



County F and US 18/151 intersection

Village of Blue Mounds

Public Involvement Meeting
Blue Mounds, WI

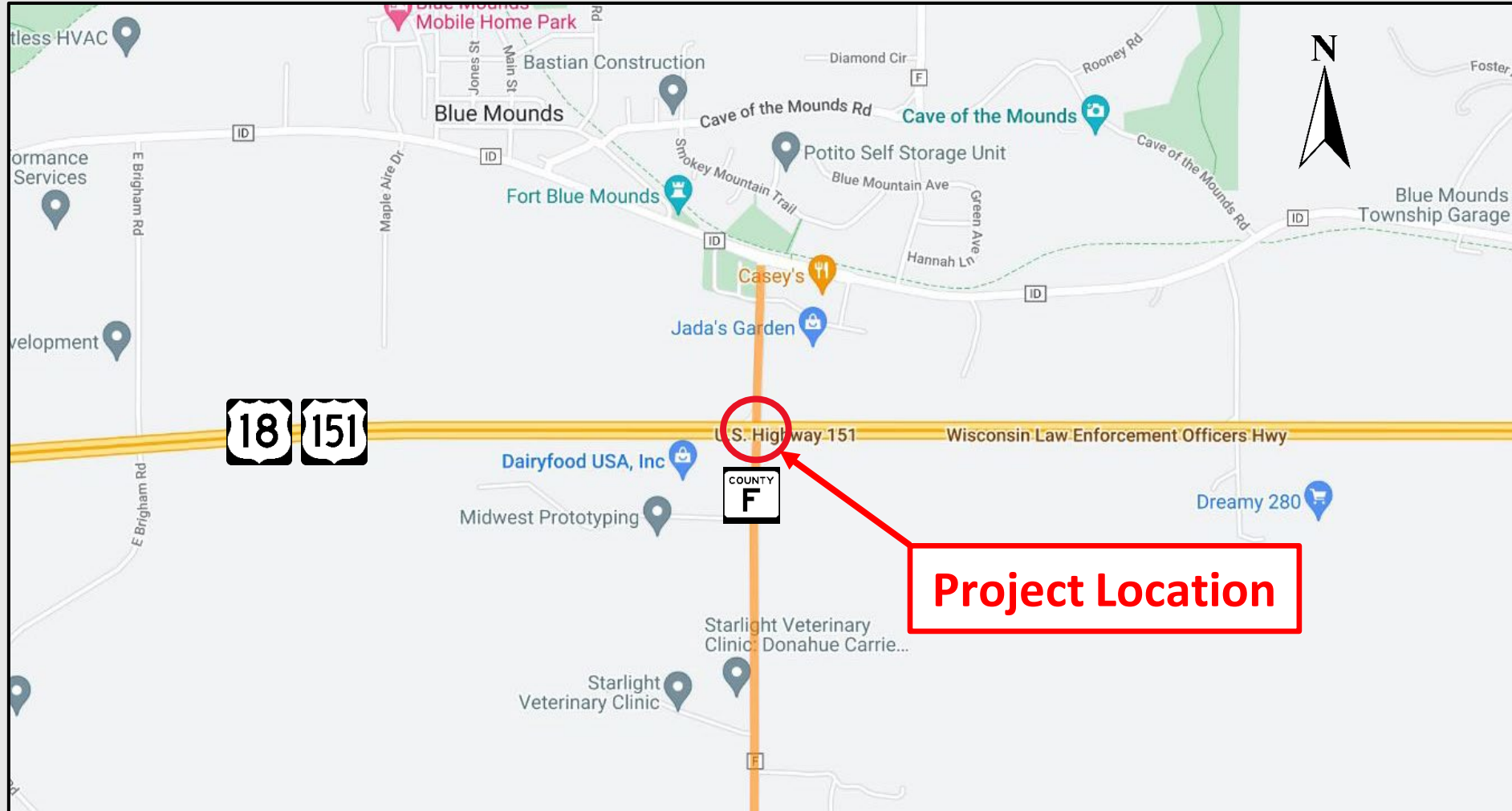
October 11, 2022

Presentation agenda

- Project overview
- Highway Safety Improvement Program (HSIP)
- Address Previous PIM Comments
- Preferred Alternative - RCUT intersection
- Wisconsin RCUTs
- Traffic during construction
- Preliminary real estate needs
- Project schedule
- Contact information



Project overview



Project overview

- US 18/151
 - Rural 4-lane expressway
 - Posted speed = 65 mph
 - Average Annual Daily Traffic (AADT) = 18,100 vehicles
- County F
 - Posted speed = 55 mph
 - AADT < 900 vehicles



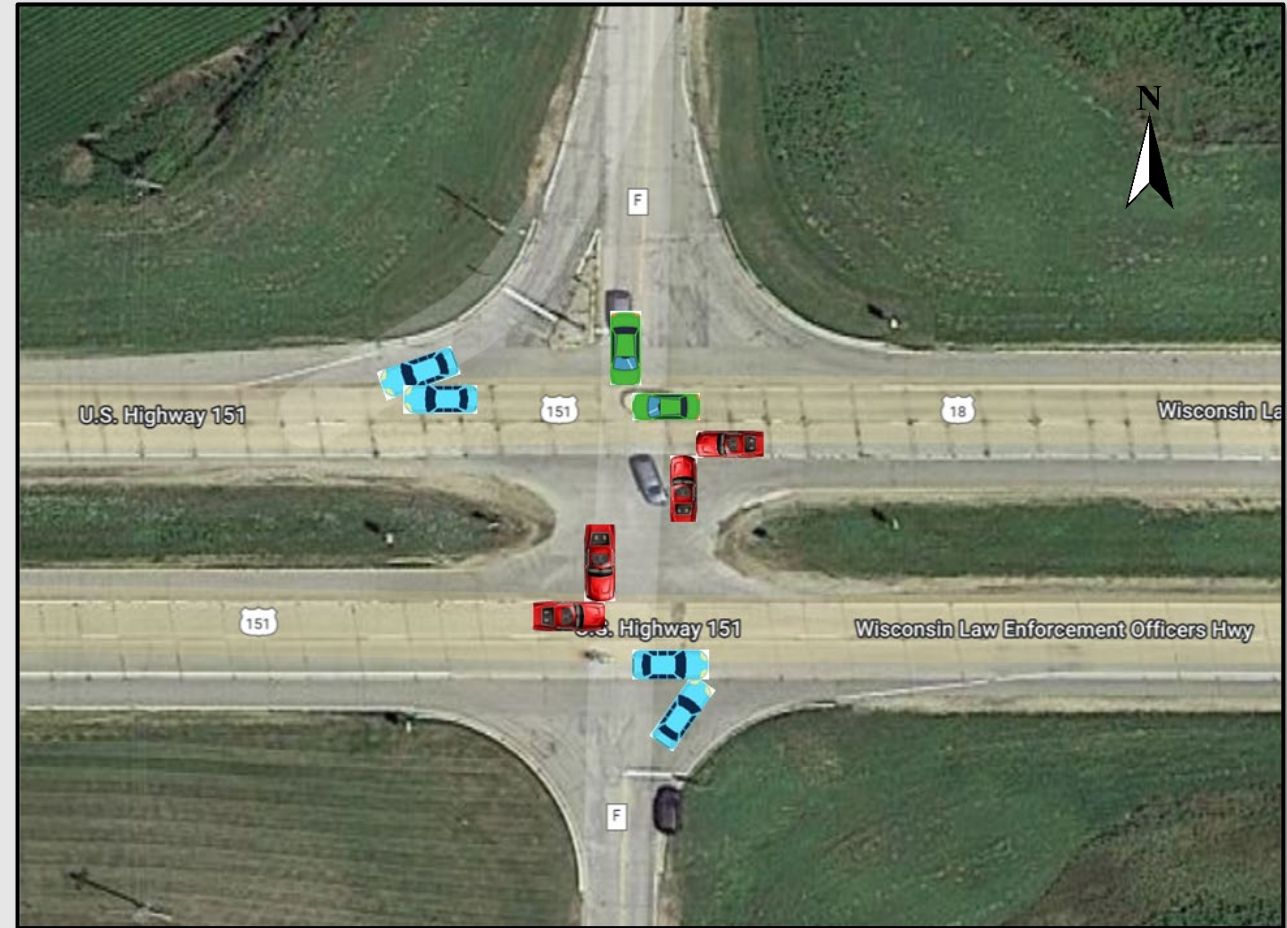
Project overview

- Five-year Crash Analysis (2016 through 2020)
 - 10 total crashes
 - 1 rear end on US 18/151
 - 1 left turn from US 18/151
 - 8 angle crashes (“T-Bone” type crashes)



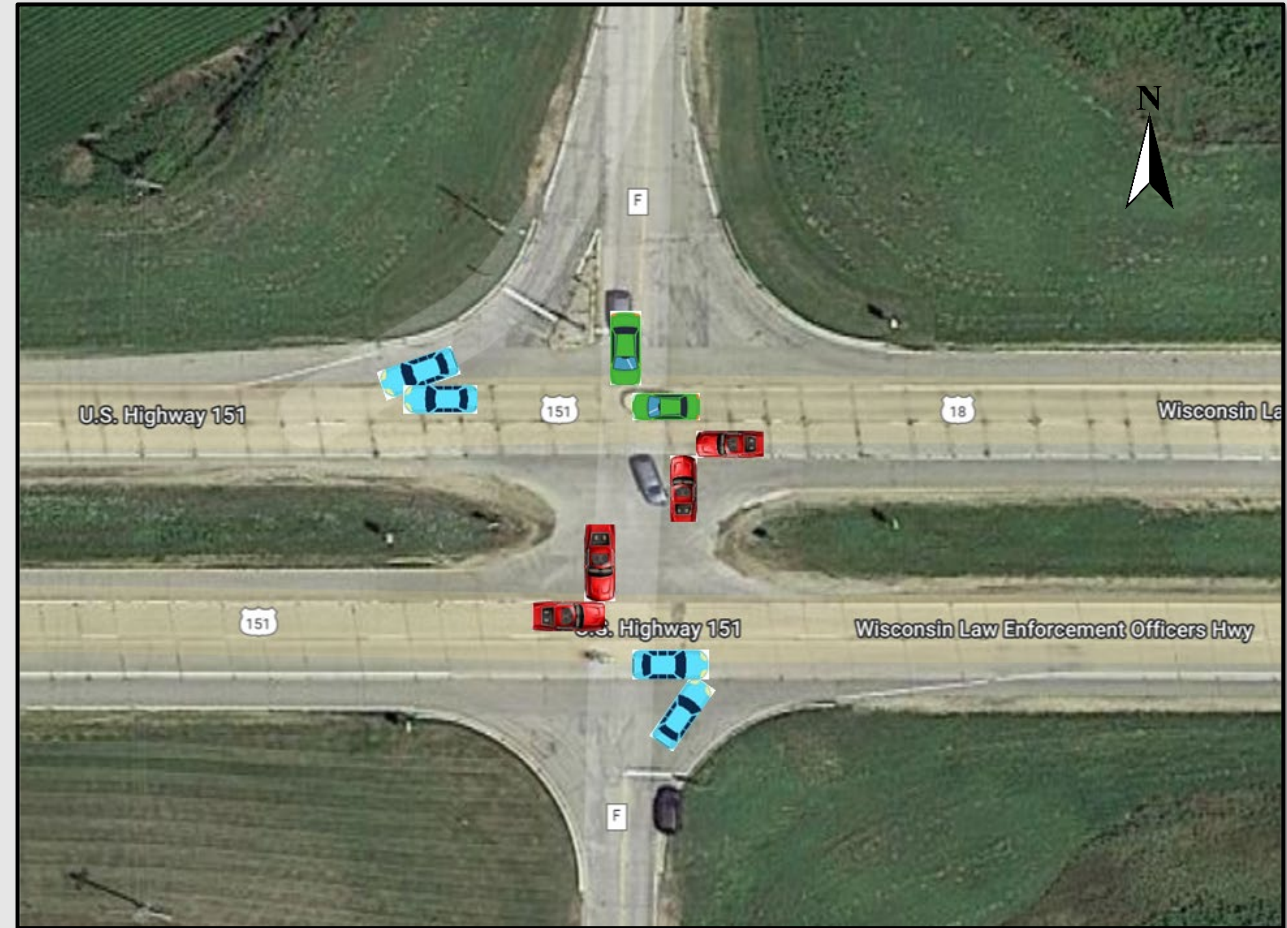
Project overview

- 6 of 8 angle crashes (75%) going through intersection
 - 4 of the 8 crashes resulted in injury
- 2 of 8 angle crashes (25%) taking a right onto US 18/151



Project overview

- One fatal crash occurred in 2015
 - Vehicle was traveling through the intersection



Highway Safety Improvement Program (HSIP)

- Program goal – achieve significant reduction in traffic fatalities and serious injuries on public roads
- Requires a data-driven, strategic approach to improve the safety of the road while maintaining performance for years to come
- Federal-aid program that funds projects with quick timeframes and smaller budgets



Highway Safety Improvement Program (HSIP)

- Several improvement alternatives studied during the application process.
- 2 alternatives, the Median U-Turn and RCUT, met HSIP criteria and both the options were approved for funding through HSIP.
- Alternatives presented to public in January 2022
- RCUT selected as WisDOT preferred alternative
 - The RCUT does not impact turning movements from US 18/151



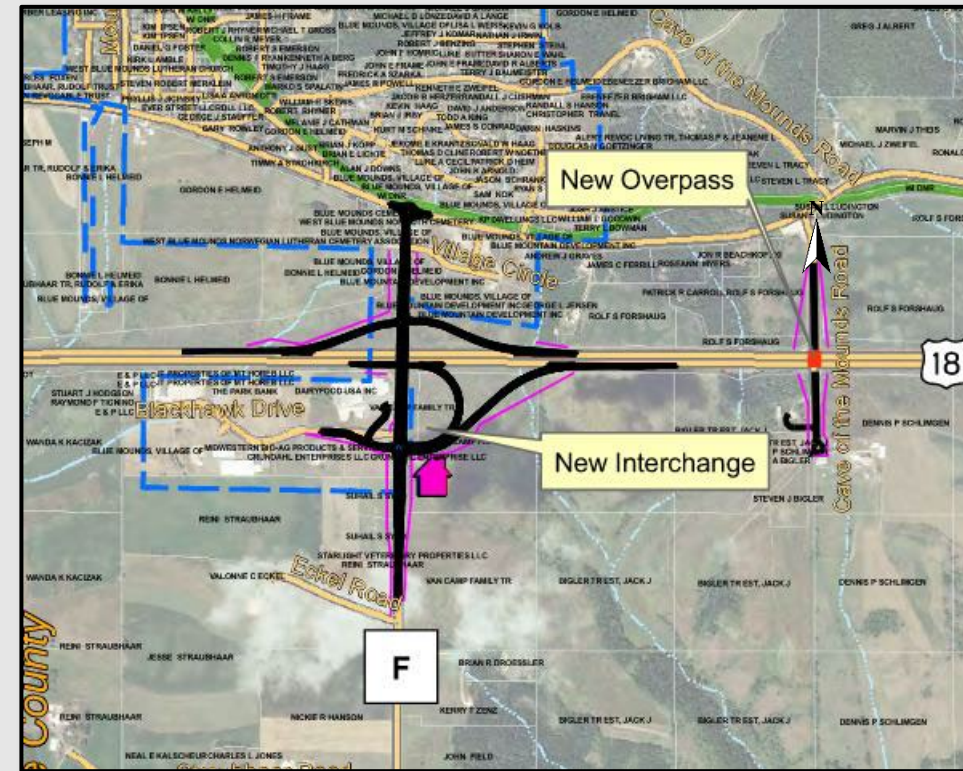
Previous PIM Comments

- Comments received following the Virtual PIM in January 2022 was heavily in support of adding an interchange at this intersection.
 - Comments referenced the 2013 Freeway Conversion Study.



Previous PIM Comments

- 2013 Freeway Conversion Study
 - Evaluated necessary changes to convert corridor to freeway
 - Conversion studies do not always result in immediate conversion of corridor
 - WisDOT evaluates different factors to determine the correct time for conversion.



Previous PIM Comments

- A wholesale conversion of USH 18/151 to a freeway is not in WisDOT's plans for the foreseeable future because safety and congestion issues on the corridor do not warrant such action.
- Improvements can be more appropriately and more cost-effectively resolved with localized improvements to address site-specific operational and safety concerns.



Previous PIM Comments

- The Department typically considers freeway conversions projects when safety and operational issues cannot be adequately address by less comprehensive solutions.
- This corridor is part of the backbone system which consists of the most critical routes in the state for tourism and industry. This route will continue to be monitored for safety and operations, and the Department will adjust its approach if needs dictate.



Previous PIM Comments

- Stand-Alone Interchange Project at County F
 - AADT on County F is less than 900 vehicles.
 - Interchanges are considered when AADT's reach closer to 2000 vehicles.
 - The needs on this intersection can be appropriately and more cost-effectively resolved with the RCUT proposed to remedy this site-specific safety concern.



Preferred Alternative - RCUT intersection

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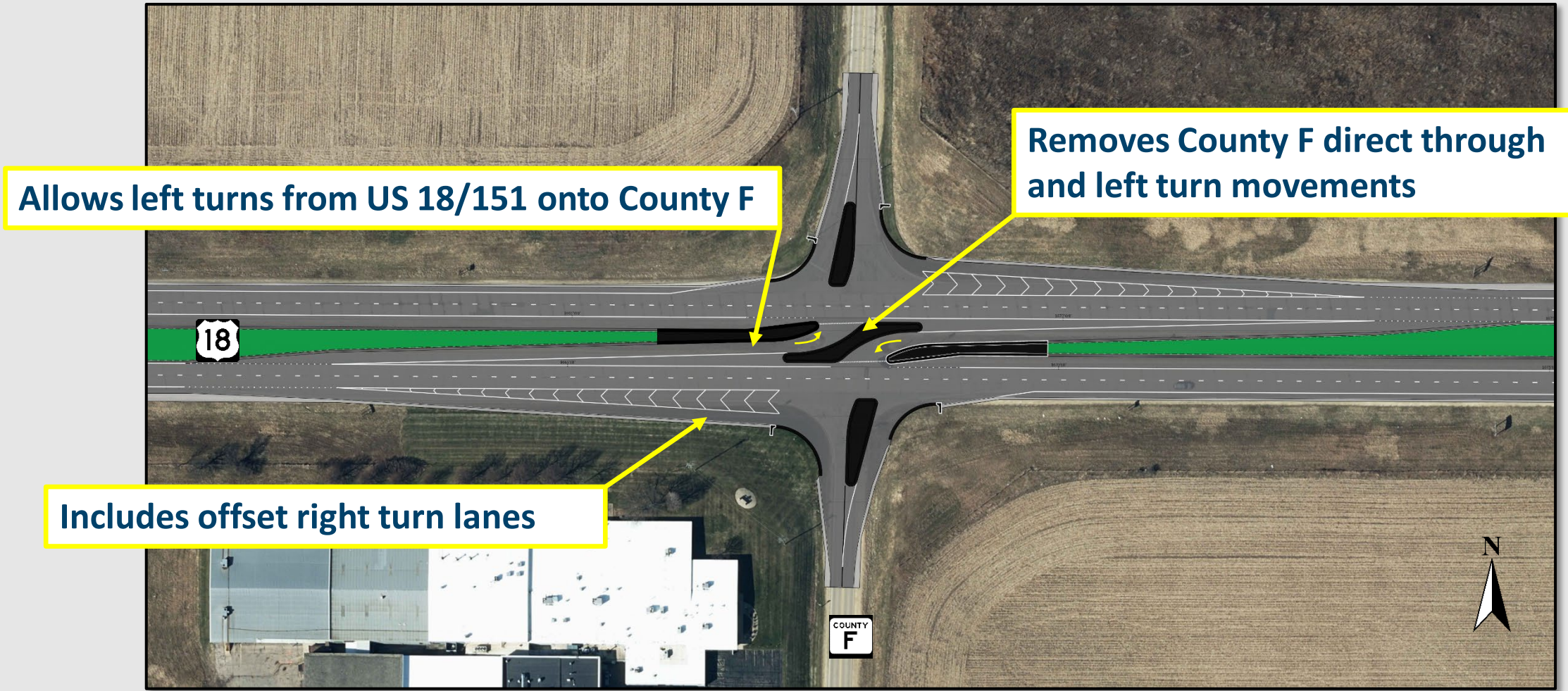
Allows left turns from US 18/151 onto County F

Removes County F direct through and left turn movements

Includes offset right turn lanes



Preferred Alternative - RCUT intersection



Preferred Alternative - RCUT intersection

Benefits

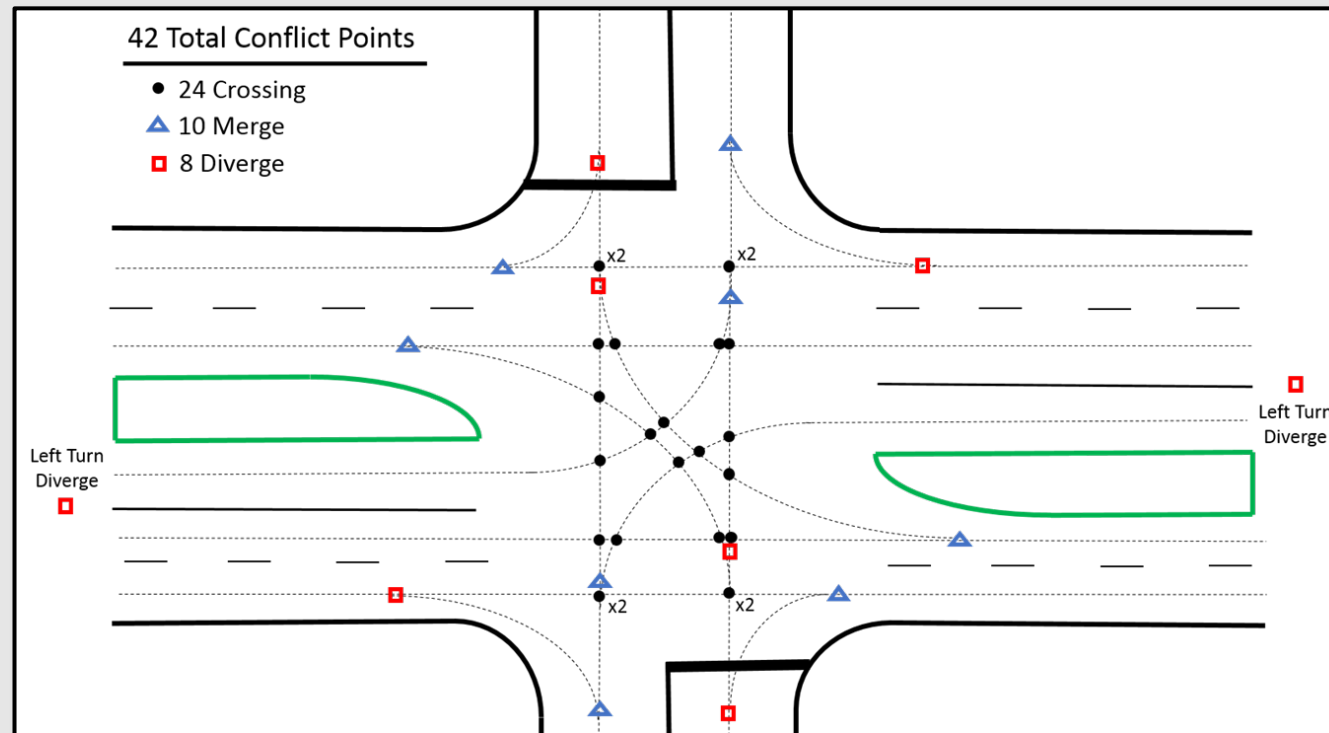
- Provide extra storage for through/left turning vehicles
- Eliminates long vehicles extending into mainline traffic
- Eliminates position confusion when multiple vehicles trying to store in the median



Preferred Alternative - RCUT intersection

Benefits (Cont.)

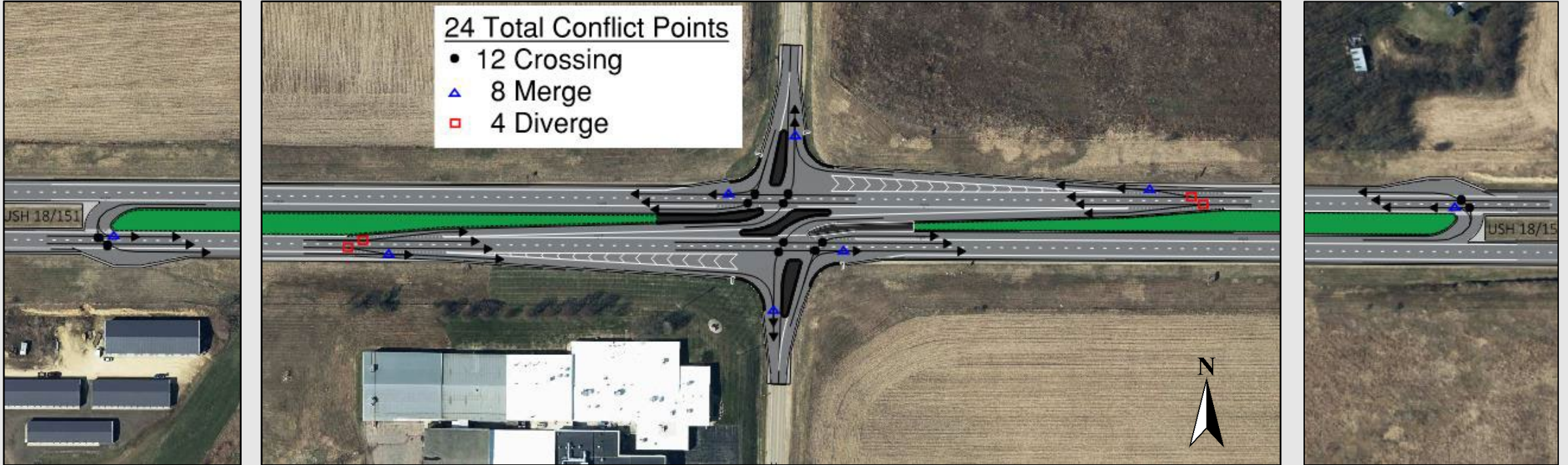
- Reduces the amount of conflict points



Preferred Alternative - RCUT intersection

Benefits (Cont.)

- Reduces the amount of conflict points



Preferred Alternative - RCUT intersection

Benefits (Cont.)

- Reduces total crash frequency by 34% - 60% (Edara et al., 2013)
- Reduces injury and fatality crashes by 53% - 75% (Bared and Zhang, 2012)
- 2013 Missouri studied 5 intersections (Edara et al., 2013)
 - Disabling injuries reduced 86%
 - Right angle crashes reduced 80%
 - Fatality crashes were eliminated
 - Wait time was reduced in half
- Federal Highway Administration Study found travel time reduced by 17% (Bared and Zhang, 2012)



RCUT in Wisconsin

- WIS 23 and County M (Completed in 2013)
 - Mainline ADT – 21,900 (higher than US 18/151)
 - Side Road ADT – <1,000 (Similar to County F)

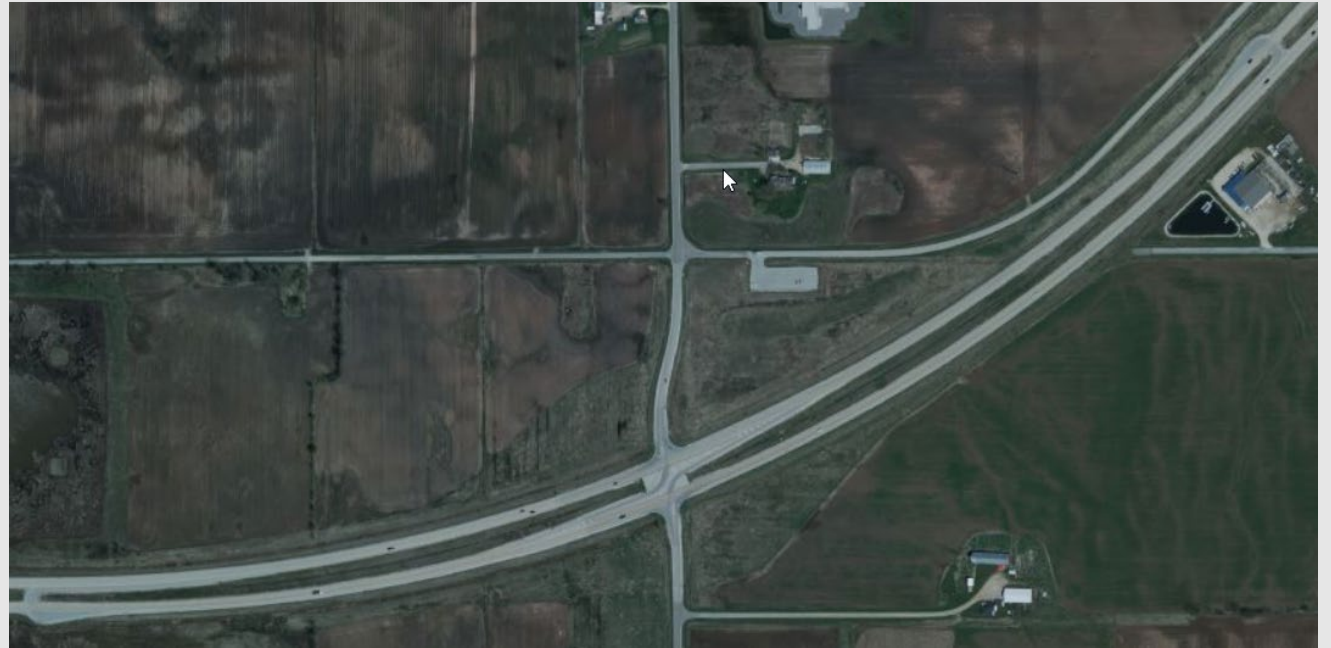
- Before J-Turn
 - 8 Crashes (3 injury crashes)

- After J-Turn
 - 2 Crashes (No injuries)



RCUT in Wisconsin

- WIS 57 and County C/D (Completed in 2015)
 - Mainline ADT – 10,900 (Lower than US 18/151)
 - Side Road ADT – 920/1400 (Higher than County F)
- Before J-Turn
 - 25 Crashes (19 injury crashes)
- After J-Turn
 - 4 Crashes (1 injury)



Traffic during construction

- US 18/151
 - Open to one lane of traffic in each direction
- County F
 - Closed to traffic



Preliminary real estate needs

- Permanent right of way is not anticipated
- Minor amounts of Temporary Limited Easement is anticipated



Project schedule

- Public Involvement Meeting #2 October 11, 2022
- Preliminary Plans Summer 2023
- Real Estate Starts Fall 2023
- Final Plans August 2025
- Construction Summer 2026



Contact information

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Project website: wisconsindot.gov/Pages/projects/by-region/sw/us18-bluemounds/default.aspx

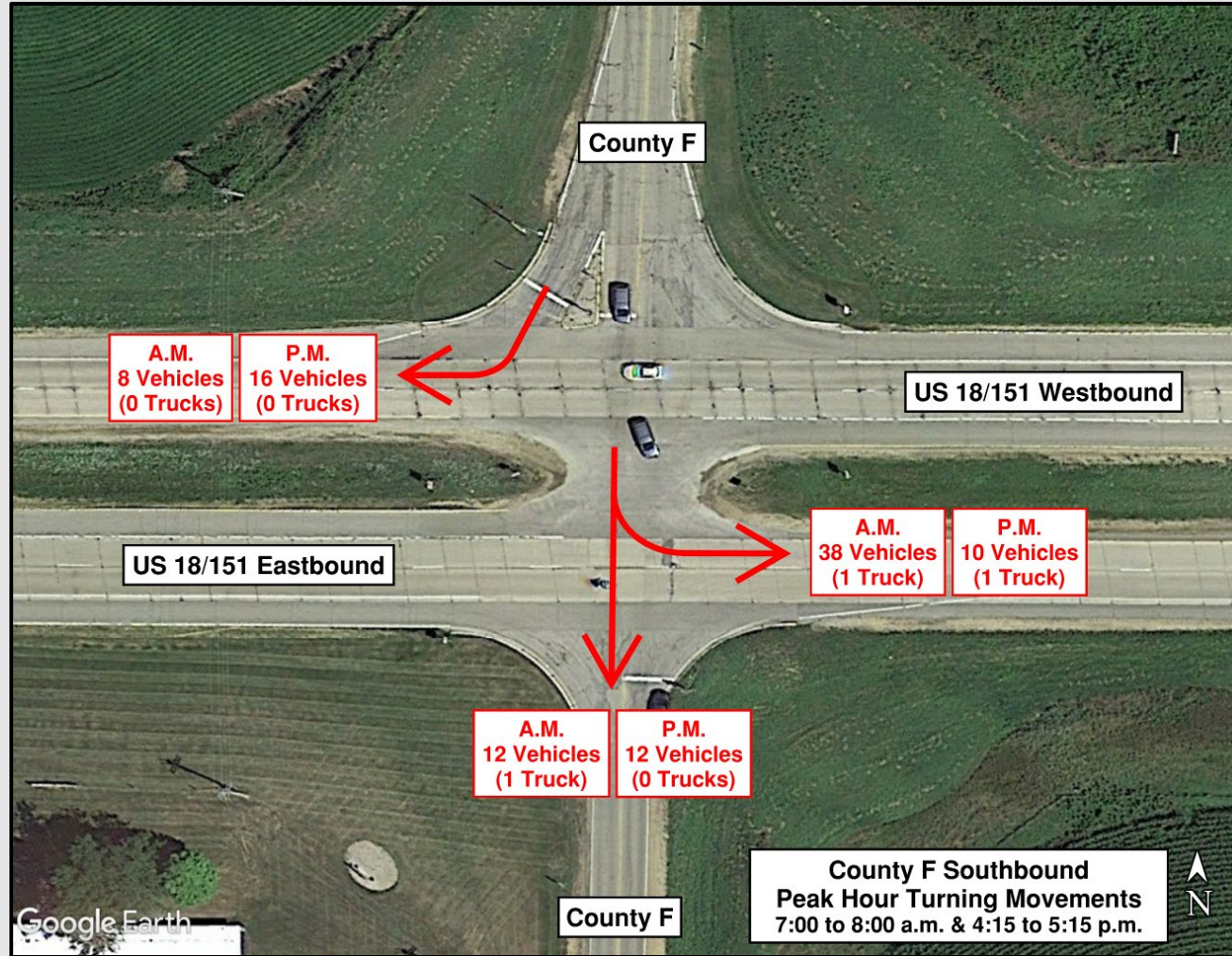
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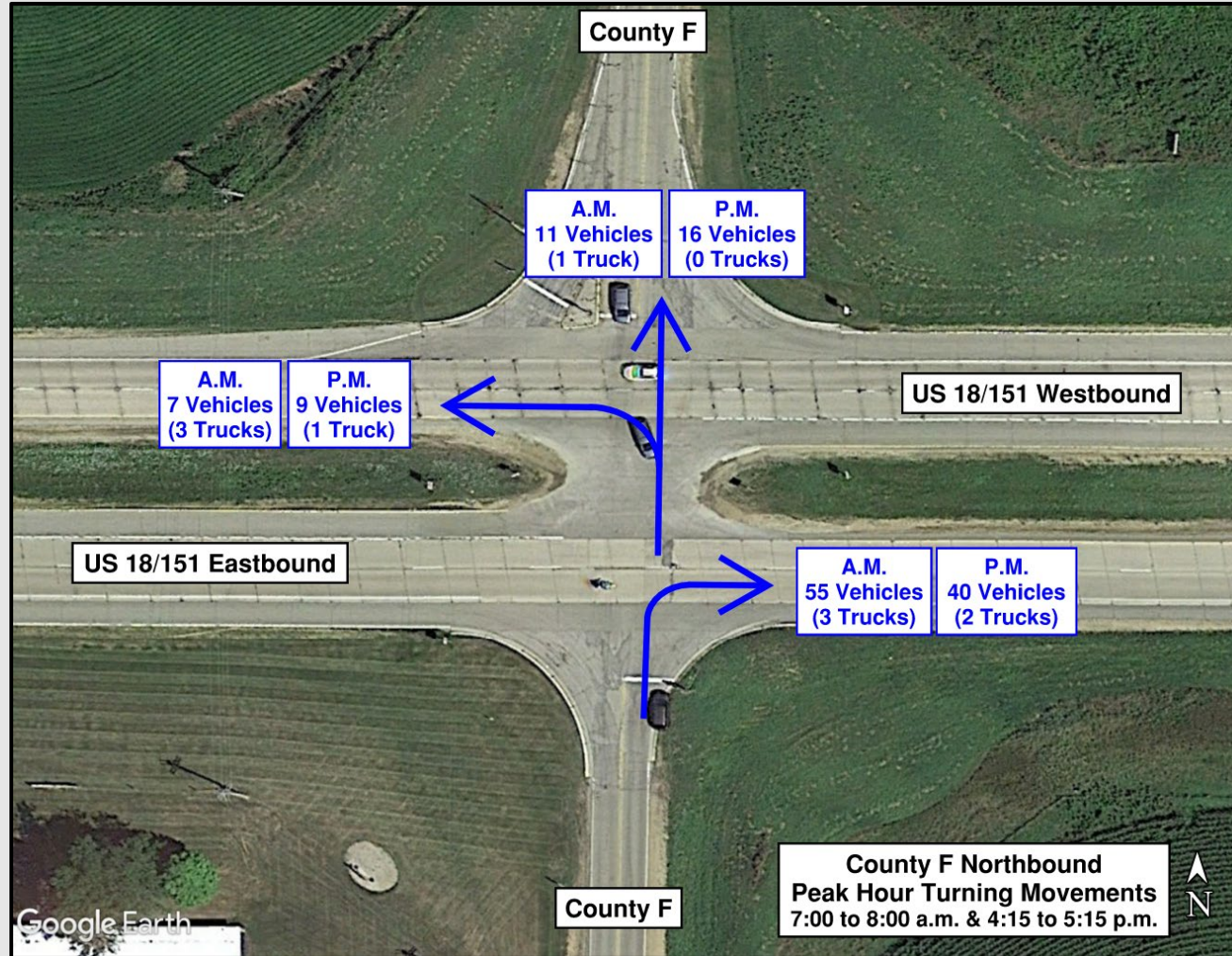




Project overview



Project overview



Median U-turn intersection

- Same restrictions as the J-turn
- Also removes Left turns from US 18/151

