

# Speed dominates collision causes in Pinellas County Vision Zero Analysis

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SAFE  
STREETS  
PINELLAS

# Vision Zero

Vision Zero recognizes that humans make mistakes and therefore the transportation system should be designed to minimize the consequences of human error.

The Vision Zero approach is fundamentally different from the traditional traffic safety approach in American communities in six keyways.

- 1 Reframes traffic deaths as **preventable**.
- 2 Integrates **human failing** into the approach.
- 3 Focuses on preventing **fatal and severe crashes** rather than eliminating all crashes.
- 4 Aims to establish **safe systems** rather than relying on individual responsibility.
- 5 Applies **data driven** decision making.
- 6 Establishes road safety as a **social equity issue**.



# Why this matters!

**SPEED IS A FUNDAMENTAL PREDICTOR OF CRASH SURVIVAL.**

IF HIT BY A PERSON DRIVING AT

**20  
MPH**



DEATH RISK  
**10%**

**30  
MPH**



DEATH RISK  
**50%**

**40  
MPH**



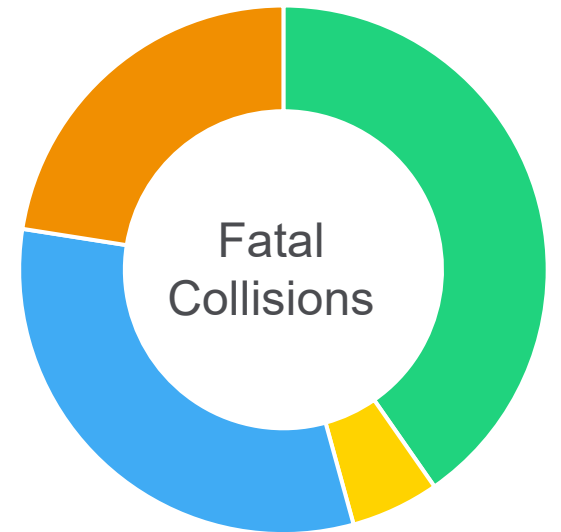
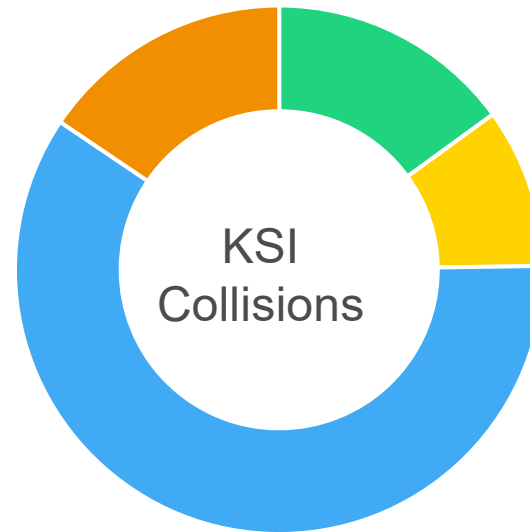
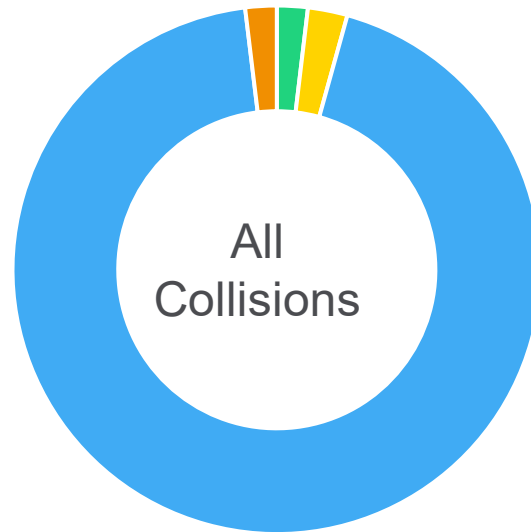
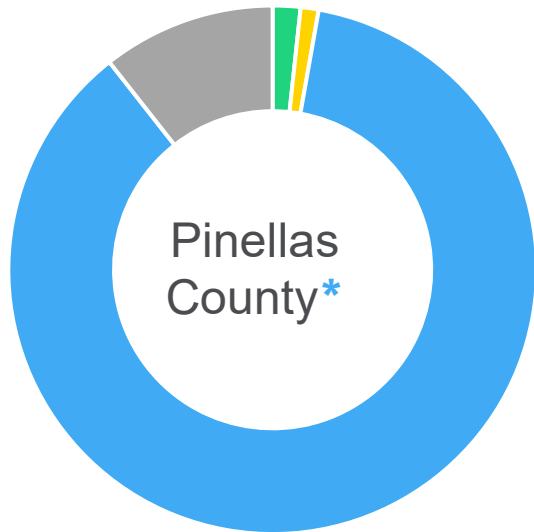
DEATH RISK  
**90%**

On average, 2 people are killed or severely injured in collisions each day in Pinellas County.



# Mode Split

Pinellas County, 9/2014-8/2019



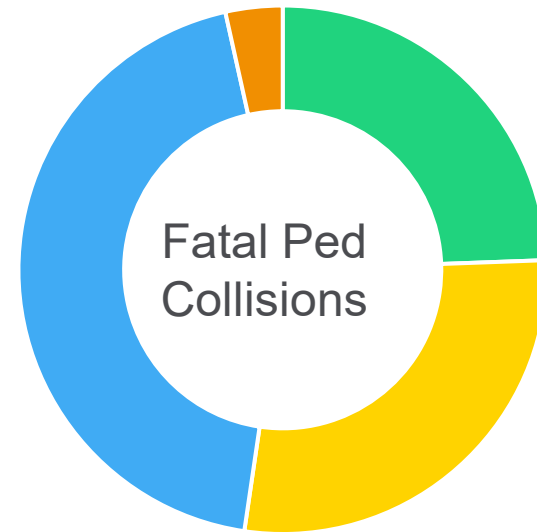
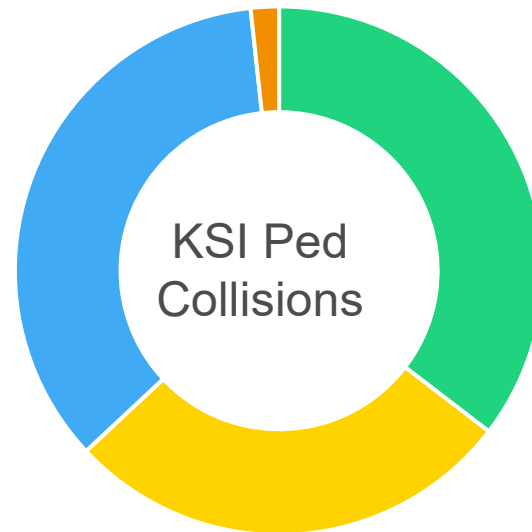
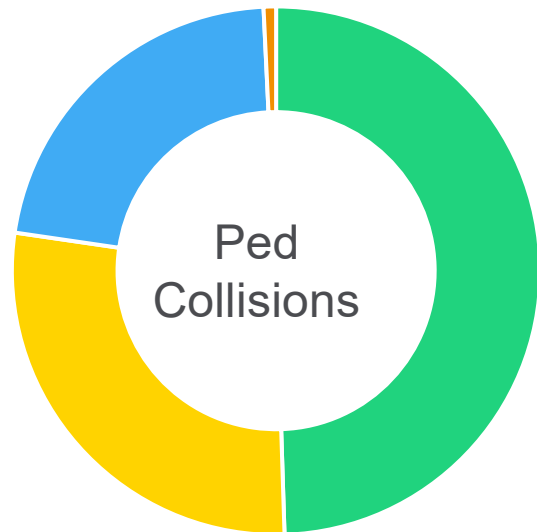
\* 2017 ACS, Means of Transportation to Work

Auto & Other    Bicycle    Pedestrian    Motorcycle    All others



# Speed Limits

Pinellas County, 9/2014-8/2019



25mph or lower

30-35mph

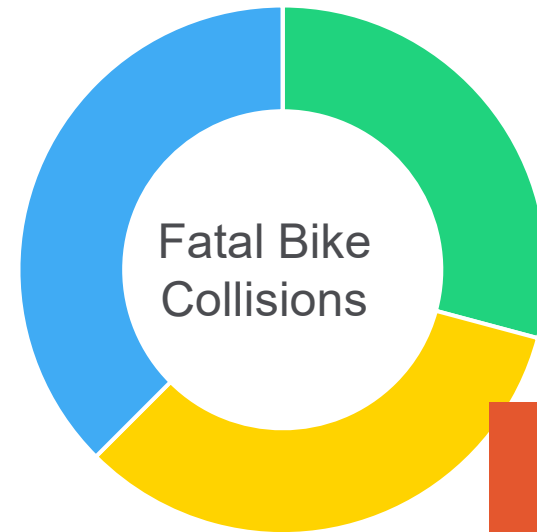
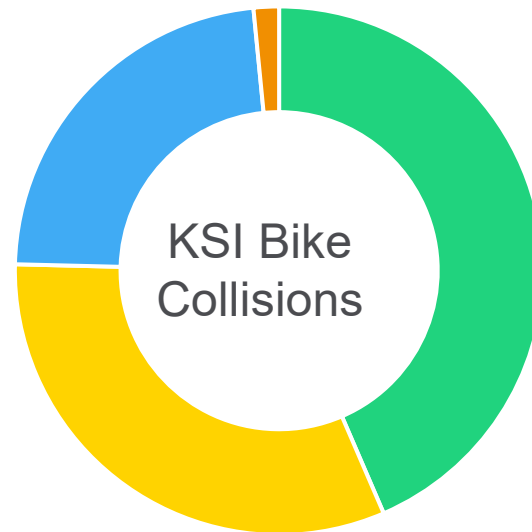
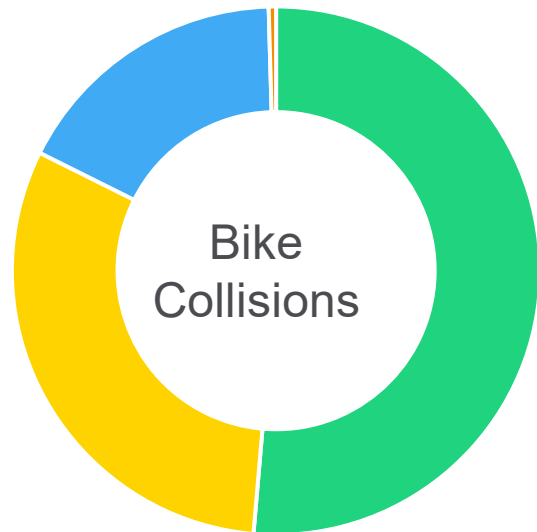
40-45mph

50mph or higher



# Speed Limits

Pinellas County, 9/2014-8/2019



Small sample size (n=4)

25mph or lower

30-35mph

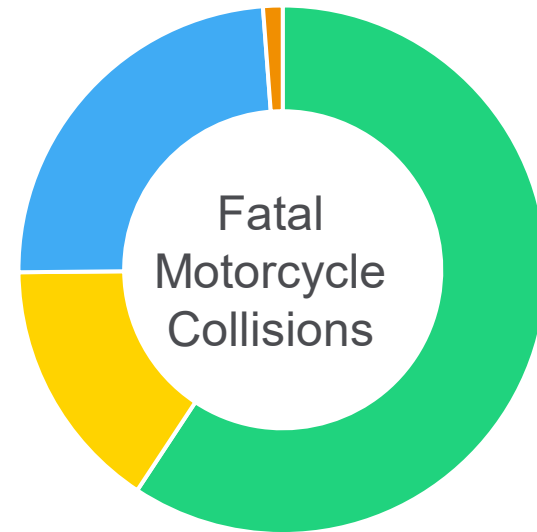
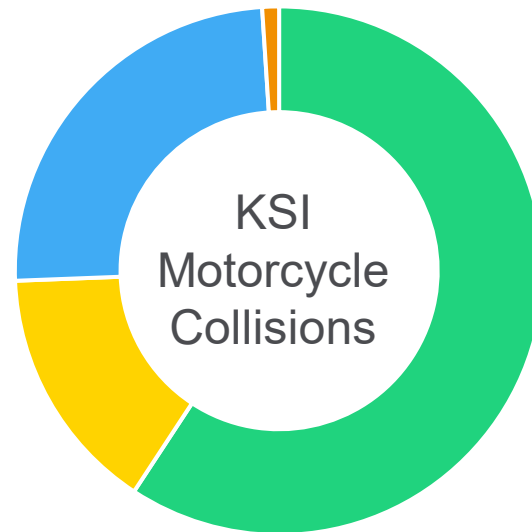
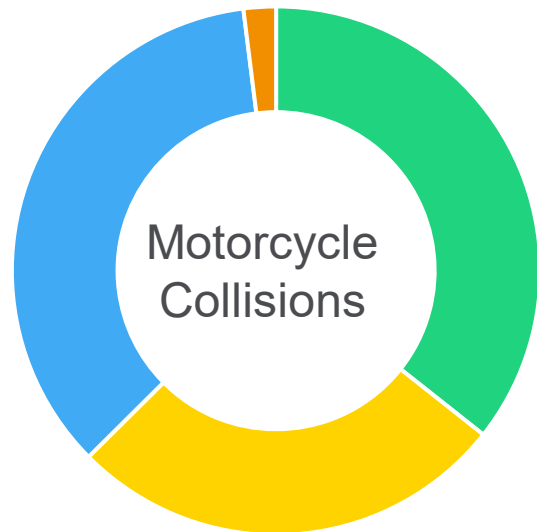
40-45mph

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# Speed Limits

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# Telling Our Story

**Collision Analytics**

This map shows the locations of KSI collisions that involved vulnerable roadway users (vulnerable roadway users typically include **pedestrians**, **bicyclists**, and **motorcyclists** as they are not protected by a vehicle), as well as automobile-only collisions (in white) where a person was killed or severely injured.

This data will then be used to develop the high injury network. The purpose of the high injury network is to

- identify where crashes occur
- repeatedly, so further analysis and the deployment of countermeasures
- to reduce KSI collisions can be prioritized.

Feel free to explore around the map for yourself.

**Concentrated Collisions**

by mode

- Bike
- Motorcycle
- Pedestrian
- Automobile

County of Pinellas, FDEP, Esri, HERE, Garmin, SafeGraph, METI/NASA, USGS, EPA, NPS, USDA | Powered by Esri





# Storymap

<https://storymaps.arcgis.com/stories/6346b01618d04dda8623aabb3a1075be>

 Collision Analytics



**SAFE  
STREETS  
PINELLAS**

## Collision Analytics

June 10, 2020



# Listening to the Community -Crowdsource

<https://apps.fehrandpeers.com/safestreetspinellasCLOSED/>

FORWARD PINELLAS Safe Streets Pinellas InteractiveWebmap

Find address or place

Safe Streets Pinellas Feedback Dashboard

An interactive mapping tool by Fehr & Peers

SAFE STREETS PINELLAS

Instructions

Skip Instructions

Place a Comment

Holiday

Palm Harbor

Citrus Park

Oldsmar

Safety Harbor

Clearwater

Seminole

Pinellas Park

PINELLAS

Petersburg

Cockroach Preserve Park

301

275

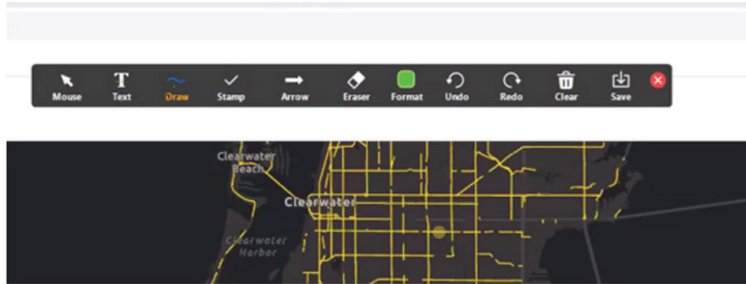
62

- Inadequate or missing bikeways (trails, bike lanes, etc.)
- There isn't enough street lighting
- Drivers go too fast
- Drivers run red lights or stop signs
- Hard to make a left-turn
- Drivers make unsafe turns or lane changes
- Hard to see far enough down the road
- Speed limit is too high
- Drivers do not yield to pedestrians
- Inadequate or missing pedestrian crossings or walkways
- Pedestrian crossing time is not sufficient to cross the street
- Transit stop is difficult to access

SAFE STREETS PINELLAS

# Map Annotation

Stay Safe



Let's go swimming in the Gulf!



Hi!

A screenshot of a web application titled "FORWARD PINELLAS 40% HIN Creation" with the subtitle "Bridging gaps between HIN segments". The application shows a map of Clearwater, Florida, with various colored lines representing different HIN segments. A legend on the right side of the screen lists the following categories and their corresponding colors:

- Link Together The Network (Red line)
- Bicycle Only 40% HIN at 2.2% of the Roadway (Orange line)
- Pedestrian Only 40% HIN at 2.2% of the Roadway (Green line)
- Motorcycle Only 40% HIN at 2.2% of the Roadway (Yellow line)
- Auto Only 40% HIN at 2.2% of the Roadway (Purple line)
- No Predominance 40% HIN at 2.2% of the Roadway (Grey line)

A comment box is open over the map, containing the following text:

Comments:  
Name  
Comment: How much of US 19 do we connect at once?  
Street  
Intersection  
Priority  
Mode

At the bottom of the screen, there is a scale bar and a coordinate display: "82 722 27 952 Degrees".

# Technology Demonstration



## Key highlights

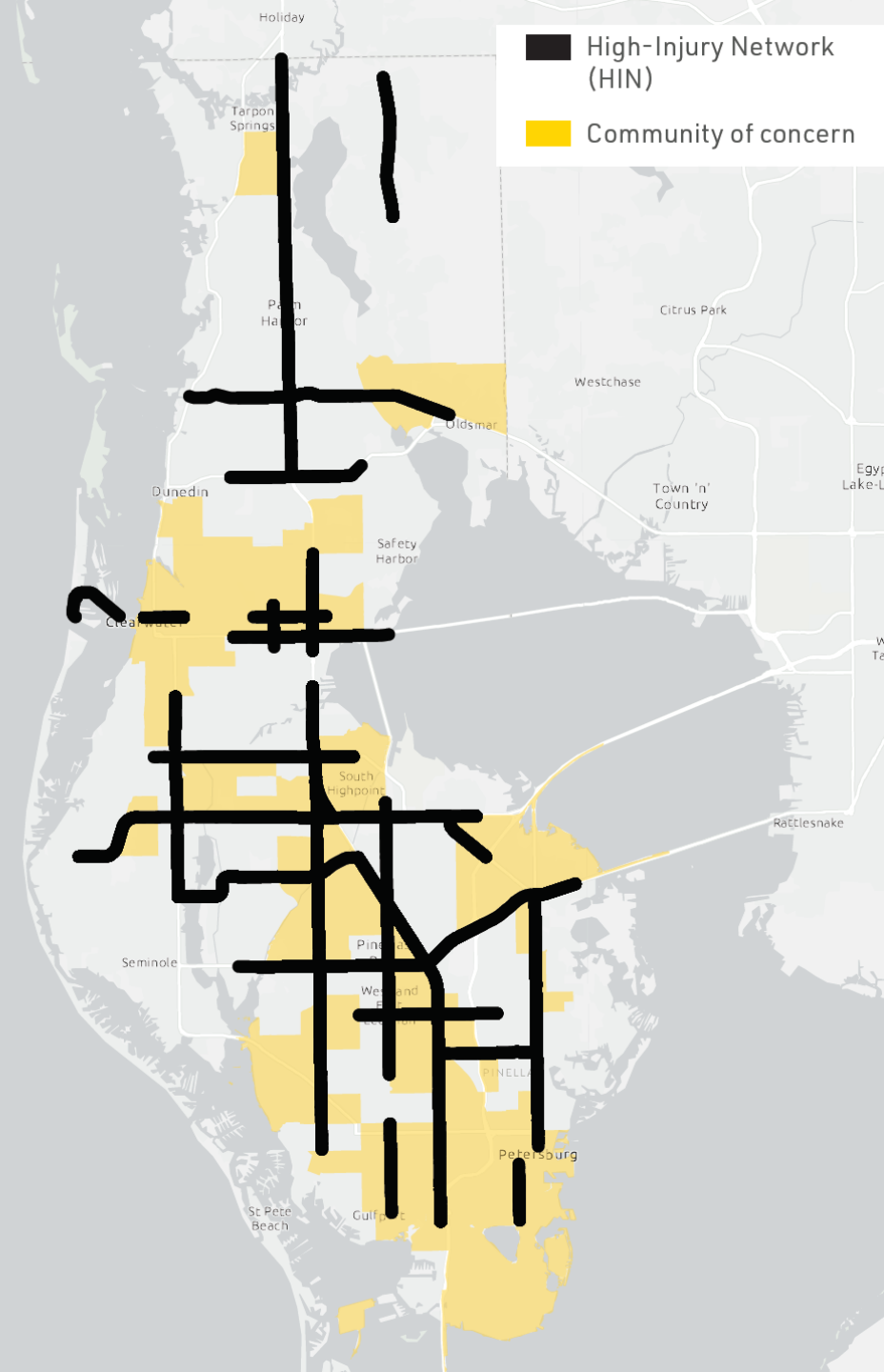
- 360 people driving were observed driving 10 or more mph over the posted speed limit (35 mph for Curlew and 40 mph for Alt Route 19)
- 60 people driving ran a red light
- 61 people walking or bicycling crossed on red
- Over 3,000 potential near-misses were observed

# High Injury Network

The HIN represents approximately 40% of the collisions that resulted in a death or severe injury.

# 73%

of the HIN bounds or runs through a community of concern, even though they only make up **32%** of the county's area



# High Injury Network

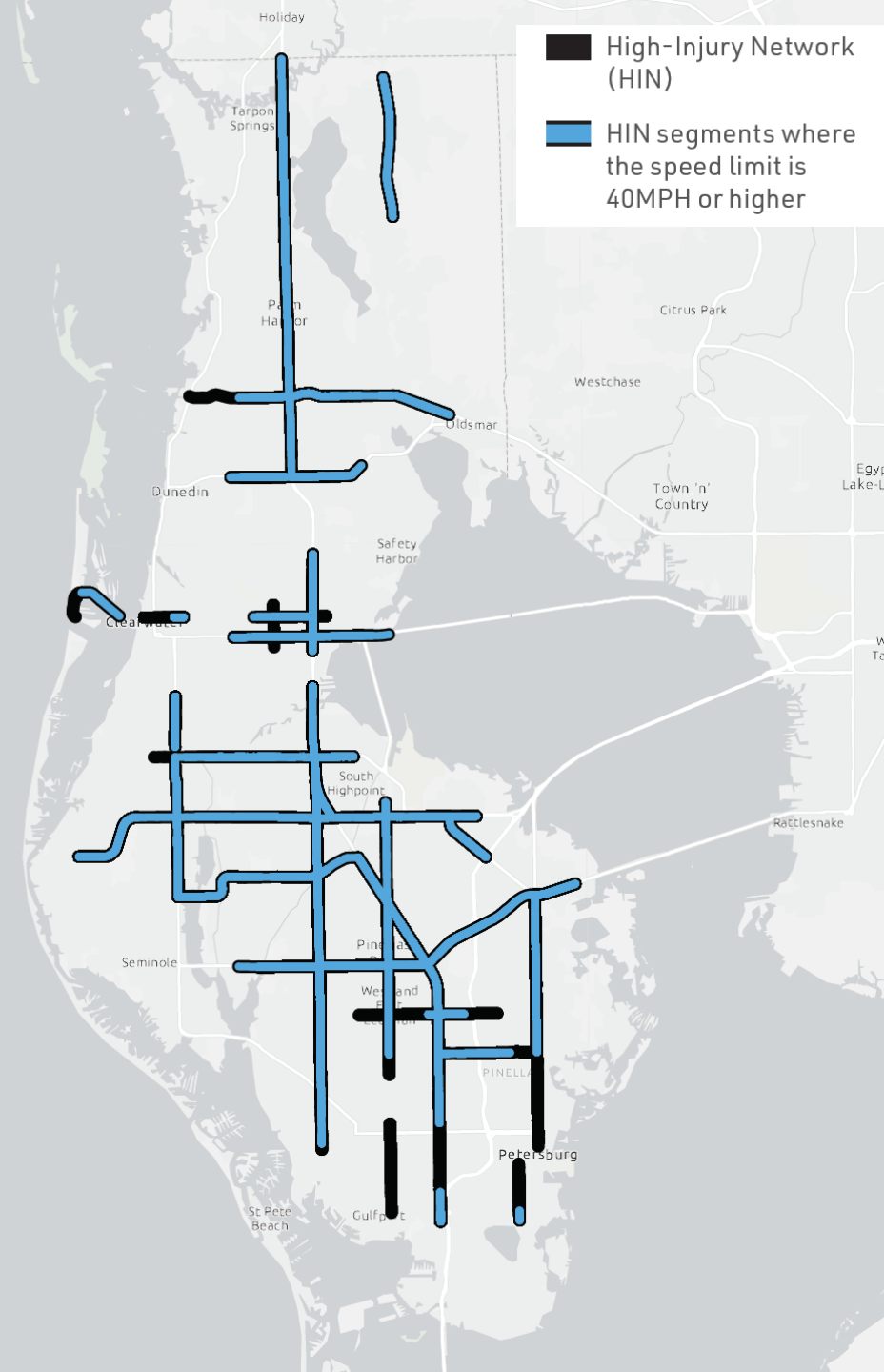
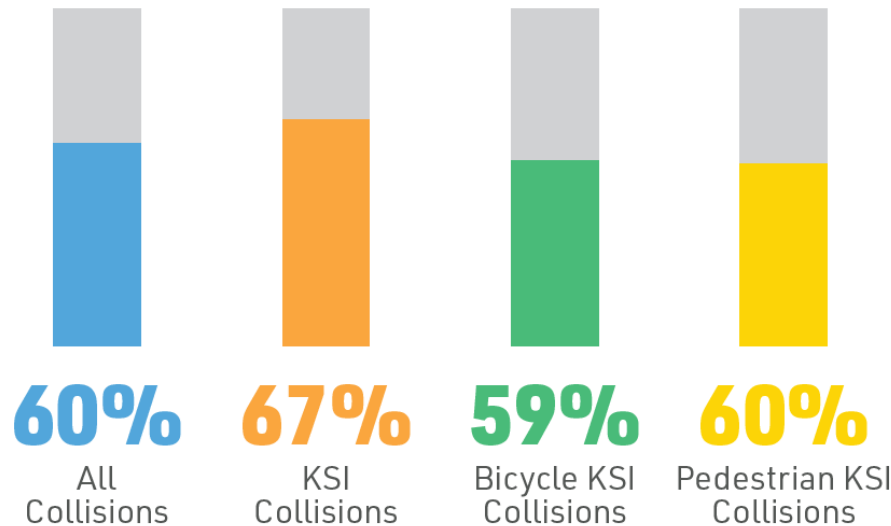
**87%**

of the HIN have speed limits of **40MPH** or higher

**66%**

of the HIN have speed limits of **45MPH** or higher

Pinellas County roadways with speed limits of 40MPH or higher were the site of



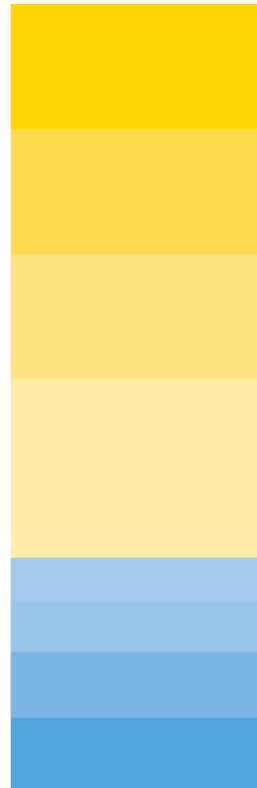
# Implementation

- Partner agencies
- Working group
- Demonstration projects
- High Injury Network and Hot Spots



**TOWARDS  
ZERO  
TOGETHER**

FORWARDPINELLAS.ORG



# Reach out to learn more

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