

New Braunfels Outer Loop Study PRELIMINARY
 VIABLE OPTIONS SCREENING MATRIX

Options:			No Build*	Viable Options																
				D																
Criteria by Goal	Measure	Rank		2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	
Safety Goal			To be assessed at later screening steps.																	
Provides a Crossing at Guadalupe River	Assessment	no, yes																		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes																		
Mobility Goal			To be assessed at later screening steps.																	
Provides Relief Route for Congested Areas	Assessment	no, yes																		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes																		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	No	Yes	Yes	No	
Economic Development Goal			To be assessed at later screening steps.																	
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes																		
Community and Environmental Goal			To be assessed at later screening steps.																	
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-,0,+																		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+																		
Minimize Impacts to Wetlands	Acres	-,0,+																		
Minimize Impacts to 100-yr Floodplains	Acres	-,0,+																		
Minimize Impacts to Sensitive Archeological Areas	Acres	-,0,+																		
Minimize Noise Impacts to Sensitive Receivers	Each	-,0,+																		
Minimize Impacts to Schools	Potential Impacts	-,+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Avoid Impacts to Historic Resources	Displacements	-,+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Avoid Impacts to Landfill	Impacts	-,+		+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-,0,+																		
Minimize Impacts to Commercial Properties	# Properties	#																		
Avoids Planned Capital Improvement Projects	Each	-,0,+																		
Minimize Impacts to Major Utility Features	Each	-,0,+																		
Minimize Impacts to Civic Organizations	Each	-,0,+																		
Minimize Impacts Environmental Justice Areas	Potential Impact	-,0,+																		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+																		
Minimize Impacts to Prime or Unique Farmlands	Acres	-,0,+																		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-,0,+																		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-,0,+																		
Engineering Goal			To be assessed at later screening steps.																	
Affords Potential River Crossings	Design parameter	no, yes		No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes																		
Cost Effectiveness Goal			To be assessed at later screening steps.																	
ROW Acquisition Cost	Approximate Cost per Mile	\$																		

* The "No Build" option is not eliminated and is to remain an option throughout this study and any subsequent screening and environmental studies.

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Options:			No Build*	Viable Options											
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Criteria by Goal	Measure	Rank		2	3	4	5	6	7	8	11	12	13	15	
Safety Goal			To be assessed at later screening steps.												
Provides a Crossing at Guadalupe River	Assessment	no, yes													
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes													
Accommodates Bicycles and Pedestrians	Assessment	no, yes													
Mobility Goal			To be assessed at later screening steps.												
Provides Relief Route for Congested Areas	Assessment	no, yes													
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes													
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Economic Development Goal			To be assessed at later screening steps.												
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes													
Community and Environmental Goal			To be assessed at later screening steps.												
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+		+	+	+	+	+	+	+	+	+	+	-	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-,0,+													
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+													
Minimize Impacts to Wetlands	Acres	-,0,+													
Minimize Impacts to 100-yr Floodplains	Acres	-,0,+													
Minimize Impacts to Sensitive Archeological Areas	Acres	-,0,+													
Minimize Noise Impacts to Sensitive Receivers	Each	-,0,+													
Minimize Impacts to Schools	Potential Impacts	-,+		+	+	+	+	+	+	+	+	+	+	+	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+		+	+	+	+	+	+	+	+	+	+	+	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+		+	+	+	+	+	+	+	+	+	+	+	+
Avoid Impacts to Historic Resources	Displacements	-,+		+	+	+	+	+	+	+	+	+	+	+	+
Avoid Impacts to Landfill	Impacts	-,+		+	+	+	+	+	+	+	+	+	+	+	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-,0,+													
Minimize Impacts to Commercial Properties	# Properties	#													
Avoids Planned Capital Improvement Projects	Each	-,0,+													
Minimize Impacts to Major Utility Features	Each	-,0,+													
Minimize Impacts to Civic Organizations	Each	-,0,+													
Minimize Impacts Environmental Justice Areas	Potential Impact	-,0,+													
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+													
Minimize Impacts to Prime or Unique Farmlands	Acres	-,0,+													
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-,0,+													
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-,0,+													
Engineering Goal			To be assessed at later screening steps.												
Affords Potential River Crossings	Design parameter	no, yes		No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes													
Cost Effectiveness Goal			To be assessed at later screening steps.												
ROW Acquisition Cost	Approximate Cost per Mile	\$													

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VIABLE OPTIONS SCREENING MATRIX

Options:			Viable Options													
			F													
			1	2	3	4	5	6	8	9	10	11	12	13	14	
Criteria by Goal	Measure	Rank	No Build*													
Safety Goal																
Provides a Crossing at Guadalupe River	Assessment	no, yes	To be assessed at later screening steps.							To be assessed at later screening steps.						
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes														
Accommodates Bicycles and Pedestrians	Assessment	no, yes														
Mobility Goal																
Provides Relief Route for Congested Areas	Assessment	no, yes	To be assessed at later screening steps.							To be assessed at later screening steps.						
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes														
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes	No
Economic Development Goal																
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	To be assessed at later screening steps.							To be assessed at later screening steps.						
Community and Environmental Goal																
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+	+	-	-	+	+	-	-	-	+	+	-	+	+	-
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-,0,+	To be assessed at later screening steps.													
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+														
Minimize Impacts to Wetlands	Acres	-,0,+														
Minimize Impacts to 100-yr Floodplains	Acres	-,0,+														
Minimize Impacts to Sensitive Archeological Areas	Acres	-,0,+														
Minimize Noise Impacts to Sensitive Receivers	Each	-,0,+														
Minimize Impacts to Schools	Potential Impacts	-,+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Avoid Impacts to Historic Resources	Displacements	-,+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Avoid Impacts to Landfill	Impacts	-,+	+	+	+	+	+	+	+	+	+	+	+	+	+	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-,0,+	To be assessed at later screening steps.													
Minimize Impacts to Commercial Properties	# Properties	#														
Avoids Planned Capital Improvement Projects	Each	-,0,+														
Minimize Impacts to Major Utility Features	Each	-,0,+														
Minimize Impacts to Civic Organizations	Each	-,0,+														
Minimize Impacts Environmental Justice Areas	Potential Impact	-,0,+														
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+														
Minimize Impacts to Prime or Unique Farmlands	Acres	-,0,+														
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-,0,+														
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-,0,+														
Engineering Goal																
Affords Potential River Crossings	Design parameter	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	To be assessed at later screening steps.													
Cost Effectiveness Goal																
ROW Acquisition Cost	Approximate Cost per Mile	\$	To be assessed at later screening steps.							To be assessed at later screening steps.						

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New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	Option: No Build*
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-,+		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+		+
Avoid Impacts to Historic Resources	Displacements	-,+		+
Avoid Impacts to Landfill	Impacts	-,+		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		No
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

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New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Options:			D
Criteria by Goal	Measure	R a n k	2
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-, +	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +	+
Avoid Impacts to Historic Resources	Displacements	-, +	+
Avoid Impacts to Landfill	Impacts	-, +	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	Options: D 3
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-, +		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +		+
Avoid Impacts to Historic Resources	Displacements	-, +		+
Avoid Impacts to Landfill	Impacts	-, +		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	Options: D 4
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-, +		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +		+
Avoid Impacts to Historic Resources	Displacements	-, +		+
Avoid Impacts to Landfill	Impacts	-, +		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	Options: D 5
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-,0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+		
Minimize Impacts to Wetlands	Acres	-,0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-,0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-,0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-,0,+		
Minimize Impacts to Schools	Potential Impacts	-,+		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+		+
Avoid Impacts to Historic Resources	Displacements	-,+		+
Avoid Impacts to Landfill	Impacts	-,+		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-,0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-,0,+		
Minimize Impacts to Major Utility Features	Each	-,0,+		
Minimize Impacts to Civic Organizations	Each	-,0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-,0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-,0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-,0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-,0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

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Criteria by Goal		Measure	R a n k	Options: D 6
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-, +		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +		+
Avoid Impacts to Historic Resources	Displacements	-, +		+
Avoid Impacts to Landfill	Impacts	-, +		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

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Criteria by Goal		Measure	R a n k	Options: D 7
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-, +		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +		+
Avoid Impacts to Historic Resources	Displacements	-, +		+
Avoid Impacts to Landfill	Impacts	-, +		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	8
Options: D				
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-, +		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +		+
Avoid Impacts to Historic Resources	Displacements	-, +		+
Avoid Impacts to Landfill	Impacts	-, +		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	Options: D 9
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-, +		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +		+
Avoid Impacts to Historic Resources	Displacements	-, +		+
Avoid Impacts to Landfill	Impacts	-, +		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	Options: D 10
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-, +		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +		+
Avoid Impacts to Historic Resources	Displacements	-, +		+
Avoid Impacts to Landfill	Impacts	-, +		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Options:			D
Criteria by Goal	Measure	R a n k	11
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	No
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-, +	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +	+
Avoid Impacts to Historic Resources	Displacements	-, +	+
Avoid Impacts to Landfill	Impacts	-, +	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	Options: D 12
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-, +		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +		+
Avoid Impacts to Historic Resources	Displacements	-, +		+
Avoid Impacts to Landfill	Impacts	-, +		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Options:			D
Criteria by Goal	Measure	R a n k	13
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-, +	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +	+
Avoid Impacts to Historic Resources	Displacements	-, +	+
Avoid Impacts to Landfill	Impacts	-, +	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Options:			D
Criteria by Goal	Measure	R a n k	14
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	No
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-, +	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +	+
Avoid Impacts to Historic Resources	Displacements	-, +	+
Avoid Impacts to Landfill	Impacts	-, +	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Options:			D
Criteria by Goal	Measure	R a n k	15
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-, +	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +	+
Avoid Impacts to Historic Resources	Displacements	-, +	+
Avoid Impacts to Landfill	Impacts	-, +	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Options:			D
Criteria by Goal	Measure	R a n k	16
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-, +	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +	+
Avoid Impacts to Historic Resources	Displacements	-, +	+
Avoid Impacts to Landfill	Impacts	-, +	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Options:			D
Criteria by Goal	Measure	R a n k	17
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	No
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-, +	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +	+
Avoid Impacts to Historic Resources	Displacements	-, +	+
Avoid Impacts to Landfill	Impacts	-, +	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Options:			E
Criteria by Goal	Measure	R a n k	2
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-, +	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +	+
Avoid Impacts to Historic Resources	Displacements	-, +	+
Avoid Impacts to Landfill	Impacts	-, +	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	Options: E 3
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-, +		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +		+
Avoid Impacts to Historic Resources	Displacements	-, +		+
Avoid Impacts to Landfill	Impacts	-, +		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	Options: E 4
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-, +		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +		+
Avoid Impacts to Historic Resources	Displacements	-, +		+
Avoid Impacts to Landfill	Impacts	-, +		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	Options: E 5
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-, +		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +		+
Avoid Impacts to Historic Resources	Displacements	-, +		+
Avoid Impacts to Landfill	Impacts	-, +		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Options:			E
Criteria by Goal	Measure	R a n k	6
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-, +	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +	+
Avoid Impacts to Historic Resources	Displacements	-, +	+
Avoid Impacts to Landfill	Impacts	-, +	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Options:			E
Criteria by Goal	Measure	R a n k	7
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-, +	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +	+
Avoid Impacts to Historic Resources	Displacements	-, +	+
Avoid Impacts to Landfill	Impacts	-, +	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Options:			E
Criteria by Goal	Measure	R a n k	8
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-, +	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +	+
Avoid Impacts to Historic Resources	Displacements	-, +	+
Avoid Impacts to Landfill	Impacts	-, +	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Options:			E
Criteria by Goal	Measure	R a n k	11
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-, +	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +	+
Avoid Impacts to Historic Resources	Displacements	-, +	+
Avoid Impacts to Landfill	Impacts	-, +	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	Options: E 12
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-, +		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +		+
Avoid Impacts to Historic Resources	Displacements	-, +		+
Avoid Impacts to Landfill	Impacts	-, +		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	Options: E 13
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +		-
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-, +		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +		+
Avoid Impacts to Historic Resources	Displacements	-, +		+
Avoid Impacts to Landfill	Impacts	-, +		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Options:			E
Criteria by Goal	Measure	R a n k	15
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-, +	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-, +	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-, +	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-, +	+
Avoid Impacts to Historic Resources	Displacements	-, +	+
Avoid Impacts to Landfill	Impacts	-, +	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Option: F

Criteria by Goal	Measure	R a n k	1
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+	-
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-,0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	
Minimize Impacts to Wetlands	Acres	-,0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-,0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-,0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-,0,+	
Minimize Impacts to Schools	Potential Impacts	-,+	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+
Avoid Impacts to Historic Resources	Displacements	-,+	+
Avoid Impacts to Landfill	Impacts	-,+	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-,0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-,0,+	
Minimize Impacts to Major Utility Features	Each	-,0,+	
Minimize Impacts to Civic Organizations	Each	-,0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-,0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-,0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-,0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-,0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Option: F

Criteria by Goal	Measure	R a n k	2
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	No
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+	-
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-,+	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+
Avoid Impacts to Historic Resources	Displacements	-,+	+
Avoid Impacts to Landfill	Impacts	-,+	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Option: F

Criteria by Goal	Measure	R a n k	3
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	No
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-,+	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+
Avoid Impacts to Historic Resources	Displacements	-,+	+
Avoid Impacts to Landfill	Impacts	-,+	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	4
Option: F				
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	No	
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+	+	
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-,+	+	
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+	
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+	
Avoid Impacts to Historic Resources	Displacements	-,+	+	
Avoid Impacts to Landfill	Impacts	-,+	+	
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes	Yes	
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	5
Option: F				
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+		-
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-,+		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+		+
Avoid Impacts to Historic Resources	Displacements	-,+		+
Avoid Impacts to Landfill	Impacts	-,+		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	6
Option: F				
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+		-
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-,+		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+		+
Avoid Impacts to Historic Resources	Displacements	-,+		+
Avoid Impacts to Landfill	Impacts	-,+		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	8
Options: F				
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+		-
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-,+		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+		+
Avoid Impacts to Historic Resources	Displacements	-,+		+
Avoid Impacts to Landfill	Impacts	-,+		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	9
Option: F				
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-,+		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+		+
Avoid Impacts to Historic Resources	Displacements	-,+		+
Avoid Impacts to Landfill	Impacts	-,+		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	10
Option: F				
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+		+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-,+		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+		+
Avoid Impacts to Historic Resources	Displacements	-,+		+
Avoid Impacts to Landfill	Impacts	-,+		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	11
Option: F				
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+		-
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-,+		+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+		+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+		+
Avoid Impacts to Historic Resources	Displacements	-,+		+
Avoid Impacts to Landfill	Impacts	-,+		+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes		Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	Options: F
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	No	
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+	+	
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-,+	+	
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+	
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+	
Avoid Impacts to Historic Resources	Displacements	-,+	+	
Avoid Impacts to Landfill	Impacts	-,+	+	
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes	Yes	
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Option: F

Criteria by Goal	Measure	R a n k	13
Safety Goal			
Provides a Crossing at Guadalupe River	Assessment	no, yes	
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	
Accommodates Bicycles and Pedestrians	Assessment	no, yes	
Mobility Goal			
Provides Relief Route for Congested Areas	Assessment	no, yes	
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes
Economic Development Goal			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	
Community and Environmental Goal			
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+	+
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+	
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	
Minimize Impacts to Wetlands	Acres	-0,+	
Minimize Impacts to 100-yr Floodplains	Acres	-0,+	
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+	
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+	
Minimize Impacts to Schools	Potential Impacts	-,+	+
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+
Avoid Impacts to Historic Resources	Displacements	-,+	+
Avoid Impacts to Landfill	Impacts	-,+	+
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+	
Minimize Impacts to Commercial Properties	# Properties	#	
Avoids Planned Capital Improvement Projects	Each	-0,+	
Minimize Impacts to Major Utility Features	Each	-0,+	
Minimize Impacts to Civic Organizations	Each	-0,+	
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+	
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+	
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+	
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+	
Engineering Goal			
Affords Potential River Crossings	Design parameter	no, yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	
Cost Effectiveness Goal			
ROW Acquisition Cost	Approximate Cost per Mile	\$	

New Braunfels Outer Loop Study PRELIMINARY VIABLE OPTIONS SCREENING MATRIX

Criteria by Goal		Measure	R a n k	13
Option: F				
Safety Goal				
Provides a Crossing at Guadalupe River	Assessment	no, yes		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		
Accommodates Bicycles and Pedestrians	Assessment	no, yes		
Mobility Goal				
Provides Relief Route for Congested Areas	Assessment	no, yes		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	No	
Economic Development Goal				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		
Community and Environmental Goal				
Minimize Residential Displacements	Extensive and Concentrated Displacements	-,+	-	
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	-0,+		
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+		
Minimize Impacts to Wetlands	Acres	-0,+		
Minimize Impacts to 100-yr Floodplains	Acres	-0,+		
Minimize Impacts to Sensitive Archeological Areas	Acres	-0,+		
Minimize Noise Impacts to Sensitive Receivers	Each	-0,+		
Minimize Impacts to Schools	Potential Impacts	-,+	+	
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+	
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+	
Avoid Impacts to Historic Resources	Displacements	-,+	+	
Avoid Impacts to Landfill	Impacts	-,+	+	
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	-0,+		
Minimize Impacts to Commercial Properties	# Properties	#		
Avoids Planned Capital Improvement Projects	Each	-0,+		
Minimize Impacts to Major Utility Features	Each	-0,+		
Minimize Impacts to Civic Organizations	Each	-0,+		
Minimize Impacts Environmental Justice Areas	Potential Impact	-0,+		
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+		
Minimize Impacts to Prime or Unique Farmlands	Acres	-0,+		
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	-0,+		
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	-0,+		
Engineering Goal				
Affords Potential River Crossings	Design parameter	no, yes	Yes	
Conforms to AASHTO Design Criteria	Design parameter	no, yes		
Cost Effectiveness Goal				
ROW Acquisition Cost	Approximate Cost per Mile	\$		