BICYCLE & PEDESTRIAN SAFETY STUDY

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Bicycle & Pedestrian Advisory Committee, July 18, 2017
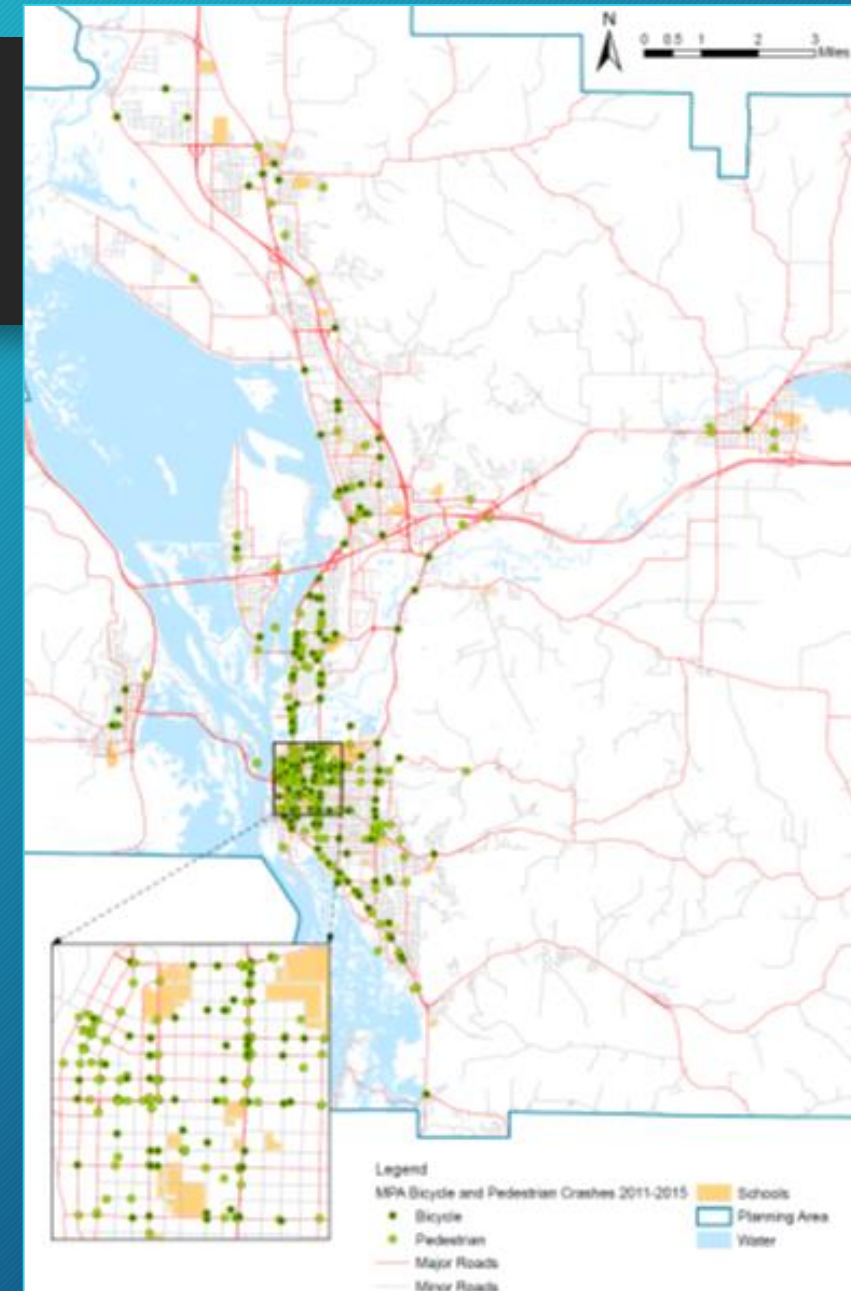
Process and Findings

Bicycle and Pedestrian Crashes 2011-2015

Bicycle/Pedestrian Crashes 2011-2015

- 381 in the planning area
  - 209 bicycle; 172 pedestrian
  - 6 fatal injury; 47 serious (incapacitating) injury
- 322 occurred in La Crosse
  - 175 bicycle; 147 pedestrian
  - 6 fatal injury—all pedestrians
    - Ages 17 to 74
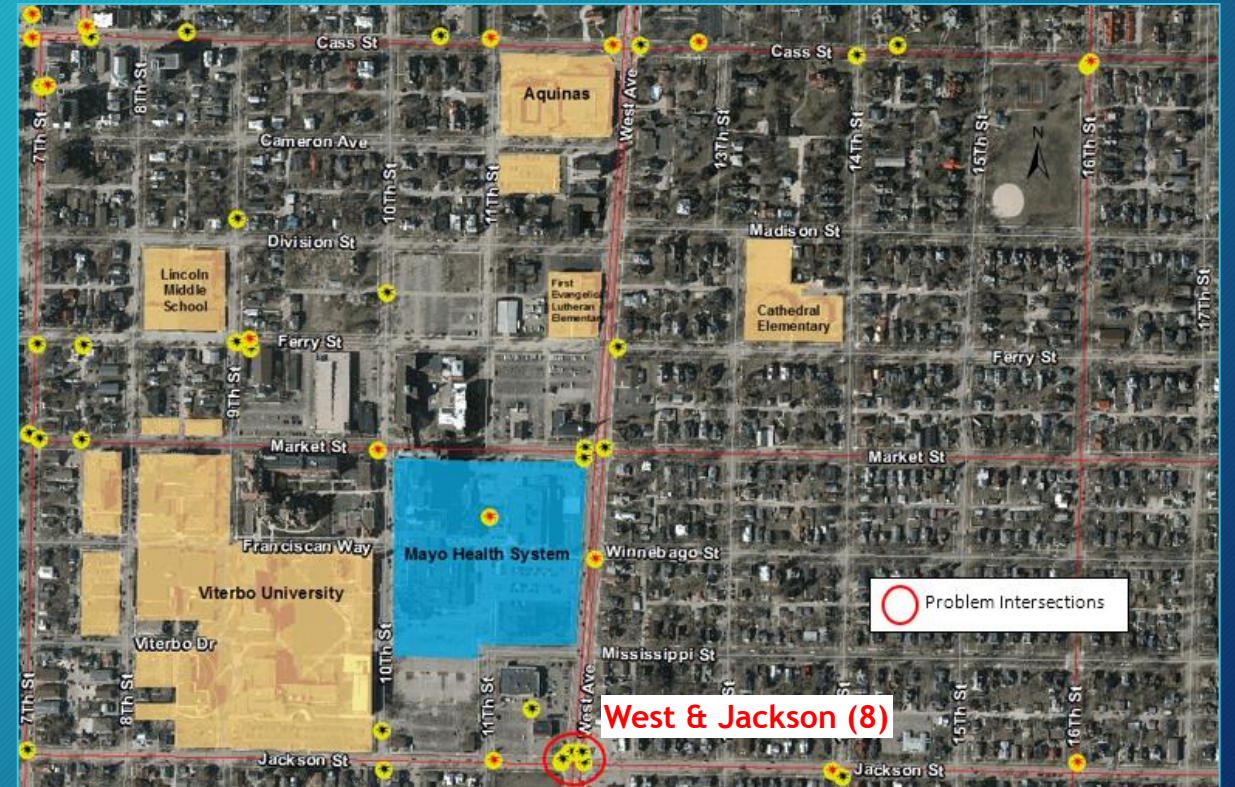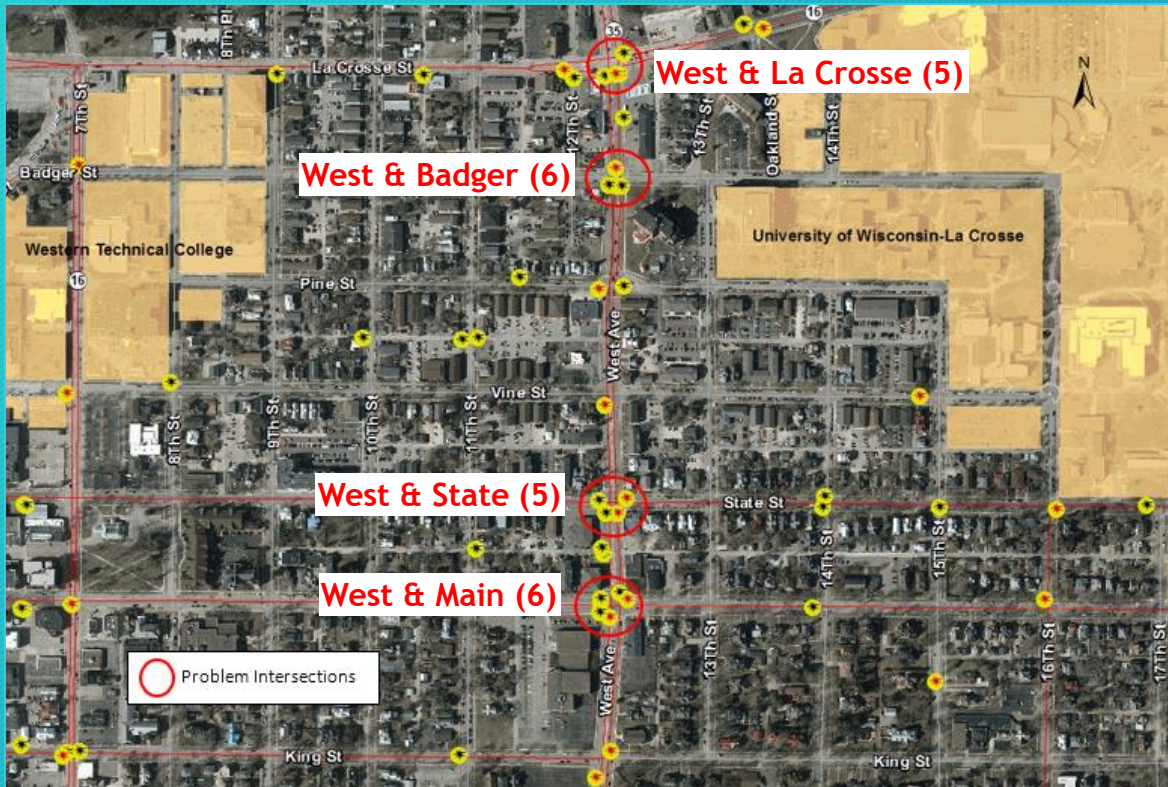 - 37 serious injury—15 bicycle and 22 pedestrian

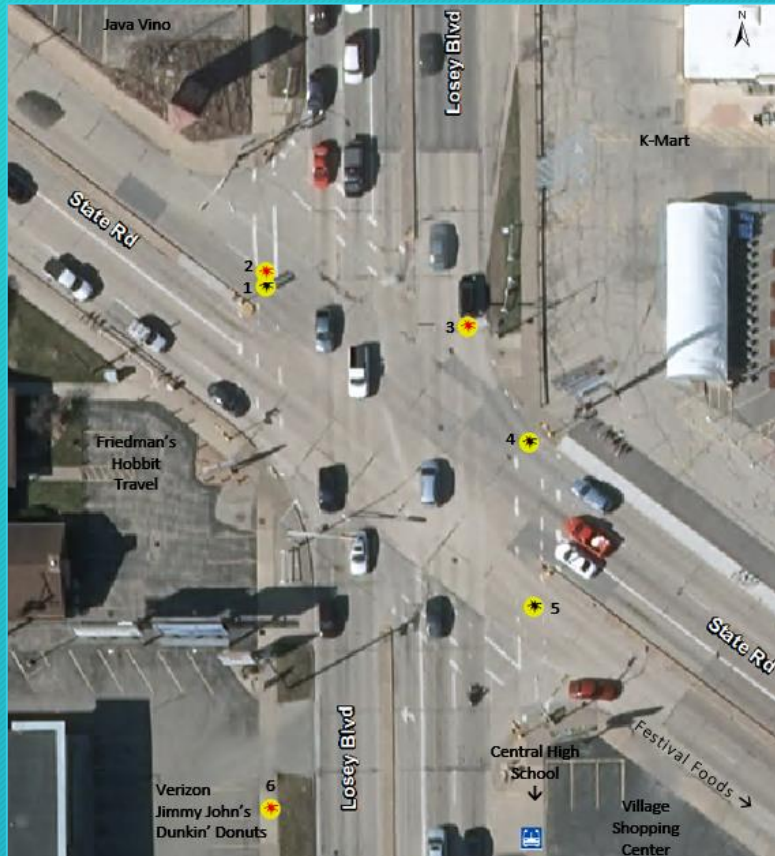# Identifying Problem Areas: Density Criteria

For 2011-2015:

- 10 or more crashes per ½-mile corridor
- 5 or more crashes at intersections

West Ave between La Crosse St & Jackson St

Losey Blvd & State Rd Intersection

3rd St between State St and King St

Cass St between 3rd St and 8th St

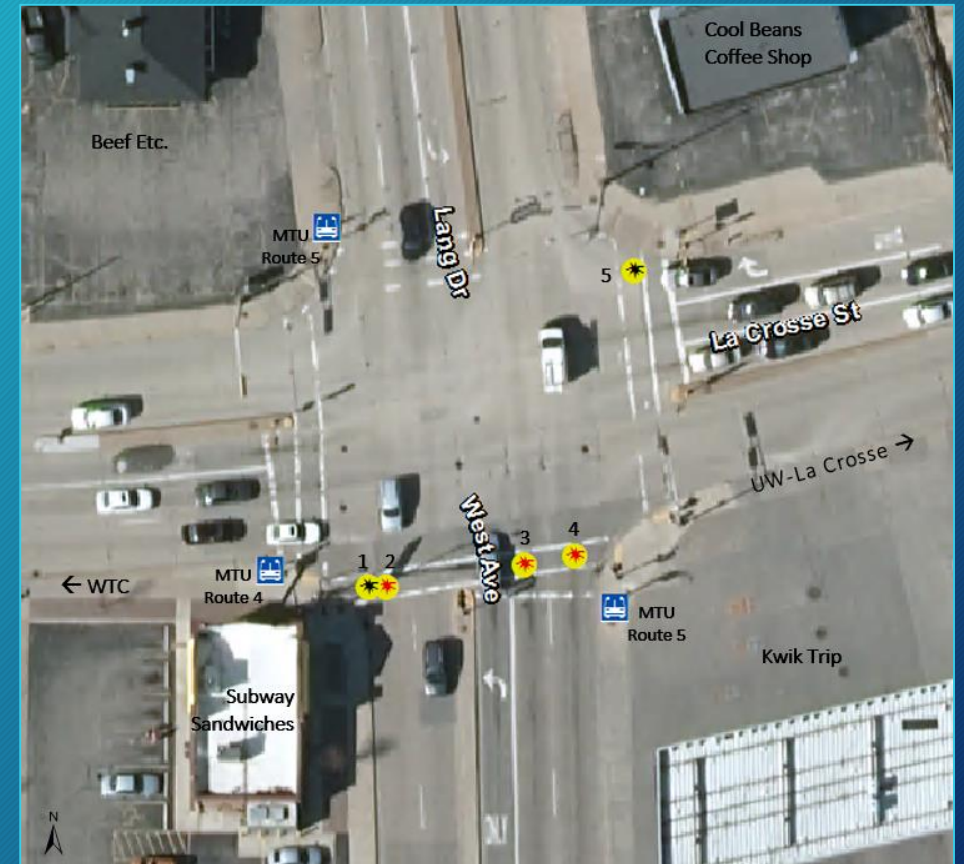# Comparing Problem Intersections: Crash Index

Inputs

- Day of the week
- Total bicycle and pedestrian crossings
- Intersection AADT
- Intersection 2-hr traffic
- Crossings per vehicle
- Annual crash average

Ranking

1. Losey Blvd/State Rd (5)
2. West Ave/Jackson St (8)
3. West Ave/Main St (6)
4. West Ave/La Crosse St (5)
5. West Ave/State St (5)
6. West Ave/Badger St (6)

Discussion and Crash Analysis

- Traffic control
  - Basic vehicle and pedestrian timings
- Traffic counts
  - Annual average daily traffic (AADT) from continuous and tube counters
  - Bicycle and pedestrian crossing counts
- Transit service
- Land use
- Crash statistics
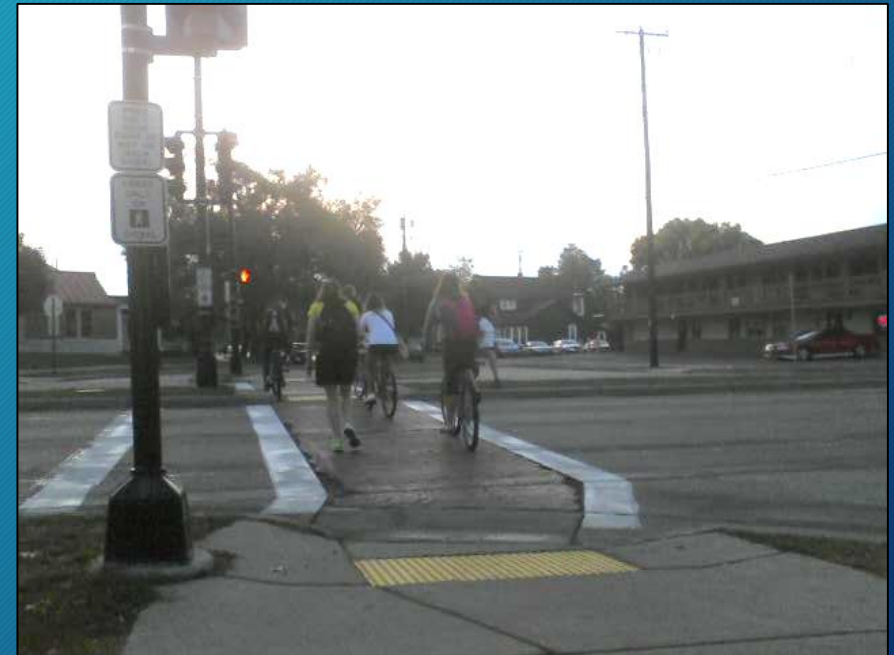 - Summaries and cross-tabulations

Findings

- None of the West Ave intersection crossings provide the minimum 7-second "walk"

- Several crossings also do not provide a 3.5 ft/s curb-to-curb clearance
  - All crossings at West Ave/La Crosse St
  - West Ave crossings at Main St and State St

- Losey Blvd/State Rd timing is longer than the 60-90 seconds recommended by NACTO's Urban Street Design Guide
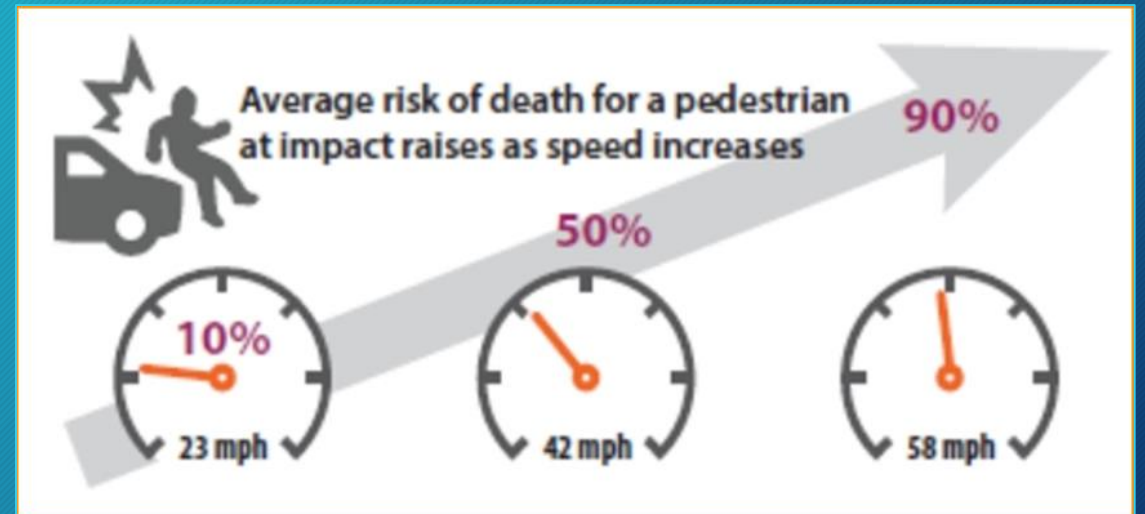
Findings

- Very high bicycle and pedestrian traffic across West Ave
  - Nearly 600 bicycle and pedestrian crossings
- Pedestrians and bicyclists rarely push the activation button
- Transit stops located to reduce need to cross
- Land uses promote bicycle and pedestrian activity

Findings

- 3 of the 6 fatal crashes occurred within identified problem corridors
- Higher proportion of fatal and serious injury crashes on Cass St
- 90% of bicycle crashes occurred in a crosswalk or on a sidewalk

Average risk of death for a pedestrian at impact raises as speed increases
90%
50%
10%
23 mph
42 mph
58 mph

Findings

- Right-turn crashes at West Ave and Main St
- Left-turn crashes at Losey Blvd and State Rd
- Evening/weekend/alcohol-related crashes on 3rd St
- 84% of right-turn crashes involved bicyclists (all crosswalk/sidewalk)
- 71% of left-turn crashes involved pedestrians

Countermeasures

Enforcement and Engineering

Reduce Operating Speeds

- Police Enforcement
- Self-enforcement
- Police enforcement as education
  - Officers on bike and foot

Reduce Operating Speeds

- Construct a raised intersection with high visibility crosswalks at King St
  - One fatality
  - Complements City's bike plan for a median and pedestrian islands
- Add parking to 3rd St
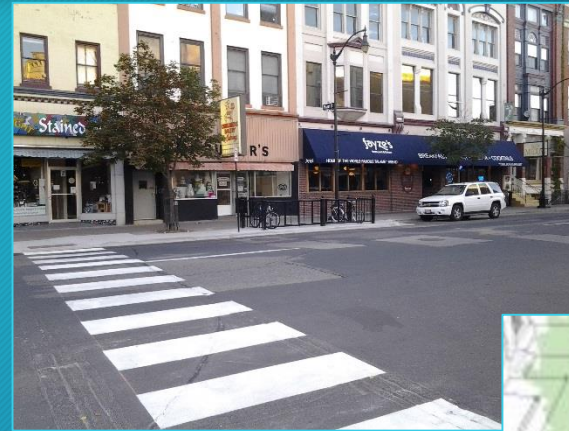- Eliminate the skew at Losey Blvd and State Rd

Adjust Signal Timing

- 60 to 90 second cycle lengths
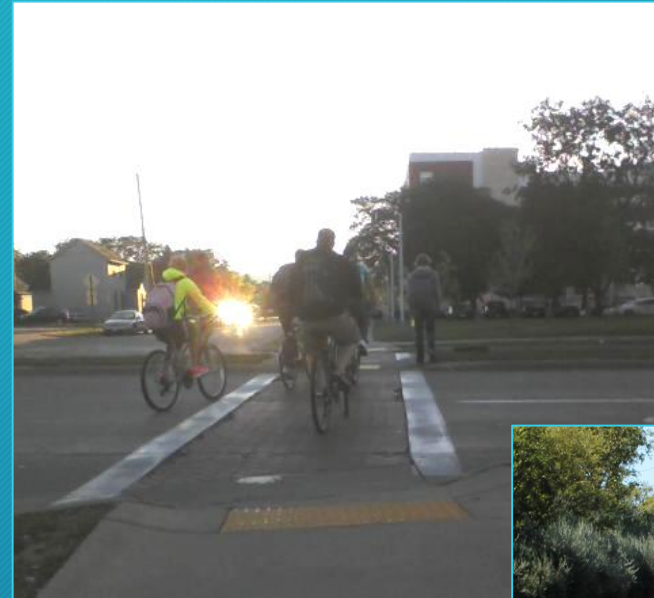- 7-second minimum pedestrian "walk" phase

Enhance Pedestrian Crossings

- High visibility crosswalks & countdown pedestrian signals
- Curb extensions on Main St
- Pedestrian-activated lead phase at Losey Blvd and State Rd

Improve Bicycle Accommodations

- Construct a north crossing at Badger St
- Widen the median storage at the existing Badger St crossing
- Buffered bike lanes
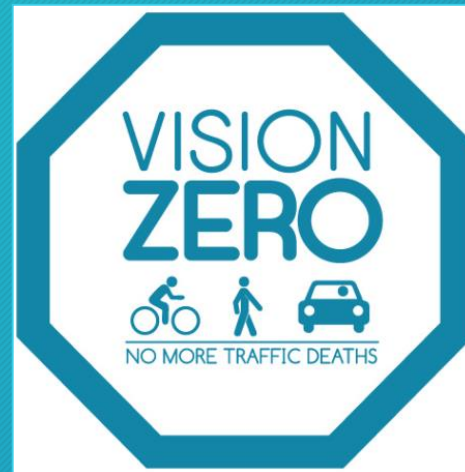- Bicycle detection at intersections

West Ave Road Diet

- Reduces all crashes by 29% (*Road Diet Informational Guide*, FHWA)

Cass St Reconstruction

- Between 4th St and 7th St
  - 3-lane conversion with bike lanes
  - Roundabout at 7th St

- Pros:
  - Pedestrian refuge islands
  - Fewer conflict points
  - Bike lanes and sharrows

- Concerns:
  - Acceleration to higher speeds as exiting roundabout will be easier and faster
  - May encourage more mid-block crossings

Next Steps

- Presentations
- Vision Zero
- Multimodal counters for data collection

Q & A

Any Questions?