

# CITY OF RALEIGH SAFETY ACTION PLAN



Safe  
Streets  
for All

Community Update

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Raleigh  
Transportation



# VISION STATEMENT



The City of Raleigh is committed to eliminating all fatal and serious injury traffic crashes, creating a safer and more resilient transportation network for all users.

***DRAFT***

# GOALS AND OBJECTIVES

- 1 Reduce fatal and serious injury crashes by 25% every five years and by 100% by 2045**
- 2 Enhance Roadway Safety Infrastructure**
- 3 Promote Safe Driving Behavior**
- 4 Evidence-based Data Analysis and Transparent Reporting**
- 5 Foster Community Engagement and Collaboration**

# WHAT IS VISION ZERO?

Vision Zero is a goal to reduce & eliminate serious injuries and fatalities along our transportation network, while increasing safe, healthy, and equitable mobility for all.



# TRADITIONAL VS. NEW APPROACH

## TRADITIONAL APPROACH

Traffic deaths are **INEVITABLE**

**PERFECT** human behaviour

Prevent **COLLISIONS**

**INDIVIDUAL** responsibility

Saving lives is **EXPENSIVE**

**VS**

## VISION ZERO

Traffic deaths are **PREVENTABLE**

Integrate **HUMAN FAILING** in approach

Prevent **FATAL AND SEVERE CRASHES**

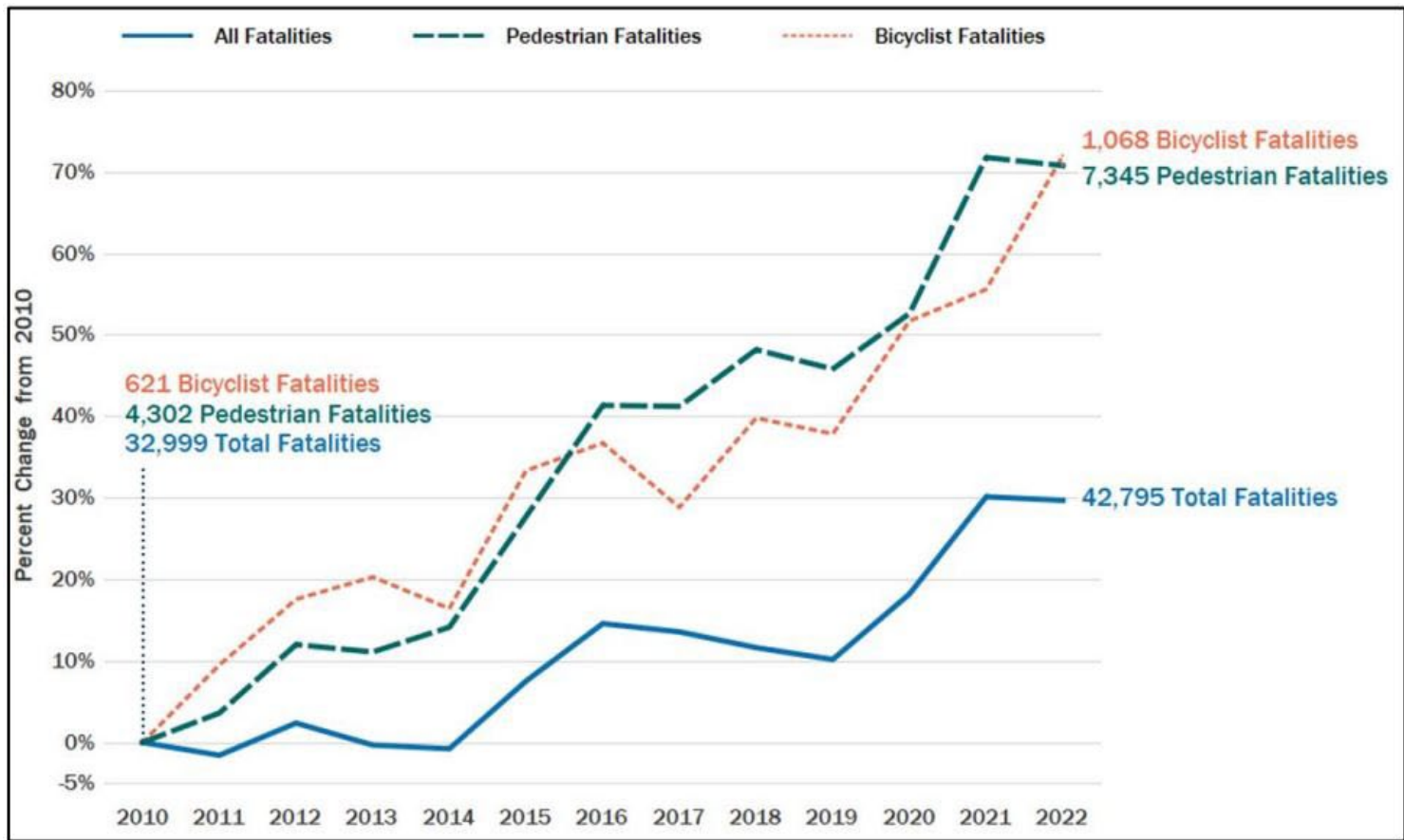
**SYSTEMS** approach

Saving lives is **NOT EXPENSIVE**



# TRAFFIC FATALITIES ON THE RISE

## Greatest Increase in Pedestrian and Bicyclist



### *The Exceptionally American Problem of Rising Roadway Deaths*

Why other rich nations have surpassed the U.S. in protecting pedestrians, cyclists and motorists.

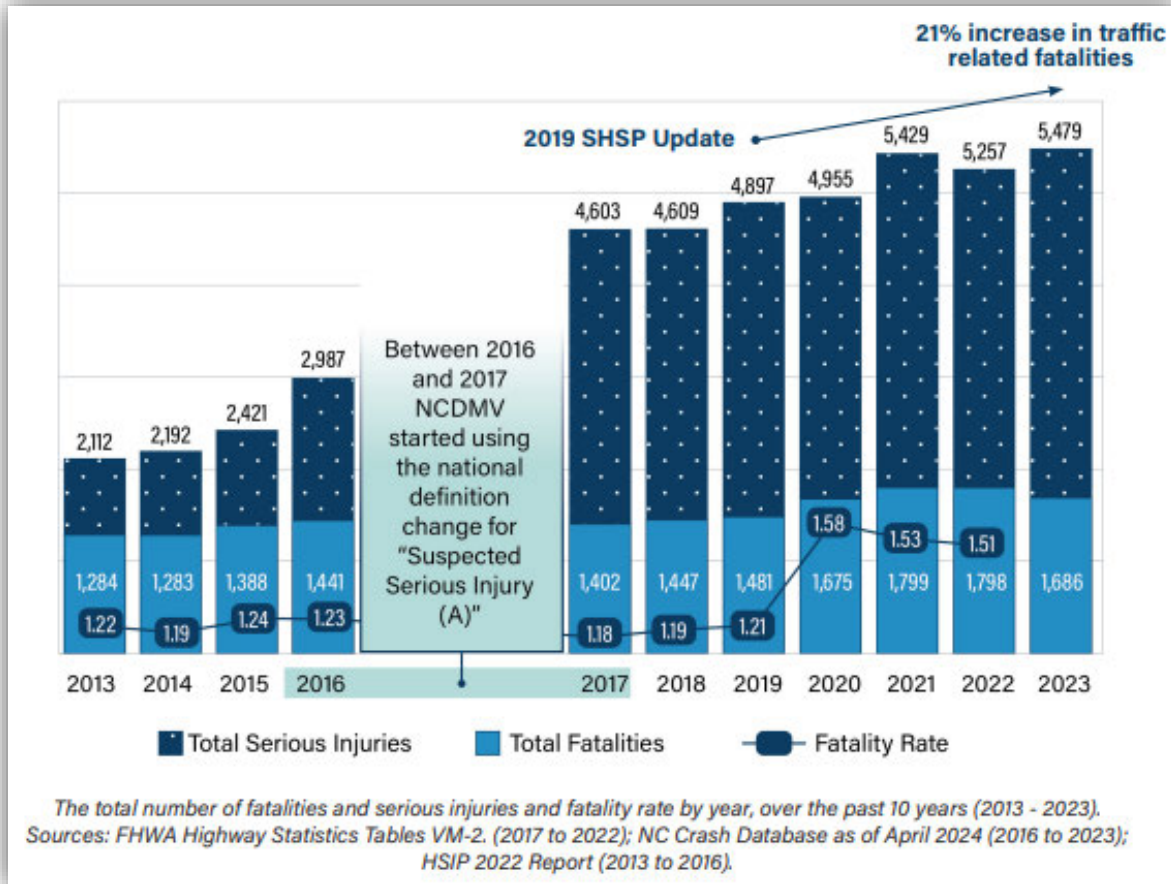
**The New York Times**

Source: NHTSA's National Center for Statistics & Analysis, FARS data; **Nationwide data**

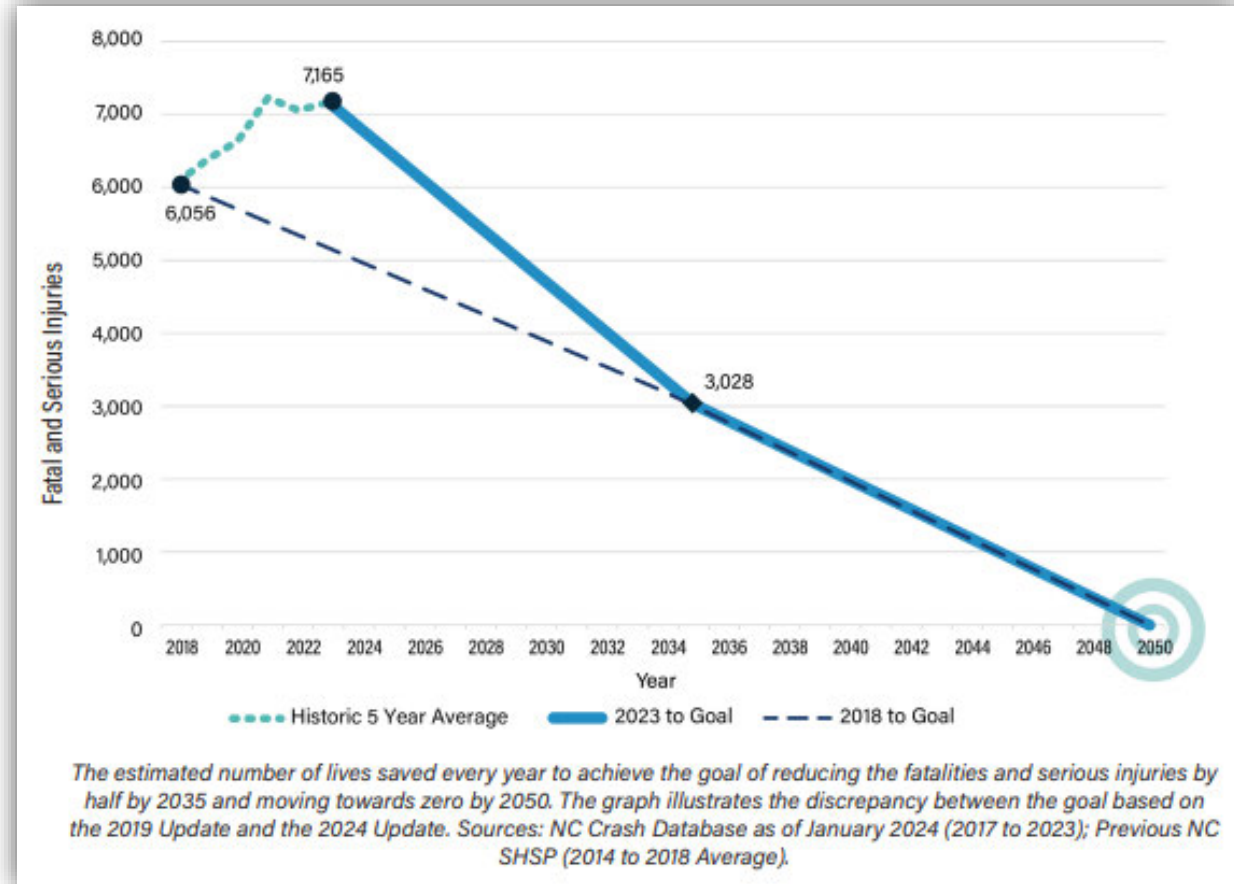
# CHANGING THE TRAJECTORY

## NC Fatalities and Population Growth are Increasing

**Traffic-related fatalities have increased by nearly 21% since the 2019 Update**



In order to return to the path set in 2019, North Carolina would need to experience a 9% decrease in fatalities each year.





# FIRST NATIONAL VISION ZERO GOAL & NATIONAL ROADWAY SAFETY STRATEGY

**ZERO** IS OUR GOAL  
A SAFE SYSTEM IS HOW WE GET THERE

## VISION ZERO NETWORK

“

Today we commit that our goal is this: Zero. *Our goal is zero deaths*; a country where, one day, nobody has to say goodbye to a loved one because of a traffic crash.

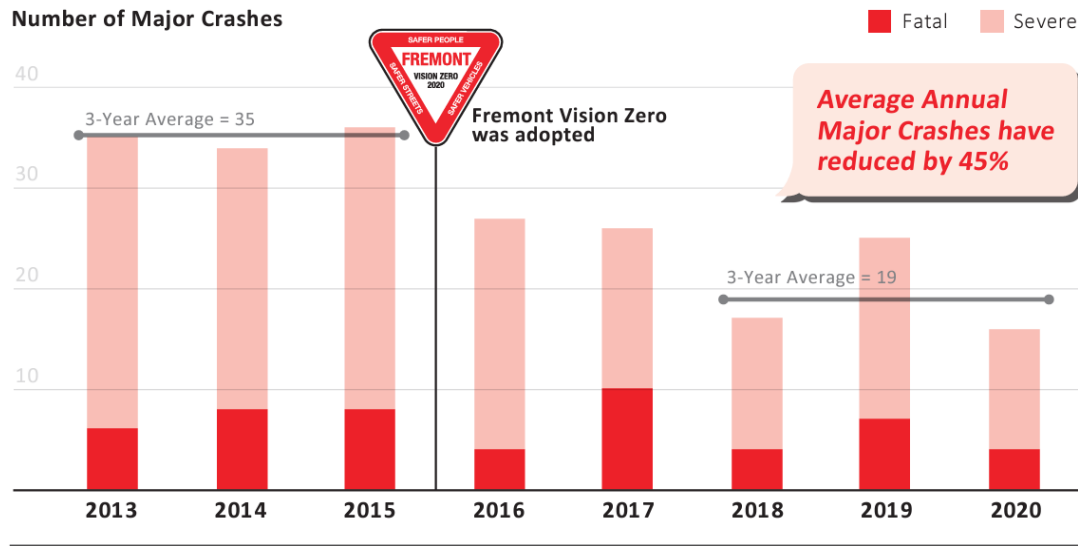
*Pete Buttigieg, U.S. Secretary of Transportation,  
on National Roadway Safety Strategy release,  
January 27, 2022*





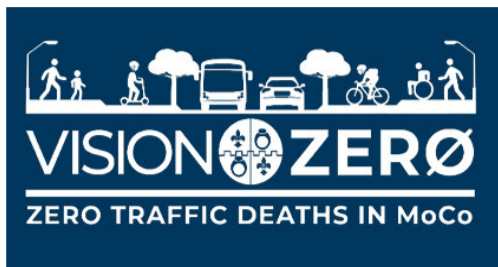
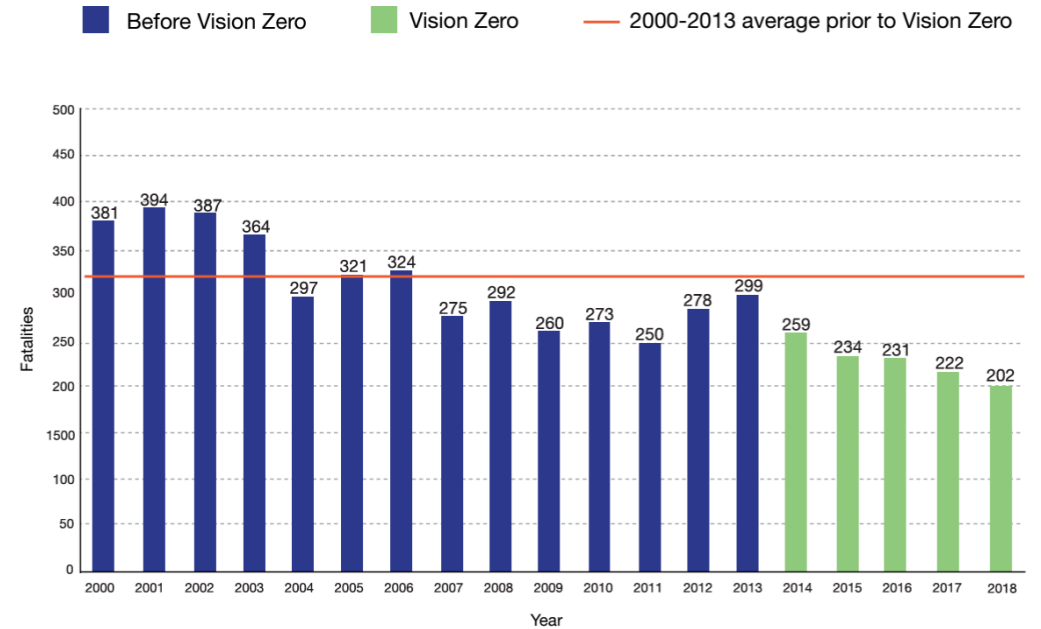
# NATIONWIDE PROGRESS

## Vision Zero Success Story: Fremont, California



Traffic Fatalies Per 100,000 (2019 Population & Fatalities, Unless Otherwise Noted)

## Vision Zero Progress in NYC



**13% decrease**  
in serious and  
fatal crashes

**Vision Zero Progress**  
in Montgomery  
County, MD

# NATIONAL LESSONS LEARNED:

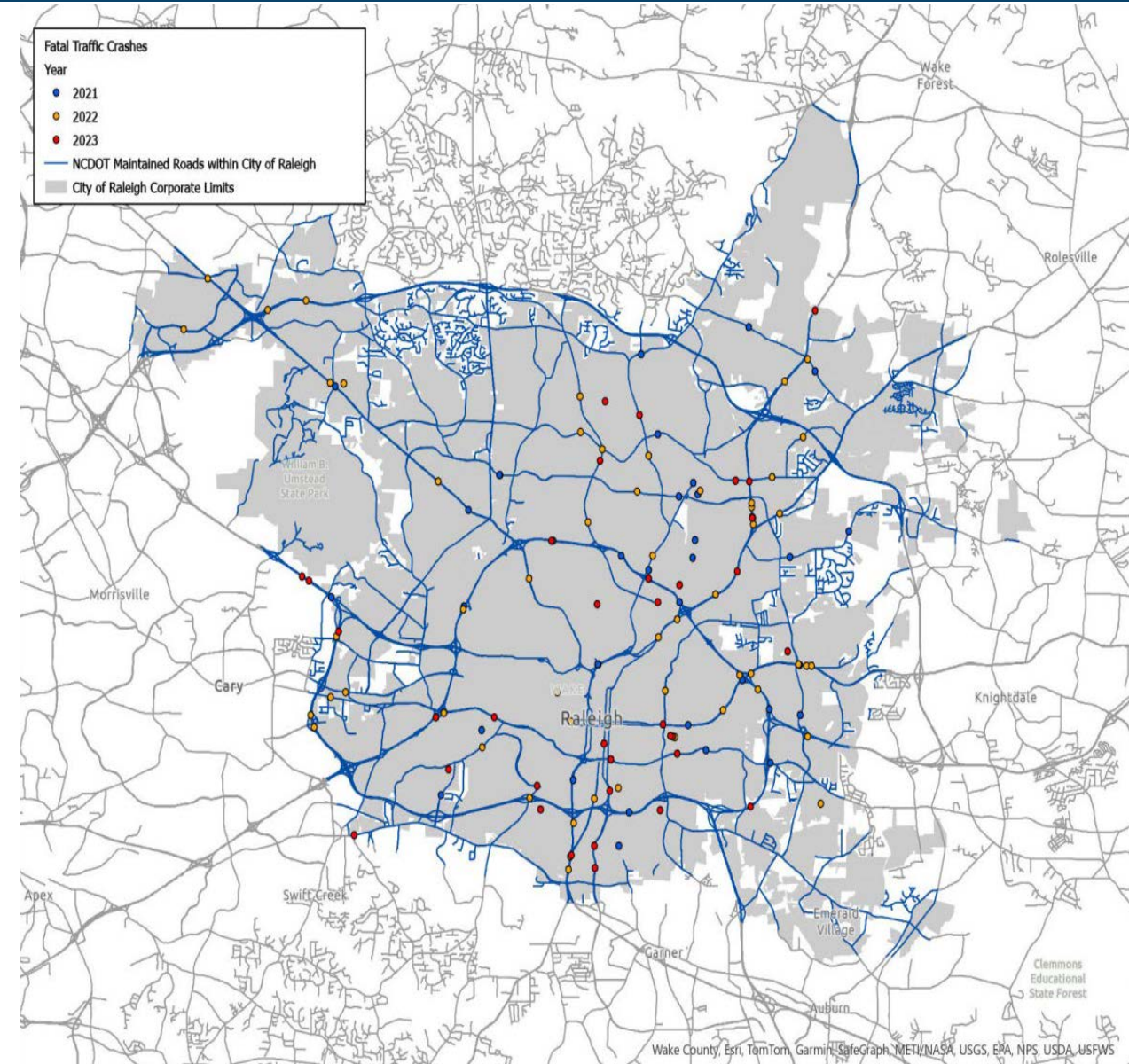
# WHAT WORKS



- 1 Focusing on managing speeds
- 2 Elevating health equity
- 3 Hastening change: Quick-build projects, pilots
- 4 Changing the status quo; Institutionalizing that change

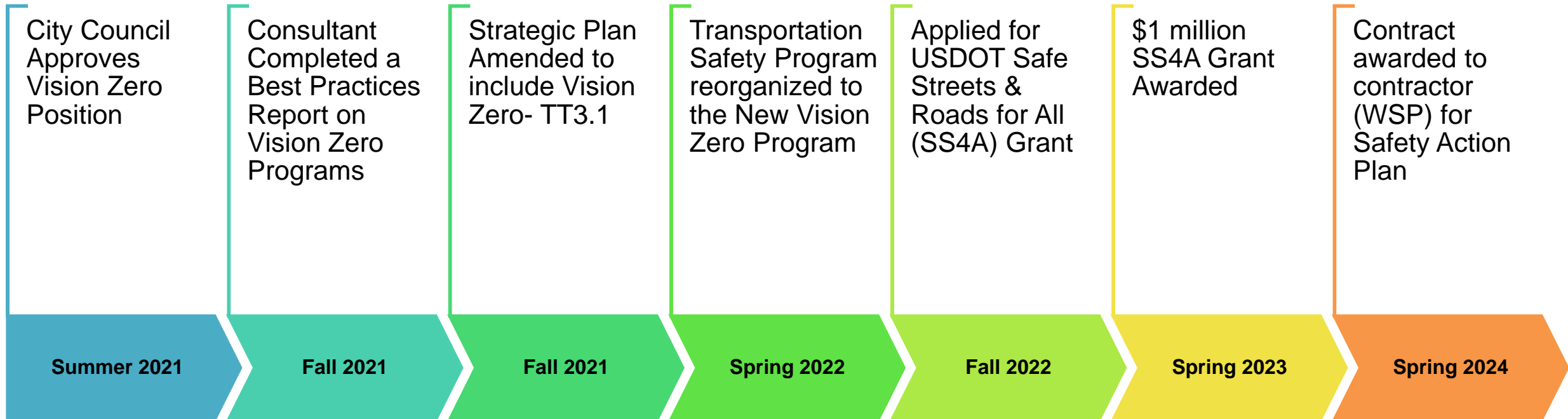
## 145 fatalities total (vehicle, bike, & ped) from 2021 to 2023

- 33% of fatalities involved a pedestrian or cyclist
- 69% of fatalities were the drivers
- 41% of fatalities were in between the ages of 20 and 40
- 70% of fatalities were people who identified as Black (53%) or Hispanic (17%)





# RALEIGH'S PATH TO ZERO



## General Safety Improvements - City & NCDOT Roadways

- Signal studies, speed studies, & crash diagrams
- Recommend mitigating measures/projects to improve safety, correct crash patterns, and help vulnerable users
- Tactical Projects (High Impact, Low Cost)

Since 2013, NCDOT/City of Raleigh have partnered to construct over 50 projects totaling more than \$15 million.

Another 40 projects currently in design or construction totaling to more than \$12.5 million.

HAWK at Avent Ferry Road



Five Points Intersection Signal Upgrades

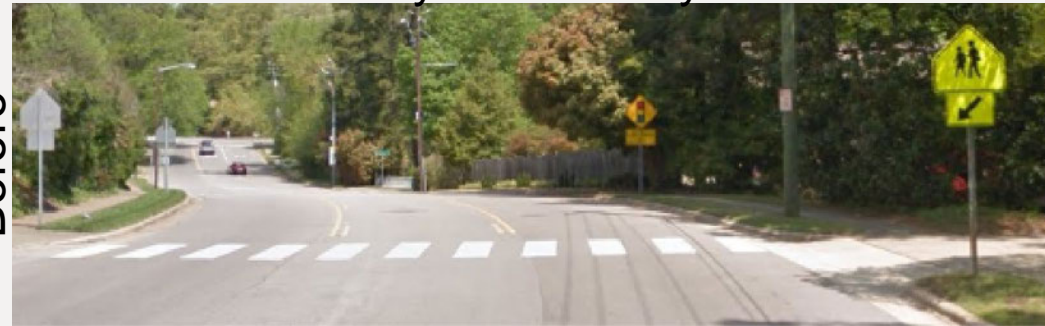


## School Zone/Area Management (130+ schools)

- Update and improve school zones/areas
- Work with Neighborhood Traffic Management Program (NTMP) & combine projects around schools
- Improvement & Traffic Calming Projects around Schools
  - Signalized Intersections
  - RRFB
  - Multiway Stop Conversions
  - Speed Limit Reductions
  - Flatwork, Signs, Pavement Markings

RRFB at Lacy Elementary School

Before



After





## Streetlight Program

- Install lighting in public right of way (proven counter measure)
- City leases approximately 35,000 streetlights from Duke Energy
- 400+ streetlights are added annually from new development, roadway projects, and citizen requests
- Safety projects outside of Duke's offerings are part of program

Street Lighting can reduce nighttime injury pedestrian crashes at intersections up to 42%. 90% of Pedestrian Fatalities in 2023 occurred at night (60% of all fatalities).

Before



After

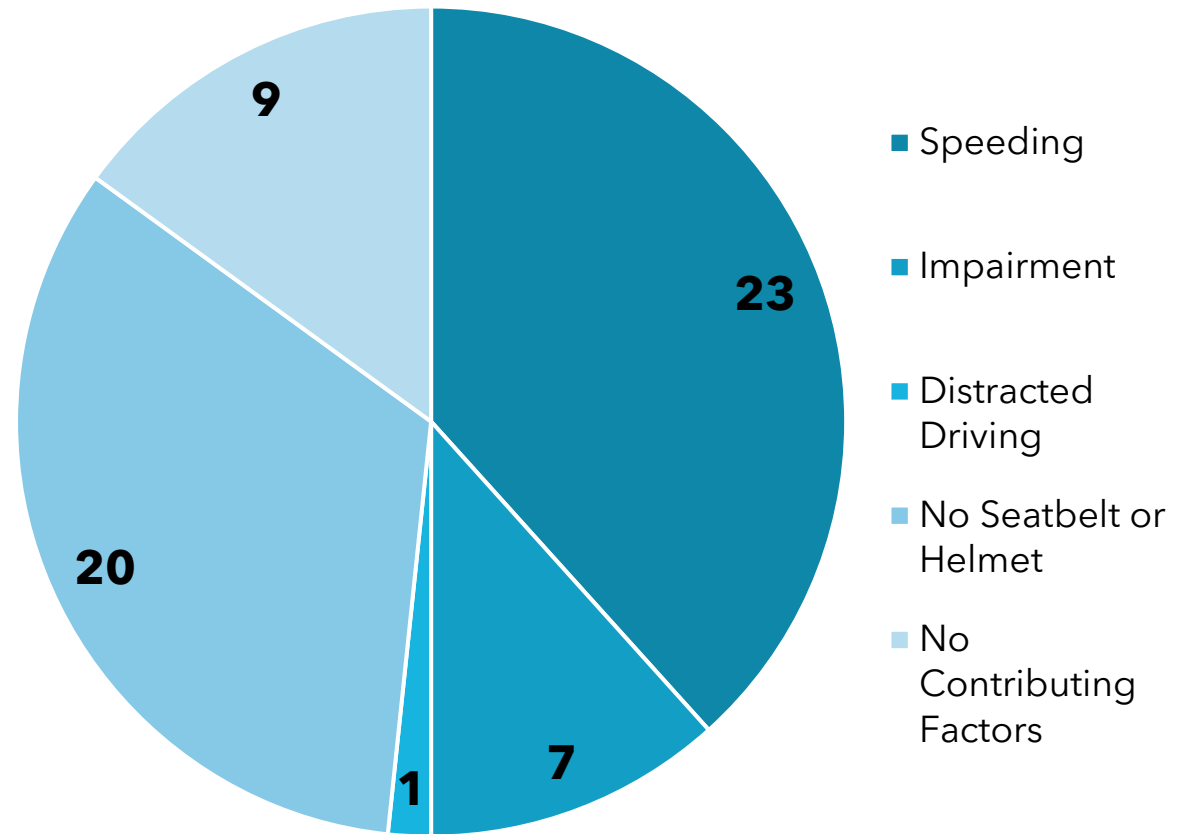
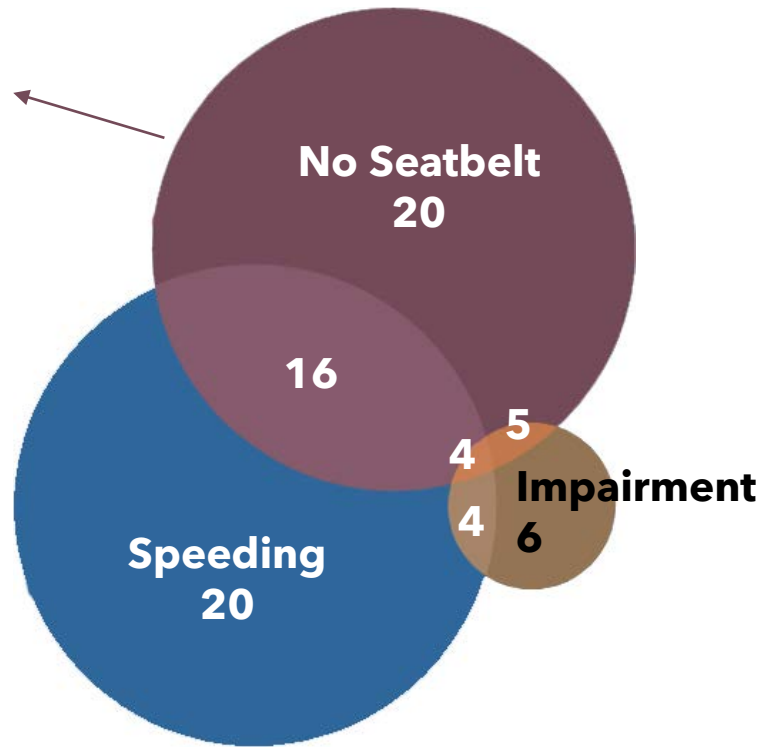


# CONTRIBUTING FACTORS IN FATAL CRASHES

Dangerous behaviors - such as speeding, driving while impaired, driving while distracted, or failing to wear a seatbelt - were involved in 85% of all fatal crashes in 2023.

71% of the people who died in passenger vehicle crashes were not wearing a seatbelt.

Speeding was involved in more than 54% of fatal crashes.



# STRATEGIES FOR IMPROVING SAFETY



**Engineering strategies**  
Redesign of roadways  
and intersections



**Operational strategies**  
Changes to signing,  
marking, or signals

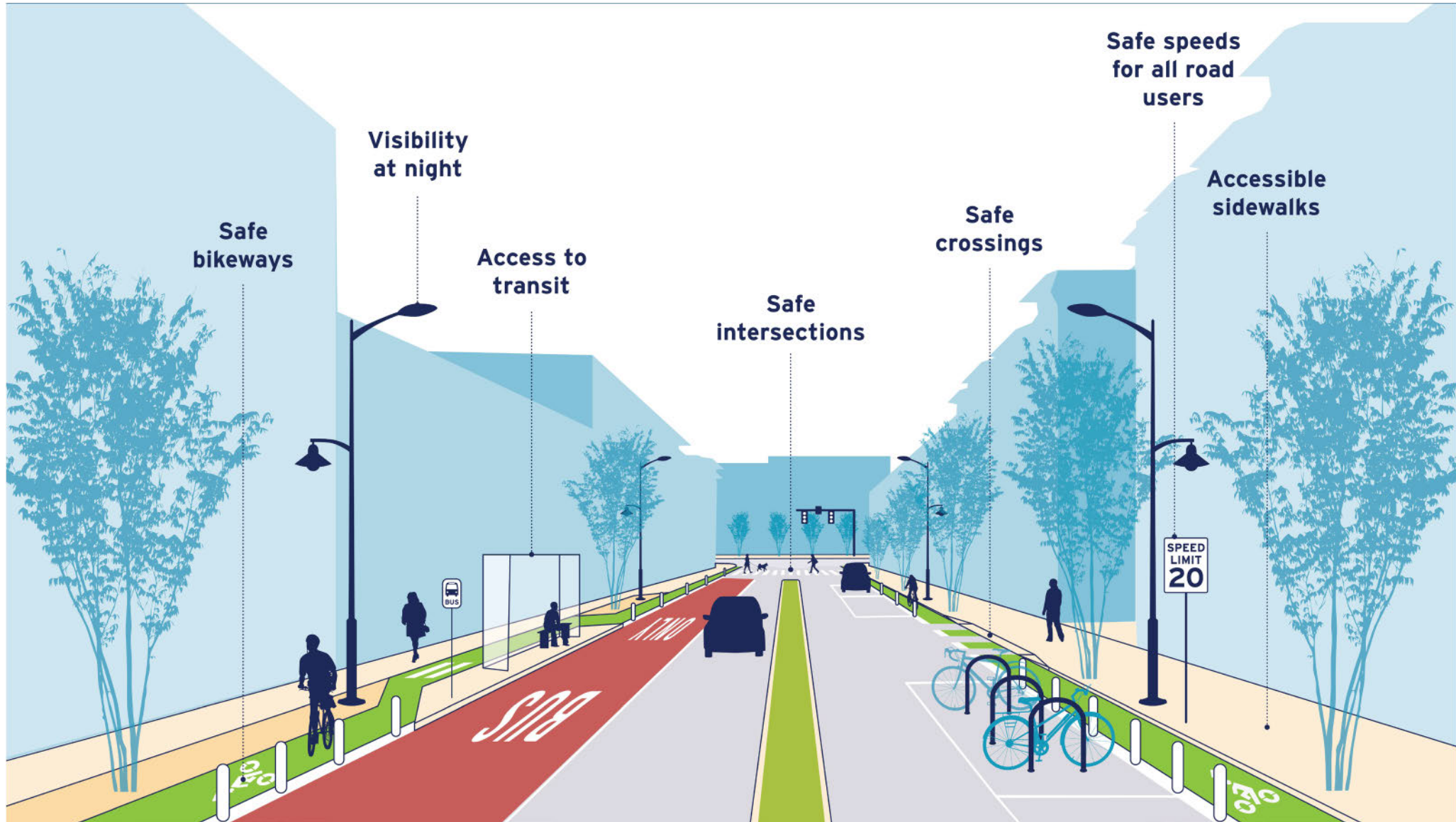


**Behavioral strategies**  
Non-construction projects  
to modify driver behavior





# DESIGNING SAFE STREETS



# WHAT WILL BE IN THE ACTION PLAN?



## LISTEN TO RALEIGHITES

Gather a broad range of community input on roadway safety and behaviors, especially the needs of vulnerable users.



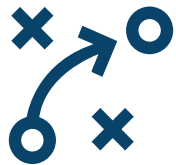
## IDENTIFY HIGH CRASH CORRIDORS

Locate the roadway segments with the most severe and fatal injury crashes.



## UNDERSTAND CRASH FACTORS

Understand which factors contribute to crashes in Raleigh—especially severe and fatal crashes.



## RECOMMEND COUNTERMEASURES

Identify a set of tools—such as roadway design changes, policy updates, and educational programs—that Raleigh can use to improve safety across the transportation network.

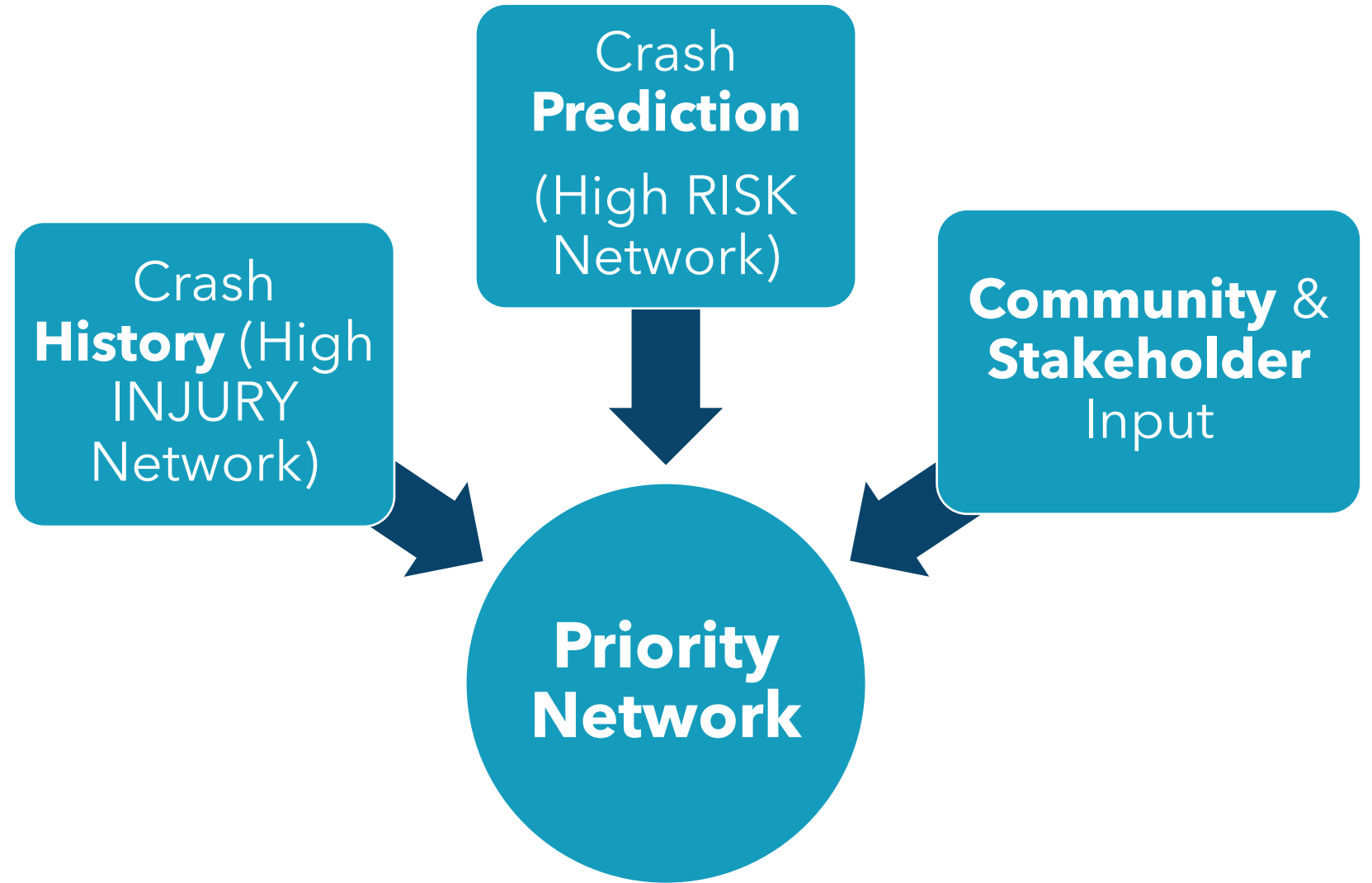


## PREPARE FOR FUNDING OPPORTUNITIES

Set Raleigh up for future funding opportunities to implement changes that make our roadways safer.

# IDENTIFYING LOCATIONS FOR SAFETY STRATEGIES

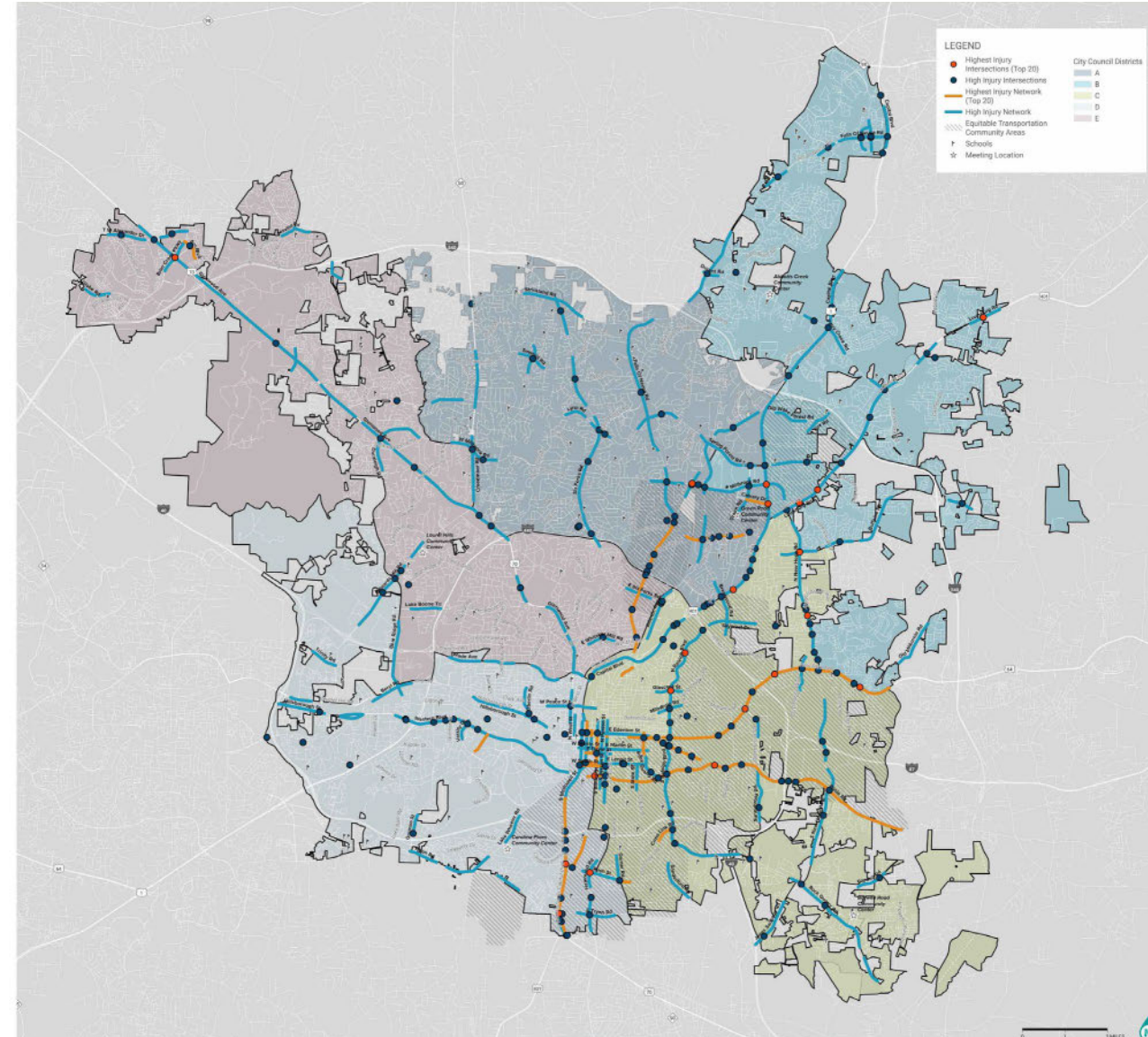
Sourcing and  
prioritizing safety  
projects



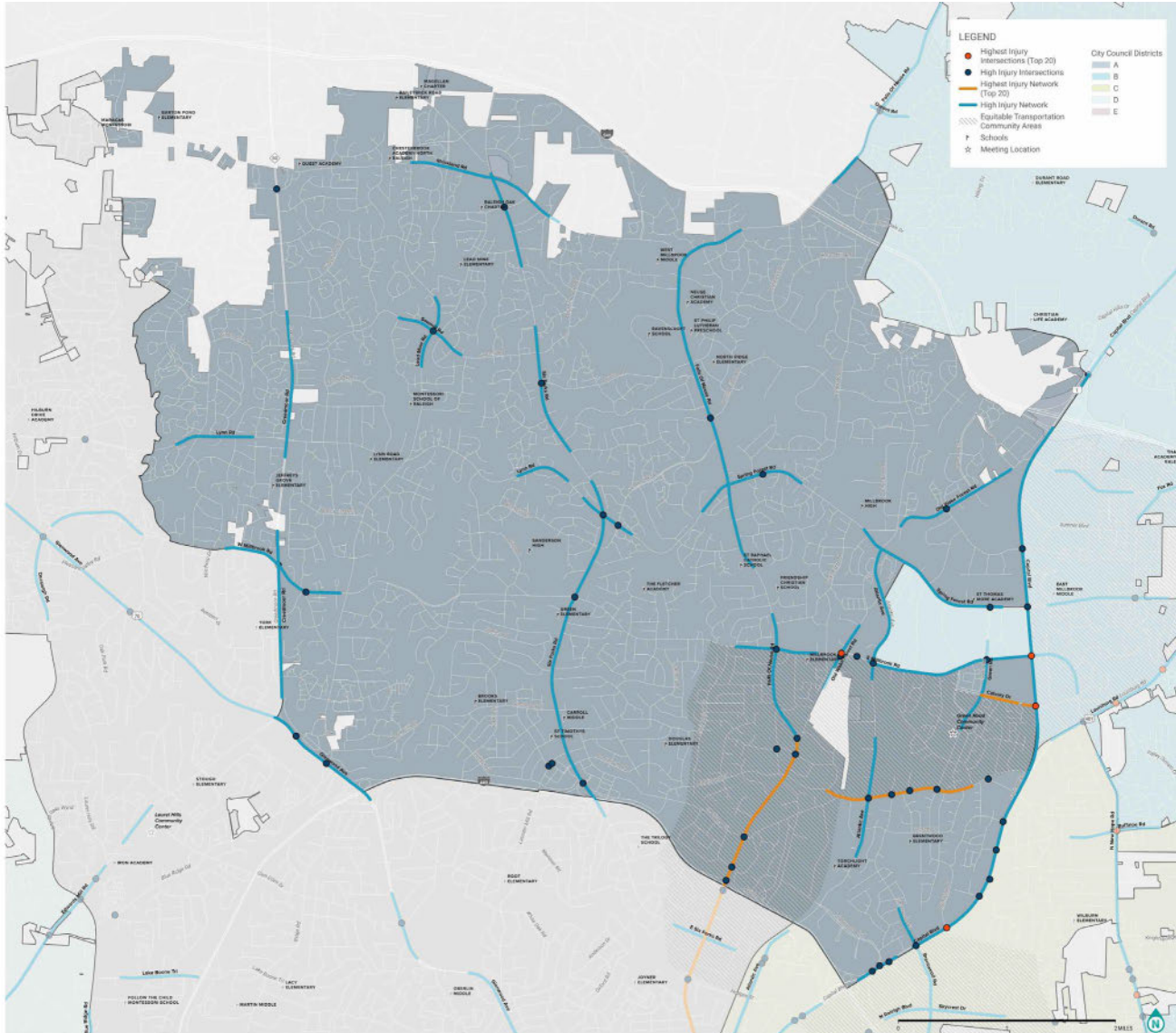


# WHAT IS A HIGH INJURY NETWORK?

- Map corridors with high degree of fatality and injury
- Helps prioritize street network for safety countermeasures
- Helps make traffic crash reductions seem reasonable: e.g. *68% of fatal and serious injury crashes happened on only 13% of roadways*



# DISTRICT A - HIGH INJURY NETWORK



## High Injury Network in District A (Top 20)

- *Calvary Dr*
- *Wake Forest Rd*
- *New Hope Church Rd*

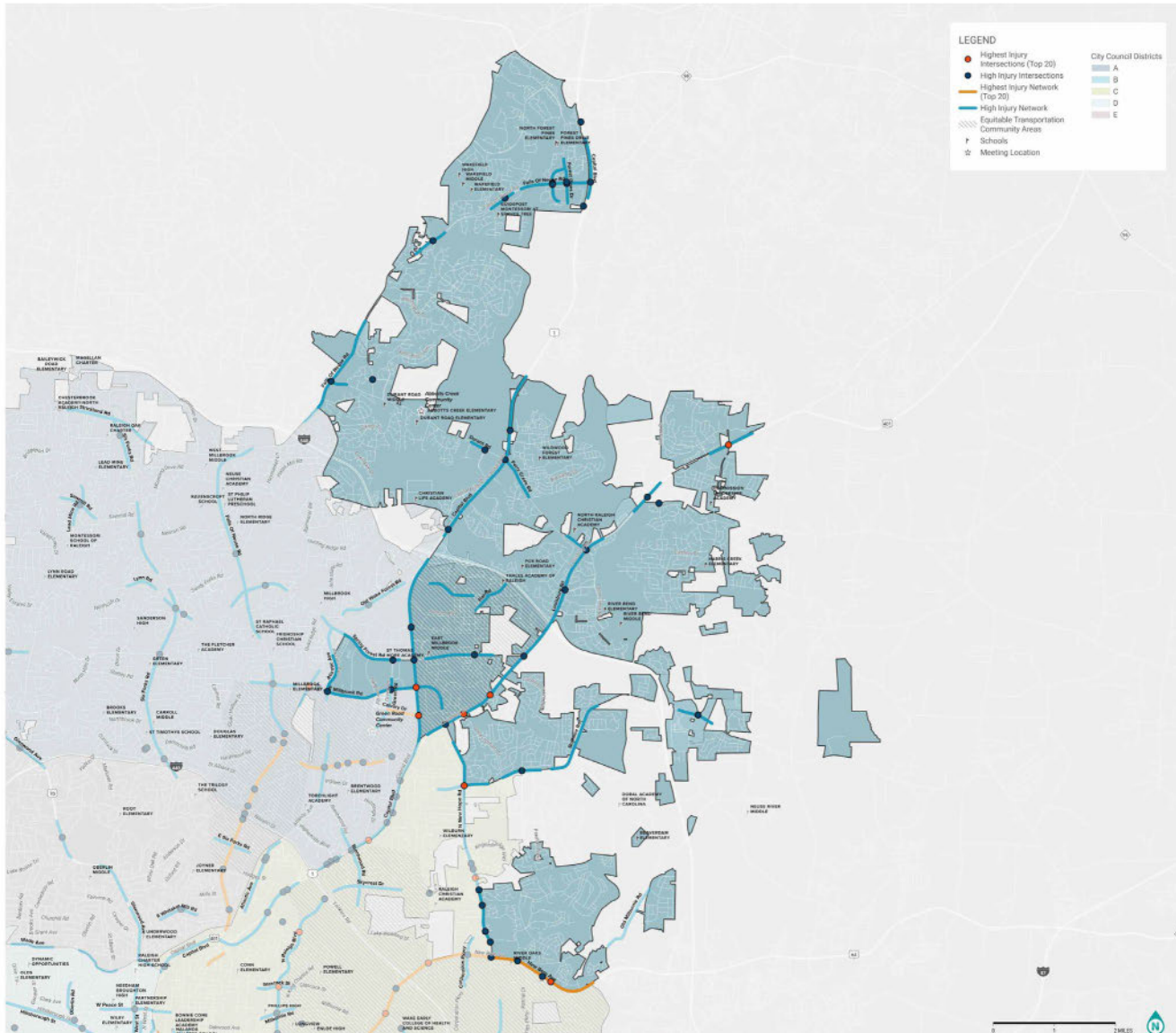


## High Injury Intersections in District A (Top 20)

- *Capital Blvd at Huntleigh Dr*
- *Capital Blvd at Calvary Dr*
- *E Millbrook Rd at Old Wake Forest Rd*
- *Capital Blvd at Millbrook/New Hope Rd*



# DISTRICT B - HIGH INJURY NETWORK



## High Injury Network in District B (Top 20)

- *New Bern Ave*

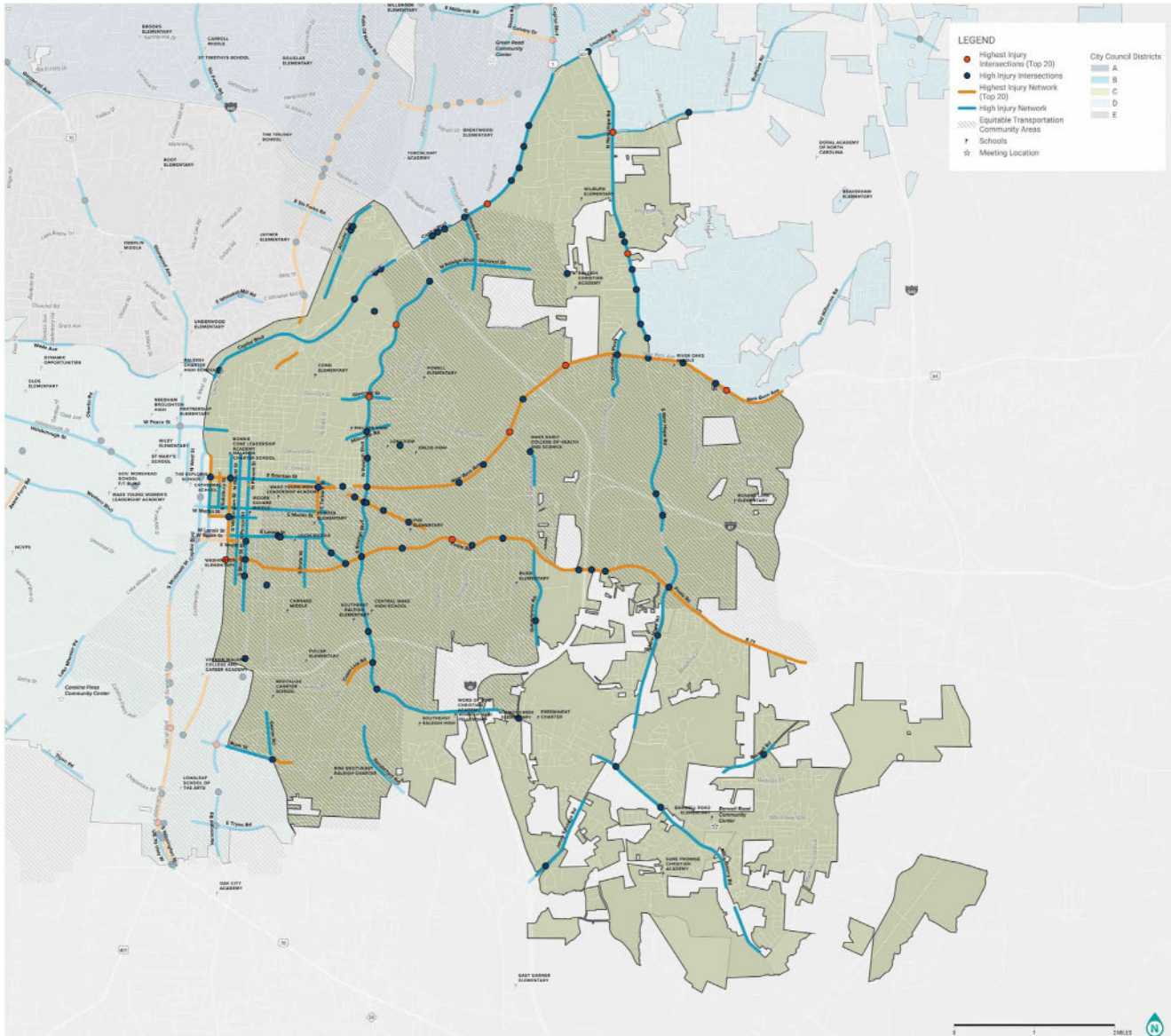


## High Injury Intersections in District B (Top 20)

- *Capital Blvd at Calvary Dr*
- *Louisburg Rd at Forestville Rd*
- *Louisburg Rd at Dansey Dr*
- *N New Hope Rd at Buffaloe Rd*
- *Louisburg Rd at Fox Rd*
- *New Bern Ave at N Rogers Ln*
- *Capital Blvd at Millbrook/New Hope Rd*



# DISTRICT C - HIGH INJURY NETWORK



## High Injury Network in District C (Top 10)

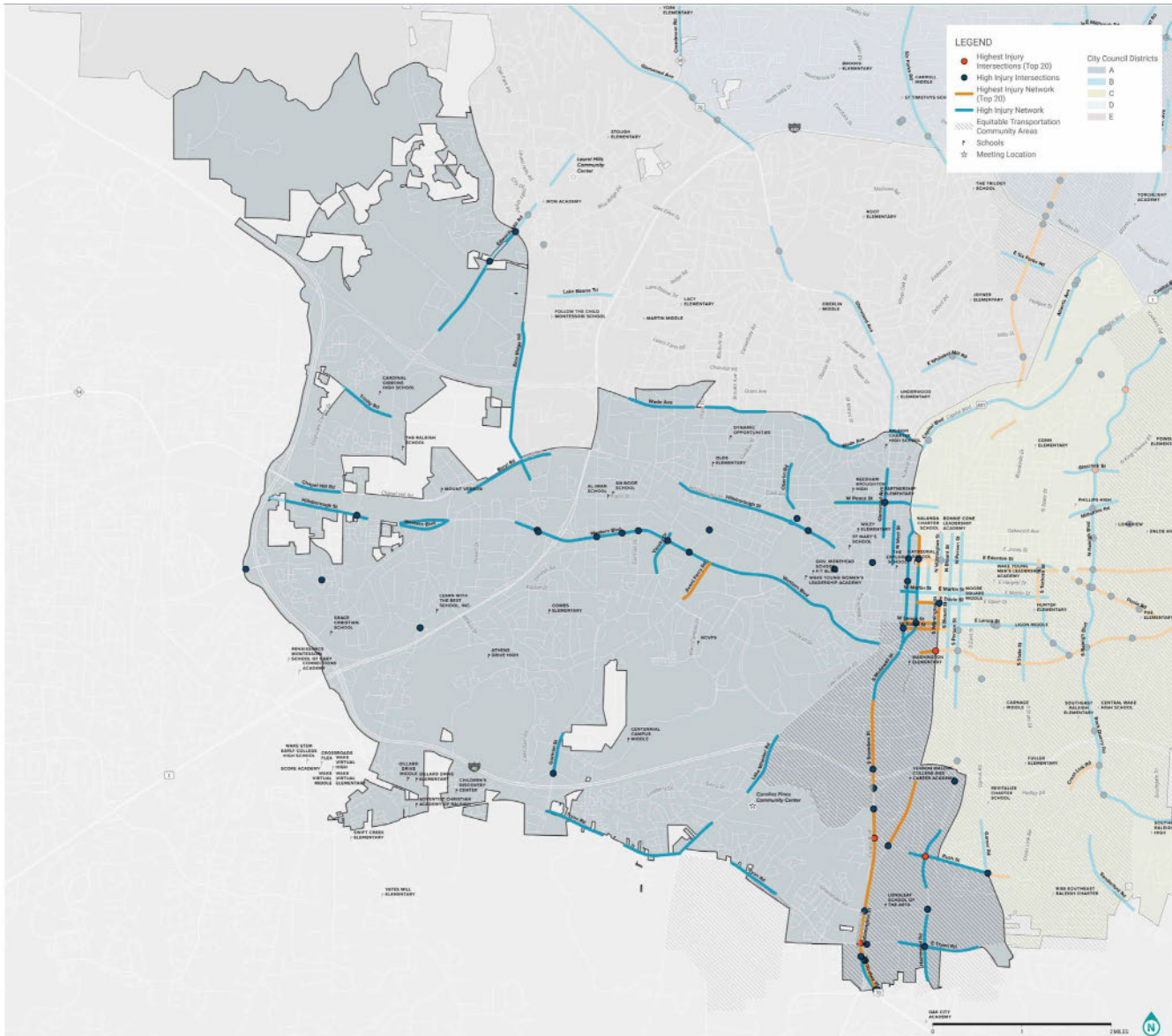
- *W Edenton St*
- *N McDowell St*
- *N Tarboro St*
- *E South St*
- *W Davie St*
- *N Salisbury St*
- *Wake Forest Rd*



## High Injury Intersections in District C (Top 10)

- *New Bern Ave at Trawick Rd*
- *Capital Blvd at Huntleigh Dr*
- *Poole Rd at Rose Ln*
- *New Hope Rd at Easthampton Dr*

# DISTRICT D - HIGH INJURY NETWORK



## High Injury Network in District D (Top 20)

- *N McDowell St*
- *E and W South St*
- *W Davie St*
- *S Saunders St*
- *W Lenoir St*
- *MLK Jr Blvd*
- *Avent Ferry Rd*
- *S Wilmington St*

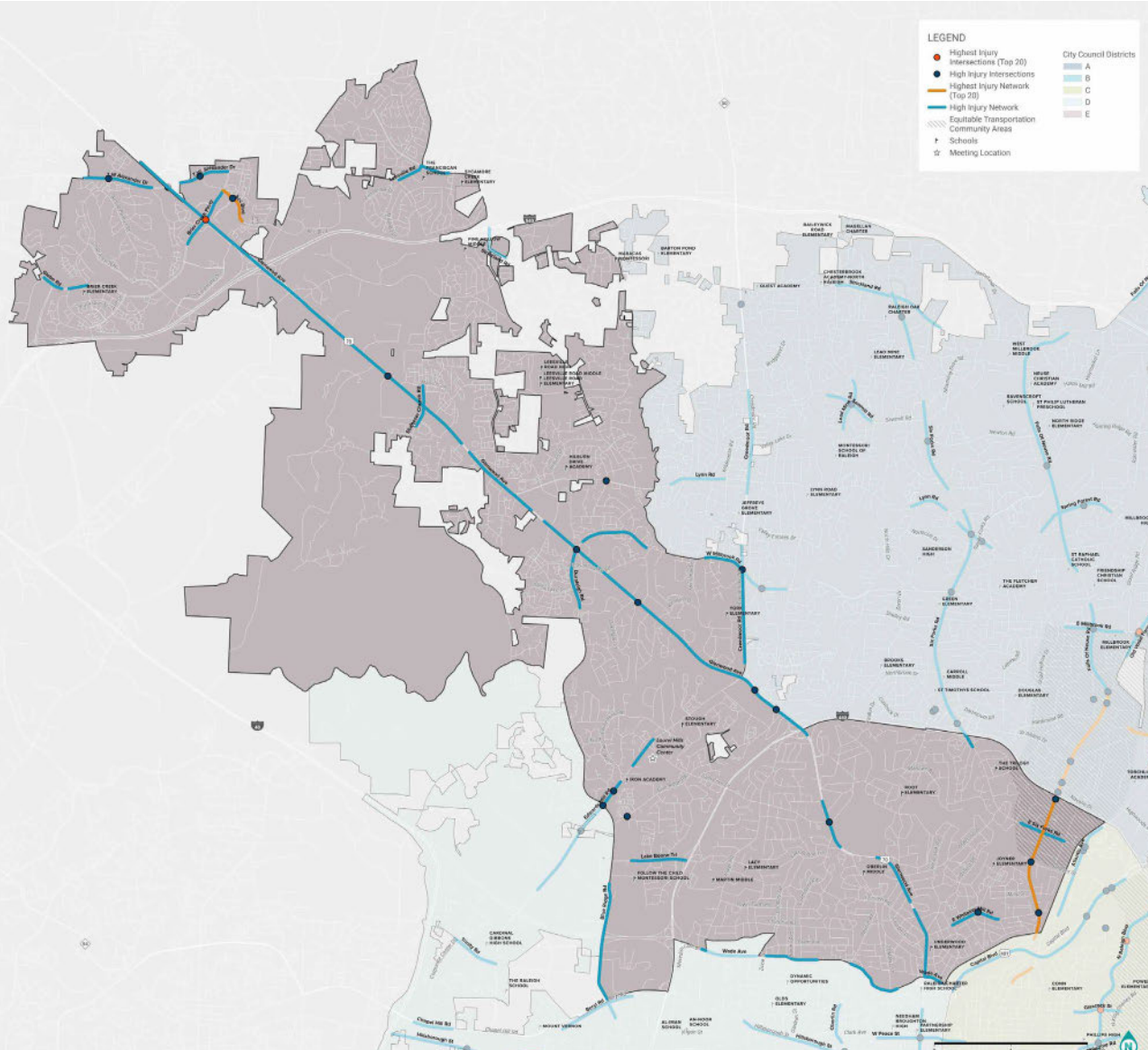


## High Injury Intersections in District D (Top 20)

- *US-401 at Tryon Rd*
- *Hammond Rd at Rush St*
- *S Saunders Rd at Ileagnes Rd*
- *MLK Jr Blvd at S Wilmington St*



# DISTRICT E - HIGH INJURY NETWORK



## High Injury Network in District E (Top 20)

- *Wake Forest Rd*
- *ACC Blvd*



## High Injury Intersections in District E (Top 20)

- *US 70 at Brier Creek Pkwy*



# WHAT IS A HIGH RISK NETWORK?

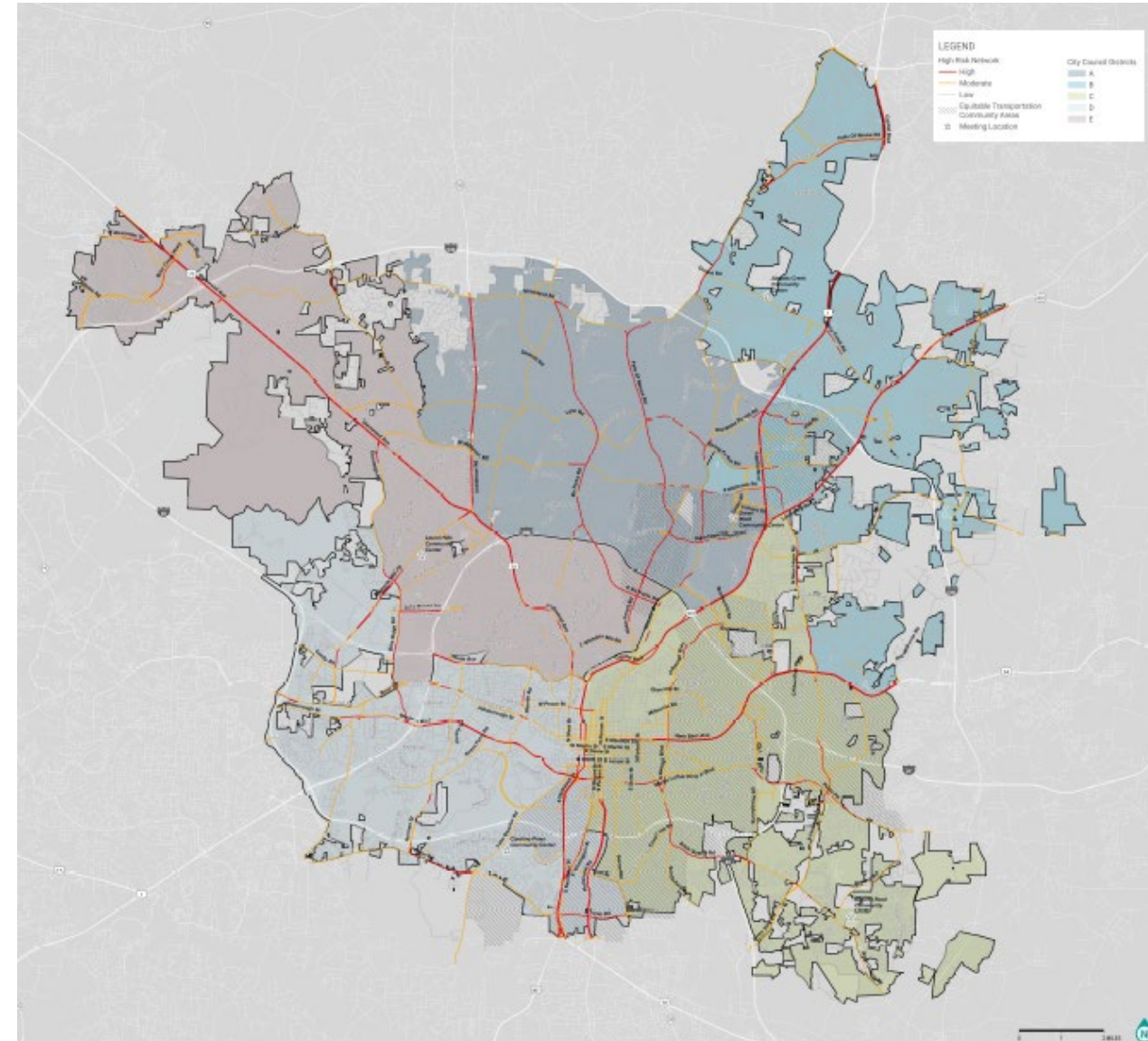
- Focuses on potential safety risk rather than crash history
- Goal is to help prioritize roadway types or features for safety intervention
- Risk is understood as the proportion of weighted fatal & injury crashes to roadway miles in an area:

| <b>Risk Factors used for the HRN</b> |
|--------------------------------------|
| Traffic Operation                    |
| Functional Class                     |
| Number of Through Lanes              |
| AADT Class                           |
| Speed Limit                          |
| Equity Area                          |
| Bus Route                            |
| Railroad Crossings                   |
| Land Use                             |

- Forward looking (not based on crash history)
- Based on systemic risk analysis (grouping attributes)
- Points-Based (i.e. 1-10, 1-100)
- Validated based on crash summary stats

# WHAT IS A HIGH RISK NETWORK?

- Map corridors with high risk of fatal and serious injury crashes
- Helps identify street network for preventative safety countermeasures
- Highest risk factors include:
  - *Number of Through Lanes*
  - *AADT*
  - *Functional Class*
  - *Equity Area*



# NEXT STEPS





# Take the Online Survey to Provide Your Input on Transportation Safety Priorities!

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