VISION ZERO

SAFER STREETS FOR ALEXANDRIA

Past, Present, and Future

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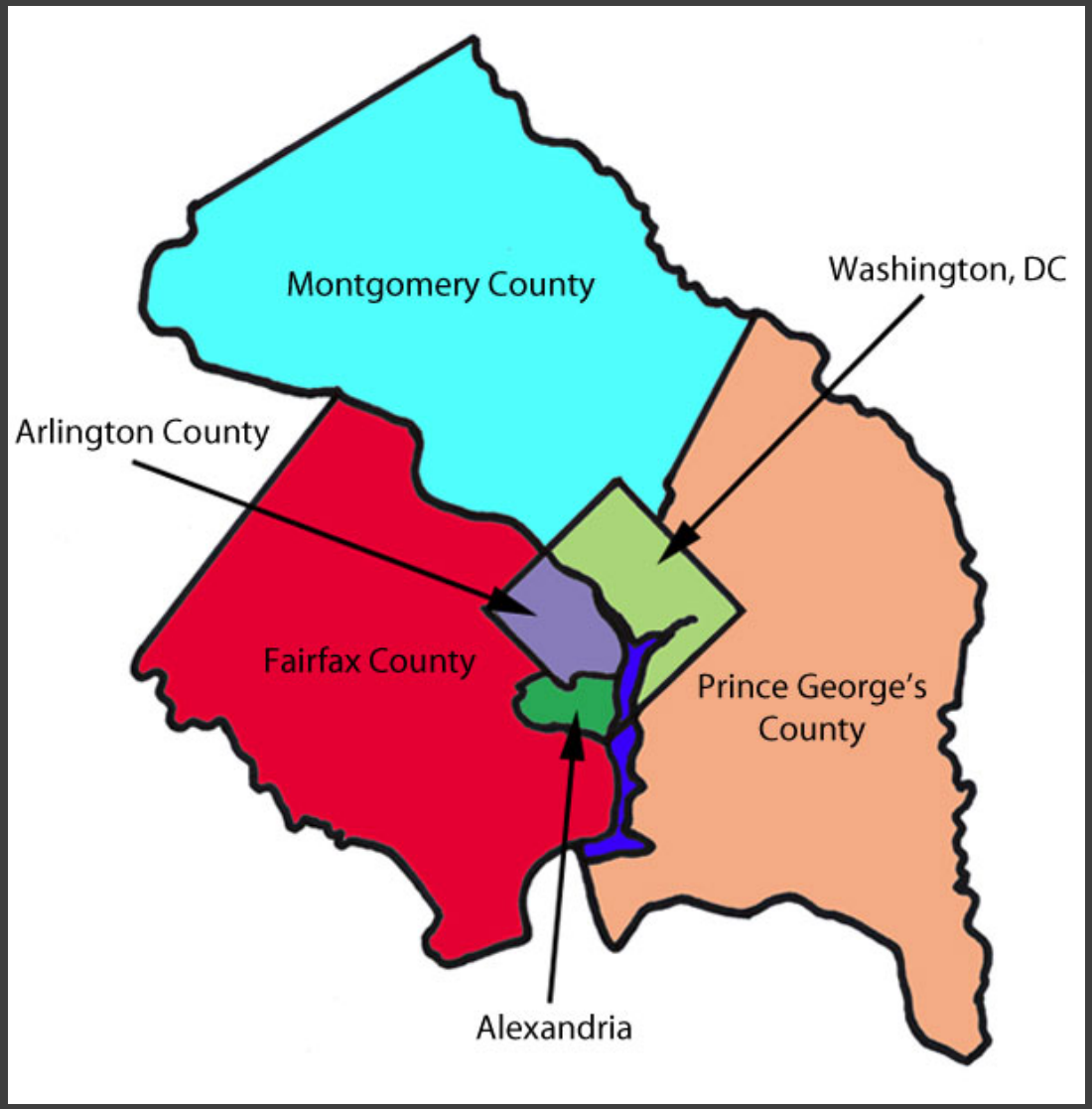
Today's Presentation

- Introduction to Alexandria
- Past:
  - Our path to Vision Zero
  - Challenges of being a small city implementing Vision Zero
  - How we drafted an Action Plan that attempts to address those challenges
- Present: Implement, Implement, and Implement
- Future: An ongoing effort

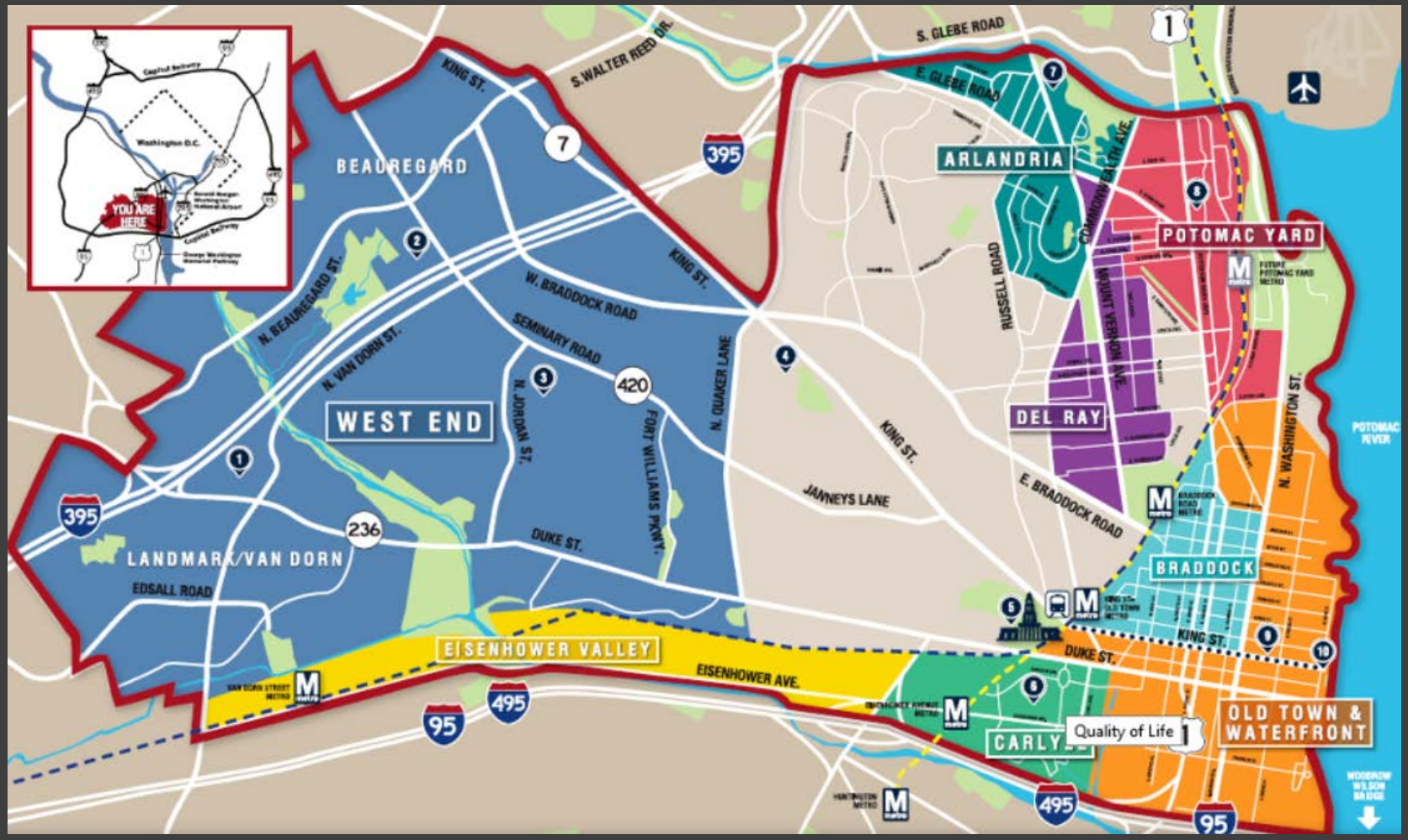
Alexandria, Virginia

- Located in DC Metro Region of Northern Virginia
- Approximately 150,000 people
- Low household sizes and high % of single-person households



Alexandria, Virginia

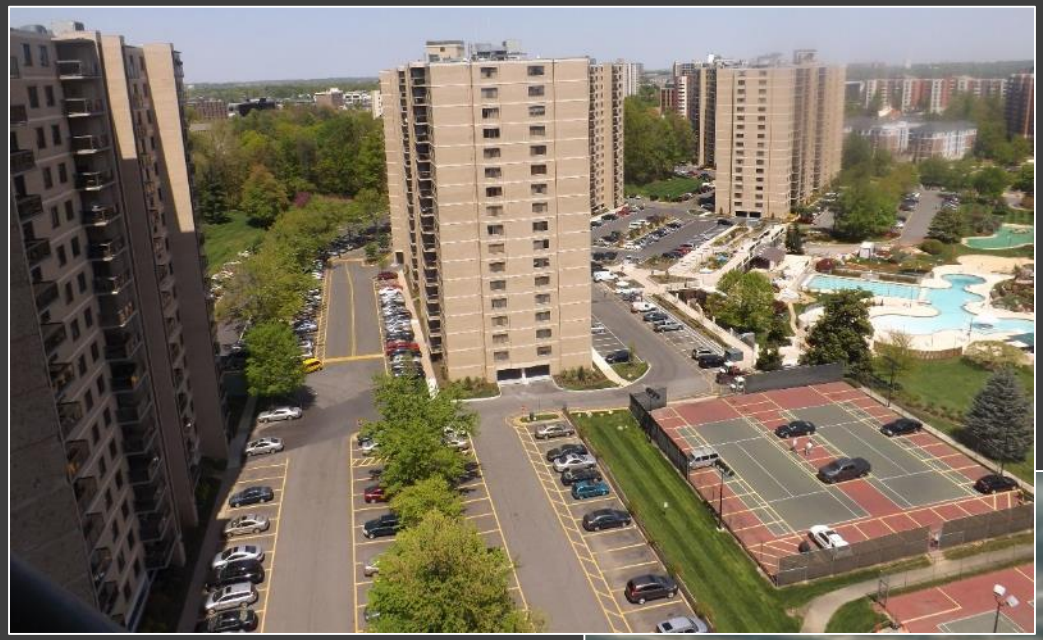
15 square miles of very dissimilar neighborhoods



Old Town

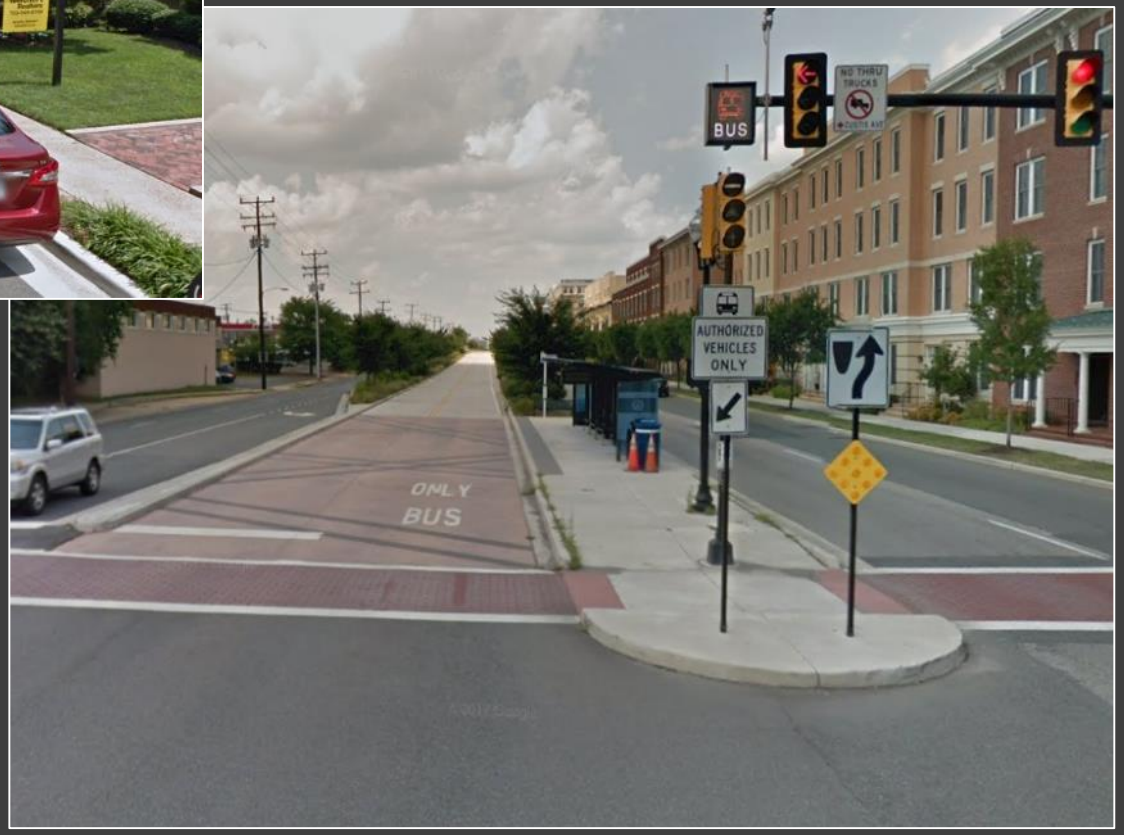
Del Ray

West End



Carlyle

Diverse Neighborhoods
Diverse Roadways



Diverse Neighborhoods
Diverse Roadways

Past- The Road to Zero

- 2001 – Traffic Calming Program
- 2008 – Transportation Master Plan
- 2011 – Complete Streets Policy
  - 2015 - Guidelines
- 2013 – Biking on sidewalks
- 2016 –
  - 25 MPH on Quaker, Seminary (March)
  - Pedestrian/Bicycle Master Plan (May)
  - King Street Complete Street Project (November)
- 2017 –
  - SR2S Walk Audits

Past- King Street Project

King Street Complete Street

1. **Zero reported traffic crashes in the first year.**
   - Annual average of 7 crashes during the 10 years prior to this project

2. **Average vehicles speeds have reduced.**
   - -18% between Albany Ave. and Hermitage Ct.
   - -4% near T.C. Williams High School

3. **Traffic delay increased slightly more than anticipated.**
   - AM Peak
   - Other intersections - **minimal or no changes** to delay.

Past- The Road to Zero

- **Adopted Pedestrian & Bicycle Master Plan – Spring 2016**
  - Key strategy: Calls for a Vision Zero Policy and Action Plan
- **Adopted a Vision Zero Policy** – January 2017
  - Goal: Zero traffic deaths and serious injuries by 2028
- **Police adopted a Traffic Safety Plan- Fall 2017**
- **Adopted Vision Zero Action Plan – December 2017**

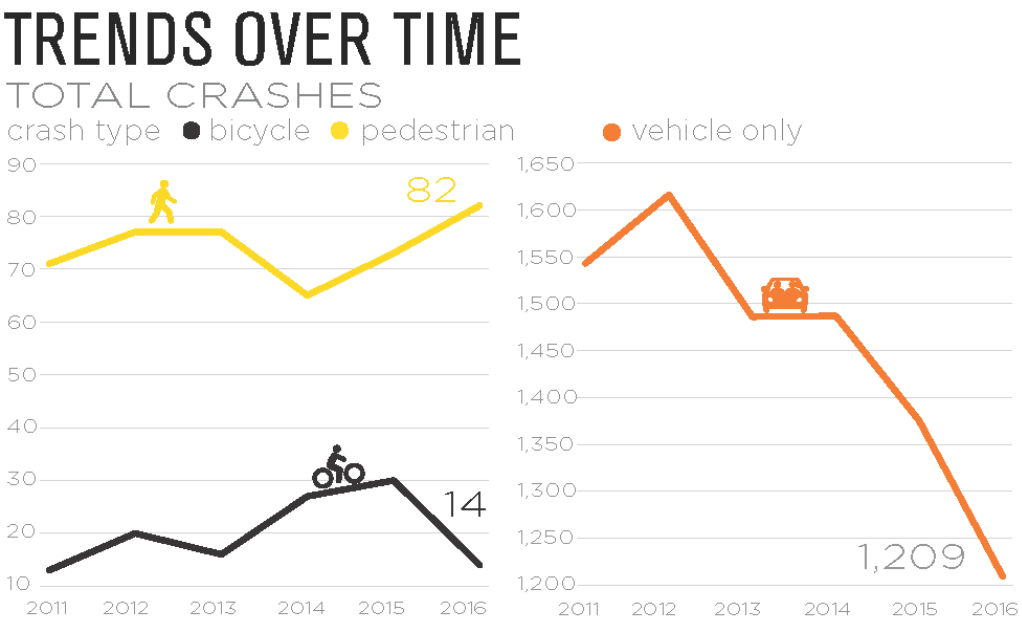
CHALLENGES

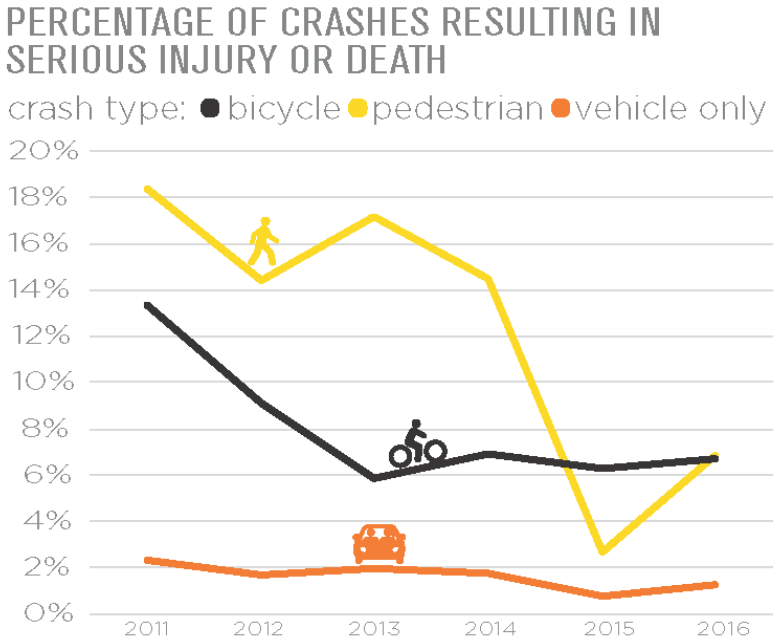
- Small city with a lot of low speed residential streets = low KSI and fatality numbers

- Developing a data driven plan with incomplete data

- Measuring success with incomplete data

Challenges: Low KSI



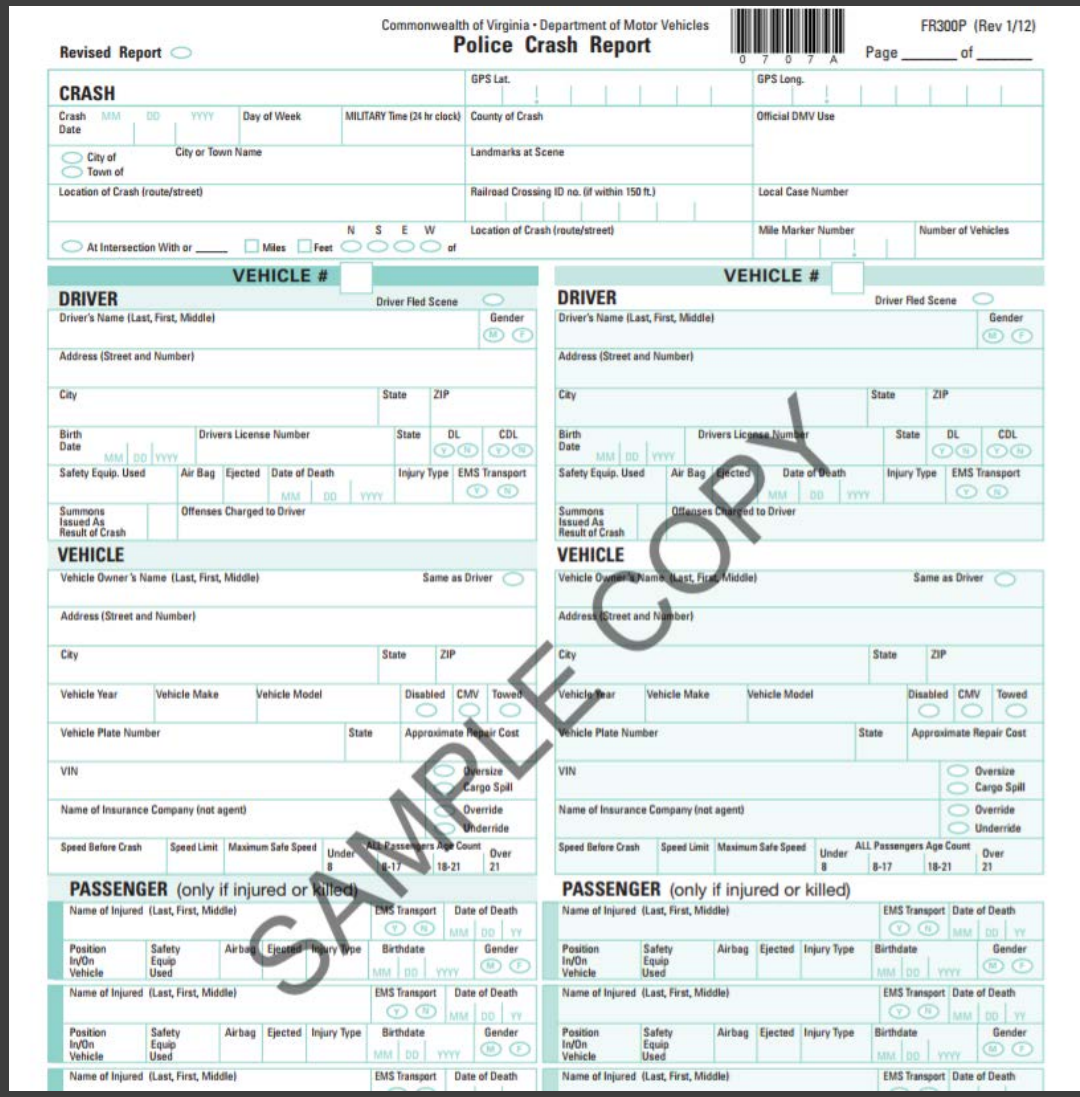


Note: Crash data provided by the Alexandria Police Department. Figures only include reports from the Alexandria Police Department, meaning that crashes where State agencies responded (such as on an interstate) or minor collisions that did not involve a police report are not recorded.

- Very low fatality numbers
- Low Killed or Seriously Injured (KSI) crashes

Challenge: Incomplete Data

- State Crash form limitations
- Manual entry into Police Database
- Missing data fields
- Location entry errors
  - N QUAKER LN
  - NORTH QUAKER LN
  - N QUAKER LANE
- No “bicycle” category
- Limited “events”



Commonwealth of Virginia • Department of Motor Vehicles

Police Crash Report

FR300P (Rev 1/12)

Revised Report ◯ 0 7 0 7 A Page _____ of _____

CRASH

GPS Lat. | GPS Long.

Crash Date MM DD YYYY | Day of Week | MILITARY Time (24 hr clock) | County of Crash | Official DMV Use

◯ City of ◯ Town of | City or Town Name | Landmarks at Scene

Location of Crash (route/street) | Railroad Crossing ID no. (if within 150 ft.) | Local Case Number

◯ At Intersection With or _____ ☐ Miles ☐ Feet ◯ N ◯ S ◯ E ◯ W of | Location of Crash (route/street) | Mile Marker Number | Number of Vehicles

VEHICLE #

DRIVER Driver Fled Scene ◯

Driver's Name (Last, First, Middle) | Gender M F

Address (Street and Number)

City | State | ZIP

Birth Date MM DD YYYY | Drivers License Number | State | DL Y N | CDL Y N

Safety Equip. Used | Air Bag | Ejected | Date of Death MM DD YYYY | Injury Type | EMS Transport Y N

Summons Issued As Result of Crash | Offenses Charged to Driver

VEHICLE

Vehicle Owner's Name (Last, First, Middle) | Same as Driver ◯

Address (Street and Number)

City | State | ZIP

Vehicle Year | Vehicle Make | Vehicle Model | Disabled ◯ | CMV ◯ | Towed ◯

Vehicle Plate Number | State | Approximate Repair Cost

VIN | ◯ Oversize ◯ Cargo Spill

Name of Insurance Company (not agent) | ◯ Override ◯ Underride

Speed Before Crash | Speed Limit | Maximum Safe Speed | ALL Passengers Age Count: Under 8 | 8-17 | 18-21 | Over 21

PASSENGER (only if injured or killed)

Name of Injured (Last, First, Middle) | EMS Transport Y N | Date of Death MM DD YY

Position In/On Vehicle | Safety Equip Used | Airbag | Ejected | Injury Type | Birthdate MM DD YYYY | Gender M F

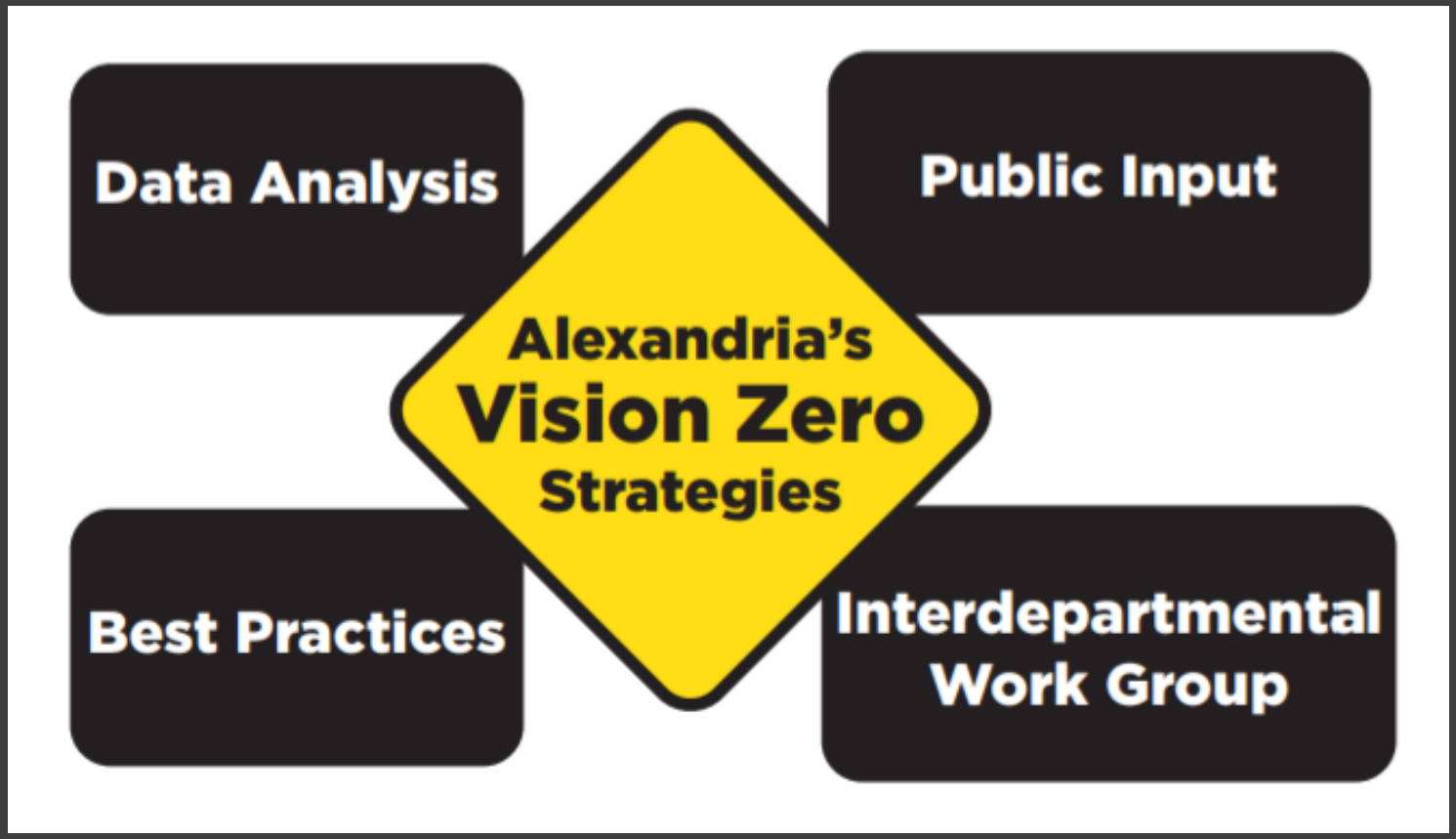
Name of Injured (Last, First, Middle) | EMS Transport Y N | Date of Death MM DD YY

Position In/On Vehicle | Safety Equip Used | Airbag | Ejected | Injury Type | Birthdate MM DD YYYY | Gender M F

Name of Injured (Last, First, Middle) | EMS Transport | Date of Death

SAMPLE COPY

Solution: 4-prong Approach



Designing a Plan: Low KSI

- Analyzed total crashes to confirm high crash locations and corridors

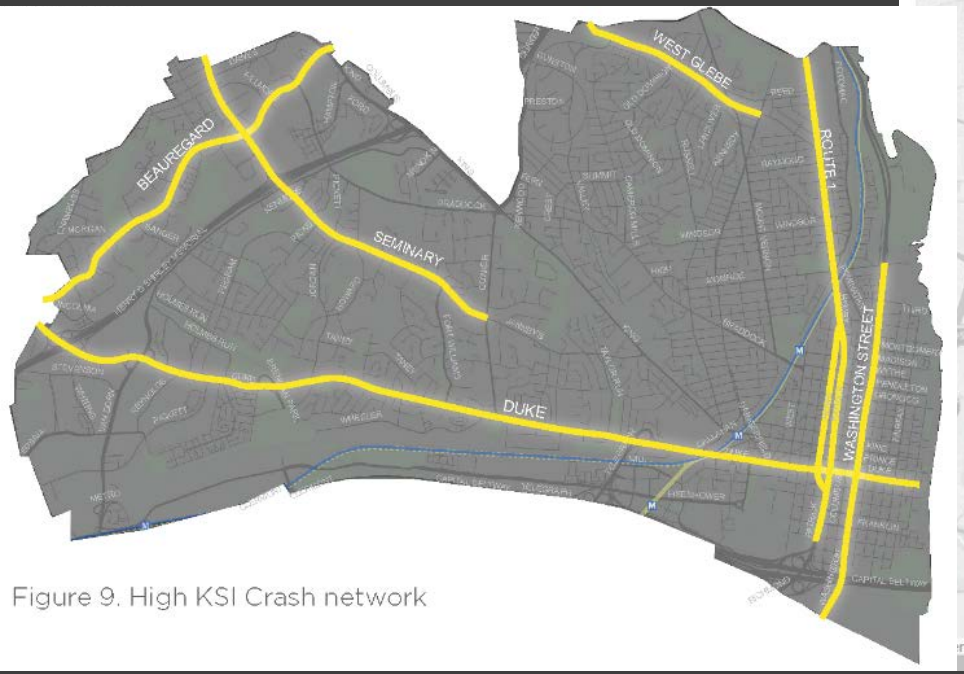
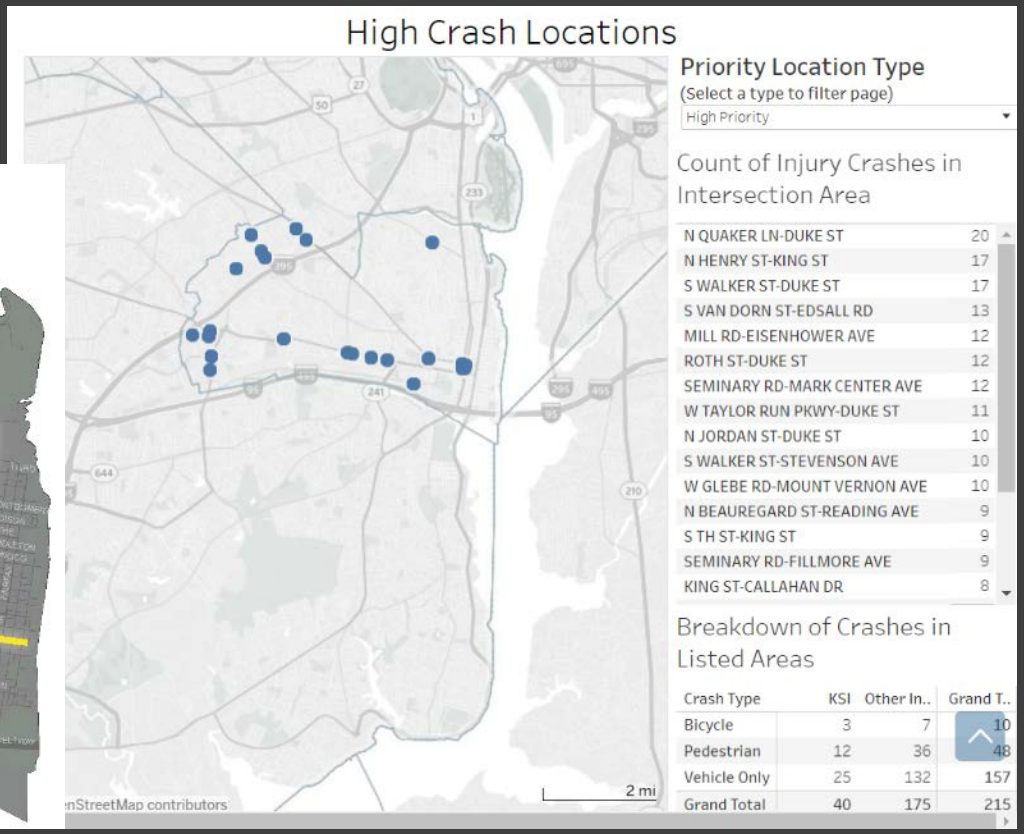


Figure 9. High KSI Crash network



Qualitative and Quantitative Data

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...

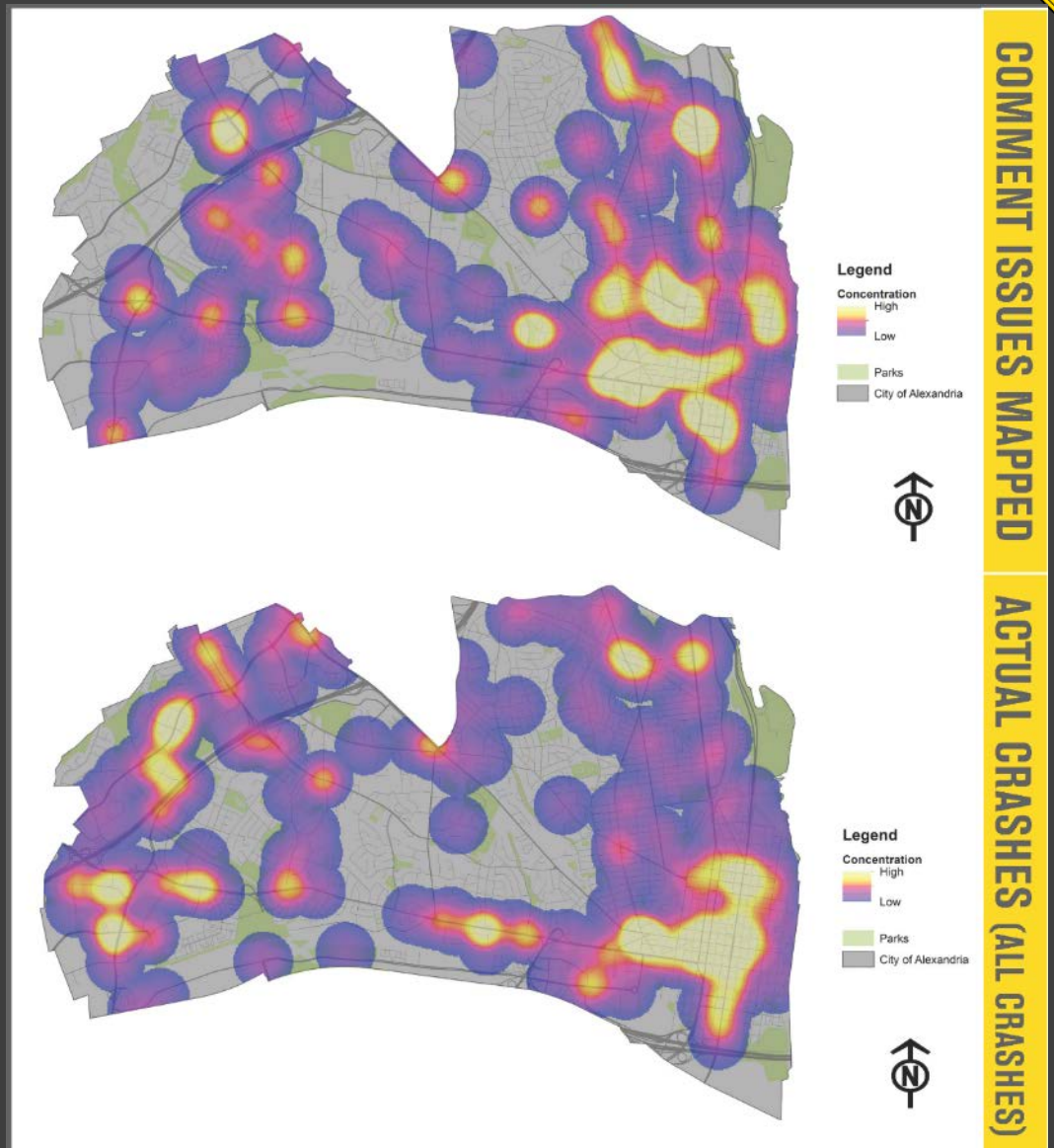
Drivers not stopping for people walking or in wheelchairs

...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.

Qualitative and Quantitative Data



Qualitative and Quantitative Data

FROM 2011-2016,

445 PEDESTRIANS WERE INVOLVED IN CRASHES

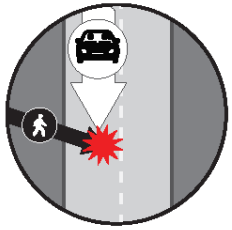
1 in 7 CRASHES RESULTED IN A FATALITY OR SERIOUS INJURY

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

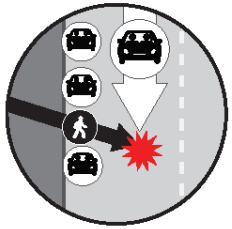
RIGHT-TURN CRASH AT SIGNALIZED INTERSECTION

4 people suffered serious injuries or fatalities

LEFT-TURN CRASH AT UNSIGNALIZED INTERSECTION

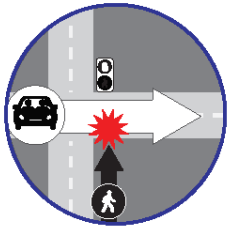
6 people suffered serious injuries or fatalities

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.

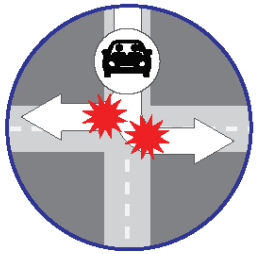
Qualitative and Quantitative Data

FROM 2011-2016, there were **9,328** **CRASHES INVOLVING ONLY MOTOR VEHICLES**

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

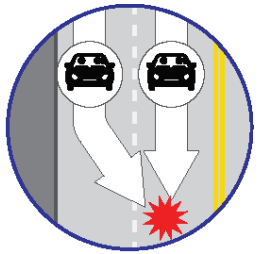
COMMON MOTOR VEHICLE CRASH TYPES*

ANGLE



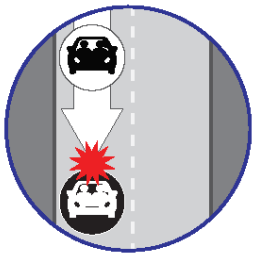
46% of all reported crashes were angle crashes. 2% of all angle crashes resulted in serious injury or loss of life.

SIDESWIPE, SAME DIRECTION



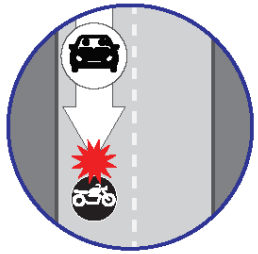
26% of all reported crashes were sideswipe, same direction crashes. 1% of all these crashes resulted in serious injury or loss of life.

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.

MOTORCYCLIST



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

*No other crash types comprised more than 3% of the dataset. Crash types listed have the highest percent share of total crashes.

Present- Implementation

YEAR 1 ENGINEERING PRIORITIES

Transportation & Environmental Services (T&ES) has developed a set of priority engineering improvements in the first year of Vision Zero. These priorities are listed below:

- Install Leading Pedestrian Intervals (LPIs) at ten intersections
- Install No Right on Red turn restrictions at ten intersections
- Install Pedestrian count-down signals at five intersections
- Reduce the speed limit from 35mph to 25mph on one high crash corridor
- Upgrade twenty crosswalks with high visibility, laddered markings
- Install two major pedestrian intersection improvements
- Install fifteen low-cost safety improvements, including new road markings, signs and minor signal modifications
- Develop concept design for funding application for at least one high crash location
- Upgrade curb ramps to improve accessibility at fifteen locations
- Upgrade three uncontrolled crossing locations with safety improvements
- Implement Safe Routes to School improvements at six schools

Present- Implementation

Year 1 Priority Action Items	
Action 1A	**Make information easily available to the public**
1A.1	Establish dashboard for all crash and safety data on the Vision Zero website.
1A.3	Provide annual citation data for infractions that potentially lead to serious injuries and deaths
Action 1B	**Enhance data collection and coordination efforts**
1B.2	Work with State Police, DMV, VDOT and State Pedestrian Task Force to revise crash reporting standards and information captured to better inform data analysis leading to projects and programs
1B.3	Standardize and establish definitions and training on crash reporting methods
1B.4	Work with the State to update crash reporting methods to differentiate between alcohol and drug related crashes.
Action 2A	**Support and encourage statewide legislative efforts to implement stricter traffic safety laws**
2A.3	Support statewide efforts to revise distracted driving laws, including increase of fines.
Action 2B	**Evaluate City policy and administrative guidelines to impro**
2B.1	Develop system to track, manage, respond to, and prioritize improvements.
Action 3A	**Improve delivery and implementation of safety treatment**
3A.2	Identify criteria for installation of "No Right on Red" and LPIs implementing changes
3A.3	treatments for priority Pedestrian & Bicycle Master Plan and recommendations
Action 3B	**Develop and implement infrastructure policies to reduce K**
3B.2	Automatically display the pedestrian walk signal where signa
3B.3	Use the data that identifies high injury crash corridors and in and education efforts, and require comprehensive safety im and intersections
3B.5	Explore a Citywide 25mph speed limit
3B.6	Update the Streets and Transit Chapters of the Transportatio KSI crashes and elevate crash data as a priority in decision-m
Action 4A	**Inform the public of Vision Zero efforts**
4A.1	Maintain a comprehensive website to provide information on the projects, programs, and progress of Vision Zero to include dashboard and annual reports
4A.4	Work with media partners to more accurately report traffic crashes to avoid victim-blaming and report crashes in the context of Vision Zero
Action 4B	**Create a network of partnerships to ensure the success of Vision Zero**
4B.4	Partner with VDOT's Northern Region Transportation Operations Center to further enhance public messaging of crashes and traffic disruptions within the City
4B.5	Initiate a regional Vision Zero Task force to identify path toward regional Vision Zero education campaigns and polices.
Action 4C	**Craft a successful education campaign to inform the public of Vision Zero and topic areas**
4C.1	Develop education "campaigns" with messaging that focuses on topic area(s) of importance (e.g. Speeding, Distracted Driving, and Driving Under the Influence).
Action 4D	**Encourage City Staff to incorporate Vision Zero into Everyday Practices**
4D.1	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 3 years
4D.3	Install Pedestrian Collision Avoidance systems on DASH buses
Action 4E	**Strengthen traffic safety enforcement policies and practices**
4E.2	Focus enforcement on roadways with higher speeds and increase traffic stops in these areas
4E.4	Regularly deploy high-visibility DUI enforcement in high-priority areas on nights with higher concentrations of severe and fatal crashes and major community events
4E.7	Identify and install signage at critical intersections to permit increased fines for failure to yield to pedestrians in a marked crosswalk

Present- Implementation

- Regional Coordination
- Educational/ Outreach Plans
- Working closely with Police
- Establishing Work Groups
- Update data dashboard
- Prioritize our actions based on staff and budget

Future: Ongoing Work

IMPROVE DATA COLLECTION AND EVALUATION

- 1A - Make information easily available to the public
- 1B - Enhance data collection and coordination efforts
- 1C - Evaluate success of existing and planned programs to determine best way to allocate resources for change

ENHANCE CITY PROCESSES AND COLLABORATION

- 2A - Support and encourage statewide legislative efforts to implement stricter traffic safety laws
- 2B - Evaluate City policy and administrative guidelines to improve safety outcomes

BUILD SAFE STREETS FOR EVERYONE

- 3A - Improve prioritization of safety treatments to inform implementation
- 3B - Develop and implement infrastructure policies to reduce KSIs

Future: Ongoing Work

PROMOTE A CULTURE OF SAFETY

- 4A - Inform the public of Vision Zero efforts
- 4B - Create a network of partnerships to ensure the success of Vision Zero
- 4C - Craft a successful public education campaign to inform the public of Vision Zero and Topic Areas
- 4D - Encourage city staff to incorporate Vision Zero into everyday practices
- 4E - Strengthen traffic safety enforcement policies and practices

Future- Coordination

- Explore regional Vision Zero
  - Regional messaging- in conjunction with Street Smart
  - Building our culture of safety
- Connect datasets for better data
  - Think regionally

Future- Evaluation

- Commitments to monitoring and refining our plans
- Transparency in our progress
- Manageable Action Items
- Short term plan with points for reevaluation

More Information

www.alexandriava.gov/VisionZero

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