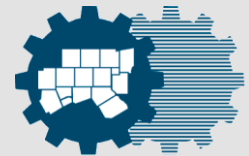# Pedestrian Safety in North Texas

Dallas - Fort Worth Metropolitan Area

Kevin Kokes, AICP, LEED AP
Principal Transportation Planner

Mobility 2045

North Central Texas Council of Governments

Statewide Pedestrian Safety Forum   July 12, 2018

Presentation Overview

Overview of North Texas Region

- Planning Area
- Regional Crash Data

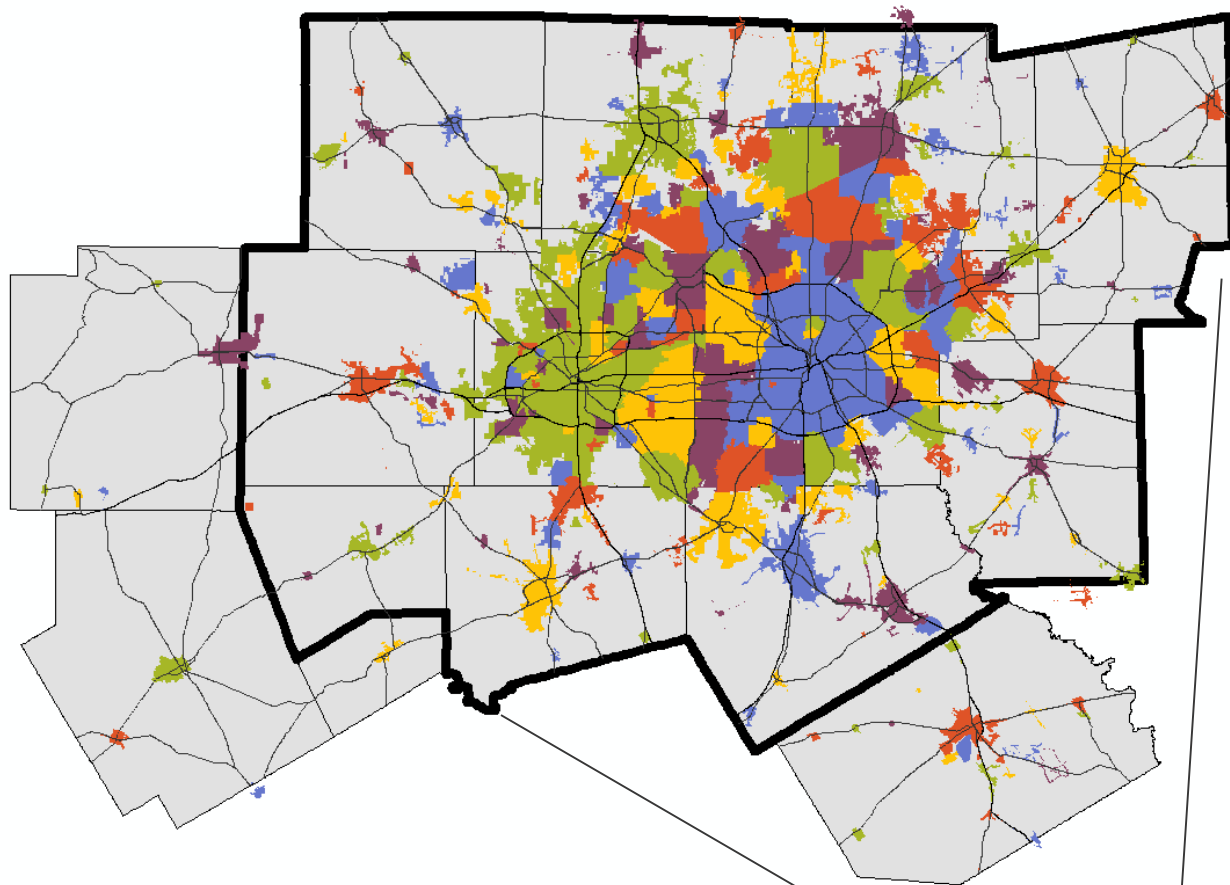## Regional Programs and Projects

- Education Training and Campaign
- Technical Research and Planning/Studies
- Routes to Rail Stations
- Mobility 2045 Funding Priorities

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MPO for the Dallas-Fort Worth Region
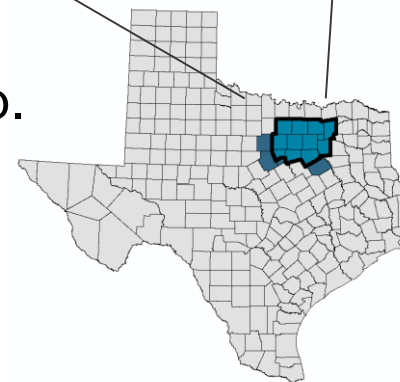

Metropolitan Planning Area (MPA)
    209 cities
    13 cities larger than 100,000 pop.
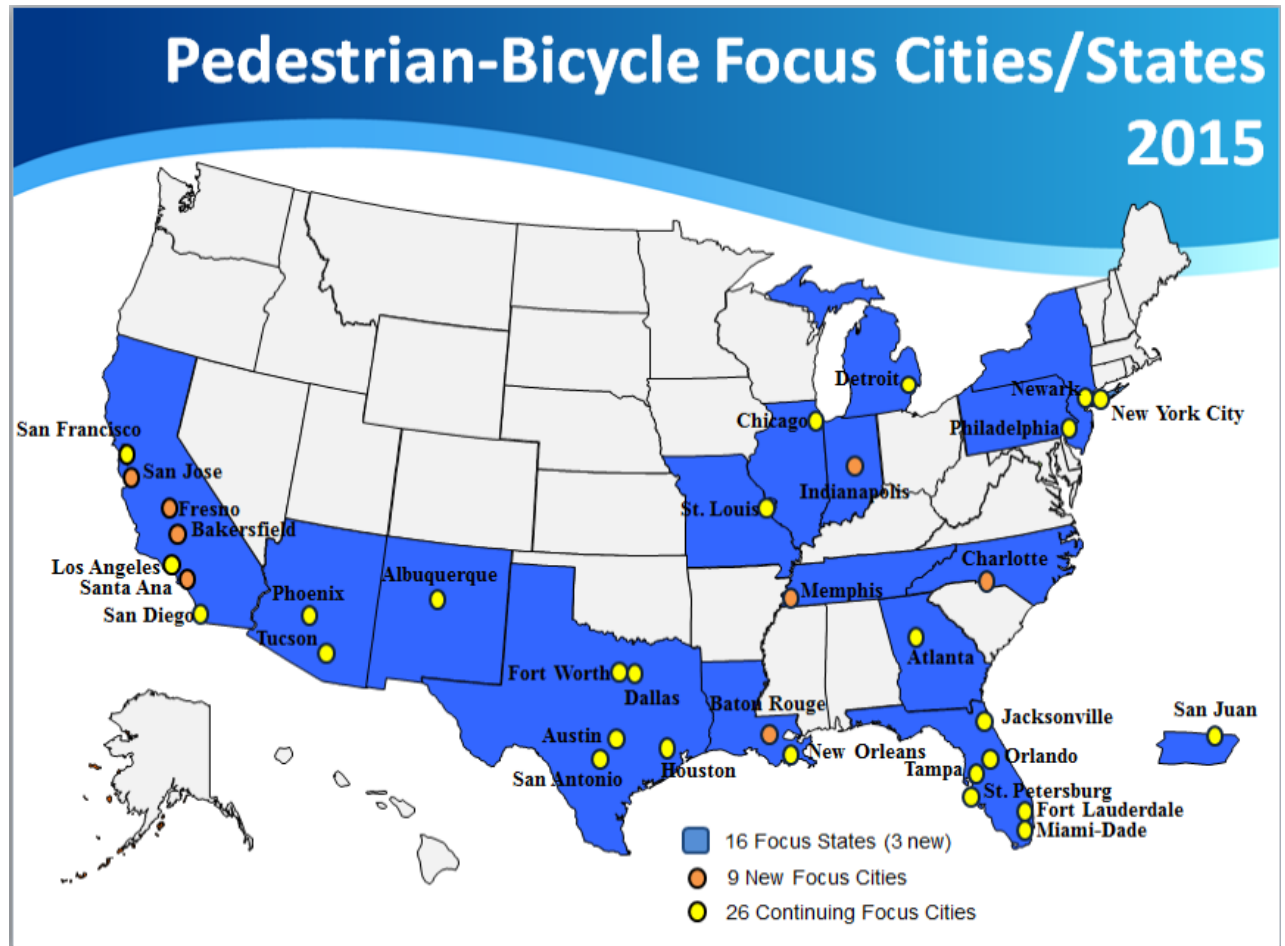
MPA Population
    2017 Estimate = 7.2 million
    2045 Forecast = 11.2 million

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FHWA Pedestrian-Bicycle Safety Focus States and Cities

States and cities with the highest pedestrian fatalities and/or fatality rates

Pedestrian-Bicycle Focus Cities/States 2015

San Francisco, San Jose, Fresno, Bakersfield, Los Angeles, Santa Ana, San Diego, Phoenix, Tucson, Albuquerque, Fort Worth, Dallas, Austin, San Antonio, Houston, Baton Rouge, New Orleans, Detroit, Chicago, St. Louis, Indianapolis, Memphis, Charlotte, Atlanta, Jacksonville, Orlando, Tampa, St. Petersburg, Fort Lauderdale, Miami-Dade, Newark, Philadelphia, New York City, San Juan

- 16 Focus States (3 new)
- 9 New Focus Cities
- 26 Continuing Focus Cities

Pedestrian Fatality Rates*
(Per 10k walking commuters)
#41: Texas

*Source: Bicycling and Walking in the United States: 2014 Benchmarking Report

Top 50 Cities*
#26: Austin
#37: Houston
#44: San Antonio
#47: Dallas
#50: Fort Worth

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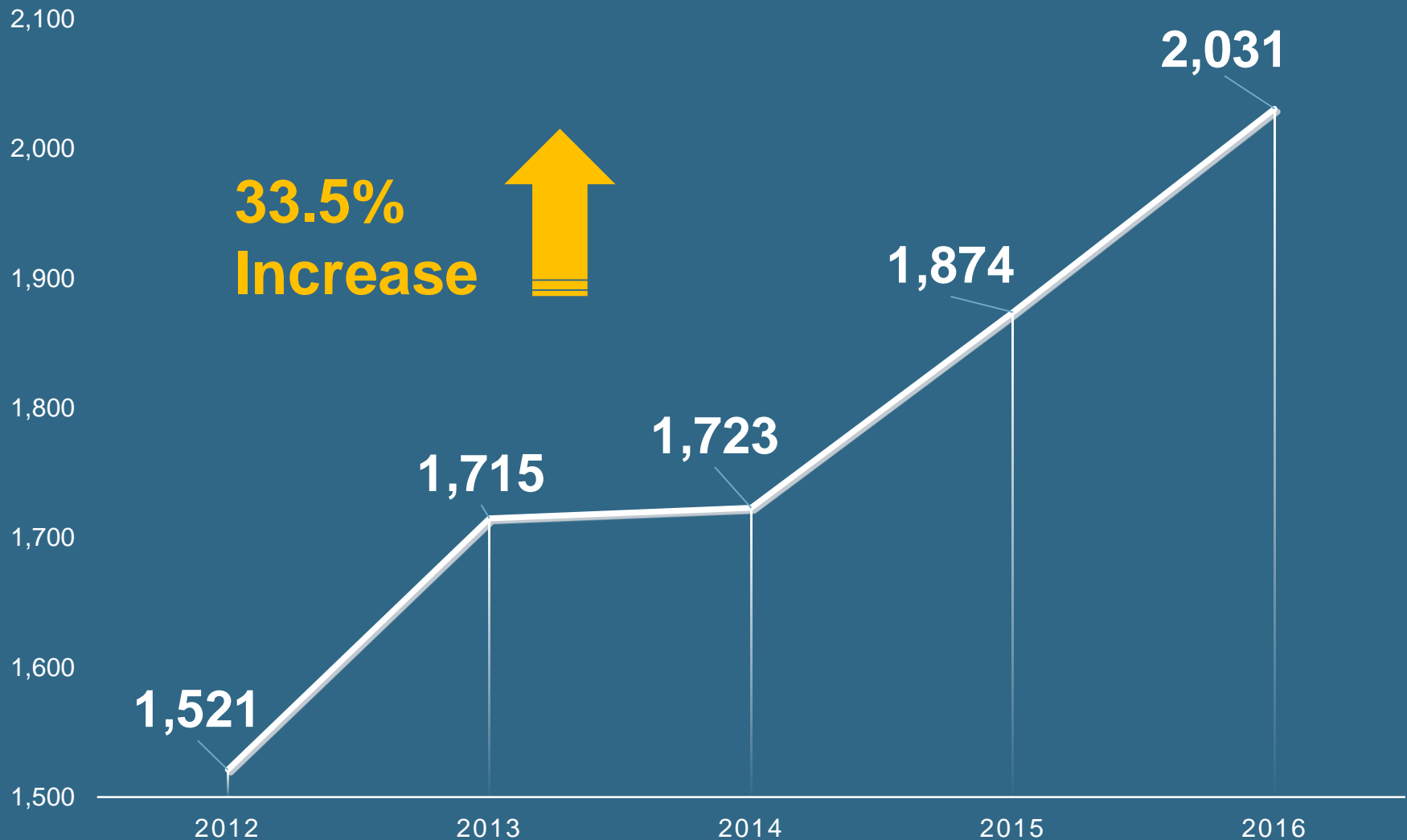
5

2012 - 2016
Bicycle And Pedestrian Crashes And Fatalities
(North Central Texas – 12 Counties)

33.5% Increase

1,521 · 1,715 · 1,723 · 1,874 · 2,031

Urbanized Area
Bicycle and Pedestrian
Crash Density
(2012 - 2016)
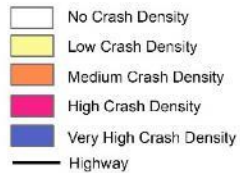
Legend

☐	No Crash Density
☐	Low Crash Density
☐	Medium Crash Density
☐	High Crash Density
☐	Very High Crash Density
—	Highway
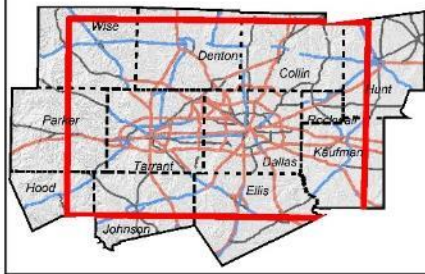
NCTCOG 12 County
Metropolitan Planning Area

Note: Density concentration is calculated as a magnitude per unit area from crash point features and is based on the geography of the census designated urbanized area. Blue symbolizes higher concentration of crashes and yellow displays lower concentrations.

1.) Source: TxDOT's Crash Records Information System - 2016 data is current as of February 2017. All TxDOT disclaimers apply.
2.) Data displayed contains reportable crashes with latitude and longitude information. Additional crashes may have occurred.
3.) This data is composed of TxDOT "Reportable Crashes" that occurs or orginates on a traffic way, results in injury to or death of any person, or damage to the property of any person to the apparent extent of $1,000.

**North Central Texas
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Transportation Department**

0   5   10   20 Miles

N

Date: 11/6/2017

**North Central Texas
Council of Governments**

7

Dallas County
Bicycle and Pedestrian
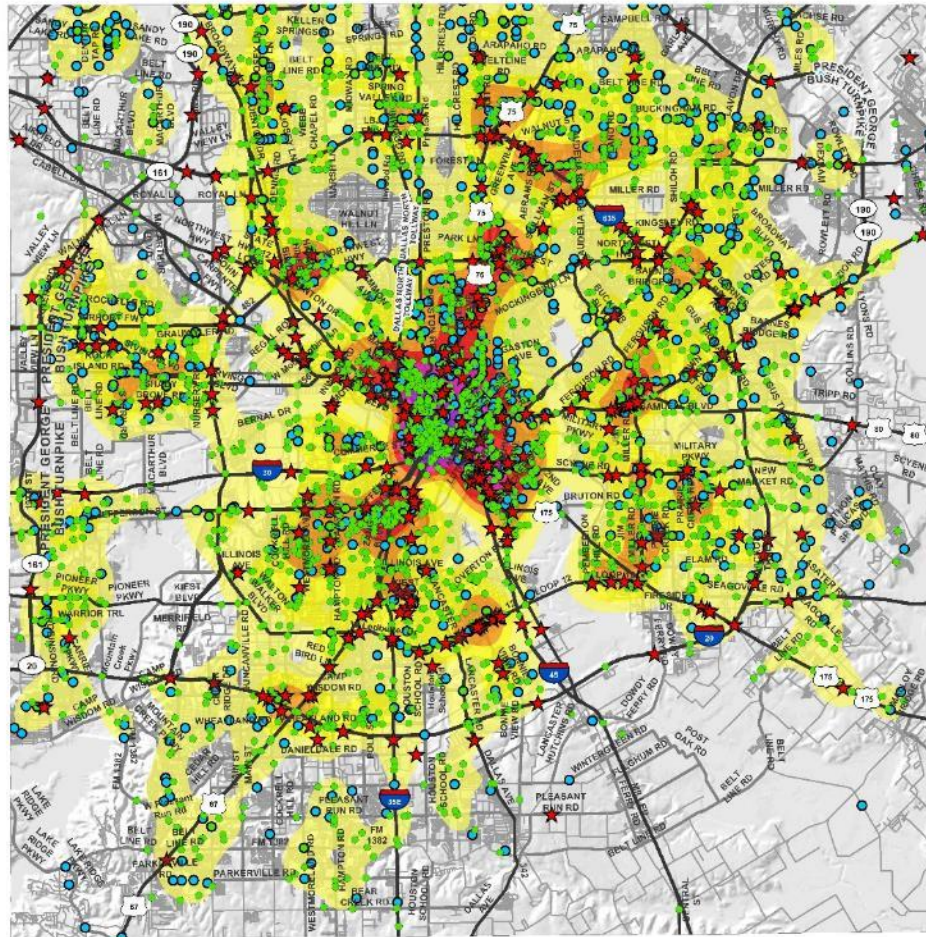## Crash Locations and Density
(2012 - 2016)

Legend

★ Fatal Bicycle or Pedestrian Crash Location - (328)

● Non-Fatal Pedetrian Crash Location - (3,225)

● Non-Fatal Bicycle Crash Location - (981)

☐ No Crash Density

☐ Low Crash Density

☐ Medium Crash Density

☐ High Crash Density

☐ Very High Crash Density

— Highway

— Major Arterial

— Minor Arterial

+—+—+ Passenger Rail

NCTCOG 12 County Metropolitan Planning Area
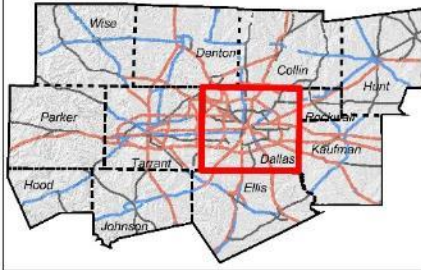
Note: Density concentration is calculated as a magnitude per unit area from crash point features and is based on each county's geography. Blue symbolizes higher concentration of crashes and yellow displays lower concentrations.

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0   2.5   5   10 Miles

N

Date: 11/7/2017

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Fatalities on TxDOT Roadways
North Central Texas MPA
(Pedestrian and Bicycle)

67% of Fatalities Occur on TxDOT Roadways

Legend

★ Bicycle and Pedestrian Fatalities (413)

— TxDOT On-System Roadways
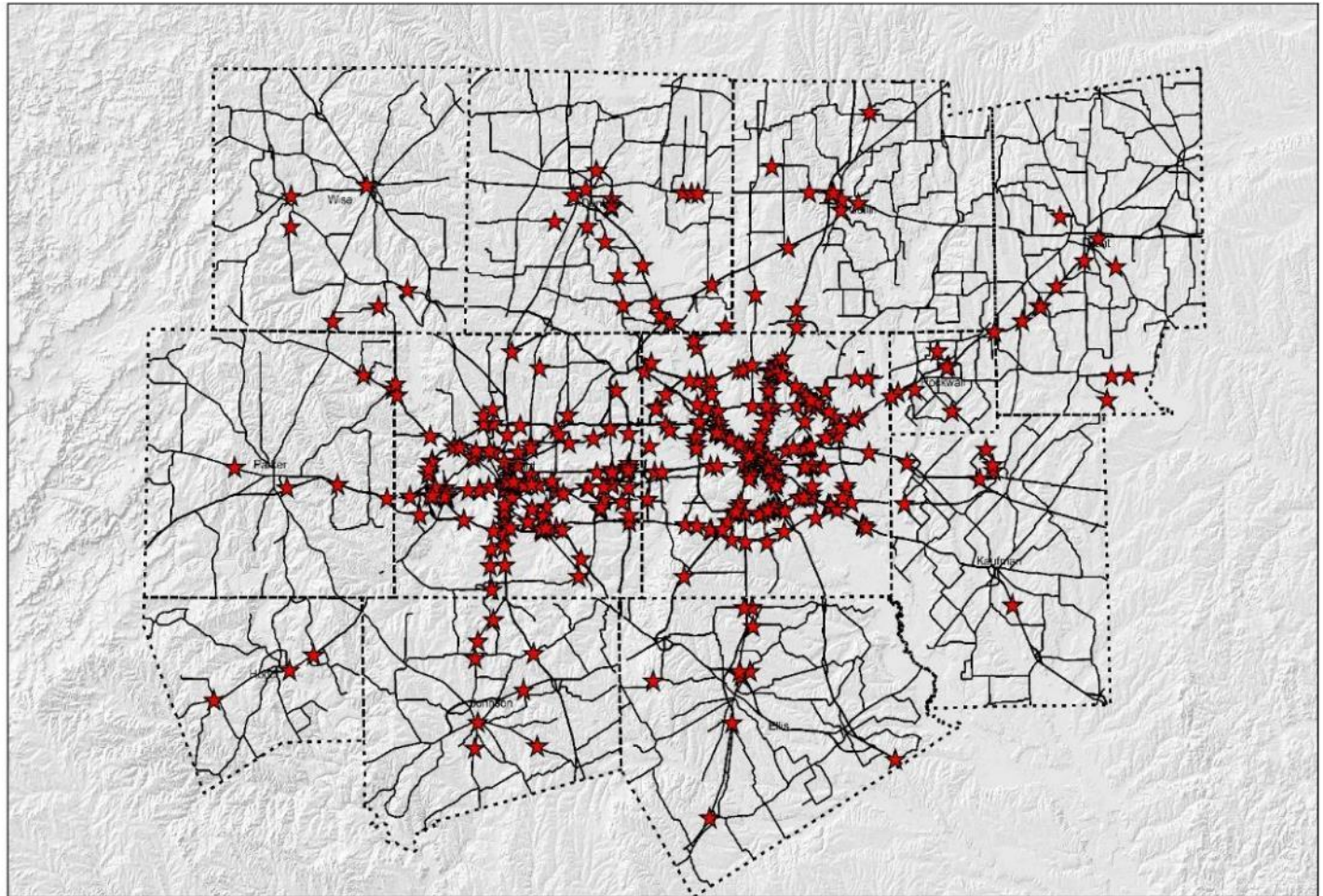
Document Path: I:\Sustainable_Development\ArcGIS\Bike_Ped\CrashData\Density Maps\2016\OnSystem OffSystem Fatalities.mxd

1.) Source: TxDOT's Crash Records Information System - 2016 data is current as of February 2017. All TxDOT disclaimers apply.
2.) Data displayed contains reportable crashes with latitude and longitude information. Additional crashes may have occurred.
3.) This data is composed of TxDOT "Reportable Crashes" that occurs or originates on a traffic way, results in injury to or death of any person, or damage to the property of any person to the apparent extent of $1,000.

North Central Texas Council of Governments Transportation Department

0 5 10 20 Miles

N

Date: 11/8/2017

Crashes and Fatalities in 12-County North Central Texas MPA

Pedestrian And Bicycle Crashes (All) (2012-2016)

On-System 27%

Off-System 73%
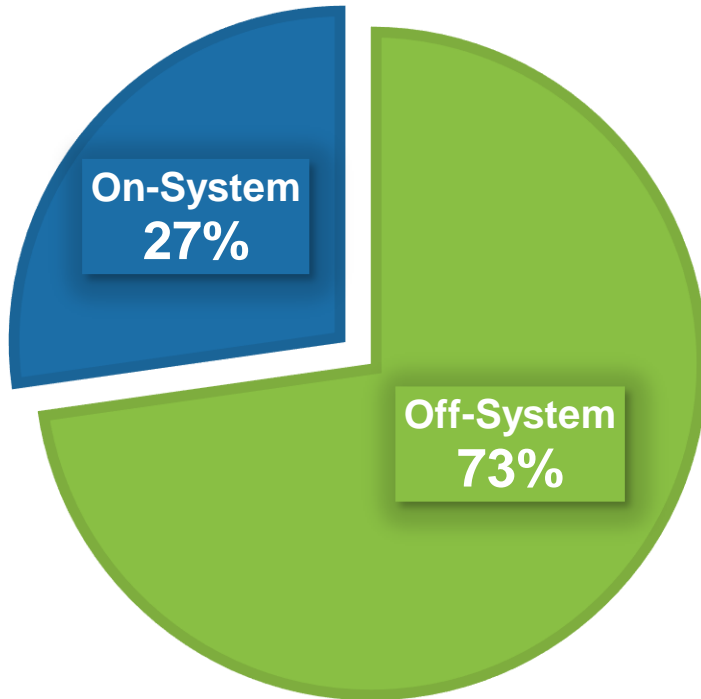
Pedestrian And Bicycle <u>Fatal</u> Crashes (2012-2016)

Off-System 33%
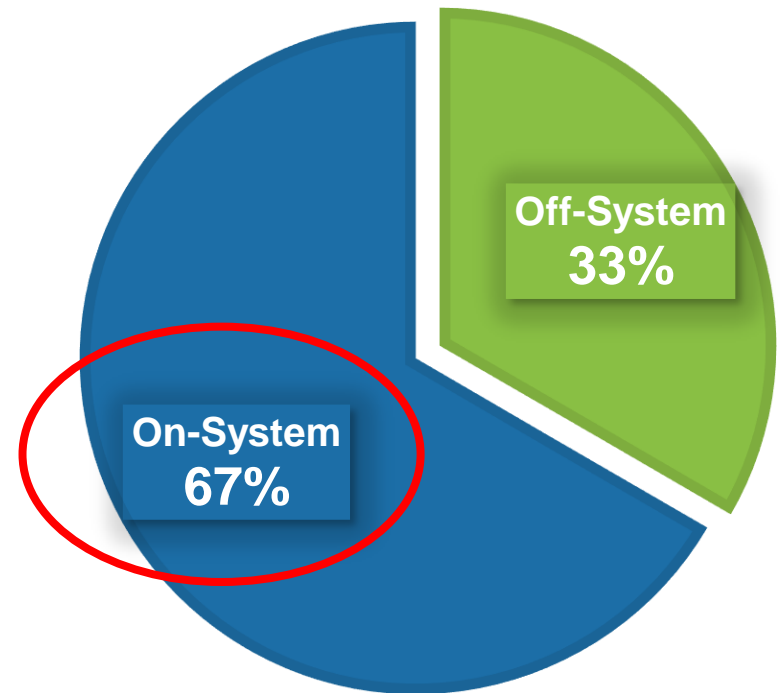
On-System 67%

On-system roadway crashes account for <u>27% of pedestrian and bicycle crashes</u> in the region and <u>67% of all pedestrian and bicycle fatalities.</u>

Programs and Projects

Education and Training

Designing for Pedestrian Safety Workshops

- NCTCOG hosts workshops for engineers and transportation planners
- TxDOT, City Staff, Transportation Agencies
- Case study site visit exercises

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Education and Training

Road Safety Audit for Pedestrian Safety

- Collaboration between City of Dallas, Dallas County, Dallas Area Rapid Transit (DART), NCTCOG and FHWA

- Area with large transit dependent population

- Agencies now collaborating on a Complete Streets project

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TxDOT Research Program (19-72)

Research and Technology Implementation Division

North Texas Pedestrian Crash Analysis

Technical Objectives

1. **Code five years of bicycle and pedestrian crash reports** for the 12-county North Central Texas Metropolitan Planning Area using the methodology developed by the National Highway Traffic Safety Administration for the Pedestrian and Bicycle Crash Analysis Tool (PBCAT).

2. Conduct an analysis to **identify corridors with highly concentrated bicycle and pedestrian crashes** and the unsafe actions that are contributing to the crashes.

3. Provide **safety countermeasures and recommendations** for further study for these corridors.

4. **Review the crash narrative/diagram** as part of the coding process to understand the true nature concerning the cause of the crash.

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Regional Pedestrian Safety Action Plan

12 County Regional Plan

- Demand analysis and mapping areas with a high propensity to walk,

- Identify corridors and districts of high density of pedestrian crashes,

- Conduct safety assessments in "hot spot" areas of crashes,

- Prepare a guide for best practices and safety countermeasures for the region, and

- Recommended programs and projects.

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Pedestrian and Bicycle Routes to Rail Stations

Distance and gaps in the actual "Routes" to stations (walksheds)

nctcog.org/RoutesToRail
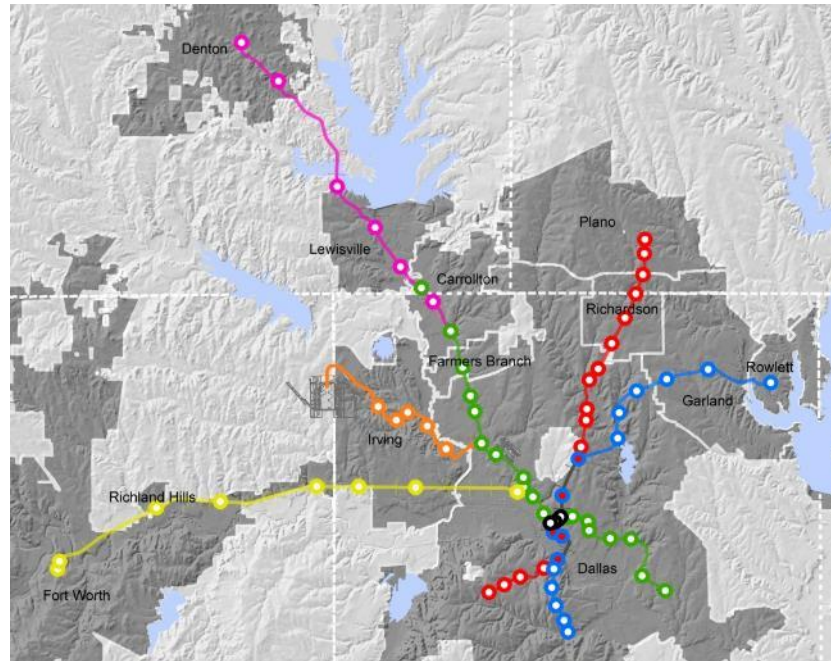
"A true walkable radius does not typically exist."

Rail Station — Barriers and Gaps in the Network — Destination

0.5 mile *actual* walk distance

0.5+ mile

Disconnected pedestrian facility

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16
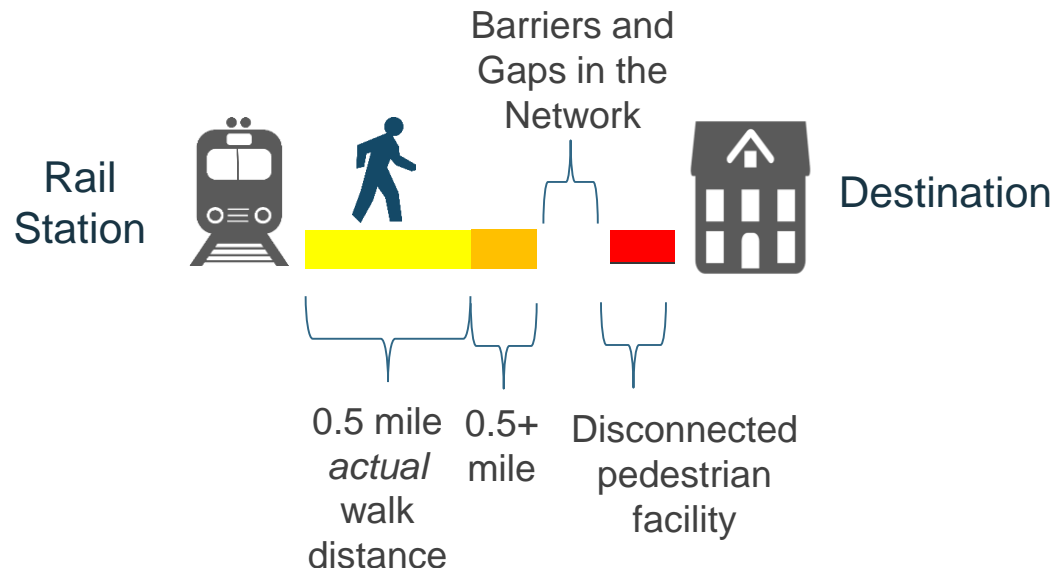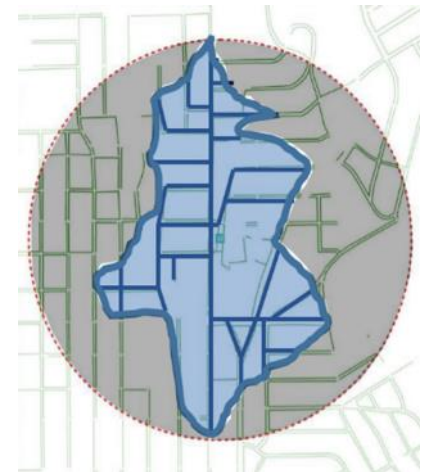
Facility Disconnected From Network

S. Denley Dr.

E. Illinois Ave.

© 2015 Google
© 2015 Google
© 2015 Europa Technologies

Google earth

4 ft

Poor Design for Access to Transit

Pedestrian Routes to Rail - Illinois Station

nctcog.org/RoutesToRail

Data Collection
– Sidewalk Gaps & Verification

Legend
- Sidewalk
- Sidewalk Gap
- Unacceptable Sidewalk Condition

VA Medical Center Station

LookOutTexans.org

North Central Texas Regional TAP Call for Projects (2017)

Safety-related projects typically score well in multiple categories.

nctcog.org/TAP

Transportation Alternatives Set-Aside Program Application Evaluation Categories (2017)	Scoring (Maximum Points)
Regional Network Connectivity (Completing the Gaps)	25
Mobility (Connections to Transit)	20
Safety (Improves Safety, Facilities for All Ages & Abilities)	15
Reducing Barriers (Safe Crossings of existing travel obstacles)	10
Congestion Reduction	10
Destination Density	5
Air Quality Benefits	5
Equity (Serving Environmental Justice Areas)	5
Local Network Connectivity	5
Total	**100**

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Kevin Kokes, AICP
Principal Transportation Planner
kkokes@nctcog.org
(817) 695-9275

nctcog.org/bikeped