

TABLE 4-1. ENVIRONMENTAL AND LAND USE DATA FOR THE PROPOSED ALTERNATIVE ROUTES

EVALUATION CRITERIA																					
LAND USE	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	
1 Length of route (feet)	17,250	15,492	14,499	16,835	16,272	14,179	11,960	13,485	12,901	13,171	13,194	13,318	15,809	15,692	28,629	23,396	24,030	29,873	24,460	20,560	
2 Length of route (miles)	3.27	2.93	2.75	3.19	3.08	2.69	2.27	2.55	2.44	2.49	2.50	2.52	2.99	2.97	5.42	4.43	4.55	5.66	4.63	3.89	
3 Number of directly affected habitable structures ^[1] within 300 feet of route centerline	1	6	4	7	9	33	32	35	38	39	35	35	37	42	168	167	167	165	164	198	
4 Number of directly affected habitable structures ^[1] also within 300 feet of an existing transmission line	0	0	0	0	3	4	4	4	4	4	4	4	4	4	161	161	161	161	161	37	
5 Length of route using existing transmission line ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12,870	12,870	12,870	12,870	12,870	4,554	
6 Length of route parallel to existing transmission line ROW	0	0	0	0	202	202	202	0	0	0	0	0	0	0	0	0	0	0	0	0	
7 Length of route not utilizing/paralleling existing transmission line ROW	17,250	15,492	14,499	16,835	16,070	13,977	11,758	13,485	12,901	13,171	13,194	13,318	15,809	15,692	15,759	10,526	11,160	17,003	11,590	16,006	
8 Length of new ROW required for route	17,250	15,492	14,499	16,835	16,272	14,179	11,960	13,485	12,901	13,171	13,194	13,318	15,809	15,692	15,759	10,526	11,160	17,003	11,590	16,006	
9 Length of route parallel to apparent property lines (or other natural or cultural features) ^[2]	4,107	2,552	2,677	4,209	393	3,784	1,563	1,840	1,781	3,546	1,781	1,781	4,569	3,866	8,615	4,076	3,713	5,847	3,262	747	
10 Length of route parallel to other existing ROW (roadways, railways, canals, etc.)	1,253	2,023	1,751	2,085	5,826	2,155	2,155	1,814	0	3,023	1,721	1,120	0	5,605	0	1,120	1,120	1,538	1,120	10,455	
11 Length of route not parallel to railroad ROW, apparent property lines, or other existing ROW (roadways, railways, etc.)	11,890	10,917	10,071	10,541	10,054	8,240	8,242	9,831	11,119	6,603	9,691	10,418	11,240	6,221	20,014	18,200	19,198	22,488	20,078	9,358	
12 Percent of route parallel with apparent features (existing ROWs or property lines)	39%	57%	59%	60%	55%	80%	77%	63%	28%	53%	55%	35%	40%	63%	75%	77%	74%	68%	71%	78%	
13 Length of route across parks/recreational areas ^[3]	0	0	0	0	315	315	315	0	0	0	0	0	0	0	0	0	0	0	0	0	
14 Number of additional parks/recreational areas ^[3] within 1,000 feet of route centerline	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15 Length of route across agricultural land/cropland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16 Length of route across pastureland	7,822	5,033	3,524	7,072	8,343	7,282	5,498	5,562	6,273	7,710	4,749	5,364	8,172	6,777	12,781	9,204	8,016	11,906	5,627	10,311	
17 Length of route across mobile irrigated cropland or pastureland	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18 Length of route parallel to existing pipeline ROW	1,379	4,192	4,192	3,739	2,754	5,445	5,445	4,904	1,811	372	3,689	1,799	1,811	372	12,870	12,870	12,870	12,870	12,870	4,926	
19 Number of pipeline crossings	30	23	23	22	31	36	34	26	26	26	26	28	28	28	60	54	84	73	75	44	
20 Number of transmission line crossings	0	0	0	0	0	1	1	0	0	0	0	0	0	0	4	4	4	4	4	4	
21 Number of U.S. and state highway crossings	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	2	2	2	2	2	
22 Number of F.M. road crossings	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23 Number of local road crossings	1	2	2	2	1	3	2	2	2	2	2	2	3	3	6	5	5	6	5	2	
24 Number of heliports within 5,000 feet of route centerline	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
25 Number of private airstrips within 10,000 feet of route centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
26 Number of FAA-listed airports ^[4] within 10,000 feet of route centerline having no runway more than 3,200 feet	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
27 Number of FAA-listed airports ^[4] within 20,000 feet of route centerline having at least one runway more than 3,200 feet	2	2	2	2	2	1	1	2	2	2	2	2	2	2	3	3	3	3	3	3	
28 Number of commercial AM radio transmitters within 10,000 feet of route centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29 Number of FM radio transmitters, microwave relay stations, and other electronic installations etc. within 2,000 feet of route centerline	1	1	1	1	1	2	2	2	2	2	2	2	2	2	3	3	3	3	3	2	
30 Number of water wells within the ROW	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
31 Number of oil and gas wells within the ROW	0	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
AESTHETICS																					
32 Estimated length of route within foreground visual zone ^[5] of U.S. and state highways	13,934	10,782	9,789	8,033	15,598	8,624	6,299	7,382	7,240	7,002	7,002	6,542	10,254	9,950	17,283	15,675	15,675	17,178	15,570	14,082	
33 Estimated length of route within foreground visual zone ^[5] of FM and county roads	6,136	6,771	6,054	8,356	3,644	10,651	8,432	8,874	9,708	9,979	10,002	10,126	12,388	12,271	24,017	18,784	19,418	25,263	19,848	15,948	
34 Estimated length of route within foreground visual zone ^[5] ^[6] of park and recreational areas ^[3]	6,089	6,008	6,008	6,008	5,046	4,519	4,519	5,602	4,499	3,836	3,836	3,836	3,183	2,520	0	0	0	0	0	0	
ECOLOGY																					
35 Length of route across upland woodlands	6,980	7,428	7,964	6,862	6,115	5,259	4,931	4,572	3,098	1,843	4,837	4,102	4,676	4,824	3,360	1,923	3,256	3,510	4,476	3,870	
36 Length of route across bottomland/riparian woodlands	1,157	1,157	1,157	1,157	77	0	0	83	83	179	179	179	90	90	207	207	207	1,087	1,087	109	
37 Length of route across Coastal Management Zone	9,572	7,268	6,551	9,199	8,563	10,564	8,345	11,872	12,818	13,088	13,111	13,235	15,809	15,962	28,629	23,396	24,030	29,873	24,460	20,560	
38 Length of route across National Wetland Inventory mapped wetlands	154	845	845	622	0	0	0	0	244	232	232	459	244	223	241	241	241	771	771	566	
39 Length of route across critical habitat of federally listed threatened or endangered species	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
40 Length of route across open water (lakes or ponds)	86	259	245	136	93	99	15	26	26	11	26	11	118	103	98	14	14	116	63	98	
41 Number of stream and canal crossings	5	6	6	6	4	5	4	8	4	4	4	5	8	4	8	6	6	9	7	5	
42 Length of route parallel to streams within 100 feet of route centerline	1,832	1,164	1,164	1,035	797	3,416	1,298	0	1,298	0	0	0	4,267	129	5,733	0	0	2,118	0	129	
43 Length of route across 100-year floodplains	1,228	1,228	1,228	1,228	83	0	0	75	75	75	75	75	101	101	3,800	3,800	3,800	5,484	5,484	2,955	
CULTURAL RESOURCES																					
44 Number of cemeteries within 1,000 feet of the route centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
45 Number of recorded historical and archeological sites crossed within ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	2	2	0	
46 Number of additional recorded historical and archeological sites within 1,000 feet of route centerline	0	0	0	0	0	0	0	1	1	1	1	1	1	1	2	2	2	1	1	0	
47 Number of National Register of Historic Places listed or determined-eligible properties within ROW	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
48 Number of additional National of Register Historic Places listed or determined-eligible properties within 1,000 feet of route centerline	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
49 Length of route across areas of high archeological/historic site potential	1,073	1,073	1,073	1,073	24	24	24	0	0	0	0	0	0	0	7,503	7,503	7,503	9,215	9,215	3,869	

[1] Single-family and multi-family dwellings and related structures, mobile homes, apartment buildings, commercial structures, industrial structures, business structures, churches, hospitals, schools, or other structures normally inhabited by humans or intended to be inhabited by humans on a regular basis within 300 feet of the centerline of a transmission line project 230-kV or less.
 [2] Apparent property boundaries created by existing roads, highway, or railroad ROW are not "double counted" in the length of ROW parallel to apparent property boundaries criteria. Property boundary information was provided by CenterPoint Energy.
 [3] Defined as parks and recreational areas owned by a governmental body or an organized group, club, or church.
 [4] As listed in the Southwest Region Airport Directory (FAA, 2022).
 [5] 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.
 [6] 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.

NOTE: All length measurements in feet unless noted otherwise. All linear measurements were obtained from various aerial photograph sources: Nemap 2022 and Google Earth with the exception of high probability areas for archaeological historical/resources which were measured using GIS software.

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