



# LOCAL ROAD SAFETY PLAN

BOARD OF SUPERVISORS

JUNE 4, 2019

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# PRESENTATION OUTLINE

- 1) Background
- 2) Local Road Safety Plan
- 3) Going Forward



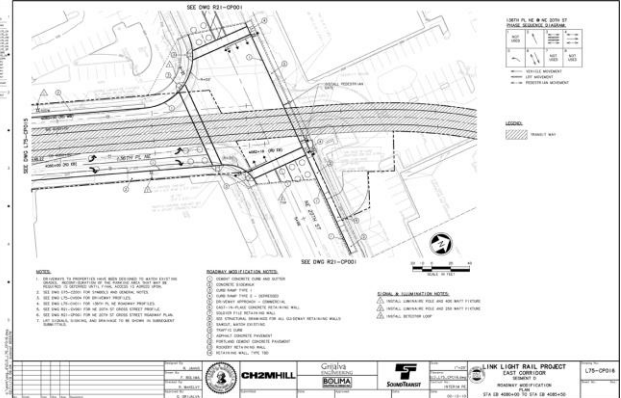
# MISSION STATEMENT

Providing a clear road, smooth ride, and a safe trip to the traveling public.



# Four "E"s of Roadway Safety

- Education
- Engineering
- Enforcement
- Emergency Response

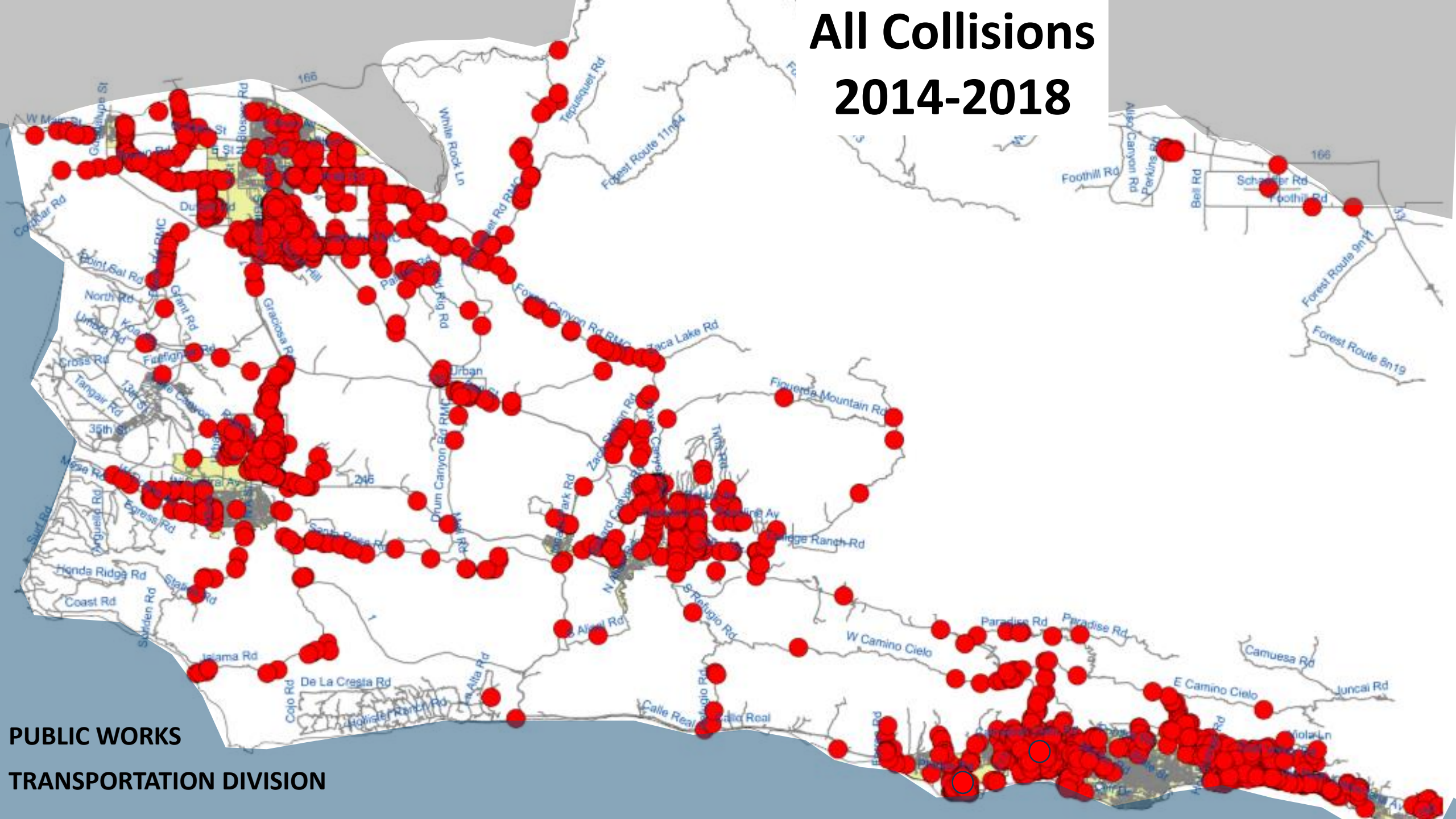


# Collision Reduction Program

- **Collect and review collision reports from enforcement agencies**
- **Look for red flags in individual reports**
- **Study all fatal collisions**
- **Review locations reported by public**
- **Yearly summary of collision hot spots**
- **Study top collision hot spots for safety countermeasures**



# All Collisions 2014-2018



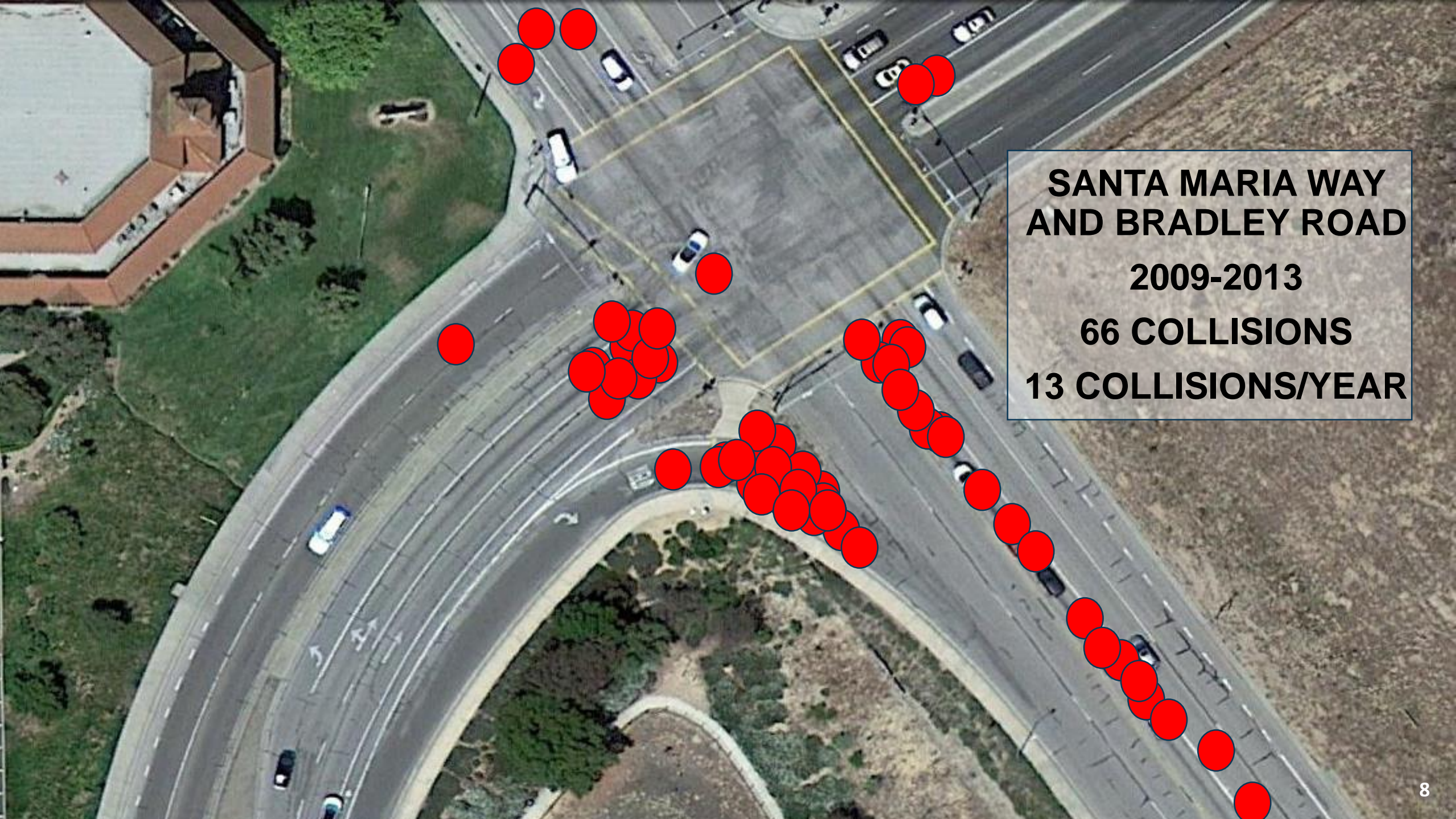
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# CASE IN POINT

Santa Maria Way and Bradley Road, Orcutt

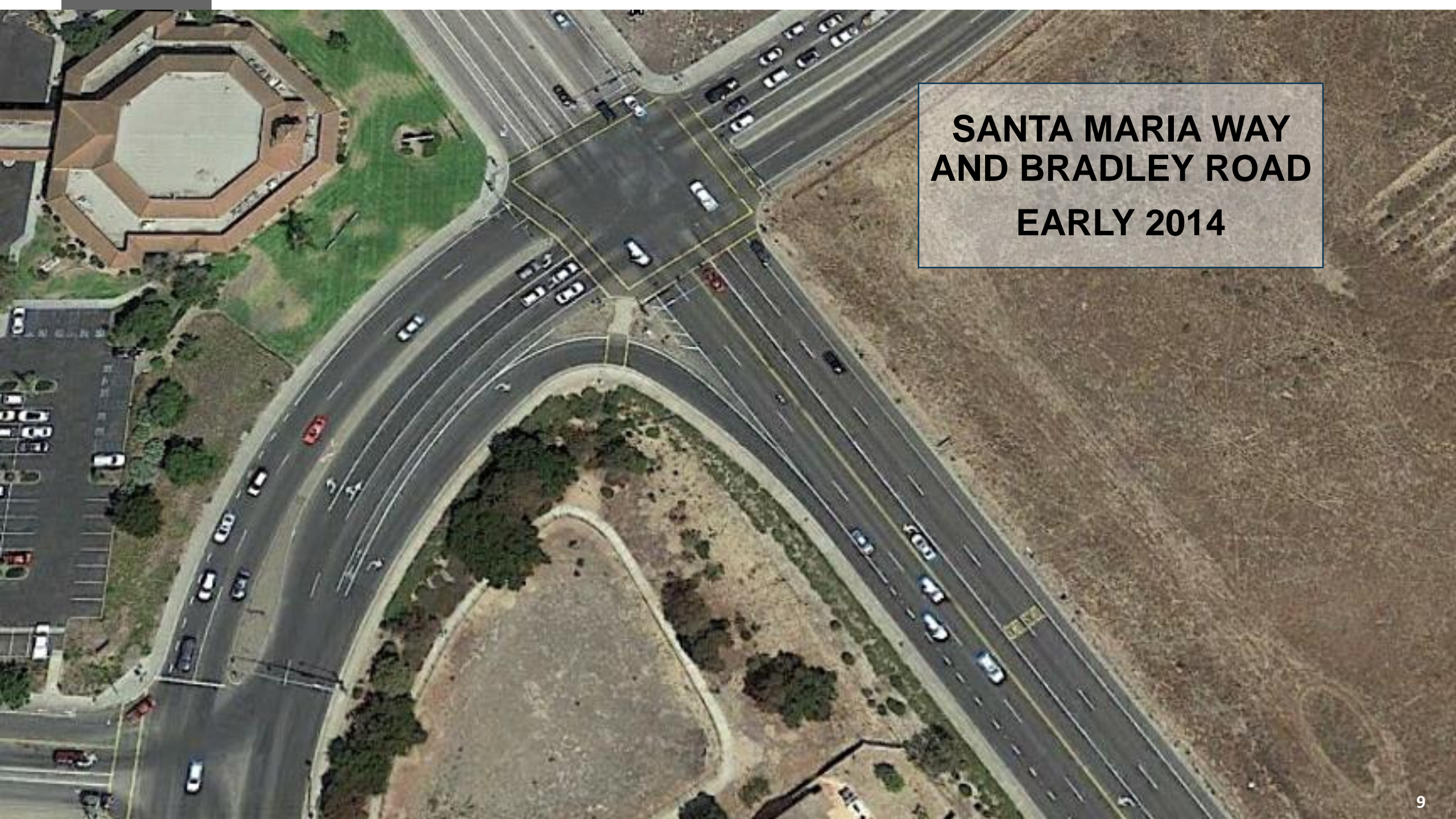


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**SANTA MARIA WAY  
AND BRADLEY ROAD**  
**2009-2013**  
**66 COLLISIONS**  
**13 COLLISIONS/YEAR**



An aerial photograph showing a complex intersection of roads. Santa Maria Way is a multi-lane road that curves from the top left towards the bottom right. Bradley Road is a multi-lane road that runs parallel to Santa Maria Way, intersecting it. The intersection is marked with yellow lines. There are several cars visible on the roads. To the left of the intersection, there is a large, octagonal building with a brown roof and a parking lot. The surrounding area is a mix of green grass, trees, and dry, brownish ground. The text "SANTA MARIA WAY AND BRADLEY ROAD EARLY 2014" is overlaid in a white box with a black border in the upper right quadrant of the image.

**SANTA MARIA WAY  
AND BRADLEY ROAD  
EARLY 2014**



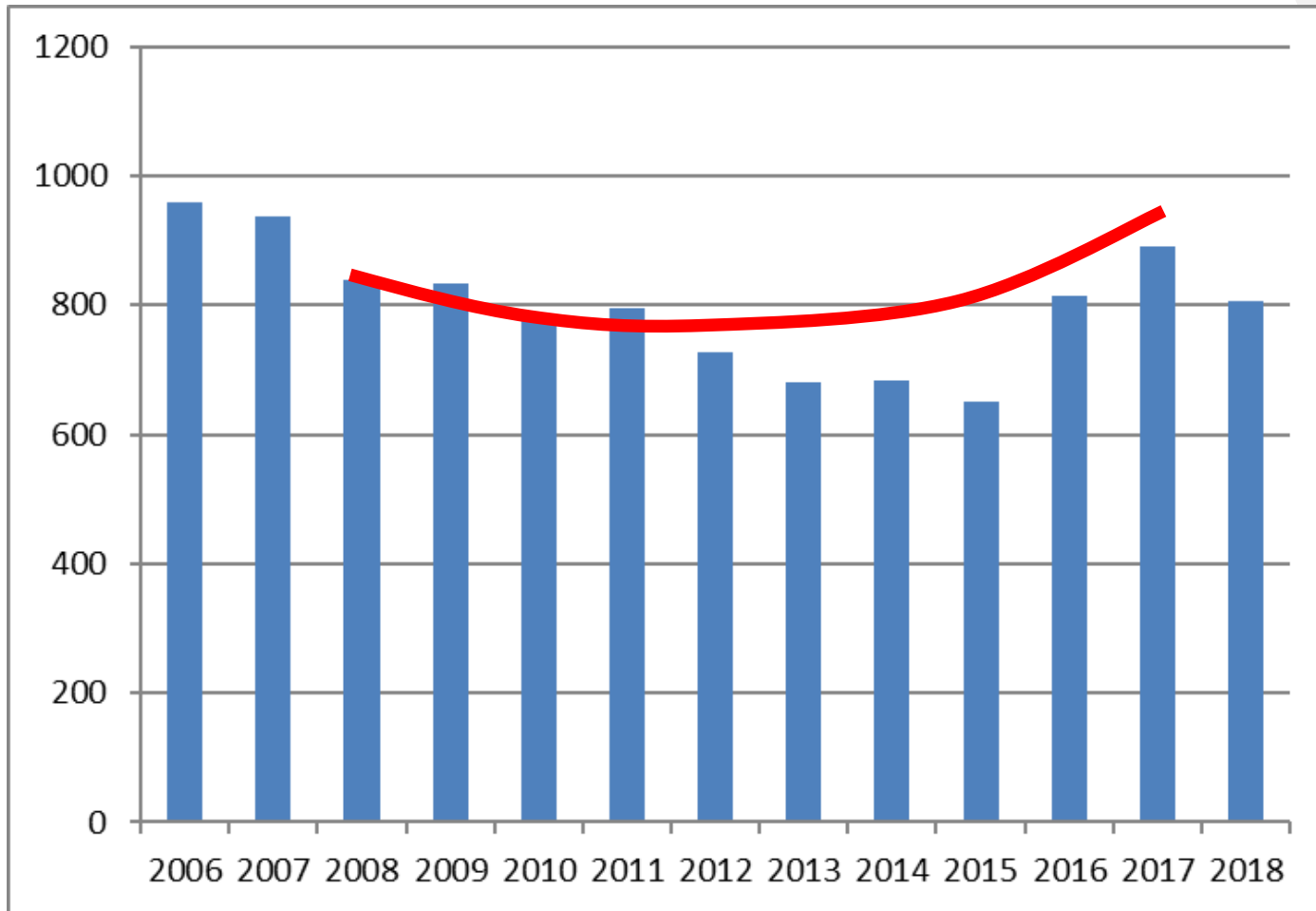
**SANTA MARIA WAY  
AND BRADLEY ROAD**

**2014-2014**

**14 COLLISIONS**

**3 COLLISIONS/YEAR**

# Total Number Collisions



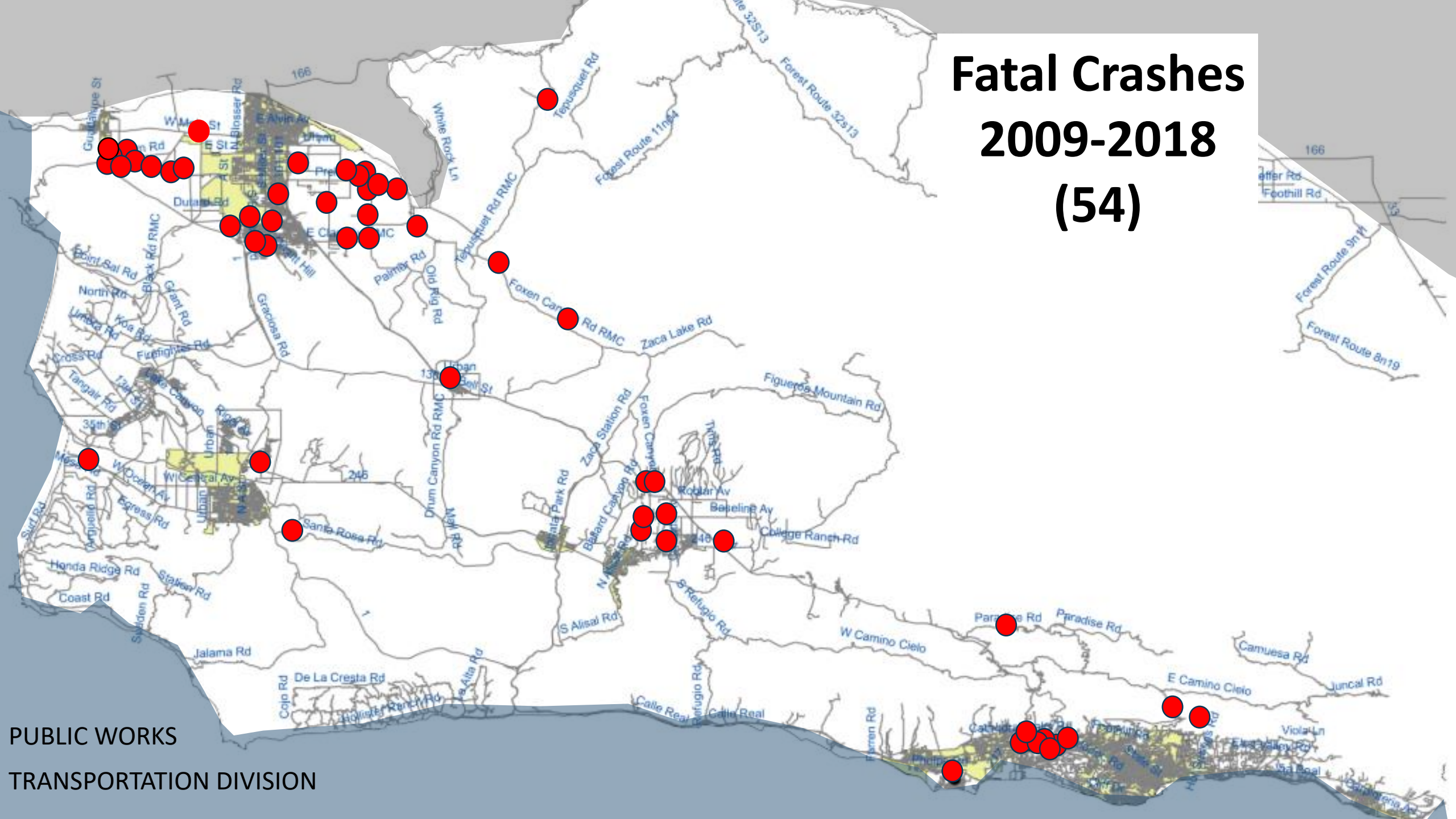
Statewide Collision Trend

# Collision Reduction Program Flaw

- Some safety issues are over looked if not concentrated at a location.
- Over 90% of collisions are not addressed in collision reduction program.
- Fatal collisions and serious injuries are not typically at locations identified in our traditional collision reduction program.
- Collision reduction program gets highest share of resources (staff time, funding, and grants)



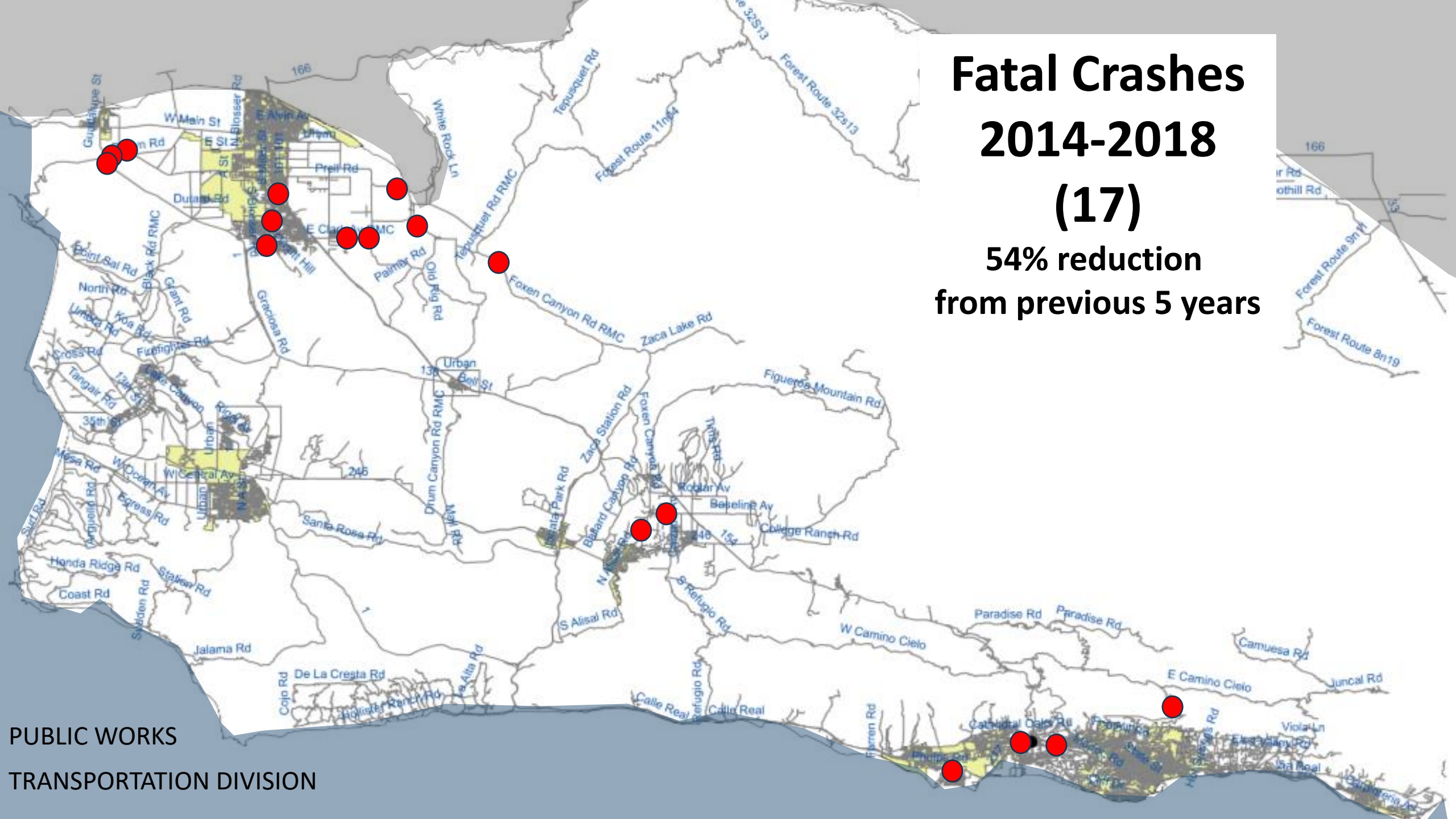
# Fatal Crashes 2009-2018 (54)



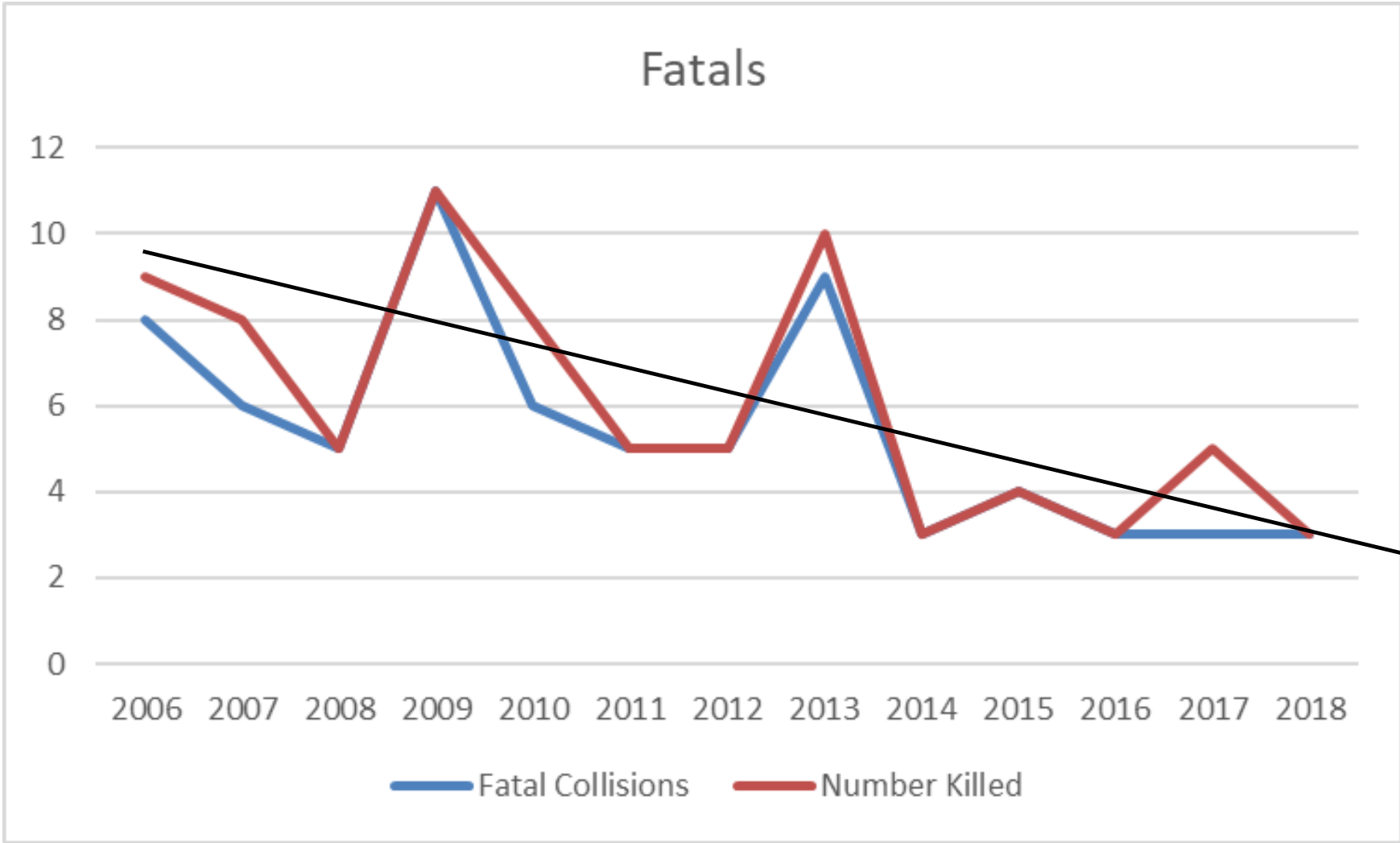
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# Fatal Crashes 2014-2018 (17)

54% reduction  
from previous 5 years



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**Goal = 0 Deaths  
By Year 2025**

**2025**

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# Crashes Involving Bikes and Pedestrians 2014-2018 (321)

**Orcutt 49**

**Santa Ynez Valley 15**

**Lompoc Valley 7**

**Goleta/Santa Barbara 67**

**Montecito/Summerland/Carpinteria 45**

**Isla Vista 138**

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# LOCAL ROAD SAFETY PLAN

New way to find and address safety issues



# Santa Barbara County, California Local Road Safety Plan



- Systemic way to identify, analyze, and prioritize roadway safety improvements.
- Analyzes type of collisions and roadway character instead of looking for collision patterns at hot spots.
- Provides an additional back-up document for grants.

# Santa Barbara County, California Local Road Safety Plan



- FHWA funded three agencies in the US to develop a LSRP
  - Chemung County, New York
  - Waller County, Texas
  - Santa Barbara County



# Stakeholders

- Santa Barbara County Public Works
- Caltrans
- CHP
- Santa Barbara Association of Governments
- FHWA
- Health Agency

# Meetings

- Oct 2017 Kick-off Meeting
- April 2018 Skype Meeting
- May 2018 Workshop in Santa Barbara with all Stakeholders
- August 2018 Skype Meeting
- November 2018 Skype Meeting

## Vision

- ▶ To have a safe transportation system for all users.

## Mission

- ▶ To ensure a safe and sustainable transportation system for all users on County public roads.

## Objectives

- ▶ Identify safety problems and countermeasures.
- ▶ Apply budget to implement improvements.
- ▶ Seek additional grant funding for countermeasures.

## Goals

- ▶ Achieve zero deaths on roads.
- ▶ Reduction in over all collisions.

# Data Resources

- Public Works Collision Database
- Sign Inventory
- Safe Route to School data
- Signal database
- Traffic Count Database
- RoadMap (County's Pavement Inventory)



# Sorting Data

- Severity
- Type of collision
- Roadway geometry
- Speed (Speed limits and 85<sup>th</sup>)
- User characteristics

# Crash Tree for Rural Roads in Santa Barbara County (2012-2016)

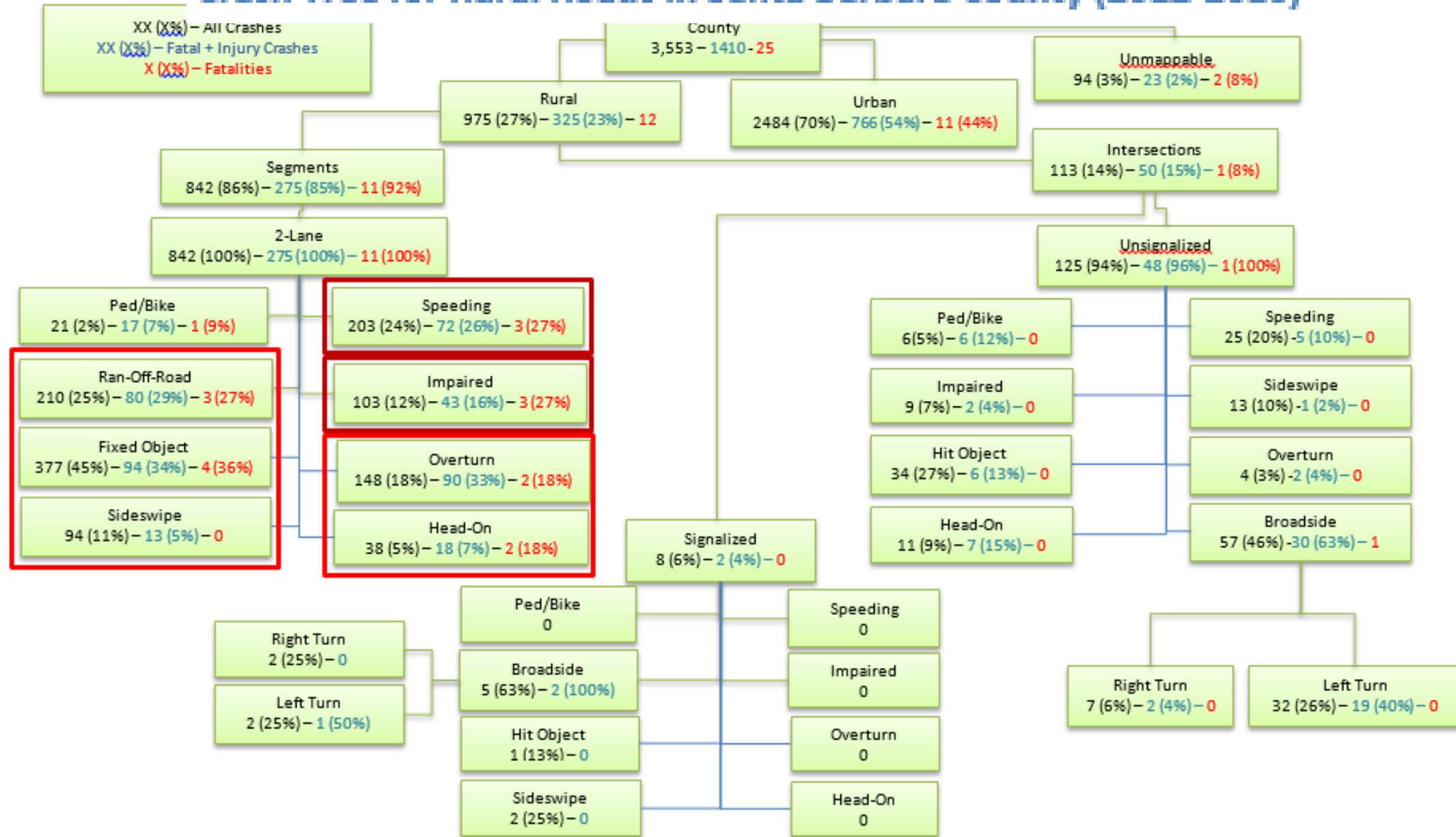
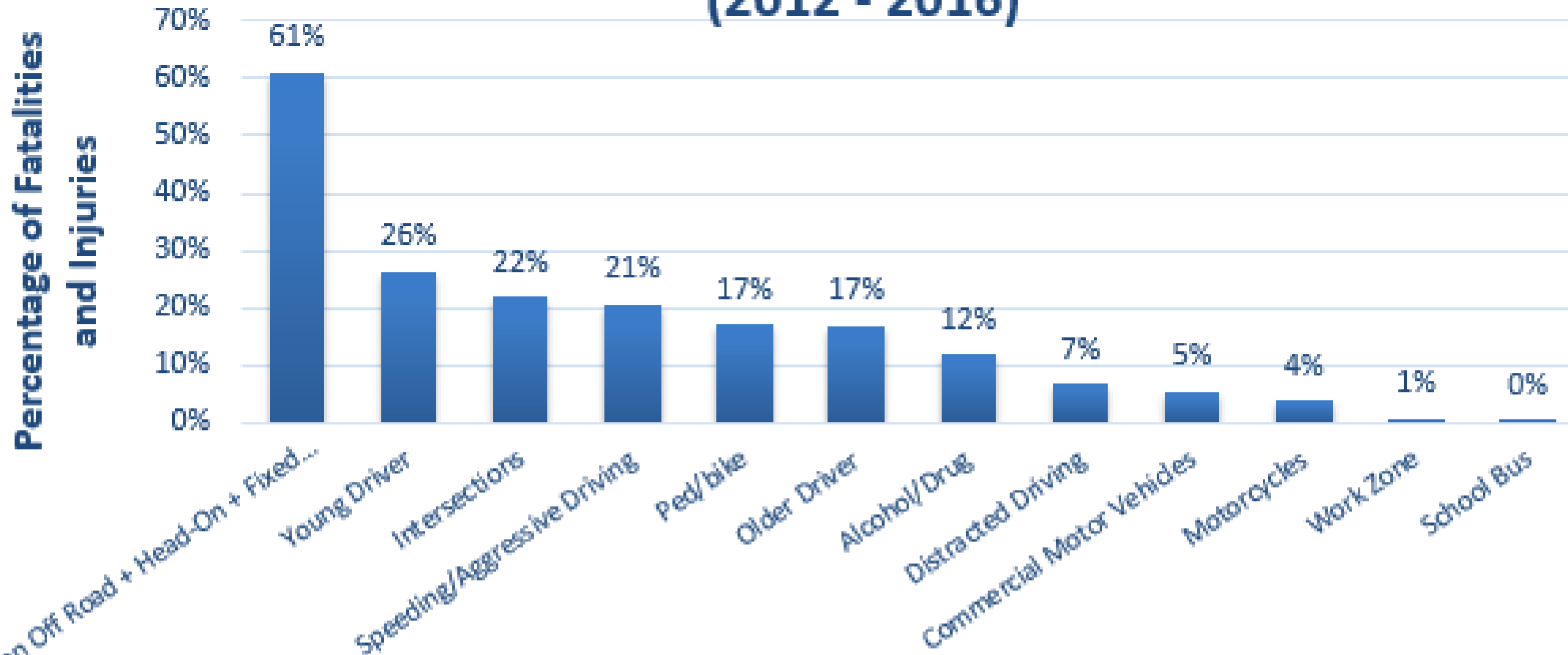
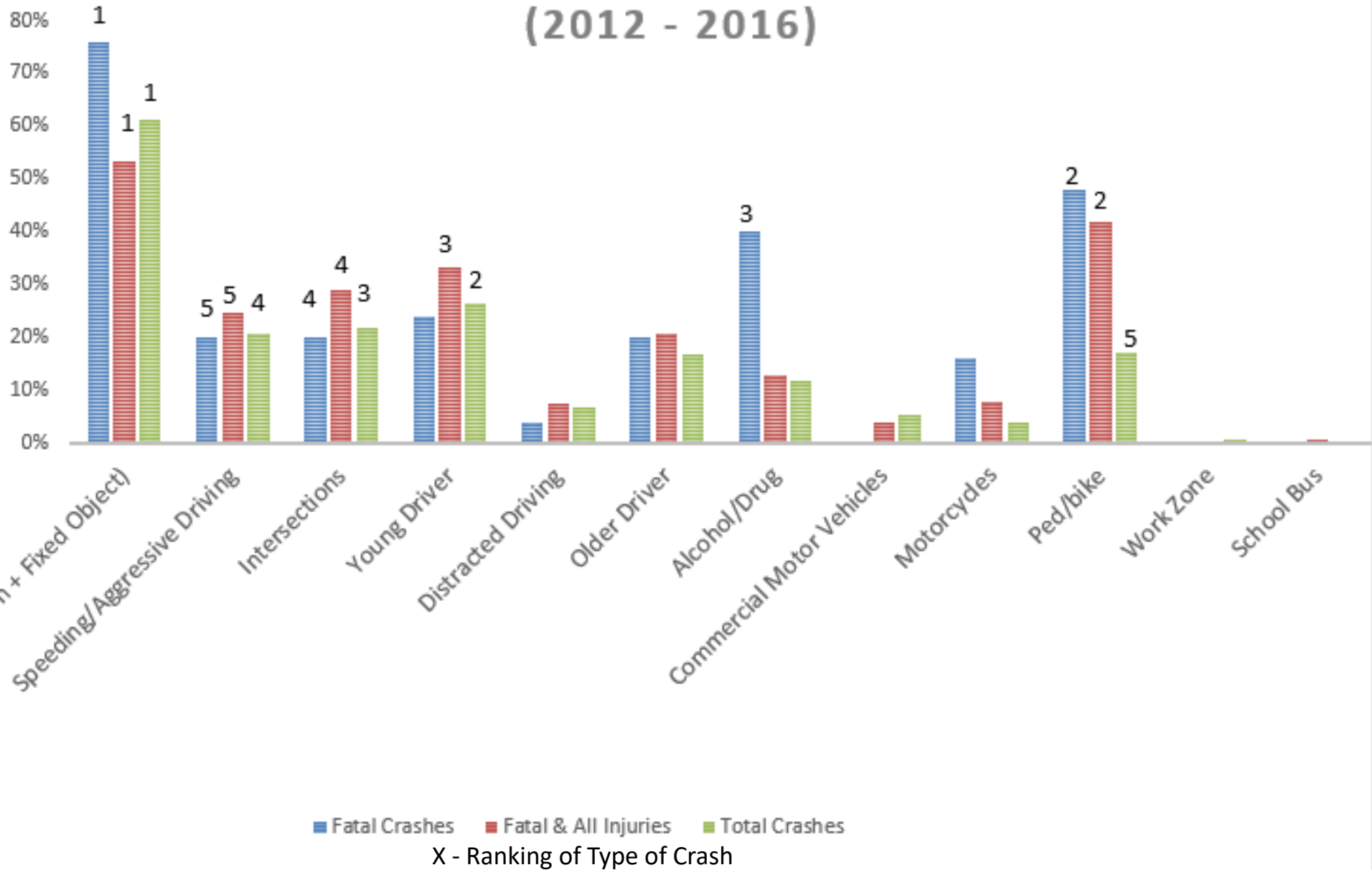


Figure 6: Crash Tree for Rural Roads in Santa Barbara County (2012-2016)

## Distribution of All Crashes by Crash Type (2012 - 2016)



# SANTA BARBARA COUNTY, CA CRASHES BY SEVERITY AND BY TYPE (2012 - 2016)



Lane Dep (Ran Off Road + Head-On + Fixed Object)

Speeding/Aggressive Driving

Intersections

Young Driver

Distracted Driving

Older Driver

Alcohol/Drug

Commercial Motor Vehicles

Motorcycles

Ped/bike

Work Zone

School Bus

# Countermeasures for Lane Departure Crashes

- Tier 1
  - Update Signage
  - Centerline
  - Edge Line
  - Fixed Object Delineation
- Tier 2
  - Enhanced Signage
  - Rumble Stripes
  - Alignment Delineation
  - Fixed Object Removal
- Tier 3
  - High Friction Surface Treatment
  - Flashing Beacons
  - Lighting
  - Shield Fixed Objects
- Tier 4
  - Shoulder Widening
  - Reconstruction of Curve
  - Road Diet
  - Median Buffer

# Countermeasures for Pedestrian and Bicycle Crashes

- Tier 1

- Crosswalk Enhancements
- Leading Pedestrian Interval
- Bicycle Lanes
- Pedestrian Refuse Islands
- Curb Extensions

- Tier 3

- Sidewalks

- Tier 2

- Road Diet
- Pedestrian Beacons
- Separated Bicycle Lanes
- Pedestrian Refuse Islands
- Bike Boulevard

- Tier 4

- Enforcement and Education

# Vision Zero, Local Road Safety Plan, and the County Roadways



# WHAT IS VISION ZERO?

1. Transportation-related deaths and severe injuries are **preventable and unacceptable**.
2. **Human life takes priority over mobility and other objectives of the road system.** The road system should be safe for all users, for all modes of transportation, in all communities, and for people of all ages and abilities.
3. **Human error is inevitable**; the transportation system should be designed to anticipate error so the consequences are not severe injury or death. Advancements in vehicle design and technology, as well as engineering advancements, personal electronic device innovations, etc., are necessary components for avoiding the impacts of human errors.
4. **People are inherently vulnerable**, and speed is a fundamental predictor of crash survival. The transportation system should be designed for speeds that protect human life.
5. **Safe human behaviors**, education, and enforcement are essential contributors to a safe system.
6. **Policies at all levels of government need to align**, making safety the highest priority for roadways.

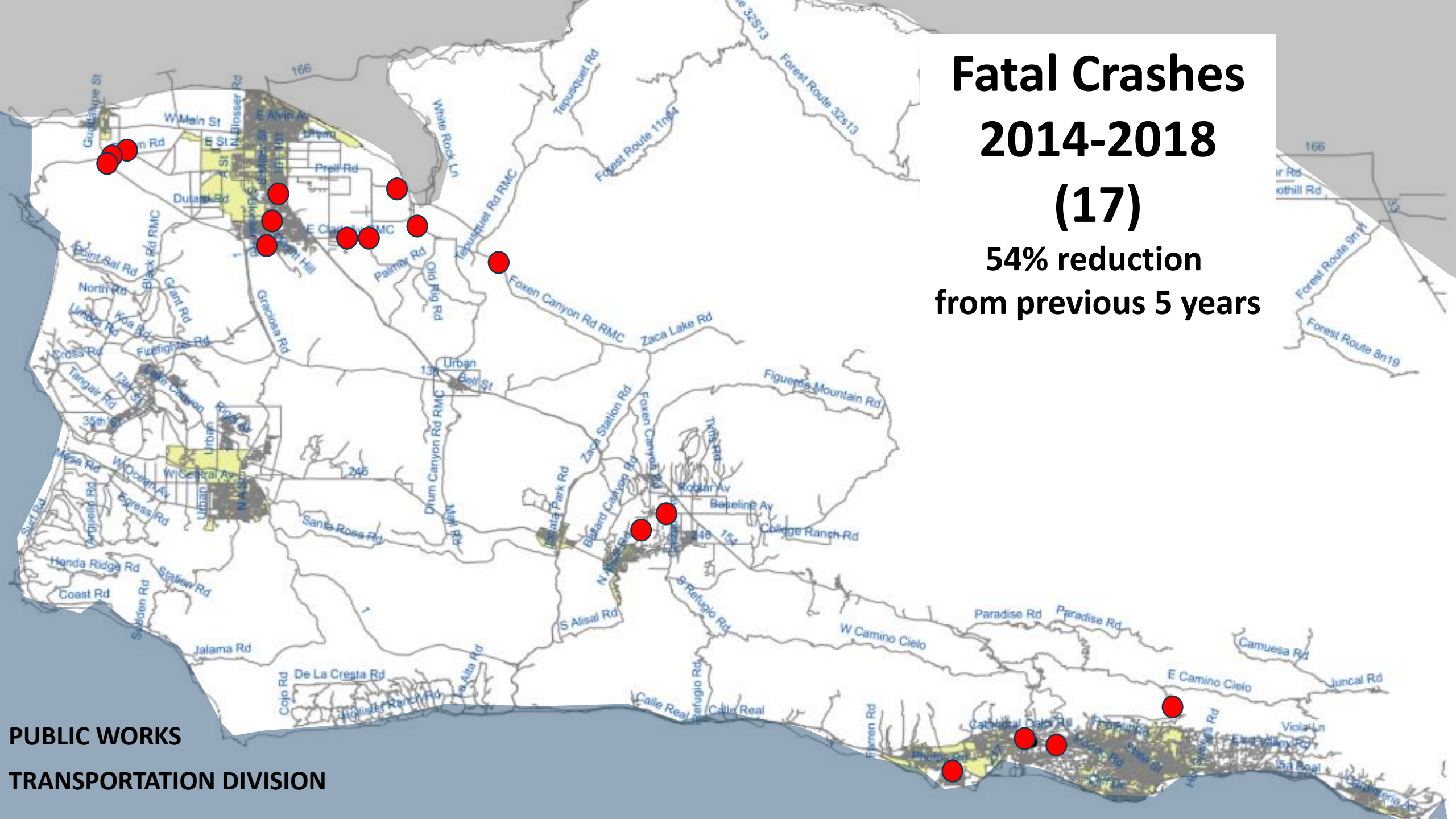


**SOURCE:** Brian Tefft, "Impact Speed and a Pedestrian's Risk of Severe Injury or Death," AAA Foundation for Traffic Safety, 2011



# Fatal Crashes 2014-2018 (17)

54% reduction  
from previous 5 years



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# Challenges of the Vision Zero

- Delays and Level of Service
- Reduce Speed Limits
  - Local Roads 20 mph
  - Collectors and Arterials 30 mph
  - Rural Roads 45 mph
- Redesign Roadways
- Community Plans Require Minimum Level of Service
- State Mandates Method to Set Speed Limits
- Funding

# Current Status and Future

- LRSP draft finalized in March 2019
- Approve and adopt by your Board June 2019
- Referenced in 2018 HSIP grant application
  - County awarded over \$600k
- Implement LSRP strategies
- Routinely update to keep information current





# THANK YOU

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