

Table 1. Legend for Comparative Analysis Measures of Effectiveness

Need	Criterion	Measure of Effectiveness (High, Medium, Low)			Note
		Arterial Improvement Options	Intersection Improvement Options	Pedestrian/Bicycle Improvement Options	
Regional Mobility	Arterial Operations (Level-of-Service)	High = Good Operations, Medium = Acceptable Operations, Low = Unacceptable Operations	High = Good Operations, Medium = Acceptable Operations, Low = Unacceptable Operations	N/A	
	Compatibility with the Rakow Road Widening Study <i>3 Lanes in Each Direction along Rakow Road</i>	High = Compatible, Medium = Semi-Compatible (Bottlenecks occur), Low = Not Compatible	N/A	N/A	
	Compatibility with the six-lane section south of Harnish Road	High = Compatible, Medium = Semi-Compatible (Bottlenecks occur), Low = Not Compatible	N/A	N/A	
Local Access/Deficiencies	Intersection Operations (Level-of-Service)	N/A	High = Good Operations, Medium = Acceptable Operations, Low = Unacceptable Operations	High = Good Operations, Medium = Acceptable Operations, Low = Unacceptable Operations	Intersection assessment is based on an October 2007 ITE Journal Article on Parallel Flow intersections and general knowledge of the operations of various intersection and interchange types (i.e. Roundabouts work best when traffic on all legs is balanced)
	Ease of Maintenance	High = Available capacity, low to moderate lane miles, and no intrusive elements (i.e. barrier), Medium = Available capacity, moderate lane miles and intrusive elements, Low = Low capacity or high lane miles	High = Easy to Maintain and no additional equipment necessary, Medium = Requires a moderate level of maintenance and potentially requires new equipment, Low = Difficult to Maintain and potentially requires new equipment	High = Easy to Maintain and no additional equipment necessary, Medium = Requires a moderate level of maintenance and potentially requires new equipment, Low = Difficult to Maintain and potentially requires new equipment	Primarily based on research and experience, Traffic signals – more signals = more maintenance, Structures – more inspections
	Compatibility to Comprehensive Plans/Other Plans of Municipalities	High = Consistent with plans Medium = Partially consistent with plans Low = Not Consistent with plans	High = Consistent with plans Medium = Partially consistent with plans Low = Not Consistent with plans	High = Consistent with plans Medium = Partially consistent with plans Low = Not Consistent with plans	Based on McHenry County Transportation Plan through 2011 and also 2020; Available maps and plans from Crystal Lake, Lake in the Hills, and Algonquin.
	Maintain Access Along Cross-Roads	N/A	High = Yes Medium = Partial Access Maintained Low = No	N/A	Based on an assessment of existing access and the potential limits of improvements
Pedestrian/Bicycle Mobility	Estimated Pedestrian/Bicycle Use	N/A	N/A	High = Direct access across, no signals Medium = Indirect access or pedestrian signals needed Low = Indirect access or no access and pedestrian signals	Directness of route and access
	Difficulty of crossing (including distance across roadway)	High = Easy to cross, Short distance across roadway Medium = Relatively difficult to cross, Acceptable distance across roadway Low = Very difficult to cross, Large distance across roadway	High = Easy to cross, Short distance across roadway, no grade changes Medium = Relatively difficult to cross, Acceptable distance across roadway Low = Very difficult to cross, Large distance across roadway, large grade changes	High = No vehicular conflicts Medium = Moderate vehicular conflicts Low = High potential for vehicular conflicts	Distance across route and grade changes Potential for ped/bike-vehicle conflict
	Connectivity with regional/local existing/planned facilities	N/A	N/A	High = Yes Medium = N/A Low = No	Based on available bike and trail plans

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		Arterial Improvement Options	Intersection Improvement Options	Pedestrian/Bicycle Improvement Options	
Community Values	Amount of new ROW required/ Property Tax Revenue Impacts	High = No ROW required/ No tax impact Medium = Low to Moderate amount of ROW/ Moderate Decrease in tax revenue - taking some tax dollars from some land, therefore, some tax impacts Low = Substantial amount of ROW/ Substantial Decrease in tax revenue - taking tax dollars from significant amount of land, therefore, high tax impact	High = No ROW required/ No tax impact Medium = Low to Moderate amount of ROW/ Moderate Decrease in tax revenue - taking some tax dollars from some land, therefore, some tax impacts Low = Substantial amount of ROW/ Substantial Decrease in tax revenue - taking tax dollars from significant amount of land, therefore, high tax impact	High = No ROW required Medium = Low amount of ROW Low = Moderate amount of ROW	
	Amount of Sensitive Environmental Impacts	High = Least amount of environmental impacts in comparison to other options in category Medium = Moderate environmental impacts in comparison to other options in category Low = Most environmental impacts in comparison to other options in category	High = Least amount of environmental impacts in comparison to other options in category Medium = Moderate environmental impacts in comparison to other options in category Low = Most environmental impacts in comparison to other options in category	High = Least amount of environmental impacts in comparison to other options in category Medium = Moderate environmental impacts in comparison to other options in category Low = Most environmental impacts in comparison to other options in category	Based on results of the environmental impacts assessment
	Estimated Capital Cost	High = Low Lane Miles or no Cost Medium = Moderate Lane Miles Low = Relatively High Lane Miles	High = Low to moderate cost, minor at-grade improvements Medium = Significant at-grade improvements with multiple signals Low = High costs associated with significant improvements, may involve a structure	High = Low cost associated with minor improvements Medium = Moderate cost associated with improvements and new signal equipment Low = High costs associated with significant improvements, may involve a structure	Considers potential construction cost (including acquisitions, equipment, and maintenance)
	Local Agency/ Municipality Support	High = Support Medium = Neutral Low = Do not Support	High = Support Medium = Neutral Low = Do not Support	High = Support Medium = Neutral Low = Do not Support	* - Based on average responses from Community Advisory Council (CAC) committee members.
	Ease of Construction	High = No Disruption Medium = Moderate Disruption Low = High Disruption	High = No Disruption Medium = Moderate Disruption Low = High Disruption	High = No Disruption Medium = Moderate Disruption Low = High Disruption	Note – Disruption includes relative staging, detours, and duration of construction.
	Potential Relocations (commercial/residential)	High = No Relocations Medium = Minimum Relocations Low = High Relocations	High = No Relocations Medium = Minimum Relocations Low = High Relocations	High = No Relocations Medium = Minimum Relocations Low = High Relocations	
	Parking Impacts	High = No Parking Impacts Medium = Moderate Parking Impacts Low = High Parking Impacts	High = No Parking Impacts Medium = Moderate Parking Impacts Low = High Parking Impacts	High = No Parking Impacts Medium = Moderate Parking Impacts Low = High Parking Impacts	
	Aesthetics/Visual	High = Low Visual Impacts Medium = Moderate Visual Impacts Low = High Visual Impacts	High = Low Visual Impacts Medium = Moderate Visual Impacts Low = High Visual Impacts	High = Low Visual Impacts Medium = Moderate Visual Impacts Low = High Visual Impacts	
	Will Option attract investment in community	High = Yes Medium = Maybe Low = Not likely	High = Yes Medium = Maybe Low = Not likely	High = Yes Medium = Maybe Low = Not likely	
Safety (Assuming Options Designed To Applicable Standards)	Traffic/Pedestrian/Bicycle safety based on Option Characteristics	High = safest option(s) in comparison to other options in category Medium = safe option(s) in comparison to other options in category Low = Least safe option(s) in comparison to other options in category	High = safest option(s) in comparison to other options in category Medium = safe option(s) in comparison to other options in category Low = Least safe option(s) in comparison to other options in category	High = Pedestrian/Bicycle Friendly Medium = Pedestrian/Bicycle Accessible Low = Not Pedestrian/Bicycle Friendly	Assuming all options would be built to current standards