red lights and stop signs.
- I pledge to obey the rules of the road when driving, walking, and biking.
- I pledge I will always be responsible for acting safely.

YOUR NAME

Source: Bob Simmons

Appendices

Source: Evan Michio Cantwell

A

EXTERNAL REFERENCES

City of Alexandria Guiding Documents	Pedestrian & Bicycle Master Plan – Vision Zero Strategy
	Complete Streets Policy Resolution
	Vision Zero Policy Resolution
	City Strategic Plan
	Transportation Master Plan
	Complete Streets Design Guidelines
	Ped Bike Crash Response Report
	APD Traffic Enforcement Plan
Regional Resources	**DC Vision Zero Action Plan**
	VDOT Strategic Highway Safety Plan
External Resources	Vision Zero Network
	NHSTA Resources
	FHWA Resources

B

SUMMARY OF PUBLIC INPUT

The following is a summary of the questions posed to the public during street meetings and in the online survey period.

1. What is your Zip Code?

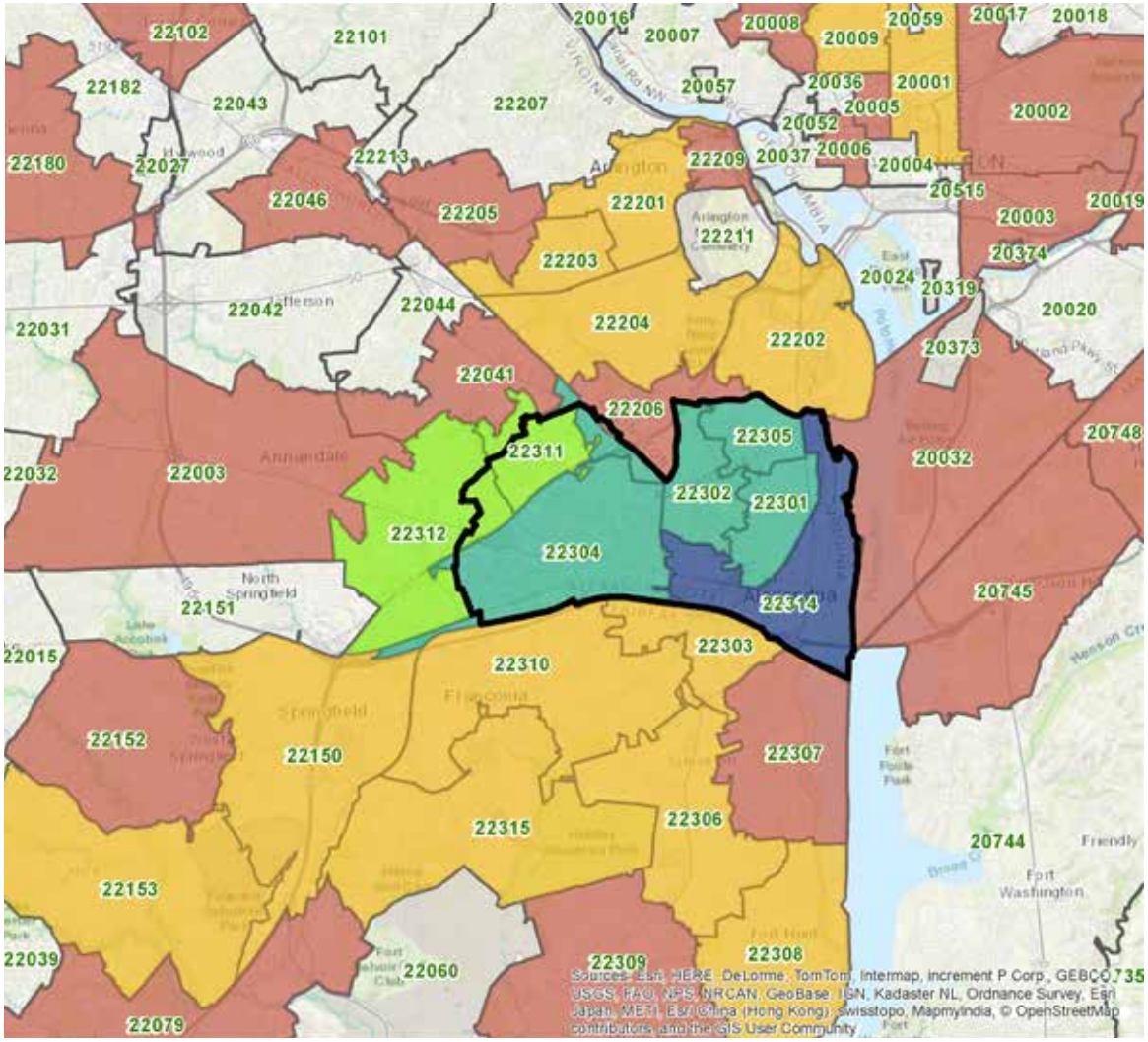
Legend

City of Alexandria Boundary

Zipcodes

Number of People Surveyed

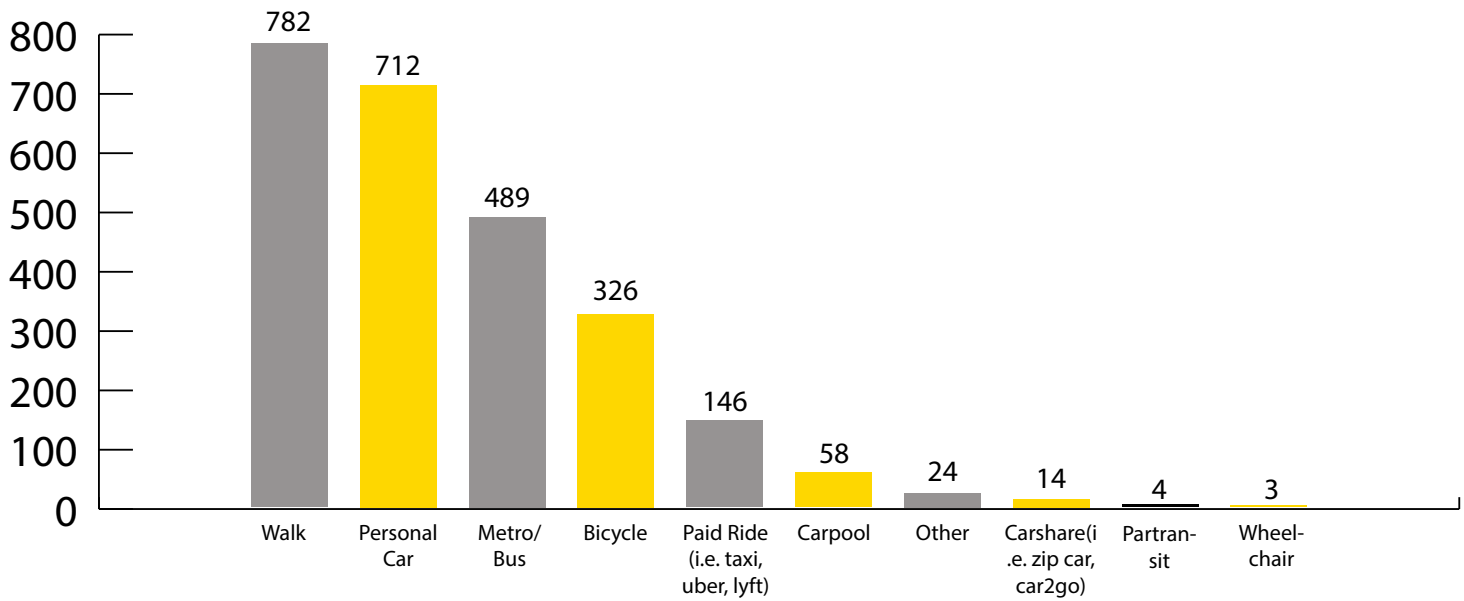
- 1 - 3
- 4 - 10
- 11 - 24
- 25 - 163
- 164 - 299



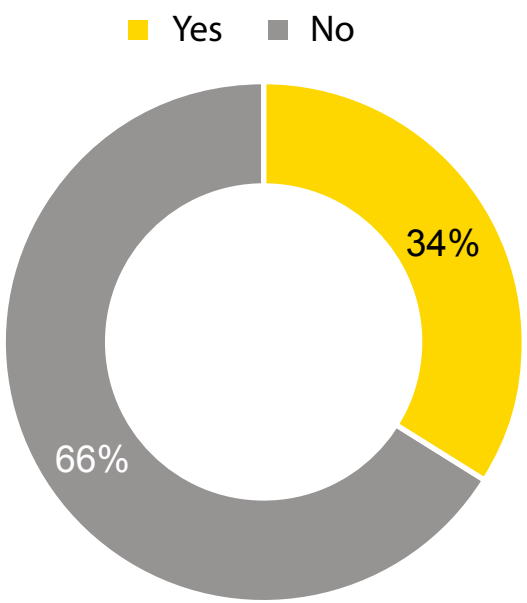
B

SUMMARY OF PUBLIC INPUT

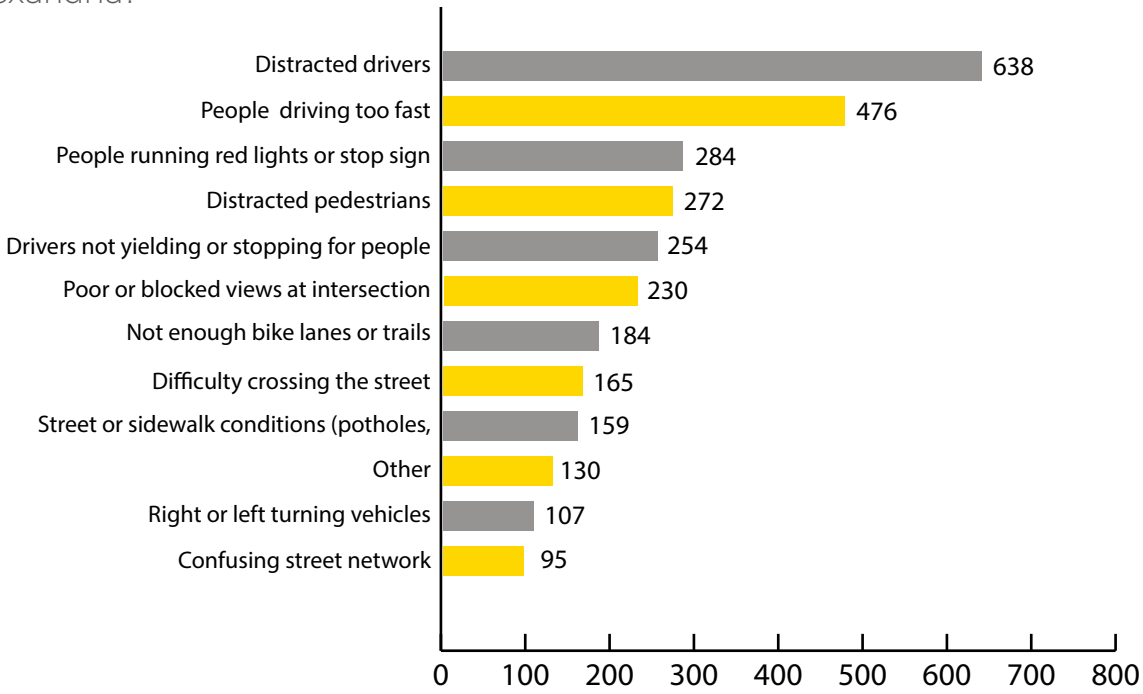
2. How do you most frequently get around? (Choose up to three)



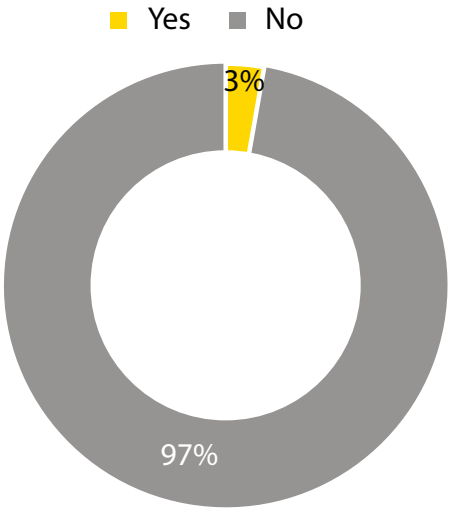
3. Did you know that Alexandria has adopted a Vision Zero Policy before today?)



4. What do you think are the top three challenges to moving safely around Alexandria?



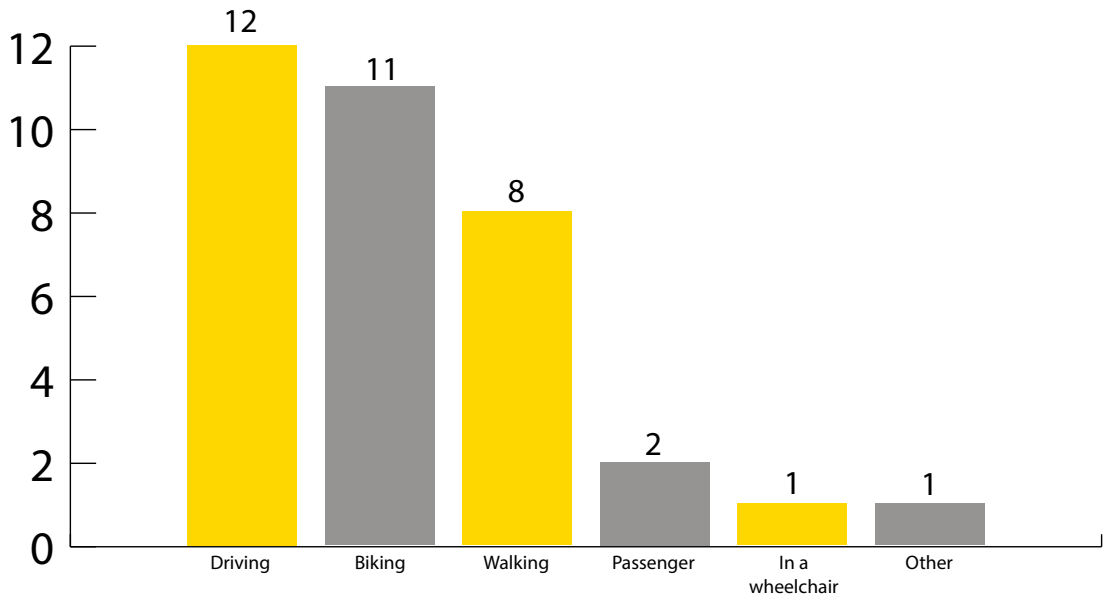
5. Have you ever been seriously injured in a traffic crash in Alexandria?



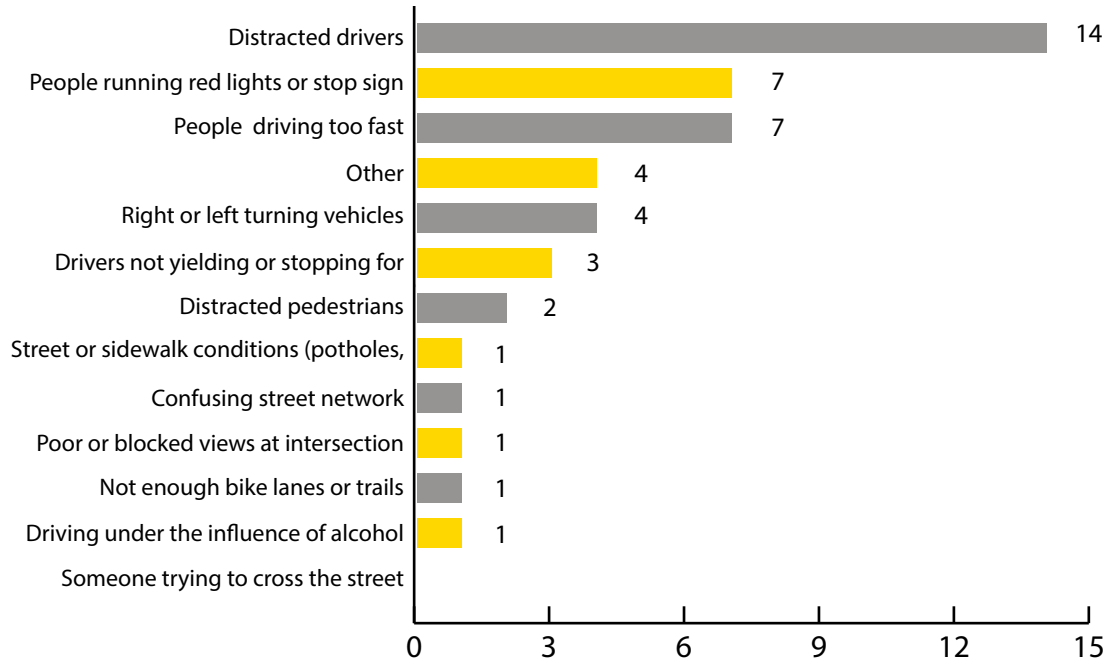
B

SUMMARY OF PUBLIC INPUT

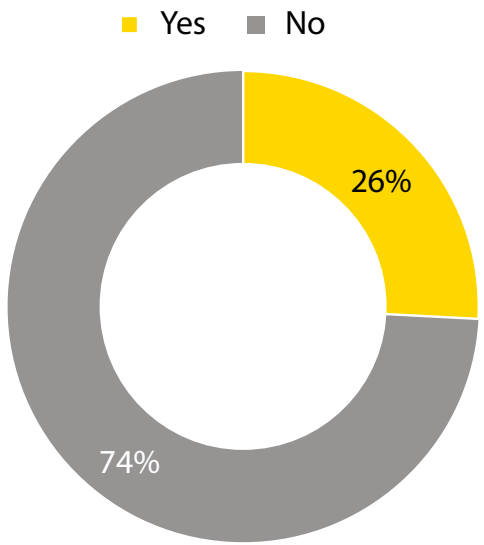
a. If yes, how were you getting around when the crash happened?



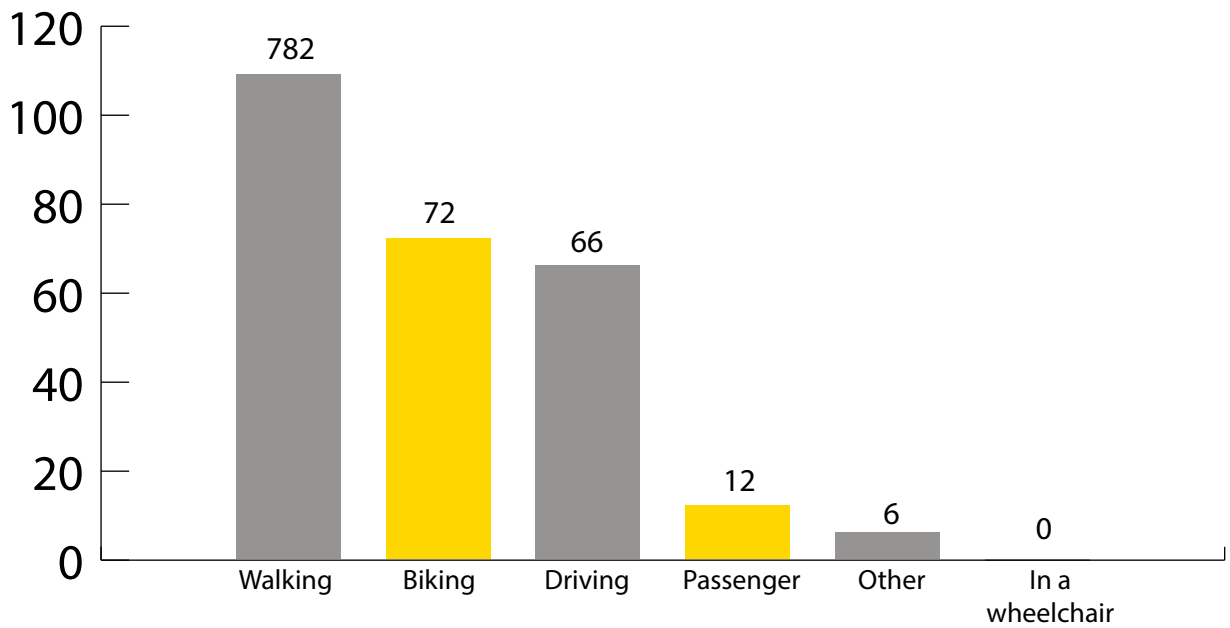
b. What primary factor contributed to the crash?



6. Do you know someone who has been killed or seriously injured in a traffic crash in Alexandria?



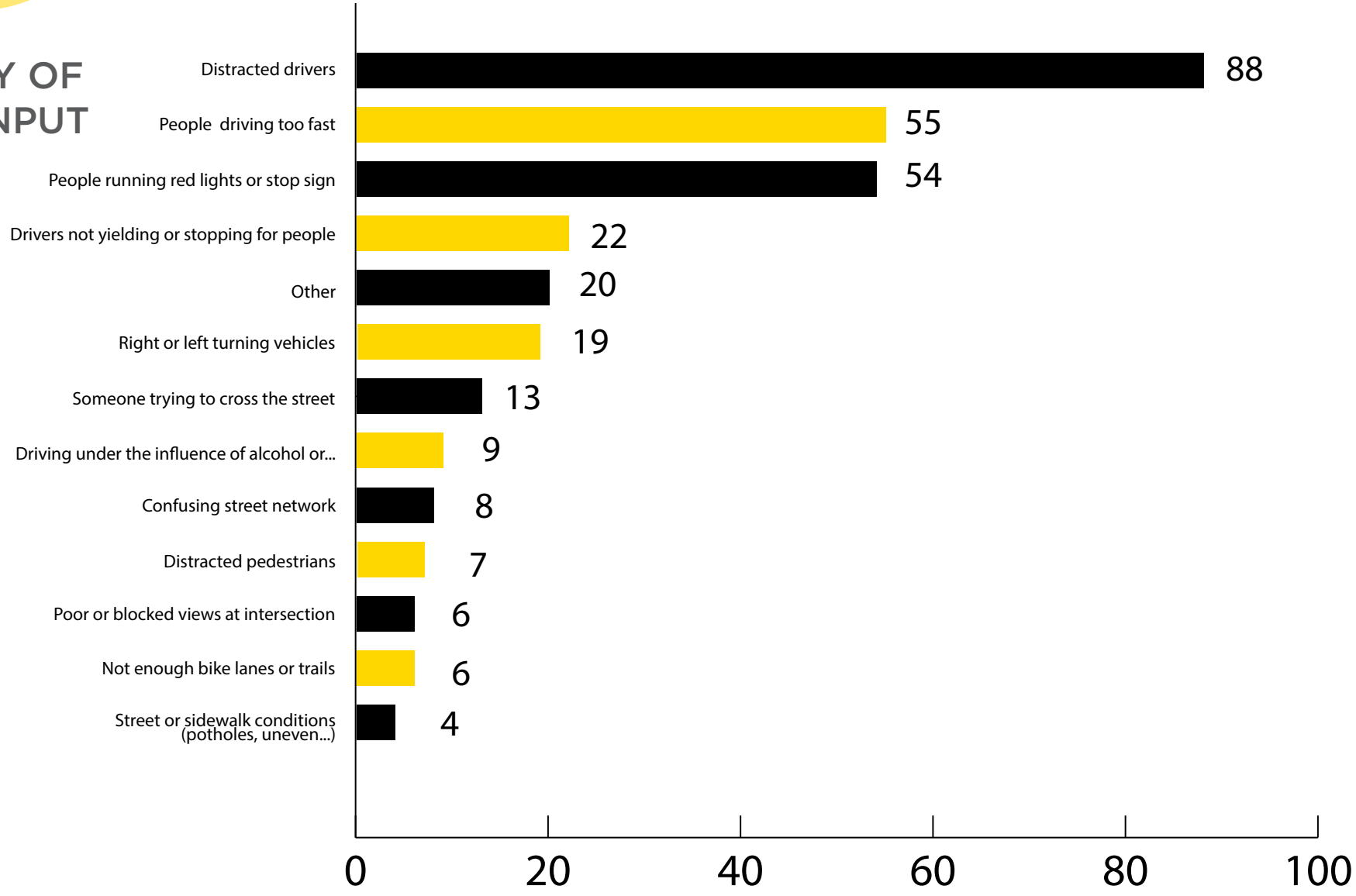
a. If yes, how were they getting around when the crash happened?



B

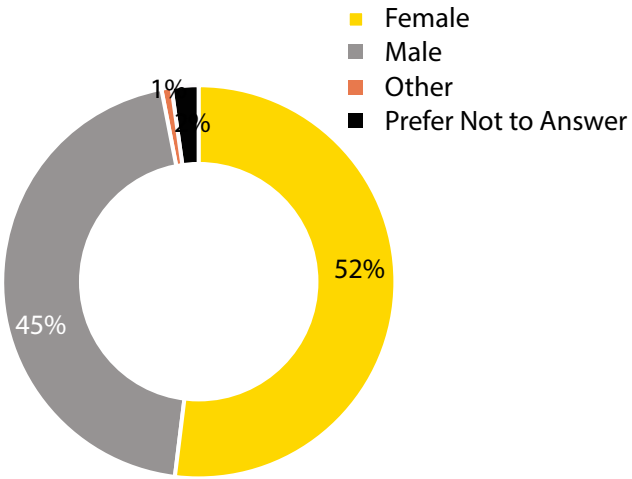
SUMMARY OF PUBLIC INPUT

b. What primary factor contributed to the crash?

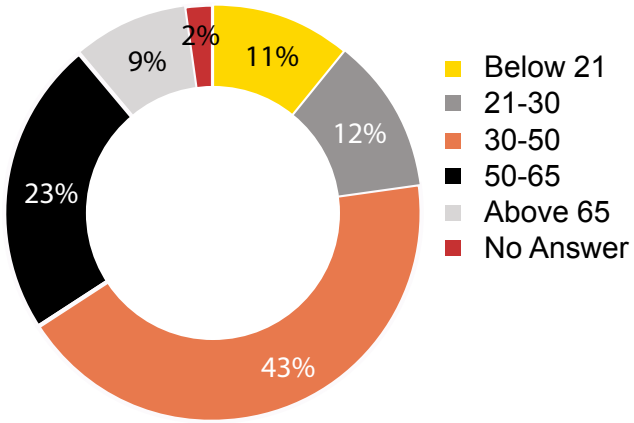


Demographic Questions

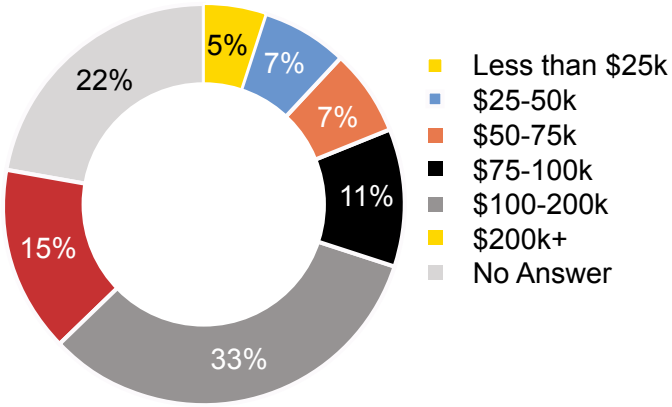
Gender Identity



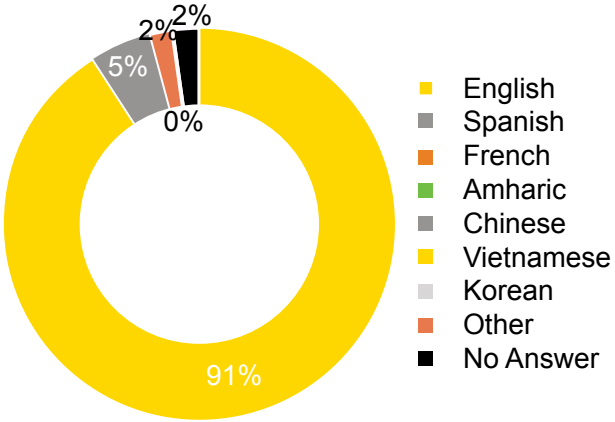
Age



Income



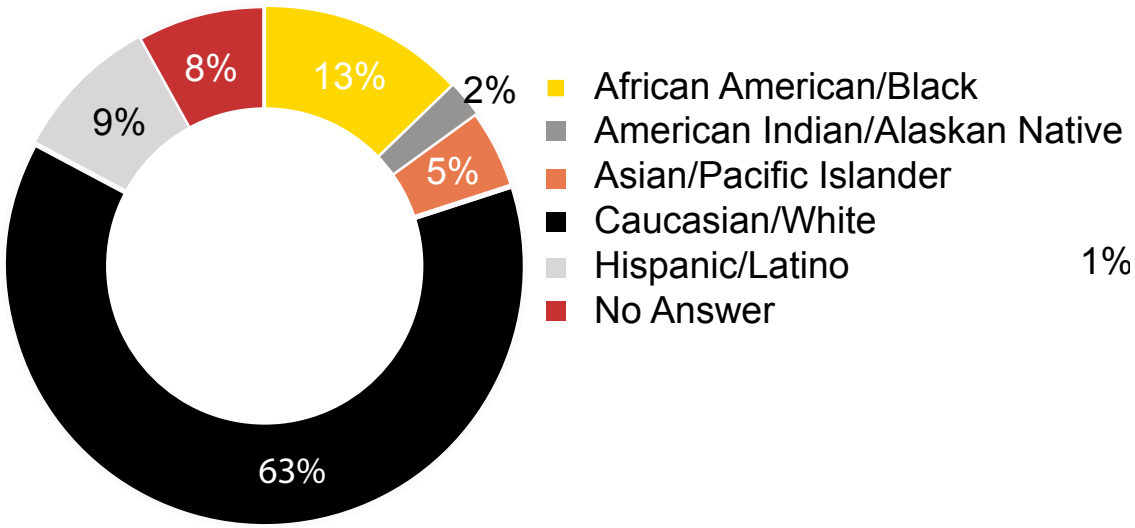
Primary Language Spoken at Home



B

SUMMARY OF PUBLIC INPUT

Race/Ethnicity



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C

STRATEGIES

GOAL: PROMOTE A CULTURE OF SAFETY

ACTION ITEMS	COMPLETION TIME FRAME	COST
Display the safety campaign messages at additional government facilities and on City fleet.	Short-Term (<2 Years)	$
Use signs and electronic messaging for PSAs such as related to "campaign" messages.	Short-Term (<2 Years)	$
Provide handouts for APD to distribute at traffic stops educating the public on safety.	Short-Term (<2 Years)	$
Develop a program to foster and teach safe driving habits to teen drivers.	Short-Term (<2 Years)	$
Work with other local governments to develop regional and City-based "campaigns" with messaging that focuses on topic area(s) of importance (e.g. Speeding, Distracted Driving, and Driving Under the Influence).	Short-Term (<2 Years)	$$
Increase distribution of safety equipment including bike lights, helmets, bells, and reflectors at City events.	Short-Term (<2 Years)	$$
Increase fines for infractions that result in crash with a pedestrian in a marked crosswalk	Short-Term (<2 Years)	$
Require all Alexandria Police officers to participate in the NHTSA's pedestrian training for law enforcement	Mid-Term (2-3 Years)	$$
Reduce driving under the influence through a collaboration with transit, taxi companies, transportation network companies, bar owners and retail outlets, especially targeting hot spot locations.	Mid-Term (2-3 Years)	$$
Develop data-driven process to determine high crash intersections where red light violations are frequent, and install and rotate maximum allowed automated red light enforcement cameras	Mid-Term (2-3 Years)	$$
Increase enforcement on roadways with higher speeds and target education campaigns about speeding in these areas (i.e. - message boards)	Mid-Term (2-3 Years)	$$$
Regularly deploy high-visibility DUI enforcement in high-priority areas on nights with higher concentrations of severe and fatal crashes and major community events	Mid-Term (2-3 Years)	$$$
Increase the number of crossing guards at schools through a volunteer training program	Mid-Term (2-3 Years)	SS

LEAD AGENCIES	SUPPORT AGENCIES	EXPECTED OUTCOME(S)
DGS	ALL	Creates safe habits through practice of safe behaviors
T&ES	OCPI	Creates safe habits through practice of safe behaviors
T&ES, APD	OCPI	Creates safe habits through practice of safe behaviors
APD	T&ES, APD, OCPI, ACPS	Creates safe habits through practice of safe behaviors - reduce crashes involving teen drivers
T&ES	OCPI	Creates safe driving habits through practice of safe behaviors
T&ES	ALL	Decreases [severity of] crashes through appropriate use of safety equipment
CAO	APD, T&ES, CMO	Reduce pedestrian crashes
APD	T&ES	Reduce pedestrian crashes
T&ES	APD, OCPI	Reduce impaired driving related crashes
T&ES	APD	Reduce red lighting running crashes
APD	T&ES, OCPI	Reduce speed related crashes
APD	T&ES, OCPI	Reduce impaired driving related crashes
APD	ACPS, T&ES	Reduce pedestrian crashes near schools

C

STRATEGIES

ACTION ITEMS	COMPLETION TIME FRAME	COST
Develop a network of "civic partners" who pledge to support Vision Zero through the dissemination of safety and educational information to their networks.	Short-Term (<2 Years)	$
Develop a network of "Coalition Partners" who pledge to support Vision Zero through implementation of one or more action items.	Short-Term (<2 Years)	$
Form interdepartmental subgroups of Vision Zero Stakeholders as necessary, to ensure successful implementation of the plan.	Short-Term (<2 Years)	$
Initiate a regional Vision Zero Task force to identify path toward regional Vision Zero Policy.	Mid-Term (2-3 Years)	$
Continue and enhance recognition programs for safe driving of school buses, transit, and City fleet vehicles.	Short-Term (<2 Years)	$
Add Vision Zero education to defensive driving courses to training for all City employees receiving fleet driving permissions. Require employees to update this training certifications every 2 years.	Mid-Term (2-3 Years)	$
Develop walking and biking curriculum for elementary school students (ACPS SRTS Coordinator).	Mid-Term (2-3 Years)	$
Use City fleet to communicate safety messages to the public.	Short-Term (<2 Years)	$
Maintain a comprehensive website to provide information on the projects, programs, and progress of Vision Zero to include dashboard and annual reports.	Short-Term (<2 Years)	$
Utilize social media to share information and promote dialog.	Short-Term (<2 Years)	$
Provide Vision Zero logo, goal, and message on back of parking receipts and City email signatures.	Short-Term (<2 Years)	$
Work with media partners to more accurately report traffic crashes to avoid victim-blaming, and report crashes in the context of Vision Zero.	Short-Term (<2 Years)	$

LEAD AGENCIES	SUPPORT AGENCIES	EXPECTED OUTCOME(S)
T&ES	ALL	A strong network of partners who can convey Vision Zero messages to the public. More people are aware of and interested in Vision Zero.
T&ES	ALL	City agencies are supported by a strong network of partners to implement action items.
T&ES	ALL	Regular meetings are established for VZ subgroups.
T&ES	ALL	Use regional strategies and data to help move toward ZERO with future efforts
ACPS, DASH, DGS	T&ES, RPCA, OCPI	Heighten importance of safety for fleet drivers and improve driver habits through practice of safe behaviors
DGS	T&ES, RPCA, OCPI	Reduce crashes for City employees and improve driver habits through practice of safe behaviors
ACPS	T&ES	Reduce pedestrian and bicycling crashes involving youth
DGS	T&ES, RPCA, APD, AFD, OCPI, DASH	More people are aware of and interested in Vision Zero
T&ES	OCPI, OPA	More people are aware of and interested in Vision Zero
OCPI	T&ES	More people are aware of and interested in Vision Zero
T&ES	OCPI	More people are aware of and interested in Vision Zero
OCPI	T&ES	Media reports accurately report traffic crashes and avoid victim-blaming and use of "accident". More people are aware of and interested in Vision Zero.

C

STRATEGIES

GOAL: BUILD SAFE STREETS FOR EVERYONE

ACTION ITEMS	COMPLETION TIME FRAME	COST
Incorporate Vision Zero data and recommendations into Transportation elements of future Small Area Plans.	Short-Term (<2 Years)	$
Use the data that identifies high KSI crash corridors and intersections to help prioritize engineering and education efforts, and require comprehensive safety improvements when designing these corridors and intersections.	Short-Term (<2 Years)	$
Update the Streets and Transit Chapters of the Transportation Master Plan to prioritize the reduction of KSI crashes and elevate crash data as a priority in decision-making.	Mid-Term (2-3 Years)	$
Develop neighborhood slow zone program with selection criteria, a request process, and launch an application-based program, through engineering and design improvements to reduce vehicle speeds.	Mid-Term (2-3 Years)	$$$
When new public school facilities open or relocate to a new site, ensure appropriate agencies continue to work together to develop a transportation plan that prioritized safey for the new school facility.	Long-Term (4-5 Years)	$$$
Explore a Citywide 25mph speed limit.	Short-Term (<2 Years)	$$
Identify criteria for installation of "No Right on Red" and LPIs for intersections and outline process for implementing changes.	Short-Term (<2 Years)	$
Reduce delivery timelines for safety improvements by implementing near-term, temporary treatments for priority Pedestrian & Bicycle Master Plan and Safe Routes to School engineering recommendations.	Short-Term (<2 Years)	$$
Develop pedestrian safety criteria for transit stations, apply these to City transit stations, and develop a plan to implement safety improvements at the most critical stations first.	Long-Term (4-5 Years)	$$$
Use most recent crash data to continually prioritize implementation of recommendations from Pedestrian & Bicycle Master Plan.	Long-Term (4-5 Years)	$$$

LEAD AGENCIES	SUPPORT AGENCIES	EXPECTED OUTCOME(S)
P&Z	T&ES	Reduce crashes
T&ES		Reduce crashes
T&ES		Reduce crashes
T&ES	APD	Reduce speed related crashes
T&ES	P&Z, ACPS	Reduce crashes with Youth
T&ES	APD	Reduce crashes
T&ES		Reduce crashes
T&ES	ACPS	Reduce crashes with Youth / Education of Engineering Improvements / Expedited Project Delivery
T&ES	DASH, OHR, GIS	Reduce crashes for transit riders
T&ES		Reduce crashes

C

STRATEGIES

GOAL: IMPROVE DATA COLLECTION AND EVALUATION

ACTION ITEMS	COMPLETION TIME FRAME	COST
Continue building and expanding and electronic citation database pending funding and resources.	Short-Term (<2 Years)	$
Work with VDOT and State Pedestrian Task Force to revise crash reporting standards and information captured to better inform data analysis leading to projects and programs.	Short-Term (<2 Years)	$
Investigate extent of pedestrians crashes not reconciled with Fire & EMS data and AHD report.	Short-Term (<2 Years)	$
Standardize and establish definitions and training on crash reporting methods.	Short-Term (<2 Years)	$
Improve existing Multi-department Response Team for all KSI crashes and develop T&ES crash form to document contributing crash factors related to street design.	Short-Term (<2 Years)	$
Investigate extent of drug related KSIs.	Short-Term (<2 Years)	$$
Continue existing and inverstigate new opportunities for partnerships with universities, technology companies, and researchers to develop a comprehensive traffic crash prediction and traffic exposure model.	Long-Term (4-5 Years)	$
Identify gaps in data in order to identify on-call data collection contracts that will help us more efficiently obtain data.	Short-Term (<2 Years)	$
Increase opportunities for interns and students to conduct research, compile data and assist city with evaluation of programs.	Short-Term (<2 Years)	$
Create standard data evaluation template to track before and after studies of all Complete Streets projects.	Short-Term (<2 Years)	$$
Publish an annual report card on the progress of Vision Zero each fall, present it to the Transportation Commission, and publish it on the Vision Zero website.	Short-Term (<2 Years)	$

LEAD AGENCIES	SUPPORT AGENCIES	EXPECTED OUTCOME(S)
APD	T&ES, OPA	Ensure continued progress toward goals. Allow the public to hold the City accountable.
T&ES	APD, OPA	Better data will inform future strategies
T&ES, AFD, AHD	APD, OPA	Better data will inform future strategies
APD	T&ES	Better data will inform future strategies
APD, T&ES		Improve data on street design's effect on a crash
APD	T&ES	Better data will inform future strategies
T&ES	APD, GIS	Better data will inform future strategies. Traffic crash prediction models and traffic exposure models will allow City to safer better streets.
T&ES		Better data will inform future strategies
T&ES		Better data will inform future strategies
T&ES		Reduce crashes through proven design
T&ES	ALL	Ensure continued progress toward goals

C

STRATEGIES

ACTION ITEMS	COMPLETION TIME FRAME	COST
Provide annual citation data for infractions that potentially lead to serious injuries and deaths.	Short-Term (<2 Years)	$
Establish dashboard for all crash and safety data on the Vision Zero website.	Short-Term (<2 Years)	$$

LEAD AGENCIES	SUPPORT AGENCIES	EXPECTED OUTCOME(S)
APD	T&ES, OPA	Continued data monitoring to inform future strategies Data will allow for tracking the impact of certain strategies while providing data on root cause for some crashes
OPA	T&ES, APD, OCPI, GIS	Ensure continued progress toward goals. Allow the public to hold the City accountable.

C

STRATEGIES

GOAL: ENHANCE CITY PROCESSES AND COLLABORATION

ACTION ITEMS	COMPLETION TIME FRAME	COST
Develop system to track, manage, respond to, and prioritize resident and customer requests for safety improvements.	Short-Term (<2 Years)	$
Support work with courts to create graduated penalties for repeat offenders	Short-Term (<2 Years)	$
Evaluate Traffic & Parking Board charter and recommend revisions to make traffic safety a primary focus of the Board.	Short-Term (<2 Years)	$
Encourage and promote national and regional senior driving education programs, such as the "We Need to Talk" program	Short-Term (<2 Years)	$
Evaluate Maintenance of Traffic (MOT) Plan requirements and revise to prioritize safe, accessible, and convenient routes for bicyclists and pedestrians. Enforce MOT plans in work zones.	Short-Term (<2 Years)	$
Evaluate City laws and ordinances to identify revisions to improve safety for all modes	Short-Term (<2 Years)	$$
Support statewide efforts to reform Driving Under the Influence (DUI) standards related to Blood Alcohol Content, arrest and adjudication process, and repeat offenders.	Mid-Term (2-3 Years)	$
Pursue and support state legislation to allow the use of fixed automated enforcement cameras for speed violations	Mid-Term (2-3 Years)	$
Support statewide efforts to revise distracted driving laws, including increase of fines.	Mid-Term (2-3 Years)	$
Pursue and support state legislation to require drivers to stop, rather than yield, for pedestrians in the crosswalk	Mid-Term (2-3 Years)	$

LEAD AGENCIES	SUPPORT AGENCIES	EXPECTED OUTCOME(S)
T&ES	OCPI	Reduce crashes
CAO	T&ES, APD, CMO	Reduce crashes amongst repeat offenders
T&ES	CMO, CAO, APD	Expedite approval and implementation of traffic safety projects
T&ES	OCPI	Reduce crashes with seniors
T&ES	P&Z	Reduce crashes for pedestrians, bicyclists, and disabled
T&ES	CMO, CAO, APD	Reduce crashes
CMO	CAO, APD, T&ES	Reduce impaired driving related crashes
CMO	CAO, APD, T&ES	Reduce speed related crashes
CMO	CAO, APD, T&ES	Reduce crashes due to distracted driving
CMO	CAO, APD, T&ES	Reduce pedestrian crashes

CITY OF ALEXANDRIA
VIRGINIA