



**BUILD ALTERNATIVES COMPARISON MATRIX**

EVALUATION CRITERIA	BUILD ALTERNATIVES												
	Build Alternative 1			Build Alternative 2			Build Alternative 3			Build Alternative 4			Build Alternative 5
	Mainline <sup>(A)</sup>	Ford Interchange	Hearne Interchange	Mainline <sup>(A)</sup>	Ford Interchange	Hearne Interchange	Mainline <sup>(A)</sup>	Ford Interchange	Hearne Interchange	Mainline <sup>(A)</sup>	Ford Interchange	Hearne Interchange	(Includes Interchanges)
Purpose and Need													
Meets Purpose and Need	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Engineering													
Length (in miles)	4.53	-	-	4.57	-	-	4.70	-	-	4.50	-	-	14.15
Required Right-of-Way (acres)	152.38	14.75	18.54	153.53	22.96	18.38	156.55	18.56	18.38	151.73	15.99	18.59	30.93
2030 Average Daily Traffic for Connector (ADT)	24,344	38,722	33,000	24,344	38,722	33,000	24,344	38,722	33,000	24,344	38,722	33,000	76,500
Anticipated Level of Service (LOS) for the Alternatives <sup>(B)</sup>	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	C-D
Anticipated LOS with One Interchange	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	NA
Anticipated LOS with Two Interchanges	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	A-C	NA
Potential At-Grade Railroad Crossing Locations	0	0	0	0	0	0	0	0	0	0	0	0	0
Potential Navigable Water Crossings	2	0	1	2	0	1	2	0	1	2	0	1	5
Constructability													
Construction Complexity <sup>(C)</sup>	Low	Medium	Low	Low	Medium	Low	Low	Medium	Low	High	Medium	Low	High only at interchanges
Estimated Preliminary Right-of-Way Costs (in millions)	\$13.30	-	-	\$11.90	-	-	\$17.90	-	-	\$16.40	-	-	\$12.90
Estimated Preliminary Construction Costs (in millions) <sup>(D)</sup>	\$535.84 - \$613.15	-	-	\$540.23 - \$617.89	-	-	\$552.79 - \$630.47	-	-	\$533.55 - \$610.64	-	-	\$631.17
Preliminary Mitigation Costs (in millions) <sup>(E)</sup>	\$2.42	-	-	\$2.41	-	-	\$2.41	-	-	\$2.42	-	-	\$1.20
Community Disruption/Impacts During Construction	High	High	Low	High	High	Low	High	High	Low	High	High	Low	High only at interchanges
Cultural Resources <sup>(F)</sup>													
Potential to Impact Historical Resources	Medium	<sup>(G)</sup>	None	Medium	<sup>(G)</sup>	None	High	<sup>(G)</sup>	None	Low	<sup>(G)</sup>	None	Low
Potential to Impact Archaeological Resources	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium	Medium
Potential Wetlands <sup>(H)</sup> and Water Resources													
Potential Wetlands (acres in the corridor)	2.37	0.00	0.31	2.20	0.00	0.31	2.21	0.00	0.31	2.39	0.00	0.31	39.89
Open Water (acres in the corridor)	1.15	0.00	0.25	0.79	0.00	0.32	0.80	0.00	0.32	1.19	0.00	0.24	14.22
Water Quality	Low	Low	Medium	Low	Low	Medium	Low	Low	Medium	Low	Low	Medium	Medium to High (Cross Lake)
State Scenic Streams	None	None	None	None	None	None	None	None	None	None	None	None	None
Active Water Well Locations	1	0	0	1	0	0	1	0	0	1	0	0	5
Threatened/Endangered/Protected Species													
Potential Impact to Threatened and Endangered Species <sup>(I)</sup>	None	None	None	None	None	None	None	None	None	None	None	None	None
Community Impacts													
Single Family Residential Structures in the Build Alternative	40	19	0	46	10	0	55	20	0	45	21	0	13
Multifamily Residential Structures in the Build Alternative	3	0	0	4	0	0	4	0	0	0	0	0	0
Abandoned/Vacant Residential Structures in the Build Alternative	2	0	0	0	0	0	1	0	0	5	0	0	0
Commercial Structures in the Build Alternative	2	1	0	1	1	0	2	3	0	2	3	0	2
Abandoned/Vacant Commercial Structures in the Build Alternative	0	0	0	0	0	0	1	0	0	1	3	0	0
Churches in the Build Alternative	1	0	0	0	0	0	2	1	0	4	2	0	1
Recreational Areas in the Build Alternative	1 <sup>(J)</sup>	0	0	2 <sup>(K)</sup>	0 <sup>(L)</sup>	0	2 <sup>(M)</sup>	1 <sup>(N)</sup>	0	2 <sup>(O)</sup>	0	0	0
Other Community Facilities in the Build Alternative	2 <sup>(P)</sup>	0	0	3 <sup>(Q)</sup>	0	0	0	0	0	0	0	0	4
Non-Profit Facilities	0	0	0	0	0	0	5 <sup>(R)</sup>	0	0	0	0	0	0
Total Community Impacts for the Build Alternative	51	20	0	56	11	0	72	25	0	59	29	0	20
Industrial Sites	0	0	0	0	0	0	1	0	0	0	0	0	2
Community Cohesion Impact	High	High	None	High	High	None	Medium	High	None	High	High	None	Low
Potential to Impact Transit Routes	High	High	Low	High	High	Low	High	High	Low	High	High	Low	Low
Potential Environmental Justice Concerns	High	High	None	High	High	None	High	High	None	High	High	None	Medium
Potential Public Facility Access Impacts	Low	Low	None	Low	Low	None	Low	Low	None	Low	Low	None	Medium
Visual Quality													
Potential Visual Quality Impacts	High	High	Low	High	High	Low	High	High	Low	High	High	Low	Low
Land Use													
Prime Farmland (acres)	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	0.00	261.86 <sup>(S)</sup>
100-yr Floodplain (acres)	100.25	0.00	11.39	98.01	0.00	11.90	98.00	0.00	11.90	100.23	0.00	11.33	139.35 <sup>(S)</sup>
Environmental Liability Concerns													
Potential Impacts to Hazardous Sites <sup>(T)</sup>	Medium	Low	Low	Medium	Low	Low	Medium	Low	Low	Medium	Low	Low	Medium
Active Oil and Gas Well Locations	0	0	0	0	0	0	1	1	0	0	0	0	0

**NOTES:**

- <sup>(A)</sup> All alternatives share a common alignment past Hearne Avenue. This includes the interchange at I-220. Therefore, the Mainline column includes the I-220 interchange.
- <sup>(B)</sup> LOS presented is given as a range of values as each segment between interchanges contains various level of service.
- <sup>(C)</sup> Construction complexity estimates the general difficulty of construction based on grade adjustments, the number of railroad crossings, the number of potential navigable water crossings, utility relocations, and ROW.
- <sup>(D)</sup> Construction cost for this estimate are discussed in the EIS document, as well as all assumptions made. These costs do not include engineering, right of way, or utility relocations. 20% Contingency included. Mainline Costs include Ford St Interchange and I-220 Interchange. Either Ford St or Hearne would be constructed; therefore, to be conservative, Ford Interchange costs were included as they are estimated to be higher. Additionally, there is an option to drop the highway to at-grade west of Hearne to the ramps for I-49 at I-220, which reduces the overall cost of Build Alternatives 1-4.
- <sup>(E)</sup> Preliminary wetland costs are based on area averages of \$20,000 an acre plus stream bank area averages at \$10,000 an acre.
- <sup>(F)</sup> Cultural resource estimates are based off data gathered from the Stage 0 Cultural Resources Report prepared in November 2009 and recent data obtained from the Louisiana Department of Culture, Recreation, and Tourism's website including, the National Register of Historic Places in Louisiana database and the Louisiana Cultural Resources Map, which identifies the location of standing structures and archaeological sites. Earth Search, Inc. will conduct a desktop survey on all four build alternatives prior to selection of a preferred and a full Cultural Resources Survey will be performed on the Preferred Build Alternative once selected.
- <sup>(G)</sup> The mainline and the Ford Interchange were evaluated together when researching historical structures.
- <sup>(H)</sup> Potential wetlands were defined using National Wetlands Inventory data and Hydric Soils data obtained from the NRCS Web Soil Survey data server as of 11/11/15. Both predominately hydric (66-99%) and hydric (100%) soils were classified as hydric in these calculations.
- <sup>(I)</sup> Based on scoping correspondence received from the United States Fish and Wildlife Service (dated February 24, 2012) and the Louisiana Department of Wildlife and Fisheries (LDWF, dated October 7, 2011) no federally listed threatened or endangered species presently occur in the proposed project area; however, based on the lapse of time we will reconfirm with LDWF the presence of any bald eagle nests prior to finalizing this document.
- <sup>(J)</sup> Recreational area is Swepco Park.
- <sup>(K)</sup> Recreational areas include Swepco Park and Miller Memorial Park.
- <sup>(L)</sup> The Ford Interchange will impact one of the Allendale Friendship House structures; however, the value was already included in the Mainline because of impacts to the playground associated with this structure.
- <sup>(M)</sup> Recreational areas include Swepco Park and the Allendale Friendship House associated playground area.
- <sup>(N)</sup> Recreational area includes Mount Moriah Park.
- <sup>(O)</sup> Recreational areas include Swepco Park and the Allendale Recreation Center.
- <sup>(P)</sup> Other community/public facilities include the Office/Community Center for Renaissance at Allendale and Israel Masonic Lodge No. 138.
- <sup>(Q)</sup> Other community/public facilities include the Office/Community Center for Renaissance at Allendale, Israel Masonic Lodge No. 138, and Hope Garden.
- <sup>(R)</sup> Nonprofits include 3 Christian Services Buildings and 2 Friendship House Buildings.
- <sup>(S)</sup> These numbers reflect acreage impacts in the total proposed ROW for Build Alternative 5.
- <sup>(T)</sup> Included in this category are underground and above ground storage tanks of any category, landfills, generators, etc. as identified by an EDR database search and field observations.