

Unwelcome Trends in Pedestrian Fatalities: What the Data Tell Us About the Problem and Opportunities to Address It

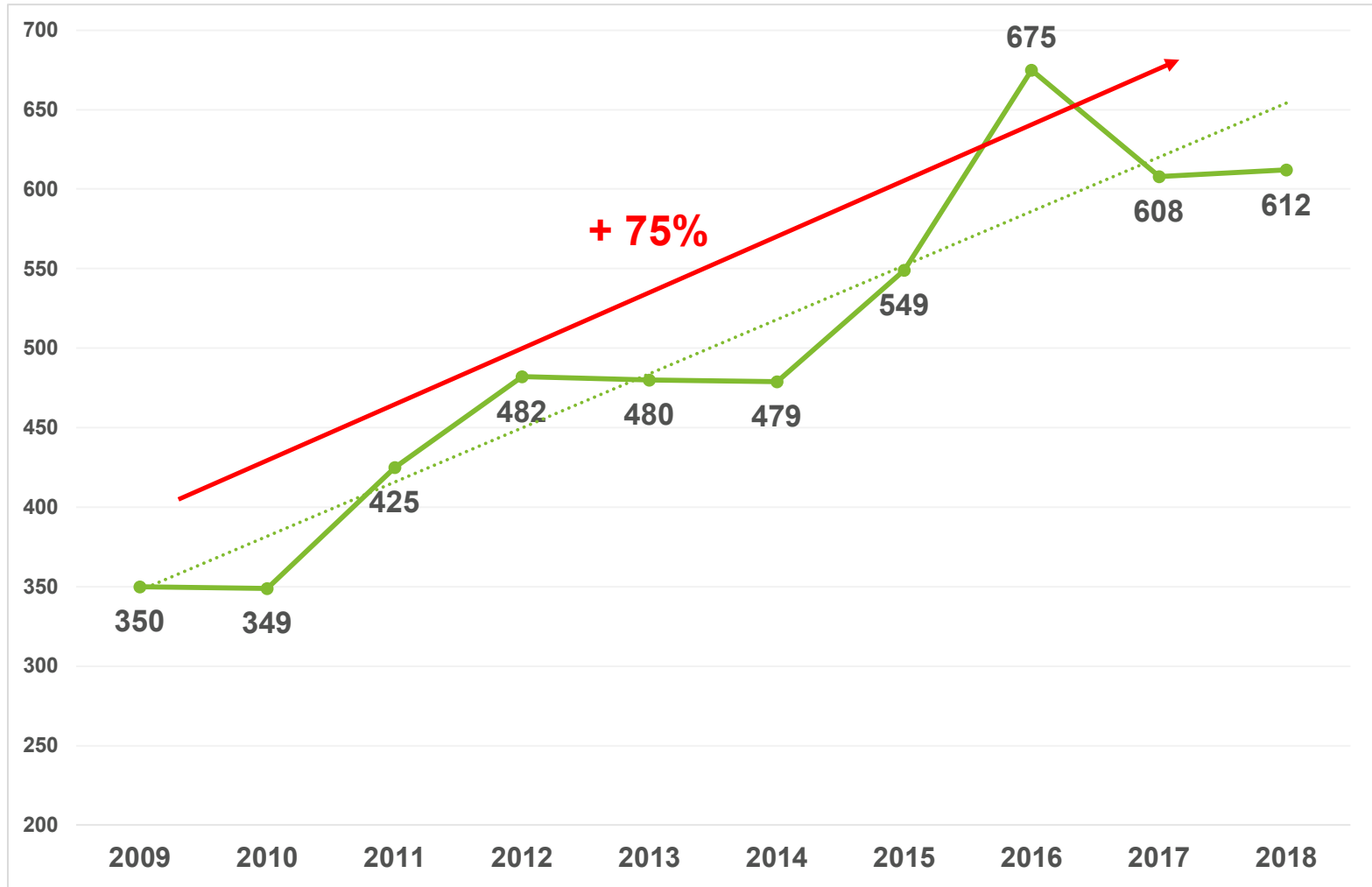
Texas Pedestrian Safety Forum
August 6, 2020



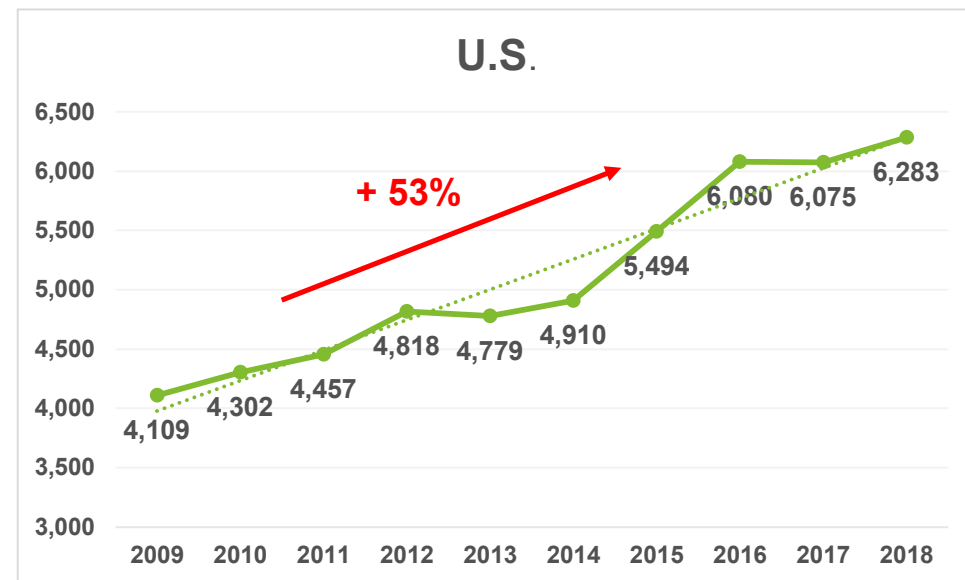
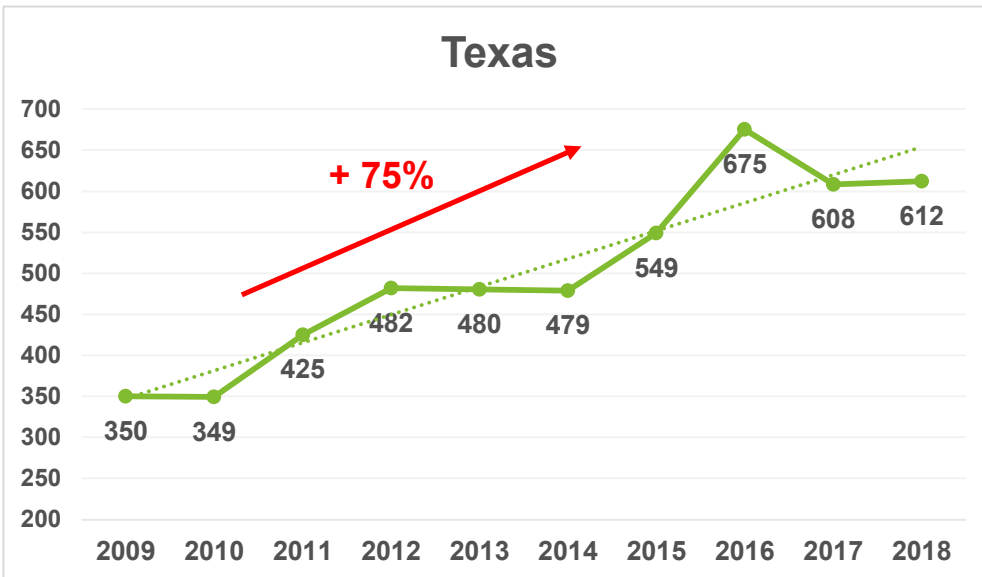
Richard Retting
Sam Schwartz Consulting

What Have the Past 10 Years Looked Like?

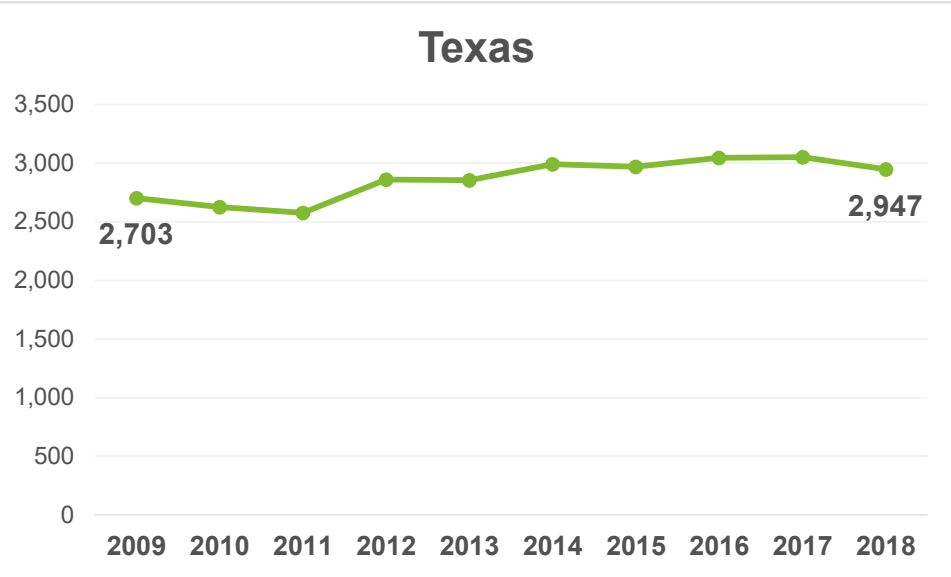
Number of Texas Ped Fatalities: 2009-2018



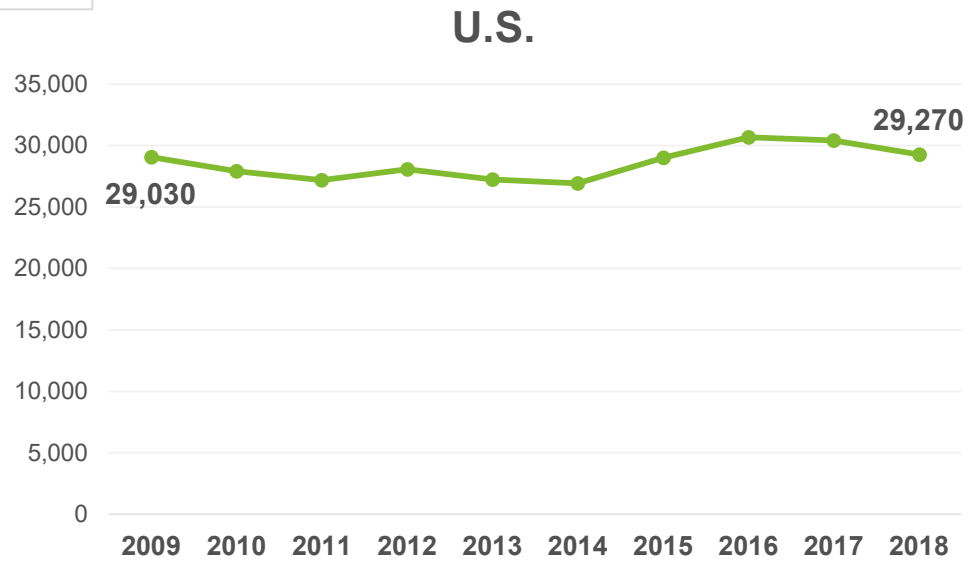
Number of Pedestrian Fatalities: 2009-2018



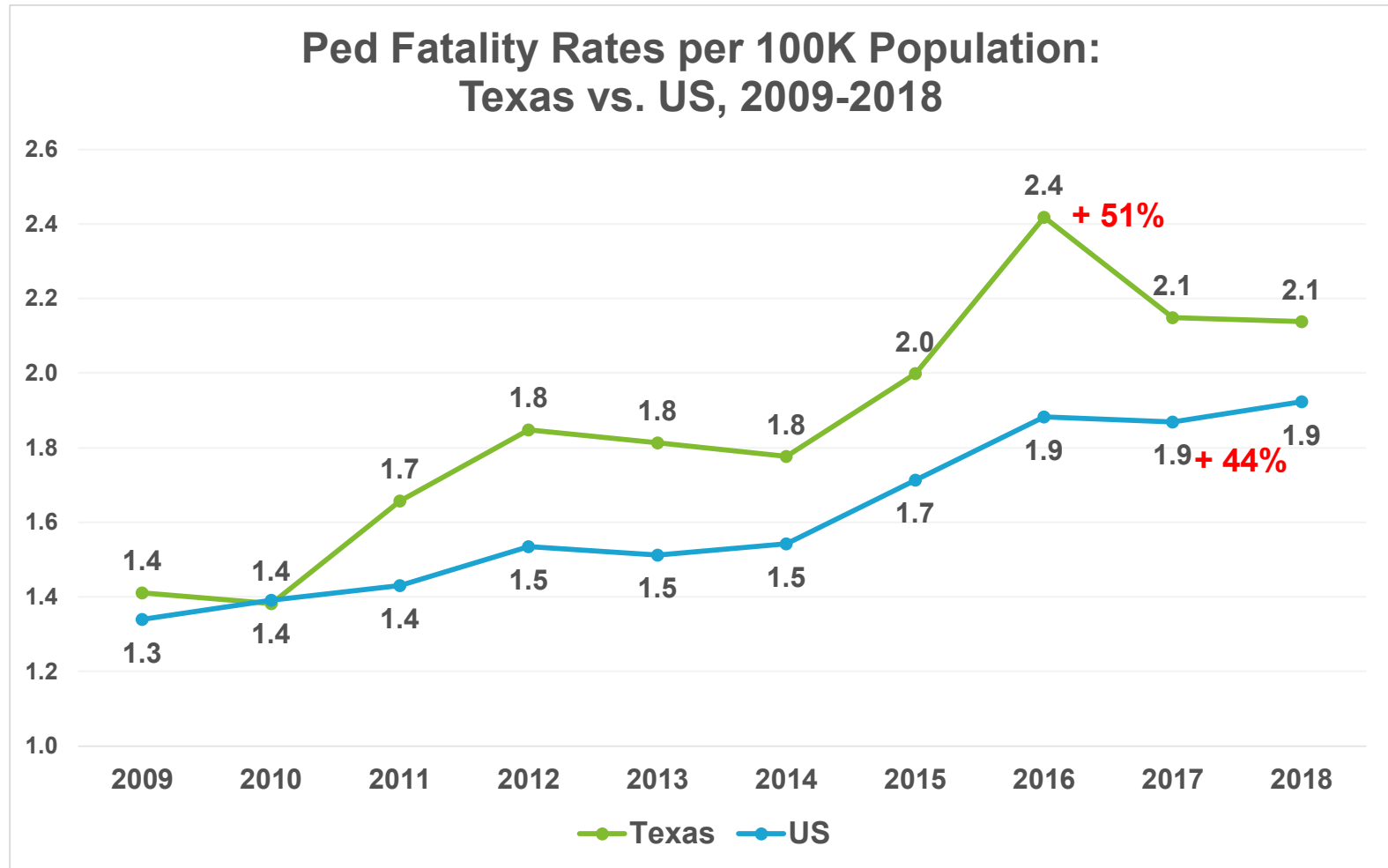
Increases in Ped Fatalities Not Reflective of Overall Traffic Fatality Trends



Number of Occupant Fatalities: 2009-2018

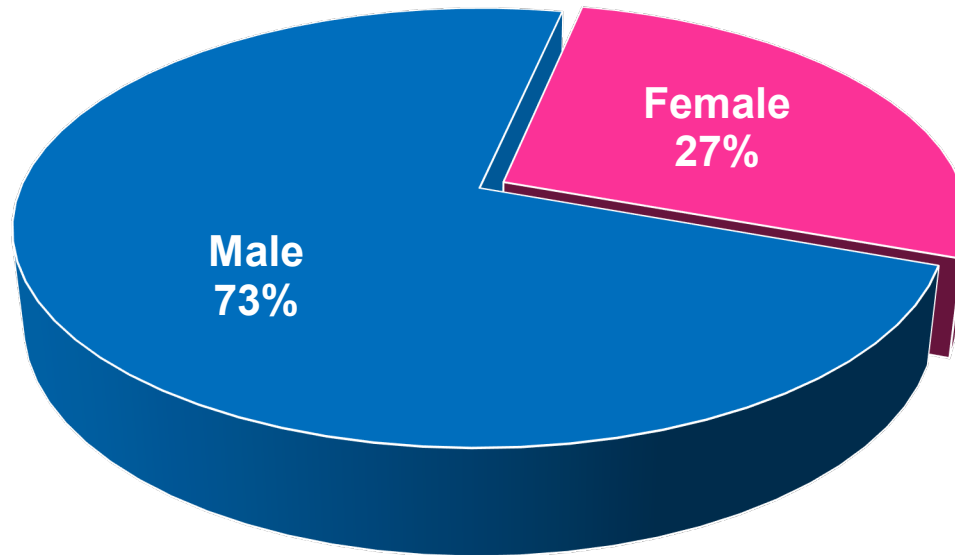


Increases in Ped Fatalities Not Simply Due to Population Growth

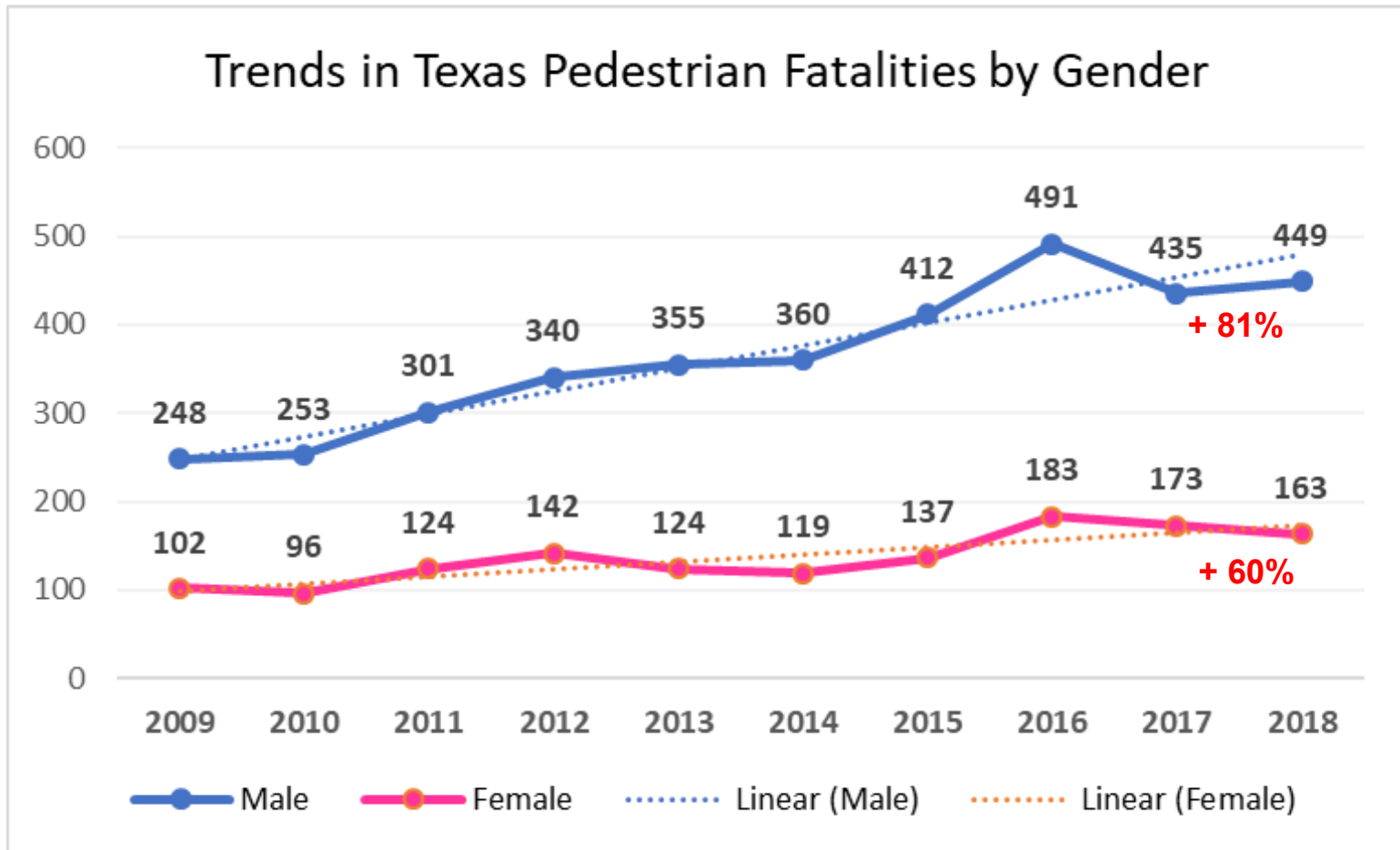


Predominantly a Male Problem

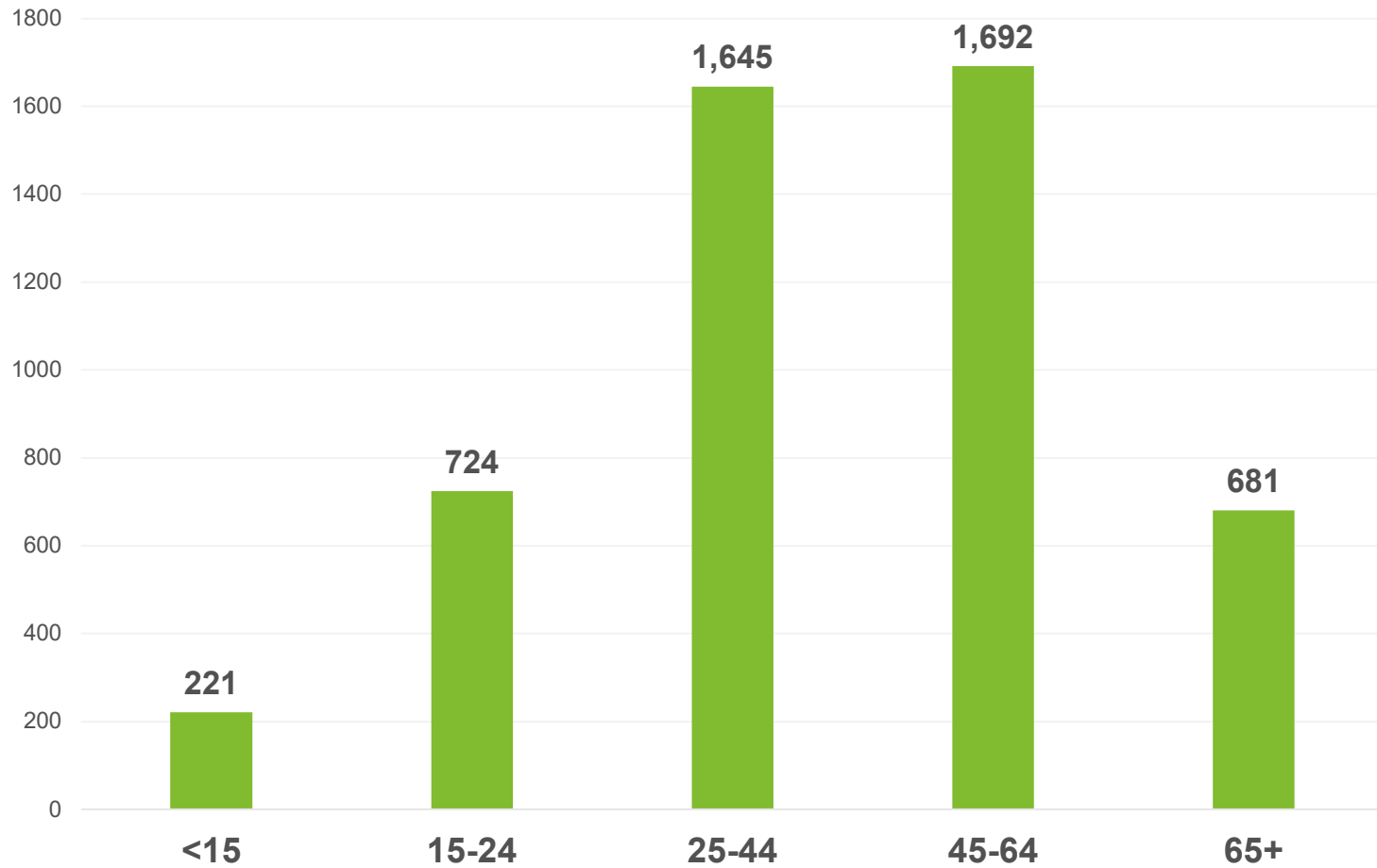
**Texas Pedestrian Fatalities by Gender:
2009-2018**



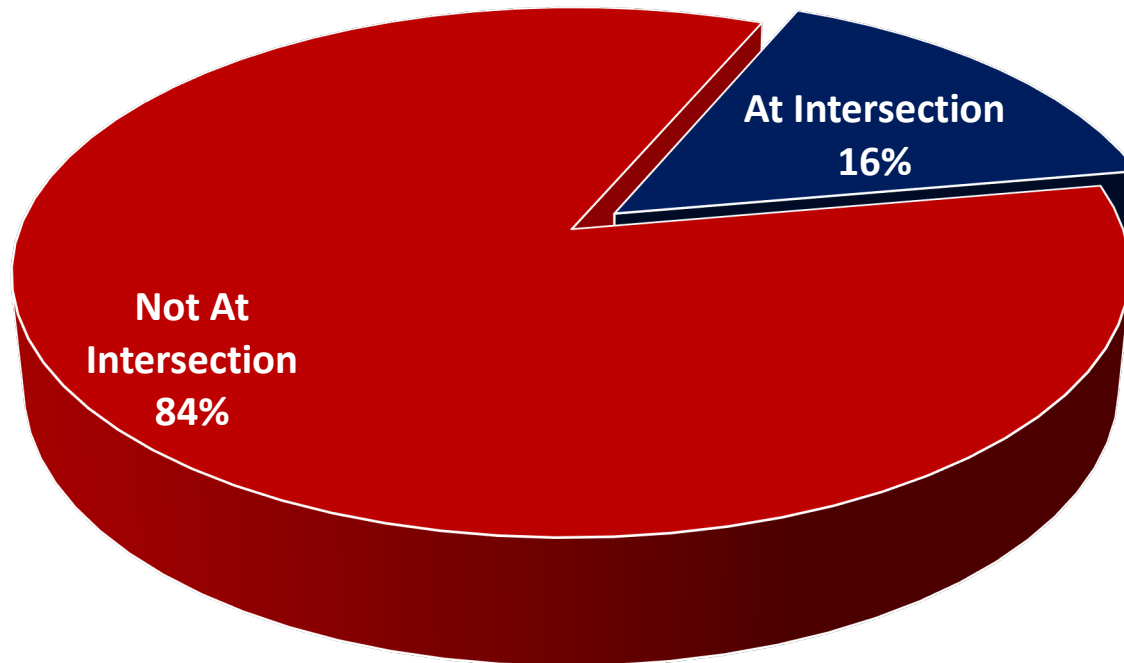
Texas Male Ped Fatalities: Growing at Faster Pace than Females



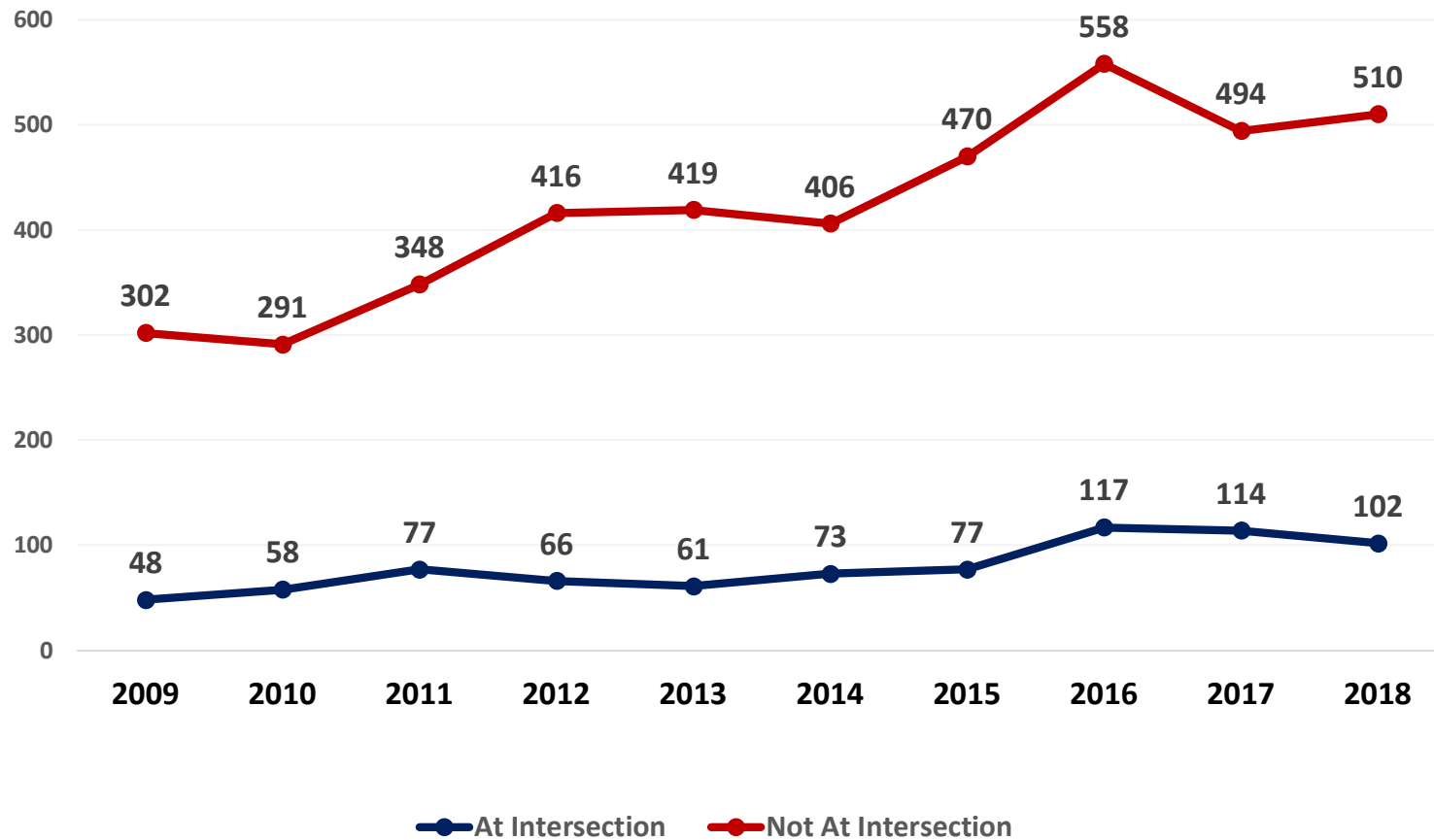
Texas Pedestrian Fatalities by Age: 2009-2018



Percent of Texas Ped Fatalities by Relation to Intersection: 2009-2018

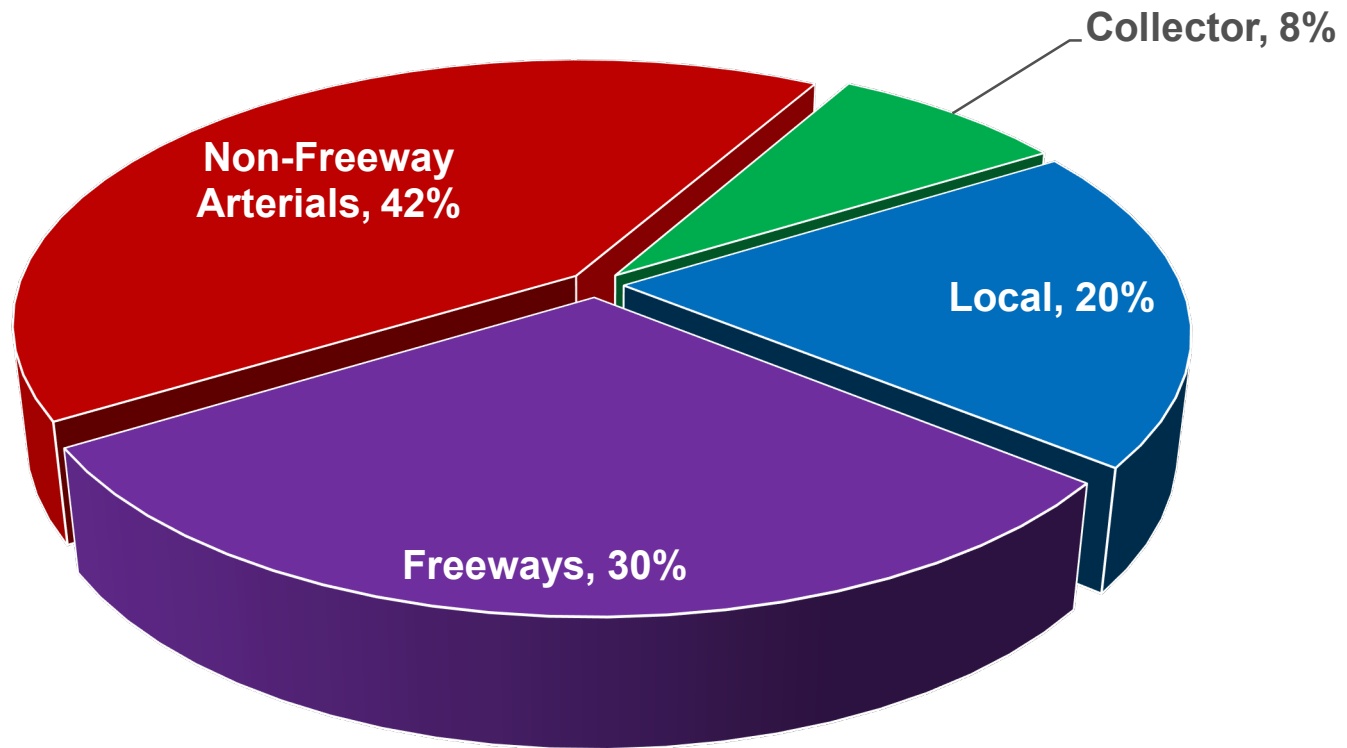


Trends in Texas Ped Fatalities by Relation to Intersection



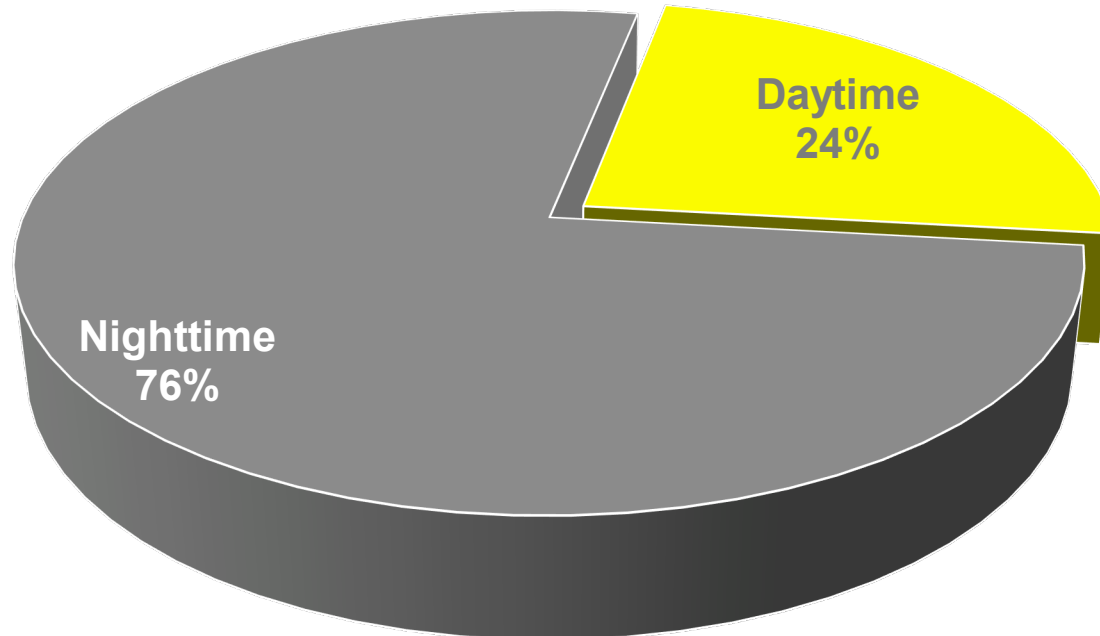
72% of Texas Ped Fatalities Occur on Arterials and Freeways

**Texas Ped Fatalities by Roadway Function Class:
2009-2018**



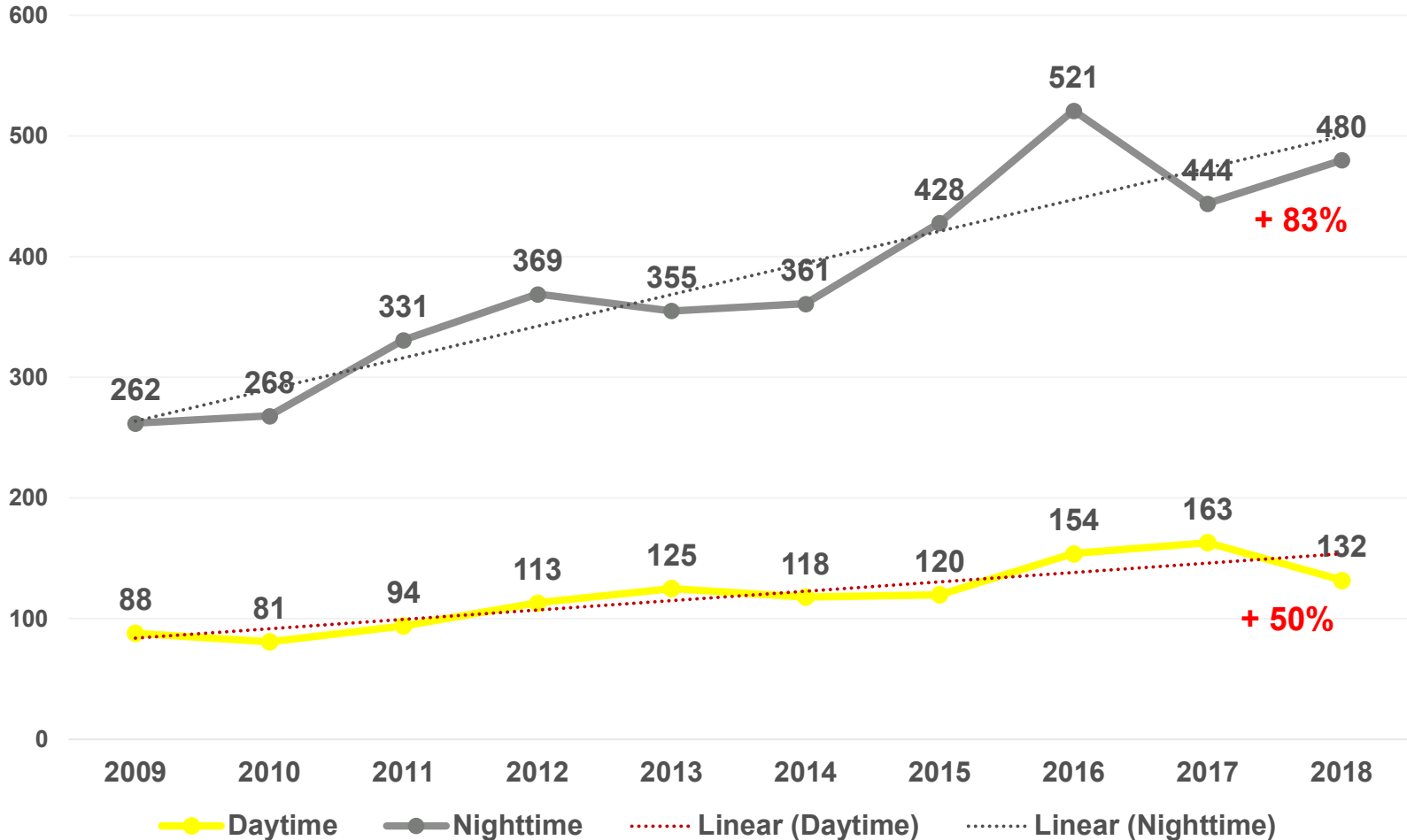
76% of Texas Ped Fatalities Occur at Night

**Percent of Texas Ped Fatalities by Time of Day:
2009-2018**



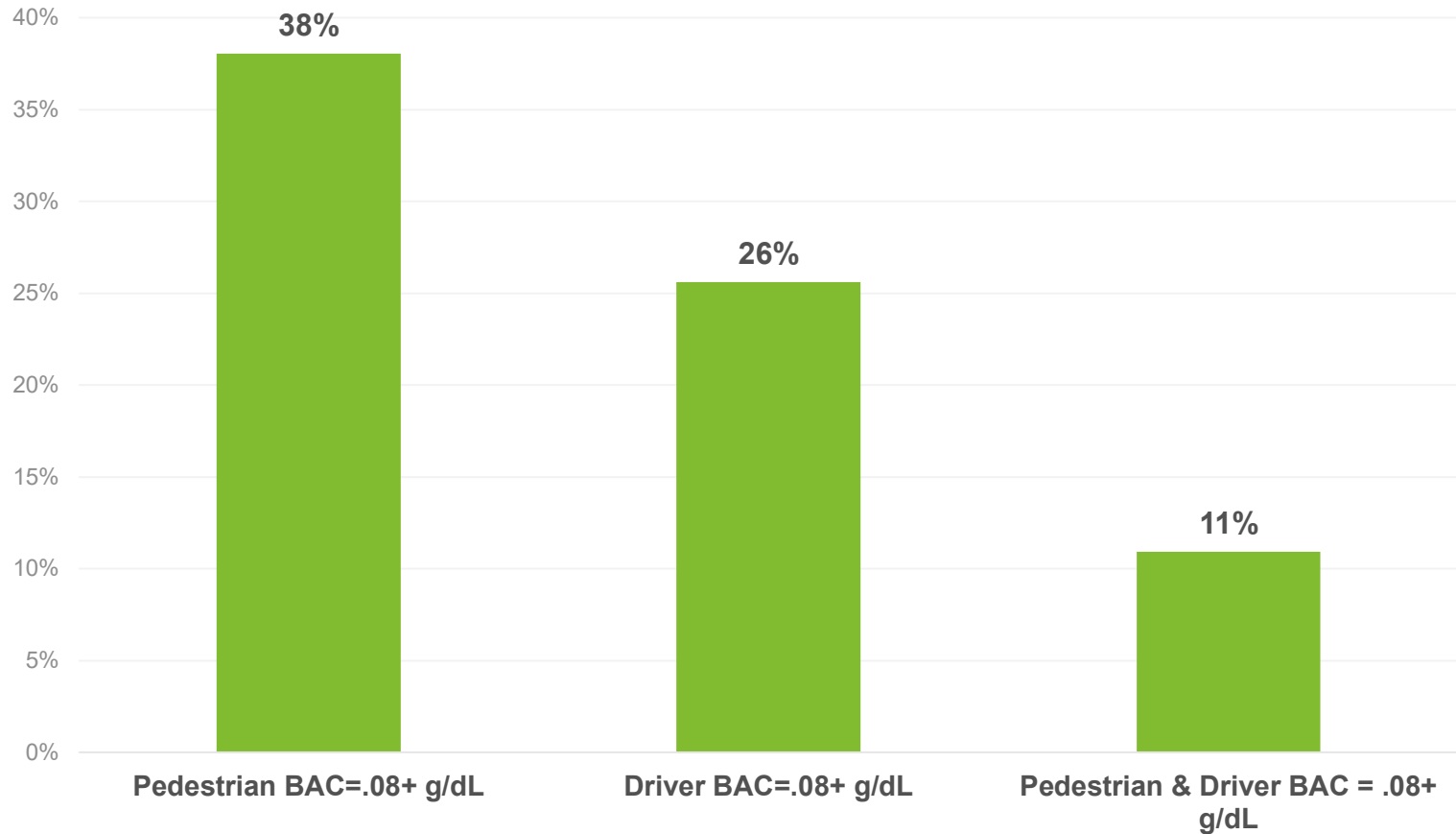
Texas Nighttime Ped Fatalities: Growing at Faster Pace than Daytime

Texas Ped Fatalities by Time of Day: 2009-2018

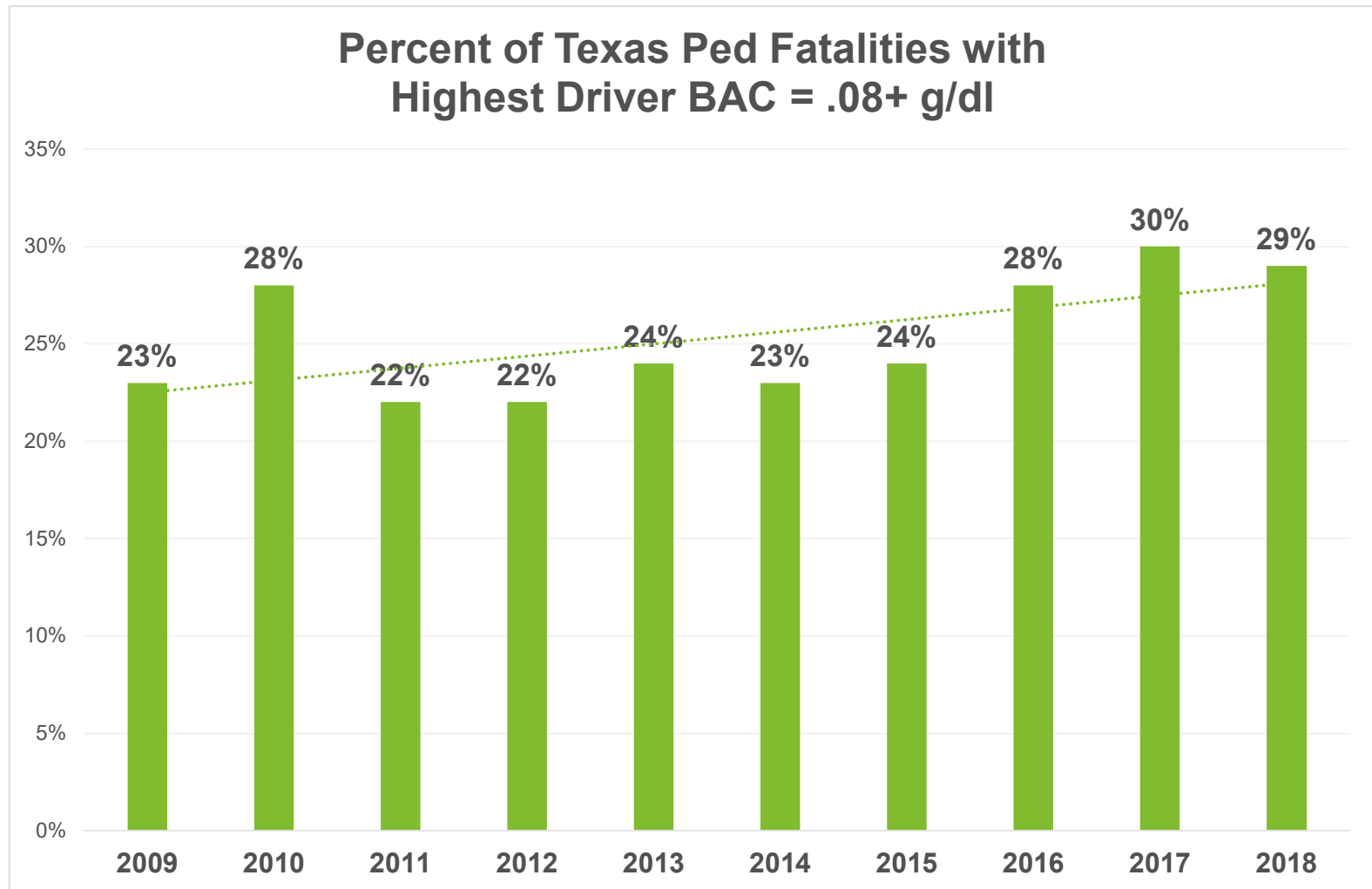


Houston....We Have an (Alcohol) Problem

% of Crashes that Resulted in Pedestrian Fatalities by High BAC Involvement: Texas 2009-2018

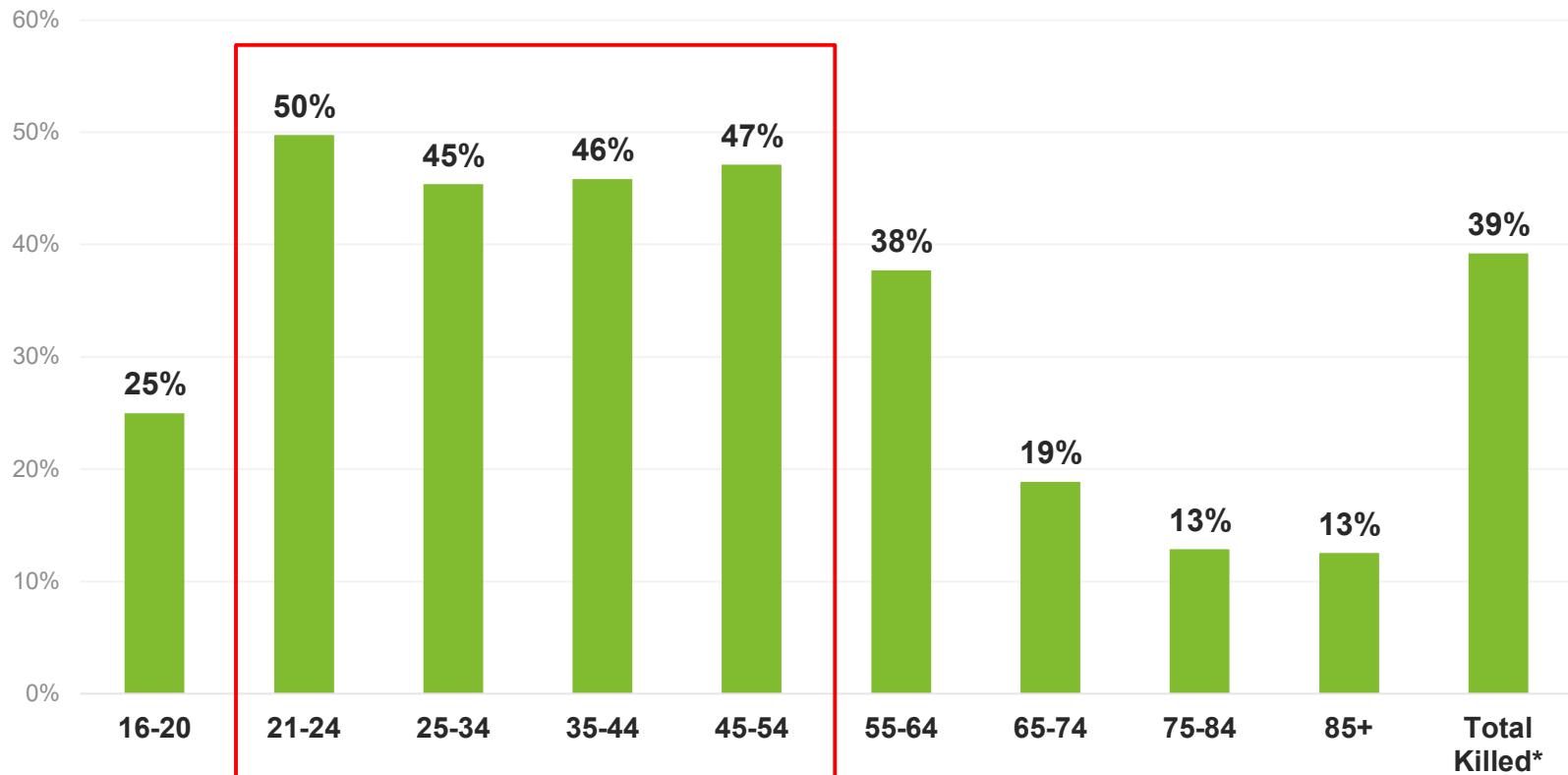


Percent of Fatal Ped Crashes Involving Intoxicated Drivers in Growing



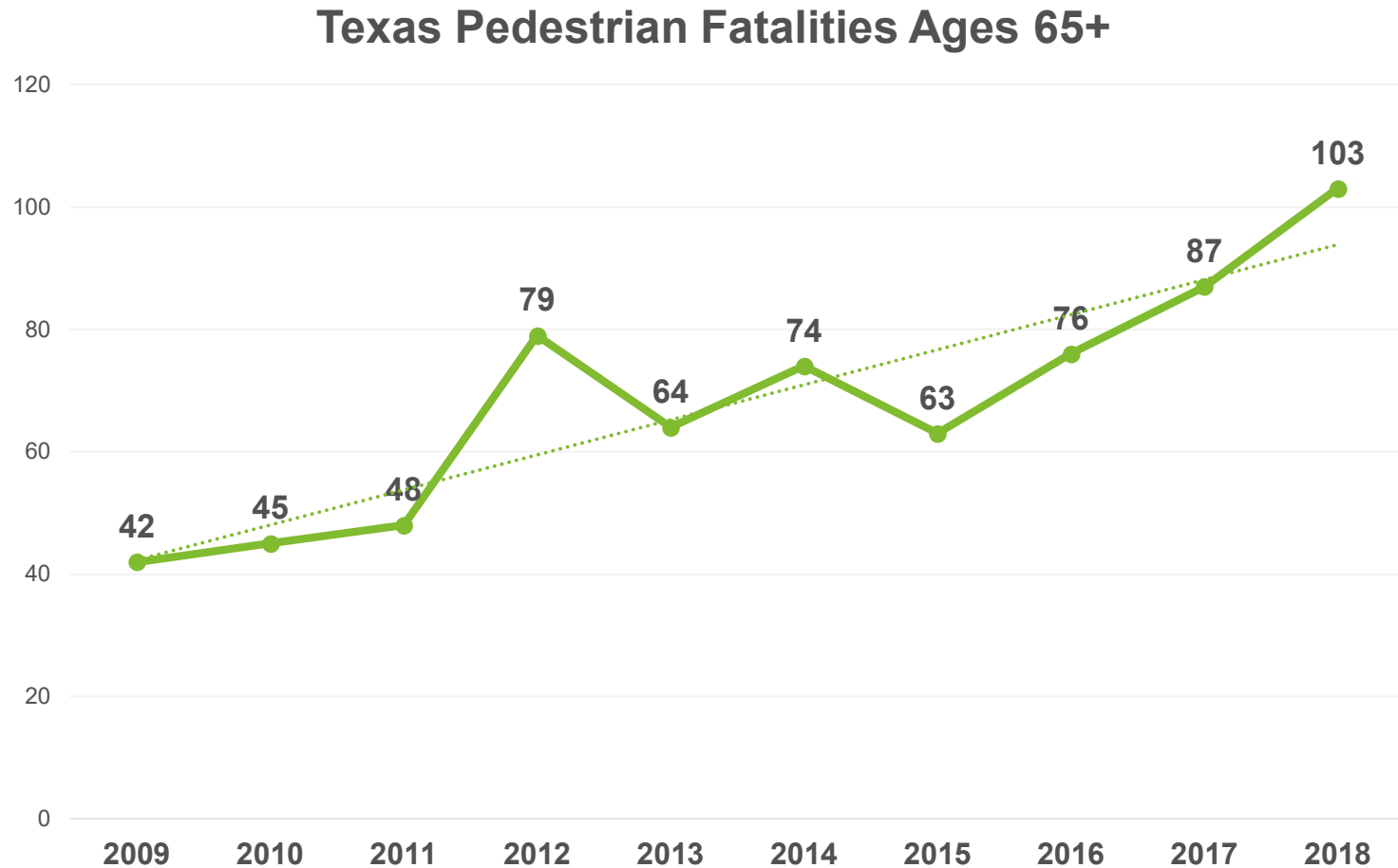
Alcohol Impairment Especially Prevalent Among Pedestrians < 55 Years of Age

**% of Pedestrian Fatalities with BAC = .08+ g/dl
by Age Group: Texas 2009-2018**



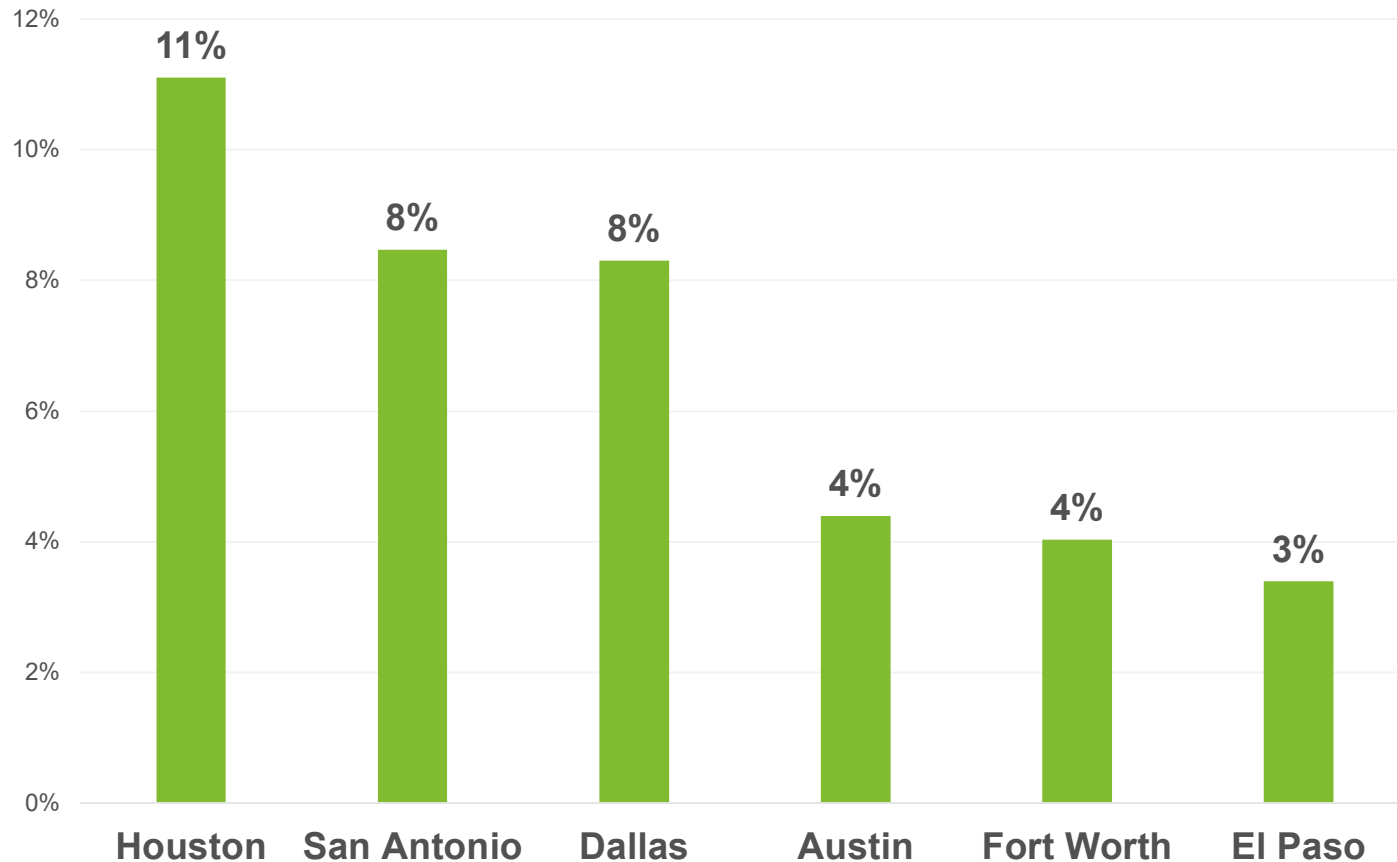
* Excludes pedestrians < 16 and those of unknown age

Texas Ped Fatalities: Growing Fastest for 65+ Age Group



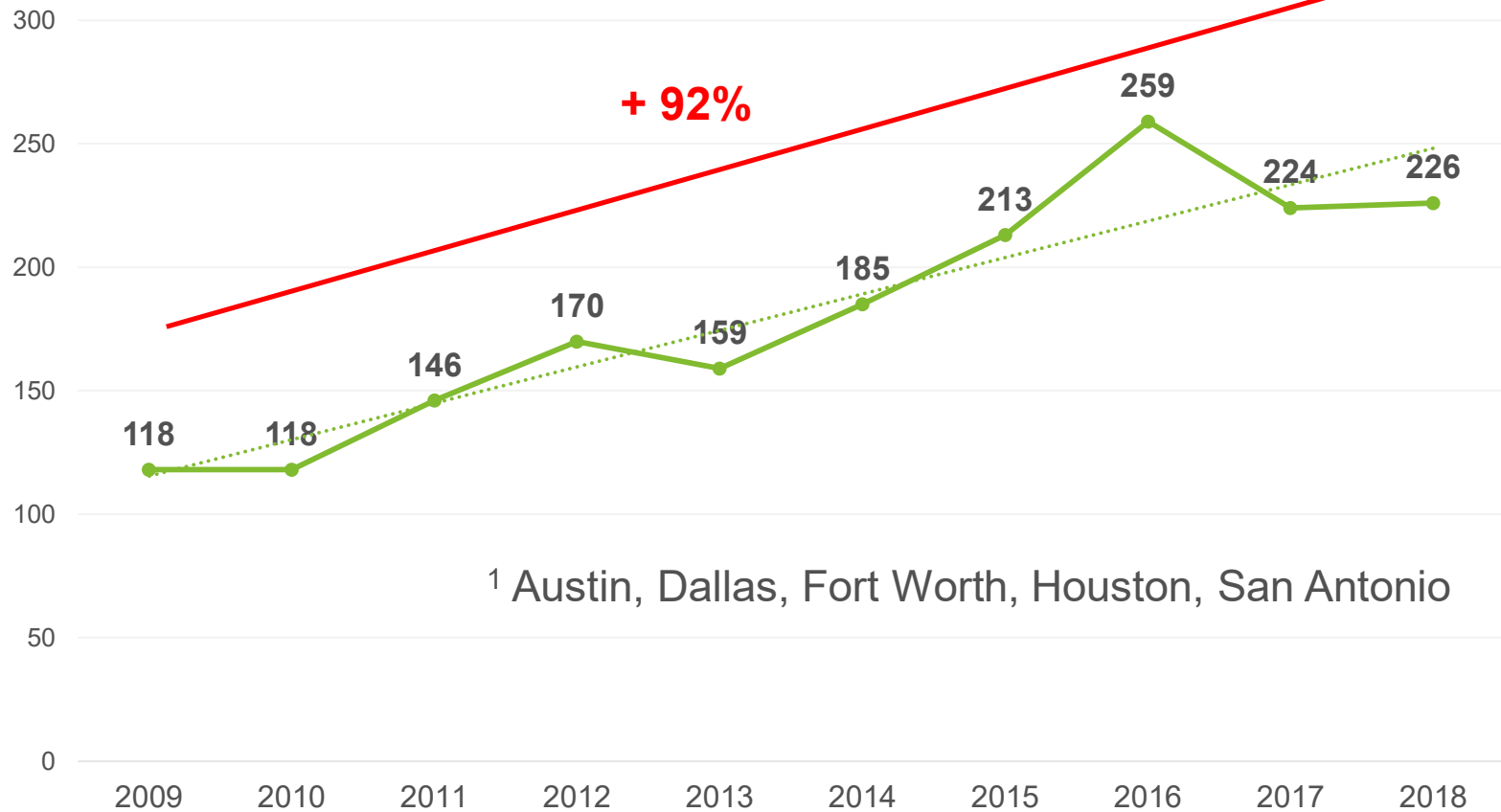
40% of Texas Ped Fatalities Occur in Six Cities (which account for 27% of Texas Population)

**% of Statewide Ped Fatalities for Largest Cities:
2009-2018**



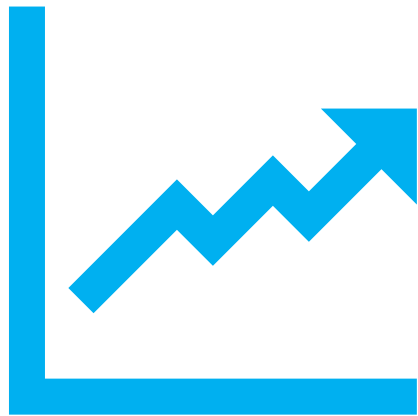
What About Trends in Vision Zero Cities?

Number of Ped Fatalities in Texas Vision Zero Cities¹: 2009-2018



¹ Austin, Dallas, Fort Worth, Houston, San Antonio

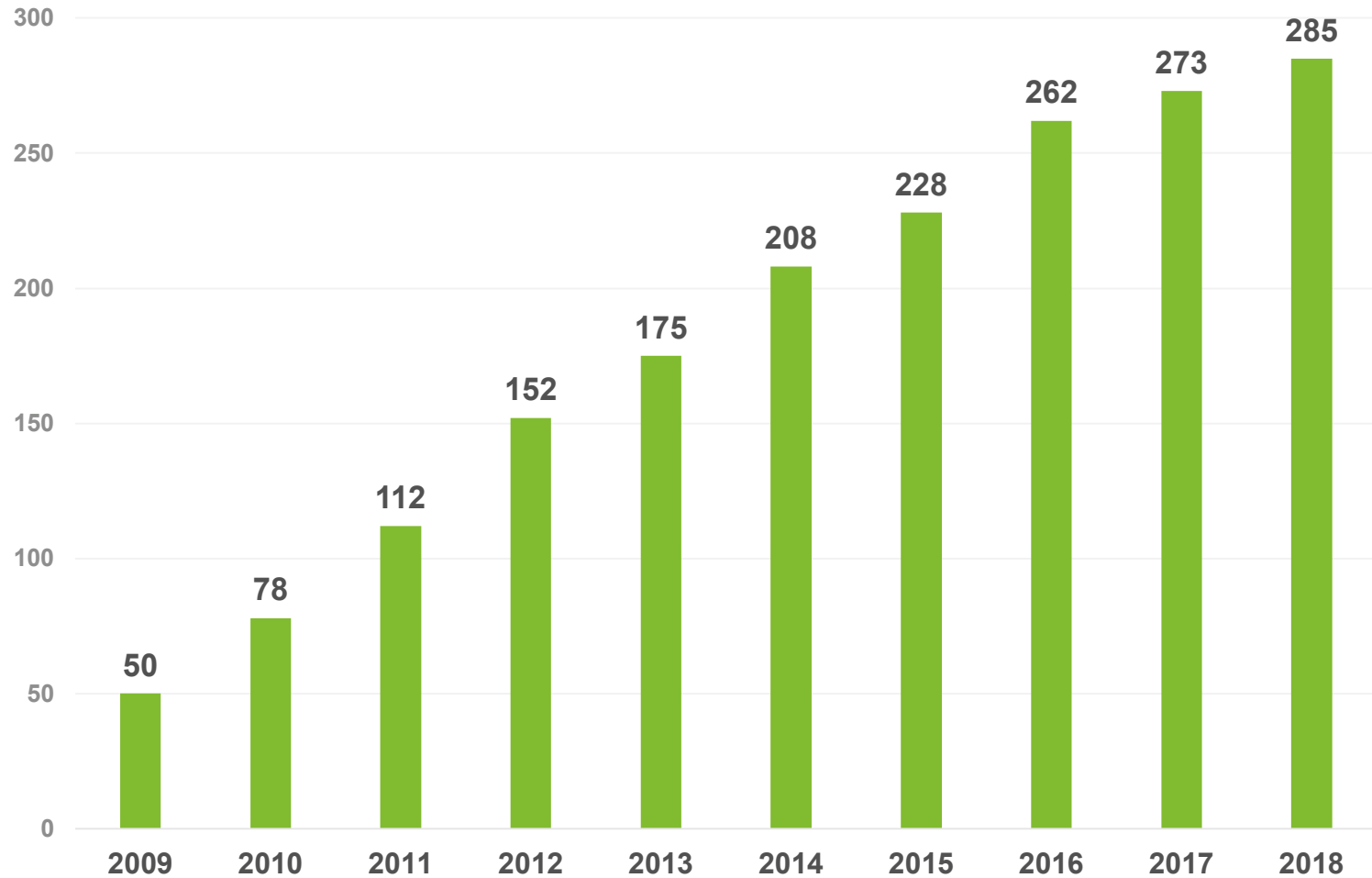
Why Have Pedestrian Fatalities Grown Dramatically Since 2009?



2009 Saw the Dawn of Electronic Devices that Cause Road User Distraction



Number of Smartphones in Use In Millions



Other Potential Factors?

- Increased market share for Light Trucks/SUVs
- Warmer winter temperatures (increased amount of time people spend walking?)
- Changes to vehicle headlight systems?
- Distracting vehicle dashboard displays?
- Increased access to recreational marijuana?
- Others??

Smart Approaches Needed

- Pedestrian safety must be considered on local level, in settings where fatalities and serious injuries occur
- Engage in robust data analyses and field assessments to identify high-risk corridors
- Allocate resources where they are most needed
- Implement evidence-based engineering improvements on a systemic basis
- Must figure out how to address alcohol impairment - a pervasive & persistent problem

Prioritize Use of Proven Engineering Countermeasures

- Pedestrian-hybrid beacons
- Increased street lighting
- Landscaping that discourages midblock crossing
- Curb extensions
- Pedestrian refuge islands
- Rectangular rapid flashing beacons
- Sidewalks and other measures to provide separation between pedestrians and vehicles
- Safe Systems Approach

Targeted High-Visibility Law Enforcement

- Impaired driving and public intoxication along high-crash corridors
- Text messaging in high-risk areas (Texas enacted primary law in 2017 banning wireless devices for electronic messaging while driving - texting as well as reading/writing email)
- Targeted speed enforcement (speed cameras are a very effective supplement to traditional enforcement, but not viable in current political climate)

Conclusion

- Rapid rise in Texas pedestrian deaths
- Not exactly sure why; potential factors identified
- Achieving Vision Zero goals requires a focus on **evidence-based** engineering measures
- Major areas of focus should include:
 - Arterials
 - Midblock
 - Nighttime
 - Alcohol impairment
 - Large cities