

# Vision Zero

Tanya Brooks  
Assistant Director

Transportation and Public Works Department

November 5, 2019

# Purpose of Meeting

- Introduction to Vision Zero
- Fort Worth Crash Data
- Introduction to Vision Zero Action Plan
- Next Steps

# Background - What is Vision Zero?

A strategy to eliminate all traffic fatalities and serious injuries through policies and regulations which prioritize safe, multi-modal streets

Basic principles of Vision Zero policies:

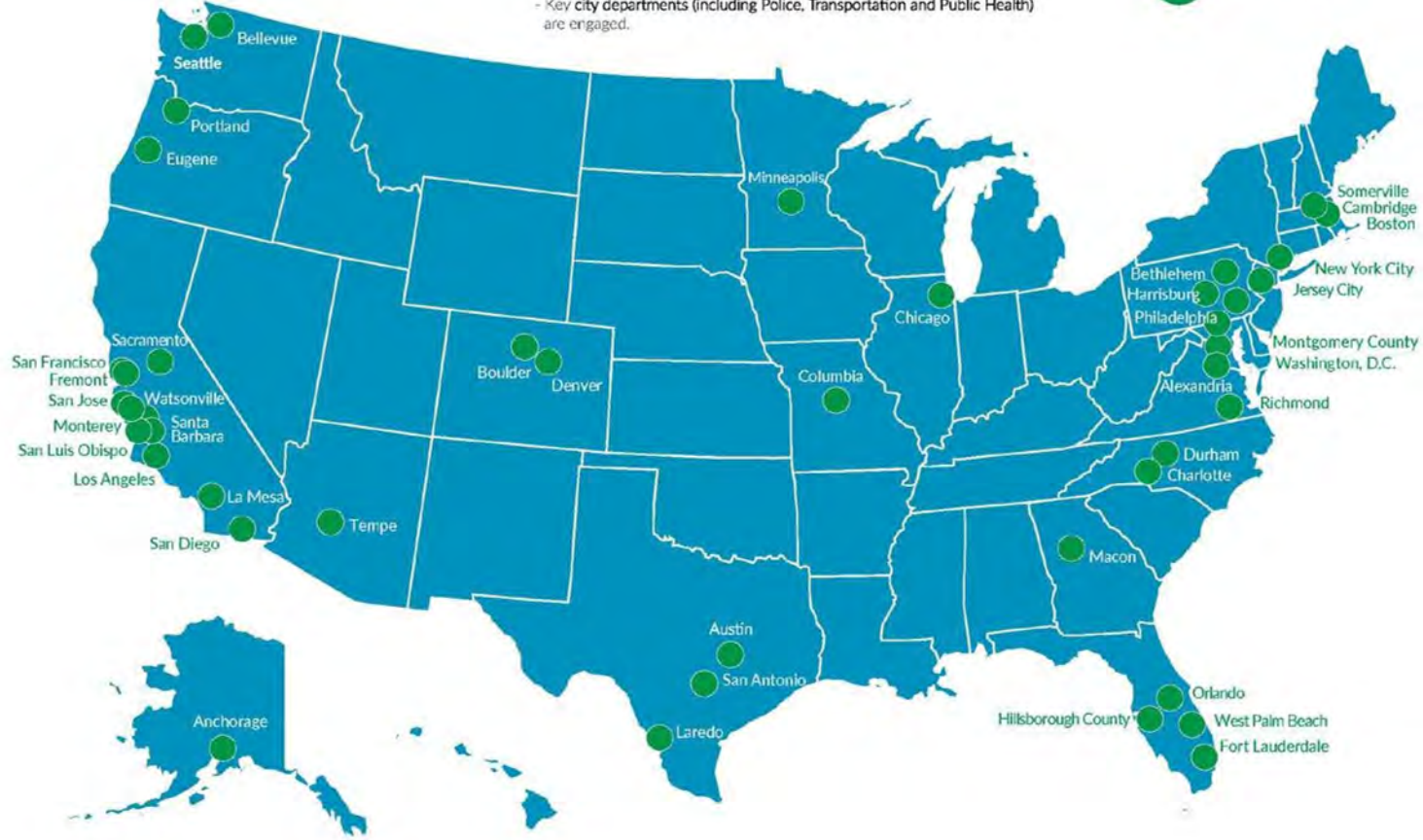
- There is no acceptable level of fatality or injury on our streets.
- Traffic deaths and injuries are not accidents; they are preventable crashes.
- The public should expect safe behavior on City streets.



# Vision Zero Network Cities

A Vision Zero City meets the following minimum standards:

- Sets clear goal of eliminating traffic fatalities and severe injuries
- Mayor has publicly, 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.



# Traditional Road Safety vs Vision Zero

	Traditional Road Safety Approach	Vision Zero
What is the problem?	Try to prevent all crashes	Prevent crashes from resulting in fatal and serious casualties
What is the appropriate goal?	Reduce the number of fatalities and serious injuries	Zero fatalities and serious injuries
What are the major planning approaches?	Reactive to incidents Incremental approach to reduce the problem	Proactively target and treat risk Systematic approach to build a safe road system
What causes the problem?	Non-compliant road users	People make mistakes People are physically fragile/vulnerable in crashes. Varying quality and design of infrastructure and operating speeds provides inconsistent guidance to users about what is safe use behavior.
Who is ultimately responsible?	Individual road users	Shared responsibility by individuals with system designers
How does the system work?	Is composed of isolated interventions	Different elements of a Safe System combine to produce a summary effect greater than the sum of the individual treatments- so that if one part of the system fails others parts provide protection.



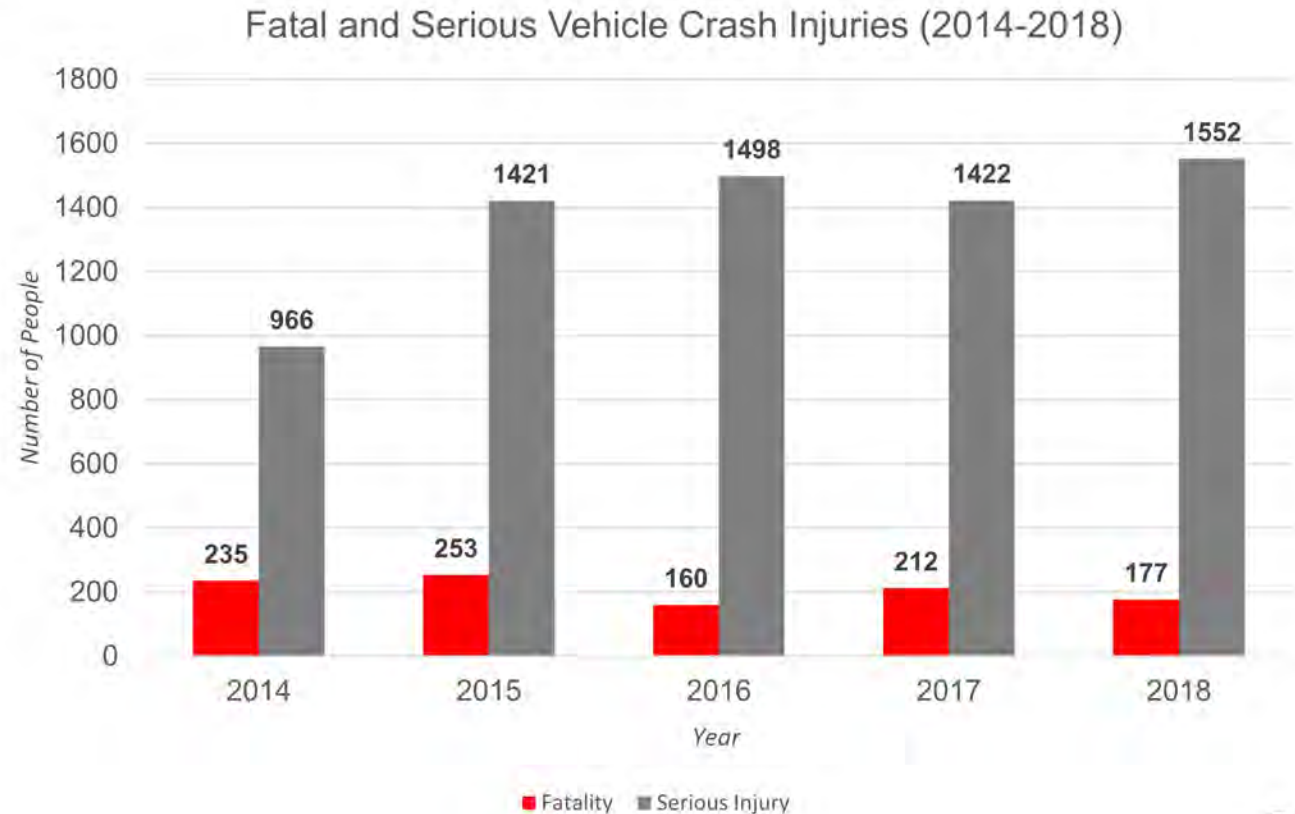
# Why is Vision Zero Important for the City of Fort Worth?

- In 2016, the Federal Highway Administration (FHWA) designated Fort Worth as a Focus City.
- FHWA-designated Focus Cities are those that have a high rate of pedestrian fatalities.
- In September 2019, the Transportation and Public Works Department participated in a FHWA Focus City Peer Exchange in Austin.

# Fort Worth Vehicle Crash Injuries

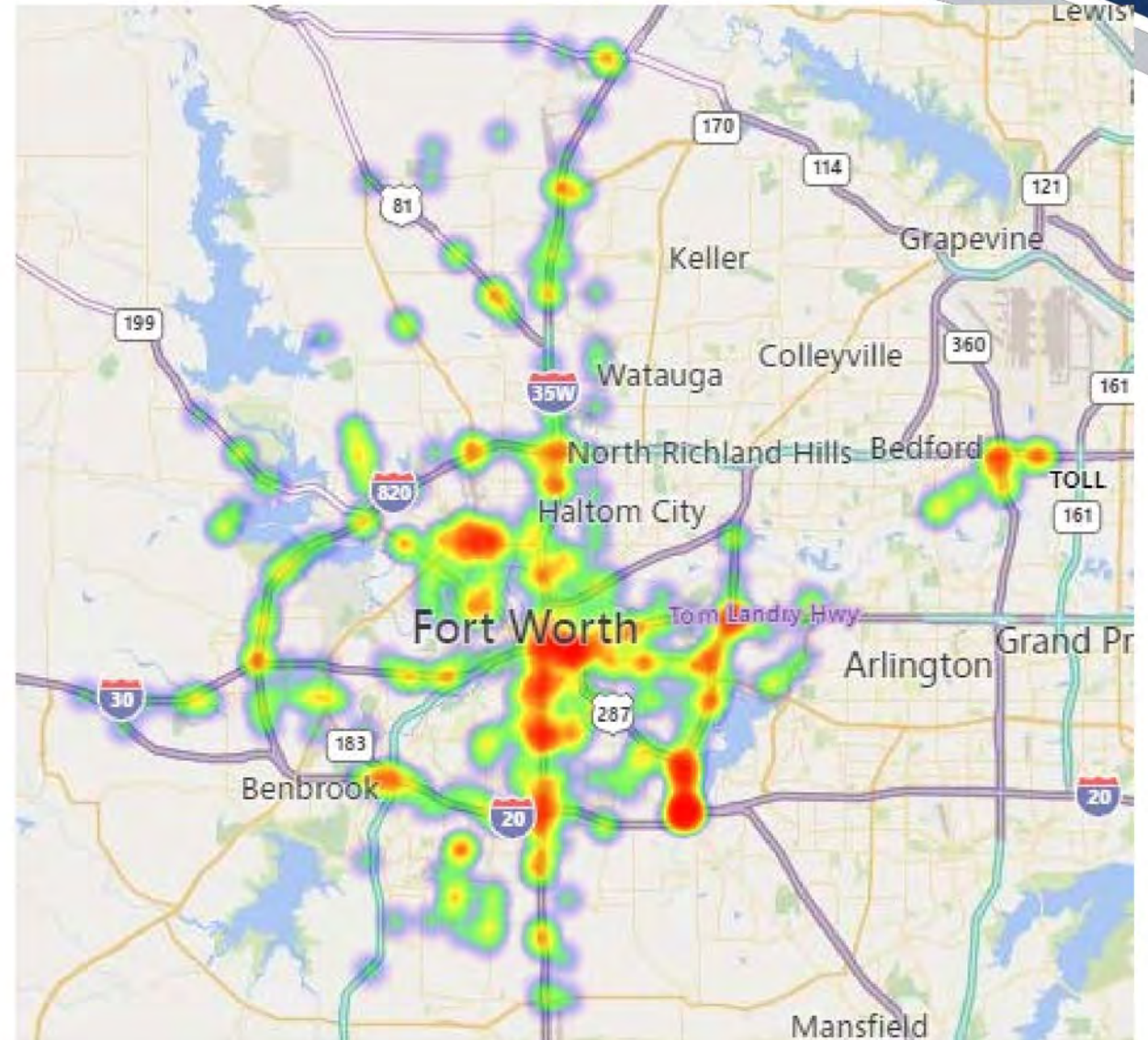
(not including pedestrians and bicyclists)

- There were 96,000+ crashes from 2014 to 2018 in Fort Worth, and nearly 250,000 people were involved in those crashes.
- Over 1,000 people died.
- Almost 7,000 people suffered a serious injury.





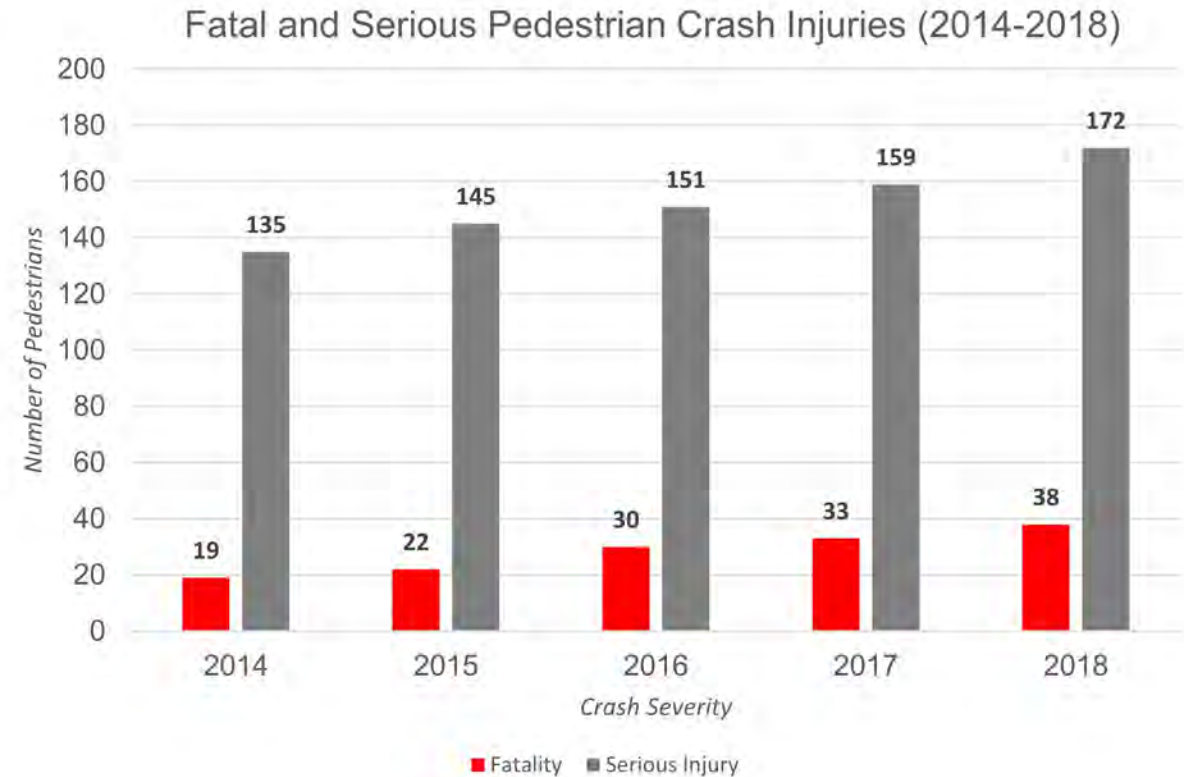
# Fort Worth Fatal Vehicle Crashes 2014 – 2018



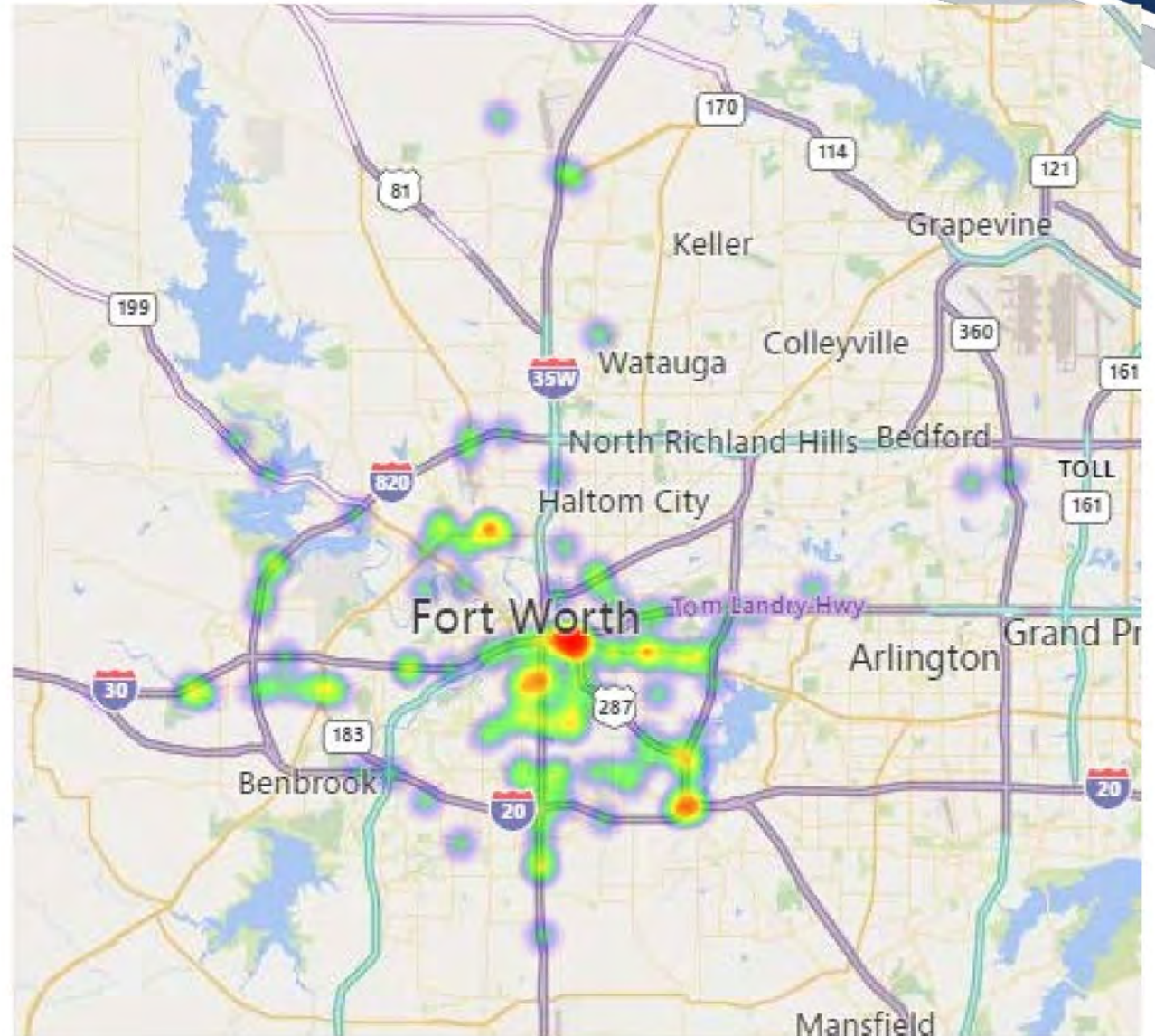


# Fort Worth Pedestrian Crash Injuries

- Pedestrian fatalities have increased by 100% and serious injuries have increased by 27% over a five-year period.
- Over 140 people died and 700+ were seriously injured while walking in Fort Worth.



# Fort Worth Fatal Pedestrian Crashes 2014 – 2018



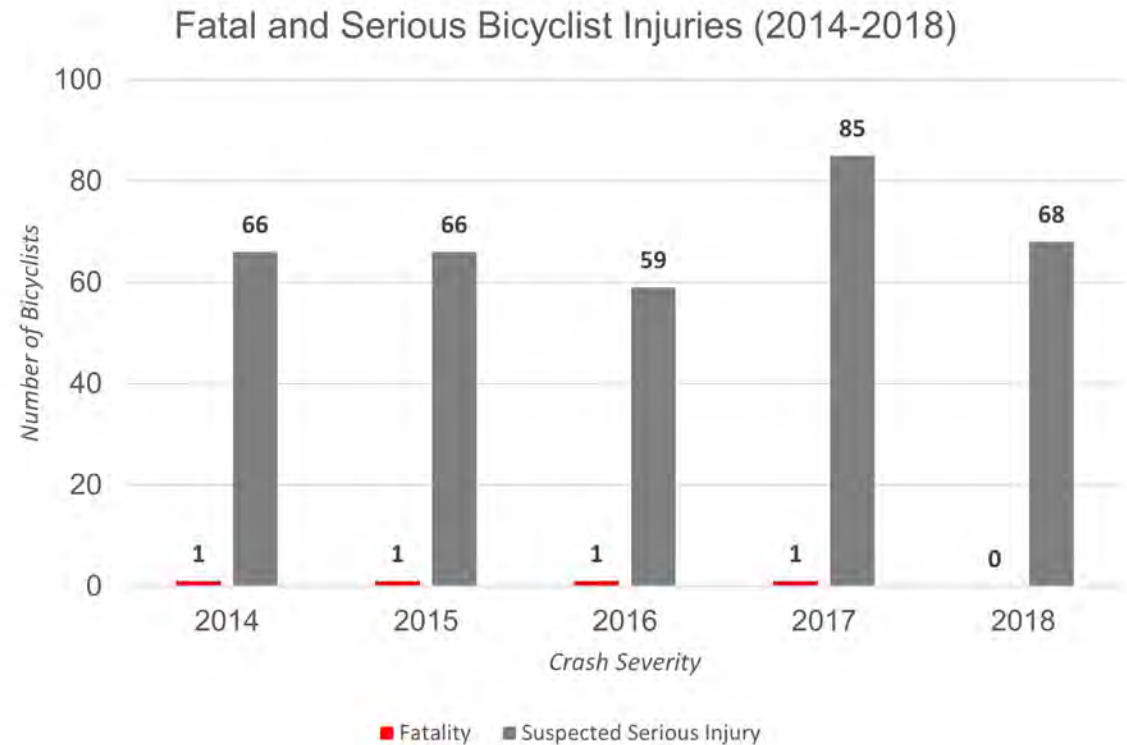


# Pedestrian Vulnerability

- Pedestrians are most at risk of death or serious injury if involved in a traffic crash in Fort Worth.
  - Fatalities represent nine percent of people involved in pedestrian crashes.
  - Fatalities represent less than one percent of people involved in vehicle crashes.

# Fort Worth Bike Crash Injuries

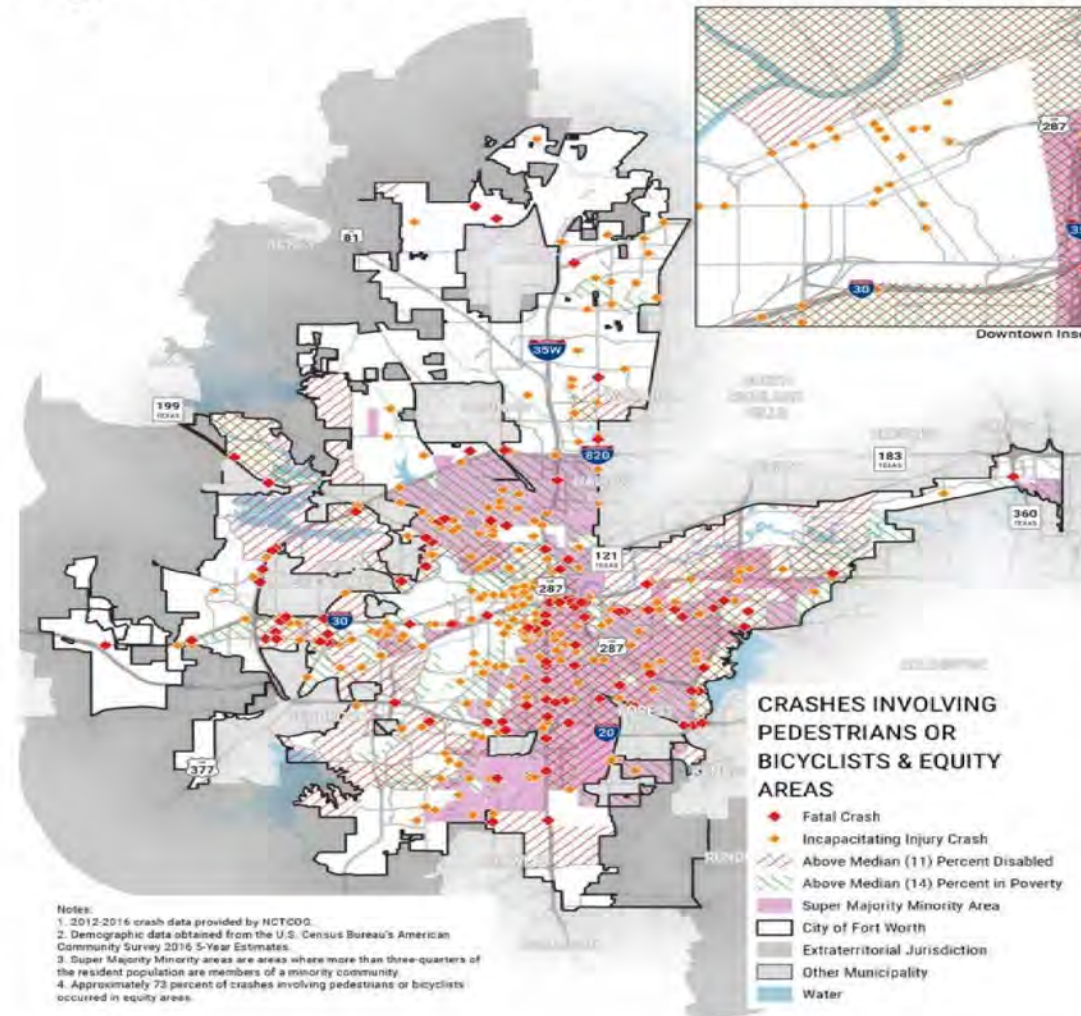
- Four people died, and over 300 people were seriously injured while biking in Fort Worth.



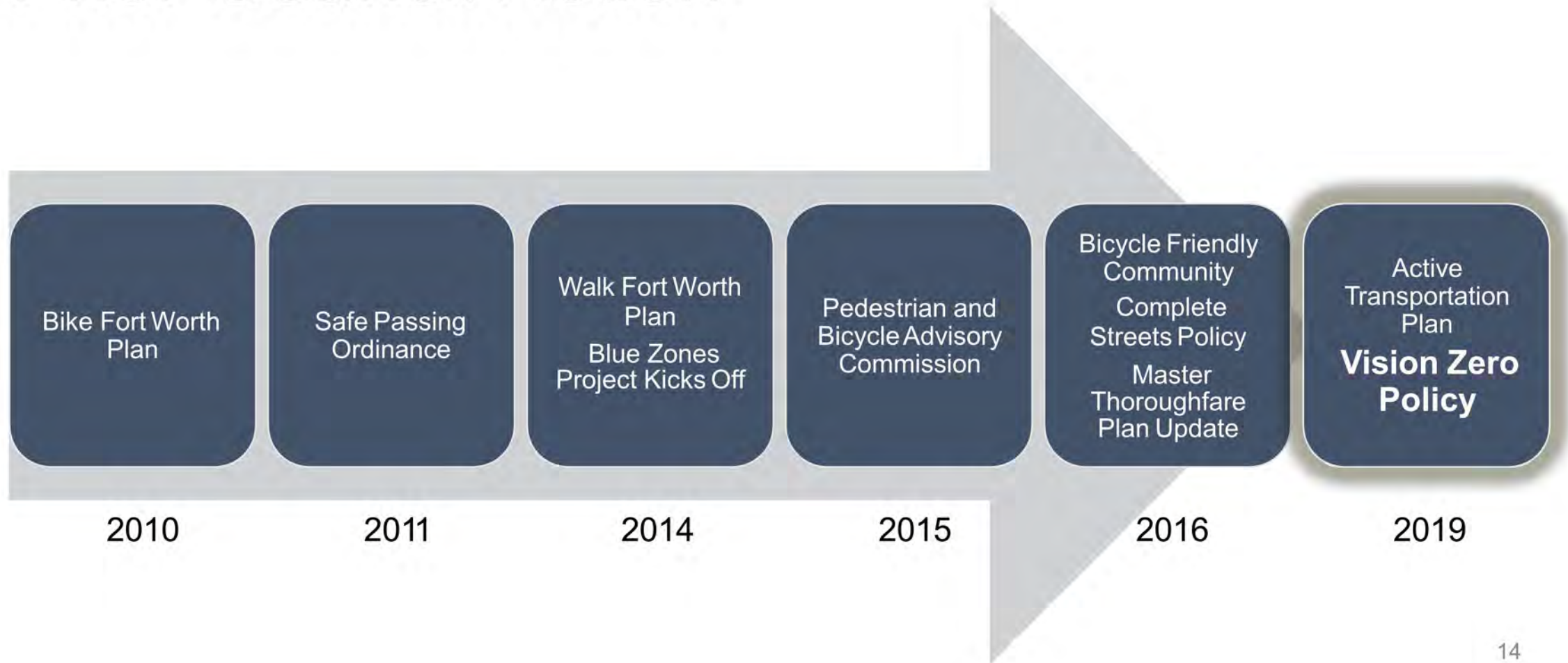


# Pedestrian and Bicycle Crashes in MMAs

- Data points represents the 2012-2016 crash data provided by NCTCOG
- This map shows that we have a high rate of fatal and severe injury crashes occurring on roadways in our super majority minority areas of equity



# Prior Council Action





# Opportunities for Vision Zero Integration

- Capital Projects
  - Safe Routes To School
  - Sidewalk Projects
  - Intersection Improvements
  - Traffic Signal Improvements
- Active Transportation Plan
- Partner Agency Project Leveraging Opportunities
  - Texas Department of Transportation
  - North Central Texas Council of Governments
  - Independent School Districts
  - Trinity Metro
  - Tarrant County

# Existing Traffic Safety Efforts with TxDOT

- TxDOT Strategic Highway Safety Plan (2017 – 2022)
  - Recognizes seven areas of concern for fatal and severe injury crashes in Texas
  - Identifies strategies and countermeasures to address traffic safety
- Highway Safety Improvement Program (HSIP) intersection projects
  - Funds projects that eliminate or reduce fatalities and serious injuries on public roads
  - Limited to improvements that address the areas of concern identified in the Texas Strategic Highway Safety Plan



# Federal and State Safety Collaborations

- Complete Street Projects
  - Lancaster Pedestrian Infrastructure Improvement Project - TxDOT working with City staff to enhanced walkability and eliminate pedestrian fatalities between North Kentucky Street and Beach Street.
  - Lancaster Multimodal Project – TxDOT collaborating with City staff to implement a complete street, inclusive of general purpose lanes, transit, and bike and pedestrian shared-use facilities between Riverside Drive and IH 820.
- Safe Routes to School
  - TxDOT Safe Routes to School Program - Two applications submitted
  - NCTCOG Safe Routes to School Program - Seven projects funded and currently in implementation phase through 2018 Bond.

# Engineering for Vision Zero

# School Safety Approach

- Signs, markings, and beacons at all schools within the City of Fort Worth will be updated on a three-year rotation.
- Between 8 and 11 schools per Council District will be updated each year.
  - Priority will be given to elementary schools in Year 1.
  - Secondary schools and other private schools within the immediate vicinity to elementary schools will also be evaluated as a priority.



# Fort Worth Examples: Crosswalk

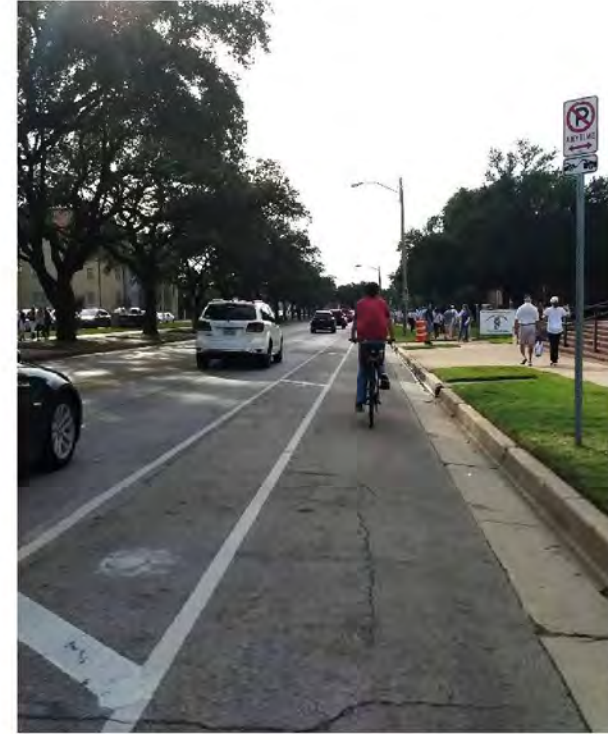
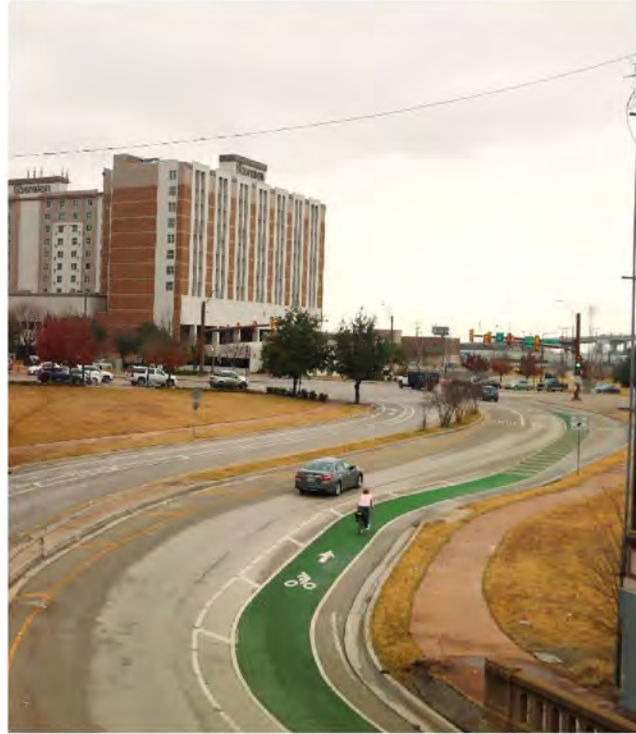
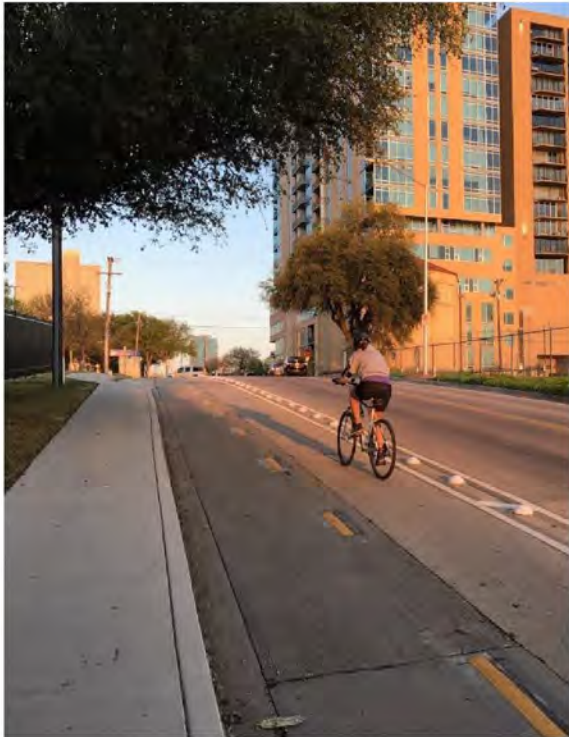


Contrast Crosswalk  
Briscoe Elementary Glen Garden @ Yuma





# Fort Worth Examples: Bike Safety



Designs that separate bicyclists from travel lanes will be emphasized.



# Fort Worth Examples: Signal Timing

## **Revise Signal Timing and Sequence**

- Provide safe pedestrian crossing
- Eliminate conflicts

## **Examples:**

- Leading Pedestrian Interval (LPI)
- Pedestrian Hybrid Beacons (PHB)
- Rapid Rectangular Flashing Beacons (RRFB)

# Leading Pedestrian Interval (LPI)



At University & Berry



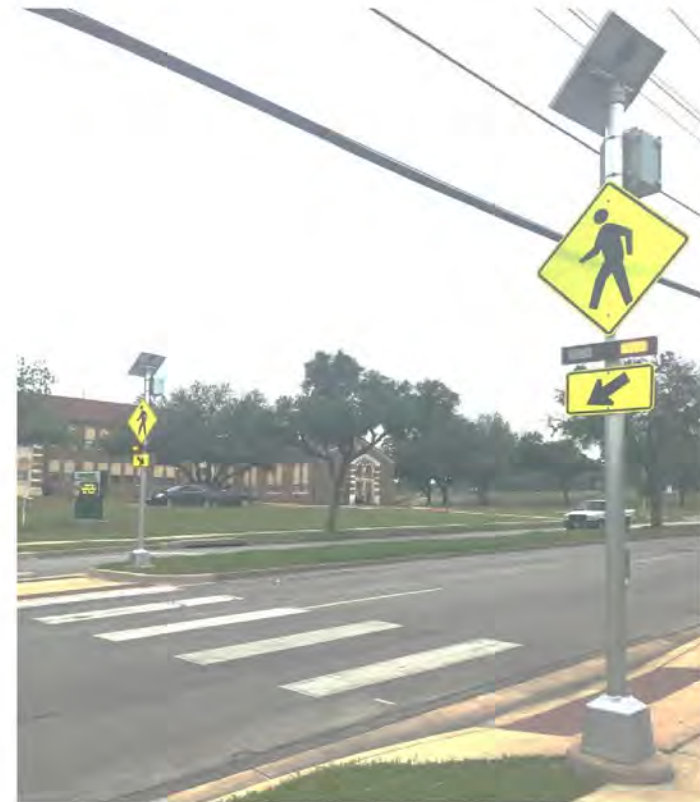
# Pedestrian Hybrid Beacons (PHB)

On University in front of Modern Art Museum



# Rapid Rectangular Flashing Beacons (RRFB)

On Seminary in front of Rosemont Middle School





# Pavement Applications

- Achieving Vision Zero through innovative and advanced paving applications to improve safety and extend the pavement life cycle.
- We are proposing a NovaChip or rubberized asphalt in 11 locations with high recurring accident data where signage has proven ineffective.
- NovaChip provides a darker pavement to maintain contrast with pavement markings and increase visibility.



# What is a Vision Zero Action Plan?

- Implementation tool that can support Vision Zero policy
- Uses crash data to examine existing safety conditions
- Identifies areas of concern
- Outlines strategy for addressing traffic safety
- Defines safety goals and performance measures



# Vision Zero Action Plan

## Step 1 - Update Pedestrian Safety Action Plan

### **STEP 1 Establish Goals and Objectives**

- Determine the scope of the safety action plan
- Establish goals and targets for improving safety

### **STEP 2 Analyze Safety Data**

- Perform analysis of high-crash and high risk locations
- Identify spot locations, corridors, areas, and system-wide problems

### **STEP 3 Gather Stakeholder Input**

- Identify community stakeholders to involve
- Establish venues and channels for gathering stakeholder input

### **STEP 4 Identify Safety Improvements**

- Diagnose sites to understand safety problems
- Develop recommendations for policy changes, design and countermeasure improvements, and behavioral programs

### **STEP 5 Implement and Evaluate Programs**

- Identify funding sources and strategies to support projects
- Determine criteria for prioritizing projects
- Collect data to evaluate programs and inform future actions

## Next Steps

- City Council Adopt Vision Zero Policy Resolution
  - November 12, 2019
- Vision Zero Action Plan Development
  - Step 1 - Update of Pedestrian Safety Action Plan (Currently Appendix C of WalkFW Plan)
  - Develop Task Force – City of FW Staff (T/PW, PD); MedStar; ISDs; PABAC; Blue Zones; etc.



# Staff Contact

Tanya Brooks, Assistant Director  
Transportation and Public Works Department  
[Tanya.Brooks@fortworthtexas.gov](mailto:Tanya.Brooks@fortworthtexas.gov)

(817) 392-7861

# Thank you

