

Phase 2 and Phase 3 Alternative Comparison Matrix

Criteria Measure		PHASE 2 EVALUATION				PHASE 3 EVALUATION	
		E-1	E-2	N-1	N-2	Modified E-1	E-3
Improve Rail Operations	Track Capacity	Adds single track bridge	Adds single track bridge	Adds single track bridge	Adds single track bridge	Adds single track bridge	Existing single track bridge replaced with new double track bridge
	Dispatching	Maintains existing	Maintains existing	Introduces 3rd dispatcher	Introduces 3rd dispatcher	Maintains existing	Maintains existing
	Industrial Access	Maintains existing	Maintains existing	Maintains existing	Maintains existing	Maintains existing	Maintains existing
	Design Speed	30 mph W of river, 40 mph E	20 mph W of river, 40 mph E	10-20 mph W of river, 40 mph E	10-20 mph W of river, 40 mph E	30 mph W of river, 40 mph E	40 mph W of river, 40 mph E
Improve Movement and Interface	Rail Movements	Reduces bottleneck at river crossing. Crossovers allow the use of either bridge.	Reduces bottleneck. Less impact to rail traffic because base elevation of bridge provides higher clearance for marine traffic. Rail grade is increased.	Reduces bottleneck. Less impact to rail traffic because bridge will be in a fixed position. Route is longer and rail grade is increased.	Reduces bottleneck. Less impact to rail traffic because bridge will be in a fixed position. Route is longer and rail grade is increased.	Reduces bottleneck at river crossing. Crossovers allow the use of either bridge.	Reduces bottleneck at river crossing. Crossover tracks are not necessary.
	Marine Movements	Comparable to existing conditions	Comparable to existing conditions	Comparable to existing conditions	Comparable to existing conditions	Comparable to existing conditions	Comparable to existing conditions
	Vehicular Movements	No change to traffic movements.	No change to traffic movements, except two highway-rail grade crossings at Old US 90.	Access to Long Avenue prohibited with some closures at cross streets. Grade separation at MLK. Increase in delay at remaining grade crossings.	Grade Separation at Old US 90. Increase in delay at remaining grade crossings.	No change to traffic movements.	No change to traffic movements.
	Planned Industrial	Future connections NE of river can be made from new track.	Future connections NE of river limited by elevation of new track.	Future connections NE of river can be made from existing track.	Future connections NE of river can be made from existing track.	Future connections NE of river can be made from new track.	Future connections NE of river can be made from new track.
Cultural	Historic Structures	Neches Rail Bridge (close proximity)	UPRR bridge	0	0	Neches Rail Bridge (close proximity); Beaumont Police Station (ROW from parking area)	Neches Rail Bridge (demolished); Beaumont Police Station (ROW from parking area)
	Historic Districts	Beaumont Commercial District (adds track in KCS ROW at existing grade)	Beaumont Commercial District (adds track N of KCS ROW on elevated structure)	0	0	Beaumont Commercial District (adds track in KCS ROW at existing grade)	Beaumont Commercial District (adds track in KCS ROW at existing grade)
	Historical Landmarks	0	0	0	0	0	0
	Archeological Sites	1	1	Shipwrecks in vicinity	Terrestrial site, also shipwrecks in vicinity	0	0
Natural Resources	Wetlands (ac.)	9.2	9.9	14.5	14.3	9.2	9.6
	Waters	Neches River	Neches River, 2 crossings of Baird's Bayou tributaries	Neches River, Brakes Bayou, 4 crossings of Baird's Bayou tributaries	Neches River, Brakes Bayou, 4 crossings of Baird's Bayou tributaries	Neches River	Neches River
	Floodplains (ac.)	23.5	28.9	39.2	42.8	23.3	22.9
Community	Hazardous Sites	14 within/ adjacent	14 within/ adjacent	25 within/ adjacent, acquires Superfund site	24 within/ adjacent, acquires Superfund site	7	7
	Displacements	0	3 (commercial)	3 (commercial)	0	0	0
	New ROW (ac.)	2.7	7.4	34.8	17.7	2.0	2.2
	Cemeteries	0	0	0	0	0	0
	Parks	Riverfront Park (parking area, boundaries under review)	Riverfront Park (parking area, boundaries under review) MLK Memorial Park	0	Riverfront Park (strip along BNSF, boundaries under review)	Riverfront Park (parking area)	Riverfront Park (parking area)
	Community Facilities	City parking	Church, city parking	0	0	City parking	City parking
	Low Income / Minority	25% / 64%	25% / 64%	26% / 65%	22% / 52%	23% / 52%	23% / 52%
Cost	Program Cost	~\$120 M	~\$380 M	~\$430 M	~ \$400 M	~\$120 M	~\$160
Other Considerations	Constructability	Adjacent to active mainline. Sufficiently offset from existing rail operations to build with minimal disruption.		Varies by section. Majority of work on new alignment reduces operational coordination with active rail. Construction of a higher and longer structure may offset distance benefits.		Adjacent to active mainline. Sufficiently offset from existing rail operations to build with minimal disruption.	Adjacent to active mainline. Sufficiently offset from existing rail operations to build with minimal disruption.
	Construction-Related Impacts	Temporary delays to rail traffic at tie-in points. No roadway impacts or grade crossings.	Temporary delays to rail traffic at tie-in points. Temporary delays to roadways for construction of grade separation structures. Temporary road closures and delays for grade crossing improvements.			Temporary delays to rail traffic at tie-in points. No roadway impacts or grade crossings.	Temporary delays to rail traffic at tie-in points. No roadway impacts or grade crossings.