

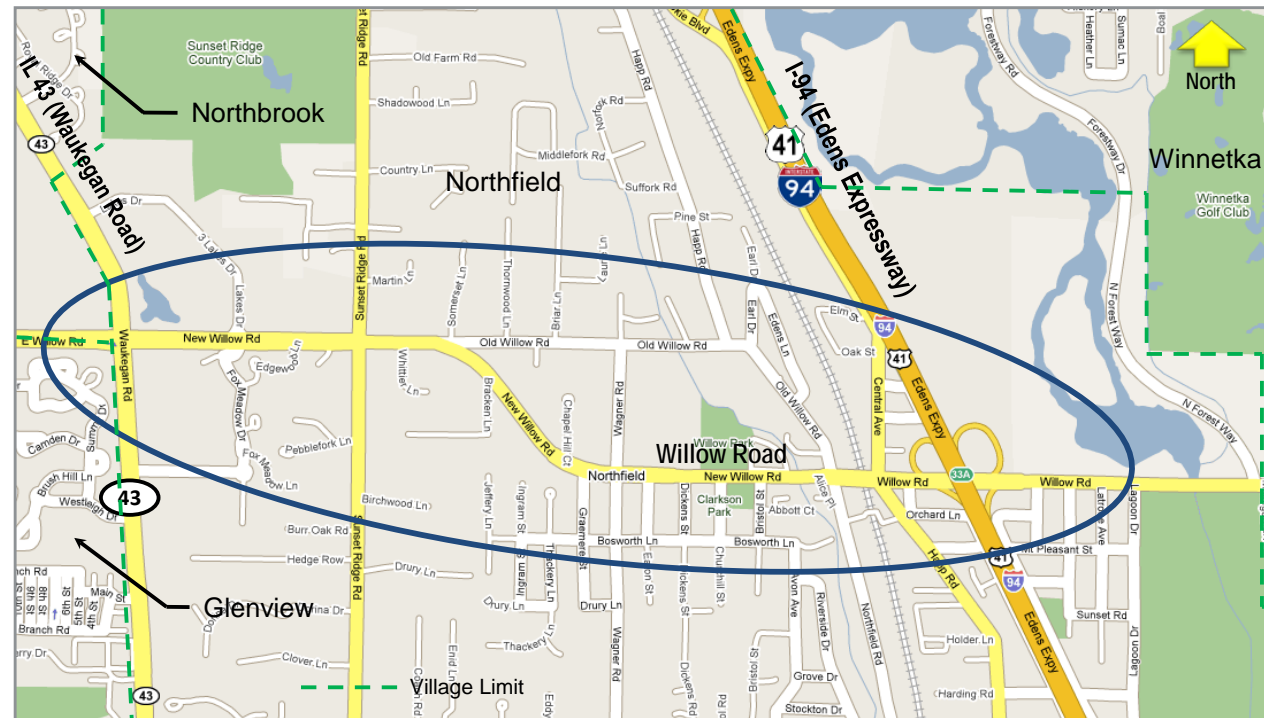


VOLUME 2

Alternatives Analysis Exhibits

Willow Road Study
Illinois Route 43 (Waukegan Road) to Interstate 94 (Edens Expressway)

Illinois Department of Transportation
Project Number: P-91-411-08



March 10, 2011

Alternatives Analysis Summary Table
Willow Road Study

Evaluation Round #1												
ALTERNATIVES		PURPOSE AND NEED SCREENING							FLAW ANALYSIS / IMPACTS			
		SAFETY (Calculated for the Willow Road Segment from Sunset Ridge Road to Wagner Road)		MOBILITY (Analyzed for the Willow Road at Sunset Ridge Road Intersection)				FACILITY CONDITION	Potential Displacements	Potential Property Acquisition	Potential Floodplain & Floodways	Concept Level Construction Cost *
		Predicted Ave Crash Frequency (Crashes/Year)	Expected Pedestrian Crash Rate Willow Road at Sunset Ridge Road Intersection (Crashes/Year)	Intersection LOS (A thru F)	Intersection Delay (sec/veh)	Queue Length Westbound Willow Rd (feet)	Queue Length Southbound Sunset Ridge Rd (feet)	Reconstruct (Yes/No)	R-Residential B-Business O-Open Space	(acres)	(acres)	(2011 Dollars)
Number	Name											
	No-Build	12.3	0.149	F	157	1,830	820	N	none	0.0	0.0	NA
Willow Road Alternatives												
1	No-Build Plus	8.0	0.112	F	154	1,990	550	N	none	0.0	0.0	\$2 MIL
2	Willow Road 2-lane with median	6.6	0.112	F	151	2,220	370	Y	none	0.0	0.8	\$18 MIL
2A	Willow Road 2-lane with median (2005 Plan)	6.7	0.112	F	151	2,220	370	Y	none	0.0	0.8	\$14 MIL
3	Willow Road 4-lane with median	Painted Median - 13.0 Curbed Median - 6.2	Painted Median - 0.120 Curbed Median/Ped Refuge - 0.051	D/E**	65	990	400	Y	none	0.0	0.8	\$23 MIL
4	Willow Road 3-lane unbalanced with median	2 Ln WB - 9.9 2 Ln EB - 9.6	2 Ln WB - 0.112 2 Ln EB - 0.116	2 Ln WB - F 2 Ln EB - F	2 Ln WB - 143 2 Ln EB - 131	2 Ln WB - 650 2 Ln EB - 2,910	2 Ln WB - 410 2 Ln EB - 410	Y	none	0.0	0.8	\$20 MIL
5	Willow Road 2-lane with roundabouts	6.9	0.081	F	225	420	5,000	Y	3-R	0.6	0.8	\$20 MIL
Other Parallel Route Alternatives												
6	Dundee Road Add Lanes - IL 43 to I-94	12.2	—	F	157	1,990	550	N	1-R 2-B	4.5	0.6	\$51 MIL
7	Lake Avenue Add Lanes - IL 43 to I-94	12.0	—	F	145	1,840	550	N	5-R 8-B	4.3	0.2	\$55 MIL
Interchange Alternatives												
8	Full Interchange I-294 at Lake Avenue	12.8	—	F	169	2,150	550	N	147-R 7-B 1-O (cemetery)	28.2	0.0	\$60 MIL
9	Full Interchange I-294 at Dundee Road	12.2	—	F	157	1,990	550	N	5-R 3-B	7.7	0.0	\$75 MIL
10	Full Interchange I-94 (Edens Spur) at I-294	12.8	—	F	162	2,150	550	N	10-R 4-B	9.9	0.0	\$57 MIL
11	Full Interchange I-94 (Edens Spur) at IL 43	12.2	—	F	157	1,990	550	N	7-R 17-B	4.8	0.0	\$27 MIL
12	Eliminate Eastbound Lane drop on Edens Spur	12.8	—	F	169	2,150	550	N	7-B	8.1	3.9	\$38 MIL
13	Full Interchange I-94 at Dundee Road	12.2	—	F	164	1,990	550	N	none	6.8	4.9	\$133 MIL
14	Full Interchange I-94 at Tower Road	12.8	—	F	169	2,150	550	N	none	2.6	5.9	\$44 MIL
15	Full Interchange I-94 at Willow Road	12.5	—	F	162	2,150	550	N	4-B	7.4	22.3	\$52 MIL
16	Full Interchange I-94 at Lake Avenue	12.2	—	F	157	1,990	550	N	55-R 4-B	6.3	0.0	\$59 MIL

*Does not include land acquisitions, relocations, mitigation and engineering costs

**Willow Road through movements are LOS D through the year 2040; the Intersection LOS D is achieved through the year 2035 with an Intersection Delay = 50.7 sec/veh, Queue Length WB = 910 feet, Queue Length SB = 380 feet

Evaluation Round #2 Corridor Specific Options

- Longer Entrance Ramp EB Willow to SB I-94 Option
- Pedestrian Friendly Modifications I-94 at Willow Road Option
- Willow Road at IL 43 Intersection Improvements Option
- Pedestrian and Bicycle Safety Toolbox Elements

FIGURE 4