55th Street
Interchange Configuration Matrix

55TH STREET INTERCHANGE CONFIGURATION MATRIX

NR TS **NORTHERN ROCHESTER TRANSPORTATION STUDY**
INTERCHANGE CONFIGURATION MATRIX

April 8, 2010

					55th Street NW Interchange Alternatives				
					No-Build	Build			
					Alternative B_3: Year 2035	Alternative F_3: Year 2035 65th Street Interchange with 6-lane 55th Street		Alternative G_3: Year 2035 65th Street Interchange with 6-lane 55th Street and West Frontage Road	
Study Goal	**Study Objectives**		**Measurable Criteria**	**Data Source Used for Evaluation/Ranking**	**Existing Diamond Interchange**	**Partial Cloverleaf Interchange**	**Single Point Urban Interchange**	**Partial Cloverleaf Interchange**	**Single Point Urban Interchange**
Transportation									**Recommended Alternative**
Develop a unified long-term transportation improvement plan that defines the study area's future transportation system, including the arterial and collector roadway networks and their associated access, including new access to TH 52.	Address existing and future operational and safety issues	1	Achieve acceptable intersection operations (number of intersections with an overall intersection LOS "D" or better during the p.m. peak hour)	Exhibit 7	0 of 5	4 of 5	5 of 5	4 of 5	5 of 5
		2	Ability to maintain and/or improve safety (daily VMT changes, estimated yearly change in crashes)	VMT changes and safety experience (average crash/severity rates by facility type)	VMT Δ = 0 ≈ 392 Crashes	VMT Δ = + 5,670 Δ = -8 Crashes	VMT Δ = + 5,670 Δ = -8 Crashes	VMT Δ = + 2,680 Δ = -9 Crashes	VMT Δ = + 2,680 Δ = -9 Crashes
	Minimize long-term operational impacts to TH 52	3	Minimize impacts to mainline TH 52 capacity and operations (freeway segments with a volume-to-capacity less than 1.0)	Technical Memorandum 4: Figures 4, 6 - 9	4 of 4	4 of 4	4 of 4	4 of 4	4 of 4
		4	Provides adequate reserve capacity on TH 52 for future growth and land use changes (percent difference between projected daily volumes and capacity threshold volumes)	Technical Memorandum 4: Figures 4, 6 - 9	35% Reserve Capacity	28% Reserve Capacity	28% Reserve Capacity	29% Reserve Capacity	29% Reserve Capacity
		5	Minimize impacts on travel speeds along TH 52 (average speed of all vehicles in specified TH 52 segment)	Preliminary CORSIM analysis	41st St to 55th St NB: AM - 62 mph PM - 14 mph SB: AM - 53 mph PM - 56 mph 55th St to 65th St NB: AM - 64 mph PM - 64 mph SB: AM - 63 mph PM - 38 mph	41st St to 55th St NB: AM - 62 mph PM - 59 mph SB: AM - 56 mph PM - 59 mph 55th St to 65th St NB: AM - 64 mph PM - 61 mph SB: AM - 59 mph PM - 59 mph	41st St to 55th St NB: AM - 62 mph PM - 58 mph SB: AM - 55 mph PM - 59 mph 55th St to 65th St NB: AM - 63 mph PM - 59 mph SB: AM - 60 mph PM - 60 mph	41st St to 55th St NB: AM - 62 mph PM - 59 mph SB: AM - 56 mph PM - 59 mph 55th St to 65th St NB: AM - 65 mph PM - 62 mph SB: AM - 58 mph PM - 59 mph	41st St to 55th St NB: AM - 62 mph PM - 58 mph SB: AM - 56 mph PM - 60 mph 55th St to 65th St NB: AM - 64 mph PM - 59 mph SB: AM - 58 mph PM - 64 mph
		6	Ability to minimize local trips on the freeway system (i.e., TH 52) (daily local trips and percentage of total volume)	Selected link analysis using ROCOG model Local Trips are defined as trips that access TH	TH 52 - 55th to 75th 7000 vpd (10.7%)	TH 52 - 55th to 65th: 5,900 vpd (6.9%)	TH 52 - 55th to 65th: 5,900 vpd (6.9%)	TH 52 - 55th to 65th: 4,200 vpd (5.2%)	TH 52 - 55th to 65th: 4,200 vpd (5.2%)
	Equitably distribute traffic to arterials, collectors and local roadways based upon their intended functions	7	Reduce system overloads on supporting arterial network (number of corridor segments with a volume-to-capacity less than 1.0)	Technical Memorandum 4: Figures 4, 6 - 9	2 of 5	3 of 5	3 of 5	4 of 5	4 of 5
		8	Provides connectivity and continuity of local road system	Planning and Engineering Judgment; ROCOG Long Range Transportation Plan	POOR	POOR	FAIR	POOR	FAIR
	Provide a supporting arterial network that serves future land uses	9	Consistency with adopted transportation plans	Hwy 52 IRC Management Plan, ROCOG 2035 Long Range Transportation Plan, and Circle Drive Access	POOR	FAIR	FAIR	FAIR	FAIR
			Does the alternative address the identified transportation purpose and need in order to be carried forward for further evaluation?		**NO**	**YES**	**YES**	**YES**	**YES**
Social, Environmental and Economic			Social						
Assess potential social impacts	Minimize long-term public costs for transportation infrastructure by maximizing existing and phased improvement investments to be consistent with long-range recommendations	10	**Acres of Right of Way (Total) (does not include Frontage Rd R/W acquisition)**	Aerial Photos, Microstation/GIS Measurements	**0**	**7.1**	**0**	**7.1**	**0**
		11	**Number of Partial Acquisitions (TOTAL)**		**0**	**FAIR**	**GOOD**	**FAIR**	**GOOD**
		12	-Number of Partial Residential Acquisitions		0	1	0	1	0
		13	-Number of Partial Commercial/Industrial Acquisitions		0	0	0	0	0
		14	-Number of Partial Agricultural Acquisitions		0	0	0	0	0
		15	**Number of Full Acquisitions (TOTAL)**		**0**	**POOR**	**GOOD**	**POOR**	**GOOD**
		16	-Number of Full Residential Acquisitions		0	9	0	9	0
		17	-Number of Full Commercial/Industrial Acquisitions		0	4	0	4	0
		18	-Number of Full Agricultural Acquisitions		0	0	0	0	0
		19	Minimize disruptions to adjacent residential neighborhoods	Public Comments	(NONE)	POOR	GOOD	POOR	GOOD
		20	Impact on quality of life factors (visual, preservation of open space)	Public Comments	(NONE)	POOR (HIGH)	GOOD (LOW)	POOR (HIGH)	GOOD (LOW)
		21	Disproportionate impact to low income or minority populations	ROCOG Environmental Justice Report	(NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)
			Environmental						
Assess potential impacts to the natural environment	Balance right of way and other social, economic and environmental impacts to the area	22	Acres of Wetlands and wetland types	NWI, Field Verification, Previous Delineation Reports, County Identified Hydric Soils	(NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)
		23	Acres of floodplain encroachment	FIRM Maps/County/City Floodplain Zone and/or Flood Prone Soils	(NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)
		24	Presence of Parks/Trails and level of potential Section 4(f)/6(f) impacts (existing)	County/City Parks and Trails Maps FHWA Section 4(f)/6(f) Guidance documents	(NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)
		25	Removal of structures containing asbestos/regulated materials (Building & Bridges)	Assessment of structures (separate contract)	(NONE)	POOR	FAIR	POOR	FAIR
		26	Impact to contaminated site	Phase I ESA Report	(NONE)	FAIR (5-med risk)	GOOD (2-med risk)	FAIR	GOOD
			Economic						
Assess economic impacts	Maximize economic growth potential	27	Estimated Cost (TOTAL)	Unit cost assumptions and measurements from alternatives		$21.8M to $25.9M	$20.4M to $25.0M	$21.8M to $25.9M	$20.4M to $25.0M
		28	-Estimated Construction Cost		0	$14.4M to $17.6M	$20.4M to $25.0M	$14.4M to $17.6M	$20.4M to $25.0M
		29	-Estimated Right of Way & Relocation Cost			$7.4M to $8.3M	$0.0M to $0.0M	$7.4M to $8.3M	$0.0M to $0.0M
		30	Preserve Current Infrastructure (55th Street Bridge)		GOOD	GOOD	FAIR	GOOD	FAIR
		31	Impacts to tax base	County/City Tax Records	GOOD	POOR	GOOD	POOR	GOOD
	Minimize costs for improvements	32	Ability to provide interim improvement options (staging)	Planning and Engineering Judgment	N/A	GOOD	FAIR	GOOD	FAIR
		33	Flexibility to accommodate potential changing traffic patterns	Planning and Engineering Judgment	POOR	FAIR	GOOD	FAIR	GOOD
			Alternative Evaluation Summary						
				GOOD		**12**	**19**	**12**	**19**
				FAIR		**9**	**9**	**9**	**9**
				POOR		**7**	**0**	**7**	**0**
									Recommended Alternative

(1) Does not include R/W needed for east frontage road relocation

65th Street
Interchange Configuration Matrix

65TH STREET INTERCHANGE CONFIGURATION MATRIX

NORTHERN ROCHESTER TRANSPORTATION STUDY
INTERCHANGE CONFIGURATION MATRIX

April 8, 2010

					65th Street NW Interchange Alternatives					
					Build					
					Alternative F_3: Year 2035 65th Street Interchange with 6-lane 55th Street			Alternative G_3: Year 2035 65th Street Interchange with 6-lane 55th Street and West Frontage Road		
Study Goal	**Study Objectives**		**Measurable Criteria**	**Data Source Used for Evaluation/Ranking**	**Single Point Urban Interchange**	**Folded Diamond Interchange**	**Standard Diamond Interchange**	**Single Point Urban Interchange**	**Folded Diamond Interchange**	**Standard Diamond Interchange**
Transportation									**Recommended Alternative**	
Develop a unified long-term transportation improvement plan that defines the study area's future transportation system, including the arterial and collector roadway networks and their associated access, including new access to TH 52.	Address existing and future operational and safety issues	1	Achieve acceptable intersection operations (number of intersections with an overall intersection LOS "D" or better during the p.m. peak hour)	Exhibit 8	5 of 5	6 of 6	6 of 6	5 of 5	6 of 6	6 of 6
		2	Ability to maintain and/or improve safety (daily VMT changes, yearly crash changes)	VMT changes and safety experience (average crash/severity rates by facility type)	VMT Δ = + 5,670 Δ = -8 Crashes	VMT Δ = + 5,670 Δ = -8 Crashes	VMT Δ = + 5,670 Δ = -8 Crashes	VMT Δ = + 2,680 Δ = -9 Crashes	VMT Δ = + 2,680 Δ = -9 Crashes	VMT Δ = + 2,680 Δ = -9 Crashes
		3	Addresses geometric design/safety concerns (specifically 65th Street loops/ramps)	Engineering Judgment	YES	YES[(1)]	YES	YES	YES[(1)]	YES
		4	Consistent with current local/state engineering standards	Local/State Design Standards	YES	YES	YES	YES	YES	YES
	Minimize long-term operational impacts to TH 52	5	Minimize impacts to mainline TH 52 capacity and operations (freeway segments with a volume-to-capacity less than 1.0)	Technical Memorandum 4: Figures 7 - 9	4 of 4	4 of 4	4 of 4	4 of 4	4 of 4	4 of 4
		6	Provides adequate reserve capacity on TH 52 for future growth and land use changes (percent difference between projected daily volumes and capacity threshold volumes)	Technical Memorandum 4: Figures 7 - 9	28% Reserve Capacity	28% Reserve Capacity	28% Reserve Capacity	29% Reserve Capacity	29% Reserve Capacity	29% Reserve Capacity
		7	Minimize impacts on travel speeds along TH 52 (average speed of all vehicles in specified TH 52 segment)	Preliminary CORSIM analysis	55th St to 65th St NB: AM - 63 mph PM - 60 mph SB: AM - 57 mph PM - 57 mph 65th St to 75th St NB: AM - 65 mph PM - 59 mph SB: AM - 65 mph PM - 59 mph	55th St to 65th St NB: AM - 65 mph PM - 62 mph SB: AM - 61 mph PM - 63 mph 65th St to 75th St NB: AM - 65 mph PM - 60 mph SB: AM - 65 mph PM - 64 mph	55th St to 65th St NB: AM - 63 mph PM - 59 mph SB: AM - 59 mph PM - 58 mph 65th St to 75th St NB: AM - 65 mph PM - 60 mph SB: AM - 65 mph PM - 64 mph	55th St to 65th St NB: AM - 64 mph PM - 60 mph SB: AM - 56 mph PM - 60 mph 65th St to 75th St NB: AM - 65 mph PM - 61 mph SB: AM - 64 mph PM - 65 mph	55th St to 65th St NB: AM - 66 mph PM - 62 mph SB: AM - 61 mph PM - 64 mph 65th St to 75th St NB: AM - 65 mph PM - 61 mph SB: AM - 64 mph PM - 65 mph	55th St to 65th St NB: AM - 64 mph PM - 60 mph SB: AM - 58 mph PM - 61 mph 65th St to 75th St NB: AM - 66 mph PM - 62 mph SB: AM - 64 mph PM - 65 mph
		8	Ability to minimize local trips on the freeway system (i.e., TH 52) (daily local trips and percentage of total volume)	Selected link analysis using ROCOG model Local Trips are defined as trips that access TH 52 at one interchange and exit at the next	TH 52 - 55th to 65th: 5,900 vpd (6.9%)	TH 52 - 55th to 65th: 5,900 vpd (6.9%)	TH 52 - 55th to 65th: 5,900 vpd (6.9%)	TH 52 - 55th to 65th: 4,200 vpd (5.2%)	TH 52 - 55th to 65th: 4,200 vpd (5.2%)	TH 52 - 55th to 65th: 4,200 vpd (5.2%)
	Equitably distribute traffic to arterials, collectors and local roadways based upon their intended functions	9	Reduce system overloads on supporting arterial network (number of corridor segments with a volume-to-capacity less than 1.0)	Technical Memorandum 4: Figures 7 - 9	4 of 5	4 of 5	4 of 5	5 of 5	5 of 5	5 of 5
		10	Provides connectivity and continuity of local road system	Planning and Engineering Judgment; ROCOG Long Range Transportation Plan	FAIR	FAIR	FAIR	FAIR	FAIR	FAIR
	Provide a supporting arterial network that serves future land uses	11	Consistency with adopted transportation plans	Hwy 52 IRC Management Plan, ROCOG 2035 Long Range Transportation Plan, and Circle Drive Access Management Plan	FAIR	FAIR	FAIR	FAIR	FAIR	FAIR
			Does the alternative address the identified transportation purpose and need in order to be carried forward for further evaluation?		**YES**	**YES**	**YES**	**YES**	**YES**	**YES**
Social, Environmental and Economic			Social							
Assess potential social impacts	Minimize long-term public costs for transportation infrastructure by maximizing existing and phased improvement investments to be consistent with long-range recommendations	12	**Acres of Right of Way (TOTAL)**	Aerial Photos, Microstation/GIS Measurements	7.4	11.7	16.8	7.4	11.7	16.8
		13	**Number of Partial Acquisitions (TOTAL) (does not include Frontage Rd R/W acquisition)**		**FAIR**	**GOOD**	**POOR**	**FAIR**	**GOOD**	**POOR**
		14	-Number of Partial Residential Acquisitions		0	0	0	0	0	0
		15	-Number of Partial Commercial/Industrial Acquisitions		6	0	1	6	0	1
		16	-Number of Partial Agricultural Acquisitions		2	1	2	2	1	2
		17	**Number of Full Acquisitions (TOTAL)**		**FAIR**	**GOOD**	**POOR**	**FAIR**	**GOOD**	**POOR**
		18	-Number of Full Residential Acquisitions		0	0	0	0	0	0
		19	-Number of Full Commercial/Industrial Acquisitions		1	0	7	1	0	7
		20	-Number of Full Agricultural Acquisitions		0	1	0	0	1	0
		21	Minimize disruptions to adjacent residential neighborhoods	Public Comments	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
		22	Impact on quality of life factors (visual, preservation of open space)	Public Comments	FAIR (MED)	FAIR (MED)	FAIR (MED)	FAIR (MED)	FAIR (MED)	FAIR (MED)
		23	Disproportionate impact to low income or minority populations	ROCOG Environmental Justice Report	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
			Environmental							
Assess potential impacts to the natural environment	Balance right of way and other social, economic and environmental impacts to the area	24	Acres of Wetlands and wetland types	NWI, Field Verification, Previous Delineation Reports, County Identified Hydric Soils	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)
		25	Acres of floodplain encroachment	FIRM Maps/County/City Floodplain Zone and/or Flood Prone Soils	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)
		26	Presence of Parks/Trails and level of potential Section 4(f)/6(f) impacts (Existing)	County/City Parks and Trails Maps FHWA Section 4(f)/6(f) Guidance documents	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)
		27	Removal of structures containing asbestos/regulated materials (Building & Bridges)	Assessment of structures (separate contract)	GOOD (NONE)	GOOD (NONE)	POOR	GOOD (NONE)	GOOD (NONE)	POOR
		28	Impact to contaminated site	Phase I ESA Report	GOOD (NONE)	GOOD (NONE)	FAIR(2-low,1-med)	GOOD (NONE)	GOOD (NONE)	FAIR(2-low,1-med)
			Economic							
Assess economic impacts	Maximize economic growth potential	29	Estimated Cost (TOTAL)	Unit cost assumptions and measurements from alternatives	$16.8M to $20.5M	$6.6M to $8.0M	$9.3M to $11.5M	$16.8M to $20.5M	$6.6M to $8.0M	$9.3M to $11.5M
		30	-Estimated Construction Cost		$13.9M to $16.9M	$4.6M to $5.6M	$4.8M to $5.8M	$13.9M to $16.9M	$4.6M to $5.6M	$4.8M to $5.8M
		31	-Estimated Right of Way & Relocation Cost		$2.9M to $3.6M	$2.0M to $2.4M	$4.5M to $5.7M	$2.9M to $3.6M	$2.0M to $2.4M	$4.5M to $5.7M
		32	Preserve Current Infrastructure (65th Street Bridge)		POOR	GOOD	GOOD	POOR	GOOD	GOOD
		33	Impacts to tax base	County/City Tax Records	FAIR	GOOD	POOR	FAIR	GOOD	POOR
	Minimize costs for improvements	34	Ability to provide interim improvement options (staging)	Planning and Engineering Judgment	POOR	GOOD	GOOD	POOR	GOOD	GOOD
		35	Flexibility to accommodate potential changing traffic patterns	Planning and Engineering Judgment	GOOD	GOOD	GOOD	GOOD	GOOD	GOOD
			Alternative Evaluation Summary							
				GOOD	**18**	**24**	**18**	**19**	**25**	**19**
				FAIR	**8**	**6**	**6**	**7**	**5**	**5**
				POOR	**4**	**0**	**6**	**4**	**0**	**6**
									Recommended Alternative	

Specific Notes:
(1) It is anticipated that the folded diamond interchange alternative will meet current local/state design standards; however, the design will incorporate mitigation measures to address safety concerns.

West frontage Road
Interchange Configuration Matrix

WEST FRONTAGE ROAD ALTERNATIVE EVALUATION

NORTHERN ROCHESTER TRANSPORTATION STUDY
WEST FRONTAGE ROAD ALTERNATIVE EVALUATION

April 8, 2010

Study Goal	Study Objectives		Measurable Criteria	Data Source Used for Evaluation/Ranking	West Frontage Road at Chateau Road: Option 1	West Frontage Road at Chateau Road: Option 2	West Frontage Road at Clearwater Road: Option 3	West Frontage Road at Clearwater Road: Option 4
					Alternatives / Build / Alternative G3: Year 2035 65th Street Interchange with 6-lane 55th Street and West Frontage Road			
							Recommended Alternative	
Transportation			Transportation					
Develop a unified long-term transportation improvement plan that defines the study area's future transportation system, including the arterial and collector roadway networks and their associated access, including new access to TH 52.	Address existing and future operational and safety issues	1	Achieve acceptable intersection operations (number of intersections with an overall intersection LOS "D" or better during the p.m. peak hour)	Exhibit 7	11 of 11	11 of 11	11 of 11	11 of 11
		2	Ability to maintain and/or improve safety (daily VMT changes, estimated yearly change in crashes)	VMT changes and safety experience (average crash/severity rates by facility type)	VMT Δ = + 2,680 Δ = -9 Crashes	VMT Δ = + 2,680 Δ = -9 Crashes	VMT Δ = + 2,680 Δ = -9 Crashes	VMT Δ = + 2,680 Δ = -9 Crashes
		3	Meets access spacing guidelines	City of Rochester Access Management Standards	Yes	No	Yes	No
	Minimize long-term operational impacts to TH 52	4	Minimize impacts to mainline TH 52 capacity and operations (freeway segments with a volume-to-capacity less than 1.0)	Technical Memorandum 4: Figures 4, 6 - 9	8 of 8	8 of 8	8 of 8	8 of 8
		5	Provides adequate reserve capacity on TH 52 for future growth and land use changes (percent difference between projected daily volumes and capacity threshold volumes)	Technical Memorandum 4: Figures 4, 6 - 9	29% Reserve Capacity	29% Reserve Capacity	29% Reserve Capacity	29% Reserve Capacity
		6	Minimize impacts on travel speeds along TH 52 (average speed of all vehicles in specified TH 52 segment)	Preliminary CORSIM analysis	41st St to 55th St NB: AM - 62 mph PM - 59 mph SB: AM - 55 mph PM - 60 mph 55th St to 65th St NB: AM - 65 mph PM - 61 mph SB: AM - 60 mph PM - 65 mph 65th St to 75th St NB: AM - 65 mph PM - 60 mph SB: AM - 64 mph PM - 65 mph	41st St to 55th St NB: AM - 62 mph PM - 59 mph SB: AM - 55 mph PM - 60 mph 55th St to 65th St NB: AM - 65 mph PM - 61 mph SB: AM - 60 mph PM - 65 mph 65th St to 75th St NB: AM - 65 mph PM - 60 mph SB: AM - 64 mph PM - 65 mph	41st St to 55th St NB: AM - 62 mph PM - 59 mph SB: AM - 55 mph PM - 60 mph 55th St to 65th St NB: AM - 65 mph PM - 61 mph SB: AM - 60 mph PM - 65 mph 65th St to 75th St NB: AM - 65 mph PM - 60 mph SB: AM - 64 mph PM - 65 mph	41st St to 55th St NB: AM - 62 mph PM - 59 mph SB: AM - 55 mph PM - 60 mph 55th St to 65th St NB: AM - 65 mph PM - 61 mph SB: AM - 60 mph PM - 65 mph 65th St to 75th St NB: AM - 65 mph PM - 60 mph SB: AM - 64 mph PM - 65 mph
		7	Ability to minimize local trips on the freeway system (i.e., TH 52) (daily local trips and percentage of total volume)	Selected link analysis using ROCOG model Local Trips are defined as trips that access TH 52 at one interchange and exit at the next (e.g. - on at 55th Street and off at 65th Street)	TH 52 - 55th to 65th: 4,200 vpd (5.2%) TH 52 - 65th to 75th: 1,400 vpd (2.0%)	TH 52 - 55th to 65th: 4,200 vpd (5.2%) TH 52 - 65th to 75th: 1,400 vpd (2.0%)	TH 52 - 55th to 65th: 4,200 vpd (5.2%) TH 52 - 65th to 75th: 1,400 vpd (2.0%)	TH 52 - 55th to 65th: 4,200 vpd (5.2%) TH 52 - 65th to 75th: 1,400 vpd (2.0%)
	Equitably distribute traffic to arterials, collectors and local roadways based upon their intended functions	8	Reduce system overloads on supporting arterial network (number of corridor segments with a volume-to-capacity less than 1.0)	Technical Memorandum 4: Figures 4, 6 - 9	9 of 10	9 of 10	9 of 10	9 of 10
		9	Provides continuity of the frontage road system	Planning and Engineering Judgment; ROCOG Long Range Transportation Plan	FAIR	FAIR	GOOD	GOOD
		10	Provides connectivity of local road system	Planning and Engineering Judgment; ROCOG Long Range Transportation Plan	GOOD	FAIR	GOOD	FAIR
	Provide a supporting arterial network that serves future land uses	11	Consistency with adopted transportation plans	Hwy 52 IRC Management Plan, ROCOG 2035 Long Range Transportation Plan, and Circle Drive Access Management Plan	FAIR	FAIR	FAIR	FAIR
			Does the alternative address the identified transportation purpose and need in order to be carried forward for further evaluation?		**YES**	**YES**	**YES**	**YES**
Social, Environmental and Economic			Social					
Assess potential social impacts	Minimize long-term public costs for transportation infrastructure by maximizing existing and phased improvement investments to be consistent with long-range recommendations	12	**Acres of Right of Way (TOTAL) (Note 1 & 3)**	Aerial Photos, Microstation/GIS Measurements	**16.6**	**14.7**	**17.7**	**11.7**
		13	**Number of Partial Acquisitions (TOTAL) (Note 3)**		**POOR**	**POOR**	**FAIR**	**POOR**
		14	-Number of Partial Residential Acquisitions		11	11	0	0
		15	-Number of Partial Commercial/Industrial Acquisitions		0	4	1	15
		16	-Number of Partial Agricultural Acquisitions		2	1	2	0
		17	**Number of Full Acquisitions (TOTAL)**		**FAIR**	**FAIR**	**POOR**	**POOR**
		18	-Number of Full Residential Acquisitions		2	2	16	16
		19	-Number of Full Commercial/Industrial Acquisitions		0	1	0	1
		20	-Number of Full Agricultural Acquisitions		0	0	1	0
		21	Minimize disruptions to adjacent residential neighborhoods	Public Comments	POOR	POOR	FAIR	FAIR
		22	Impact on quality of life factors (visual, noise, preservation of open space)	Public Comments	POOR (HIGH)	POOR (HIGH)	FAIR (MED)	FAIR (MED)
		23	Disproportionate impact to low income or minority populations	ROCOG Environmental Justice Report	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)
			Environmental					
Assess potential impacts to the natural environment	Balance right of way and other social, economic and environmental impacts to the area	24	Acres of Wetlands and wetland types	NWI, Field Verification, Previous Delineation Reports, County Identified Hydric Soils	FAIR (LOW)	FAIR (LOW)	FAIR (LOW)	FAIR (LOW)
		25	Acres of floodplain encroachment	FIRM Maps/County/City Floodplain Zone and/or Flood Prone Soils	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)
		26	Presence of Parks/Trails and level of potential Section 4(f)/6(f) impacts (existing)	County/City Parks and Trails Maps FHWA Section 4(f)/6(f) Guidance documents	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)	GOOD (NONE)
		27	Removal of structures containing asbestos/regulated materials (Building & Bridges)	Assessment of structures (separate contract)	GOOD	GOOD	FAIR	FAIR
		28	Impact to contaminated site	Phase I ESA Report	GOOD	GOOD	GOOD	GOOD
			Economic					
Assess economic impacts	Maximize economic growth potential	29	Estimated Cost (TOTAL) (Note 2)	Unit cost assumptions and measurements from alternatives	$5.1M to $6.4M	$4.3M to $5.3M	$9.6M to $11.8M	$8.7M to $10.7M
		30	-Estimated Construction Cost		$3.6M to $4.4M	$3.1M to $3.7M	$3.6M to $4.4M	$3.2M to $4.0M
		31	-Estimated Right of Way & Relocation Cost (Note 3)		$1.5M to $2.0M	$1.2M to $1.6M	$6.0M to $7.4M	$5.5M to $6.7M
		32	Preserve Current Infrastructure (Existing roadbed; Chateau, Clearwater, 34th Ave)		FAIR	GOOD	FAIR	GOOD
		33	Impacts to tax base	County/City Tax Records	FAIR	FAIR	POOR	POOR
		34	Improves economic development opportunity	Planning and Engineering Judgment	FAIR	GOOD	FAIR	GOOD
	Minimize costs for improvements	35	Ability to provide interim improvement options (provides alternative route during construction of adjacent interchanges)	Planning and Engineering Judgment	GOOD	GOOD	GOOD	GOOD
		36	Flexibility to accommodate potential changing traffic patterns	Planning and Engineering Judgment	GOOD	GOOD	GOOD	GOOD
			Alternative Evaluation Summary					
				GOOD	**16**	**16**	**16**	**16**
				FAIR	**11**	**12**	**10**	**10**
				POOR	**4**	**3**	**5**	**5**
							Recommended Alternative	

General Notes:
1. Each build alternative assumes a Single-Point Interchange at 55th Street and a Folded Diamond Interchange at 65th Street
2. Social, Environmental, and Economic (SEE) impacts refer to West Frontage Road impacts only, see Interchange Configuration Matrices for SEE impacts associated with the 55th and 65th Street interchange configurations.

Specific Notes:
(1) Only includes R/W needed for the west frontage road
(2) Only includes costs associated with the west frontage road and does not include costs attributed to noise mitigation (i.e. - noise walls) or ponding
(3) Does not include right-of-way for ponding.