

OLD MCHENRY ROAD: LEVEL 2 ALTERNATIVES

RECOMMENDED
ALTERNATIVE

O1

Evaluation Criteria	Unit of Measure	Existing	2050 No Build	Range of Build Alternatives					
				O1		O2			
Transportation Performance									
Old McHenry Road Average Daily Traffic (ADT) - Abbey Glen to Fairfield	veh/day	13,500	16,400	16,400		16,600			
Old McHenry Road Average Daily Traffic (ADT) - Fairfield to Midlothian	veh/day	24,200	28,200	28,200		30,400			
Old McHenry Road Average Daily Traffic (ADT) - Midlothian to Quentin	veh/day	25,200	29,800	29,800		30,800			
Intersection Level of Service (LOS) and Average Delay		AM	PM	AM	PM	AM	PM	AM	PM
Old McHenry Road at Fairfield Road Intersection	LOS (sec/veh)	D (53.5)	B (15.9)	E (76.0)	B (19.5)	D (42.0)	B (18.6)	C (31.9)	B (18.1)
Max Volume-to-Capacity Ratio (v/c)		0.88	0.70	1.11	0.80	0.95	0.76	0.90	0.84
Old McHenry Road at Midlothian Road Intersection	LOS (sec/veh)	E (55.0)	D (40.8)	F (84.5)	E (75.3)	D (41.3)	D (39.9)	C (29.1)	C (35.0)
Max Volume-to-Capacity Ratio (v/c)		1.02	0.96	1.27	1.21	0.94	0.95	0.80	0.77
Old McHenry Road at Quentin Road Intersection	LOS (sec/veh)	B (18.1)	C (29.9)	C (24.0)	D (35.1)	C (24.1)	C (31.6)	C (23.4)	C (33.7)
Max Volume-to-Capacity Ratio (v/c)		0.65	0.84	0.82	0.87	0.77	0.85	0.80	0.84
Network Performance		AM	PM	AM	PM	AM	PM	AM	PM
Total Delay	sec/veh	212.7	104.4	320.7	209.1	96.5	124.3	87.4	88.8
	hours	250.4	130.5	419.4	303.9	132.5	184.4	125.4	135.5
Comparison to No Build	% change					-68%	-39%	-70%	-55%
Average Speed	mph	13	20	9	12	21	18	22	22
Safety (Illinois Highway Safety Design Manual)									
Emergency Response Times/Life & Safety (RR Grade Separation)	scale	+		+		++++		++++	
Total Conflict Points	each	128		128		169		169	
Average Predicted Crashes	crashes/year	28.7		35.1		33.8		24.1	
Fatal & Injury Predicted Crashes (Intersections)	crashes/year	8.6		10.7		10.3		9.4	
Fatal & Injury Crash Reduction from No Build (Intersections)	% change	-		-		-4.0%		-12.5%	
Mobility & Accessibility									
Total Travel Time (Fairfield/Kruger to Quentin/OMR Intersection) ³	minutes	9.7	3.9	14.2	6.1	3.0	2.8	2.7	2.6
Comparison to No Build						-79%	-54%	-81%	-57%
Level of Access for properties along OMR (Midlothian to Quentin)	scale	+++++		+++++		++		+	
Non-Motorized Accommodations									
Non-Motorized Accommodations	Yes/No	No		No		Yes		Yes	
Environmental Resource Impacts									
Wetland Impacts	acres	-		0.0		0.14		0.18	
Stormwater Facility Impacts	acres	-		0.0		0.20		0.21	
Surface Waters Impacts	acres	-		0.0		0.00		0.00	
Floodway Impacts	acres	-		0.0		0.00		0.00	
Floodplain Impacts	acres	-		0.0		0.00		0.00	
Park Impacts (Section 4f)	acres	-		0.0		0.26		0.61	
OSLAD Recreational Property Impacts	acres	-		0.0		0.00		0.12	
Historic Property Impacts	acres	-		0.0		0.01		0.13	
Historic Structure Impacts	each	-		0.0		0		0	
Cemetery Impacts	acres	-		0.0		0.00		0.00	
Tree Impacts	each	-		0.0		40		156	
Socio-Economic Impacts									
Residential Building Impacts	each	-		0.0		4		5	
Commercial Building Impacts	each	-		0.0		0		0	
Total Property Acquisition	acres	-		0.0		1.5		2.6	
Parcels Affected	each	-		0.0		30		36	
Access Changes	each	-		0.0		11		14	
Cost									
Cost	scale	-		-		\$		\$	

Legend

