## U.S. Route 45; IL Route 132 to IL Route 173 Millburn Bypass Alternatives Finalist Impact Evaluation Matrix<sup>i</sup> CAG 5 - July 26th, 2011

			Alternatives	
Impact Criteria	Impact Measure	A1	A4	C4
I. Transportation Performance				
Network Performance				
Total Delay <sup>e</sup>	hours	39	32	39
Total Travel Time <sup>e</sup>	hours	107	99	116
Number of Vehicle Stops <sup>e</sup>	number	3,146	3,245	3,377
Level Of Service (LOS) & Delay (Sec) - Main Intersection <sup>e</sup>	seconds	D (36.6)	C (31.7)	D (37.6)
Pedestrian/Bicycle Accommodations <sup>h</sup>	scale			
Transit Compatibility <sup>c</sup>	scale			
Opportunities for Innovative Solutions <sup>c</sup>	scale			
Safety	scale			
II. Environmental Resources				
Water Resources				
Existing Detention Pond Impacts	acres	0.00	0.00	0.00
Impervious Area Increase	acres	10.85	11.95	11.38
Floodplain Impact	acres	0.49	0.49	0.46
Floodway Impact	acres	0.00	0.00	0.00
Stream Crossings <sup>g</sup>	number	2	2	1
Stream Impact <sup>g</sup>	acres	0.042	0.042	0.035
Wetlands <sup>g</sup>				
ADID	acres	0.00	0.00	0.00
Non-ADID	acres	0.02	0.00	0.04
Biological Resources	- i <b>i i</b>			
T&E Species	number	0	0	0
Trees & Landscape <sup>c</sup>	number			
Air Quality <sup>c</sup>	scale			
Energy <sup>c</sup>	scale			
Traffic Noise <sup>d</sup>	scale			
Cultural Resources				
Historic District Impacts	acres	0.00	0.00	1.25
Historic Building Impacts (Res & Com)	number	0	0	0
Potential Archeological Resource Area <sup>a</sup> Cemetery Impacts <sup>c</sup>	acres	0.00	0.00	3.10
	acres	0.00	0.00	0.00
Special Lands		2.44	244	0.00
Forest Preserve District & Park Impacts	acres	<u>3.14</u> 0.00	0.00	0.00
School Property Impacts Farmland Impact	acres		1.92	11.49
Potential Special Waste Sites <sup>c</sup>	acres number	1.92		
III. Socio-Economic Impacts				
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Planned Land Use Compatibility	scale			
Community Cohesion	scale			
Residential Displacements	number	2	3	3
Business Displacements	number	0	0	0
Total ROW Acquisition	acres	16.60	19.84	17.71
Public (Forest Preserves, Parks)	acres	3.14	3.14	0.00
Community Resources (Church) Residential/Commercial	acres	0.34	1.09	0.79
Farmland	acres	11.88	13.44	4.88
Economic Impacts <sup>c</sup>	acres scale			
Public Facilities and Services Impact	scale	2	2	2
Environmental Justice <sup>c</sup>	scale			
IV. Cost				
Total Length of Improvement	miles	1.62	1.95	1.97
Length of Improvement - US Route 45	miles	1.26	1.26	1.35
Length of Improvement - County/Local Roads	miles	0.36	0.69	0.62
Estimated Construction Cost (Millions) <sup>b</sup>	dollars	12.70	14.70	13.80

## Notes:

<sup>a</sup> Based on available GIS data. IDOT environmental surveys ongoing.

<sup>b</sup> Does not include the cost for property acquisition or engineering beyond Phase I.
 <sup>c</sup> Insufficient information to effectively evaluate at this time.

<sup>d</sup> Reflects proximity to new potential noise receptors. Does not consider noise mitigation.

<sup>e</sup> Reflects modeled travel performance during PM peak hour of travel for Build Condition with projected 2040 traffic.

<sup>f</sup> Reflects the LOS of the two main intersections of Grass Lake Road and Millburn Road with US Route 45

<sup>g</sup> Reflects INHS field surveyed data (not including ADID wetlands)

*h* Based on proximity to existing and planned ped/bike facilities

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		
	Relatively Weak in Comparison		
	Relatively Strong in Comparison		
	No Significant Difference		

in September 2010. The most notable new information includes transportation performance based on updated year 2040 traffic projections received from CMAP, and updated impacts due to alignment refinements for the Finalist Alternatives. For purposes of distinguishing the Finalist Alternatives, consistent with the finalist evaluation matrix presented at the Public Meeting, the associated color coding has been adjusted for relative comparison of only the Finalist Alternatives.

Where a notable range of impacts or transportation performance is judged to exist for a given criteria, the alternate with the worst transportation performance or greatest impact is colored red (weakest in comparison). The alternate with the best transportation performance or least impact is colored green (strongest in comparison). The colors for all alternatives are determined based on numerical scale from the strongest to the weakest alternatives for each criteria. Where no notable differences are judged to exist, each alternate is colored gray.

<sup>&</sup>lt;sup>*i*</sup> The Finalist Alternatives evaluation matrix has been updated to reflect new information since the Public Meeting