

US 290/SH 71 Preliminary Concept Initial Screening Criteria

Purpose and Need Performance Criterion	Measure	Evaluation Parameters (Units)	Concept A	Concept B	Concept C	Concept D	Concept E-1	Concept E-2	Concept F	TSM Concept*	TDM Concept*	2007 Mediation Alt.	No-Build
Improve mobility and operational efficiency	Reduces conflict between local and through traffic in the corridor (barrier separation, control of access, grade separation, driveway improvements)	Yes/No	Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No
		Reduces travel times (Signal improvements, improve LOS, improve intersection efficiency)	Yes/No	Yes	Yes	Yes	No	No	Yes	Yes	No	Yes	No
		Provides opportunity for multimodal travel options (transit, bicycle and pedestrian accommodations)	Yes/No	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No
Increase multimodal travel options for people and goods	Reduce crashes (Reduction in conflict points, grade separation, driveway improvements)	Yes/No	Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No
Improve safety and emergency response	Serves as a reliable route for emergency response organizations (Signal improvements, control of access, adequate shoulder widths)	Yes/No	Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	No
			Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	Yes
CARRY FORWARD TO SECONDARY SCREENING?			Yes	Yes	Yes	Yes	No	No	Yes	No	No	Yes	Yes

\* TSM and TDM Concepts were eliminated as stand-alone concepts; however, elements of TSM and TDM can be included with any concept.



Performance Measures	Criterion	Evaluation Parameters	Evaluation Parameters (Units)	Concept A	Concept B	Concept C	Concept D	Concept F	2007 Mediation Alt.	No-Build
Improve mobility and operational efficiency	Improves US 290 operational efficiency - reduce travel time during peak hour for 2035 traffic	WESTBOUND MAIN LANES: Travel time along WB US 290 main lanes from Old Fredericksburg Rd to Circle Dr, PM Peak	Minutes	6.7	5.6	5.2	8.2	6.3	19.6	29.0
		WESTBOUND FRONTAGE ROADS: Travel time along WB US 290 FTG RD from Old Fredericksburg Rd to Circle Dr, PM Peak	Minutes	13.2	10.6	10.3	18.7	n/a*	12.7	29.1
		EASTBOUND MAIN LANES: Travel time along EB US 290 main lanes from Circle Dr to Old Fredericksburg Rd, AM Peak	Minutes	11.5	10.9	11.9	10.7	19.0	13.3	34.6
		EASTBOUND FRONTAGE ROAD: Travel time along EB US 290 FTG RD from Circle Dr to Old Fredericksburg Rd, AM Peak	Minutes	12.6	11.3	11.4	13.8	n/a*	18.5	35.8
		WESTBOUND MAINLANES: Travel time along WB US 290 and SH 71 from Old Fredericksburg Rd to Silvermine Dr, PM Peak	Minutes	5.3	4.6	3.9	9.9	5.8	3.7	25.3
	Improves SH 71 operational efficiency - reduce travel time during peak hour for 2035 traffic	WESTBOUND FRONTAGE ROADS: Travel time along WB US 290 and SH 71 from Old Fredericksburg Rd to Silvermine Dr, PM Peak	Minutes	9.4	6.8	6.8	9.5	n/a*	7.2	25.4
		EASTBOUND MAINLANES: Travel time along EB SH 71 and US 290 from Silvermine Dr to Old Fredericksburg Rd, AM Peak	Minutes	4.0	7.4	4.1	9.7	4.8	4.2	32.2
		EASTBOUND FRONTAGE ROAD: Travel time along EB SH 71 and US 290 from Silvermine Dr to Old Fredericksburg Rd, AM Peak	Minutes	10.0	8.8	7.6	11.1	n/a*	8.8	33.4
		Adds sidewalk, bike/pedestrian elements as part of the project.	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes	No
		Provides opportunity for high capacity transit to utilize the corridor.	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes	No
Increase multimodal travel options for people and goods	Provides opportunity for multimodal travel options	Provides opportunity for local bus service to utilize the corridor.	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes	No
Improve safety and emergency response	Corrects geometric deficiencies within project limits	Adds shoulders, separates through traffic from local traffic making frequent turns onto collectors, and corrects sharp horizontal curves.	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes	No
	Upgrades facility to current design standards	Proposed design meets FHWA standards for National Highway System (23 CFR 625.4) and TxDOT's Roadway Design Manual and Bridge Design Manual, including associated references.	Yes/No	Yes	Yes	Yes	Yes	Yes	Yes	No
	Serves as a reliable route for emergency response organizations	Adequate ramps and detour route for emergency vehicles or alternate route due to accidents	Yes/No	Yes	Yes	Yes	Yes	No	Yes	No
	Minimize Residential Displacements	Number of Residential Displacements	Each	0	0	0	0	0	0	0
Potential Displacements	Minimize Commercial Displacements	Number of Commercial Displacements	Each	0	0	0	0	7	0	0
Preliminary Project Cost	Minimize Construction Cost	Preliminary Construction Cost Estimate	\$ Million	269	257	280	250	204	266	N/A
	Minimize ROW Cost	ROW Area	Acres	27.8	24.3	27.6	30.5	39.2	25	N/A
		Preliminary ROW Estimated Cost	\$ Million	34.8	31.1	34.6	37.3	51.1	31.6	N/A
	Minimize Utility Relocation Cost	Anticipated Utility Relocation effort	High/Med/Low	Med	High	High	High	High	Med	N/A
CARRY FORWARD TO ALTERNATIVE DEVELOPMENT?				YES	NO	YES	NO	NO	NO	YES

\* Concept F does not have continuous frontage roads

LEGEND

Concept with highest score

Concept with lowest score

The No-Build Alternative must be carried forward in the Evaluation