

Control Number: 49523



Item Number: 333

Addendum StartPage: 0





May 19, 2020

Via Interchange Filing

Stephen Journeay
Office of Policy & Docket Management
1701 N. Congress Avenue
PO Box 13326
Austin, Texas 78711

Re: PUC Docket No. 49523; Application of LCRA Transmission Services Corporation to Amend its Certificate of Convenience and Necessity for the Proposed Mountain Home 138-KV Transmission Line Project in Gillespie, Kerr, and Kimble Counties

Dear Mr. Journeay:

On March 4, 2020, LCRA Transmission Services Corporation (LCRA TSC) filed a native electronic copy (Excel) of LCRA TSC Exhibit 15 containing the environmental assessment data and cost data for the above-referenced project that should be used by the Public Utility Commission of Texas (Commission) and all parties in this proceeding. Tab 1 of the native file contains all of the environmental assessment data for each route. Tab 2 of the native file contains all of the environmental assessment data for each route segment for the project. The copy of LCRA TSC Exhibit 15 that was filed at the Commission did not include the route segment data for Segments 15, C5, and V4. LCRA TSC Exhibit 15 attached to this letter in PDF format and filed electronically in native electronic format (Excel) includes the route segment data for Segments 15, C5, and V4.

Sincerely,

/s/ Kirk Rasmussen

Kirk D. Rasmussen

Enclosure



	Evaluation of the file											LCIV	A IJC L	AI III DIL I
1	Land Use	Hunt 1	Hunt 2	Hunt 3	Hunt 4	Hunt 5	Hunt 5A	Hunt 6	Hunt 7	Hunt 7A	Hunt 8	Hunt 9	Hunt 10	Hunt 11
	Estimated Costs for Transmission Line and Substation Facilities	63 41	63 78	63 44	70 77	61 60	61 22	62 39	64 82	64 45	64 67	65 13	67 99	66 31
1	Length of primary alternative route (miles)	22 80	22 68	24 26	26 28	21 48	20 98	21 59	22 77	22 26	22 56	22 89	24 24	24 10
2	Number of habitable structures' within 300 feet of ROW centerline	30	36	30	26	26	26	28	30	30	31	29	50	31
3	Number of habitable structures' currently located within 300 feet of an existing transmission line ROW centerline	16	16	6	2	-6	6	6	16	16	16	16	16	16
4	Length of ROW using existing transmission line ROW	1 91	1 91	0 33	0.06	0 33	0 33	0 33	1 91	1 91	1 91	1 91	1 91	1 91
5	Length of ROW parallel and adjacent to existing transmission line ROW	0 00	0 00	0.00	0 00	0.00	0.00	0.00	0 00	0.00	0 00	0 00	0.00	0.00
6	Length of ROW parallel and adjacent to other existing ROW (roadways)	4 42	6 48	4 33	2 89	1 73	2 12	1 73	2 95	3 34	2 59	2 72	5 89	3 39
7	Length of ROW parallel and adjacent to apparent property lines ²	10 93	9 22	14 54	17 96	15 35	14 65	15 86	13 14	12 45	13 16	12 31	10 61	12 60
8	Sum of evaluation criteria 4, 5, 6, and 7	17 26	17 61	19 20	20 91	17 41	17 10	17 92	18 00	17 70	17 66	16 94	18 41	17 90
9	Percent of evaluation criteria 4, 5, 6, and 7	76%	78%	79%	80%	81%	82%	83%	79%	80%	78%	74%	76%	74%
10	Length of ROW across parks/recreational areas ³	0 00	0 00	0.00	0 00	0.00	0.00	0 00	0 00	0 00	0 00	0.00	0.00	0 00
11	Number of additional parks/recreational areas ³ within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Length of ROW across cropland	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	Length of ROW across pasture/rangeland	8 97	10 66	12 09	10 84	8 11	7 99	8 17	7 63	7 53	7 25	8 29	11 24	9 87
14	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0.00	0.00	0.00	0.00	0.00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
15	Length of ROW parallel and adjacent to pipelines	0 00	0 00	0 00	0 66	0.66	0.66	0 66	0 66	0 66	0 66	0 66	0 00	0 00
16	Number of pipeline crossings*	2	2	2	2	2	2	2	2	2	2	2	2	2
17	Number of transmission line crossings	1	1	-	1	1	1	1	1	1	1	1	1	1
18	Number of IH, US and state highway crossings	2	2	2	2	2	2	2	2	2	2	2	2	2
19	Number of farm-to-market (FM) road crossings	3	4	3	3	3	3	3	4	4	4	4	4	4
20	Number of cemeteries within 1,000 feet of the ROW centerline	-0	1	ō	0	0	ő	0	0	0	0	0	1	0
21	Number of FAA registered public/milifary airports ⁵ with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline	0	0	Ö	0	0	ő	0	0	0	0	0	Ö	0
22	Number of FAA registered public/military arports having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerine	0	0	0	0	0	0	- 6	0	0	_ 0	°	0	0
23	Number of private austrops within 10.000 feet of the ROW centerine	4	5	5	4	4	4	4	4	4	4	4	5	4
24	Number of heliports within 5,000 feet of the ROW centerline	2	2	2	2	2	2	7 2	2	2	2	2	2	2
25	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline	0	0	0	0	0	0	0	- 6	0	0	0	0	0
26	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline	1 0	ō	0	1	1	1		1	1	1	-	2	0
$\overline{}$	Assthetics													
27	Estimated length of ROW within foreground visual zone ⁵ of IH, US and state highways	2 87	3 94	2 88	3 11	2 92	2 90	3 03	4 21	4 19	3 99	4 44	5 67	4 05
28	Estimated length of ROW within foreground visual zone of FM roads	8 30	9 23	7 46	3 43	4 65	4 84	4 65	4 65	4 84	4 65	4 65	7 49	7 57
29	Estimated length of ROW within foreground visual zone ⁶¹⁷ of parks/recreational areas ³	0 07	0 07	0.07	0 25	0 25	0 25	0 25	0 07	0 07	0 25	0 07	0 07	0 07
	Ecology	+ • • •		00.	020	V 23	025	0 2 3	007	007	0 23	00/	00/	007
30	Length of ROW across upland woodlands/brushlands	16 05	14 88	18 10	19 57	16 27	14 95	16 34	16 85	15 53	16 85	16 41	17 24	17 74
31	Length of ROW across bottomland/npanan woodlands	0.96	0 99	0.74	0 93	0 69	0 69	0 69	0.74	0.74	0.74	0.90	1 10	0 99
32	Length of ROW across NWI mapped wetlands	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00
33	Length of ROW across known habitat of federally listed endangered or threatened species	0 00	0 00	0.00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
34 0	Area of ROW across golden-cheeked warbler modeled habitat where three models agree (acres)	68 8	71 3	48 4	104 4	68 4	62 0	69 2	82.5	76 1	83.0	77.7	77.3	73.2
35	Length of ROW across open water (lakes, ponds)	0 02	0 01	0 02	0.03	0 02	0 02	0 02	0.01	0.01	0.01	0.01	0.01	0.01
36	Number of stream crossings	29	28	27	33	22	23	23	23	24	23	28	31	31
37	Number of nver crossings	1	1	1	1	1	1	1	1	1	1	1	1	1
38	Length of ROW parallel (within 100 feet) to streams or rivers	0 34	0 26	0 17	1 08	0 27	0 35	0 27	0 27	0.36	0 27	0 24	0 18	0 44
39	Length of ROW across 100-year floodplains	0.86	1 26	0.86	1 01	0 76	0.88	0 76	1 13	1 24	1 15	1 64	1 27	1 21
	Cultural Resources									1				
40	Number of recorded histonc or prehistoric sites crossed by ROW	0	1	0	0	0	0	0	1	1	1	1	1	1
41	Number of additional recorded historic or prehistoric sites within 1,000 feet of ROW centerline	2	2	1	1	2	2	2	2	2	2	2	2	3
42	Number of National Register-listed or determined eligible sites crossed by ROW	0	0	0	0	0	0	0	0	0	0 -	0	ō	<u> </u>
43	Number of additional National Register-listed or determined eligible sites within 1,000 feet of ROW centerline	0	0	0	0	0	0	ō	0	0	0	0	0	0
44	Length of ROW across areas of high archeological/historic site potential	12 7	11 8	112	163	10 2	10 3	10 5	11 3	11.5	11 1	12 8	13.5	14 6

Notes. Single-family and multi-family dwellings, and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures churches, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular bass within 300 feet of the centerine of a transmission project of 230kV or less

²Apparent property boundanes created by existing roads, highways, or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundanes ontena

Defined as parks and recreational areas owned by a governmental body or an organized group, club or church within 1,000 feet of the centerline of the project

Only metallic pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

5As listed in the Chart Supplement South Central U.S. (FAA 2018b formerly known as the Airport/Facility Directory South Central U.S.) and FAA 2018a

*One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of interstates, US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria.

²One-half mile unobstructed Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates. US and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria.

All length measurements are shown in miles unless noted otherwise. All linear measurements were obtained from senal photography flown February and October, 2018 with the exception of high probability areas for archeological historical/resources which were measured from the USGS Topographic Quadrangles. The senal photography was orthorectrified to National Map Accuracy Standards of 4/-9 feet

Route	Segments Segments
Hunt 1	X3-B-F-I-U3-V3-Z3-Q-A1-B1-F1-H1-T4-L1-O1-SUB1-R1-X1-I2-J2-H2-I3-J3-M3-R3
Hunt 2	X3-B-F-I-H4-I4-L4-Q-A1-B1-F1-H1-T4-L1-SUB2-N1-Z1-B2-F2-I3-J3-M3-R3
Hunt 3	X3-B-C-D-K-Y3-Z3-Q-A1-B1-F1-H1-T4-L1-SUB2-N1-Z1-A2-D2-G2-H2-I3-J3-M3-R3
Hunt 4	X3-A-L-B4-N-P-R-S-A1-G1-T4-SUB3-L1-O1-R1-X1-I2-J2-S2-G3-L3-W3-Q3
Hunt 5	X3-B-C-J-V3-Z3-Q-A1-B1-F1-H1-T4-SUB3-L1-Q1-R1-X1-I2-J2-S2-G3-L3-W3-Q3
Hunt 5A	X3-B-C-J-V3-Z3-W4-T4-Sub 3-L1-O1-R1-X1-I2-J2-S2-G3-L3-W3-Q3
Hunt 6	X3-B-C-J-V3-Z3-Q-A1-G1-T4-SUB3-L1-O1-R1-X1-I2-J2-S2-G3-L3-W3-Q3
Hunt 7	X3-B-F-I-H4-I4-L4-Q-A1-B1-F1-H1-T4-SUB3-L1-O1-R1-X1-I2-Q2-U2-T2-G3-L3-W3-P3-R3
Hunt 7A	X3-B-F-I-H4-I4-L4-W4-T4-Sub 3-L1-O1-R1-X1-I2-Q2-U2-T2-G3-L3-W3-P3-R3
Hunt 8	X3-B-F-I-H4-I4-L4-Q-A1-B1-F1-H1-T4-SUB3-L1-O1-R1-X1-I2-Q2-U2-T2-G3-L3-W3-Q3
Hunt 9	X3-B-F-I-H4-I4-L4-Q-A1-B1-F1-H1-T4-SUB3-L1-O1-R1-X1-I2-Q2-U2-Z2-D3-F3-O3-W3-P3-R3
Hunt 10	X3-B-F-I-H4-I4-L4-Q-A1-G1-T4-SUB3-N4-M1-Z1-B2-F2-I3-K3-M3-R3
Hunt 11	X3-B-F-I-H4-I4-L4-Q-A1-G1-T4-SUB3-L1-O1-R1-X1-I2-J2-H2-I3-K3-M3-R3

	E-infection Annual		,											
	Land Use	Hunt 12	Hunt 13	Hunt 14	Hunt 15	Hunt 16	Hunt 17	Hunt 18	Hunt 19	Hunt 20	Hunt 21	Hunt 22	Hunt 23	Hunt 24
	Estimated Costs for Transmission Line and Substation Facilities	64 15	64 00	64 30	68 88	65 40	63 71	71 39	70 29	70 02	69 30	69 92	66 04	69 50
1	Length of primary alternative route (miles)	22 56	22 34	22 46	27 98	24 38	24 32	27 12	27 77	25 68	26 43	25 45	25 72	26 94
2	Number of habitable structures' within 300 feet of ROW centerline	31	32	31	28	29	31	23	30	25	30	40	40	30
3	Number of habitable structures' currently located within 300 feet of an existing transmission line ROW centerline	16	16	16	6	6	6	16	16	16	16	16	6	7
4	Length of ROW using existing transmission line ROW	1 91	1 91	1 91	0 33	0 33	0 33	1 91	1 91	1 91	1 91	1 91	0 33	0 33
5	Length of ROW parallel and adjacent to existing transmission line ROW	0 00	0 00	0 00	0 29	0 00	0 00	0 29	0 29	0 29	0 29	0.00	0 29	1 50
6	Length of ROW parallel and adjacent to other existing ROW (roadways)	2 95	2 59	2 36	3 40	5 16	1 97	4 30	4 62	3 86	2 55	6 57	7 64	5 44
7	Length of ROW parallel and adjacent to apparent property lines ²	13 04	13 06	12 23	18 72	16 05	18 69	14 62	14 13	15 58	17 18	11 80	13 51	14 09
8	Sum of evaluation criteria 4, 5, 6, and 7	17 90	17 56	16 50	22 74	21 54	20 99	21 12	20 95	21 64	21 93	20 28	21 77	21 36
9	Percent of evaluation criteria 4, 5, 6, and 7	79%	79%	73%	81%	88%	86%	78%	75%	84%	83%	80%	85%	79%
10	Length of ROW across parks/recreational areas ³	0 00	0 00	0 00	0.00	0 00	0.00	0 00	0 00	0 00	0 00	0.00	0 00	0 00
11	Number of additional parks/recreational areas within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Length of ROW across cropland	0 00	0 00	0.00	0 00	0 00	0.00	0 00	0.00	0 00	0 00	0.00	0.00	0 00
13	Length of ROW across pasture/rangeland	6 97	6 59	7 24	18 45	10 63	12 66	11 59	12 95	8 74	12 82	10 26	15 69	12 81
14	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0 00	0 00	0.00	0.00	0 00
15	Length of ROW parallel and adjacent to pipelines	0 66	0 66	0 66	0 66	0 66	0 66	0 00	0 00	0 66	0 66	0 66	0 00	0 66
16	Number of pipeline crossings ⁴	2	2	2	2	2	2	2	2	2	2	2	2	2
17	Number of transmission line crossings	1	1	1	1	1	1	1	1		1	<u> </u>	1	1
18	Number of IH, US and state highway crossings	2	2	2	2	2	2	2	2	2	2	2	2	3
19	Number of farm-to-market (FM) road crossings	3	3	3	3	3	3	4	4	3	3	5	3	3
20	Number of cemeteries within 1,000 feet of the ROW centerline	0	Ö	0	0	0	ō	0	0	0	0	0	0	0
21	Number of FAA registered public/military airports ⁵ with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline	0	0	0	Ö	0	-	0	0		0	Ů,	ō	0
22	Number of FAA registered public/military airports ⁵ having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline	-	0	0	0	0	Ö	- 6	0	- 0	,	0	ő	0
23	Number of private airstings within 10,000 feet of the ROW centerline	4	4	4	3	4	<u> </u>	4	4	- 4	4	4	3	3
24	Number of heliports within 5,000 feet of the ROW centerline	2	2	2	0	2	2	2	- i 	2	1	2	o l	
25	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline	0	0	0	0	0		ō	0	0	i	0	0	Ö
26	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline	1	1	1	2	2	2	2	1	3	2	4	1	3
	Assitutics									<u> </u>				
27	Estimated length of ROW within foreground visual zone ⁶ of IH, US and state highways	3 14	2 92	3 16	4 10	4 42	4 44	4 75	4 82	3 95	4 25	4 21	3 84	6 27
28	Estimated length of ROW within foreground visual zone ⁶ of FM roads	4 65	4 65	4 65	1 79	4 83	3 88	7 49	7 77	4 57	3 88	9 19	6 57	2 63
29	Estimated length of ROW within foreground visual zone ^{RE/7} of parks/recreational areas*	0.07	0 25	0 25	0 07	0 07	0.25	0.07	0 07	0 07	0 07	0.25	0 07	0 25
\vdash	Eoology						<u> </u>					- 0.20		
30	Length of ROW across upland woodlands/brushlands	17 23	17 22	16 78	17 65	17 65	16 97	18 99	19 75	18 55	17 49	17 44	16 01	19 48
31	Length of ROW across bottomland/ripanan woodlands	0 74	0 75	0 92	0 53	0 65	0.70	1 17	1 24	0 93	0 93	0.72	0.85	0.82
32	Length of ROW across NWI mapped wetlands	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0 00	0 00	0 00	0 00	0.06
33	Length of ROW across known habitat of federally listed endangered or threatened species	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0 00
34 0	Area of ROW across golden-cheeked warbler modeled habitat where three models agree (acres)	78 8	79 4	74 6	65 5	75 0	65 2	82 9	75 6	89 3	78 3	94 9	52 6	64 2
35	Length of ROW across open water (lakes, ponds)	0 02	0 02	0 02	0 03	0 02	0 02	0 01	0 01	0 02	0 02	0 02	0 04	0 00
36	Number of stream crossings	24	24	29	21	24	27	35	35	29	30	29	29	29
37	Number of river crossings	1	1	1	2	1	2	1	1	1	2	2	1	1
38	Length of ROW parallel (within 100 feet) to streams or rivers	0 17	0 17	0 15	0 37	0 08	0 44	0 70	0 99	0 43	0 63	0 19	0 63	0 20
39	Length of ROW across 100-year floodplains	0 73	0.76	1 28	0 58	0 99	1 46	1 88	1 71	1 40	1 76	1 15	0 76	1 16
Щ	Cultural Resources													
40	Number of recorded historic or prehistoric sites crossed by ROW	0	0	0	0	0	0	1	1	0	0	0	1	0
41	Number of additional recorded historic or prehistoric sites within 1,000 feet of ROW centerline	1	1	1	1	1	2	3	3	1	2	. 1	5	7
42	Number of National Register-listed or determined eligible sites crossed by ROW	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Number of additional National Register-listed or determined eligible sites within 1,000 feet of ROW centerline	0	0	0	0	0	ō	0	0	0	0	0	0	0
44	Length of ROW across areas of high archeological/historic site potential	10 9	10.7	12 2	13 1	110	12 3	15 6	16 1	12 3	13 9	13 9	13 4	12 2

Notes Single-family and musti-family diveilings and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures churches, hospitals, nursing homes schools or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerline of a transmission project of 230kV or less

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Defined as parks and recreational areas owned by a governmental body or an organized group, club, or church within 1,000 feet of the centerline of the project

Only metallic pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

Evaluation Criteria

5As listed in the Chart Supplement South Central U.S. (FAA 2018b formerly known as the Airport/Facility Directory South Central U.S.) and FAA 2018a

One-half mile unobstructed. Lengths of ROW within the visual foreground zone of interstates, US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria.

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Route	Segments
Hunt 12	X3-B-F-I-U3-V3-Z3-Q-A1-B1-F1-H1-T4-SUB3-L1-O1-R1-X1-I2-Q2-U2-T2-G3-L3-W3-P3-R3
Hunt 13	X3-B-F-I-U3-V3-Z3-Q-A1-B1-F1-H1-T4-SUB3-L1-O1-R1-X1-I2-Q2-U2-T2-G3-L3-W3-Q3
Hunt 14	X3-B-F-I-U3-V3-Z3-Q-A1-B1-F1-H1-T4-SUB3-L1-O1-R1-X1-I2-Q2-U2-Z2-D3-F3-O3-W3-Q3
Hunt 15	X3-B-C-D-E-L-B4-N-P-R-Z-C1-E1-J1-SUB4-Q1-U1-M2-V2-X2-Y2-A3-D3-F3-H3-L3-W3-P3-R3
Hunt 16	X3-B-C-J-V3-Z3-Q-A1-B1-F1-I1-J1-SU84-Q1-T1-V1-Y1-I2-Q2-U2-T2-G3-L3-W3-P3-R3
Hunt 17	X3-B-C-J-V3-Z3-Q-A1-B1-F1-I1-J1-SUB4-Q1-U1-M2-V2-B3-E3-F3-O3-W3-Q3
Hunt 18	X3-B-F-I-H4-I4-L4-Q-S-Z-C1-E1-J1-SUB4-P1-R1-X1-I2-J2-H2-I3-K3-M3-R3
Hunt 19	X3-B-F-I-H4-I4-L4-Q-S-Z-C1-E1-J1-SUB4-Q1-U1-W1-K2-L2-J2-H2-I3-K3-M3-R3
Hunt 20	X3-B-F-I-U3-V3-Z3-Q-S-Z-C1-E1-J1-SUB4-P1-R1-X1-I2-Q2-U2-T2-G3-L3-W3-P3-R3
Hunt 21	X3-B-F-I-U3-V3-Z3-Q-S-Z-C1-E1-J1-SUB4-Q1-U1-M2-V2-B3-E3-F3-O3-W3-P3-R3
Hunt 22	X3-B-F-I-U3-V3-Z3-Q-A1-B1-F1-I1-J1-SUB4-Q1-T1-V1-T3-K2-N2-P2-W2-Y2-C3-E3-F3-H3-L3-W3-Q3
Hunt 23	X3-B-C-D-K-A4-O-R-Z-C1-E1-J1-SUB4-Q1-U1-W1-T3-Y1-C2-D2-E2-F2-J3-J3-M3-R3
Hunt 24	X3-B-C-D-K-A4-M-N-T-D4-V-W-X-SU85-Y-C1-D1-F1-H1-T4-L1-O1-R1-X1-I2-Q2-U2-Z2-D3-F3-O3-W3-Q3

Evaluation Criteria

o. 49523 - Route Cost and Data Chart	LCRA TSC Exhibit No. 15

	Evaluation Criteria												
	Land Use	Hunt 25	Hunt 26	Hunt 27	Hunt 28	Hunt 29	Hunt 30	Hunt 31	Hunt 31A	Hunt 36	Hunt 36A	Hunt 37	Hunt 37A
	Estmated Costs for Transmission Line and Substation Facilities	69 83	71 09	74 19	70 98	68 24	71 34	64 79	63 62	64 15	62 93	65 50	64 33
1	Length of primary alternative route (miles)	27 27	27 90	29 77	27 61	26 84	28 46	22 45	21 83	22 57	21 95	23 13	22 51
2	Number of habitable structures' within 300 feet of ROW centerline	32	29	48	27	35	37	34	32	39	37	39	37
3	Number of habitable structures' currently located within 300 feet of an existing transmission line ROW centerline	6	2	6	7	6	6	16	16	16	16	16	16
4	Length of ROW using existing transmission line ROW	0 33	0.06	0 33	0 33	0 33	0 33	1 91	1 91	1 91	1 91	1 91	1 91
5	Length of ROW parallel and adjacent to existing transmission line ROW	0 29	0 29	0 29	1 50	0 29	0 29	0 00	0 00	0 00	0 00	0 00	0.00
6	Length of ROW parallel and adjacent to other existing ROW (roadways)	5 21	3 23	7 06	6 21	10 78	3 79	2 59	2 98	6 48	6 87	6 48	6 87
7	Length of ROW parallel and adjacent to apparent property lines ²	15 47	18 68	16 17	14 64	10 99	19 32	13 57	12 36	9 63	8 43	11 32	10 12
8	Sum of evaluation criteria 4, 5, 6, and 7	21 30	22 26	23 85	22 68	22 39	23 73	18 07	17 25	18 02	17 21	19 71	18 90
9	Percent of evaluation criteria 4, 5, 6, and 7	78%	80%	80%	82%	83%	83%	80%	79%	80%	78%	85%	84%
10	Length of ROW across parks/recreational areas ³	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00	0.00	0 00	0.00
11	Number of additional parks/recreational areas ³ within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
12	Length of ROW across cropland	0 00	0.00	0.00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0.00
13	Length of ROW across pasture/rangeland	14 73	15 42	18 07	13 79	15 75	17 31	6 64	6 47	10 05	9 88	9 56	9 38
14	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00
15	Length of ROW parallel and adjacent to pipelines	0.66	0.66	0.00	0 66	0 00	0.66	0 66	0.66	0 00	0.00	0.00	0 00
16	Number of pipeline crossings*	2	2	2	2	2	2	2	2	2	2	2	2
17	Number of transmission line crossings	1	1	1	1	1	1	1	1	1	1	1	1
18	Number of IH. US and state highway crossings	3	3	2	2	2	2	2	2	2	2	2	2
19	Number of farm-to-market (FM) road crossings	3	3	3	3	3	3	3	3	3	3	3	3
20	Number of cameteries with 1.000 feet of the ROW centerine	1 0	0	0	0	1	0	0	0	1	1	1	1
21	Number of FAA registered public/military airports ⁶ with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
22	Number of FAA registered public/military airports ⁵ having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline	1 0	0	0	0	0	0	0	0	0	0	0	0
23	Number of private aristings within 10,000 feet of the ROW centerine	3	2	3	3	4	2	4	4	5	5	5	5
24	Number of helicorts within 5.000 feet of the ROW centerine	0	1	0	1	1	-	2	2	2	2	2	2
25	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline	1 0	0	0	0	0	0	0	0	0	0	0	0
26	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline	5	3	2	3	3	3	1	1	0	0	0	0
	Assituates												
27	Estimated length of ROW within foreground visual zone ⁶ of IH, US and state highways	5 14	5 14	4 73	6 92	5 87	4 78	3 03	2 90	2 98	2 85	2 96	2 83
28	Estimated length of ROW within foreground visual zone of FM roads	1 79	2 67	6 32	2 63	7 21	2 91	4 65	4 84	9 23	9 43	9 23	9 43
	Estimated length of ROW within foreground visual zone (RT) of parks/recreational areas ³	0 25	0 25	0.07	0 07	0 07	0 25	0 25	0.25	0 07	0.07	0 07	0 07
	Estimated rengin or NOTY whalling long render of parks recognition and the second seco	+											
30	Length of ROW across upland woodlands/brushlands	19 04	18 74	19 70	19 54	17 94	18 95	17 30	15 90	15 33	13 93	16 80	15 40
31	Length of ROW across bottom and/manan woodlands	0.71	0.87	1 09	0 63	0 89	0.58	0.75	0.75	1 00	1 00	0 90	0 90
32	Length of NOW across Outcommingual recommenda	0.06	0.06	0.06	0.00	0.06	0.06	0.00	0.00	0.00	0.00	0 00	0 00
	Length of ROW across known highfall of federally listed endangered or threatened species	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
34 0	Area of ROW across golden-cheeked warbler modeled habitat where three models agree (acres)	59 1	89 1	65 0	66 0	56 8	75 6	80 2	73 0	68 5	61 3	73 1	66 0
35	Length of ROW across open water (lakes, ponds)	0 00	0 00	0 00	0 02	0 00	0 00	0 02	0 02	0 02	0 02	0 02	0 02
36	Number of stream crossings	25	34	36	29	27	25	25	25	30	30	27	27
37	Number of river crossings	1	2	1	1	1	2	1	1	1	1	1	1
38	Length of ROW parallel (within 100 feet) to streams or rivers	0.36	1 00	0 58	0 20	0 18	0 23	0 17	0 26	0 16	0 25	0 16	0 25
39	Length of ROW across 100-year floodplains	1 16	1 27	0 68	1 01	0 75	0.68	0 76	0.88	0.86	0 98	0.86	0 98
	Cultural Resources	T											
40	Number of recorded historic or prehistoric sites crossed by ROW	_0	0	0	0	0	0	0	0	0	0	0	0
41	Number of additional recorded historic or prehistonic sites within 1,000 feet of ROW centerline	7	3	2	7	7	3	1	1	1	1	1	1
42	Number of National Register-isted or determined eligible sites crossed by ROW	0	0	0	0		0	0	ō	0	0	0	0
43	Number of additional National Register-listed or determined eligible sites within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	. 0	0	0	0	0
44	Length of ROW across areas of high archeological/historic site potential	12 8	16 7	15 5	12 3	12 0	13 3	11 1	10 9	11 7	11 5	118	116

Notes Single-family and multi-family dwellings, and related structures, mobile homes, apartment buildings, commercial structures industrial structures, business structures, churches, hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerline of a transmission project of 230kV or less

'Apparent property boundaries created by existing roads, highways, or railroad ROWs are not 'double-counted' in the length of ROW parallel to apparent property boundaries orderia

³Defined as parks and recreational areas owned by a governmental body or an organized group, club, or church within 1,000 feet of the centerline of the project

Only metallic pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

5As listed in the Chart Supplement South Central U.S. (FAA 2018b formerly known as the Airport/Facility Directory South Central U.S.) and FAA 2018a

6One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of interstates, US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria

One-half mile unobstructed Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates, US and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria

All length measurements are shown in miles unless noted otherwise. All linear measurements were obtained from aerial photography flown February and October, 2018 with the exception of high probability areas for archeological historical/resources which were measured from the USGS Topographic Quadrangles. The aerial photography was orthorectified to National Map Accuracy Standards of +/- 9 feet

Segments
X3-B-C-D-K-A4-M-N-T-D4-V-W-X-SUB5-Y-C1-E1-J1-Q1-U1-M2-O2-P2-R2-U2-Z2-D3-F3-O3-W3-Q3
X3-A-L-C4-D4-V-W-X-SUB5-Y-C1-E1-J1-Q1-U1-M2-V2-B3-E3-F3-O3-W3-Q3
X3-B-C-D-E-L-B4-N-T-D4-V-SUB6-W-Y-C1-E1-J1-Q1-T1-S1-X1-C2-D2-E2-F2-I3-K3-M3-R3
X3-B-C-D-K-A4-M-N-T-D4-U-SUB6-W-Y-C1-D1-F1-H1-T4-L1-O1-R1-X1-I2-Q2-U2-Z2-D3-F3-O3-W3-P3-R3
X3-B-C-D-K-A4-M-N-T-D4-V-SUB6-W-Y-C1-E1-I1-H1-T4-L1-N1-Z1-B2-F2-I3-J3-M3-R3
X3-B-C-D-E-L-C4-D4-V-SUB6-W-Y-C1-E1-J1-Q1-U1-M2-V2-X2-C3-E3-F3-H3-L3-W3-Q3
X3-B-F-I-U3-V3-Z3-Q-A1-G1-T4-SUB3-L1-O1-R1-X1-I2-Q2-U2-T2-G3-L3-W3-Q3
X3-B-F-I-U3-V3-Z3-W4-T4-Sub 3-L1-Q1-R1-X1-I2-Q2-U2-T2-G3-L3-W3-Q3
X3-B-F-I-U3-V3-Z3-Q-A1-G1-T4-SUB 3-L1-N1-Z1-B2-F2- 3-J3-M3-R3
X3-B-F-I-U3-V3-Z3-W4-T4-Sub 3-L1-N1-Z1-B2-F2-I3-J3-M3-R3
X3-B-F-I5-C5-V4-Z3-Q-A1-G1-T4-SUB 3-L1-N1-Z1-B2-F2-I3-J3-M3-R3
X3-B-F-I5-C5-V4-Z3-W4-T4-Sub 3-L1-N1-Z1-B2-F2-I3-J3-M3-R3

	L'indution one le											LCIVA
	Land Use	Ingram 1	Ingrem 2	ingram 3	Ingram 4	Ingram 5	ingram 6	Ingram 7	ingram 8	ingram 9	Ingrem 10	ingram 11
	Estimated Costs for Transmission Line and Substation Facilities	68 88	67 92	67 47	70 89	68 51	70 34	68 76	70 07	71 77	70 77	66 57
1	Length of primary alternative route (miles)	25 34	23 12	23 28	25 22	25 02	24 87	25 23	25 33	25 08	25 01	25 42
2	Number of habitable structures' within 300 feet of ROW centerline	60	76	72	35	39	32	28	45	44	46	42
3	Number of habitable structures' currently located within 300 feet of an existing transmission line ROW centerline	4	3	3	3	3	3	4	31	31	31	4
4	Length of ROW using existing transmission line ROW	0 00	0 00	0 00	0 00	0 00	0 00	0 00	4 47	4 47	4 47	0 00
5	Length of ROW parallel and adjacent to existing transmission line ROW	1 88	0 00	0 00	0 00	0 00	0 00	1 88	0 00	0 00	0.00	1 88
В	Length of ROW parallel and adjacent to other existing ROW (roadways)	10 67	5 80	4 45	2 41	6 88	2 13	7 99	2 95	2 09	2 36	10 75
7	Length of ROW parallel and adjacent to apparent property lines ²	9 40	12 74	14 41	17 34	13 12	16 99	10 93	13 14	12 98	12 23	9 08
8	Sum of evaluation criteria 4, 5, 6, and 7	21 95	18 54	18 86	19 75	20 00	19 12	20 80	20 56	19 54	19 06	21 71
9	Percent of evaluation criteria 4, 5, 6, and 7	87%	80%	81%	78%	80%	77%	82%	81%	78%	76%	85%
10	Length of ROW across parks/recreational areas ³	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0 00	0 00	0 00	0 00
11	Number of additional parks/recreational areas ³ within 1,000 feet of ROW centerine	2	0	0	0	0	0	2	0	0	0	2
12	Length of ROW across cropland	0.00	0 15	0 15	0.00	0 00	0.00	0.00	0.00	0 00	0 00	0 00
13	Length of ROW across pasture/rangeland	9 62	7 36	6 99	8 67	11 18	7 93	9 69	8 72	8 22	8 33	12 89
14	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0.00	0 00	0.00	0 00	0.00	0.00	0 00	0.00	0 00	0 00	0 00
15	Length of ROW parallel and adjacent to pipelines*	0 66	0.66	0 66	0 66	0 00	0.66	0 66	0 66	0 66	0 66	0 00
16	Number of pipeline crossings*	2	2	2	2	2	2	2	2	2	2	2
17	Number of transmission line crossings	+	1	1	1	1	1	1	1	1		1 -
18	Number of IH, US and state highway crossings	3	7	5	1	<u> </u>	1	1	3	3	3	
19	Number of farm-to-market (FM) road crossings	4	4	4	4	4	4	4	4	3	3	4
20	Number of cemetenes within 1,000 feet of the ROW centerline	0	0	o	0	1	0	0	0	0	0	0
21	Number of FAA registered public/military airports ⁵ with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline	0	ō	0	0	- i -	-	0	0	0	-	0
22	Number of FAA registered public/military airports ⁵ having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline	0		0	0	- i -	-	0	0	0	0	0 -
23	Number of private airstrips within 10,000 feet of the ROW centerline	2	3	3	-4	4	$\frac{3}{3}$	2	4	4	4	2
24	Number of heliports within 5,000 feet of the ROW centerline	1	2	2	2	2	- J	1	2	2	2	1
25	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline	0	0	0	ō	0		0	0	0	0	0
26	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline	1	1	1	1	- 0		- 1	2	2	2	0
_	Aesthelics	<u> </u>	 									├
27	Estimated length of ROW within foreground visual zone of H, US and state highways	10 63	9 07	8 06	5 64	5 37	5 42	9 53	4 72	3 65	3 67	9 27
	Estimated length of ROW within foreground visual zone* of FM roads	2 42	4 45	4 45	3 61	9 03	4 45	2 42	4 45	4 45	4 45	6 35
	Estimated length of ROW within foreground visual zone [®] of parks/recreational areas³	140	0 25	0 25	0 07	0 07	0.25	1 40	0 07	0 07	0 25	140
	Edulation registro in 10019 within 100 oground 10000 zone 100 parkstroctobulura diwas	170	025	0 2 3	007	0 07	0.25	140	0 07	0 07	0.25	1 40
30	Length of ROW across upland woodlands/brushlands	16 34	16 77	17 47	19 49	16 74	18 57	16 50	17 91	18 14	17 84	15 46
31	Length of ROW across bottomland/riparian woodlands	0 45	0 69	0.73	0.71	0.96	0.75	0 49	0.77	0 82	0 95	0 64
32	Length of ROW across NWI mapped wetlands	0 00	0 00	0 00	0.01	0.01	0.01	0 00	0 00	0 00	0 00	0 00
33	Length of ROW across known habitat of federally listed endangered or threatened species	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00
	Area of ROW across golden-cheeked warbler modeled habital where three models agree (acres)	76.8	62.2	74.7	92.2	71.9	91 0	92 7	95.6	99 4	87.7	78.0
35	Length of ROW across open water (lakes, ponds)	0 00	0 00	0.00	0 01	0.01	0.01	0 00	0 02	0 03	0 03	0.00
36	Number of stream crossings	28	28	28	33	32	30	30	24	28	30	36
37	Number of niver crossings	1	1	1	1	1	1	1	1	1	1	1
38	Length of ROW parallel (within 100 feet) to streams or rivers	0.46	0 59	1 00	0.61	0.67	0.78	0 33	0 27	0 27	0 15	0 18
39	Length of ROW across 100-year foodplains	0.54	1 03	0 98	1 36	1 49	1 39	0.59	1 42	1 03	1 57	0 72
	Cultural Resources					170	1 00	- 0 00	172	100	1 37	012
40	Number of recorded historic or prehistoric sites crossed by ROW	1	5	4	1	1	1	1	3	2	2	1
41	Number of additional recorded historic or prehistoric sites within 1,000 feet of ROW centerline	7	7	4	2	2	3	6	- 4	4	3	5
42	Number of National Register-listed or determined eligible sites crossed by ROW	0	ó	- i - 		0	- 0	0	0	-	0	0
	Number of additional National Register-listed or determined eligible sites within 1,000 feet of ROW centerline	0	Ö	0	- 0	0	_ 0 +	-	0	0	0	0
44	Length of ROW across areas of high archeological/historic site potential	11 2	13 4	13.0	13.5	13.3	13.4	11.5	11 1	11.5	11.9	12 2
Notes	Single-family and multi-family dwellings, and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures churches, hospitals, nursing homes									110	110	14.4

Notes Single-family and multi-family dwellings, and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business situatures churches, hospitals, nursing homes schools or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerine of a transmission project of 230kV or less

'Apparent property boundanes created by existing roads, highways or railroad ROWs are not 'double-counted' in the length of ROW parallel to apparent property boundaries criteria

³Defined as parks and recreational areas owned by a governmental body or an organized group club or church within 1,000 feet of the centerline of the project

Only metallic pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

As listed in the Chart Supplement South Central U.S. (FAA 2018b formerly known as the Airport/Facility Directory South Central U.S.) and FAA 2018a

*One-half mile unobstructed Lengths of ROW within the visual foreground zone of interstates. US and state highway critera are not "doubte-counted" in the length of ROW within the visual foreground zone of FM roads criteria.

⁷One-half male, unobstructed. Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates. US and state highway ontena and/or with the total length of ROW within the visual foreground zone of FM roads criteria.

All length measurements are shown in miles unless noted otherwise. All linear measurements were obtained from aenal photography flown February and October, 2018 with the exception of high probability areas for archeological historical/resources which were measured from the USGS Topographic Quadrangles. The aenal photography was orthorectified to National Map Accuracy Standards of +/- 9 feet

Route	Segments
ingram 1	F4-G4-R4-Q4-M4-N4-Sub 3-L1-O1-R1-X1-I2-Q2-U2-T2-G3-L3-W3-P3-R3
Ingram 2	F4-G4-S4-O4-I4-L4-Q-A1-B1-F1-H1-T4-Sub 3-L1-O1-R1-X1-I2-J2-S2-G3-L3-W3-Q3
Ingram 3	F4-G4-S4-P4-L4-Q-A1-B1-F1-H1-T4-Sub 3-L1-O1-R1-X1-I2-J2-S2-G3-L3-W3-Q3
Ingram 4	F4-J4-Q4-K4-P4-L4-Q-A1-B1-F1-H1-T4-Sub 3-L1-N1-Z1-A2-D2-G2-S2-G3-L3-W3-P3-R3
Ingram 5	F4-J4-Q4-K4-P4-L4-Q-A1-B1-F1-H1-T4-Sub 3-L1-N1-Z1-B2-F2-I3-J3-M3-R3
Ingram 6	F4-J4-Q4-K4-P4-L4-Q-A1-B1-F1-H1-T4-Sub 3-L1-O1-R1-X1-I2-J2-52-G3-L3-W3-Q3
Ingram 7	F4-J4-Q4-M4-N4-Sub 3-L1-O1-R1-X1-I2-J2-S2-G3-L3-W3-P3-R3
Ingram 8	E4-I-H4-I4-L4-Q-A1-B1-F1-H1-T4-Sub 3-L1-O1-R1-X1-I2-Q2-U2-T2-G3-L3-W3-P3-R3
Ingram 9	E4-I-U3-V3-Z3-Q-A1-B1-F1-H1-T4-Sub 3-L1-O1-R1-X1-I2-J2-S2-G3-L3-W3-P3-R3
Ingram 10	E4-I-U3-V3-Z3-Q-A1-B1-F1-H1-T4-Sub 3-L1-O1-R1-X1-I2-Q2-U2-Z2-D3-F3-O3-W3-Q3
Ingram 11	F4-J4-Q4-M4-N4-SUB3-L1-N1-Z1-A2-D2-E2-F2-I3-J3-M3-R3

	Evaluation Criteria				r—						T		T				
	Land Use		A1	A2	A3	M	B	B1	B 2	B3	B4	C	C1_	C2	C3	C4	C5
[]	Length of primary alternative route (miles)	5 55	0 52	1 79	1 44	1 24	0 26	0 41	3 60	2 06	0 36	2 39	0 46	1.98	1 03	1 52	1 95
2	Number of habitable structures' within 300 feet of ROW centerline	5	5	0	0	0	5	0	3	0	0	9	0	6	11	0	0
3	Number of habitable structures' currently located within 300 feet of an existing transmission line ROW centerline	1	0	0	0	0	5	0	0	0	0	3	0	0	0	0	0
4	Length of ROW using existing transmission line ROW	0 00	0 00	0 00	0 00	0 00	0 26	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00
5	Length of ROW parallel and adjacent to existing transmission line ROW	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 29	0 00	0 00	0 00	0 00
6	Length of ROW parallel and adjacent to other existing ROW (roadways)	0 00	0 00	0 00	0 00	0 04	0 00	0 00	1 64	0 00	0 36	0 00	0 17	0 51	0.87	0 00	0 00
7	Length of ROW parallel and adjacent to apparent property lines ²	3.98	0 50	1 47	1 11	0.78	0 00	0 00	1 40	1 83	0 00	2 14	0 00	1 28	0.00	1 00	1 69
8	Sum of evaluation criteria 4, 5, 6, and 7	3 98	0 50	1 47	1 11	0 82	0 26	0 00	3 04	1 83	0 36	2 14	0 46	1 79	0.87	1 00	1 69
9	Percent of evaluation criteria 4, 5, 6, and 7	72%	96%	82%	77%	66%	100%	0%	84%	89%	100%	90%	100%	90%	84%	66%	87%
10	Length of ROW across parks/recreational areas ³	0 00	0 00	0.00	0.00	0.00	0 00	0 00	0.00	0 00	0 00	0 00	0.00	0.00	0 00	0.00	0 00
11	Number of additional parks/recreational areas ³ within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Length of ROW across cropland	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00
13	Length of ROW across pasture/rangeland	2 33	0 02	1 26	1 06	0.66	0.00	0.00	2 16	1 80	0.36	1 49	0 11	0.70	0.51	0.72	0.56
14	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0.00	0 00	0.00	0.00	0.00
15	enoth of ROW parallel and adjacent to pipelines*	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0.00	0 00
16	Number of pipeline crossings ⁴	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
	Number of transmission line crossings	0	0	0	0	0	0	0	0	0 -	0	0	0	0	0	-	0
18	Number of IH, US and state highway crossings	<u> </u>	0	0	0	0		1 0	0	- 0	-	0		Ö	0	-	1 0
19	Number of farm-to-market (FM) road crossings	Ö	0	0	0	0	-	0	1 0	0	-	0	-	 0 -	0		
	Number of cemetenes within 1,000 feet of the ROW centerline	0	n	0	0	0	0	0	1	0	0	0	- 0	0	0	 	0
	Number of FAA registered public/military airports with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline	0	Ö	0		0	0	<u> </u>	0	-	-	0	0	0	0	-0	6
22	Number of FAA registered public/military airports with at least one fullway more than 3,200 feet in length located within 10,000 feet of ROW centerline	0	0	0	0		-	<u> </u>	1 0	0	1 0	0	0	0	0	0	1 0
23	Number of FAA registered publicimilitary airports. Inaving no runway more than 3,200 seet in length located within 10,000 seet of ROW centerline. Number of private airstrips within 10,000 feet of the ROW centerline.	2	2	- 4	0	1 1	-	1	1 -	0	2	1					1
24	Number of private airstrips within 10,000 reet of the ROW centerline		0	0	0	 	 		 	- 0	0	1 0	0	0	0	1	1 7
25	Number of nelipons within 5,000 reek of the ROW cententine Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline	0	0	0	0	-	-	0	1 -	0	0	0	0	0	0	0	0
	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline	0	0	0	0	0	-	0	1 0	-	0	0		0	0	0	0
	Number of FM radio granismitials, microwave (owers, and other electronic installations within 2,000 real of ROVY centerinie		<u> </u>		<u> </u>	<u> </u>	<u> </u>	<u> </u>	ļ <u>'</u>		<u>'</u>	-		<u> </u>	0	0	-
27		0 00	0 04	0 00	0.00	0 00	0 00	0.41	0 00	0.00	0.00	0 00	0.40	0.00	0.00		
	Estimated length of ROW within foreground visual zone of IH, US and state highways	1 01	0.00	0.00	0.47	0.00	0.20	0.00					0 46	0 00	0 00	0 00	0 00
	Estimated length of ROW within foreground visual zone ⁶ of FM roads								1 14	0 46	0 00	0.00	0 00	0 00	1 03	0 00	0.00
	Estimated length of ROW within foreground visual zone [FI/7] of parks/recreational areas*	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00
	Ecology		ليبا					L									
30	Length of ROW across upland woodlands/brushlands	4 19	0.50	1 79	0 62	0.57	0 26	0 41	2 07	0 96	0 35	1 64	0 33	1 17	0 70	0 78	1 56
31	Length of ROW across bottomland/npanan woodlands	0 24	0 00	0 00	0.07	0 03	0 00	0 00	0 19	0 01	0 00	0 00	0 00	0 11	0 00	0 00	0 00
	ength of ROW across NWI mapped wetlands	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
33	Length of ROW across known habitat of federally listed endangered or threatened species	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	Area of ROW across golden-cheeked warbler modeled habital where three models agree (acres)	43 9	5 6	3.4	28	23	3 2	10	50	02	0.0	98	2 7	73	47	0.0	11 8
35	Length of ROW across open water (lakes, ponds)	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	Number of stream crossings	10	1	1	2	1 1	0	0	2	2	0	1	0	5	2	3	1_1_
	Number of river crossings	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
	Length of ROW parallel (within 100 feet) to streams or rivers	0 57	0 00	0 00	0 00	0 02	0 00	0 00	0 08	0 22	0 00	0 00	0 00	0 43	0 00	0 00	0.00
39	Length of ROW across 100-year floodplains	0 19	0 00	0.00	0.00	0 10	0.00	0.00	0.00	0.00	0.00	0 00	0.00	0.00	0.00	0 10	0.00
اـــــــــــــــــــــــــــــــــــــ	Cultural Resources											L					
	Number of recorded historic or prehistoric sites crossed by ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Number of additional recorded historic or prehistoric sites within 1,000 feet of ROW centerline	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0
	Number of National Register-listed or determined eligible sites crossed by ROW	0	0	0	0	0	.0	0	0	0	0	0	0	0	0	0	0_
43	Number of additional National Register-listed or determined ●ligible sites within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Notes	ength of ROW across areas of high archeological/historic site potential	50	04	0.8	09	0.8	00	0 1	0.8	0.8	0 0	0.6	0.0	20	10	10	10

Single-family and multi-family dwellings, and related shuctures, mobile homes apartment buildings commercial shuctures industrial structures, business shuctures, churches, hospitals, nursing homes, schools, or other shuctures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerine of a transmission project of 139W or less.

²Apparent property boundaries created by existing roads. highways: of railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundaries criteria.

*Defined as parks and recreational areas owned by a governmental body or an organized group club or church within 1,000 feet of the centerline of the project

*Only metallic pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

5As listed in the Chart Supplement South Central U.S. (FAA 2018b formerly known as the Airport/Facility Directory South Central U.S.) and FAA 2018a

⁶One-half mile, unobstructed Lengths of ROW within the visual foreground zone of inferstates, US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria

One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates. US and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria.

All length measurements are shown in miles unless noted otherwise. All linear measurements were obtained from eatial photography flown February and October, 2016 with the exception of lap probability areas for archaeological historical/resources which were measured from the USGS Topographic Quadrangles. The senal photography was orthorectified to National Map Accuracy Standards of 1-6 yets!

	Evaluation Criteria																
	Land Use	D	D1	D2	D3	D4	E	E1	E2	E3	E4	F	F1	F2	F3	F4	G1
1	Length of primary alternative route (miles)	1 44	1 21	0 07	1 00	0 43	1 99	0 15	2 01	1 48	4 47	1 58	0 14	1 14	1 47	0 26	0.94
2	Number of habitable structures' within 300 feet of ROW centerline	0	1	0	0	0	0	0	9	1	30	13	0	0	2	5	2
3	Number of habitable structures' currently located within 300 feet of an existing transmission line ROW centerline	0	1	0	0	0	0	0	0	0	30	13	0	0	0	2	0
4	Length of ROW using existing transmission line ROW	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0 00	4 47	1 58	0 00	0 00	0 00	0 00	0 00
5	Length of ROW parallel and adjacent to existing transmission line ROW	0 00	1 21	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0.00	0 00	0 00	0.00	0 00
6	Length of ROW parallel and adjacent to other existing ROW (roadways)	0.00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0 00	0 00	0 00	0 00	1 11	0 00	0 19	0 00
7	Length of ROW parallel and adjacent to apparent property lines²	1 20	0.00	0 06	0.00	0 43	1 54	0.00	1 88	1 19	0.00	0.00	0.00	0.01	1 34	0.00	0.51
8	Sum of evaluation criteria 4, 5, 6, and 7	1 20	1 21	0.06	0.00	0 43	1 54	0 00	1 88	1 19	4 47	1 58	0 00	1 12	1 34	0 19	0.51
9	Percent of evaluation criteria 4, 5, 6, and 7	83%	100%	86%	0%	100%	77%	0%	94%	80%	100%	100%	0%	98%	91%	73%	54%
10	Length of ROW across parks/recreational areas ³	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0.00	0 00	0 00	0.00	0.00	0.00	0 00	0 00	0.00
11	Number of additional parks/recreational areas within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	1 0	0	0	0	0	0	0
12	Length of ROW across cropland	0 00	0 00	0.00	0.00	0 00	0.00	0.00	0.00	0.00	0 00	0 00	0 00	0.00	0 00	0 00	0 00
13	Length of ROW across pasture/rangeland	1 44	0.00	0.03	0.57	0 43	1 99	0.05	1 20	1 21	1 16	0 07	0.02	1 01	0 38	0.05	0 27
14	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0 00	0.00	0.00	0.00	0.00	0.00	0 00	0.00	0.00	0.00	0 00	0 00	0 00	0 00	0 00	0 00
15	Length of ROW parallel and adjacent to pipelines	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0.00	0 00	0.00	0 00	0 00	0 00	0 00	0.00	0 00
16	Number of pipeline crossings*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00	0.00
17	Number of transmission line crossings	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	1
18	Number of IH, US and state highway crossings	0	 0 -	o	0	0	0	1	0	0	1	0	1 1	0	0	0	
19	Number of farm-to-market (FM) road crossings	ō	0	<u> </u>	0	0	0	- i -	0	1	0	0	0	1	0	0	6
20	Number of cameteries within 1,000 feet of the ROW centerline	0	0	0	0	0	0	-	- 6	0	0	0	0	0	0	0	1 0
21	Number of FAA registered public/military airports ⁵ with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerine	0	ő	-	0	0	0	0	l ö	0	0	0	0	0	0	0	0
22	Number of FAA registered public/military airports ⁵ having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline	0	0	0	0-	0	0		0	0	0	0	0		0		
	Number of private airstrips within 10,000 feet of the ROW centerline	1	1	0	0	1	1	0	0	0	1		1	0		0	0
	Number of heliports within 5,000 feet of the ROW centerline	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	2
	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline	0	0	0	0	0 -	0	0	0	0	0	0	0			0	<u> </u>
26	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
	Assthetics			_ <u> </u>			- 0	,		-	<u> </u>	- -	, , ,			L 0	<u> </u>
27	Estimated length of ROW within foreground visual zone ⁶ of IH, US and state highways	0 00	1 21	0 00	0.00	0.00	0.00	0 15	0.00	0 00	0 58	0 00	0 14	0 00	0 00	0 26	0 94
	Estimated length of ROW within foreground visual zone* of FM roads	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 48	0 61	0 00	0 00		1 14			
	Estimated length of ROW within foreground visual zone NIT of parks/recreational areas*	0 00	0.00	0 00	0.00	0.00	0 00	0.00	0.00	0.00			0 00		0 00	0.00	0 00
	Ecoloda.	0 00	0.00	0.00	000	000	0.00	0 00	0.00	0.00	0 00	0 00	0 00	0 00	0.00	0 00	0 00
30	Length of ROW across upland woodlands/brushlands	0 75	1 17	0 07	0 76	0 29	1 44	0.06	4.00	0.00							
31	Length of ROW across bottomland/nparian woodlands	0 00	0 03	0 00	0.01	0 00	0 00	0 00	1 00	0.89	2 77	1 43	0.07	0 62	1 15	0,17	0 84
32	Length of ROW across NWI mapped wetlands	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 13	0 02	0 03	0 00	0 00	0 10	0 04	0.00	0 00
33	Length of ROW across known habitat of federally listed endangered or threatened species	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0.00	0.00	0 00	0 00	0 00	0 00	0 00	0 00
	Area of ROW across golden-cheeked warbler modeled habitat where three models agree (acres)	0.00	83	0.4	17	010	44	0.00	50	28	30.0	13.5	0.00	0.00	0 00	0 00	0 00
35	Length of ROW across open water (lakes, ponds)	0.00	000	0.00	0 00	0 00	0 00	0.00	0 00	0 00	0.01	0 00	0.00	0.00	4 0 0 00	0.00	3
	Number of stream crossings	0	5	0	0	0	1	0 00	5	1	3	2	0 00	3		0 00	0 00
	Number of over crossings	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
38	Length of ROW parallel (within 100 feet) to streams or rivers	0.00	0.04	0.00 *	0 00	0 00	0.00	0 00	0 04	0.00	0 00	0 00	0.00	0 00	0 05	0 07	0 00
39	Length of ROW across 100-year floodplains	0 00	0.09	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 29	0 00	0 00	0.00	0.05	0 00	0 00
	Cultural Resources		0.00		0.00	0.00		0.00	0.00	0 00	0 2 3	0.00	000	0.00	007	- 000	0 00
	Number of recorded historic or prehistoric sites crossed by ROW	0	0	0	0	0	0	0	0	0	2	0	ó	0	0		0
	Number of additional recorded historic or prehistoric sites within 1,000 feet of ROW centerline	0	0	Ö	0	0	0	0	0	- 0	2	0	0	0	0	1	0
	Number of National Register-listed or determined eligible sites crossed by ROW	0	0	- 0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Number of additional National Register-listed or determined eliqible sites within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	- 0	0	0	0	0	-	0	0
44	Length of ROW across areas of high archeologicaVhistoric site potential	0.0	00	01	0.6	02	06	0.0	1.0	0.6	0.6	0.7	00	0.6	10	03	0 4
Notes.	Single-family and multi-family dwellands and related structures mobile homes anartment huldfinds commercial structures industrial structures this iness structures.	00	- 00		- 00	_ 02	00	00	10	00	00	07	. 00	06	10 1	0.3	04

Single-family and multi-family dwellings, and related structures, mobile homes, apartment buildings, commercial structures, industrial structures business structures churches hospidals, nursing homes, schools or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the ceretation of a transmission project of 300k feet of the ceretation of a transmission project of 300k feet of the

²Apparent property boundanes created by existing roads highways or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundares criteria

Defined as parks and recreational areas owned by a governmental body or an organized group club or church within 1,000 feet of the centerline of the project

⁴Only metallic pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

5As listed in the Chart Supplement South Central U.S. (FAA 2018b formerly known as the Airport/Facility Directory South Central U.S.) and FAA 2018a

*One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of interstates. US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria.

²One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates, US and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria.

All length measurements are shown in miles unless noted officence. All linear measurements were obtained from aenal photography flown February and October, 2018 with the exception of high probability areas for archeological historical/resources which were measured from the USGS Topographic Quadrangles. The aenal photography was orthorectified to beloan Map Accounty Standards of 4-19 feet.

	Evaluation Criteria	G2	G3	G4	H1	H2	H3	H4		I1	12	13	1 14	15		J1
<u> </u>	Land Use	1 13	2 39	1 22	0 29	2 23	0 59	1 07	2 15	1 21	1 03	0 89	0.71	0 37	0 93	0.30
<u> </u>	Length of primary atternative route (miles) Number of habitable structures' within 300 feet of ROW centerline	0	1	23	0 2 3	0	1 0 0 0 0 0 0	0	0	0	0	0 89	1	0	0 93	1 030
3		0	0	0	- 0	0	0	0	0	0	0	0	0	0	0	1 0
	Number of habitable structures' currently located within 300 feet of an existing transmission line ROW centerline	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0 00	0 00	0.00	0 00	0 00	000
4	Length of ROW using existing transmission line ROW	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00		0 00	0 00	0 00	0 00
5	Length of ROW parallel and adjacent to existing transmission line ROW				0.00	0 00	0 10	0.00	0.00	1 21	0 00	0 00	0 00			0 29
6	Length of ROW parallel and adjacent to other existing ROW (roadways)	0 60	0 14	1 15										0 00	0 00	
7	Length of ROW parallel and adjacent to apparent property lines ²	0.30	2 01	0.00	0.00	1 76	0 35	0 77	0.72	0.00	1 03	0.00	0 42	0 37	0 93	0 00
8	Sum of evaluation criteria 4, 5, 6, and 7	0 90	2 15	1 15	0 00	1 76	0 45	0.77	0 72	1 21	1 03	0 89	0 42	0 37	0 93	0 29
9	Percent of evaluation critina 4, 5, 6, and 7	80%	90%	94%	0%	79%	76%	72%	33%	100%	100%	100%	59%	100%	100%	97%
10	Length of ROW across parks/recreational areas ³	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
11	Number of additional parks/recreational areas ³ within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
12	Length of ROW across cropland	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
13	Length of ROW across pasture/rangeland	0 18	0 49	0 35	0 19	1 03	0 46	0 48	0 91	0 23	0 80	0 38	0 31	0 00	0 93	0 22
14	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
15	Length of ROW parallel and adjacent to pipelines ⁴	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
16	Number of pipeline crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
17	Number of transmission line crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
18	Number of IH, US and state highway crossings	0	0	2	0	0	0	1	0	0	ō	0	0	0	0	0
19	Number of farm-to-market (FM) road crossings	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
20	Number of cometenes within 1,000 feet of the ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Number of FAA registered public/military airports ⁵ with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline	0	0	0	ō	0	0	0	0	0	0	0	0	0	0	0
22	Number of FAA registered public/military airports ⁵ having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10
23	Number of private airstrips within 10,000 feet of the ROW centerline	<u> </u>	0	0	0	0	0	2	2	0	0	0	2	1	1 -	<u> </u>
24	Number of heliports within 5,000 feet of the ROW centerline		0	Ť	 1	0	1 0	1	1 1		0	0	1	0	Ö	0
25	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline	0	0	0	0	0	0		0	0	0	0	0	0	0	0
26	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline	<u> </u>	 	0		0	1	-	0	1	0	0	<u> </u>	0	0	 0
<u> </u>	Assthetics	<u> </u>			- 		 	- <u> </u>	— <u> </u>			<u> </u>				
27		0.00	0.00	1 22	0.29	0.00	0.00	0.58	0 00	1 21	0.00	0.00	0.71	0 00	0.00	0.30
	Estimated length of ROW within foreground visual zone of IH, US and state highways	0.00	0.00	0 00	0.00	0 52	0 00	0 00	0 00	0 00	0 00	0.89	0 00	0 00	0 00	0 00
	Estimated length of ROW within foreground visual zone of FM roads		0.00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0.00		0.00	0 00
29	Estimated length of ROW within foreground visual zone [FI[7] of parks/recreational areas*	0 00	0.00	0.00	000	000	0.00	0 00	0.00	0.00	0 00	0.00	000	0.00	0.00	0.00
	Ecology	100		0.74		4.50	0 12	0 48	 	4.40	0.75	0.50			0.40	
30	Length of ROW across upland woodlands/brushlands	1 02	2 01	0.71	0 29	1 53			1 14	1 19	0 75	0 53	0 35	0 37	0 42	0 08
31	Length of ROW across bottomland/npanan woodlands	0 10	0 00	0 03	0 00	0 10	0 00	0 07	0 08	0 02	0 04	0 06	0 03	0 00	0 00	0 00
32	Length of ROW across NWI mapped wetlands															
33	Length of ROW across known habitat of federally listed endangered or threatened species	0 00	0.00	0 00	0 00	0.00	10	0 00	0.00	0 00	0.00	0 00	0.00	0 00	0 00	0.00
34	Area of ROW across golden-cheeked warbler modeled habitat where three models agree (acres)	11	8.6	15	0.00	29		0.01	18 6	76	13	0.1	4.5	4 4	64	0.6
35	Length of ROW across open water (lakes, ponds)	0 00	0 00	0 00		0 00	0 00		0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
36	Number of stream crossings	3	2		0	4		1			1		1 1	0	0	
37	Number of river crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38	Length of ROW parallel (within 100 feet) to streams or rivers	0.00	0 00	0 22	0 00	0 10	0 01	0 07	0.00	0 00	0 00	0 00	0 03	0 00	0 00	0 00
39	Length of ROW across 100-year floodplains	0 00	0 00	0 11	0 00	0 00	0 05	0 30	0 00	0 09	0 00	0 00	0.05	0 00	0 00	0.05
L	Cultural Researces															
40	Number of recorded historic or prehistoric sites crossed by ROW	0	0	0	0	0	0	0	0	0	0	0		0	0	0
41	Number of additional recorded historic or prehistoric sites within 1,000 feet of ROW centerline	0	0	2	0	0	0	2	Ō	0	0	0	0	0	0	0
42	Number of National Register-listed or determined eligible sites crossed by ROW	0	0		0	0	0	0	0	0	0	0	0	0	0	0
43	Number of additional National Register-listed or determined eligible sites within 1,000 feet of ROW centerline	0	. 0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Length of ROW across areas of high archeological/histonic site potential	0.8	0.4	0.9	0.0	11	03	0.7	13	07	0 4	06	0.7	02	0.5	03

Single-family and multi-family dwellings, and related structures, mobile homes, apartment buildings, commercial structures, industrial structures business structures churches; hospitals, nursing homes, schools, or other structures normally chabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the ceretains of a stramsmoson proped of 30NV or less.

²Apparent property boundanes created by existing roads. highways, or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundanes criteria.

³Defined as parks and recreational areas owned by a governmental body or an organized group club or church within 1,000 feet of the centerline of the project

⁴Only metallic pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

As listed in the Chart Supplement South Central U.S. (FAA 2018b formerly known as the Airport/Facility Directory South Central U.S.) and FAA 2018a

*One-half mile, unobstructed Lengths of ROW within the visual foreground zone of interstates. US and state highway criteria are not 'double-counted' in the length of ROW within the visual foreground zone of FM roads or lena.

One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates, US and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria.

All length measurements are shown in miles unless noted otherwise. All linear measurements were obtained from aenal pholography flown February and October, 2018 with the exception of high probability areas for archeological historical/resources which were measured from the USGS Topographic Quadrangles. The senal pholography was orthorectified to National Map Accuracy Standards of +/- 9 feet.

,	Evaluation Criteria																
	Land Use	J2	J3	J4	K	K2	К3	K4	L	L1	L2	L3	LA	M	M1	M2	M3
1	Length of primary alternative route (miles)	1 91	2 55	2 25	1 17	1 04	3 52	2 40	2 47	0 85	1 04	1 12	0 67	1 04	2 53	2 26	0 40
2	Number of habitable structures' within 300 feet of ROW centerline	0	4	9	0	4	4	2	2	2	0	0	0	0	19	1	0
3	Number of habitable structures' currently located within 300 feet of an existing transmission line ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4	Length of ROW using existing transmission line ROW	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
5	Length of ROW parallel and adjacent to existing transmission line ROW	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
6	Length of ROW parallel and adjacent to other existing ROW (roadways)	0 00	1 23	0 21	0 00	1 04	0 20	0 00	0 47	0.85	0 01	0 00	0 00	1 04	1 29	0 00	0 40
7	Length of ROW parallel and adjacent to apparent property lines ²	1 40	0.50	1 59	1 08	0.00	1 56	1 46	1 84	0.00	0 26	1.11	0.41	0.00	1 12	2 13	0 00
8	Sum of evaluation cntena 4, 5, 6, and 7	1 40	1 73	1 80	1 08	1 04	1 76	1 46	2 31	0 85	0 27	1 11	0 41	1 04	2 41	2 13	0 40
9	Percent of evaluation criteria 4, 5, 6, and 7	73%	68%	80%	92%	100%	50%	61%	94%	100%	26%	99%	61%	100%	95%	94%	100%
10	Length of ROW across parks/recreational areas ³	0.00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0.00
11	Number of additional parks/recreational areas ³ within 1,000 feet of ROW centerline	0	0	0	0	Ö	0	0	0	0	0	0	0	0	0	0	0
12	Length of ROW across cropland	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0.00	0.00	0.00	0 00	0 00	0 00	0.00	0.00
13	Length of ROW across pasture/rangeland	1 09	1 54	0 65	0 76	0 00	171	0 99	2 31	0.00	0.39	0 11	0 18	1 04	0.54	1 02	0 13
14	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0.00	0.00	0 00	0 00	0.00	0 00	0 00	0.00
15	Length of ROW parallel and adjacent to pipelines	0 00	0 00	0 00	0.00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
16	Number of pipeline crossings*	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	0 00
17	Number of transmission line crossings	0	0	- 0	0	ō	0	0	0	0	0	0	0	0	0	0	0
18	Number of IH, US and state highway crossings	0	0	ō	0	0	0	ō	Ö	0	0	0	0	0	0	-	0
19	Number of farm-to-market (FM) road crossings	0	1	0	0	0	1	0	0	0	1-	0	1	0	0	0	0
20	Number of cemeteries within 1,000 feet of the ROW centerline	Ö	Ö	0	0	0	o	0	0	0	0	0	0	0	l ö	- 0	1 0
21	Number of FAA registered public/military airports ⁵ with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline	0	ō	0	0	0	0	0	Ö	0	0	0	0	0	 0	0	0
22	Number of FAA registered public/military airports ⁵ having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0		0
23	Number of private airstrips within 10,000 feet of the ROW centerline	0	0	0	1	0	0	1	1	0	0	0	3	2		0	
24	Number of heliports within 5,000 feet of the ROW centerine	0	6	0	 	0	0	<u> </u>	0	— -	0	0	1	0	2	0	0
25	Number of commercial AM radio transmitters within 10.000 feet of the ROW centerline	0	0	0	0	0	0	0	0	0	0	0	<u>'</u>	0	0	0	- 0
26	Number of FM radio transmitters, microwave towers, and other electronic installations within 2.000 feet of ROW centerline	0	i i	0	0	0	0	-	ō	0	-	1	0	0	2	0	1 0
	Aesthetics		 		⊢—	<u>-</u>	<u> </u>	- ů		<u> </u>			 			\vdash	<u> </u>
27	Estimated length of ROW within foreground visual zone of IH, US and state highways	0 00	0.00	0 65	0.00	0.00	0 00	0.56	0.00	0 36	0.00	0 00	0 67	0.00	1 75	0 00	0 02
28	Estimated length of ROW within foreground visual zone ⁵ of FM roads	0.00	2 45	0 00	0.00	1 04	1 72	0.00	0.00	0 49	0.51	0 00	0 00	0.00	0 00		
29	Estimated length of ROW within foreground visual zone (6) 77 or parks/recreational areas ³	0.00	0 00	0 00	0.00	0.00	0 00	0 00	0.00	0 00	0.00					0 00	0 38
	Ecology Ecology	0.00	000	0 00	0 00	000	0 00	0.00	0.00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
30	Length of ROW across upland woodlands/brushlands	1 44	1 15	1 54	1 17	1 02	3 15	1 25	0.07	0.05	0.70						<u> </u>
31	Length of ROW across bottomland/nparian woodlands	0.06	0 18	0 03	0 00	0 00	0 22	0.06	0 97	0 85	0 78 0 12	0 91	0 51	0 34	2 35	1 65	0 40
32	Length of ROW across NWI mapped wetlands	0 00	0 00	0 00	0.00	0 00	0 00	0.06	0.00	0 00	0 12	0 06	0 02	0 00	0 09	0 06	0 00
33	Length of ROW across known habitat of federally listed endangered or threatened species	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00
34	Area of ROW across golden-cheeked warbler modeled habitat where three models agree (acres)	37	2.9	10 0	3 1	0.00	28	6.2	70	11	22	53	32		12 9	0 00	0 00
35	Length of ROW across open water (lakes, ponds)	0.00	0 00	0 00	0 00	0.00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0.00
36	Number of stream crossings	3	4	2	1	0	6	4	2	1	4	2	1	1	4	3	
37	Number of river crossings	0	1	0	0	0	1	0	0	0	0	0	0	- 1	-4	0	0
38	Length of ROW parallel (within 100 feet) to streams or rivers	0 15	0.00	0 00	0 00	0 12	0 00	0 00	0 00	0 00	0 35	0 00	0 00	0 00	0 00		0
39	Length of ROW across 100-year floodplains	0 00	0.24	0 29	0 00	0.00	0 19	0 30	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 17	0 00
	Cultural Resources	0 00	027	020	0.00	1	0.13	0.50	0.00	0.00	0.00	0 00	0 22	0 00	001	0 00	0 00
40	Number of recorded historic or prehistoric sites crossed by ROW	Ó	0		0	0	0	0	ō	0	0	0	0	0	-0		
41	Number of additional recorded historic or prehistoric sites within 1,000 feet of ROW centerline	1	0	1	0	0 -	0	0	0	0	0	0	1		-0	0	0
42	Number of National Register-listed or determined eligible sites crossed by ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Number of additional National Register-listed or determined eligible sites within 1,000 feet of ROW centerline	0	0	-0	0	0	0	0	0	0	0	0	0	0	0		0
44	Length of ROW across areas of high archeological/historic site potential	14	15	15	0.4	06	25	14	10	0.4	0.9	04	0.5	0 3		0	0
Notes	Sprake forming and multi-family dwellings, and related characters mobile homes anothern buildings commercial structures industrial s	- 1 -	L "2	10	- 0 -	00	20	14	10	04		U 4	0.5	03	15	15	0 4

Single-family and multi-family dwellings and related structures mobile homes apartment buildings, commercial structures, industrial structures, business structures, churches hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centaline of a transmission project of 230kV or fees.

²Apparent property boundaries created by existing roads, highways, or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundaries criteria.

³Defined as parks and recreational areas owned by a governmental body or an organized group, club, or church within 1,000 feet of the centerline of the project

⁴Only metallic pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

5As listed in the Chart Supplement South Central U.S. (FAA 2018b formerly known as the Airport/Facility Directory South Central U.S.) and FAA 2018a

*One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of interstates, US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria.

⁷One-half mile, unobstructed. Langths of ROW within the wisual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates. US and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria.

All length measurements are shown in miles unless noted otherwise. All linear measurements were obtained from aerial photography flown February and October, 2018 with the exception of high probability areas for archeological historical/resources which were measured from the USGS Topographic Quadrangles. The aerial photography was orthorectified to National Map Accuracy Standards of 4-19 feet.

	E-valuation one is																
	Land Vee	M4	N	N1	N2	N4	0	01	O2	03	04	T P	P1	P2	P3	P4	Q
1	Length of primary alternative route (miles)	9 33	0.88	1 44	0 99	0 24	1 47	0 08	1 07	1 56	1 60	0.54	1 86	0.07	0 24	2 47	2 44
2	Number of habitable structures' within 300 feet of ROW centerline	5	0	5	0	0	1	0	1	0	5	0	0	0	1	2	0
3	Number of habitable structures' currently located within 300 feet of an existing transmission line ROW centerline	1	0	0	0	0	0	0	0	0	0	1 0	1 0	0	1 0	1 0	1 0
4	Length of ROW using existing transmission line ROW	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0.00	0 00	0.00	0 00	0 00	0 00	0 00
5	Length of ROW parallel and adjacent to existing transmission line ROW	1 88	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0 00	0 00	0 00	0.00	0.00	0 00	0.00	0 00
6	Length of ROW parallel and adjacent to other existing ROW (roadways)	5 50	0 00	0 00	0 95	0 00	0.00	0 08	0 46	0.41	1 35	0.00	0 12	0.00	0 00	0.00	0.00
7	Length of ROW parallel and adjacent to apparent property lines ²	0.87	0.73	1 42	0.00	0 11	101	0.00	0.46	0.90	0.18	0.51	1 69	0.00	0.00	2 28	2 24
8	Sum of evaluation criteria 4, 5, 6, and 7	8 25	0.73	1 42	0 95	0 11	1 01	0.08	0.92	1 31	1 53	0.51	1 81	0.00	0 00	2 28	2 24
9	Percent of evaluation criteria 4, 5, 6, and 7	88%	83%	99%	96%	46%	69%	100%	86%	84%	96%	94%	97%	0%	0%	92%	92%
10	Length of ROW across parks/recreational areas ³	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0 00	0 00	0.00	0.00	0 00	0.00	0 00	0.00	0.00
11	Number of additional parks/recreational areas ³ within 1,000 feet of ROW centerline	2	0	0	0	0	0	0	0	0	0	0	0	0	0	1 000	000
12	Length of ROW across cropland	0 00	0 00	0 00	0.00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00
13	Length of ROW across pasture/rangeland	4 79	0.84	0 26	0 32	0.07	0.76	0.02	0 39	0.50	0 48	0.31	0 45	0 00	0 14	0 42	1 60
14	Length of ROW across land imgated by traveling systems (rolling or pivot type)	0 00	0 00	0.00	0.00	0 00	0.00	0 00	0 00	0 00	0.00	0.00	0.00	0 00	0 00	0 00	0 00
15	Length of ROW parallel and adjacent to pipelines ⁴	0 00	0 00	0.00	0 00	0.00	0.00	0 00	0 00	0.00	0.00	0 00	0 00	0 00	0 00	0.00	0.00
16	Number of pipeline crossings ⁴	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0 00	000
17	Number of transmission line crossings	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 0
18	Number of IH, US and state highway crossings	1	0	0	0	0	0	0	0	0	1 2	0	<u> </u>	0	0	0	0
19	Number of farm-to-market (FM) road crossings	0	0	1	1	1	0	-	1	0	0	 	0	0	1	 0	 0
20	Number of cemetenes within 1,000 feet of the ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1 0
21	Number of FAA registered public/military airports ⁵ with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline	Ö	0	0	0	0	Ö	0	0	0	0	0	0	-	0	0	
22	Number of FAA registered public/military airports ⁵ having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	-	0	0	0	0
23	Number of private airstrips within 10,000 feet of the ROW centerline	2	2	1	0	0	2	0	0	0	2	2	0	-0	0	2	3
24	Number of heliports within 5,000 feet of the ROW centerline	1	0	1	0	1	0	1	-	0	1-1	0	1	0	0	1	0
25	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline	0	0	0	0	ō	0	0	0	0	0	0	0	0	0	0	1-0-1
26	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline	0	0	0	2	0	0	0	2	1	0	0	1	2	-	0	0
	Aesthetics				1						<u> </u>				_ <u> </u>		\vdash
27	Estimated length of ROW within foreground visual zone ⁶ of IH, US and state highways	7 37	0 00	0 00	0 00	0 24	0 03	0.00	0.00	0 23	1 60	0 02	0 45	0.00	0 24	1 31	0.21
28	Estimated length of ROW within foreground visual zone ⁵ of FM roads	0 00	0 00	0 51	0 99	0 00	0.00	0.08	0 52	0 00	0.00	0.00	0.49	0.07	0 00	0.00	2 02
29	Estimated length of ROW within foreground visual zone (AIT) of parks/recreational areas*	1 33	0.00	0 00	0 00	0 00	0 00	0.00	0 00	0.00	0.00	0.00	0.00	0.00	0 00	0 00	0 00
	Ecology											- 000	0.00	0 00	- 0 00		-000
30	Length of ROW across upland woodlands/brushlands	4 27	0 33	1 33	0 72	0 12	0 93	0.08	0 69	1 07	0 92	0.51	1 60	0.07	0 16	1 98	1 42
31	Length of ROW across bottomland/ripanian woodlands	0 08	0 03	0 05	0 00	0 02	0.04	0.00	0.04	0 11	0 00	0.00	0.03	0.00	0 05	0 06	0 23
32	Length of ROW across NWI mapped wetlands	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0.00	0.00	0 00	0 00	0 00
33	Length of ROW across known habitat of federally listed endangered or threatened species	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
34	Area of ROW across golden-cheeked warbler modeled habitat where three models agree (acres)	42 8	02	66	0.0	0.0	50	01	22	39	45	0.0	87	0.0	0.0	21.5	22
35	Length of ROW across open water (lakes, ponds)	0 00	0 00	0 00	0 00	0 00	0 02	0 00	0 00	0.00	0.00	0.00	0 00	0 00	0 00	0 00	0 00
36	Number of stream crossings	11	1	4	0	1	2	0	2	5	1	0	5	0	0	2	4
37	Number of river crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	1		0
38	Length of ROW parallel (within 100 feet) to streams or rivers	0 00	0 00	0 08	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 07	0.00	0 00	0.45	0 00
39	Length of ROW across 100-year floodplains	0 14	0 09	0 00	0.00	0 05	0 16	0 00	0 00	0 45	0 00	0 00	0.21	0.00	0.05	0.00	0 44
	Cultural Resources																
40	Number of recorded historic or prehistoric sites crossed by ROW	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
41	Number of additional recorded historic or prehistoric sites within 1,000 feet of ROW centerline	4	0	0	0	0	1	0	0	0	4	0	0	ō	0	0	-
42	Number of National Register-listed or determined eligible sites crossed by ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Number of additional National Register-listed or determined eligible sites within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	ō	0	0	0	0
44	Length of ROW across areas of high archeological/historic site potential	27	0.8	10	0.0	02	15	0 1	03	0.9	11	0.5	0.9	00	02	14	13
Notes																	

Single-family and multi-family dwellings and related structures mobile homes, apartment buildings, commercial structures, industrial structures, business structures, thurdnes, hospitals musting homes, schools, or other structures normally inhabited by humans or inlended to be inhabited by humans on a daily or regular basis within 300 feet of the centerine of a transmission project of 2304 or of less.

²Apparent property boundanes created by existing roads. highways, or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundanes criteria.

¹Defined as parks and recreational areas owned by a governmental body or an organized group club or church within 1 000 feet of the centerline of the project.

Only metallic pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations.

Only metalise pipelines six incress and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

⁵As listed in the Chart Supplement South Central U.S. (FAA 2018b formerly known as the Airport/Facility Directory South Central U.S.) and FAA 2018a

⁶One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of interstates, US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria.

⁷One-half mile unobstructed Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates, US and state highway on

All length measurements are shown in miles unless noted otherwise. All linear measurements were obtained from senal photography flown February and October, 2018 with the exception of high probability areas for archeological historical/resources which were measured from the USGS Topographic Quadrangles. The senal photography was orthorectified to National Map Accuracy Standards of +/- 9 feet.

	Evaluation Criteria																
	Land Use	Q1	Q2_	Q3	0.4	R	R1_	R2	R3	R4	8	51	82	34		T1	T2
1	Length of primary alternative route (miles)	1 15	0 94	0 38	0 79	1 24	0 74	0 97	0 36	1 11	1 48	0 53	0 93	2 63	0 41	1 52	1 45
2	Number of habitable structures' within 300 feet of ROW centerline	3	0	3	2	3	0	1 1	1	18	1	2	0	33	0	0	2
3	Number of habitable structures' currently located within 300 feet of an existing transmission line ROW centerline	0	0	1	.0	0	0	0	1	0	0	0	0	0	0	0	0
4	Length of ROW using existing transmission line ROW	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
5	Length of ROW parallel and adjacent to existing transmission line ROW	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
6	Length of ROW parallel and adjacent to other existing ROW (roadways)	0 00	0 00	0 00	0 00	0 33	0 61	0 55	0 36	0 88	0 00	0 30	0 00	1 38	0 00	0 17	0 51
7	Length of ROW parallel and adjacent to apparent property lines ²	0.71	0 94	0 01	0 48	0.51	0 00	0.00	0.00	0.00	1 35	0 00	0.31	0 95	0 41	1 22	0.83
8	Sum of evaluation cntena 4, 5, 6, and 7	0 71	0 94	0 01	0 48	0.84	0.61	0 55	0.36	0.88	1 35	0 30	0 31	2 33	0.41	1 39	1 34
9	Percent of evaluation criteria 4, 5, 6, and 7	62%	100%	3%	61%	68%	82%	57%	100%	79%	91%	57%	33%	89%	100%	91%	92%
10	Length of ROW across parks/recreational areas ³	0 00	0 00	0 00	0.00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
11	Number of additional parks/recreational areas ³ within 1,000 feet of ROW centerline	0	0	0	0	- o	0	0	0	0	ō	0	0	0	0	0	0
12	Length of ROW across cropland	0.00	0.00	0.00	0 00	0 00	0.00	0 00	0 00	0 00	0.00	0 00	0.00	0 15	0 00	0 00	0 00
13	Length of ROW across pasture/rangeland	0.71	0.25	0 12	0 17	0 64	0.44	0.20	0.36	0 39	0.15	0.00	0.00	0 53	0 36	0 98	0.67
14	Length of ROW across land imgated by traveling systems (rolling or pivot type)	0 00	0.00	0.00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00
15	Length of ROW parallel and adjacent to pipelines *	0.00	0.00	0.00	0.00	0 00	0 00	0.00	0.00	0 00	0.00	0.00	0 00	0 00	0 00	0 00	0 00
16	Number of pipeline crossings ⁴	0	0	0	0	0	0	0	0	0	0	1 0	0	0	0	0	0
17	Number of pipeline crossings Number of transmission line crossings	0	0	0	0	0	0	0	1 0	0	0	1 0	0	0	0	0	1 0
18		0	0	0	-0	1	0	0	10	-	0	-	0	2	1 0	0	0
19	Number of IH, US and state highway crossings Number of farm-to-market (FM) road crossings	0	0	-	0	0	1	- 0	- 6	0	0	 	0	0	0	0	1 0
20	Number of raim-to-market (FM) road crossings Number of cemeteres within 1,000 feet of the ROW centerline	0	0	 	0	0	0	0	0	0	0		0	0	0	0	0
		0	0	0	0	0	0	1 0	0	0	0	0	0	0	0	0	1 0
21	Number of FAA registered public/military airports with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW centerline				0		_										
22	Number of FAA registered public/military airports ⁵ having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline	0	0	0		0	0	0	0	0	0	0	0	0	0	0	0
23	Number of private airstrips within 10,000 feet of the ROW centerline	0	0	0	0	1	0	0	0_	0	2	0	0		2	0	0
24	Number of heliports within 5,000 feet of the ROW centerline	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
25	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
26	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline	0_	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
	Anotholics																
27	Estimated length of ROW within foreground visual zone [®] of IH, US and state highways	0 52	0 00	0 38	0 00	1 16	0 00	0 00	0 36	0 53	0 00	0 00	0 00	2 63	0 00	0 00	0 00
28	Estimated length of ROW within foreground visual zone ⁶ of FM roads	0 00	0 00	0 00	0 00	0 00	0 74	0.41	0 00	0 00	0 00	0 53	0 00	0 00	0 00	0 45	0 00
29	Estimated length of ROW within foreground visual zone [RIF] of parks/recreational areas*	0 00	0 00	0 25	0.00	0.00	0 00	0 00	0.07	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	Ecology																
30	Length of ROW across upland woodlands/brushlands	1 05	0 88	0 19	0 61	0 88	0 51	0 77	0 04	0 53	1 15	0 44	0 89	1 59	0 23	0 54	1 11
31	Length of ROW across bottomland/npanan woodlands	0 00	0 05	0 05	0 00	0 10	0 00	0 00	0.00	0.01	0 16	0 03	0 03	0 04	0 00	0 04	0 00
32	Length of ROW across NWI mapped wetlands	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
33	Length of ROW across known habitat of federally listed endangered or threatened species	0 00	0.00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
34	Area of ROW across golden-cheeked warbler modeled habitat where three models agree (acres)	4 4	0.7	06	5 7	36	0.0	01	0.0	00	6.5	03	5 5	41	0.0	0 3	0.5
35	Length of ROW across open water (lakes, ponds)	0 00	0 00	0 00	0 00	0 03	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
36	Number of stream crossings	2	2	. 0	1	2	1	0	0	1	2	3	2	3	0	2	0
37	Number of niver crossings	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
38	Length of ROW parallel (within 100 feet) to streams or rivers	0 00	0 00	0 00	0 00	0 10	0 00	0 12	0 00	0 00	0 15	0 00	0 02	0 00	0 00	0 01	0 07
39	Length of ROW across 100-year floodplains	0 04	0 00	0 07	0 00	0 17	0 00	0 00	0 00	0 13	0 42	0 00	0 00	0 08	0 00	0 08	0 00
	Cultural Resources																
40	Number of recorded historic or prehistoric sites crossed by ROW	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	0
41	Number of additional recorded historic or prehistoric sites within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0
42	Number of National Register-listed or determined eligible sites crossed by ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
43	Number of additional National Register-listed or determined eligible sites within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	Ö	0	0	0	0
44	Length of ROW across areas of high archeological/historic site potential	0.6	03	0 4	0.5	11	07	03	0.4	11	0.9	01	0.6	20	04	11	0.8
	· · · · · · · · · · · · · · · · · · ·																

Single-family and multi-family dwellings, and related structures mobile homes apartment buildings commercial structures industrial structures business structures, churches hospitals, nursing homes schools or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 text of the entenherine of a trainisms on project of 250kV or less

²Apparent property boundaries created by existing roads highways or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundaries criteria

³Defined as parks and recreational areas owned by a governmental body or an organized group club or church within 1,000 feet of the centerline of the project *Only metallic pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and parallelling calculations

5As listed in the Chart Supplement South Central U.S. (FAA 2018b formerly known as the Airport/Facility Directory South Central U.S.) and FAA 2018a

*One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of interstates. US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria

One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates, US and state highway ortena and/or with the total length of ROW within the visual foreground zone of FM roads criteria.

All largith measurements are shown in miles unless roled otherwise. All linear measurements were obtained from aerial photography flown February and October 2018 with the exception of high probability areas for archeological historical/resources which were measured from the USGS Topographic Quadrangles. The aerial photography was ontherectified to National Maps Accuracy Standards of 4-19 feet.

	Evaluation Criteria																
	Land Use	T3	T4	U	U1	U2	U3		V1	V2	V3	V4	W	W1	W2	W3	W4
1	Length of pnmary alternative route (miles)	0 02	0 10	1 69	1 33	0 49	0 42	1 11	1 05	1 04	0 96	1.77	0 15	1 31	1 08	1.11	3 28
	Number of habitable structures' within 300 feet of ROW centerline	0	0	5	0	0	0	7	1	2	0	0	2	1	1	2	5
	Number of habitable structures' currently located within 300 feet of an existing transmission line ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Length of ROW using existing transmission line ROW	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00
5	Length of ROW parallel and adjacent to existing transmission line ROW	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
6	Length of ROW parallel and adjacent to other existing ROW (roadways)	0 02	0 00	0 74	0 00	0 35	0 00	0 33	1 05	0 00	0 00	0 00	0 00	0 00	0.81	0 06	0 39
7	Length of ROW parallel and adjacent to apparent property lines ²	0 00	0 00	0 62	1 33	0 00	0 00	0.06	0 00	1 04	0 94	1 29	0 00	1 19	0 00	0.89	2 05
- 8	Sum of evaluation criteria 4, 5, 6, and 7	0 02	0.00	1 36	1 33	0 35	0 00	0 39	1 05	1 04	0 94	1 29	0.00	1 19	0.81	0 95	2 44
9	Percent of evaluation criteria 4, 5, 6, and 7	100%	0%	80%	100%	71%	0%	35%	100%	100%	98%	73%	0%	91%	75%	86%	74%
10	Length of ROW across parks/recreational areas ³	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0 00	0.00	0 00	0 00	0.00	0.00	0 00	0 00
11	Number of additional parks/recreational areas ³ within 1,000 feet of ROW centerline	0	0	0	0	0	ō	0	0	0	0	0	0	0	0	0	0
12	Length of ROW across cropland	0.00	0 00	0.00	0.00	0 00	0.00	0.00	0.00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00
13	Length of ROW across pasture/rangeland	0.02	0.05	0.70	1 13	0.00	0.08	0 02	0.47	0.55	0 17	0 10	0.00	0.83	1 06	0.50	1 71
14	Length of ROW across land irrigated by traveling systems (rolling or pivot type)	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
15	Length of ROW parallel and adjacent to pipelines ⁴	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0.00	0 00	0 00	0 66	0.00
	Number of pipeline crossings ⁴	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	1 0
	Number of transmission line crossings	<u> </u>	0	0	0	0	0	0	1 0	0	0	0	0	1 0	0	 	1 1
	Number of IH, US and state highway crossings	_ 0_	<u> </u>	1	0	0	0	1	0	0	Ö	0	0	1 0	0	 0	1 1
	Number of farm-to-market (FM) road crossings	ō	ŏ	0	- 0	<u> </u>	0	0	0	0	0	 	0	1 0	1 0	 1	
	Number of cametenes within 1,000 feet of the ROW centerline	<u> </u>	0	0	-0	0-	0	0	0	-	Ö	0	0	0	1 0	-	1 0
	Number of FAA registered public/military airports ⁵ with at least one runway more than 3,200 feet in length located within 20,000 feet of ROW canterline	0	٦	ō	0	0	0	0	0	0	0	1 0	0	0	0	0	1 0
		-0	0	0	0	0	0	0	0	0	0	0	0	0	0	 0	1 0
	Number of FAA registered public/military arports ⁵ having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline	0	0	2	0	0	0	1	0	0	2	2	0	1 0	1 0	 0	3
	Number of private airstrips within 10,000 feet of the ROW centerline Number of helicoids within 5,000 feet of the ROW centerline	0	1	. 2	0	0	4	- ;	0	<u> </u>	1	1	1 0	0	1 0	0	1 1
		- 0		0	0	0	. 0	0	0	0	0	- '	0	1 0	0	0	1 -
	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline	0	0	1	0	0	. 0	1	0	0	0	0	1 0	0	2	0	0
	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROVV centerine			<u>'</u>	<u> </u>			<u> </u>			- <u>'</u>		 	· ·		<u> </u>	+
		0 00	0 10	1 52	0 00	0 00	0 00	0 97	0.00	0.00	0.04	0 02	0 15	0.00	0 00	0.05	1 06
	Estimated length of ROW within foreground visual zone of IH, US and state highways																
	Estimated length of ROW within foreground visual zone ⁶ of FM roads	0 02	0 00	0 00	0 00	0 00	0 00	0.00	1 05	0 00	0 00	0 00	0 00	0 49	1 08	0 59	2 22
	Estimated length of ROW within foreground visual zone [N/7] of parks/recreational areas ³	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	Ecology												L		I		
30	Length of ROW across upland woodlands/brushlands	0 00	0 04	0 93	1 33	0 49	0 31	0 85	0 95	0 60	0 70	1 68	0 15	0 93	0 24	0 67	1 37
31	Length of ROW across bottomland/npanan woodlands	0 00	0.00	0 02	0 00	0 00	0 01	0 20	0 02	0 01	0 09	0 08	0 00	0 11	0 00	0 03	0 23
32	Length of ROW across NWI mapped wetlands	0 00	0 00	0 00	0 00	0 00	0 00	0.06	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
33	Length of ROW across known habitat of federally listed endangered or threatened species	0 00	0 00	0 00	0 00	0.00	0 00	0.00	0.00	0.00	0.00	0 00	0.00	0 00	0 00	0 00	0 00
	Area of ROW across golden-cheeked warbler modeled habitat where three models agree (acres)	0.00	0.00	12 5	0.0	0.6	25	10 1	77	0.0	3 6	13 2	0.00	0.2	0.00	39	3 4
	Length of ROW across open water (lakes, ponds)	0 00	0 00	0 02	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
	Number of stream crossings	0	0	2	0	0	2	2	1	0	1	1	0	2	0	1	6
	Number of river crossings	0	0	0 00	0	0 00	0 00	0 00	0 00	0	0	0 00	0	0	0	0	0
38	Length of ROW parallel (within 100 feet) to streams or rivers	0 00	0.00		0 00					0.00	0 00		0 00	0 00	0 00	0 00	0 09
	Length of ROW across 100-year floodplains	0 00	0.00	0 11	0 00	0 00	0 00	0 23	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 06	0 56
	Cultural Resources							L						 			
	Number of recorded historic or prehistoric sites crossed by ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Number of additional recorded historic or prehistoric sites within 1,000 feet of ROW centerline	0	0	2	0	0	0	2	0	1	0	0	1	0	0	0	0
	Number of National Register-listed or determined eligible sites crossed by ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Number of additional National Register-listed or determined eligible sites within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
44	Length of ROW across areas of high archeological/historic site potential	0.0	0.0	11	0 0	0.0	04	11	03	0.6	05	12	02	0.9	0.5	09	19

Not

Single-family and multi-family dwellings, and related structures, mobile homes, apartment buildings, commercial structures industrial structures business structures churches hospitals, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerine of a trainismoson project of 250% or less.

²Apparent property boundanes created by existing roads, highways, or railroad ROWs are not 'double-counted' in the length of ROW parallel to apparent property boundanes criteria.

Defined as parks and recreational areas owned by a governmental body or an organized group club or church within 1,000 feet of the centerine of the project.

*Only metalic pipulines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations.

*Only metallic pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

*As listed in the Chart Supplement South Central U.S. (FAA 2018b formerly known as the Airport/Facility Directory South Central U.S.) and FAA 2018a

*One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of interstates. US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria.

⁷One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates, US and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria.

All length measurements are shown in miles unless noted otherwise. All linear measurements were obtained from senial photography flown February and October 2018 with the exception of high probability areas for archeological instonceal/resources which were measured from the USGS Topographic Quadrangles. The senial photography was orthorectified to National Map Accuracy Standards of +f-9 feet.

	Evaluation Criteria		V4			T -	T V4	T wn	1 100	-	T =4		
	Land Use	X	X1	X2	X3	Y	Y1	Y2	Y3	Z	Z1	Z2	Z3
	Length of primary alternative route (miles)	0 12	1 59	1 02	0.06	1 74	1 06	0 04	1 43	1 26	1 06	1 04	0.84
2	Number of habitable structures' within 300 feet of ROW centerline	0	1	0	1	0	1	0	0	0	0	0	2
3	Number of habitable structures' currently located within 300 feet of an existing transmission line ROW centerline	0_	0	0	1	0	0	0	0	0	0	0	0
4	Length of ROW using existing transmission line ROW	0 00	0 00	0 00	0 06	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00
5	Length of ROW parallel and adjacent to existing transmission line ROW	0.00	0 00	0 00	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
6	Length of ROW parallel and adjacent to other existing ROW (roadways)	0 00	0 00	0 00	0.00	1.50	1 02	0.00	0.00	1 26	0 00	0 00	0 00
7	Length of ROW parallel and adjacent to apparent property lines ²	0.00	1 27	1 01	0 00	0 00	0 00	0 02	0 49	0.00	0 82	0 87	0 56
8	Sum of evaluation criteria 4, 5, 6, and 7	0 00	1 27	1 01	0 06	1 50	1 02	0 02	0 49	1 26	0 82	0 87	0 56
9	Percent of evaluation criteria 4, 5, 6, and 7	0%	80%	99%	100%	86%	96%	50%	34%	100%	77%	84%	67%
10	Length of ROW across parks/recreational areas ³	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
11	Number of additional parks/recreational areas ³ within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
12	Length of ROW across cropland	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0.00	0 00	0.00
13	Length of ROW across pasture/rangeland	0.08	0 00	0 59	0 00	1 25	0 41	0 03	0 28	1 10	0.98	0 48	0.06
14	Length of ROW across land irrigated by traveling systems (rolling or privot type)	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00
15	Length of ROW parallel and adjacent to pipelines	0.00	0.00	0 00	0 00	0 00	0 00	0 00	0.00	0.00	0 00	0.00	0.00
16	Number of pipeline crossings*	0	1	0	0	0	0	0	0	0	0	0	0
17	Number of transmission line crossings	0	0	0	0	0	0	0	0	0	1 0	0	0
18	Number of IH, US and state highway crossings	1	ő	0	0	0	0	 	0	-	1 0	0	 1 -
19	Number of farm-to-market (FM) road crossings	0	0	0	0	0	1	1	0	0	-	0	0
20	Number of cametenes within 1,000 feet of the ROW centerline	0	0	0	0	0	0	6	0	0	0	0	0
21	Number of FAA registered public/military airports ⁵ with at least one runway more than 3,200 feet in length located writhin 20,000 feet of ROW centerline	0	G	0	0	0	0	0	0	0	0	0	 0 -
22		0	0	 0 -	0	0	-	0	0	0	0	0	0
23	Number of FAA registered public/military airports having no runway more than 3,200 feet in length located within 10,000 feet of ROW centerline		0	0	1			_					
24	Number of private airstrips within 10,000 feet of the ROW centerline	0		0	-	0	0	0	1	1	1	0	3
25	Number of heliports within 5,000 feet of the ROW centerline		0	0	0	0		0	1	0	0	0	1
	Number of commercial AM radio transmitters within 10,000 feet of the ROW centerline	0	0	_	0	0	0	0	0	<u> </u>	0	0	0
20	Number of FM radio transmitters, microwave towers, and other electronic installations within 2,000 feet of ROW centerline	0	0	0	ļ .	0	0	0	0	0	0	0	0
	Asethetics	0.40	0.00	0.00	0.00				<u> </u>			L	
	Estimated length of ROW within foreground visual zone* of IH, US and state highways	0 12	0 00	0 00	0 06	1 74	0 00	0 00	0.05	0 79	0 00	0 00	0 84
	Estimated length of ROW within foreground visual zone of FM roads	0 00	0 53	0 48	0 00	0 00	0 51	0 04	0 00	0 00	0 00	0 00	0 00
29	Estimated length of ROW within foreground visual zone [6][7] of parks/recreational areas*	0.00	0 00	0 00	0 00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0 00
	Ecology												
30	Length of ROW across upland woodlands/brushlands	0 02	1 49	0 63	0 02	1 45	0 69	0 00	1 15	0 33	0 97	0 60	0 70
31	Length of ROW across bottomland/riparian woodlands	0 00	0 09	0 02	0 00	0 04	0 00	0 00	0 00	0 00	0 00	0 06	0 02
32	Length of ROW across NWI mapped wetlands	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00
33	Length of ROW across known habitat of federally listed endangered or threatened species	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0.00	0 00	0 00	0 00	0.00
34	Area of ROW across golden-cheeked warbler modeled habitat where three models agree (acres)	0.0	48	53	0 1	0.0	0.6	0.0	23	0.0	0 1	0.0	07
35	Length of ROW across open water (lakes, ponds)	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 02
36	Number of stream crossings	0	1	2	0	1	0	0	0	0	1	2	1
37	Number of nver crossings	0	0	0	0	0	0	0	0	0	0	0	0
38	Length of ROW parallel (within 100 feet) to streams or rivers	0.00	0 10	0 00	0 00	0 00	0 00	0 00	0 00	0 04	0 00	0 00	0 00
39	Length of ROW across 100-year floodplains	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 00	0 18
	Cultural Resources												
40	Number of recorded historic or prehistoric sites crossed by ROW	0	0	0	0	0	0	0	0	0	0	0	0
41	Number of additional recorded historic or prehistoric sites within 1,000 feet of ROW centerline	1	0	0	0	1	0	0	0	0	0	Ō	1
42	Number of National Register-listed or determined eligible sites crossed by ROW	0	0	0	0	0	0	0	0	0	0	0	0
43	Number of additional National Register-listed or determined eligible sites within 1,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
44	Length of ROW across areas of high archeological/historic site potential	01	0.5	0.6	0 1	0.5	03	00	0.7	02	0.3	0.6	0.6
						لننب	_ , ,	لتتا	<u> </u>				

Single family and multi-family dwellings and related structures, mobile homes apartment buildings, commercial structures industrial structures business structures churches, hospitalis, nursing homes, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a daily or regular basis within 300 feet of the centerline of a transmission project of 20kW or less.

¹Apparent property boundanes created by existing roads. highways, or railroad ROWs are not "double-counted" in the length of ROW parallel to apparent property boundanes criteria.

'Defined as parks and recreational areas owned by a governmental body or an organized group club, or church within 1,000 feet of the centerline of the project

⁴Only metallic pipelines six inches and greater in diameter carrying hydrocarbons were quantified in the pipeline crossing and paralleling calculations

As listed in the Chart Supplement South Central U.S. (FAA 2018b formerly known as the Airport/Facility Directory South Central U.S.) and FAA 2018a

*One-half mile, unobstructed. Lengths of ROW within the visual foreground zone of interstates, US and state highway criteria are not "double-counted" in the length of ROW within the visual foreground zone of FM roads criteria.

⁷One-half mile, unobstructed Lengths of ROW within the visual foreground zone of parks/recreational areas may overlap with the total length of ROW within the visual foreground zone of interstates US and state highway criteria and/or with the total length of ROW within the visual foreground zone of FM roads criteria.

All length measurements are shown in miles unless noted otherwise. All linear measurements were obtained from senal photography flown February and October, 2018 with the exception of high probability areas of archaeological historical/resources which were measured from the USGS Topographic Quadrangles. The senal photography was orthorectified to National Map Accountry Standards of 4-19 feet.

Docket No. 49523 - Segment Data Chart _______ LCRA TSC Exhibit No. 15

	A	A1	A2	A3	A4	В	B1	B2	B3	B4	С	C1
	5.55	0.52	1.79	1.44	1.24	0.26	0.41	3.60	2.06	0.36	2.39	0.46
	5	5	0	0	0	5	0	3	0	0	9	0
ROW centerline	1	0	0	0	0	5	0	0_	0	0	3	0
	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29
	0.00	0.00	0.00	0.00	0.04	0.00	0.00	1.64	0.00	0.36	0.00	0.17
	3.98	0.50	1.47	1.11	0.78	0.00	0.00	1.40	1.83	0.00	2.14	0.00
	3.98	0.50	1.47	1.11	0.82	0.26	0.00	3.04	1.83	0.36	2.14	0.46
	72%	96%	82%	77%	66%	100%	0%	84%	89%	100%	90%	100%_
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2.33	0.02	1.26	1.06	0.66	0.00	0.00	2.16	1.80	0.36	1.49	0.11
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	1	0	0	0	0	1	0	0	0	0
	0	0	0	_0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	1	0	0	0	0
in length located within 20,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
gth located within 10,000 feet of ROW centerline	0	0_	0	0	0	0	0	0	0	0	0	0
	2	2	11	0	1	1	1	11	0	2	1	0
	1	0	0	0	0	0	1	0	0	0	0	0
	0	0	0	0	0	0	0	0_	0	0	0	0
00 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	11
				ļ								
	0.00	0.04	0.00	0.00	0.00	0.00	0.41	0.00	0.00	0.00	0.00	0.46
	1.01	0.00	0.00	0.47	0.00	0.20	0.00	1.14	0.46	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4.19	0.50	1.79	0.62	0.57	0.26	0.41	2.07	0.96	0.35	1.64	0.33
	0.24	0.00	0.00	0.07	0.03	0.00	0.00	0.19	0.01	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
)	43.9	5.6	3.4	2.8	2.3	3.2	1.0	5.0	0.2	0.0	9.8	2.7
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	1	1	2	1	0	0	2	2	0	1	0
	0	0	0	1	0	0	0	0	0	0	0	00
	0.57	0.00	0.00	0.00	0.02	0.00	0.00	0.08	0.22	0.00	0.00	0.00
	0.19	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ercial structures, industrial structures, **Docket shoul49523 - Segment Data Chart** o be inhabited by humans on a daily or regular basis within

ed" in the length of ROW parallel to apparent property

urch within 1,000 feet of the centerline of the project.

line crossing and paralleling calculations
rectory South Central U.S.) and FAA 2018a

₃ highway criteria are not "double-counted" in the length of

may overlap with the total length of ROW within the visual visual foreground zone of FM roads criteria d from aerial photography flown February and October, 2018 the USGS Topographic Quadrangles. The aerial

Docket No. 49523 - Segment Data Chart

	C2	C3	C4	C5	D	D1	D2	D3	D4	E	E1	E2
	1.98	1.03	1.52	1.95	1.44	1.21	0.07	1.00	0.43	1.99	0.15	2.01
	6	1	0	0	0	1	0	0	0	0	0	9
ROW centerline	0	0	0	0	0	1	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.00	0.00	0.00	0.00
	0.51	0.87	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.28	0.00	1.00	1.69	1.20	0.00	0.06	0.00	0.43	1.54	0.00	1.88
	1.79	0.87	1.00	1.69	1.20	1.21	0.06	0.00	0.43	1.54	0.00	1.88
	90%	84%	66%	87%	83%	100%	86%	0%	100%	77%	0%	94%
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.70	0.51	0.72	0.56	1.44	0.00	0.03	0.57	0.43	1.99	0.05	1.20
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	1	0
	0	0	0	0	0	0	0	0	0	0	1	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
in length located within 20,000 feet of ROW centerline		0	0	0	0	0	0	0	0	0	0	0
3th located within 10,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	11	1	1	0	0	1	11	0	0
	0	0	0	0	00	1	0	0	0	0	0	0
	0	0	0	0	0	0	0	00	0	0	0	0
30 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	1.21	0.00	0.00	0.00	0.00	0.15	0.00
	0.00	1.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.48
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
				<u> </u>								
	1.17	0.70	0.78	1.56	0.75	1.17	0.07	0.76	0.29	1.44	0.06	1.00
	0.11	0.00	0.00	0.00	0.00	0.03	0.00	0.01	0.00	0.00	0.00	0.13
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
()	7.3	4.7	0.0	11.8	0.9	8.3	0.4	1.7	0.1	4.4	0.8	5.0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	2	3	1	0	5	0	0	0	1	0	5
	0	0	0	0	0	0	0	0	0	0	0	0
	0.43_	0.00	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.04
	0.00	0.00	0.10	0.00	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00

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	E3	E4	F	F1	F2	F3	F4	G1	G2	G3	G4	H1
	1.48	4.47	1.58	0.14	1.14	1.47	0.26	0.94	1.13	2.39	1.22	0.29
	1	30	13	0	0	2	5	2	0	1	23	0
ROW centerline	0	30	13	0	0	0	2	0	0	0	0	0
	0.00	4.47	1.58	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	1.11	0.00	0.19	0.00	0.60	0.14	1.15	0.00
	1.19	0.00	0.00	0.00	0.01	1.34	0.00	0.51	0.30	2.01	0.00	0.00
	1.19	4.47	1.58	0.00	1.12	1.34	0.19	0.51	0.90	2.15	1.15	0.00
	80%	100%	100%	0%	98%	91%	73%	54%	80%	90%	94%	0%
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.21	1.16	0.07	0.02	1.01	0.38	0.05	0.27	0.18	0.49	0.35	0.19
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	1	0	0	0	0
	0	1	0	1	0	0	0	1	0	0	2	0
	1	0	0	0	1	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
in length located within 20,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
th located within 10,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	1	1	0	0	0	2	0	0	0	0
	0	0	0	1	0	0	0	1	0	0	0	1
	0	0	0	0	0	0	0	0	0	0	0	0
0 feet of ROW centerline	0	1	0	0	0	0	0	0	0	1	0	0
	0.00	0.58	0.00	0.14	0.00	0.00	0.26	0.94	0.00	0.00	1.22	0.29
	0.61	0.00	0.00	0.00	1.14	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.89	2.77	1.43	0.07	0.62	1.15	0.17	0.84	1.02	2.01	0.71	0.29
	0.02	0.03	0.00	0.00	0.10	0.04	0.00	0.00	0.10	0.00	0.03	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2.8	30.0	13.5	0.5	0.0	4.0	0.0	3	1.1	8.6	1.5	0.5
	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1	3	2	0	3	2	1	1	3	2	_2	0
	1	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.05	0.07	0.00	0.00	0.00	0.22	0.00
	0.00	0.29	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.11	0.00

ercial structures, industrial structures, **Document Sho**ckul 9523 - Segment Data Chart o be inhabited by humans on a daily or regular basis within

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Docket No. 49523 - Segment Data Chart LCRA TSC Exhibit No. 15

	H2	Н3	H4		11	12	13	14	15	J	J1	J2
	2.23	0.59	1.07	2.15	1.21	1.03	0.89	0.71	0.37	0.93	0.30	1.91
	0	1	0	0	0	0	0	1	0	0	0	0
ROW centerline	0	0	0	0	0	0	0_	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.10	0.00	0.00	1.21	0.00	0.89	0.00	0.00	0.00	0.29	0.00
	1.76	0.35	0.77	0.72	0.00	1.03	0.00	0.42	0.37	0.93	0.00	1.40
	1.76	0.45	0.77	0.72	1.21	1.03	0.89	0.42	0.37	0.93	0.29	1.40
	79%	76%	72%	33%	100%	100%	100%	59%	100%	100%	97%	73%
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	0_	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.03	0.46	0.48	0.91	0.23	0.80	0.38	0.31	0.00	0.93	0.22	1.09
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	0	0	_0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	11	0	0	0	0	0	0	0	0	0
	1	0	0	0	0	0	00	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
in length located within 20,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
gth located within 10,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	2	2	0	0	0	2	11	1	0	0
	0	0	11	1	1	0	0	1	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
30 feet of ROW centerline	0	1	0	0	11	0	0	0	0	0	0	0
	0.00	0.00	0.58	0.00	1.21	0.00	0.00	0.71	0.00	0.00	0.30	0.00
	0.52	0.00	0.00	0.00	0.00	0.00	0.89	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.53	0.12	0.48	1.14	1.19	0.75	0.53	0.35	0.37	0.42	0.08	1.44
	0.10	0.00	0.07	0.08	0.02	0.04	0.06	0.03	0.00	0.00	0.00	0.06
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
.)	2.9	1.0	2.9	18.6	7.6	1.3	0.1	4.5	4.4	6.4	0.6	3.7
	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	0	1	2	3	1	11	1	0	0	0	3
	0	0	0	0	0	0	0	0	0	0	0	0
	0.10	0.01	0.07	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.15
	0.00	0.05	0.30	0.00	0.09	0.00	0.00	0.05	0.00	0.00	0.05	0.00

ercial structures, industrial structures, **Document Mediul 9523 - Segment Data Chart** o be inhabited by humans on a daily or regular basis within

ed" in the length of ROW parallel to apparent property

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may overlap with the total length of ROW within the visual visual foreground zone of FM roads criteria d from aerial photography flown February and October, 2018 the USGS Topographic Quadrangles The aenal

	J3	J4	К	K2	K3	K4	L	L1	L2	L3	L4	M
	2.55	2.25	1.17	1.04	3.52	2.40	2.47	0.85	1.04	1.12	0.67	1.04
	4	9	0	4	4	2	2	2	0	0	0	0
ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.23	0.21	0.00	1.04	0.20	0.00	0.47	0.85	0.01	0.00	0.00	1.04
	0.50	1.59	1.08	0.00	1.56	1.46	1.84	0.00	0.26	1.11	0.41	0.00
	1.73	1.80	1.08	1.04	1.76	1.46	2.31	0.85	0.27	1.11	0.41	1.04
	68%	80%	92%	100%	50%	61%	94%	100%	26%	99%	61%	100%
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.54	0.65	0.76	0.00	1.71	0.99	2.31	0.00	0.39	0.11	0.18	1.04
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1	0	0	0	1	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	1	0	0	0	1	0	0	0	1	0	1	0
	0	0	0	0	0	0	0	0	0	0	0	0
in length located within 20,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
3th located within 10,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	1	0	0	1	1	0	0	0	3	2
	0	0	0	0	0	0	0	1	_ 0	0	1	0
	0	0	0	0	0	0	0	0	0	0	0	0
00 feet of ROW centerline	0	0	0	0	0	0	0	0	0	1	0	0
	0.00	0.65	0.00	0.00	0.00	0.56	0.00	0.36	0.00	0.00	0.67	0.00
	2.45	0.00	0.00	1.04	1.72	0.00	0.00	0.49	0.51	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.15	1.54	1.17	1.02	3.15	1.25	0.97	0.85	0.78	0.91	0.51	0.34
	0.18	0.03	0.00	0.00	0.22	0.06	0.04	0.00	0.12	0.06	0.02	0.00
	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
;)	2.9	10.0	3.1	0.7	2.8	6.2	7.0	1.1	2.2	5.3	3.2	0.0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	4	2	1	0	6	4	2	1	4	2	1	1
	11	0	0	0	1	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.12	0.00	0.00	0.00	0.00	0.35	0.00	0.00	0.00
	0.24	0.29	0.00	0.00	0.19	0.30	0.00	0.00	0.00	0.00	0.22	0.00

ercial structures, industrial structures, **Document Month 18523 - Segment Data Chart** o be inhabited by humans on a daily or regular basis within

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Docket No. 49523 - Segment Data Chart

												S EXIIIDITE ITO
	M1	M2	M3	M4	N	N1	N2	N4	0	01	02	O3
	2.53	2.26	0.40	9.33	0.88	1.44	0.99	0.24	1.47	0.08	1.07	1.56
	19	11	0	5	0	5	0	0	1	0	1	0
ROW centerline	0	0	0	1	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	1.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.29	0.00	0.40	5.50	0.00	0.00	0.95	0.00	0.00	0.08	0.46	0.41
	1.12	2.13	0.00	0.87	0.73	1.42	0.00	0.11	1.01	0.00	0.46	0.90
	2.41	2.13	0.40	8.25	0.73	1.42	0.95	0.11	1.01	0.08	0.92	1.31
	95%	94%	100%	88%	83%	99%	96%	46%	69%	100%	86%	84%
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	2	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.54	1.02	0.13	4.79	0.84	0.26	0.32	0.07	0.76	0.02	0.39	0.50
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	1	0	0	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0
	0	0	0	1	0	0	0	0	0	0	0	0
	0	0	0	0	0	1	1	1	0	0	1	0
	0	0	0	0	0	0	0	0	0	0	0	0
in length located within 20,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
gth located within 10,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
	2	0	0	2	2	1	0	0	2	0	0	0
	1	0	0	1	0	1	0	1	0	1	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
00 feet of ROW centerline	2	0	0	0	0	0	2	0	0	0	2	1
	1.75	0.00	0.02	7.37	0.00	0.00	0.00	0.24	0.03	0.00	0.00	0.23
	0.00	0.00	0.38	0.00	0.00	0.51	0.99	0.00	0.00	0.08	0.52	0.00
	0.00	0.00	0.00	1.33	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	2.35	1.65	0.40	4.27	0.33	1.33	0.72	0.12	0.93	0.08	0.69	1.07
	0.09	0.06	0.00	0.08	0.03	0.05	0.00	0.02	0.04	0.00	0.04	0.11
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
;)	12.9	4.1	0.0	42.8	0.2	6.6	0.0	0.0	5.0	0.1	2.2	3.9
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
	4	3	0	11	1	4	0	1	2	0	2	5
	0	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.17	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00	0.00
	0.01	0.00	0.00	0.14	0.09	0.00	0.00	0.05	0.16	0.00	0.00	0.45
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ercial structures, industnal structures, **Docubest Mustu49523 - Segment Data Chart** o be inhabited by humans on a daily or regular basis within

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Docket No. 49523 - Segment Data Chart

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	04	P	P1	P2	P3	P4	Q	Q1	Q2	Q3	Q4	R
	1.60	0.54	1.86	0.07	0.24	2.47	2.44	1.15	0.94	0.38	0.79	1.24
	5	0	0	0	1	2	0	3	0	3	2	3
ROW centerline	0	0	0	0	0	0	0	0	0	1	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.35	0.00	0.12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.33
	0.18	0.51	1.69	0.00	0.00	2.28	2.24	0.71	0.94	0.01	0.48	0.51
	1.53	0.51	1.81	0.00	0.00	2.28	2.24	0.71	0.94	0.01	0.48	0.84
	96%	94%	97%	0%	0%	92%	92%	62%	100%	3%	61%	68%
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.48	0.31	0.45	0.00	0.14	0.42	1.60	0.71	0.25	0.12	0.17	0.64
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	2	0	0	0	0	0	0	0	0	0	0	1
	0	0	0	0	1	0	0	0	0	1	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
in length located within 20,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
3th located within 10,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
	2	2	0	0	0	2	3	0	0	0	0	1
	1	0	1	0	0	1	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
00 feet of ROW centerline	0	0	1	2	0	0	0	0	0	0	0	0
	1.60	0.02	0.45	0.00	0.24	1.31	0.21	0.52	0.00	0.38	0.00	1.16
	0.00	0.00	0.49	0.07	0.00	0.00	2.02	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.00	0.00
	0.92	0.51	1.60	0.07	0.16	1.98	1.42	1.05	0.88	0.19	0.61	0.88
	0.00	0.00	0.03	0.00	0.05	0.06	0.23	0.00	0.05	0.05	0.00	0.10
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
;)	4.5	0.0	8.7	0.0	0.0	21.5	2.2	4.4	0.7	0.6	5.7	3.6
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
	1	0	5	0	0	2	4	2	2	0	1	2
	0	0	0	0	1	0	0	0	0	1	0	0
	0.00	0.00	0.07	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.00	0.10
	0.00	0.00	0.21	0.00	0.05	0.00	0.44	0.04	0.00	0.07	0.00	0.17
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LCRA TSC Exhibit No. 15

	R1	R2	R3	R4	S	S1	S2	S4	T	T1	T2	T3
	0.74	0.97	0.36	1.11	1.48	0.53	0.93	2.63	0.41	1.52	1.45	0.02
	0	1	1	18	1	2	0	33	0	0	2	0
ROW centerline	0	0	1	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.61	0.55	0.36	0.88	0.00	0.30	0.00	1.38	0.00	0.17	0.51	0.02
	0.00	0.00	0.00	0.00	1.35	0.00	0.31	0.95	0.41	1.22	0.83	0.00
	0.61	0.55	0.36	0.88	1.35	0.30	0.31	2.33	0.41	1.39	1.34	0.02
	82%	57%	100%	79%	91%	57%	33%	89%	100%	91%	92%	100%
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0_	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.00
	0.44	0.20	0.36	0.39	0.15	0.00	0.00	0.53	0.36	0.98	0.67	0.02
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0_	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	2	0	0	0	0
	1	0	0	0	0	11	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
in length located within 20,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
3th located within 10,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	2	0	0	1	2	0	0	0
	1	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
00 feet of ROW centerline	0	11	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.36	0.53	0.00	0.00	0.00	2.63	0.00	0.00	0.00	0.00
	0.74	0.41	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.45	0.00	0.02
	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
								ļ				<u> </u>
	0.51	0.77	0.04	0.53	1.15	0.44	0.89	1.59	0.23	0.54	1.11	0.00
	0.00	0.00	0.00	0.01	0.16	0.03	0.03	0.04	0.00	0.04	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
;)	0.0	0.1	0.0	0.0	6.5	0.3	5.5	4.1	0.0	0.3	0.5	0.0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1	0	0	1	2	3	2	3	0	2	0	0
	0_	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.12	0.00	0.00	0.15	0.00	0.02	0.00	0.00	0.01	0.07	0.00
	0.00	0.00	0.00	0.13	0.42	0.00	0.00	0.08	0.00	0.08	0.00	0.00
		•		•	•	•	•	-	-	•	-	•

Docket No. 49523 - Segment Data Chart

ercial structures, industrial structures, **Discrets Mostu49523 - Segment Data Chart** o be inhabited by humans on a daily or regular basis within

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Docket No. 49523 - Segment Data Chart

	T4	U	U1	U2	U3	٧	V1	V2	V3	V4	W	W1
	0.10	1.69	1.33	0.49	0.42	1.11	1.05	1.04	0.96	1.77	0.15	1.31
	0	5	0	0	0	7	1	2	0	0	2	1
ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.74	0.00	0.35	0.00	0.33	1.05	0.00	0.00	0.00	0.00	0.00
	0.00	0.62	1.33	0.00	0.00	0.06	0.00	1.04	0.94	1.29	0.00	1.19
	0.00	1.36	1.33	0.35	0.00	0.39	1.05	1.04	0.94	1.29	0.00	1.19
	0%	80%	100%	71%	0%	35%	100%	100%	98%	73%	0%	91%
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.05	0.70	1.13	0.00	0.08	0.02	0.47	0.55	0.17	0.10	0.00	0.83
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	1	0	0	0	0	1
	0	0	0	0	0	0	0	0	0	0	0	0
	0	1	0	0	0	1	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
in length located within 20,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
3th located within 10,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
	0	2	0	0	0	1	0	0	2	2	0	0
	1	0	0	0	1	0	0	0	1	1	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
00 feet of ROW centerline	0	1	0	0	0	1	0	0	0	0	0	0
	0.10	1.52	0.00	0.00	0.00	0.97	0.00	0.00	0.04	0.02	0.15	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	1.05	0.00	0.00	0.00	0.00	0.49
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.04	0.93	1.33	0.49	0.31	0.85	0.95	0.60	0.70	1.68	0.15	0.93
	0.00	0.02	0.00	0.00	0.01	0.20	0.02	0.01	0.09	0.08	0.00	0.11
	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
;)	0.0	12.5	0.0	0.6	2.5	10.1	7.7	0.0	3.6	13.2	0.0	0.2
	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	2	0	0	2	2	1	0	1	1	0	2
	0	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.11	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00

ercial structures, industrial structures, **Doculest Structur49523 - Segment Data Chart** o be inhabited by humans on a daily or regular basis within

ed" in the length of ROW parallel to apparent property

urch within 1,000 feet of the centerline of the project.

line crossing and paralleling calculations
ectory South Central U.S.) and FAA 2018a.

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may overlap with the total length of ROW within the visual visual foreground zone of FM roads criteria.

d from aerial photography flown February and October, 2018 the USGS Topographic Quadrangles. The aerial

Docket No. 49523 - Segment Data Chart

1 00	A T	~~	·	L : L	:.	A1 -	4 5
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Water Inches and the Control of the	W2	W3	W4	Х	X1	X2	Х3	Υ	Y1	Y2	Y3	Z
	1.08	1.11	3.28	0.12	1.59	1.02	0.06	1.74	1.06	0.04	1.43	1.26
	1	2	5	0	1	0	1	0	1	0	0	0
ROW centerline	0	0	0	0	0	0	1	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.81	0.06	0.39	0.00	0.00	0.00	0.00	1.50	1.02	0.00	0.00	1.26
	0.00	0.89	2.05	0.00	1.27	1.01	0.00	0.00	0.00	0.02	0.49	0.00
	0.81	0.95	2.44	0.00	1.27	1.01	0.06	1.50	1.02	0.02	0.49	1.26
	75%	86%	74%	0%	80%	99%	100%	86%	96%	50%	34%	100%
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	1.06	0.50	1.71	0.08	0.00	0.59	0.00	1.25	0.41	0.03	0.28	1.10
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	11	0	0	1	0	0	0	0	0	0	0
	0	0	1	0	0	0	0	0	0	0	0	0
	0	0	1	1	0	0	0	0	0	0	0	0
	0	1	0	0	0	0	0	0	1	1	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
in length located within 20,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
gth located within 10,000 feet of ROW centerline	0	0	0	0	0	0	0	0	0	0	0	0
	0	0	3	0	0	0	1	0	0	0	1	1
	0	0	1	0	0	0	0	0	0	0	1	0
	0	0	0	0	0	0	0	0	0	0	0	0
00 feet of ROW centerline	2	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.05	1.06	0.12	0.00	0.00	0.06	1.74	0.00	0.00	0.05	0.79
	1.08	0.59	2.22	0.00	0.53	0.48	0.00	0.00	0.51	0.04	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.24	0.67	1.37	0.02	1.49	0.63	0.02	1.45	0.69	0.00	1.15	0.33
	0.00	0.03	0.23	0.00	0.09	0.02	0.00	0.04	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
;)	0.0	3.9	3.4	0.0	4.8	5.3	0.1	0.0	0.6	0.0	2.3	0.0
	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	0	1	6	0	1	2	0	1	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	0.00	0.00	0.09	0.00	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.04
	0.00	0.06	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

ercial structures, industrial structures, **Doculect Mustur49523 - Segment Data Chart** o be inhabited by humans on a daily or regular basis within

ed" in the length of ROW parallel to apparent property

urch within 1,000 feet of the centerline of the project line crossing and paralleling calculations. rectory South Central U S) and FAA 2018a.

 \Rightarrow highway criteria are not "double-counted" in the length of

may overlap with the total length of ROW within the visual visual foreground zone of FM roads criteria.

d from aenal photography flown February and October, 2018 the USGS Topographic Quadrangles The aerial

Docket No. 49523	23 - Segment Data Chart							
	Z 1	Z 2	Z3					
	1.06	1.04	0.84					
	0	0	2					
ROW centerline	0	0	0					
	0.00	0.00	0.00					
	0.00	0.00	0.00					
	0.00	0.00	0.00					
	0.82	0.87	0.56					
	0.82	0.87	0.56					
	77%	84%	67%					
	0.00	0.00	0.00					
	0	0	0					
	0.00	0.00	0.00					
	0.98	0.48	0.06					
	0.00	0.00	0.00					
	0.00	0.00	0.00					
	0	0	0					
	0	0	0					
	0	0	1					
	0	0	0					
	0	0	0					
in length located within 20,000 feet of ROW centerline	0	0	0					
gth located within 10,000 feet of ROW centerline	0	0	0					
-	1	0	3					
	0	0	1					
	0	0	0					
00 feet of ROW centerline	0	0	0					
	0.00	0.00	0.84					
	0.00	0.00	0.00					
	0.00	0.00	0.00					
	0.97	0.60	0.70					
	0.00	0.06	0.02					
	0.00	0.00	0.00					
	0.00	0.00	0.00					
;)	0.1	0.0	0.7					
	0.00	0.00	0.02					
	1	2	1					
	0	0	0					
	0.00	0.00	0.00					
	0.00	0.00	0.18					
								

ercial structures, industrial structures, **Docidest Medu49523 - Segment Data Chart** o be inhabited by humans on a daily or regular basis within

ed" in the length of ROW parallel to apparent property

urch within 1,000 feet of the centerline of the project line crossing and paralleling calculations ectory South Central U.S.) and FAA 2018a.

₃ highway criteria are not "double-counted" in the length of

may overlap with the total length of ROW within the visual visual foreground zone of FM roads criteria d from aenal photography flown February and October, 2018 the USGS Topographic Quadrangles. The aenal