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
CASE IN POINT
Santa Maria Way and Bradley Road, Orcutt
SANTA MARIA WAY AND BRADLEY ROAD
2009-2013
66 COLLISIONS
13 COLLISIONS/YEAR
SANTA MARIA WAY AND BRADLEY ROAD
2014-2018
14 COLLISIONS
3 COLLISIONS/YEAR
Total Number Collisions
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)
Fatal Crashes
2014-2018
(17)
54% reduction
from previous 5 years
Goal = 0 Deaths By Year 2025
Crashes Involving Bikes and Pedestrians 2014-2018 (321)

- Isla Vista 138
- Orcutt 49
- Goleta/Santa Barbara 67
- Santa Ynez Valley 15
- Lompoc Valley 7
- Montecito/Summerland/Carpinteria 45

PUBLIC WORKS
TRANSPORTATION DIVISION
LOCAL ROAD SAFETY PLAN

New way to find and address safety issues
• 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
THE LRSP DEVELOPMENT PROCESS

1. Establish Leadership
2. Analyze Safety Data
3. Determine Emphasis Areas
4. Identify Strategies
5. Prioritize and Incorporate Strategies
6. Evaluate and Update
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 overall 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\textsuperscript{th})
• User characteristics
Crash Tree for Rural Roads in Santa Barbara County (2012-2016)

- County: 3,553 - 1410 - 25
- Rural: 975 (27%) - 315 (23%) - 12
- Urban: 2484 (70%) - 756 (54%) - 11 (44%)
- Unmanaged: 94 (3%) - 23 (2%) - 2 (8%)
- Intersections: 113 (14%) - 56 (15%) - 1 (8%)

Segments:
- 842 (86%) - 275 (85%) - 11 (92%)
- 842 (100%) - 275 (100%) - 11 (100%)

2-Lane:
- Ped/Bike: 21 (2%) - 17 (7%) - 1 (9%)
- Run-Off-Road: 210 (25%) - 80 (29%) - 3 (27%)
- Fixed Object: 377 (45%) - 94 (34%) - 4 (36%)
- Sideswipe: 94 (11%) - 13 (5%) - 0

Speeding:
- 203 (24%) - 72 (26%) - 3 (27%)
- Impaired: 103 (12%) - 43 (16%) - 3 (27%)
- Overturn: 148 (18%) - 90 (33%) - 2 (18%)
- Head-On: 38 (5%) - 10 (7%) - 2 (18%)

Signalized:
- 5 (6%) - 2 (4%) - 0

Ped/Bike:
- Right Turn: 0
- Left Turn: 2 (25%) - 0

Right Turn:
- 7 (6%) - 2 (4%) - 0
- 32 (25%) - 19 (10%) - 0

Figure 6: Crash Tree for Rural Roads in Santa Barbara County (2012-2016)
Distribution of All Crashes by Crash Type (2012 - 2016)

- Lane Dep/Run Off Road + Head-On + Fixed Obstacle: 61%
- Young Driver: 26%
- Intersections: 22%
- Speeding/Agressive Driving: 21%
- Ped/bike: 17%
- Older Driver: 17%
- Alcohol/Drug: 12%
- Distracted Driving: 7%
- Commercial Motor Vehicles: 5%
- Motorcycles: 4%
- Work Zone: 1%
- School Bus: 0%
SANTA BARBARA COUNTY, CA
CRASHES BY SEVERITY AND BY TYPE
(2012 - 2016)

X - Ranking of Type of Crash
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
Challenges of the Vision Zero

• Delays and Level of Service
• Reduce Speed Limits
  • Local Roads 20 mph
  • Collectors and Arterials 30 mph
  • Rural Roads 40 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

PUBLIC WORKS
TRANSPORTATION DIVISION