



U.S. Route 45 IL 132 to IL 173 and Millburn Bypass

Community Advisory Group Meeting #3
April 27, 2010



Welcome and Introductions

- Lake County Division of Transportation staff:

- Chuck Gleason
- Paula Trigg

- Illinois Department of Transportation staff:

- John Baczek
- Marie Glynn

- Consultant Engineering staff:

- Christopher B. Burke Engineering*

- Mike Matkovic
 - Marty Worman
 - Pete Knysz
 - Matt Huffman

- Patrick Engineering*

- Ryan Westrom
 - Eric Boelter
 - Eric Cook
 - Chris DeRosia

- CAG members

CAG participants

Groups Represented

- Cross Creek Homeowners Association
- Forest Trail subdivision
- Heritage Trails Homeowners Association
- Historic Millburn Community Association
- Lake County Forest Preserves
- Lake County Planning, Building and Development
- Lake County Stormwater Management Commission
- Lake Villa Township
- Lindenhurst Park District
- Lindenhurst Police Department
- Lindenhurst, Village of
- Lindenhurst/Lake Villa Chamber of Commerce
- Millburn C.C. School District
- Millburn Tree Farm
- Old Mill Creek, Village of
- Old Mill Creek Historic Preservation Commission
- Providence Ridge subdivision
- Providence Woods Homeowners Association
- Tempel Farms

- Please review the updated list of CAG members within your binder to re-familiarize yourself with your fellow participants.

Meeting Agenda

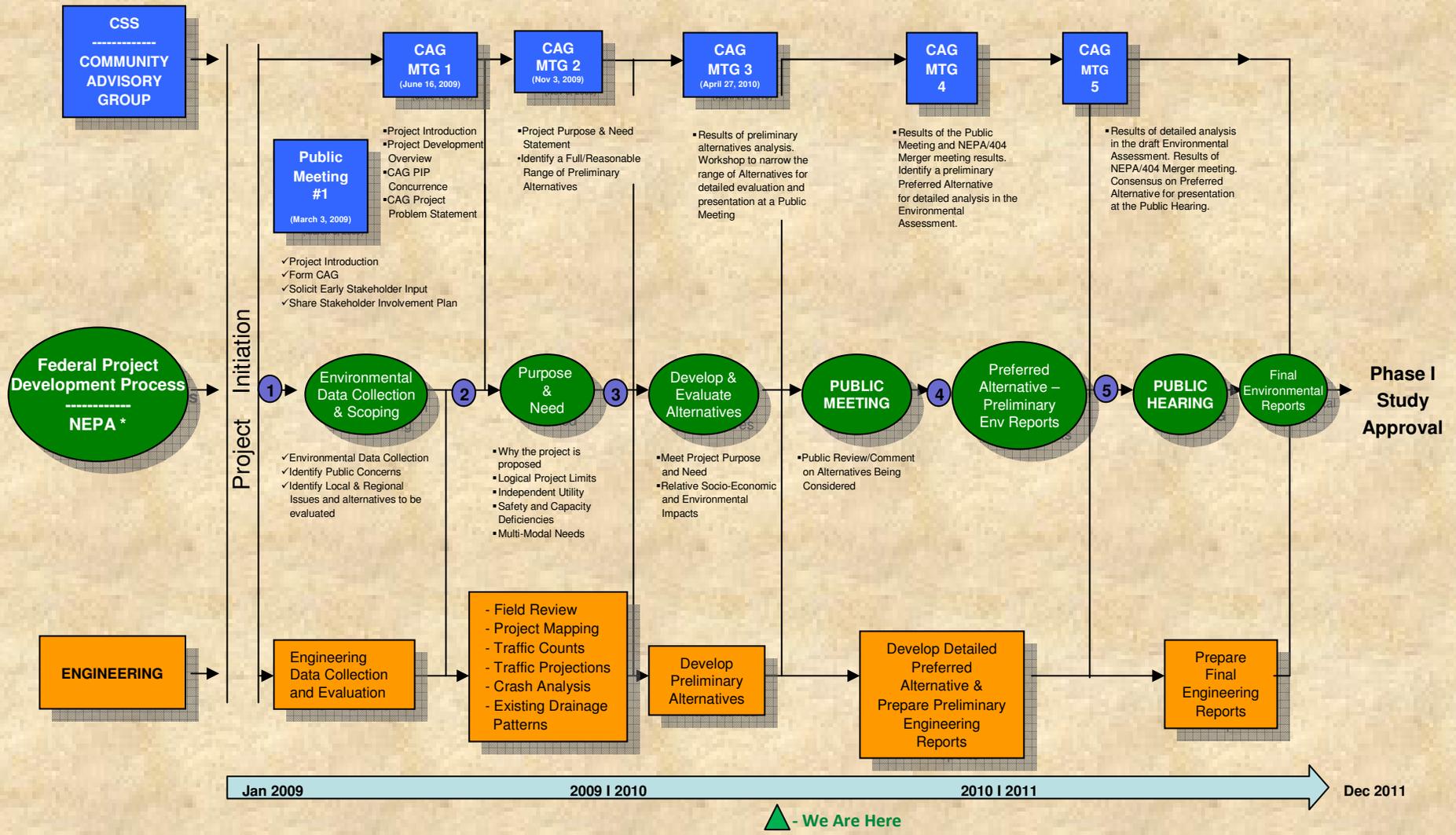
- Introduction / Housekeeping / CAG Binders
- November 3, 2009 Meeting Minutes
- Project Update, NEPA Process, Schedule Review, and Tonight's Objectives
- Evaluation Process Overview
- Relative Comparison of Alternatives
- Tonight's Breakout Session: Input on Remaining Alternatives
- Next Steps:
 - Further Alternatives Narrowing
 - Public Meeting

Project Update / NEPA Process and Schedule Review

- **Items Accomplished Since CAG #2**
 - Environmental surveys (ongoing)
 - Initial Alternatives Screening with CAG #2 results
 - NEPA/404 presentation (February)
 - Purpose & Need Concurrence
 - Initial Alternatives Screening Concurrence
 - Alternatives Development and Analysis
- **Overall Project Development Schedule**
 - NEPA Process
 - Public Involvement / CAG Process

Phase I Engineering and Environmental Studies Project Development Flowchart US Route 45

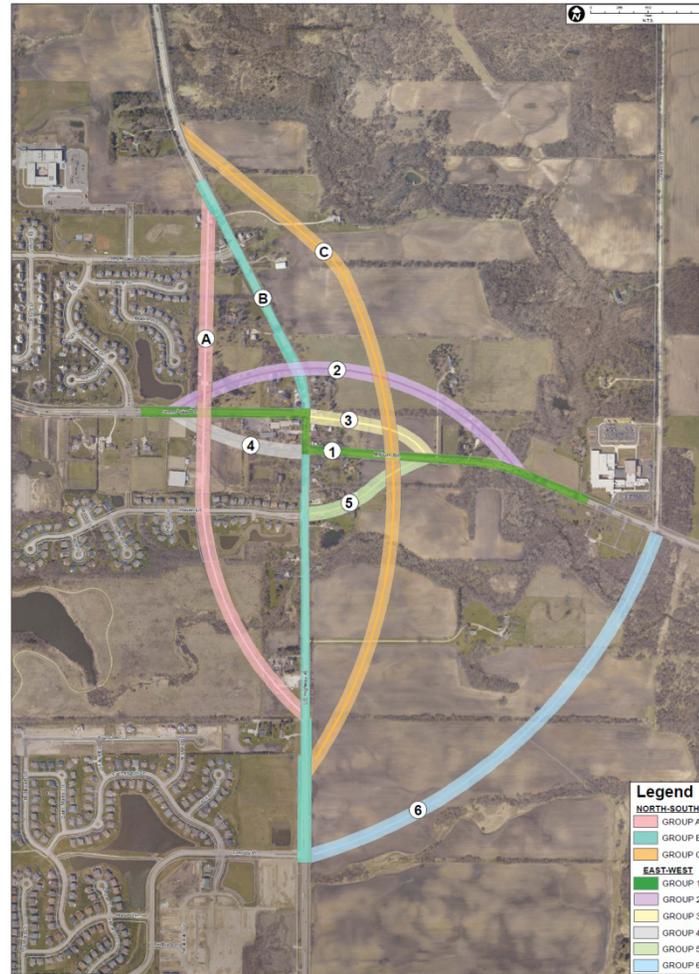
IL Route 132 to IL Route 173 and Millburn Bypass



* NEPA = National Environmental Policy Act OF 1969; 42 U.S.C. 4321-43

● = NEPA /404 Merger Meetings

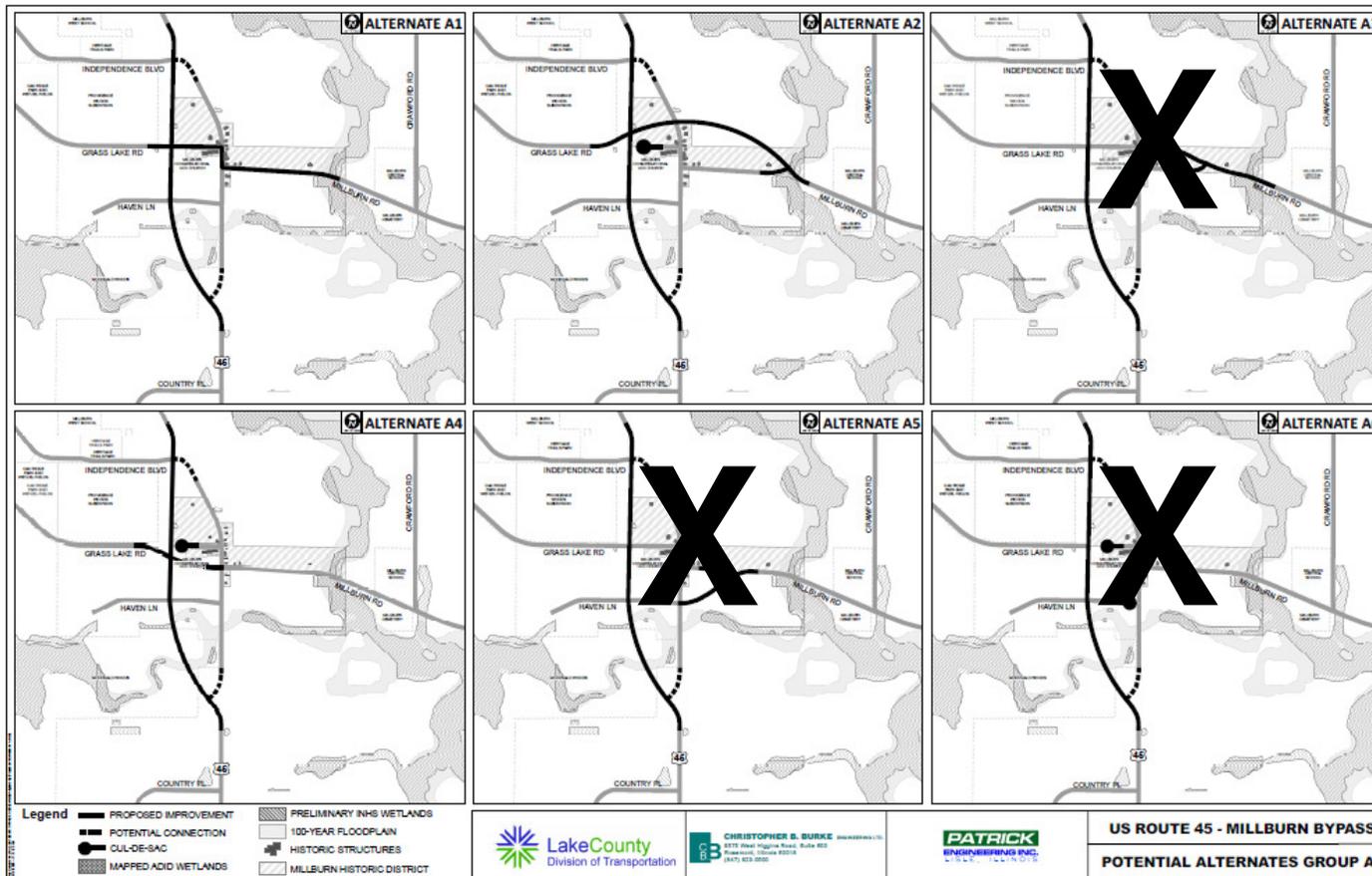
Alternatives Overview



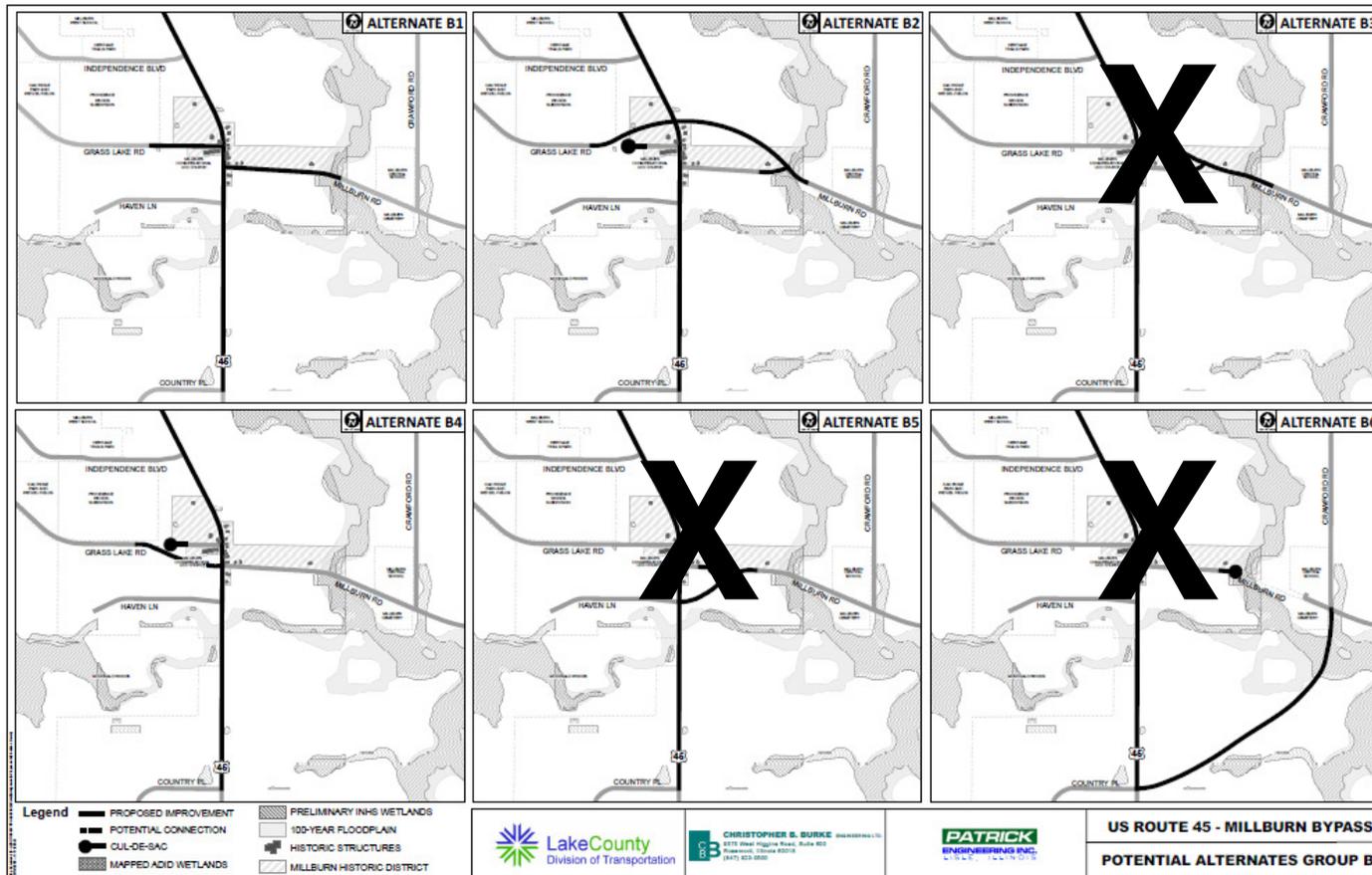
Alternatives Narrowing

- CAG #2 results
 - Alignment 3 and 5 were not preferred
- An extension of Crawford Rd. south or Wadsworth Rd. west to US 45 are considered outside the scope of the traffic problem to be solved by this bypass
- Consultation with the FHWA, IDOT, and LCDOT concluded these 9 alternatives provided a reasonable range of alternatives for further analysis and evaluation

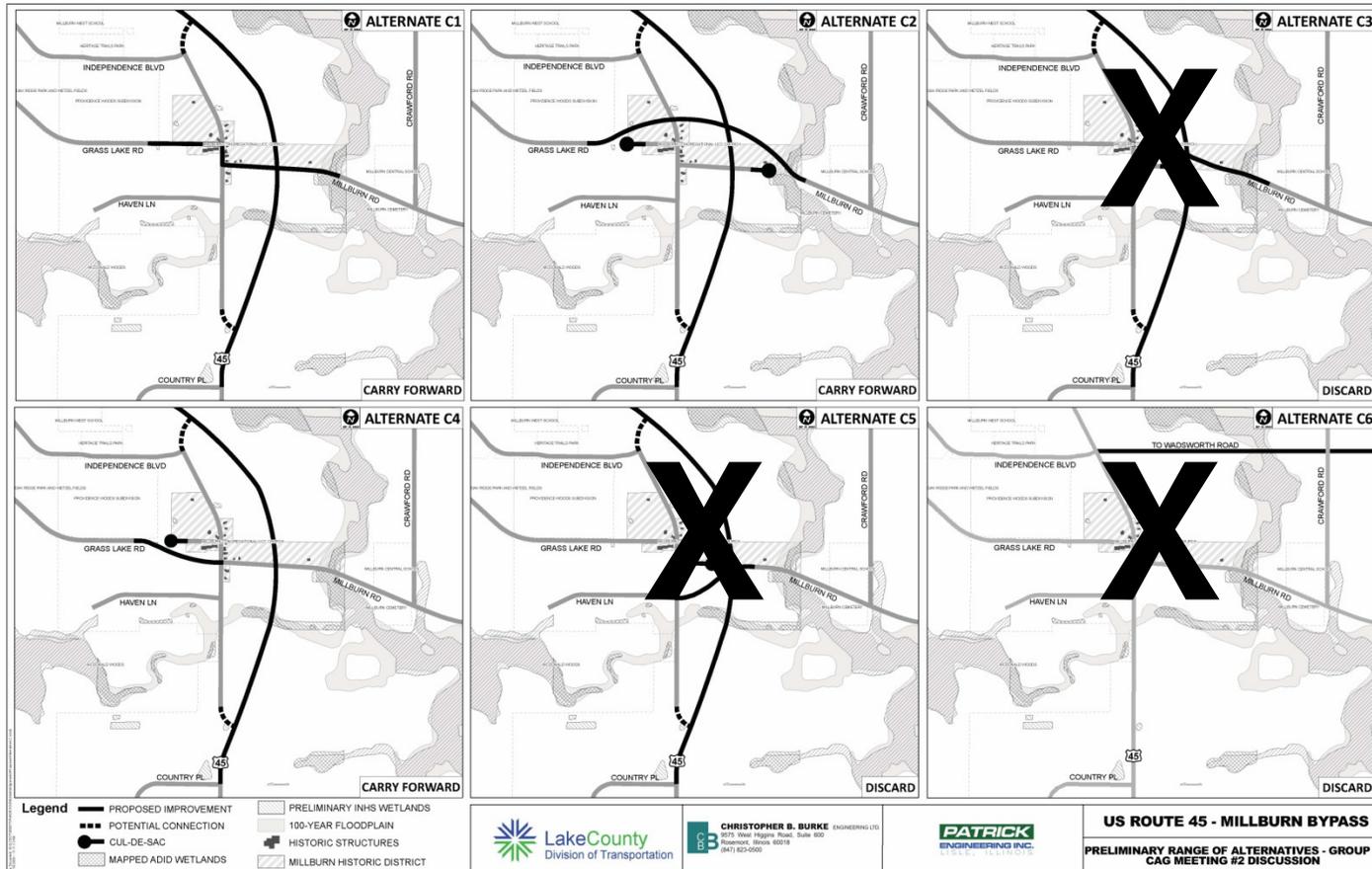
Alternatives Screening – West Bypass Options



Alternatives Screening – On Alignment Options



Alternatives Screening – East Bypass Options



Alternatives Analysis Process

- Analysis of the Alternatives is via an Evaluation Process that meets federal requirements.
- By identifying the relative costs, benefits, and impacts among alternatives being considered, evaluation leads to the identification of preferred outcomes.

Analysis Process (Evaluation)

Evaluation Criteria

- Transportation Performance
 - Congestion Relief
 - Safety
- Environmental impacts
 - Historic District impacts
 - Forest Preserve impacts
 - Wetlands
 - Other
- Socio-Economic Impacts
 - Displacements
 - Economic impacts
 - Land Use compatibility
- Cost

Evaluation Matrix

U.S. Route 45; IL Route 132 to IL Route 173
Millburn Bypass Alternatives
Preliminary Impact Evaluation Matrix

Impact Criteria	Impact Measure	Alternatives											
		Group A			Group B			Group C					
		1	2	4	1	2	4	1	2	4			
I. Transportation Performance													
Network - Total Delay ¹	hours	32	33	35	35	35	35	35	35	35	35	35	35
Network - Total Travel Time ¹	hours	88	85	77.1	74	79	75	84	78	90	78	90	90
Network - Number of Vehicle Stops ¹	number	2,949	2,926	2,724	1,864	2,123	2,278	2,204	2,204	2,204	2,204	2,204	2,204
Level of Service (LOS) - Main Intersection ¹	seconds	---	---	---	---	---	---	---	---	---	---	---	---
Pedestrian/Bicycle Accommodations ¹	scale	---	---	---	---	---	---	---	---	---	---	---	---
Transit Compatibility ¹	scale	---	---	---	---	---	---	---	---	---	---	---	---
Opportunities for Innovative Solutions ¹	scale	---	---	---	---	---	---	---	---	---	---	---	---
Safety	scale	---	---	---	---	---	---	---	---	---	---	---	---
II. Environmental Resources													
Water Resources													
Existing Detention Pond Impacts	acres	7.65	10.70	7.76	7.65	8.78	7.65	10.70	10.70	10.70	10.70	10.70	10.70
Impervious Area Increase	acres	10.85	10.84	11.03	1.84	6.87	1.35	11.77	10.84	13.19	10.84	13.19	13.19
Floodplain Impact	acres	0.45	0.44	0.44	0.41	1.11	0.41	0.41	0.41	0.41	0.41	0.41	0.41
Floodway Impact	acres	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Wetlands													
ADID	acres	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Non-ADID	acres	0.02	0.05	0.02	0.02	0.02	0.05	0.02	0.05	0.02	0.05	0.02	0.05
Biological Resources													
T&E Species	number	0	0	0	0	0	0	0	0	0	0	0	0
Trees & Landscape ¹	number	---	---	---	---	---	---	---	---	---	---	---	---
Air Quality ²	scale	---	---	---	---	---	---	---	---	---	---	---	---
Energy ³	scale	---	---	---	---	---	---	---	---	---	---	---	---
Traffic Noise ⁴	scale	4	3	4	3	4	3	4	3	4	3	4	3
Cultural Resources													
Historic District Impacts	acres	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Historic Building Impacts (Res. & Com)	number	---	---	---	---	---	---	---	---	---	---	---	---
Potential Archeological Resource Area ⁵	acres	0.00	0.70	0.00	0.00	0.70	0.00	0.00	0.70	0.00	0.70	0.00	0.70
Cemetery Impacts ⁶	acres	---	---	---	---	---	---	---	---	---	---	---	---
Special Lands													
Forest Preserve District & Park Impacts	acres	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
School Property Impacts	acres	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Farmstead Impact	acres	0.00	0.40	0.00	0.00	0.40	0.00	0.00	0.40	0.00	0.40	0.00	0.40
Potential Special Waste Sites ⁷	number	---	---	---	---	---	---	---	---	---	---	---	---
III. Socio-Economic Impacts													
Planned Land Use Compatibility	scale	---	---	---	---	---	---	---	---	---	---	---	---
Community Cohesion	scale	3	3	3	3	3	3	3	3	3	3	3	3
Residential Displacements	number	---	---	---	---	---	---	---	---	---	---	---	---
Business Displacements	number	2	1	1	18	11	10	0	1	10	0	1	10
ROW Acquisition	acres	16.40	16.74	19.84	7.74	17.49	1.16	18.04	17.49	17.49	17.49	17.49	17.49
Economic Impacts ⁸	scale	---	---	---	---	---	---	---	---	---	---	---	---
Public Facilities and Services Impact	scale	2	2	2	2	2	2	2	2	2	2	2	2
Environmental Justice ⁹	scale	---	---	---	---	---	---	---	---	---	---	---	---
IV. Cost													
Total Length of Improvement	miles	0.00	2.23	1.91	0.00	2.47	0.00	0.00	0.00	0.00	0.00	0.00	2.18
Length of Improvement - US Route 45	miles	1.26	1.24	1.26	1.21	1.24	1.21	1.21	1.21	1.21	1.21	1.21	1.21
Length of Improvement - County/Local Roads	miles	0.00	1.00	0.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.97
Estimated Construction Cost (Millions) ¹⁰	dollars	11.17	18.30	14.70	10.71	18.30	10.71	10.71	10.71	10.71	10.71	10.71	14.20

Notes:
¹ Based on available GIS data. IDOT environmental surveys ongoing.
² Does not include the cost for property acquisition or engineering beyond Phase I.
³ Insufficient information to effectively evaluate at this time.
⁴ Reflects proximity to new potential noise receptors. Does not consider noise mitigation.
⁵ Reflects modeled travel performance during PM peak hours of travel for Build Condition with projected 2030 traffic.
⁶ Reflects the LOS of the two main intersections of Grass Lake Road and Millburn Road with US Route 45.

Scale Key	Relative Potential Impacts
1	High Positive Impact
2	Moderate Positive Impact
3	Little to No Impact
4	Moderate Negative Impact
5	High Negative Impact

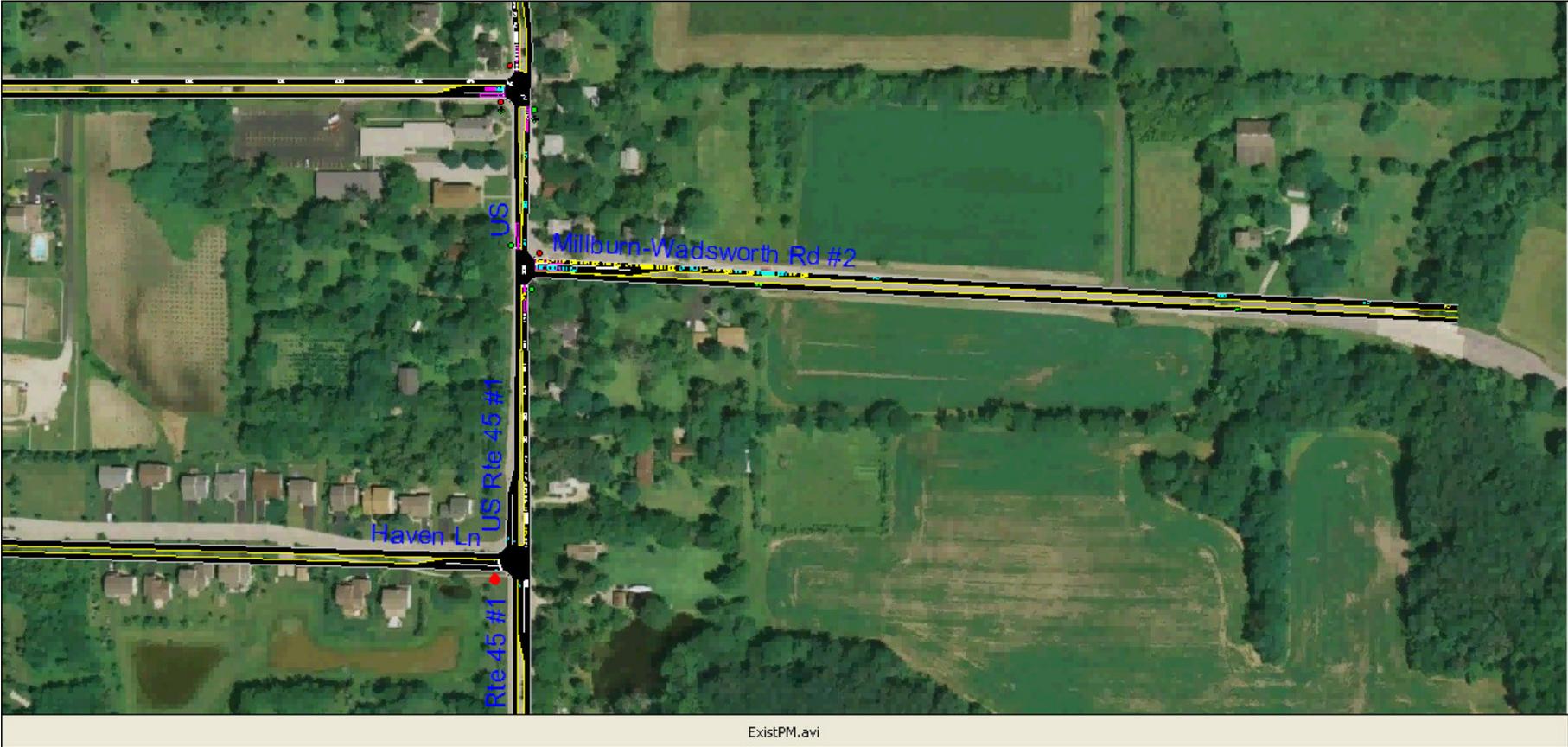
MATRIX KEY	RELATIVE COMPARISON
Red	Relatively Weak In Comparison
Yellow	Relatively Strong In Comparison
Green	Relatively Strong In Comparison
White	No Significant Difference

Each Criteria has at least one Red Alternative (weakest in comparison to the other alternatives) and one Dark Green Alternative (strongest in comparison to the other alternatives). The colors for the remaining alternatives are determined relative to the strongest and weakest alternatives for each criteria.

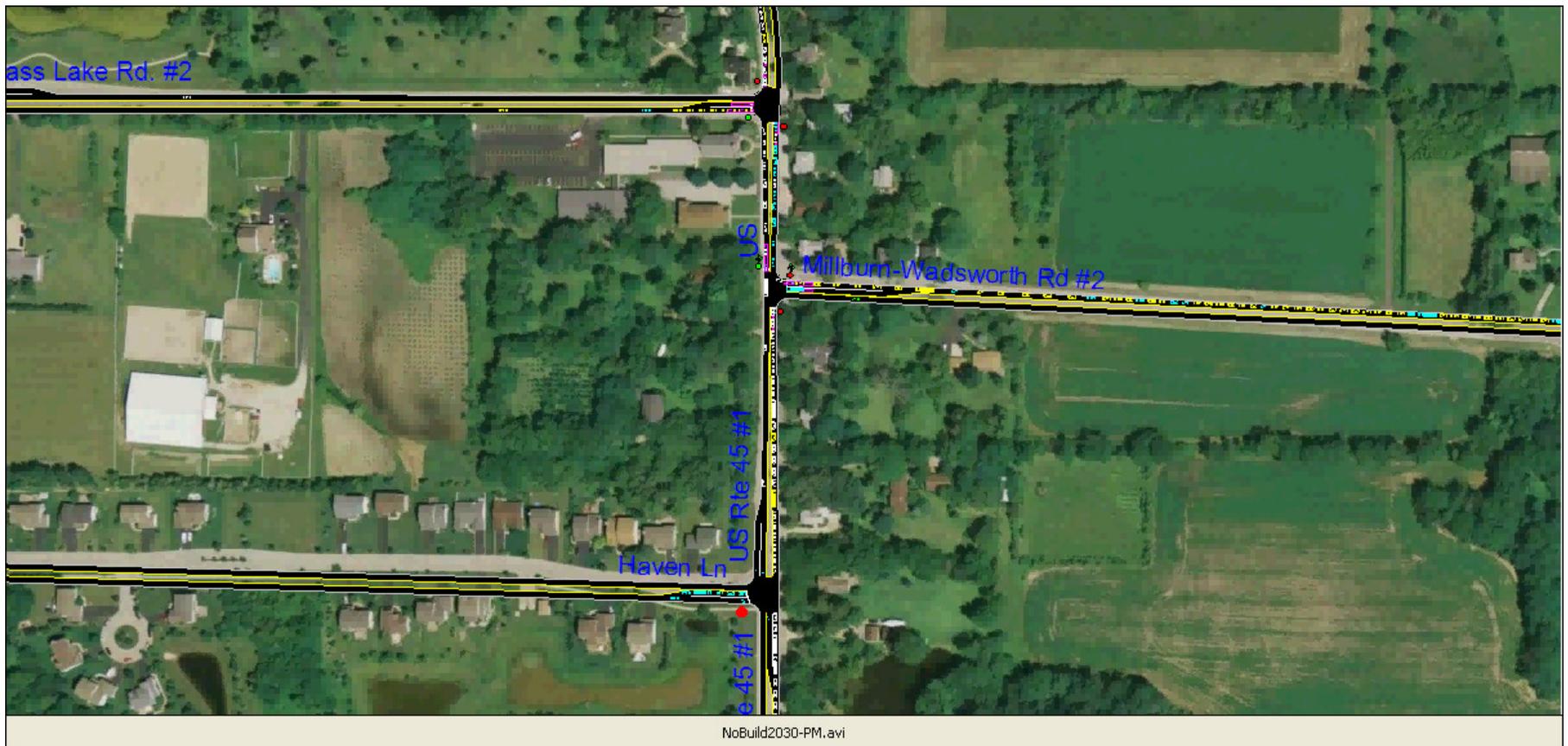
Transportation Performance Visualizations

- ❑ Transportation performance within the core study area for each alternative is a key part of the overall alternatives evaluation process.
- ❑ The computer traffic analysis tool “Synchro/Simtraffic” was used to analyze the transportation performance for each alternative, with the analysis results included in the evaluation matrix for relative comparison.
- ❑ Visualization files can also be generated from Synchro/Simtraffic. The following four examples are for existing conditions, 2030 No-Build, alternative B1 (worst performing), and alternative A4 (best performing).
- ❑ If interested, more information on this visualization tool can be shared after this evening’s meeting.

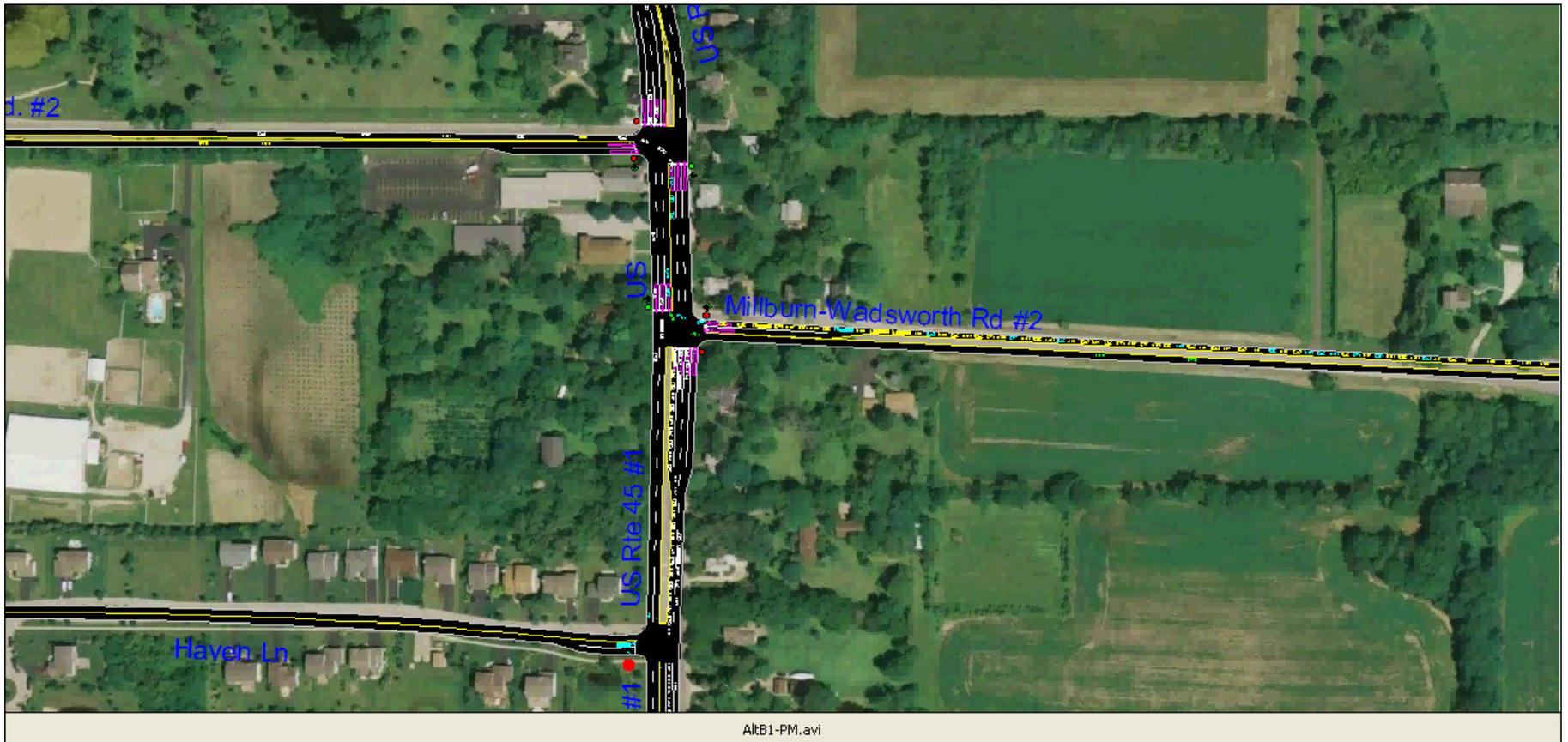
Existing Conditions Traffic Visualization



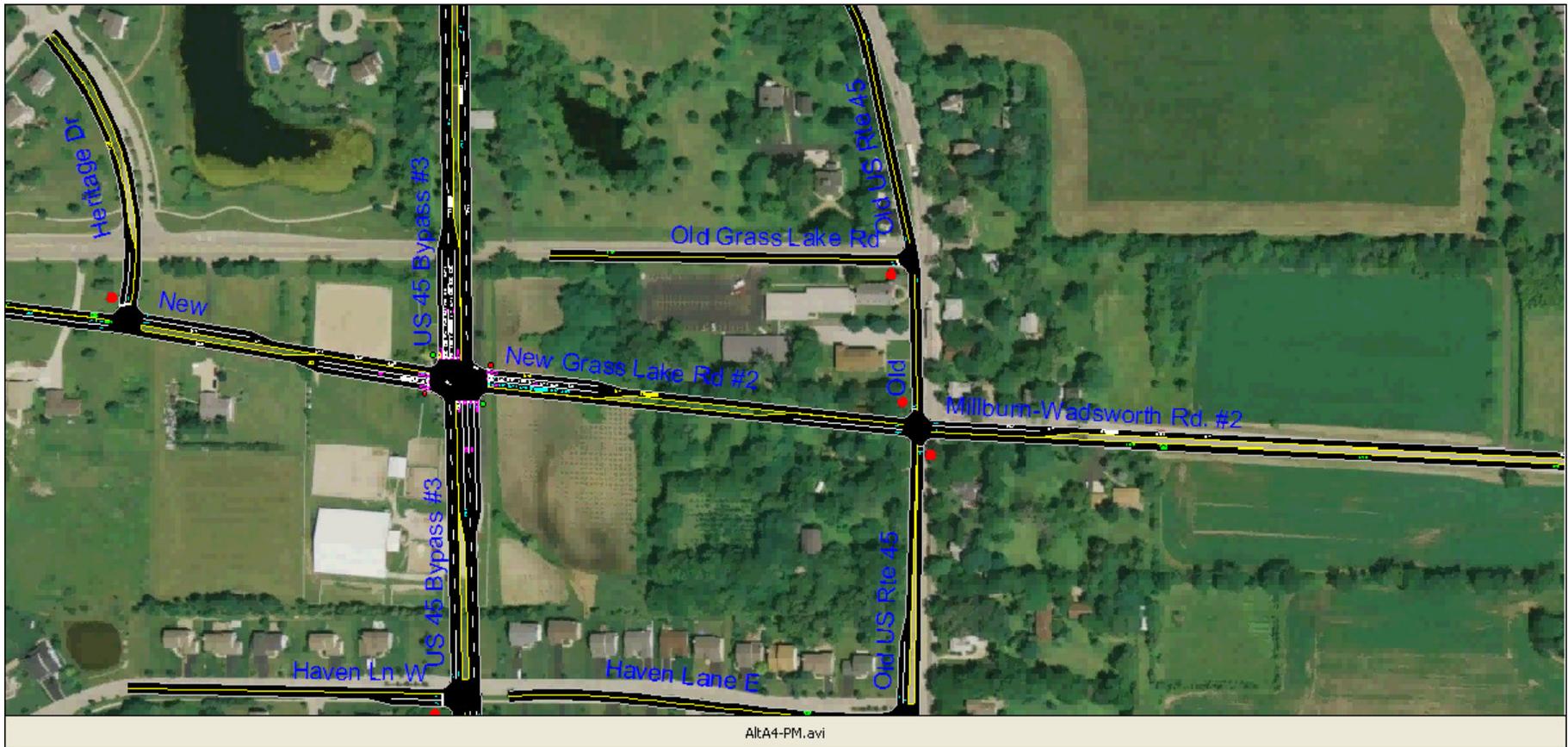
No-Build 2030 Traffic Visualization



Alt. B1 2030 Traffic Visualization



Alt. A4 2030 Traffic Visualization



Methodology

- Evaluation General Findings
 - *The matrix can guide findings.*
 - Alternative B-1 (existing-existing alignment)
 - Cheapest but with Greatest Impacts
 - 9 Historic Building and Residential Impacts
 - Highest Delay
 - East-West Alignment 2 (northernmost connection) is most expensive
 - Alternative B-2 costs \$18.3 million versus B-4 at \$12.5 million

Breakout Exercise

- CAG input on the developed alternatives
- Each breakout group to discuss the 9 concept alternatives (30 minutes)
 - Narrow alternatives for further development, evaluation, and presentation to public
 - Are there any alternatives that should be eliminated due to unreasonableness?
- Report out on Group recommendations for further alternatives development and evaluation feedback (15 minutes)

Next Steps / Schedule

- Ongoing project development activities:
 - Further traffic analysis
 - Environmental surveys
 - Alternatives evaluation
 - Further Alternative Screening
- NEPA/404 Merger Meeting (June)
- A Public Meeting will be held this summer presenting the alternatives to be considered.
- Topics at that meeting will include presentation of alternatives development and comparisons.
- The next CAG meeting is anticipated in Fall 2010.



Thanks for your participation!

See you next time.

If you have any project questions in the interim,
please contact Chuck Gleason at LCDOT.

If those questions are in regard to the CAG, please
contact Jarrod Cebulski at Patrick Engineering.

www.Route45project.com