IL 38 OVER I-39 Phase I Study

Online Public Meeting

Welcome!

The Project Presentation will begin Shortly

While you are waiting, please remember:

- Participants cameras and microphones are turned off
- This meeting will be recorded for project documentation
- Questions/comments may be submitted at any time and will be addressed at the end of the meeting
- Instructions on how to submit questions and comments will be provided shortly
- If you are having difficultly with your audio, please use the call-in number:

1-309-205-3325 86350747028#







Illinois Route 38 at Interstate 39 Phase I Engineering Study







https://idot.illinois.gov/ transportationsystem/transportationmanagement/featuredprojects/index

Online Public Meeting – May 3, 2023 @ 6:00 PM





Presenters and Panelists



Michael Kuehn, P.E.



Steven Robery, P.E.



Kristina Kuehling Images, Inc.



Peter Harmet, P.E. CBBEL



Melissa McGhee, P.E. CBBEL





Meeting Agenda

- I. Meeting Guidelines
- II. How to use Zoom
- **III.** Project Presentation
 - Overview
 - Purpose and Need
 - Alternatives Considered
 - Preferred Alternative Details
 - Q&A Session
- V. Next Steps



https://idot.illinois.gov/transportationsystem/transportation-management/ featured-projects/index





IL 38 OVER I-39 Phase I Study Public Information Meeting Guidelines

Comments received by

May 17th will be included in the Public Meeting record.

- This meeting will be recorded for project documentation
- Questions and comments may be submitted using the <u>Q&A Feature</u>
- For more detailed inquiries, please contact the project team through the IDOT website
- If your question requires further research, it will be answered after the meeting





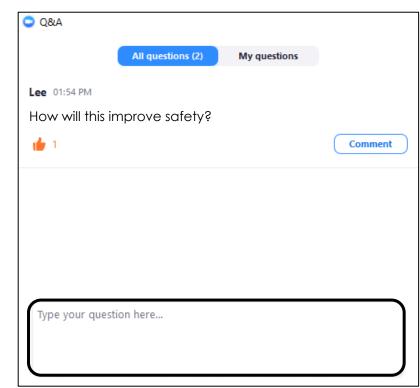
How to use Zoom

Submit questions and comments via the Q&A feature! A Q&A session will be held at the end.



Click "Q&A" to expand window and type a question or comment









Overview





Project Location

- Located in the City of Rochelle, Dement Township and in Ogle County
- Includes the section of IL 38 from Dement Road to the I-39 Interchange







IDOT Project Development Process

WE ARE HERE

PHASE I

Preliminary
Engineering and
Environmental
Studies

2020-2023

PHASE II

Contract Plan Preparation & Land Acquisition

2023-2024

PHASE III

Construction

Funding included in IDOT's Multi-Year Program

Construction Schedule not yet established





Phase I Process

DATA COLLECTION

IDENTIFY
IMPROVEMENT NEEDS

ALTERNATIVES EVALUATION

PREFERRED ALTERNATIVE

Topography

Drainage Features

Environmental Survey

Traffic & Crash Data

Structural Inspections

Safety

Mobility

Design

Condition

Alternatives
Development
& Evaluation

Determine Preferred Alternative Preferred Alternative Refinement and Documentation

> Public Meeting (May 2023)

Finalize Study





Project Purpose and Need





Purpose and Need

Safety: Intersection crashes

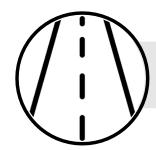




Mobility: High truck percentage

Design: Standards from the 1970's





Condition: Constructed in the early 1980's



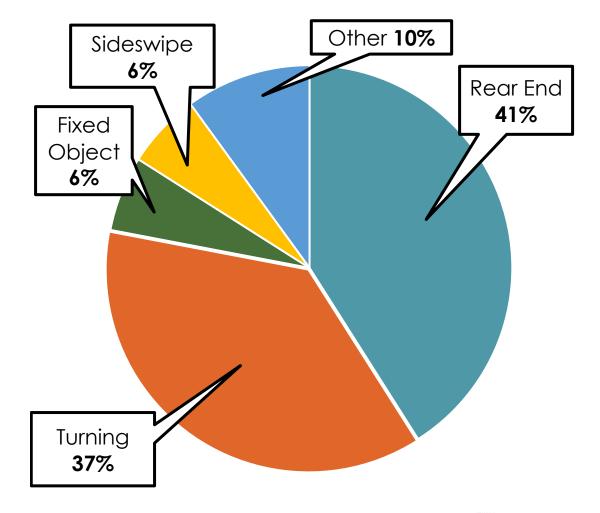


Transportation NeedsSafety

IL 38: 49 Crashes, 9 Injuries

- Rear end and turning crashes
- Angle crashes at west ramp intersection

1-39: No substantive safety issued identified







Transportation NeedsMobility

IL 38:

- Existing: 7,000 to 14,000 vehicles per day (vpd)
 - ✓ Up to 55% Trucks
 - Congested left turn movements
- Projected: 8,000 to 15,000 vpd
- Traffic Signal Warranted at I-39
 West Ramp Intersection







Transportation NeedsDesign

- Roadway widths inadequate for turning trucks
- Lane configurations less efficient
- Gaps in sidewalk/path system
- Non-ADA compliant features







Transportation NeedsCondition

IL 38 Pavement

Replacement and Repair

IL 38 Bridge

- Deck Replacement
- Repairs

Creston Ditch Culvert

- Partial replacement
- Repairs















Alternative One

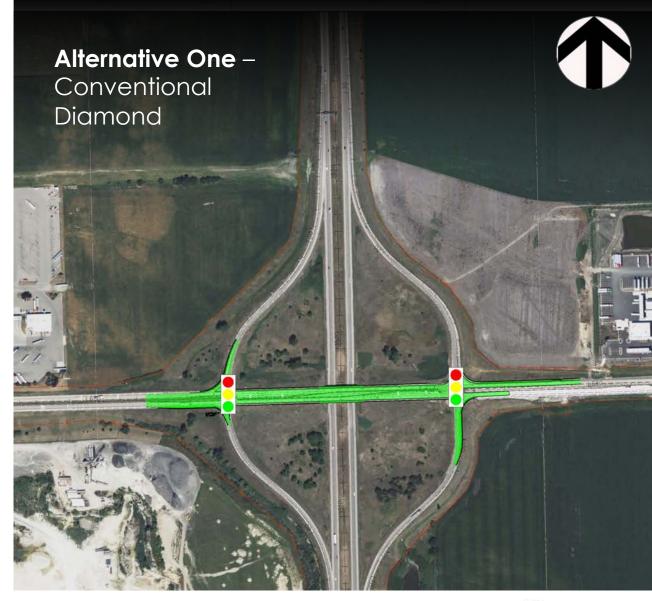
- Conventional Diamond interchange
- New signal at west ramp intersection

Advantages

Lower impacts

Disadvantages

- Most conflict points
- Requires bridge widening
- Highest cost







Alternative Two

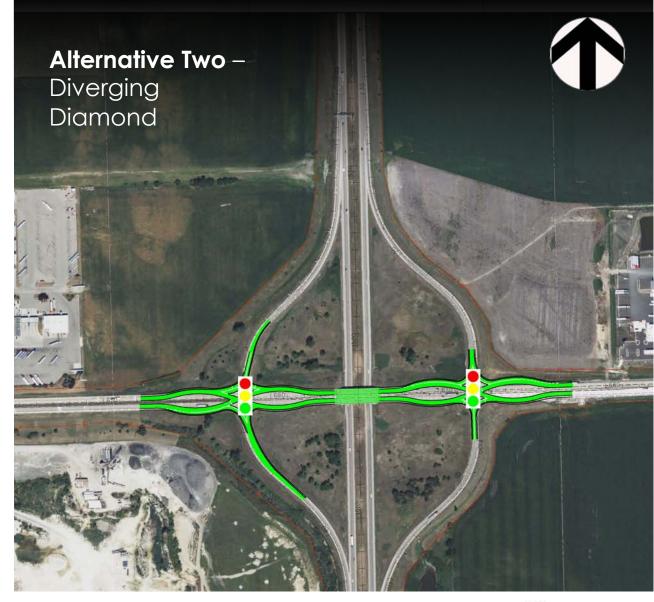
- Construct Diverging Diamond Interchange
- New signal at west ramp intersection

Advantages

- Lower impacts
- Reduces conflict points
- Provides high mobility
- Bridge widening not required

Disadvantages

Second highest cost







Alternative Three

- Partial Cloverleaf Interchange –
 Two Quadrant
- New signal at west ramp intersection

Advantages

- Converts a heavy left turn to a right turn
- Bridge widening not required

Disadvantages

- Higher impacts
- Conflict points not reduced







Alternative Four

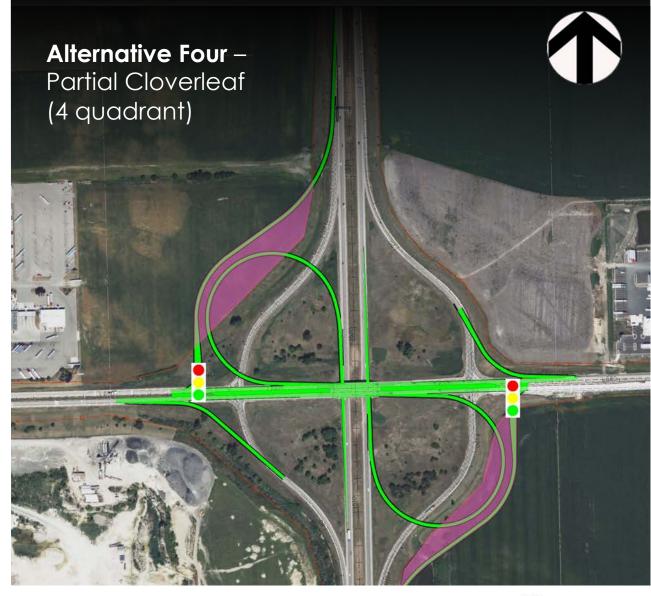
- Partial Cloverleaf Interchange –
 Four Quadrant
- New signal at west ramp intersection

Advantages

- Reduces conflict points
- Provides high mobility
- Bridge widening not required

Disadvantages

Higher impacts



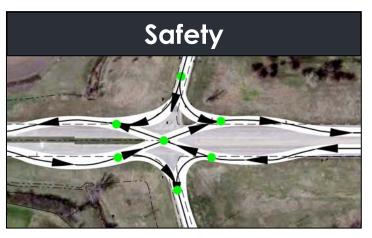


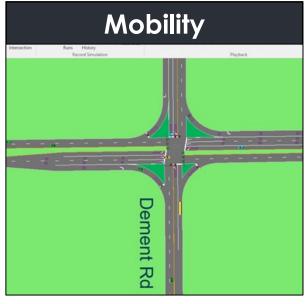


Evaluation Criteria

- Safety
- Mobility
- Impacts
- Estimated construction cost

No distinguishing environmental issues were identified













Preferred Alternative – Alternative Two Diverging Diamond Interchange

Alternatives Evaluation Summary:

- DDI has best combination of improved safety and mobility, with low impacts.
- Slightly higher estimated construction cost was offset by DDI benefits



Alternative Two - Diverging Diamond



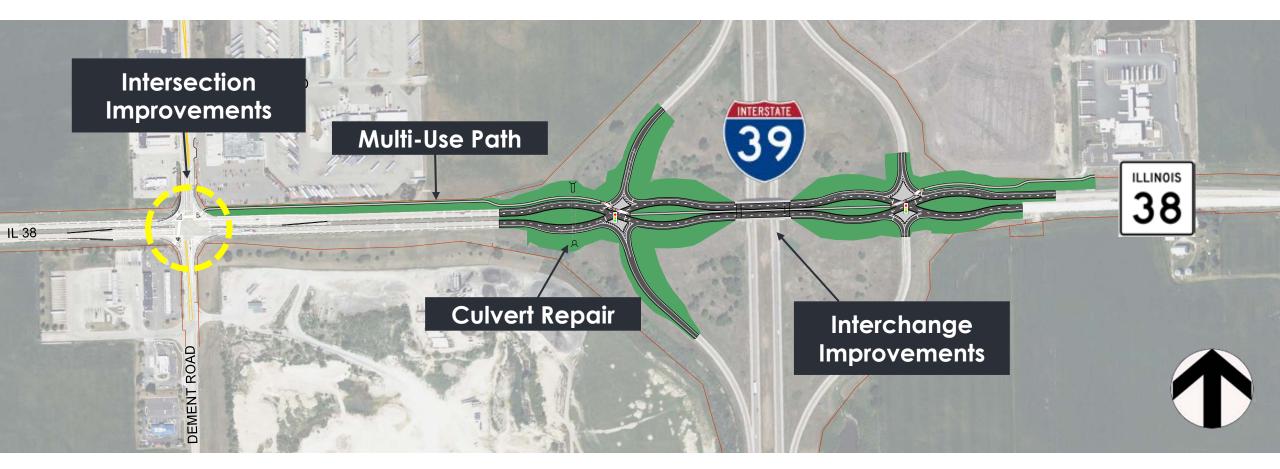


Preferred Alternative Details





Preferred Alternative Overview







Proposed Improvements – Dement Road

Widen Northwest Corner to Accommodate Future Right Turn Lane

ADA Compliant Crosswalks and Landing Areas



Restripe North Leg

- Provide Exclusive SB Dual Left Turn Lanes
- Provide SB through/right turn lane

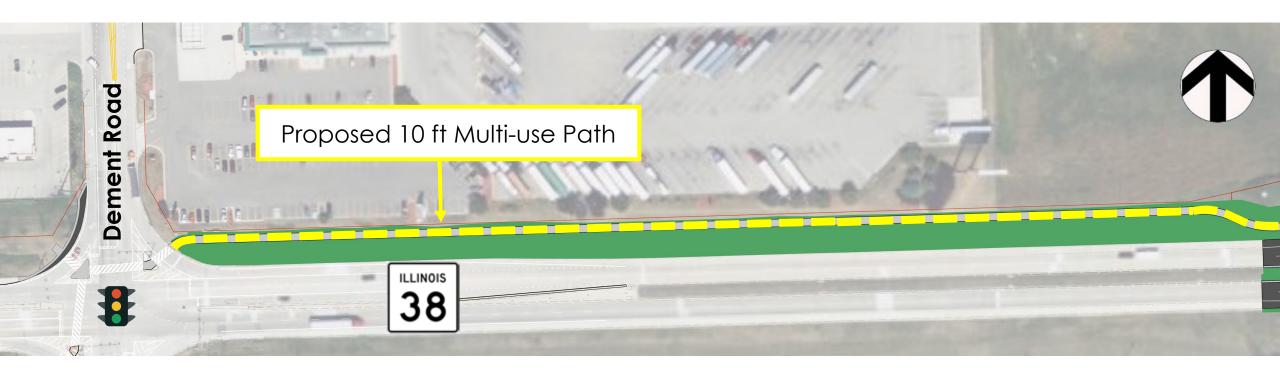


10-foot Multi-Use Path

Traffic Signal Modernization



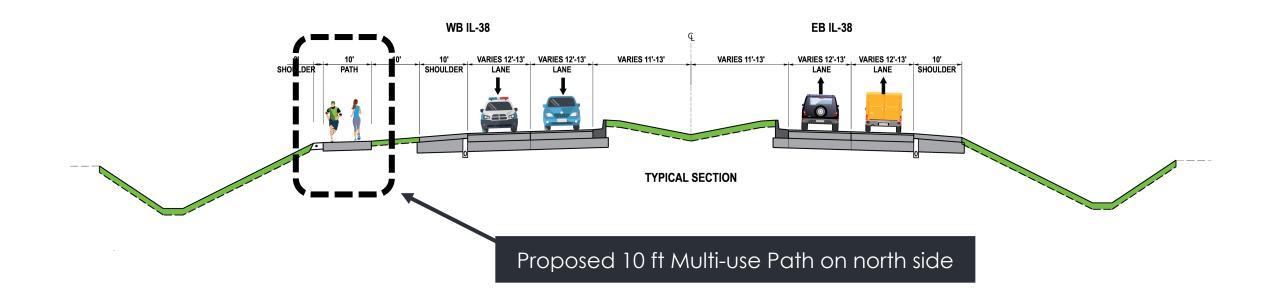






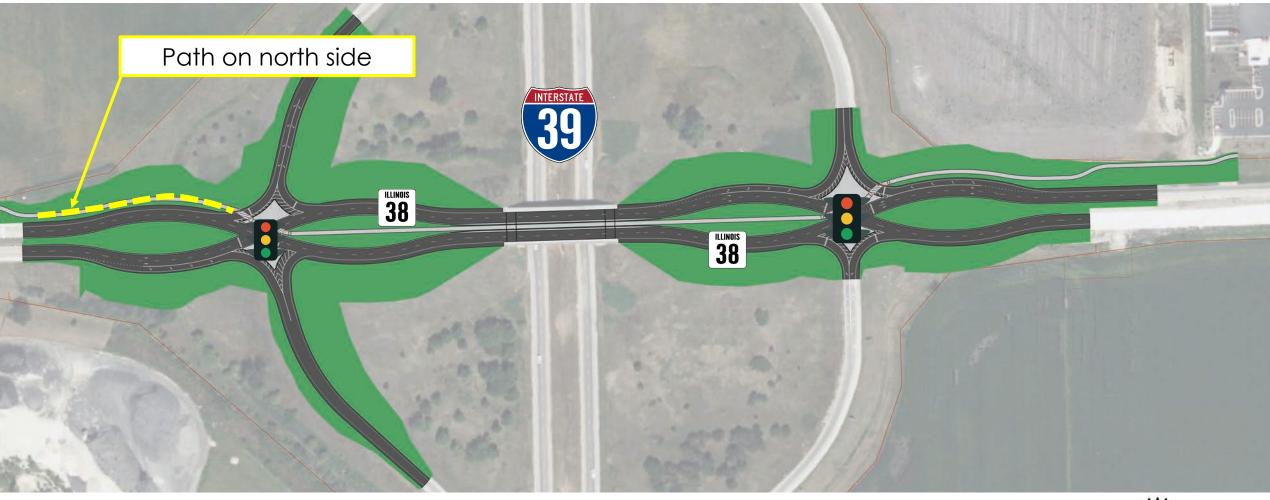


IL 38 Cross Section – Looking East



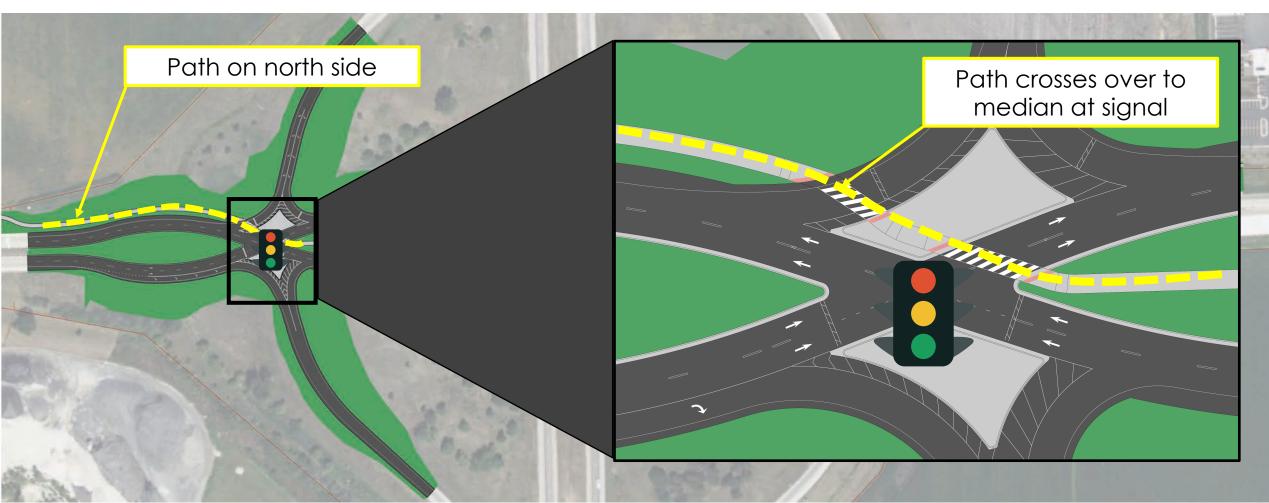








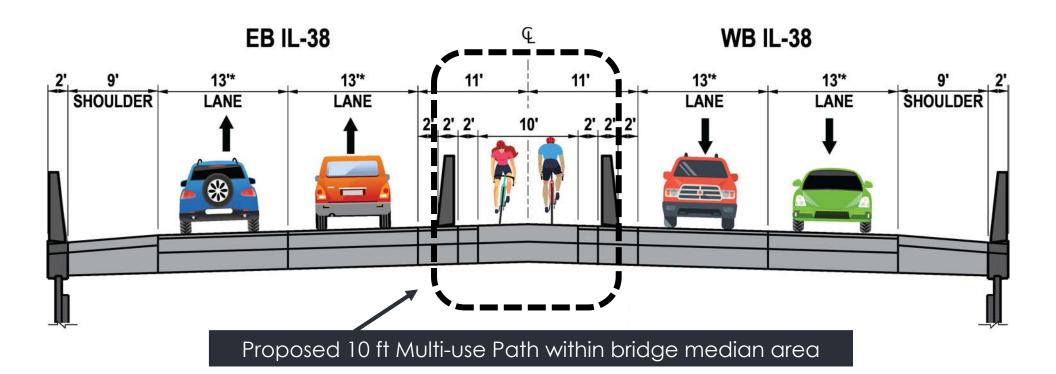








IL 38 Cross Section – Looking East



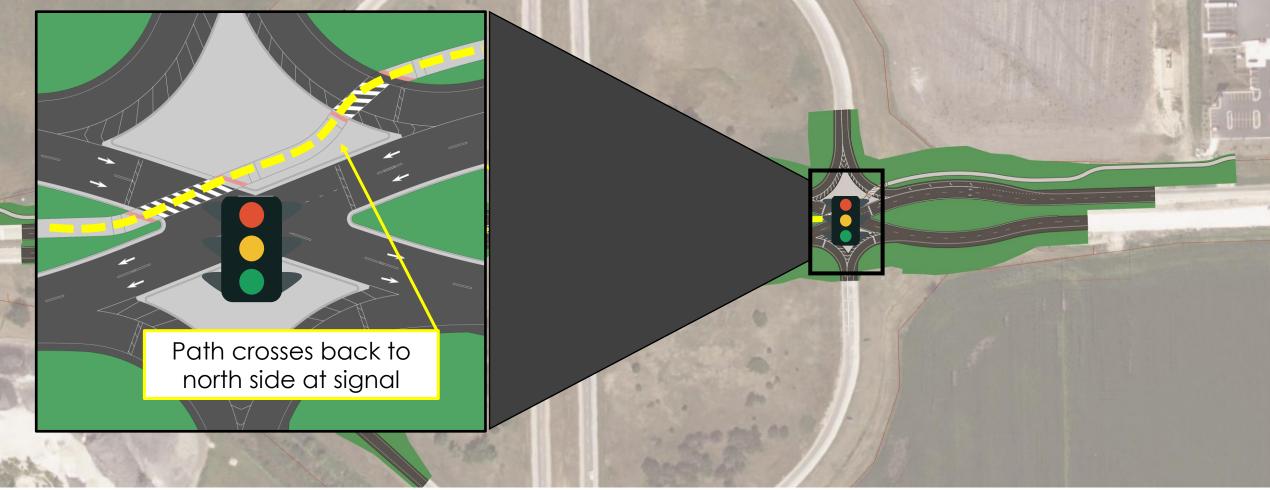














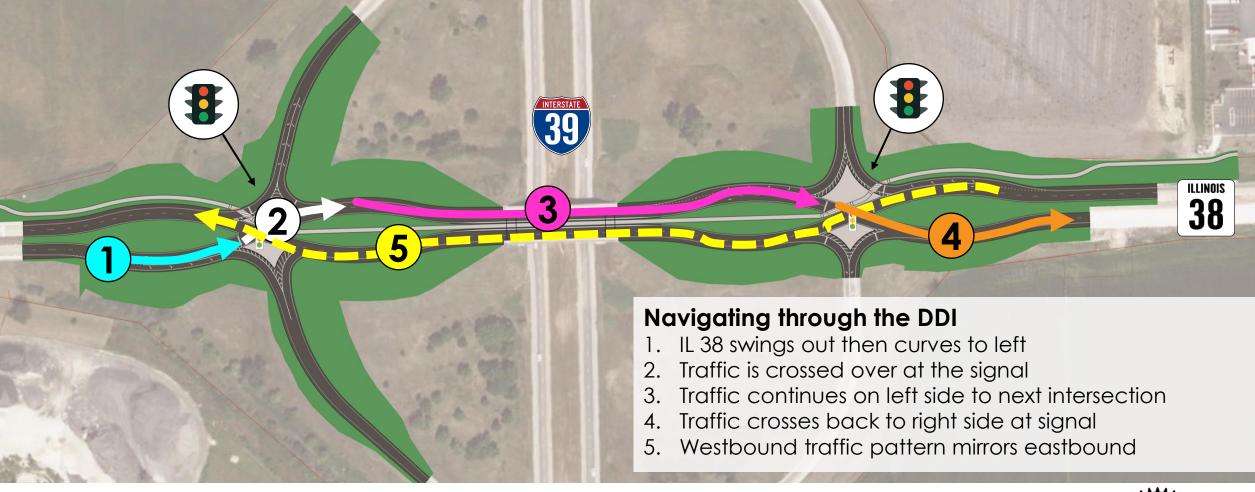








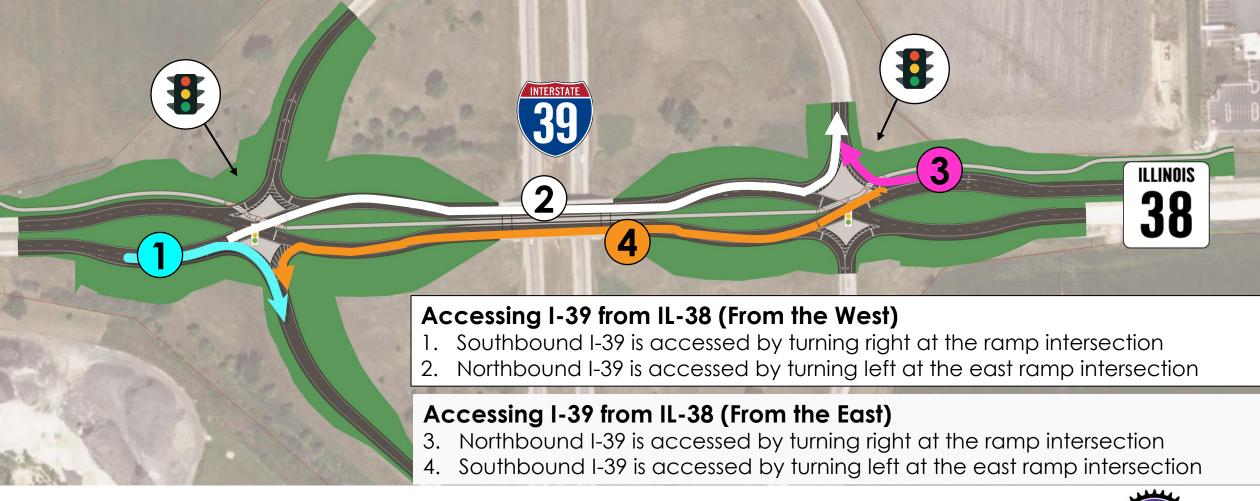
Proposed Improvements – DDI Interchange







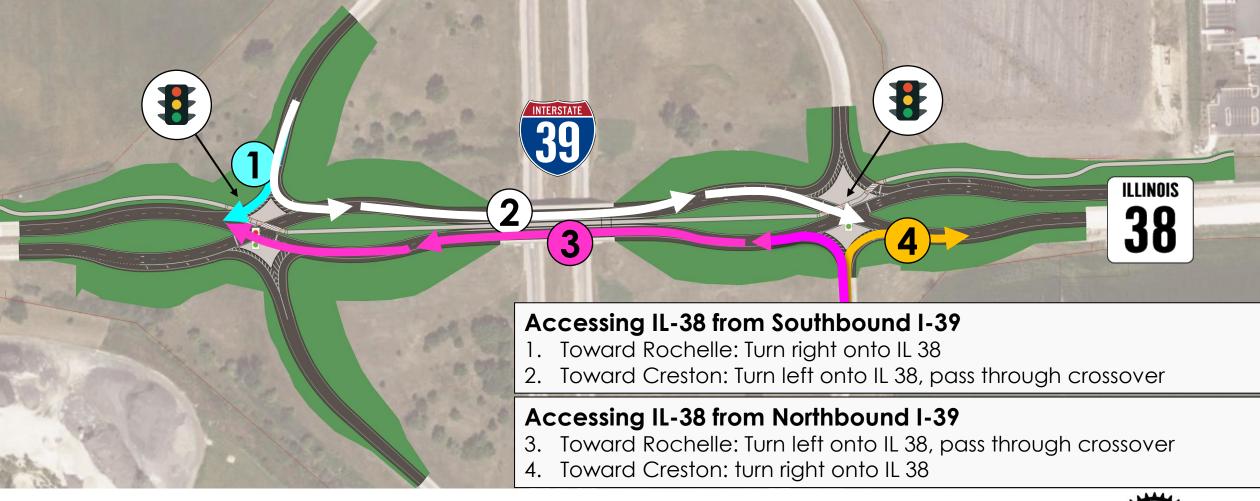
Proposed Improvements – DDI Interchange







Proposed Improvements – DDI Interchange







Diverging Diamond Interchange Operations

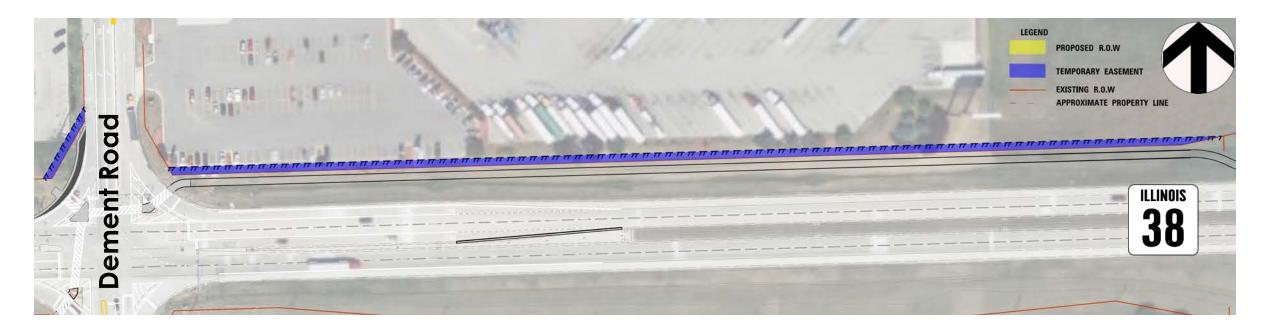
PM Traffic







Preferred Alternative: Estimated Right-of-Way

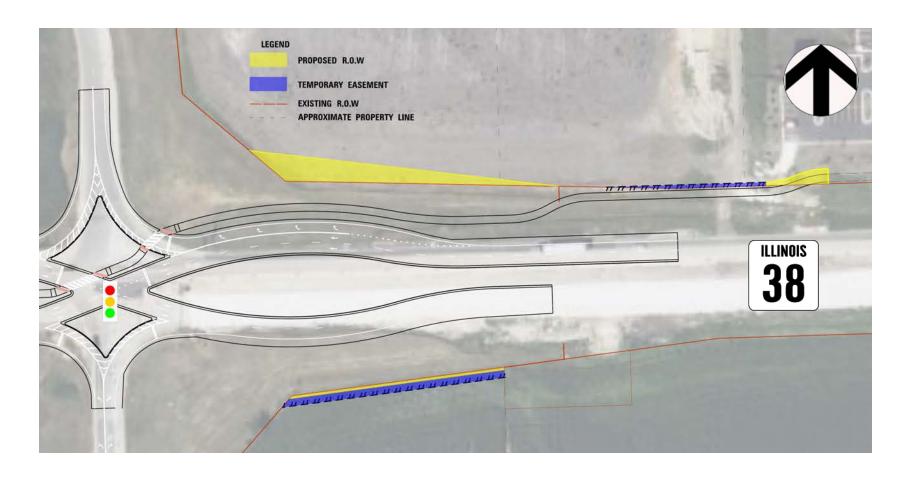


Proposed ROW Requirements will be refined following this meeting and shared with affected property owners.





Preferred Alternative: Estimated Right-of-Way



Proposed ROW
Requirements will
be refined
following this
meeting and
shared with
affected
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Preferred Alternative Summary

Safety

Left turn conflict points eliminated

Better sight distance at turns

Safer bike/ pedestrian crossings

Up to 60% reduction in fatal/injury crashes (before/after studies)

Operations

Lower (safer) speeds

Shorter cycle lengths

Better coordination between traffic signals

Mobility

High capacity within compact footprint

Ample space for stacked vehicles

Impacts

Minor right-of-way, wetland and floodplain impacts





Question & Answer Session



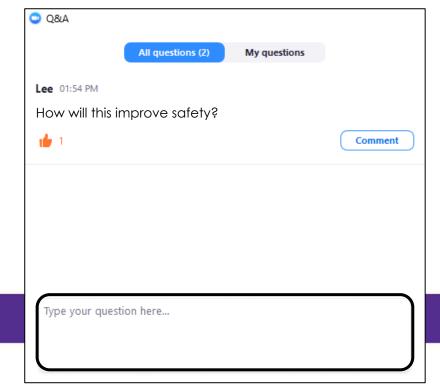


Q&A How to submit a question or comment



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IL 38 at I-39 Interchange Phase I Study

If you have additional comments, please submit them by May 17, 2023, to be included in the Public Meeting Record. Questions and comments can be submitted in several ways:

Via IDOT Website

https://idot.illinois.gov/ projects/illinois-38-overinterstate-39-interchangeproject.html



Click on "Get Involved" tab and select the link for the "Questions/Comments" form

Via E-Mail

Steven.Robery@illinois.gov

Subject: IL 38 at I-39 Interchange

Via Mail

Illinois Department of
Transportation
District 2
Studies and Plans

819 Depot Avenue Dixon, IL 61021-3500 Attn: Steven Robery





IL 38 at I-39 Interchange Phase I Study

Next Steps

- Review, Summarize and Respond to Comments
- Additional Coordination
- Refine and Finalize Preferred Alternative
- Prepare Final Engineering Report





Thank You!



