

EVALUATION CRITERIA																																									
Secondary Screening Process of Preliminary Alternatives																																									
Segment 1 BW8 to I-610	Alternative Type	Description	Meets Need and Purpose and Project Goals (Yes/No)	Signature Project Potential (Yes/No)	Engineering			Traffic							Environmental															HazMat											
					Construcibility (Undesirable/Desirable/Neutral)	Functionality Requirements (Undesirable/Desirable/Neutral)	Operations and Maintenance (Undesirable/Desirable/Neutral)	Managed Lane Utilization - Along New Managed Lane Facility (Undesirable/Desirable/Neutral)	Travel Demand - Along I-45 (Undesirable/Desirable/Neutral)	Vehicle Hours Traveled - Along I-45 (Undesirable/Desirable/Neutral)	Vehicle Hours Traveled - Along Study Area Freeway System (Undesirable/Desirable/Neutral)	Vehicle Hours Traveled - Along Downtown Street System (Undesirable/Desirable/Neutral)	Volume-to-Capacity Ratio - Along I-45 (Undesirable/Desirable/Neutral)	Land Use							Cultural Resources			Natural Resources				Noise	Socioeconomics												
														Community Parks (Yes/No)	Cemeteries (Yes/No)	Commercial (acres)	Residential (acres)	Industrial (acres)	Public Use Areas (acres)	Other (acres)	Total Additional ROW (acres)	National Register of Historic Places (number)	Recorded Archeological Sites (Yes/No)	Archeological High Probability Areas (acres)	Flooding	Wildlife	Wetlands		Streams		Residential Parcel Impacts (number)	Commercial Parcel Impacts (number)	Churches (number)	Schools (number)	Visual Impacts (Undesirable/Desirable/Neutral)	Adverse Changes in Community Cohesion (Parks, Schools, Churches - Yes/No)	Environmental Justice (Yes/No)	Superfund Sites (number)			
Alternative 1	Existing Configuration	No Build Scenario (Project Not Constructed)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alternative 3 Option 1	Widen existing with elevated managed lanes	Addition of direct connector from I-45 to Hardy Toll Road that includes four (4) managed lanes; also includes widening of Hardy Toll Road to provide one additional lane inbound and outbound	Yes	No	U	N	N	U	N	N	N	NA	N	Yes	No	46	12	3	2	2	65	0	No	No	<1	<1	0	No	0	0	197	115	145	1	1	U	Yes	Yes	Yes	0	
Alternative 3 Option 2	Widen existing with elevated managed lanes	Addition of direct connector from I-45 to Hardy Toll Road that includes four (4) managed lanes; also includes widening of Hardy Toll Road to provide one additional lane inbound and outbound	Yes	No	U	N	N	U	N	N	N	NA	N	Yes	No	46	12	3	2	2	65	0	No	No	<1	15	0	No	0	0	197	115	132	1	1	U	Yes	Yes	Yes	0	
Alternative 3 Option 3	Widen existing with elevated managed lanes	Addition of direct connector from I-45 to Hardy Toll Road that includes four (4) managed lanes; also includes widening of Hardy Toll Road to provide one additional lane inbound and outbound	Yes	No	U	N	N	U	N	N	N	NA	N	Yes	No	46	12	3	2	2	65	0	No	No	<1	6	0	No	0	0	197	115	160	1	1	U	Yes	Yes	Yes	0	
Alternative 4	Widen existing	Twelve (12) lane section - includes eight (8) general purpose lanes and four (4) managed lanes; additional ROW will be acquired on the west side of I-45	Yes	No	D	D	D	D	D	D	D	NA	D	No	No	166	12	<1	5	2	186	0	No	No	6	73	0	No	<1	0	102	55	212	0	0	U	No	Yes	Yes	0	
Alternative 5	Widen existing	Twelve (12) lane section - includes eight (8) general purpose lanes and four (4) managed lanes; additional ROW will be acquired on the east side of I-45	Yes	No	D	D	D	D	D	D	D	NA	D	No	No	168	11	<1	13	2	195	0	No	No	3	47	0	No	0	0	146	87	223	1	1	U	Yes	Yes	Yes	0	
Alternative 6	Widen existing	Twelve (12) lane section - includes eight (8) general purpose lanes and four (4) managed lanes; additional ROW will be acquired on both sides of I-45	Yes	No	D	D	D	D	D	D	D	NA	D	No	No	161	9	<1	8	2	181	0	No	No	2	59	0	No	0	0	98	62	285	1	1	U	Yes	Yes	Yes	0	
Alternative 7	Elevated managed lanes	Twelve (12) lane section - includes eight (8) general purpose lanes and four (4) elevated managed lanes on a single structure at center	Yes	No	D	D	D	D	D	D	D	NA	D	No	No	115	8	<1	5	2	131	0	No	No	0	0	0	No	0	0	92	56	275	1	1	U	Yes	Yes	Yes	0	
Alternative 8	Elevated managed lanes	Twelve (12) lane section - includes eight (8) general purpose lanes and four (4) elevated managed lanes on two separate structures on left and right sides of the centerline	Yes	No	D	D	D	D	D	D	D	NA	D	No	No	206	13	<1	9	2	231	0	No	No	0	0	0	No	<1	0	121	86	267	1	1	U	Yes	Yes	Yes	0	

- IDENTIFIED REASONABLE ALTERNATIVE
- DESIRABLE
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SEGMENT 2 I-610 to I-10	Alternative Type	Description	Meets Need and Purpose and Project Goals (Yes/No)	Signature Project Potential (Yes/No)	Engineering			Traffic						Environmental																									
					Constructability (Undesirable/Desirable/Neutral)	Functionality Requirements (Undesirable/Desirable/Neutral)	Operations and Maintenance (Undesirable/Desirable/Neutral)	Managed Lane Utilization - Along New Managed Lane Facility (Undesirable/Desirable/Neutral)	Travel Demand - Along I-45 (Undesirable/Desirable/Neutral)	Vehicle Hours Traveled - Along I-45 (Undesirable/Desirable/Neutral)	Vehicle Hours Traveled - Along Study Area Freeway System (Undesirable/Desirable/Neutral)	Vehicle Hours Traveled - Along Downtown Street System (Undesirable/Desirable/Neutral)	Volume-to-Capacity Ratio - Along I-45 (Undesirable/Desirable/Neutral)	Community Parks (Yes/No)	Cemeteries (Yes/No)	Land Use						Cultural Resources			Natural Resources				Noise	Socioeconomics				HazMat					
																Commercial (acres)	Residential (acres)	Industrial (acres)	Public Use Areas (acres)	Other (acres)	Total Additional ROW (acres)	National Register of Historic Places (number)	Recorded Archeological Sites (Yes/No)	Archeological High Probability Areas (acres)	Flooding	Wildlife	Wetlands	Streams		Residential Parcel Impacts (number)	Commercial Parcel Impacts (number)	Churches (number)	Schools (number)		Visual Impacts (Undesirable/Desirable/Neutral)	Adverse Changes in Community Cohesion (Parks, Schools, Churches - Yes/No)	Environmental Justice (Yes/No)		
Alternative 1	Existing Configuration	No Build Scenario (Project Not Constructed)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Alternative 3	Widen Existing	Twelve (12) lane section; includes ten (10) general purpose lanes and two (2) reversible, special purpose lanes	Yes	No	D	U	N	U	U	U	U	NA	U	No	No	6	2	0	0	<1	9	0	No	No	<1	4	0	No	0	0	215	25	19	0	0	U	No	Yes	0
Alternative 10	Widen Existing	Twelve (12) lane section; includes eight (8) general purpose lanes and four (4) managed lanes	Yes	Yes	D	N	N	D	D	D	D	NA	D	No	No	6	2	0	0	<1	9	0	No	No	<1	4	0	No	0	0	215	25	19	0	0	U	No	Yes	0
Alternative 11	Widen Existing with Elevated Managed Lanes	Twelve (12) lane section; includes eight (8) general purpose lanes and four (4) elevated managed lanes on a single structure at the center of the roadway	Yes	No	D	N	D	D	D	D	NA	D	No	No	6	2	0	0	<1	9	0	No	No	<1	4	0	No	0	0	215	25	19	0	0	U	No	Yes	0	
Alternative 12	Widen Existing with Elevated Managed Lanes	Twelve (12) lane section; includes eight (8) general purpose lanes and four (4) elevated managed lanes on a double decker structure at the center of the roadway	Yes	No	D	N	N	D	D	D	NA	D	No	No	6	2	0	0	<1	9	0	No	No	<1	4	0	No	0	0	214	25	19	0	0	U	No	Yes	0	
Alternative 14	Add Tunnel to Existing	Tunneled roadway underneath I-45; includes four (4) managed lanes	Yes	No	U	U	U	D	D	D	D	NA	D	No	No	9	3	0	0	<1	13	0	No	Yes	<1	4	0	No	0	0	0	37	31	0	0	D	No	Yes	0
Alternative 15	Add Direct Connector	Addition of direct connectors along the I-610 corridor from I-45 to Hardy Toll Road; includes four (4) managed lanes; this alternative also includes widening of Hardy Toll Road to provide one additional lane inbound and outbound	Yes	No	N	N	D	U	N	N	N	NA	N	No	No	7	4	0	<1	<1	13	0	No	No	<1	4	0	No	0	0	224	38	32	0	0	U	No	Yes	2

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SEGMENT 3 Downtown Loop	Alternative Type	Description	Meets Need and Purpose and Project Goals (Yes/No)	Signature Project Potential (Yes/No)	Engineering			Traffic						Environmental														HazMat											
					Constructability (Undesirable/Desirable/Neutral)	Functionality Requirements (Undesirable/Desirable/Neutral)	Operations and Maintenance (Undesirable/Desirable/Neutral)	Managed Lane Utilization - Along New Managed Lane Facility (Undesirable/Desirable/Neutral)	Travel Demand - Along I-45 (Undesirable/Desirable/Neutral)	Vehicle Hours Traveled - Along I-45 (Undesirable/Desirable/Neutral)	Vehicle Hours Traveled - Along Study Area Freeway System (Undesirable/Desirable/Neutral)	Vehicle Hours Traveled - Along Downtown Street System (Undesirable/Desirable/Neutral)	Volume-to-Capacity Ratio - Along I-45 (Undesirable/Desirable/Neutral)	Land Use						Cultural Resources			Natural Resources				Noise		Socioeconomics										
														Community Parks (Yes/No)	Cemeteries (Yes/No)	Commercial (acres)	Residential (acres)	Industrial (acres)	Public Use Areas (acres)	Other (acres)	Total Additional ROW (acres)	National Register of Historic Places (number)	Recorded Archeological Sites (Yes/No)	Archeological High Probability Areas (acres)	Flooding	Wildlife			Wetlands	Streams	Residential Parcel Impacts (number)	Commercial Parcel Impacts (number)	Churches (number)	Schools (number)	Visual Impacts (Undesirable/Desirable/Neutral)	Adverse Changes in Community Cohesion (Parks, Schools, Churches - Yes/No)	Environmental Justice (Yes/No)		
NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Alternative 1	Existing Configuration	No Build Scenario (Project Not Constructed)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
Alternative 3	Convert Downtown Loop to One Way Loop	Convert existing downtown loop roadway network to a one-way loop	Yes	No	N	U	N	NA	NA	U	D	U	D	No	No	7	<1	2	1	3	14	0	Yes	No	<1	1	0	No	0	0	526	8	47	0	0	U	No	Yes	2
Alternative 5	Add Tunnel to Existing	Tunneled roadway underneath I-45, continues underneath Bagby Street and ends at Spur 527; includes four (4) managed lanes	Yes	No	U	N	U	NA	NA	U	N	N	U	No	No	0	0	0	0	0	0	0	No	Yes	0	0	0	No	0	0	0	1	0	0	0	D	No	Yes	0
Alternative 6	Add Tunnel to Existing	Tunneled roadway underneath I-45, continues to Jefferson Street and ends at I-45, south of the I-45/US 59 interchange; includes four (4) managed lanes	Yes	No	U	U	U	NA	NA	U	D	N	D	No	No	<1	<1	0	0	<1	<1	0	No	Yes	0	0	0	No	0	0	0	0	10	0	0	D	No	Yes	1
Alternative 10	Widen Existing	Eight (8) lane section from I-10 to I-45/US 59 interchange; includes eight (8) general purpose lanes	Yes	No	N	N	N	NA	NA	N	D	N	N	Yes	No	4	0	0	1	1	6	0	No	No	2	2	0	No	<1	166	518	4	18	0	0	U	No	Yes	0
Alternative 11	Realignment of I-45	Realign I-45 Northbound and Southbound lanes to the east and place along US 59, existing I-45 North to be converted into a parkway/boulevard for downtown access	Yes	Yes	U	N	N	NA	NA	D	D	U	D	No	No	19	5	1	2	3	30	0	No	Yes	0	0	0	No	0	0	519	7	46	0	0	D	No	Yes	0
Alternative 12	Convert Downtown Loop to One Way Loop - Hybrid	Realign I-45 Northbound lanes to the east and place along US 59, while maintaining two-directional flow on both I-10 and US 59	Yes	No	D	N	N	NA	NA	N	D	D	D	No	No	5	1	1	1	1	9	0	No	Yes	0	0	0	No	0	0	518	5	29	0	0	N	No	Yes	0

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