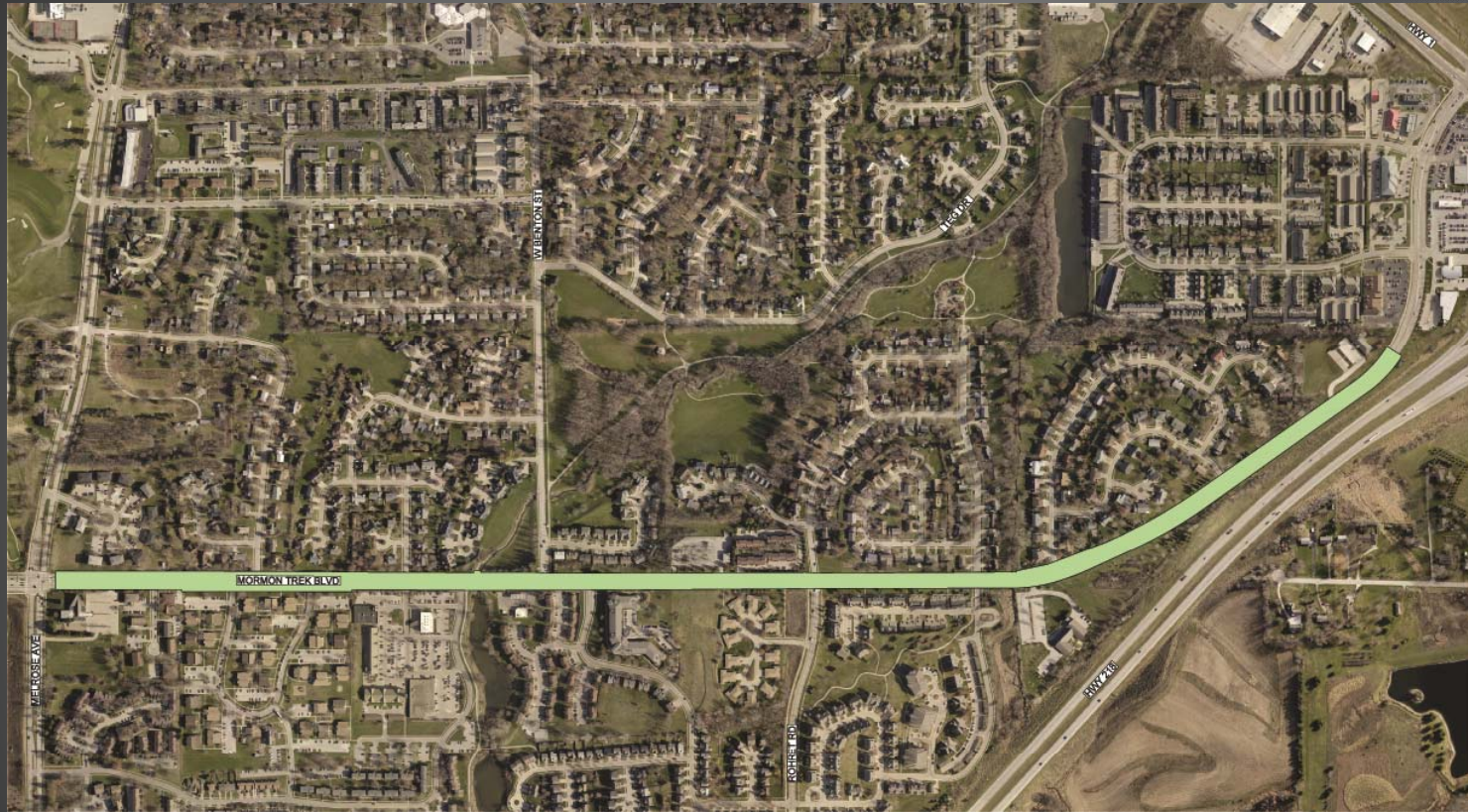


# MORMON TREK BOULEVARD



Safety Improvements from  
Melrose Ave to Iowa Hwy 1



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Engineers and Planners

# Project Team

## City of Iowa City

- Jason Havel, P.E. – City Engineer
- Scott Sovers, P.E. – Project Manager
- Kent Ralston, AICP – Transportation Planner
- Darian Nagle-Gamm, AICP – Transportation Planner

## Snyder & Associates, Inc.

- Brenna Fall, P.E. – Project Manager
- Dax Suntken, E.I. – Project Engineer
- Justin Jackson, P.E. – Traffic Engineer
- Rich Voelker, P.E. – Transportation Group Director



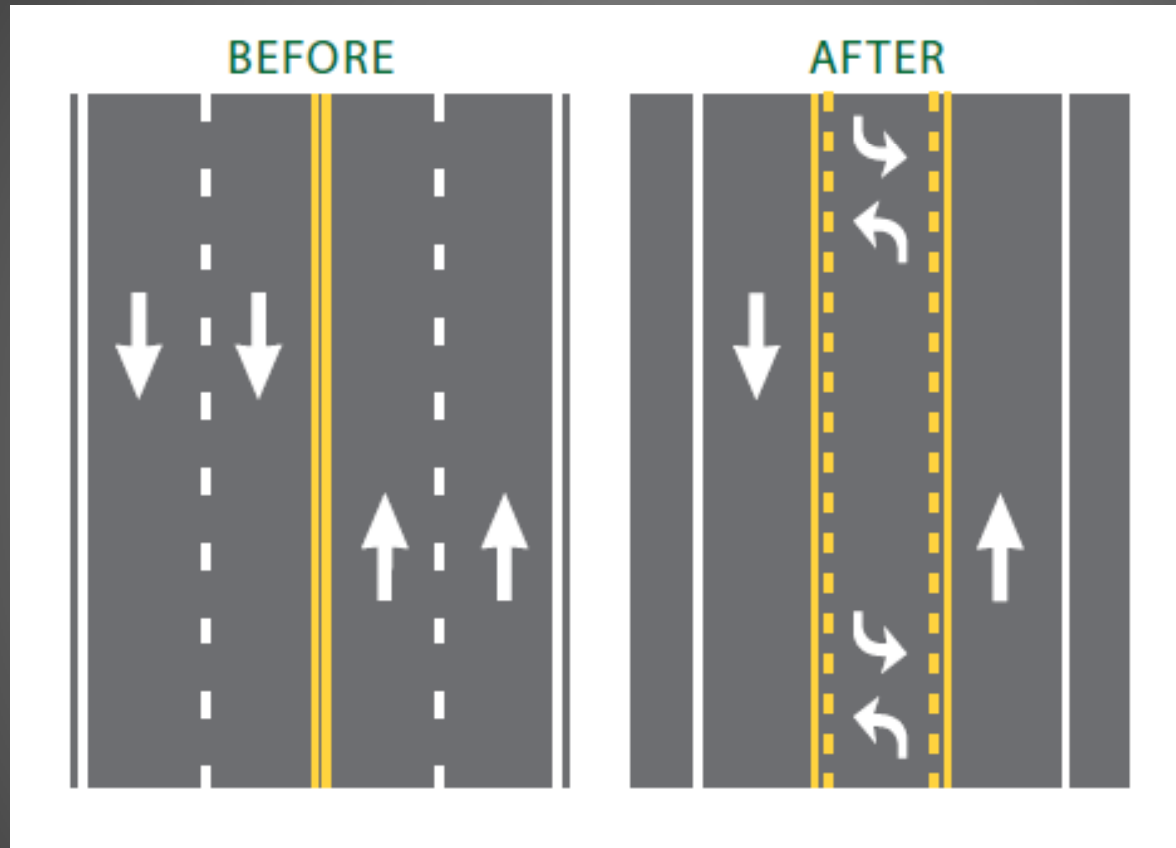
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# Lane Reconfiguration



Source: FHWA Road Diet Information Guide

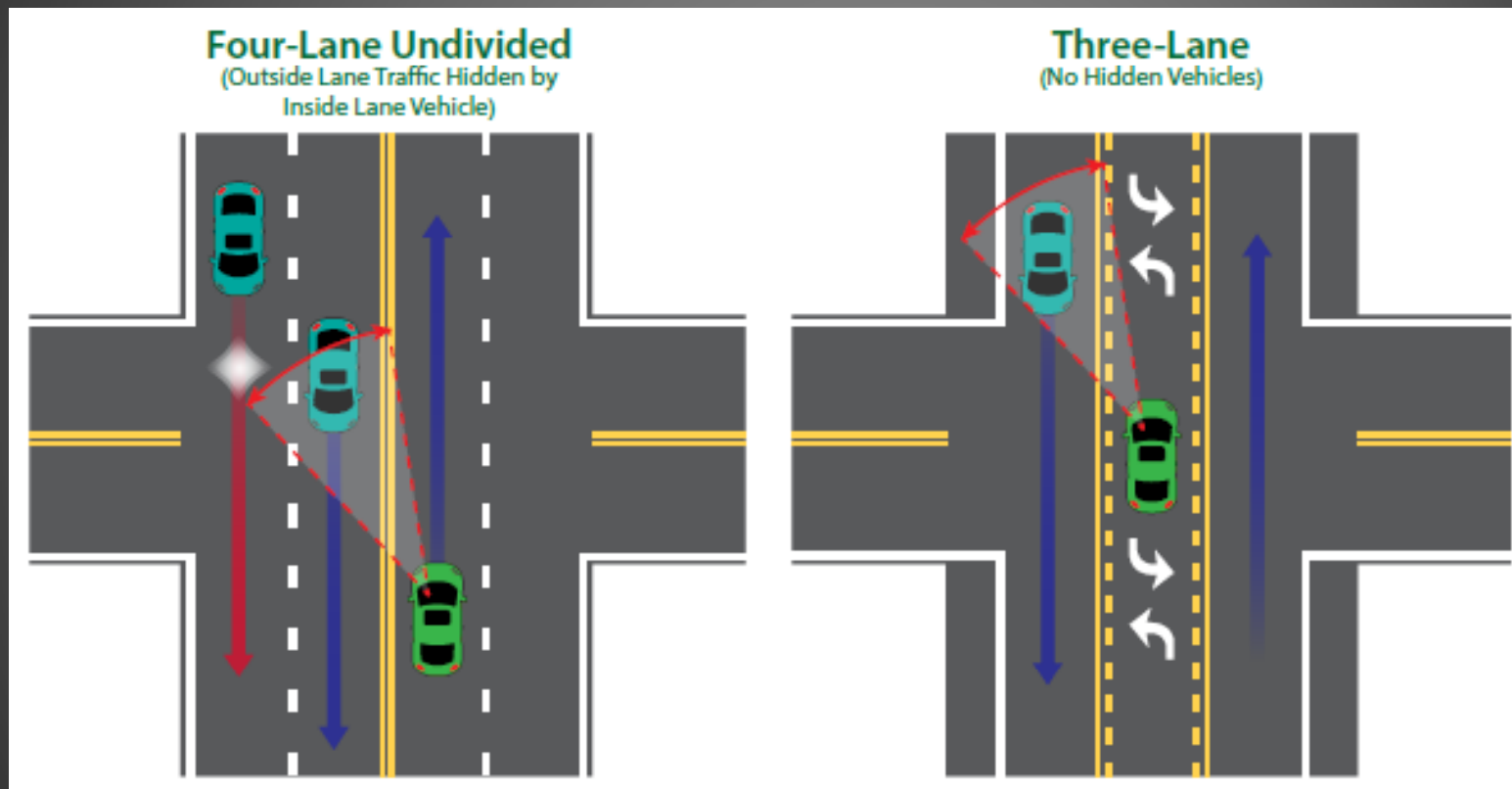


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# Increased Sight Distance



Source: FHWA Road Diet Information Guide

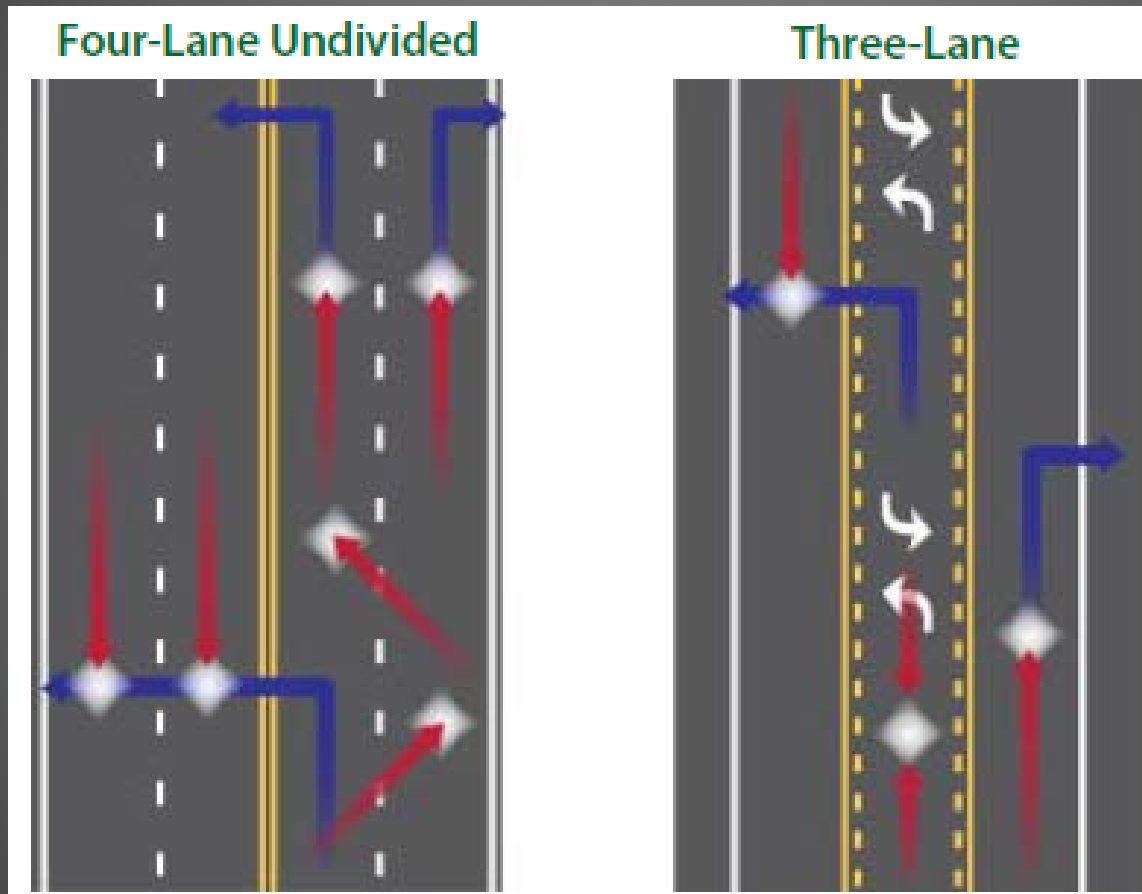


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# Reduced Conflict Points



Source: FHWA Road Diet Information Guide

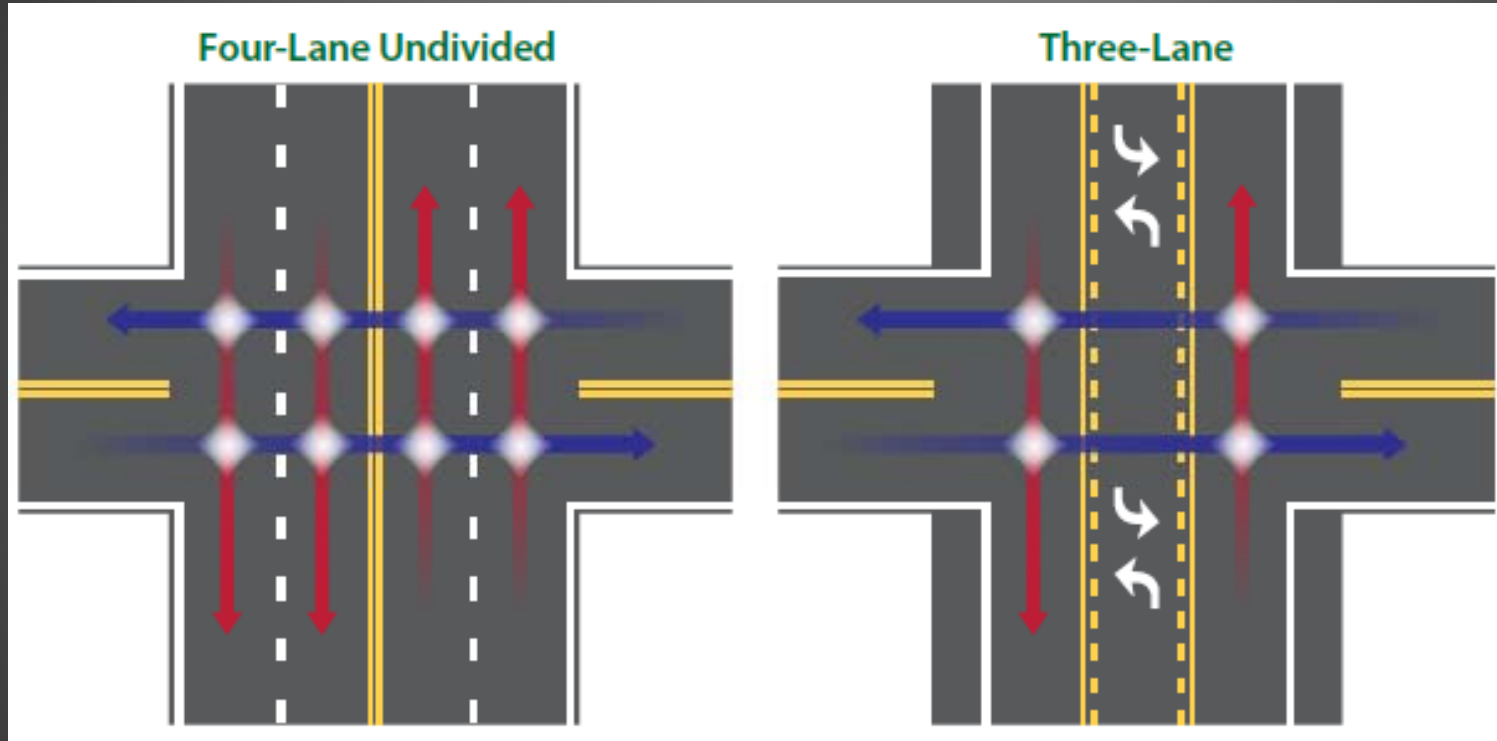


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# Reduced Conflict Points



Source: FHWA Road Diet Information Guide



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# Annual Average Daily Traffic

Roadway Segment	2002	2006	2010	2014	MPOJC Model 2010	MPOJC Model 2040
Melrose Ave, south of	16,900	-	14,100	-	14,100	14,300
Rohret Rd, north of	-	15,400	-	8,800	15,400	19,980
Rohret Rd, south of	10,900	-	10,300	-	10,300	13,800
Iowa Hwy 1, north of	12,200	9,800	12,100	13,300	12,100	14,900

- DOT did not count at this location during count year



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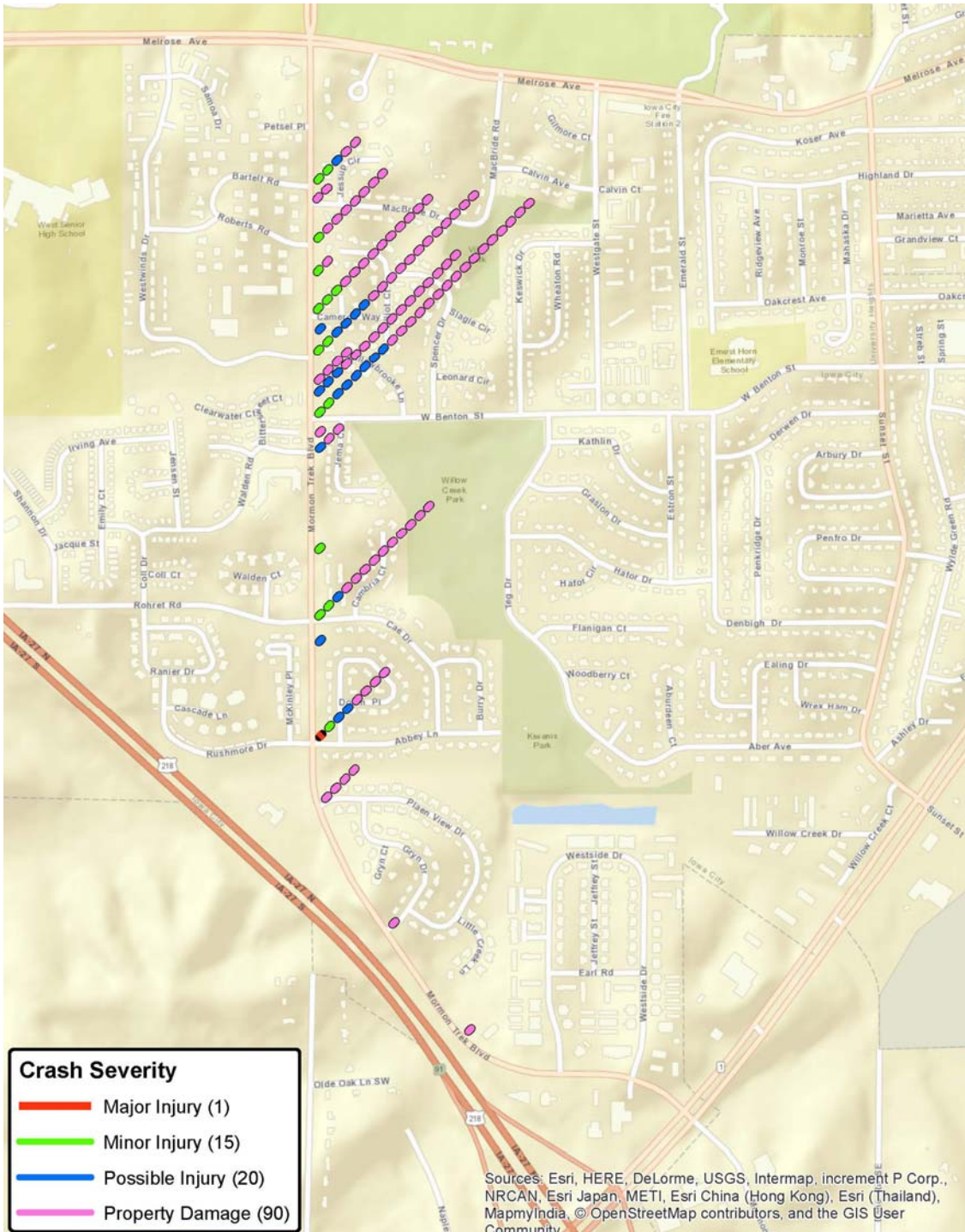


# Crash History

## 2011-2015

### Petsel Pl to West Side Dr

- 126 Crashes
- Injuries
  - 1 Major
  - 19 Minor
  - 28 Possible/Unknown
- \$645,100 in Property Damage Reported
- 30 Followed Too Close
- 26 FTYROW Left Turn / Driveway



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# Crash Reduction



**Following too close**  
**Failing to yield the right of way**



**Sideswipe**



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# Funding

- Traffic Safety Improvement Program (TSIP)
- Comes from Iowa Road Use Tax Fund
- Applied for in 2014 and granted full request of \$500,000
- Calculated Benefit to Cost Ratio of 1.5:1
- 25% Reduction in Crashes Expected



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# Travel Time Study

## Existing Condition

- 4 Lanes (2 each direction)
- Measured Average Travel Time = 281 sec

Travel Time Increase  
of approximately 30  
seconds over the  
entire corridor

## Proposed Condition

- 3 Lanes (1 each direction w/ continuous TWLTL)
- Protected/Permissive left turn phasing
- Updated signal coordination plan
- Travel Time = 305 sec\*

\* Traffic Model Analysis Derived



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# Level of Service (LOS)

Definition: Quality measure describing operational traffic conditions, in terms of speed, travel time, freedom to maneuver, traffic interruptions, comfort, and convenience.

## Six Levels used to evaluate a corridor

### ● LOS A to LOS F

- LOS A = Best Operating Conditions (free-flow)
- LOS F = Worst Operating Conditions (congested)

### ● LOS C and LOS D

- Considered acceptable operating service for design and planning



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# Level of Service (LOS)

Intersection	Current Traffic 4-Lane	Current Traffic 3-Lane	Future Traffic 4-Lane	Future Traffic 3-Lane
Melrose Ave	C	C	C	C
Cameron Way	A	A	A	A
Benton St	A	B	B	B
Rohret Rd	A	C	B	C
Westside Dr	A	B	B	B

Average LOS based on calculated delay at all legs of the intersection during the AM Peak Hour.



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# Level of Service (LOS)

Intersection	Current Traffic 4-Lane	Current Traffic 3-Lane	Future Traffic 4-Lane	Future Traffic 3-Lane
Melrose Ave	C	C	C	C
Cameron Way	A	A	A	B
Benton St	B	A	B	B
Rohret Rd	A	C	A	C
Westside Dr	A	B	B	B

Average LOS based on calculated delay at all legs of the intersection during the PM Peak Hour.



# Project Specifics

- Lane reconfiguration proposed from Melrose Ave to north of Westside Dr
  - 11' wide Through Lanes
  - 12' wide Continuous Two-Way-Left-Turn Lane
  - Dedicated Bike Lanes
- Addition of a dedicated Right Turn Lane at Benton St



# Project Specifics

- ADA Sidewalk Ramp Reconstruction
- Traffic Signal Improvements
  - Coordinated signal timing
  - Protected/permissive left-turn phasing
- Pavement patching



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# THANK YOU FOR COMING

Please provide us with your comments.  
Comment forms are available at the registration  
table or you may email the project team at  
[bfall@snyder-associates.com](mailto:bfall@snyder-associates.com).



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