

U.S. Route 14 at Hartland / Hughes Road Phase I Study

McHenry County, Illinois

Stakeholder Working Group Meeting #1
May 12, 2022



US 14 AT HARTLAND / HUGHES ROAD
McHENRY COUNTY,
ILLINOIS

INTRODUCTIONS

- IDOT Project Team

- Brenda Alicea – Consultant Studies Unit Head
- Anna Kutryn – Project Manager
- Cary Lewis – Project Engineer
- Kenny Martinez – Design Engineer

- Consultant Team

- Epstein
 - Beth Norton
 - Athena Erbs
 - Greg Osborne
- Atlas Engineering
 - Behzad Amini



Agenda

- Recap of the Public Outreach Event
- Existing Conditions Summary
- Alternatives Analysis
- Alternatives Considered
- Next Steps



Recap of the Public Outreach Event

We are hosting a virtual public outreach event from May 17 to June 13, 2021.

Please review the materials on this website and provide comments using our [comment form](#).

Educational information, materials, and updates about the U.S. Route 14 Phase I Study will be posted [here](#). The goal is to provide the public with the opportunity to express their needs and concerns regarding the project and to keep them informed about the project development process.



- Held between May 17 and June 13, 2021
- 429 unique visitors to project website
- Visitors not limited to:
 - Village of Woodstock
 - Pace
 - CMAP
 - Local Residents

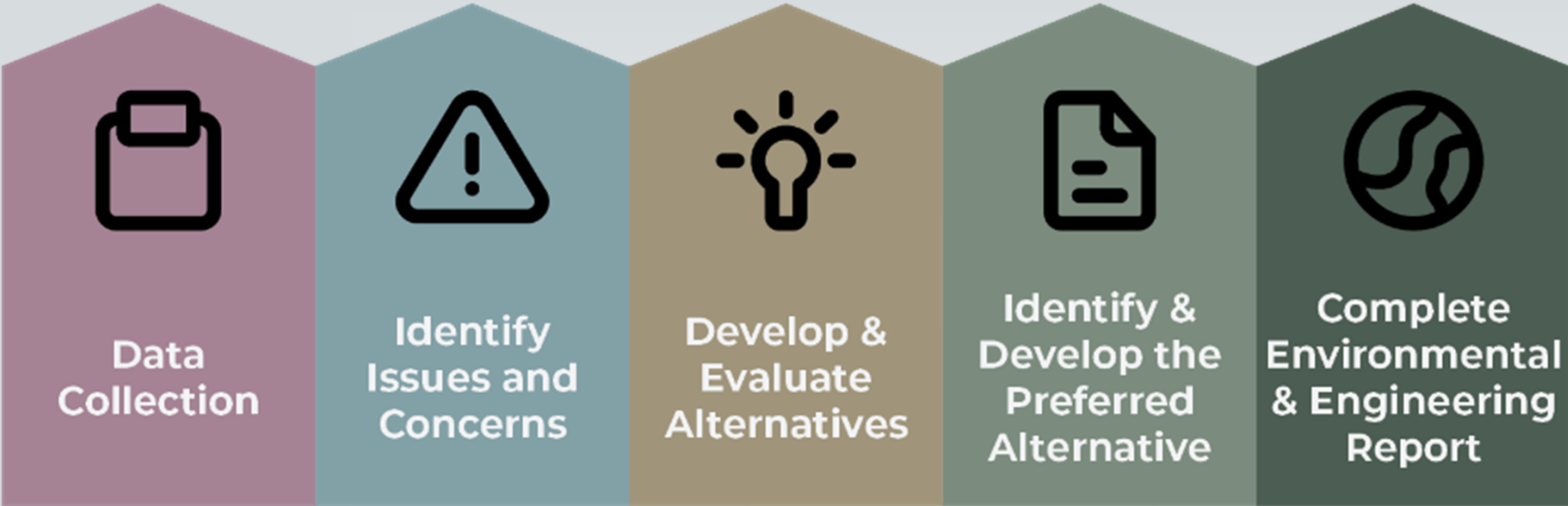


Public Outreach Event – Comments

- 8 comments received
 - Safety
 - High Speeds
 - Illegal and/or unsafe driver behavior
 - Poor sight distance
 - Intersection Improvements
 - Roundabout
 - Traffic Lights
 - Grade Separation



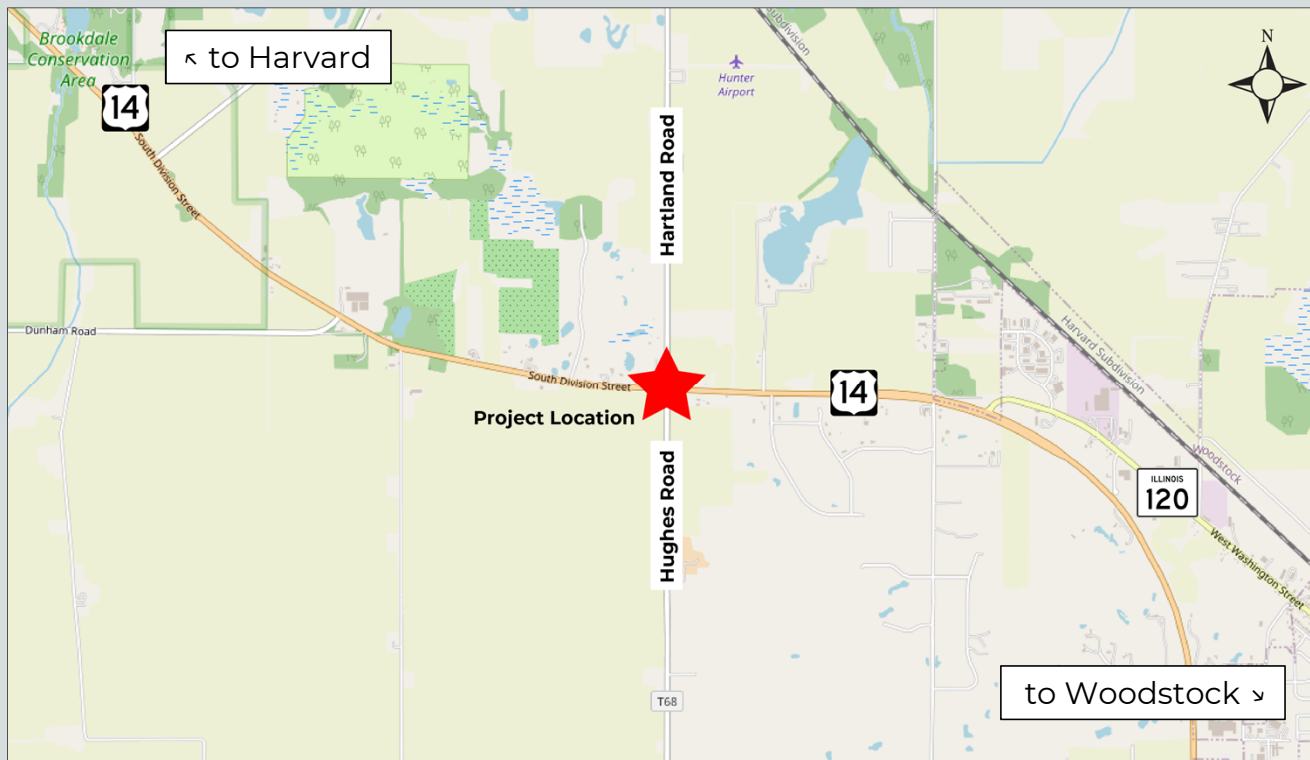
Phase I Schedule



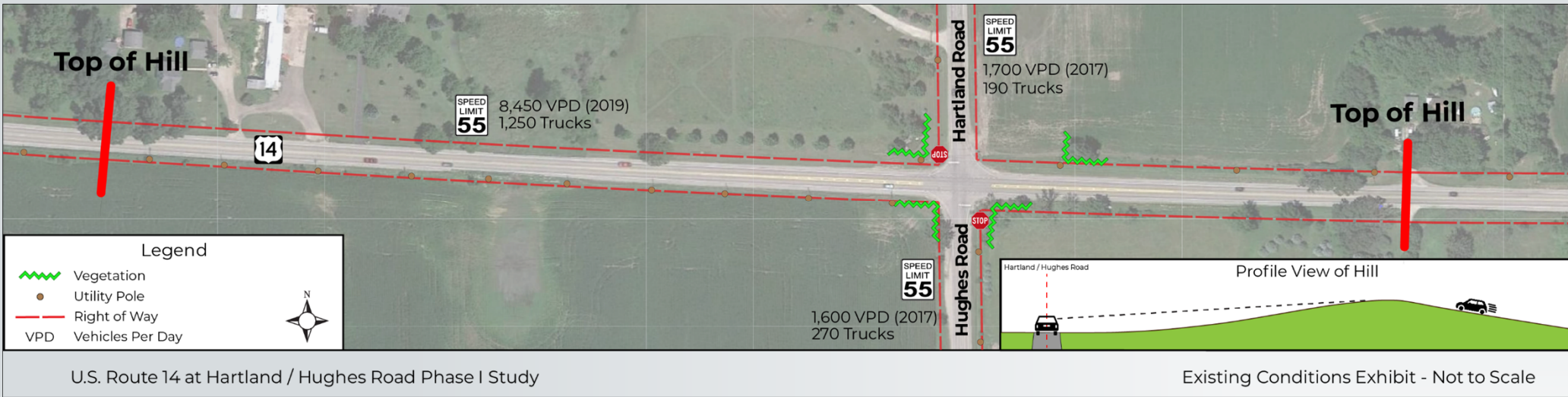
We Are Here



Project Location



Existing Conditions



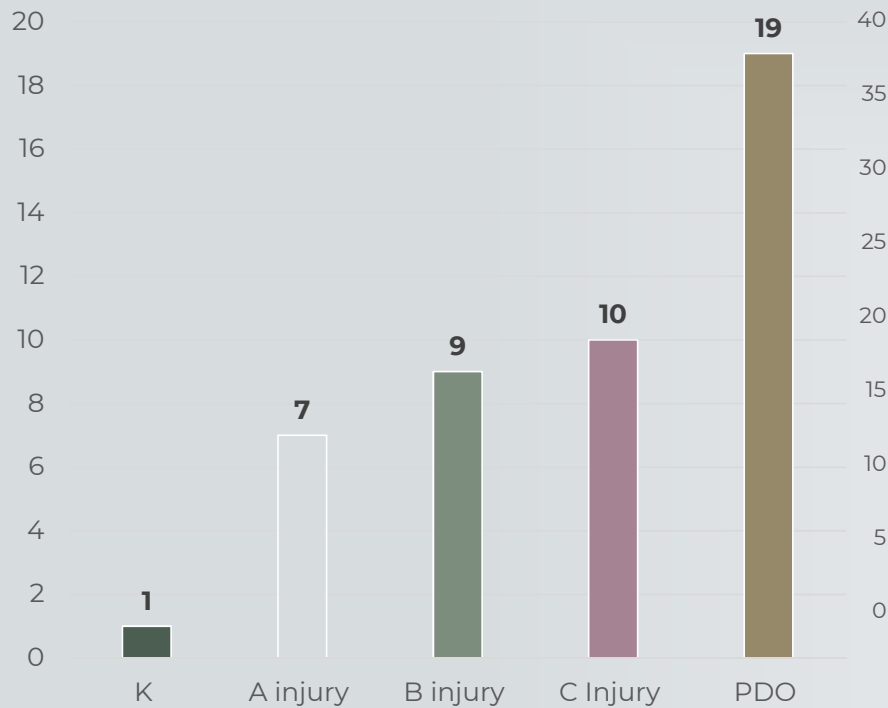
U.S. Route 14 at Hartland / Hughes Road Phase I Study

Existing Conditions Exhibit - Not to Scale

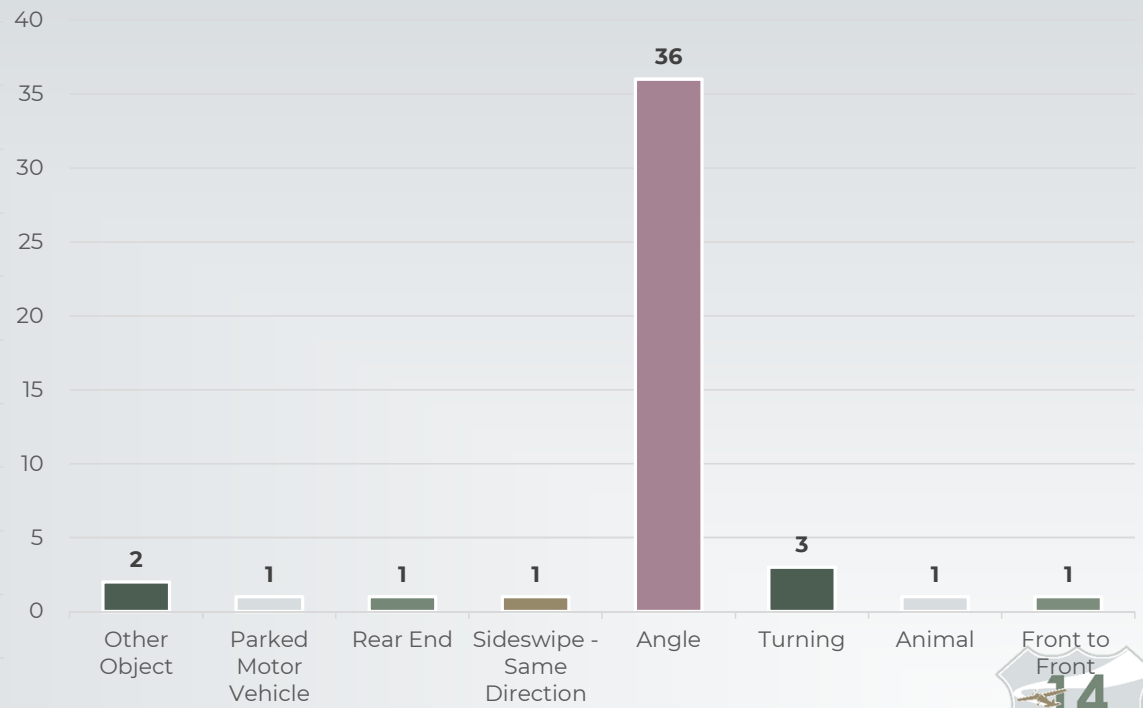
Crash History

- 46 crashes occurred between 2015 and 2020

Crash Injury Type, 2015 to 2020



Crash Type, 2015 to 2020



Alternatives Evaluation Process

- Purpose and Need
 - The purpose of this project is to improve safety and traffic operations by providing an intersection improvement.
- Range of Alternatives
- Preferred Alternative



Range of Alternatives

- No-Build Alternative
- Build Alternatives
 - Modified R-cut
 - Right-In/Right-out
 - Roundabout



No-Build

- Routine maintenance to keep it functioning and serviceable
- No geometric, safety or capacity improvements to the intersection



Modified R-Cut

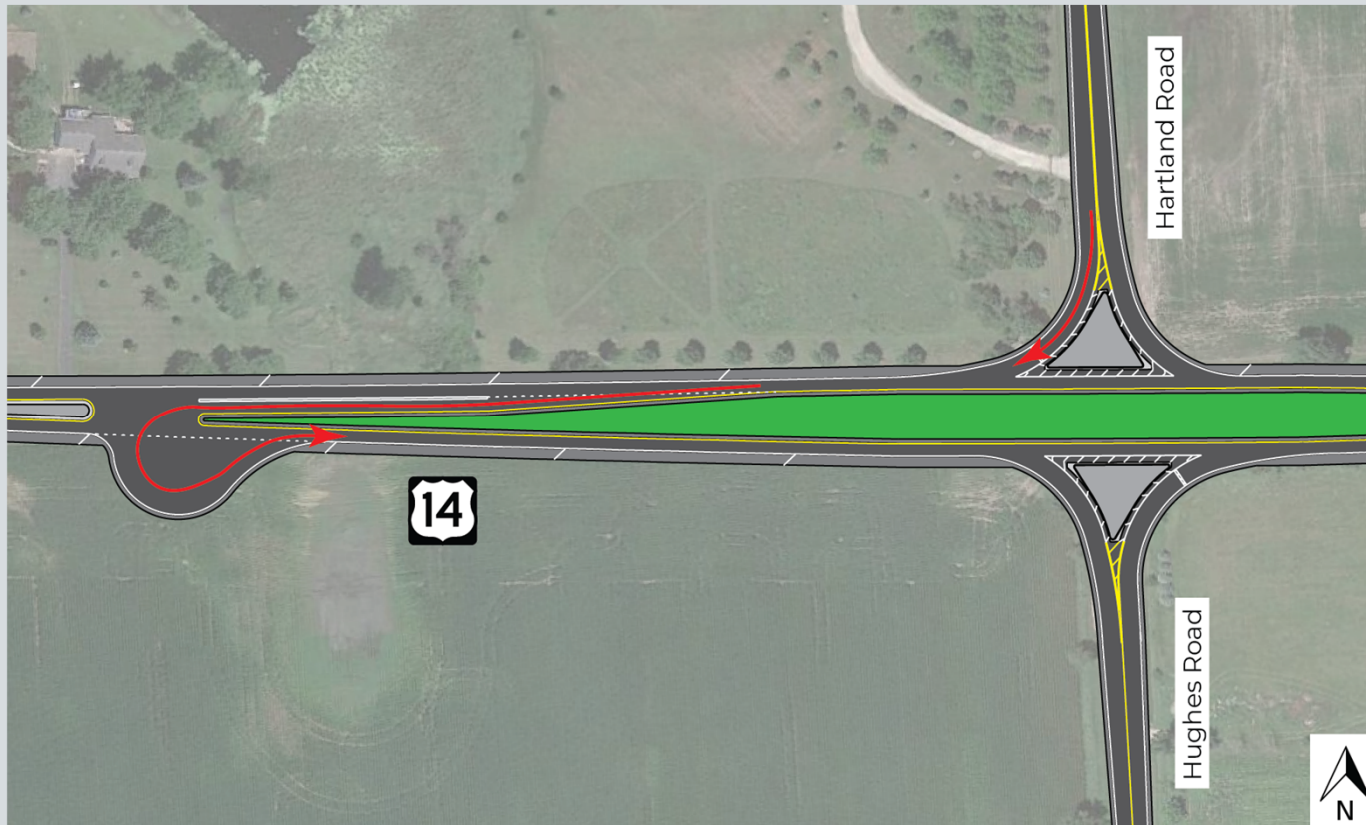
- 40' depressed median and bump outs on both sides of US 14
- Widened shoulders
- Raised islands
- Right Turn - Drivers required to turn right on US 14 and U-turn to continue on H/H or in the opposite direction on US 14
- Left Turn – Drivers required to perform a U-turn to cross the median and then proceed onto US 14 or Hartland/Hughes



Modified R-Cut



Modified R-cut



Right-In/Right-Out

- Similar design to R-cut
- 22' flush median
- Widened shoulders
- Splitting islands



Right-In/Right-Out

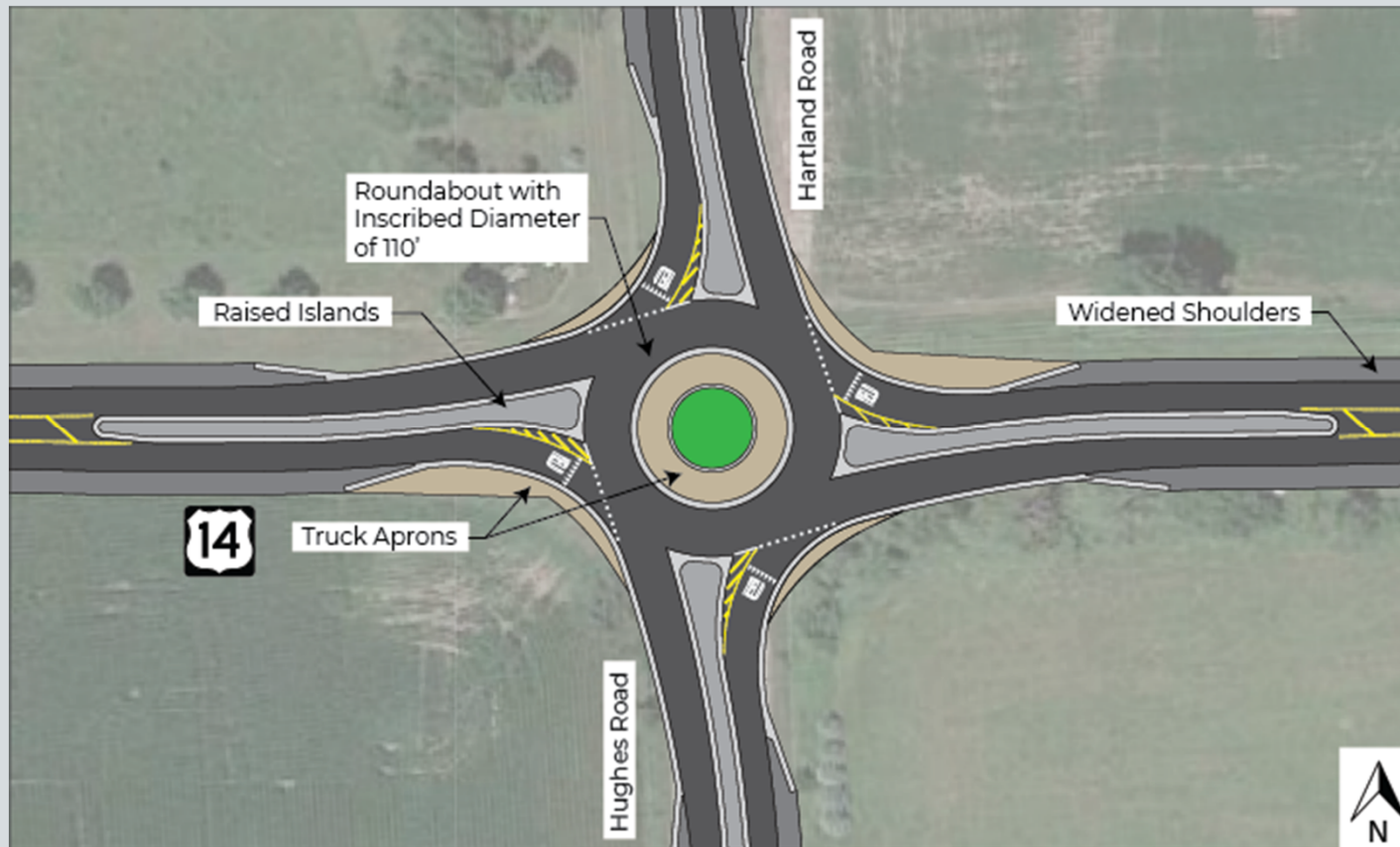


Roundabout

- Removal of the existing intersection
- Widened shoulders
- Raised islands
- Roundabout with an inscribed diameter of 110'
- Truck Aprons to maintain passage of trucks
- Drainage improvements to account for Road widening



Roundabout

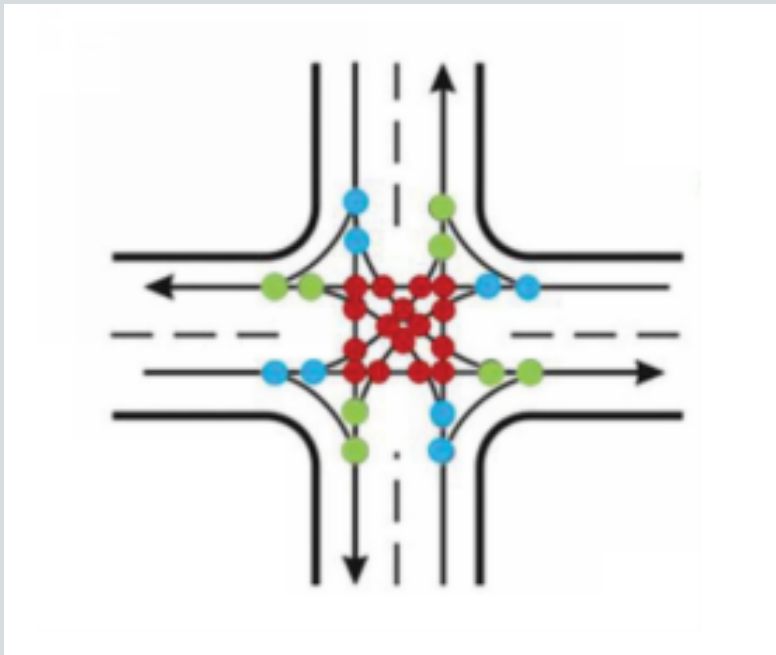


Alternatives Evaluation

- Evaluation Criteria
 - Required ROW
 - Utility Conflicts
 - Drainage
 - Tree Removal
 - Adjacent Land Use Connectivity
 - Driveway Conflicts
 - Cost
 - Safety Considerations
 - Conflict Points



Conflict Points



- Conventional Intersection has 32 conflict points
- Location where paths of vehicles intersect, diverge, or converge

No-Build Alternative

Evaluation Criteria	No-Build
ROW	None
Utility Conflicts	None
Drainage	Existing Deficiencies
Adjacent Land Use Connectivity	No significant impacts
Safety Considerations	No improvement
Cost + Contingency	\$0
Driveway Conflicts	0
Tree Removal	0
Conflict Points	32



Modified R-cut

Evaluation Criteria	Modified R-Cut
ROW	4.92 acres
Utility Conflicts	Significant
Drainage	Changes required
Adjacent Land Use Connectivity	Reduced access
Safety Considerations	Improvement
Cost + Contingency	\$8.9 M
Driveway Conflicts	6
Tree Removal	92
Conflict Points	8



Right-In/Right-Out

Evaluation Criteria	Right-In/Right-Out
ROW	4.37 acres
Utility Conflicts	Significant
Drainage	Changes required
Adjacent Land Use Connectivity	Reduced access
Safety Considerations	Improvement
Cost + Contingency	\$6.5 M
Driveway Conflicts	6
Tree Removal	43
Conflict Points	4



Roundabout

Evaluation Criteria	Roundabout
ROW	2.43 acres
Utility Conflicts	Significant
Drainage	Changes required
Adjacent Land Use Connectivity	No significant impacts
Safety Considerations	Improvement
Cost + Contingency	\$4.5 M
Driveway Conflicts	2
Tree Removal	7
Conflict Points	8



Alternatives Evaluation Summary

Evaluation Criteria	No-Build	Modified R-cut	Right-In/Right-Out	Roundabout
ROW	None	4.92 acres	4.37 acres	2.43 acres
Utility Conflicts	None	Significant	Significant	Significant
Drainage	Existing Deficiencies	Changes required	Changes required	Changes required
Adjacent Land Use Connectivity	No significant impacts	Reduced access	Reduced access	No significant impacts
Safety Considerations	No Improvement	Improvement	Improvement	Improvement
Cost + Contingency	\$0	\$8.9 M	\$6.5 M	\$4.5 M
Driveway Conflicts	0	6	6	2
Tree Removal	0	92	43	7
Conflict Points	32	8	4	8



DISCUSSION



Next Steps

Public Outreach Event #2

Working Group #2

Public Meeting

Design Approval



Thank you!

Questions?

