

**New Braunfels Outer Loop Study PRELIMINARY  
SHORT LIST OF OPTIONS SCREENING MATRIX CRITERIA**

Criteria by Goal	Measure	Rank	Notes
<b>Safety Goal</b>			
Provides a Crossing at Guadalupe River	Assessment	no, yes	"Yes" if route will provide a crossing at the Guadalupe River.
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	"Yes" if route will reduce public safety delays to response time.
Accommodates Bicycles and Pedestrians	Assessment	no, yes	"Yes" if route will provide accommodations for bicycles and pedestrians.
<b>Mobility Goal</b>			
Provides Relief Route for Congested Areas	Assessment	no, yes	"Yes" if route will provide a relief route for congested areas.
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	"Yes" if route will offer long-term expansion potential for future needs.
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	"Yes" if route will minimize impacts to existing interchanges along IH 35.
<b>Economic Development Goal</b>			
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	"Yes" if route will avoid impacts to future airport expansion.
<b>Community and Environmental Goal</b>			
Minimize Residential Displacements	Each	#	Residents were identified via aerial images, sight-identification, and stakeholders. Each resident was counted as "impacted" if the corridor impacted a residential structure. *Green(+)'s 6, 6 s*Yellow(0)'s 10, *Red(-)'s 11
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	Impacts to undeveloped habitat. Undeveloped habitat does not include farmland, residential, nor commercial properties. Vegetation/Wildlife Habitat will be further evaluated during the Environmental Document Phase. *Green(+)'s 50, 51 s*Yellow(0)'s 65, *Red(-)'s 66
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	Using existing databases, sites were identified as potential and known hazardous material sites.
Minimize Impacts to Wetlands	Acres	#	Using existing databases, sites were identified as areas of potential wetland. Wetland mitigation would be based upon detailed analysis as part of future studies. *Green(+)'s 5, 6 s*Yellow(0)'s 10, *Red(-)'s 11
Minimize Impacts to 100-yr Floodplains	Acres	#	FEMA floodplain data was used to determine the acreage count, based upon the proposed corridor width. *Green(+)'s 50, 51 s*Yellow(0)'s 100, *Red(-)'s 100
Minimize Impacts to Sensitive Archeological Areas	Acres	#	This criterion is based on characteristics of the natural, topographic and geologic settings within the study area that have historically demonstrated the potential to contain archeological sites. The archeological sites have not been digitized to protect the location and security of the sites. *Green(+)'s 200, 201 s*Yellow(0)'s 400, *Red(-)'s 401
Minimize Noise Impacts to Sensitive Receivers	Each	#	300 ft from the 800 ft corridor was used for potential sensitive receivers. Noise mitigation would be based upon detailed analysis as part of future studies. *Green(+)'s 25, 26 s*Yellow(0)'s 50, *Red(-)'s 51
Minimize Impacts to Schools	Potential Impacts	-,+	No routes appear to directly impact schools within the study area.
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	Using existing databases and sight-identified cemeteries. No routes appear to directly impact cemeteries and prehistoric burial sites.
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	No routes appear to directly impact parks and recreational facilities within the study area.
Avoid Impacts to Historic Resources	Displacements	-,+	Registered historical sites as well as potentially eligible historical sites were identified within the study area using existing databases and sight-identified potential historical sites. A rank of "+" indicates that no impact was identified for the proposed corridors. A rank of "-" indicates that one impact was identified for the proposed corridors.
Avoid Impacts to Landfill	Impacts	-,+	No routes appear to directly impact the landfill.
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	Corridors were examined for intent to avoid splitting parcels of farmland/ranchland. *Green(+)'s 10, 11 s*Yellow(0)'s 15, *Red(-)'s 16
Minimize Impacts to Commercial Properties	# Properties	#	Commercial properties were sight-identified by the study team. Each commercial property was counted as "impacted" if the corridor impacted a property. *Green(+)'s 5, 6 s*Yellow(0)'s 10, *Red(-)'s 11
Avoids Planned Capital Improvement Projects	Each	-0,+	Using existing databases, sites were identified as planned capital improvement projects. Upon discussions with county and city engineers and planners, no routes appear to directly impact planned capital improvement projects.
Minimize Impacts to Major Utility Features	Each	-0,+	Major utility features were identified and are shown on the constraints map. A major utility feature was counted as "impacted" if the corridor impacted a major utility feature. A major utility was identified as any structure above ground.
Minimize Impacts to Civic Organizations	Each	-0,+	The civic organizations used for this count were sight-identified by the study team. A rank of "+" indicates that no impact was identified for the proposed corridors.
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-0,+	Environmental justice concerns include disproportionate impacts to low-income and minority residents. Potential environmental justice areas identified will be further evaluated during the Environmental Document Phase. A rank of "+" indicates that no impact was identified for the proposed corridors. A rank of "-" indicates that an impact was identified for the proposed corridors.
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	The faith-based organizations used for this count were sight-identified by the study team. A rank of "+" indicates that no impact was identified for the proposed corridors.
Minimize Impacts to Prime or Unique Farmlands	Acres	#	Corridors were examined to minimize impacts to prime or unique farmlands. Unique Farmlands will be determined during the Environmental Document Phase. *Green(+)'s 200, 201 s*Yellow(0)'s 400, *Red(-)'s 401
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	Potential Golden-cheeked warbler habitat areas were identified within the study area. Mitigation would be based upon detailed analysis as part of future studies. *Green(+)'s 200, 201 s*Yellow(0)'s 300, *Red(-)'s 301
Minimize Impacts to Potential Sensitive Geologic Areas	Acres	#	Areas mapped as cave-bearing formations on a geologic map (Collins 2000) were identified within the study area. Mitigation would be based upon detailed analysis as part of future studies. *Green(+)'s 500, 501 s*Yellow(0)'s 700, *Red(-)'s 701
<b>Engineering Goal</b>			
Affords Potential River Crossings	Design parameter	no, yes	"Yes" if route can afford a potential river crossing.
Conforms to AASHTO Design Criteria	Design parameter	no, yes	"Yes" if route conforms to terrain and is viable.
<b>Cost Effectiveness Goal</b>			
Costs will be determined during future planning and environmental studies.			

New Braunfels Outer Loop Study PRELIMINARY  
 SHORT LIST OF OPTIONS SCREENING MATRIX

Criteria by Goal	Measure	Rank	No Build*	Section D Short List of Options					
				ROUTE 1	ROUTE 2	** ROUTE 3	ROUTE 4	ROUTE 5	ROUTE 6
				(D2, D5, D6, D13)	(D2, D5, D6, D9, D10, D12)	(D2, D5, D6, D16, D8, D15)	(D2, D4, D7, D9, D10, D13)	(D2, D4, D7, D9, D10, D12)	(D2, D4, D8, D15)
<b>Safety Goal</b>									
Provides a Crossing at Guadalupe River	Assessment	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Accommodates Bicycles and Pedestrians	Assessment	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>Mobility Goal</b>									
Provides Relief Route for Congested Areas	Assessment	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Economic Development Goal</b>									
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Community and Environmental Goal</b>									
Minimize Residential Displacements	Each	#	0	8	8	8	13	13	12
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	0	64	64	95	53	53	84
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-.0,+	+	+	+	+	+	+	+
Minimize Impacts to Wetlands	Acres	#	0	8	5	9	8	6	10
Minimize Impacts to 100-yr Floodplains	Acres	#	0	64	57	57	28	22	22
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0	0	0	0	0	0	0
Minimize Noise Impacts to Sensitive Receivers	Each	#	0	41	39	40	42	40	46
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	18	18	17	14	14	16
Minimize Impacts to Commercial Properties	# Properties	#	0	1	0	0	1	0	0
Avoids Planned Capital Improvement Projects	Each	-.0,+	+	+	+	+	+	+	+
Minimize Impacts to Major Utility Features	Each	-.0,+	+	+	+	+	+	+	+
Minimize Impacts to Civic Organizations	Each	-.0,+	+	+	+	+	+	+	+
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-.0,+	+	-	-	-	-	-	-
Minimize Impacts to Faith-Based Organizations	Potential Impact	-.0,+	+	+	+	+	+	+	+
Minimize Impacts to Prime or Unique Farmlands	Acres	#	0	666	667	685	615	616	635
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0	0	0	0	0	0	0
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0	0	0	0	0	0	0
<b>Engineering Goal</b>									
Affords Potential River Crossings	Design parameter	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>Cost Effectiveness Goal***</b>									

\* The "No Build" option is not eliminated and is to remain an option throughout this study and any subsequent screening and environmental studies  
 \*\* Study Recommendation Route  
 \*\*\* Costs will be determined during future planning and environmental studies.

New Braunfels Outer Loop Study PRELIMINARY  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

Criteria by Goal	Measure	Rank	No Build*	Section E Short List of Options					
				ROUTE 1	ROUTE 2	ROUTE 3	** ROUTE 4	ROUTE 5	ROUTE 6
				(E5, E14, E7, E12)	(E4, E7, E12)	(E3, E6, E11, E12)	(E3, E6, E15)	(E2, E6, E11, E12)	(E2, E6, E15)
<b>Safety Goal</b>									
Provides a Crossing at Guadalupe River	Assessment	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Accommodates Bicycles and Pedestrians	Assessment	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes
<b>Mobility Goal</b>									
Provides Relief Route for Congested Areas	Assessment	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Economic Development Goal</b>									
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Community and Environmental Goals</b>									
Minimize Residential Displacements	Each	#	0	8	5	7	5	7	5
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	0	61	75	83	32	63	12
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-.0,+	0	+	+	+	+	+	+
Minimize Impacts to Wetlands	Acres	#	0	23	10	6	3	4	1
Minimize Impacts to 100-yr Floodplains	Acres	#	0	75	143	113	74	151	111
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0	0	0	0	0	0	0
Minimize Noise Impacts to Sensitive Receivers	Each	#	0	50	48	52	12	51	11
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	11	12	12	12	14	13
Minimize Impacts to Commercial Properties	# Properties	#	0	0	0	0	1	0	1
Avoids Planned Capital Improvement Projects	Each	-.0,+	0	+	+	+	+	+	+
Minimize Impacts to Major Utility Features	Each	-.0,+	0	+	+	+	+	+	+
Minimize Impacts to Civic Organizations	Each	-.0,+	0	+	+	+	+	+	+
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-.0,+	+	-	-	-	-	-	-
Minimize Impacts to Faith-Based Organizations	Potential Impact	-.0,+	0	+	+	+	+	+	+
Minimize Impacts to Prime or Unique Farmlands	Acres	#	0	369	295	242	261	247	266
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0	0	0	0	0	0	0
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0	0	0	0	0	0	0
<b>Engineering Goal</b>									
Affords Potential River Crossings	Design parameter	no, yes	No	Yes	Yes	Yes	Yes	Yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	N/A	Yes	Yes	Yes	Yes	Yes	Yes
<b>Cost Effectiveness Goal***</b>			0						

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New Braunfels Outer Loop Study PRELIMINARY  
 SHORT LIST OF OPTIONS SCREENING MATRIX

Criteria by Goal	Measure	Rank	No Build*	Section F Short List of Options		
				ROUTE 1 (F3-F13)	** ROUTE 2 (F3, F10)	ROUTE 3 (F3, F12, F9)
<b>Safety Goal</b>						
Provides a Crossing at Guadalupe River	Assessment	no, yes	No	Yes	Yes	Yes
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	No	Yes	Yes	Yes
Accommodates Bicycles and Pedestrians	Assessment	no, yes	No	Yes	Yes	Yes
<b>Mobility Goal</b>						
Provides Relief Route for Congested Areas	Assessment	no, yes	No	Yes	Yes	Yes
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	No	Yes	Yes	Yes
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Yes	Yes	Yes
<b>Economic Development Goal</b>						
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes	Yes	Yes	Yes
<b>Community and Environmental Goal</b>						
Minimize Residential Displacements	Each	#	0	8	5	4
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	0	27	7	39
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-0,+	0	+	+	+
Minimize Impacts to Wetlands	Acres	#	0	3	4	1
Minimize Impacts to 100-yr Floodplains	Acres	#	0	66	65	69
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0	0	0	0
Minimize Noise Impacts to Sensitive Receivers	Each	#	0	17	16	14
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	18	13	15
Minimize Impacts to Commercial Properties	# Properties	#	0	0	0	0
Avoids Planned Capital Improvement Projects	Each	-0,+	0	+	+	+
Minimize Impacts to Major Utility Features	Each	-0,+	0	+	+	+
Minimize Impacts to Civic Organizations	Each	-0,+	0	+	+	+
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-0,+	+	+	+	+
Minimize Impacts to Faith-Based Organizations	Potential Impact	-0,+	0	+	+	+
Minimize Impacts to Prime or Unique Farmlands	Acres	#	0	394	324	280
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0	0	0	0
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0	0	0	0
<b>Engineering Goal</b>						
Affords Potential River Crossings	Design parameter	no, yes	No	Yes	Yes	Yes
Conforms to AASHTO Design Criteria	Design parameter	no, yes	N/A	Yes	Yes	Yes
<b>Cost Effectiveness Goal***</b>			0			

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\*\* Study Recommendation Route

\*\*\* Costs will be determined during future planning and environmental studies.

**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

			Option:		
Criteria by Goal	Measure	R a n k	No Build*	Comments	
<b>Safety Goal</b>					
Provides a Crossing at Guadalupe River	Assessment	no, yes	No		
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	No		
Accommodates Bicycles and Pedestrians	Assessment	no, yes	No		
<b>Mobility Goal</b>					
Provides Relief Route for Congested Areas	Assessment	no, yes	No		
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	No		
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes		
<b>Economic Development Goal</b>					
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes		
<b>Community and Environmental Goal</b>					
Minimize Residential Displacements	Each	#	0		
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	#	0		
Avoids Planned Capital Improvement Projects	Each	-0,+	+		
Minimize Impacts to Major Utility Features	Each	-0,+	+		
Minimize Impacts to Civic Organizations	Each	-0,+	+		
Minimize Impacts Potential 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 Sensitive Geologic Areas	Acres	#	0		
<b>Engineering Goal</b>					
Affords Potential River Crossings	Design parameter	no, yes	No		
Conforms to AASHTO Design Criteria	Design parameter	no, yes	No		
<b>Cost Effectiveness Goal****</b>					

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\*\* Study Recommendation Route

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**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

			Options:		
Criteria by Goal	Measure	R a n k	D		Comments
			ROUTE 1		
<b>Safety Goal</b>					
Provides a Crossing at Guadalupe River	Assessment	no, yes	Yes		Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	Yes		Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes	Yes		Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>					
Provides Relief Route for Congested Areas	Assessment	no, yes	Yes		Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	Yes		Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes		Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>					
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes		Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>					
Minimize Residential Displacements	# of Residents	#	8		8 Residents within D1 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	64		64 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	+		No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#	8		8 ACRES Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#	64		Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0		No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#	41		41 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+	+		No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+		No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+		No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+	+		No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+	+		No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	18		18 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#	1		1 impact to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+	+		No impacts to planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+	+		No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+	+		No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+	-		Impacts Environmental Justice Areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	+		No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#	666		666 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0		No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0		No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>					
Affords Potential River Crossings	Design parameter	no, yes	Yes		
Conforms to AASHTO Design Criteria	Design parameter	no, yes	Yes		
<b>Cost Effectiveness Goal***</b>					
<b>Notes</b>					
This alternative is a combination of: D2, D5, D6, D13					

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\*\* Study Recommendation Route

\*\*\* Costs will be determined during future planning and environmental studies.



**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

Criteria by Goal	Measure	Options:		D	Comments
		R	a	ROUTE 2	
		n	n		
		k			
<b>Safety Goal</b>					
Provides a Crossing at Guadalupe River	Assessment	no, yes		Yes	Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		Yes	Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes		Yes	Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>					
Provides Relief Route for Congested Areas	Assessment	no, yes		Yes	Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		Yes	Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes	Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>					
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		Yes	Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>					
Minimize Residential Displacements	# of Residents	#		8	8 Residents within D2 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#		64	64 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+		+	No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#		5	5 ACRES Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#		57	Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#		0	No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#		39	39 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+		+	No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+		+	No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+		+	No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+		+	No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+		+	No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#		18	18 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#		0	No impacts to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+		+	No impacts to planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+		+	No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+		+	No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+		-	Impacts Environmental Justice Areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+		+	No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#		667	667 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#		0	No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#		0	No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>					
Affords Potential River Crossings	Design parameter	no, yes		Yes	
Conforms to AASHTO Design Criteria	Design parameter	no, yes		Yes	
<b>Cost Effectiveness Goal***</b>					
<b>Notes</b>					
This alternative is a combination of: D2, D5, D6, D9, D10, D12					

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

\*\* Study Recommendation Route

\*\*\* Costs will be determined during future planning and environmental studies.



**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

			Options:		D	
Criteria by Goal	Measure	R a n k			ROUTE 6	Comments
<b>Safety Goal</b>						
Provides a Crossing at Guadalupe River	Assessment	no, yes	Yes			Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	Yes			Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes	Yes			Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>						
Provides Relief Route for Congested Areas	Assessment	no, yes	Yes			Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	Yes			Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes			Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>						
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes			Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>						
Minimize Residential Displacements	# of Residents	#	8			8 Residents within D3 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	95			95 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	+			No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#	9			9 ACRES Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#	57			Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0			No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#	40			40 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+	+			No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+			No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+			No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+	+			No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+	+			No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	17			17 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#	0			No impacts to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+	+			Avoids planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+	+			No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+	+			No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+	-			Impacts Environmental Justice Areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	+			No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#	685			685 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0			No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0			No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>						
Affords Potential River Crossings	Design parameter	no, yes	Yes			
Conforms to AASHTO Design Criteria	Design parameter	no, yes	Yes			
<b>Cost Effectiveness Goal***</b>						
<b>Notes</b>						
This alternative is a combination of: D2, D5, D6, D16, D8, D15						

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\*\* Study Recommendation Route

\*\*\* Costs will be determined during future planning and environmental studies.



**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

			Options:		D	
Criteria by Goal	Measure	R a n k			ROUTE 6	Comments
<b>Safety Goal</b>						
Provides a Crossing at Guadalupe River	Assessment	no, yes	Yes			Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	Yes			Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes	Yes			Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>						
Provides Relief Route for Congested Areas	Assessment	no, yes	Yes			Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	Yes			Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes			Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>						
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes			Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>						
Minimize Residential Displacements	# of Residents	#	13			13 Residents within D4 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	53			53 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	+			No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#	8			8 ACRES Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#	28			Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0			No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#	42			42 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+	+			No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+			No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+			No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+	+			No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+	+			No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	14			14 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#	1			1 impact to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+	+			Avoids planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+	+			No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+	+			No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+	-			Impacts Environmental Justice Areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	+			No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#	615			615 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0			No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0			No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>						
Affords Potential River Crossings	Design parameter	no, yes	Yes			
Conforms to AASHTO Design Criteria	Design parameter	no, yes	Yes			
<b>Cost Effectiveness Goal***</b>						
<b>Notes</b>						
This alternative is a combination of: D2, D4, D7, D9, D10, D13						

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\*\* Study Recommendation Route

\*\*\* Costs will be determined during future planning and environmental studies.



**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

			Options:		D	
Criteria by Goal	Measure	R a n k			ROUTE 6	Comments
<b>Safety Goal</b>						
Provides a Crossing at Guadalupe River	Assessment	no, yes	Yes			Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	Yes			Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes	Yes			Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>						
Provides Relief Route for Congested Areas	Assessment	no, yes	Yes			Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	Yes			Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes			Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>						
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes			Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>						
Minimize Residential Displacements	# of Residents	#	13			13 Residents within D5 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	53			53 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	+			No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#	6			6 ACRES Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#	22			Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0			No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#	40			40 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+	+			No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+			No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+			No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+	+			No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+	+			No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	14			14 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#	0			No impacts to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+	+			Avoids planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+	+			No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+	+			No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+	-			Impacts Environmental Justice Areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	+			No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#	616			616 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0			No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0			No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>						
Affords Potential River Crossings	Design parameter	no, yes	Yes			
Conforms to AASHTO Design Criteria	Design parameter	no, yes	Yes			
<b>Cost Effectiveness Goal***</b>						
<b>Notes</b>						
This alternative is a combination of: D2, D4, D7, D9, D10, D13						

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\*\* Study Recommendation Route

\*\*\* Costs will be determined during future planning and environmental studies.



**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

Criteria by Goal	Measure	Options:		D	Comments
		R	a	ROUTE 6	
		n	k		
<b>Safety Goal</b>					
Provides a Crossing at Guadalupe River	Assessment	no, yes		Yes	Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes		Yes	Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes		Yes	Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>					
Provides Relief Route for Congested Areas	Assessment	no, yes		Yes	Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes		Yes	Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes		Yes	Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>					
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes		Yes	Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>					
Minimize Residential Displacements	# of Residents	#		12	12 Residents within D6 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#		84	84 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+		+	No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#		10	10 ACRES Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#		22	Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#		0	No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#		46	46 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+		+	No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+		+	No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+		+	No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+		+	No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+		+	No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#		16	16 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#		0	No impacts to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+		+	Avoids planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+		+	No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+		+	No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+		-	Impacts Environmental Justice Areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+		+	No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#		635	635 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#		0	No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#		0	No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>					
Affords Potential River Crossings	Design parameter	no, yes		Yes	
Conforms to AASHTO Design Criteria	Design parameter	no, yes		Yes	
<b>Cost Effectiveness Goal***</b>					
<b>Notes</b>					
This alternative is a combination of: D2, D4, D8, D15					

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\*\* Study Recommendation Route

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**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

Options:			E	Comments
Criteria by Goal	Measure	R a n k	ROUTE 1	
<b>Safety Goal</b>				
Provides a Crossing at Guadalupe River	Assessment	no, yes	Yes	Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	Yes	Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes	Yes	Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>				
Provides Relief Route for Congested Areas	Assessment	no, yes	Yes	Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	Yes	Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes	Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>				
Minimize Residential Displacements	# of Residents	#	8	8 Residents within E1 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	61	61 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	+	No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#	23	23 ACRES Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#	75	Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0	No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#	50	50 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+	+	No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+	No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+	No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+	+	No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+	+	No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	11	11 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#	0	No impacts to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+	+	No impacts to planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+	+	No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+	+	No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+	-	Impacts Environmental Justice Areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	+	No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#	369	369 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0	No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0	No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>				
Affords Potential River Crossings	Design parameter	no, yes	Yes	
Conforms to AASHTO Design Criteria	Design parameter	no, yes	Yes	
<b>Cost Effectiveness Goal****</b>				
<b>Notes</b>				
This alternative is a combination of: E5, E14, E7, E12				

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\*\* Study Recommendation Route

\*\*\* Costs will be determined during future planning and environmental studies.

**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

Options:			E	Comments
Criteria by Goal	Measure	R a n k	ROUTE 2	
<b>Safety Goal</b>				
Provides a Crossing at Guadalupe River	Assessment	no, yes	Yes	Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	Yes	Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes	Yes	Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>				
Provides Relief Route for Congested Areas	Assessment	no, yes	Yes	Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	Yes	Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes	Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>				
Minimize Residential Displacements	# of Residents	#	5	5 Residents within E2 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	75	75ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	+	No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#	10	10 ACRES Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#	143	Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0	No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#	48	48 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+	+	No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+	No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+	No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+	+	No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+	+	No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	12	12 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#	0	No impacts to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+	+	No impacts to planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+	+	No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+	+	No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+	-	Impacts Environmental Justice Areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	+	No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#	295	295 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0	No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0	No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>				
Affords Potential River Crossings	Design parameter	no, yes	Yes	
Conforms to AASHTO Design Criteria	Design parameter	no, yes	Yes	
<b>Cost Effectiveness Goal****</b>				
<b>Notes</b>				
This alternative is a combination of: E4, E7, E12				

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\*\* Study Recommendation Route

\*\*\* Costs will be determined during future planning and environmental studies.



## New Braunfels Outer Loop Study PRELIMINARY SHORT LIST OF OPTIONS SCREENING MATRIX

Options:			E	Comments
Criteria by Goal	Measure	R a n k	ROUTE 3	
<b>Safety Goal</b>				
Provides a Crossing at Guadalupe River	Assessment	no, yes	Yes	Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	Yes	Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes	Yes	Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>				
Provides Relief Route for Congested Areas	Assessment	no, yes	Yes	Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	Yes	Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes	Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>				
Minimize Residential Displacements	# of Residents	#	7	7 Residents within E3 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	83	83 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	+	No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#	6	6 ACRES Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#	113	Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0	No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#	52	52 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+	+	No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+	No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+	No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+	+	No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+	+	No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	12	12 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#	0	No impacts to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+	+	No impacts to planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+	+	No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+	+	No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+	-	Impacts Environmental Justice Areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	+	No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#	242	242 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0	No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0	No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>				
Affords Potential River Crossings	Design parameter	no, yes	Yes	
Conforms to AASHTO Design Criteria	Design parameter	no, yes	Yes	
<b>Cost Effectiveness Goal****</b>				
<b>Notes</b>				
This alternative is a combination of: E3, E6, E11, E12				

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

\*\* Study Recommendation Route

\*\*\* Costs will be determined during future planning and environmental studies.



**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

Options:			E	Comments
Criteria by Goal	Measure	R a n k	** ROUTE 4	
<b>Safety Goal</b>				
Provides a Crossing at Guadalupe River	Assessment	no, yes	Yes	Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	Yes	Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes	Yes	Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>				
Provides Relief Route for Congested Areas	Assessment	no, yes	Yes	Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	Yes	Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes	Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>				
Minimize Residential Displacements	# of Residents	#	5	5 Residents within E4 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	32	32 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	+	No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#	3	3 ACRES Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#	74	Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0	No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#	12	12 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+	+	No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+	No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+	No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+	+	No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+	+	No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	12	12 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#	1	1 impact to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+	+	No impacts to planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+	+	No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+	+	No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+	-	Impacts Environmental Justice Areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	+	No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#	261	261 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0	No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0	No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>				
Affords Potential River Crossings	Design parameter	no, yes	Yes	
Conforms to AASHTO Design Criteria	Design parameter	no, yes	Yes	
<b>Cost Effectiveness Goal****</b>				
<b>Notes</b>				
This alternative is a combination of: E3, E6, E15				

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\*\* Study Recommendation Route

\*\*\* Costs will be determined during future planning and environmental studies.



**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

Options:			E	Comments
Criteria by Goal	Measure	R a n k	ROUTE 5	
<b>Safety Goal</b>				
Provides a Crossing at Guadalupe River	Assessment	no, yes	Yes	Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	Yes	Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes	Yes	Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>				
Provides Relief Route for Congested Areas	Assessment	no, yes	Yes	Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	Yes	Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes	Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>				
Minimize Residential Displacements	# of Residents	#	7	7 Residents within E5 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	63	63 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	+	No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#	4	4 ACRES Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#	151	Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0	No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#	51	51 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+	+	No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+	No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+	No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+	+	No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+	+	No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	14	14 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#	0	No impacts to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+	+	No impacts to planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+	+	No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+	+	No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+	-	Impacts Environmental Justice Areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	+	No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#	247	247 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0	No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0	No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>				
Affords Potential River Crossings	Design parameter	no, yes	Yes	
Conforms to AASHTO Design Criteria	Design parameter	no, yes	Yes	
<b>Cost Effectiveness Goal****</b>				
<b>Notes</b>				
This alternative is a combination of: E2, E6, E11, E12				

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\*\* Study Recommendation Route

\*\*\* Costs will be determined during future planning and environmental studies.



**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

Options:			E	Comments
Criteria by Goal	Measure	R a n k	ROUTE 6	
<b>Safety Goal</b>				
Provides a Crossing at Guadalupe River	Assessment	no, yes	Yes	Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	Yes	Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes	Yes	Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>				
Provides Relief Route for Congested Areas	Assessment	no, yes	Yes	Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	Yes	Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes	Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>				
Minimize Residential Displacements	# of Residents	#	5	5 Residents within E6 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	12	12 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	+	No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#	1	1 ACRE Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#	111	Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0	No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#	11	11 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+	+	No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+	No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+	No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+	+	No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+	+	No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	13	13 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#	1	1 impact to commercial property
Avoids Planned Capital Improvement Projects	Each	-,0,+	+	No impacts to planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+	+	No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+	+	No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+	-	Impacts Environmental Justice Areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	+	No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#	266	266 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0	No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0	No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>				
Affords Potential River Crossings	Design parameter	no, yes	Yes	
Conforms to AASHTO Design Criteria	Design parameter	no, yes	Yes	
<b>Cost Effectiveness Goal****</b>				
<b>Notes</b>				
This alternative is a combination of: E2, E6, E15				

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\*\* Study Recommendation Route

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**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

			Option:	F	
Criteria by Goal	Measure	R a n k	ROUTE 1		Comments
<b>Safety Goal</b>					
Provides a Crossing at Guadalupe River	Assessment	no, yes	Yes		Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	Yes		Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes	Yes		Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>					
Provides Relief Route for Congested Areas	Assessment	no, yes	Yes		Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	Yes		Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes		Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>					
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes		Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>					
Minimize Residential Displacements	# of Residents	#	8		8 Residents within F1 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	27		27 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	+		No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#	3		3 ACRES Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#	66		Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0		No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#	17		17 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+	+		No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+		No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+		No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+	+		No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+	+		No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	18		18 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#	0		No impacts to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+	+		No impacts to planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+	+		No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+	+		No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+	+		No impact to environmental justice areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	+		No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#	394		394 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0		No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0		No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>					
Affords Potential River Crossings	Design parameter	no, yes	Yes		
Conforms to AASHTO Design Criteria	Design parameter	no, yes	Yes		
<b>Cost Effectiveness Goal***</b>					
<b>Notes</b>					
This alternative is a combination of: F3, F13					

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\*\* Study Recommendation Route

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**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

Option:			F	Comments
Criteria by Goal	Measure	R a n k	** ROUTE 2	
<b>Safety Goal</b>				
Provides a Crossing at Guadalupe River	Assessment	no, yes	Yes	Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	Yes	Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes	Yes	Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>				
Provides Relief Route for Congested Areas	Assessment	no, yes	Yes	Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	Yes	Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes	Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>				
Minimize Residential Displacements	# of Residents	#	5	5 Residents within F2 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	7	7 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	+	No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#	4	4 ACRES Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#	65	Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0	No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#	16	16 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+	+	No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+	No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+	No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+	+	No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+	+	No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	13	13 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#	0	No impacts to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+	+	No impacts to planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+	+	No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+	+	No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+	+	No impact to environmental justice areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	+	No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#	324	324 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0	No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0	No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>				
Affords Potential River Crossings	Design parameter	no, yes	Yes	
Conforms to AASHTO Design Criteria	Design parameter	no, yes	Yes	
<b>Cost Effectiveness Goal****</b>				
<b>Notes</b>				
This alternative is a combination of: F3, F10				

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\*\* Study Recommendation Route

\*\*\* Costs will be determined during future planning and environmental studies.



**New Braunfels Outer Loop Study PRELIMINARY**  
**SHORT LIST OF OPTIONS SCREENING MATRIX**

Option:			F	Comments
Criteria by Goal	Measure	R a n k	ROUTE 3	
<b>Safety Goal</b>				
Provides a Crossing at Guadalupe River	Assessment	no, yes	Yes	Provides a crossing at Guadalupe River
Reduces Public Safety Delays (police, fire, EMS)	Assessment	no, yes	Yes	Reduces Public Safety Delays (police, fire, EMS)
Accommodates Bicycles and Pedestrians	Assessment	no, yes	Yes	Accommodates Bicycles and Pedestrians
<b>Mobility Goal</b>				
Provides Relief Route for Congested Areas	Assessment	no, yes	Yes	Provides relief route for congested areas
Offers Long-Term Expansion Potential for Future Needs	Assessment	no, yes	Yes	Offers long-term expansion potential for future needs
Minimizes Impacts to Existing Interchanges Along IH 35	Assessment	no, yes	Yes	Minimizes impacts to existing interchanges along IH 35
<b>Economic Development Goal</b>				
Avoid Impacts to Future Airport Expansion	Avoids Impacts	no, yes	Yes	Avoids impacts to future Airport expansion
<b>Community and Environmental Goal</b>				
Minimize Residential Displacements	# of Residents	#	4	4 Residents within F3 corridor
Minimize Impacts to Vegetation/Wildlife Habitat	Acres	#	39	39 ACRES Quantities calculated from GIS export.
Minimize Impacts to Hazardous Material Sites	# HazMat Sites	-,0,+	+	No Hazardous Material Sites
Minimize Impacts to Wetlands	Acres	#	1	1ACRE Quantities calculated from GIS export.
Minimize Impacts to 100-yr Floodplains	Acres	#	69	Quantities calculated from GIS export.
Minimize Impacts to Sensitive Archeological Areas	Acres	#	0	No impact to Sensitive Archeological Areas
Minimize Noise Impacts to Sensitive Receivers	Each	#	14	14 IMPACTS Quantities calculated from GIS export.
Minimize Impacts to Schools	Potential Impacts	-,+	+	No impact to schools
Avoid Cemeteries and Prehistoric Burial Sites	Impacts	-,+	+	No impact to Cemeteries and Prehistoric Burial Sites
Avoid Impacts to Parks/Recreational Facilities	Impacts	-,+	+	No impact to Parks/Recreational Facilities
Avoid Impacts to Historic Resources	Displacements	-,+	+	No impact to Historic Resources
Avoid Impacts to Landfill	Impacts	-,+	+	No impact to Landfills
Minimize Impacts to Farmlands/Ranchlands	Splits to Large Parcels	#	15	15 SPLITS Quantities calculated from GIS export.
Minimize Impacts to Commercial Properties	# Properties	#	0	No impacts to commercial properties
Avoids Planned Capital Improvement Projects	Each	-,0,+	+	No impacts to planned capital improvement projects
Minimize Impacts to Major Utility Features	Each	-,0,+	+	No impacts to major utility features
Minimize Impacts to Civic Organizations	Each	-,0,+	+	No impact to civic organizations
Minimize Impacts Potential Environmental Justice Areas	Potential Impact	-,0,+	+	No impact to environmental justice areas
Minimize Impacts to Faith-Based Organizations	Potential Impact	-,0,+	+	No impacts to faith-based organizations
Minimize Impacts to Prime or Unique Farmlands	Acres	#	280	280 ACRES Quantities calculated from GIS export.
Minimize Impacts to Potential Golden-cheeked Warbler Habitat	Acres	#	0	No impacts to Potential Golden-cheeked Warbler Habitat
Minimize Impacts to Sensitive Geologic Areas	Acres	#	0	No impact to Sensitive Geologic Areas
<b>Engineering Goal</b>				
Affords Potential River Crossings	Design parameter	no, yes	Yes	
Conforms to AASHTO Design Criteria	Design parameter	no, yes	Yes	
<b>Cost Effectiveness Goal****</b>				
<b>Notes</b>				
This alternative is a combination of: F3, F12, F9				

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\*\* Study Recommendation Route

\*\*\* Costs will be determined during future planning and environmental studies.