U.S. Route 45; IL Route 132 to IL Route 173
Millburn Bypass Alternatives
Preliminary Impact Evaluation Matrix
CAG 3 - April 27th, 2010

Impact Criteria	Impact Measure	Alternatives Group A 1	2	4	Group B 1	2	4	Group C 1	2	4
I. Transportation Performance										
Network - Total Delay[e]	hours	32	23	23	79	23	22	35	26	26
Network - Total Travel Time[e]	hours	88	81	77	128	78	70	94	78	90
Network - Number of Vehicle Stops[e]	number	2,940	2,482	2,314	3,612	2,372	2,109	4,186	2,814	2,795
Level Of Service (LOS) - Main Intersection[e]	seconds	C	C	C	F/C[f]	C	C	C	C	C
Pedestrian/Bicycle Accommodations[c]	scale	---	---	---	---	---	---	---	---	---
Transit Compatibility[c]	scale	---	---	---	---	---	---	---	---	---
Opportunities for Innovative Solutions[c]	scale	---	---	---	---	---	---	---	---	---
Safety	scale									
II. Environmental Resources										
Water Resources										
Existing Detention Pond Impacts	acres	0.00	1.30	0.00	0.00	1.30	0.00	0.00	1.30	0.00
Impervious Area Increase	acres	10.85	14.60	11.95	2.64	6.67	3.85	11.77	16.67	13.19
Floodplain Impact	acres	0.49	0.49	0.49	0.42	1.02	0.42	0.45	1.05	0.45
Floodway Impact	acres	0.00	0.00	0.00	0.00	0.60	0.00	0.00	0.60	0.00
Wetlands										
ADID	acres	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	0.00	0.00	0.08	0.05	0.00	0.07	0.05
Biological Resources										
T&E Species	number	0	0	0	0	0	0	0	0	0
Trees & Landscape [c]	number	---	---	---	---	---	---	---	---	---
Air Quality [c]	scale	---	---	---	---	---	---	---	---	---
Energy [c]	scale	---	---	---	---	---	---	---	---	---
Traffic Noise [d]	scale	4	5	4	3	4	3	2	4	2
Cultural Resources										
Historic District Impacts	acres	0.00	2.95	0.00	0.56	4.11	0.47	1.21	4.42	1.25
Historic Building Impacts (Res & Com)	number	0	0	0	9	9	9	0	0	0
Potential Archeological Resource Area [a]	acres	0.00	1.70	0.00	0.00	6.70	0.00	3.10	8.00	3.10
Cemetery Impacts [c]	acres	---	---	---	---	---	---	---	---	---
Special Lands										
Forest Preserve District & Park Impacts	acres	3.14	3.14	3.14	0.23	0.23	0.23	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
Farmland Impact	acres	1.92	5.40	1.92	2.13	6.16	2.13	13.26	17.07	13.32
Potential Special Waste Sites [c]	number	---	---	---	---	---	---	---	---	---
III. Socio-Economic Impacts										
Planned Land Use Compatibility	scale	2	4	2	5	5	5	3	4	3
Community Cohesion	scale	3	3	3	3	3	3	3	3	3
Residential Displacements	number	1	1	2	10	11	10	0	1	1
Business Displacements	number	1	1	1	2	2	2	0	0	0
ROW Acquisition	acres	16.60	25.00	19.84	5.74	17.69	8.93	18.04	27.65	21.10
Economic Impacts[c]	scale	---	---	---	---	---	---	---	---	---
Public Facilities and Services Impact	scale	2	2	2	2	2	2	2	2	2
Environmental Justice [c]	scale	---	---	---	---	---	---	---	---	---
IV. Cost										
Total Length of Improvement	miles	1.62	2.23	1.95	1.57	2.47	1.74	1.81	2.88	2.10
Length of Improvement - US Route 45	miles	1.26	1.23	1.26	1.27	1.26	1.27	1.35	1.35	1.35
Length of Improvement - County/Local Roads	miles	0.36	1.00	0.69	0.30	1.21	0.47	0.46	1.53	0.75
Estimated Construction Cost (Millions) [b]	dollars	12.70	16.30	14.70	11.70	18.30	12.50	12.58	20.34	14.20

Notes:

[a] Based on available GIS data. IDOT environmental surveys ongoing.

[b] Does not include the cost for property acquisition or engineering beyond Phase I.

[c] Insufficient information to effectively evaluate at this time.

[d] Reflects proximity to new potential noise receptors. Does not consider noise mitigation.

[e] Reflects modeled travel performance during PM peak hour of travel for Build Condition with projected 2030 traffic.

[f] 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
	Relatively Weak in Comparison
	Relatively Strong in Comparison
	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.