

Date: May 12, 2022 **Time:** 10:00 am

Location: Virtual – Webex Meeting

Topic: US 14 @ Hartland/Hughes Phase I Study

Working Group Meeting #1

Meeting Summary

The first Working Group (WG) meeting for the preliminary engineering and environmental study (Phase I) of US 14 at Hartland/Hughes intersection was held on May 12, 2022 at 10:00 am on WebEx. A save the date for the meeting was sent on April 22, 2022 via outlook and a follow-up WebEx link was sent to all meeting participants on May 10, 2022. A total of 18 people attended the meeting. The attendance list can be found at the end of the summary.

The agenda for the meeting was:

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

The presentation was done using PowerPoint and the presentation can be found on the project website here: https://www.us14hartlandhughes.com/documents. At the end of the presentation, the meeting was opened for discussion. The below recap highlights the presentation and questions/comments from meeting participants during the discussion period.

Recap of the Public Outreach Event

The first Public Outreach Event was held virtually over a four-week period from May 17 to June 13, 2021 on the project website. All of the meeting documents were contained on the website for attendees to view any time over the four-week period. Based on email and mailing addresses, those who completed the sign-in sheet were from Woodstock, Huntley, Union, McHenry, Algonquin, Crystal Lake, Harvard, CMAP, and Pace. A total of 8 comments were received. The majority of the commenters mentioned safety issues and all of the comments recommended or advocated for a redesign of the intersection.

Existing Conditions Summary

The intersection is located on US 14 in McHenry County, between the City of Woodstock and the Village of Harvard. Hartland/Hughes Road is a county highway providing access to agriculture, places of worship, and residents in the area. US 14 is a primary thoroughfare in McHenry County and is an important commercial route. Both US 14 and Hartland Hughes have



speed limits of 55 mph. According to observations by IDOT, speeding is common on this corridor and intersection geometry causes difficulty for turning trucks. Stop signs on Hartland/Hughes Road allow free flow traffic on US 14. The crash history of this intersection reflects the safety concerns found during our review of the existing conditions. Predominant crashes were between drivers on US 14 traveling through and drivers attempting to turn onto or cross US 14.

Alternatives Analysis

The first step in the alternatives evaluation process is to develop the project Purpose and Need and determine if the proposed improvement satisfies the project needs. The project study team defined the purpose of this project to improve safety and traffic operations at the intersection. The project team developed several build alternatives that satisfy the Purpose and Need.

Alternatives Considered

We have evaluated the following alternatives, the no-build alternative, and then three build alternatives, including a Right-In/Right-out, Modified R-cut, and a roundabout.

No-Build Alternative: The No-Build Alternative includes routine maintenance to keep it functioning and serviceable, but will not include any geometric, safety or capacity improvements to the intersection. Routine maintenance is: resurfacing, minor patching, shoulder improvements, and replacement of drainage structures.



Modified R-cut: A modified R-cut does not permit left turn movements through the center of the intersection. The R-cut alternative would use a 40' depressed median and bump outs on both sides of US Route 14 to reduce the number of conflict points at the intersection while accommodating all turning movements. This alternative also includes widened shoulders and raised islands. To make a right turn, drivers will be required to turn right on US 14 and U-turn to continue on Hartland/Hughes or in the opposite





direction on US 14. To make a left turn, drivers will be required to perform a U-turn to cross the median and then proceed onto US 14 or Hartland/Hughes.

Right-In/Right-Out: The Right-in/Right-Out alternative uses a similar design to the R-Cut alternative but does not include bump outs or the median crossovers. Therefore, this intersection will no longer accommodate drivers wanting to make a left turn from Hartland/Hughes onto US 14 or continue straight on Hartland/Hughes. This alternative would include a 22' flush median, widened shoulders, and splitting islands.



Roundabout: The Roundabout Alternative consists of removing the existing roadway at the intersection of US Route 14 and Hartland/Hughes Road and constructing a roundabout to address safety and speeding concerns. This alternative would consist of widened shoulders, raised islands, a roundabout with an inscribed diameter of 110', truck aprons maintaining passage of trucks, and drainage improvements to account for road widening.



Alternatives Evaluation

The alternatives analysis methodology defines the evaluation criteria used to determine and screen the reasonable range of alternatives to establish the process to select a Preferred Alternative. The criteria used in this analysis are as follows: Required ROW, Utility Conflicts, Drainage, Tree Removal, Adjacent Land Use Connectivity, Driveway Conflicts, Cost, Safety



Considerations, and Conflict Points. The following summary chart shows the evaluation of each alternative.

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

The following is a summary of the comments/questions from stakeholders and the responses from the Project Study Team.

Comment (MCBA): It appears the roundabout would be the most logical solution with the least impact. There does not appear to be any bicycle/pedestrian crossings in the current design. Adding crossings would be a small and beneficial change.

Response: This is the concept geometry and additional detail will be added when the preferred alternative is chosen. Complete Streets design will be incorporated.

Comment (MCDOT): MCDOT has a new planned driveway entrance to the farm on the northwest corner of the intersection.

Response: The Project Study Team requested plans for the improvement to be incorporated into the existing conditions for this intersection.

Comment (MCPD): Has there been a tree survey done yet? There are concerns with what type of trees will be removed as part of the project.



Response: A tree survey has not been performed yet.

Comment (MCPD): How can bicyclists be incorporated into roundabouts?

Response: Bicyclists and pedestrians can be accommodated with a crosswalk across the legs approaching the roundabout. A sidewalk or shared-use path would be constructed from the widened shoulder, bend away from the roundabout, and lead bicyclists to the crosswalk to cross. The crosswalk will be located at least 20' away from the circulatory roadway to allow room for a car to wait and yield for a bicyclist or pedestrian without obstructing the circulatory roadway.

Comment (MCCD): Concerned about how the Right-In/Right-Out alternative would move traffic to Dimmel Road where similar issues exist.

Comment (MCBA): The modified R-cut and Right-In/Right-out alternative would be worse for bicyclists as they would jump into the median to turn and defeat the purpose while being more expensive. I am not in favor of these two alternatives from the safety perspective.

Comment (MCPD): I spend time in Michigan and am familiar with the Michigan left turns. People can get used to them, but a Right-In/Right-Out design would entice drivers to make Uturns at locations where they are not designed to.

Response: This has been taken into account and we are considering it moving forward.

Comment (MCBA): Four conflict points for the Right-In/Right-Out is misleading because it is moving the conflict to other, nearby intersections where it is not being considered.

Comment (MCPD): Has detention been considered as part of this project? **Response:** Once we pick the Preferred Alternative we will begin working on the proposed drainage plan later this year.

Comment (MCDOT): A lot of people use Hartland/Hughes to avoid IL 47 and Woodstock. This may push drivers onto Rose Farm Road or Dimmel Road. We need to make sure we keep the north-south access for MCDOT and the nursing home near there.

Comment (MCDOT): The two driveways that would be impacted could be accommodated by allowing an opening across the splitting islands. There is an example in McHenry County where this was done for a business at Charles Road and Raffel Road, opened September 2017. **Response:** The project study team appreciates the example and asked how that roundabout is functioning.

Comment (MCDOT): It has improved safety considerably and the business with the enhanced access is an apple orchard and there have been no problems. One recommendation is to not use stamped decorative pavement at the opening location because drivers will think they cannot use it.



Next Steps

The next steps for this project after today will be to begin preparation for Public Outreach Event #2. After this event, the Project Team will take the alternatives analysis and public input and select a Preferred Alternative. This Preferred Alternative will be presented to the group at the Second Working Group Meeting and then the Public Hearing. The Project Team will then finalize the design and documents to conclude the study and obtain Design Approval.

Attendance List

Name	Organization - Position	
Behzad Amini	Atlas Engineering	
Asen Strashimirov	Atlas Engineering	
Eberhard Veit	McHenry County Bicycle Advocates (MCBA)	
Athena Erbs	Epstein	
Beth Norton	Epstein	
Greg Osborne	Epstein	
Anna Kutryn	Illinois Department Of Transportation (IDOT)	
Kenny Martinez	Illinois Department Of Transportation (IDOT)	
Cary Lewis	Illinois Department Of Transportation (IDOT)	
Brenda Alicea	Illinois Department Of Transportation (IDOT)	
Scott Hennings	McHenry County Department of Transportation (MCDOT)	
Samantha Dittrich	McHenry County Department of Transportation (MCDOT)	
Rebecca Brazas	McHenry County Department of Transportation (MCDOT)	
Scott Czaplicki	McHenry County Department of Transportation (MCDOT)	
John Kremer	McHenry County Conservation District (MCCD)	
Dan Volkers	McHenry County Farm Bureau (MCFB)	
Scott Kuykendall	McHenry County Planning and Development (MCPD)	
Chris Tiedt	City of Woodstock	