

COVID-19 Texas County by County Hospital Bed Demand versus Supply

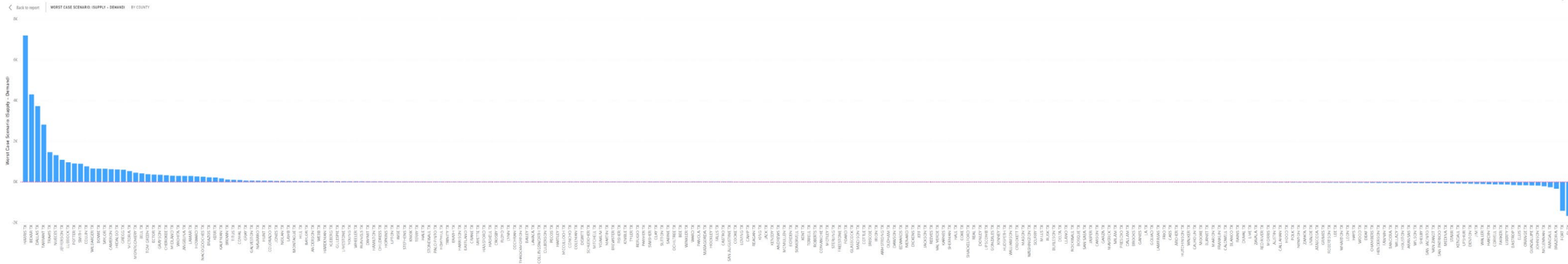


Fig 1: The above figure shows Supply minus Demand at peak using the Imperial-College-COVID19-NPI-modelling-16-03-2020 and the exponential regression model in the article published. All appearing above the red dashed line have capacity even at peak. All Counties that at or falling below the red line are will not be able to meet demand. In this scenario, peak will hit mid-May. Planning for servicing counties that either do not have hospitals or overburdened systems should be made. Some Counties will have capacity to redirect to needed areas.

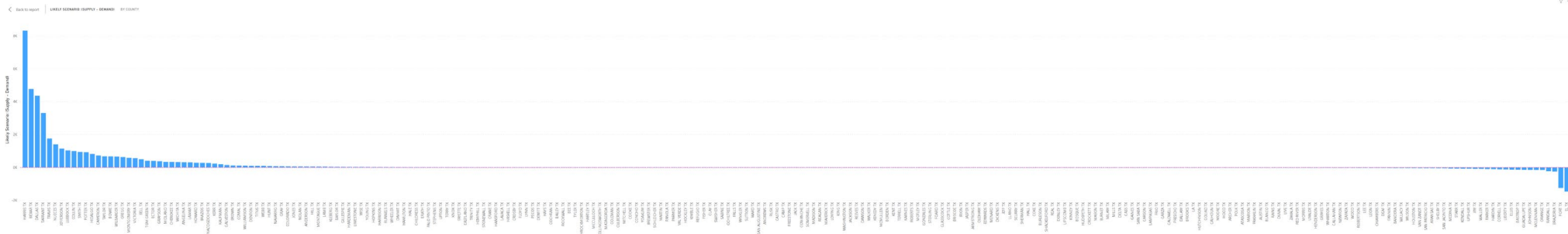


Fig 2: In the more likely scenario where some precautions are taken to flatten the curve, data suggests some Counties will still be unable to meet the needed demand. The peak will hit in early June. Planning for servicing counties that either do not have hospitals or overburdened systems should be made. Some Counties will have capacity to redirect to needed areas.



Fig 3: In the scenario where all precautions are taken to flatten the curve, data suggests almost all Counties will be able to meet the needed demand. The peak will hit in June. Planning for servicing counties that either do not have hospitals or overburdened systems should be made. Several Counties will have capacity to redirect to needed areas.

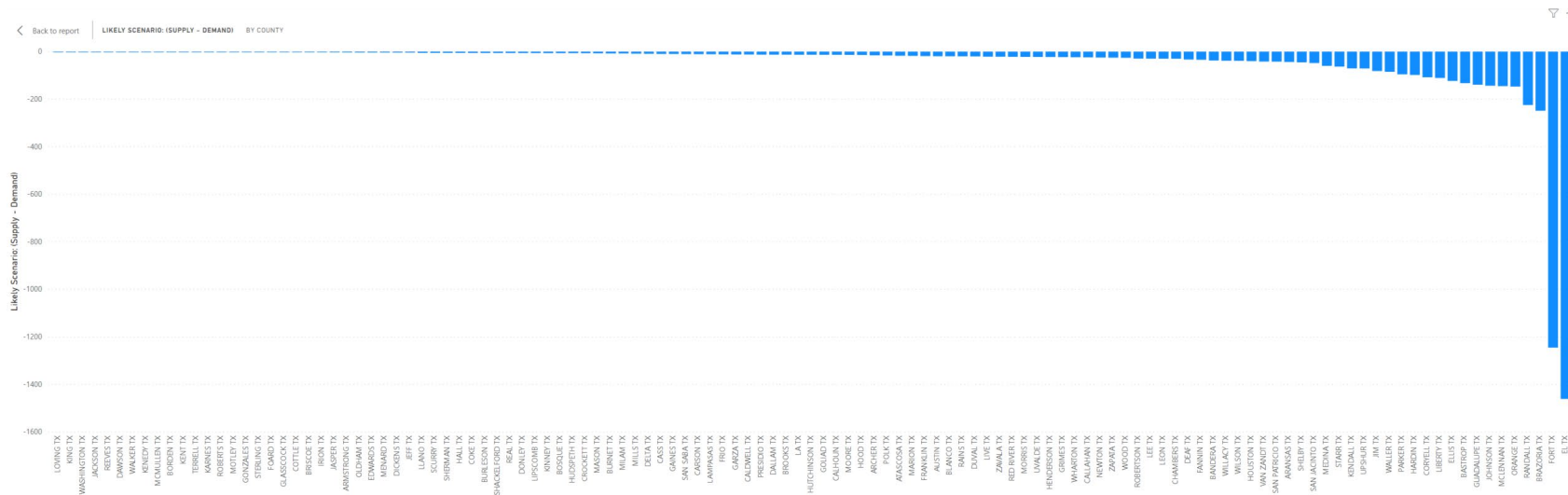


Fig 4: The figure above represents Counties that will run out of beds at peak for the Worst-Case scenario

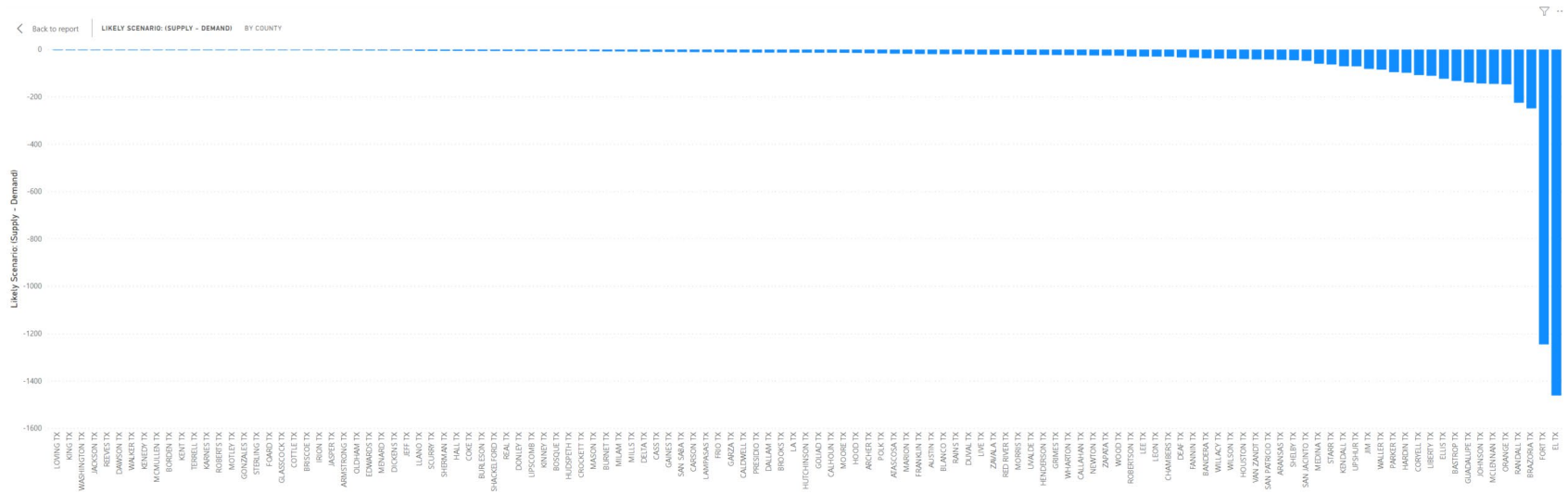


Fig 5: The figure above represents Counties that will run out of beds at peak for the Likely scenario

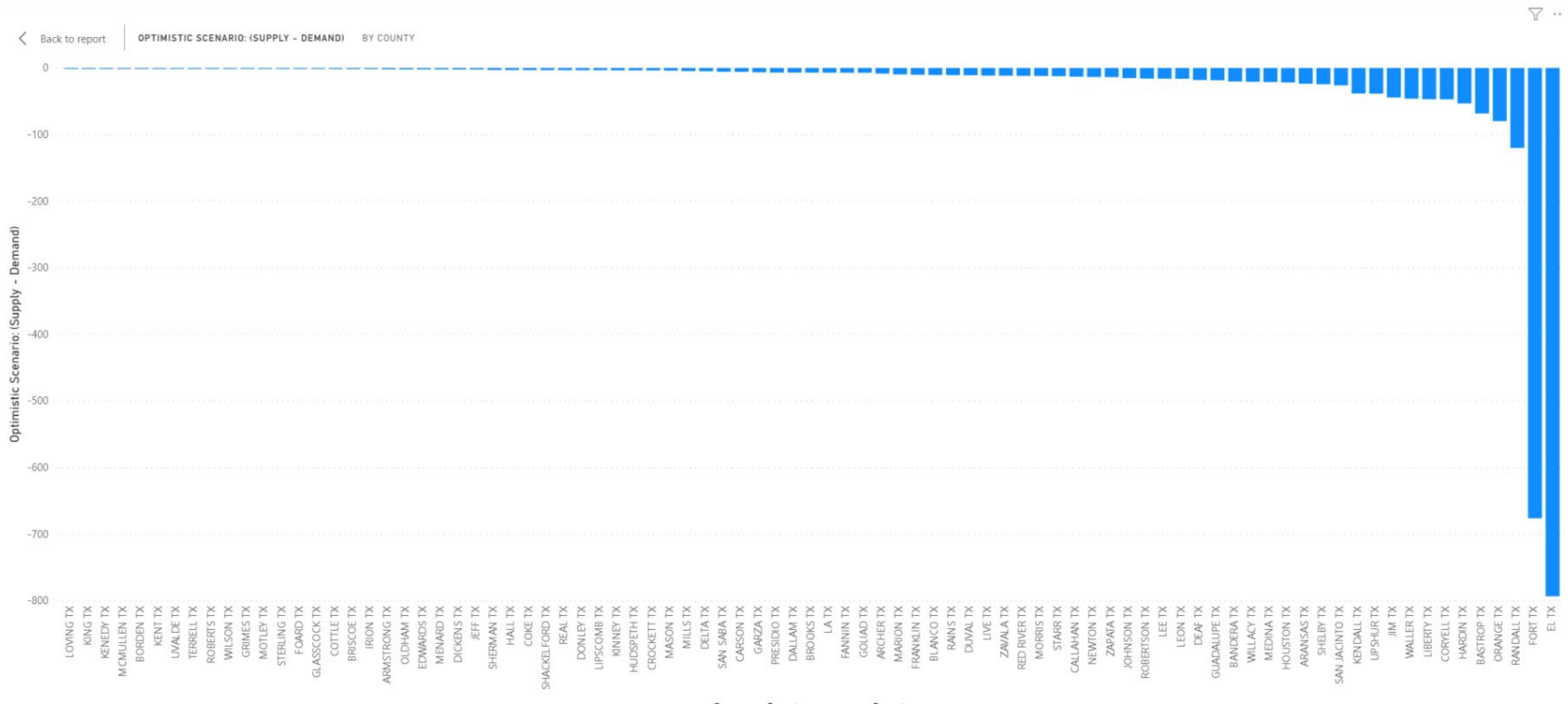


Fig 6: The figure above represents Counties that will run out of beds or do not have a hospital at peak for the Optimistic scenario

County	Total Population	65+ Population	Beds	With Full Precautions - Optimistic Scenario of needed Demand for Hospital Beds								With Some Precautions - Likely Scenario of needed Demand for Hospital Beds								With No Precautions - Worst Case Scenario of needed Demand for Hospital Beds								Counties to run out of beds (all precautions - Optimistic)	Counties to run out of beds (some precautions - Likely)	Counties to run out of beds (no precautions - Worstcase)
				O-April	O-May	O-June	O-Mid-June	O-July	O-August	L-Apr	L-May	L-June	L-July	L-August	W-April	W-May	Mid-May	W-June	W-July	W-August										
ANDERSON TX	57747	10674	156	6	6	52	55	29	6	6	29	101	29	6	6	58	159	115	9	6				x						
ANDREWS TX	17577	2377	34	2	2	16	17	9	2	2	9	31	9	2	2	18	48	35	3	2				x						
ANGELINA TX	87700	16390	470	9	9	79	83	44	9	9	44	153	44	9	9	88	241	175	13	9										
ARANSAS TX	24832	7773	0	2	2	22	24	12	2	2	12	43	12	2	2	25	68	50	4	2	x		x	x						
ARCHER TX	8793	2097	0	1	1	8	8	4	1	1	4	15	4	1	1	9	24	18	1	1	x		x	x						
ARMSTRONG TX	1929	459	0	0	0	2	2	1	0	0	1	3	1	0	0	2	5	4	0	0	x		x	x						
ATASCOSA TX	48139	8858	67	5	5	43	46	24	5	5	24	84	24	5	5	48	132	96	7	5			x	x						
AUSTIN TX	29292	6691	32	3	3	26	28	15	3	3	15	51	15	3	3	29	81	59	4	3			x	x						
BAILEY TX	7098	1399	25	1	1	6	7	4	1	1	4	12	4	1	1	7	20	14	1	1										
BANDERA TX	21316	7009	0	2	2	19	20	11	2	2	11	37	11	2	2	21	59	43	3	2	x		x	x						
BASTROP TX	80306	15451	8	8	8	72	76	40	8	8	40	141	40	8	8	80	221	161	12	8	x		x	x						
BAYLOR TX	3602	997	49	0	0	3	3	2	0	0	2	6	2	0	0	4	10	7	1	0										
BEE TX	32729	4638	69	3	3	29	31	16	3	3	16	57	16	3	3	33	90	65	5	3				x						
BELL TX	336506	43488	1091	34	34	303	320	168	34	34	168	589	168	34	34	337	925	673	50	34										
BEXAR TX	1892004	281536	8084	189	189	1703	1797	946	189	189	946	3311	946	189	189	1892	5203	3784	284	189										
BLANCO TX	11089	3616	0	1	1	10	11	6	1	1	6	19	6	1	1	11	30	22	2	1	x		x	x						
BORDEN TX	602	161	0	0	0	1	1	0	0	0	0	1	0	0	0	1	2	1	0	0	x		x	x						
BOSQUE TX	17955	5092	25	2	2	16	17	9	2	2	9	31	9	2	2	18	49	36	3	2			x	x						
BOWIE TX	93635	18184	841	9	9	84	89	47	9	9	47	164	47	9	9	94	257	187	14	9										
BRAZORIA TX	345995	53634	357	35	35	311	329	173	35	35	173	605	173	35	35	346	951	692	52	35			x	x						
BRAZOS TX	214231	24112	658	21	21	193	204	107	21	21	107	375	107	21	21	214	589	428	32	21										
BREWSTER TX	9220	2361	25	1	1	8	9	5	1	1	5	16	5	1	1	9	25	18	1	1				x						
BRISCOE TX	1591	439	0	0	0	1	2	1	0	0	1	3	1	0	0	2	4	3	0	0	x		x	x						
BROOKS TX	7251	1315	0	1	1	7	7	4	1	1	4	13	4	1	1	7	20	15	1	1	x		x	x						
BROWN TX	37787	8690	194	4	4	34	36	19	4	4	19	66	19	4	4	38	104	76	6	4										
BURLESON TX	17596	4522	25	2	2	16	17	9	2	2	9	31	9	2	2	18	48	35	3	2			x	x						
BURNET TX	45017	12156	71	5	5	41	43	23	5	5	23	79	23	5	5	45	124	90	7	5			x	x						
CALDWELL TX	40544	6959	59	4	4	36	39	20	4	4	20	71	20	4	4	41	111	81	6	4			x	x						
CALHOUN TX	21821	4345	25	2	2	20	21	11	2	2	11	38	11	2	2	22	60	44	3	2			x	x						
CALLAHAN TX	13660	3390	0	1	1	12	13	7	1	1	7	24	7	1	1	14	38	27	2	1	x		x	x						
CAMERON TX	420201	65452	1463	42	42	378	399	210	42	42	210	735	210	42	42	420	1156	840	63	42										
CAMP TX	12670	2814	25	1	1	11	12	6	1	1	6	22	6	1	1	13	35	25	2	1				x						
CARSON TX	6033	1318	0	1	1	5	6	3	1	1	3	11	3	1	1	6	17	12	1	1	x		x	x						
CASS TX	30118	7569	43	3	3	27	29	15	3	3	15	53	15	3	3	30	83	60	5	3			x	x						
CASTRO TX	7891	1540	17	1	1	7	7	4	1	1	4	14	4	1	1	8	22	16	1	1				x						
CHAMBERS TX	39283	5924	39	4	4	35	37	20	4	4	20	69	20	4	4	39	108	79	6	4			x	x						
CHEROKEE TX	51594	11096	429	5	5	46	49	26	5	5	26	90	26	5	5	52	142	103	8	5										
CHILDRESS TX	7064	1290	39	1	1	6	7	4	1	1	4	12	4	1	1	7	19	14	1	1										
CLAY TX	10369	2916	25	1	1	9	10	5	1	1	5	18	5	1	1	10	29	21	2	1				x						
COCHRAN TX	2932	549	18	0	0	3	3	1	0	0	1	5	1	0	0	3	8	6	0	0										
COKE TX	3238	1003	0	0	0	3	3	2	0	0	2	6	2	0	0	3	9	6	0	0	x		x	x						
COLEMAN TX	8422	2440	25	1	1	8	8	4	1	1	4	15	4	1	1	8	23	17	1	1										
COLLIN TX	914075	127495	2599	91	91	823	868	457	91	91	457	1600	457	91	91	914	2514	1828	137	91										
COLLINGSWORTH TX	3026	639	16	0	0	3	3	2	0	0	2	5	2	0	0	3	8	6	0	0										

Table 1: Table with Data showing all three scenarios for counties in alphabetical order

With Full Precautions - Optimistic Scenario of needed Demand for Hospital Beds
With Some Precautions - Likely Scenario of needed Demand for Hospital Beds
With No Precautions - Worst Case Scenario of needed Demand for Hospital Beds

County	State	Total Population	65+ Population	Beds	With Full Precautions - Optimistic Scenario of needed Demand for Hospital Beds					With Some Precautions - Likely Scenario of needed Demand for Hospital Beds					With No Precautions - Worst Case Scenario of needed Demand for Hospital Beds					Counties to run out of beds (all precautions - Optimistic)	Counties to run out of beds (some precautions - Likely)	Counties to run out of beds (no precautions - Worstcase)		
					O-April	O-May	O-June	O-Mid-June	O-July	O-August	L-Apr	L-May	L-June	L-July	L-August	W-April	W-May	Mid-May	W-June				W-July	W-August
TITUS TX	TX	32664	5570	164	3	3	29	31	16	3	3	16	57	16	3	3	33	90	65	5	3			
TOM GREEN TX	TX	116906	21254	614	12	12	105	111	58	12	12	58	205	58	12	12	117	321	234	18	12			
TRAVIS TX	TX	1176584	149630	3821	118	118	1059	1118	588	118	118	588	2059	588	118	118	1177	3236	2353	176	118			
TRINITY TX	TX	14481	4776	45	1	1	13	14	7	1	1	7	25	7	1	1	14	40	29	2	1			
TYLER TX	TX	21456	5403	49	2	2	19	20	11	2	2	11	38	11	2	2	21	59	43	3	2			x
UPSHUR TX	TX	40506	8886	0	4	4	36	38	20	4	4	20	71	20	4	4	41	111	81	6	4	x		x
UPTON TX	TX	3575	581	29	0	0	3	3	2	0	0	2	6	2	0	0	4	10	7	1	0			
UVALDE TX	TX	27015	5585	25	3	3	24	26	14	3	3	14	47	14	3	3	27	74	54	4	3	x		x
VAL VERDE TX	TX	48976	8358	93	5	5	44	47	24	5	5	24	86	24	5	5	49	135	98	7	5			x
VAN ZANDT TX	TX	53607	13528	52	5	5	48	51	27	5	5	27	94	27	5	5	54	147	107	8	5			x
VICTORIA TX	TX	91518	17155	723	9	9	82	87	46	9	9	46	160	46	9	9	92	252	183	14	9			
WALKER TX	TX	70818	10919	123	7	7	64	67	35	7	7	35	124	35	7	7	71	195	142	11	7			x
WALLER TX	TX	48443	7165	0	5	5	44	46	24	5	5	24	85	24	5	5	48	133	97	7	5	x		x
WARD TX	TX	11498	1968	25	1	1	10	11	6	1	1	6	20	6	1	1	11	32	23	2	1			x
WASHINGTON TX	TX	34667	7932	60	3	3	31	33	17	3	3	17	61	17	3	3	35	95	69	5	3			x
WEBB TX	TX	269624	31291	578	27	27	243	256	135	27	27	135	472	135	27	27	270	741	539	40	27			x
WHARTON TX	TX	41430	8117	49	4	4	37	39	21	4	4	21	73	21	4	4	41	114	83	6	4			x
WHEELER TX	TX	5599	1149	41	1	1	5	5	3	1	1	3	10	3	1	1	6	15	11	1	1			
WICHITA TX	TX	131778	22919	559	13	13	119	125	66	13	13	66	231	66	13	13	132	362	264	20	13			
WILBARGER TX	TX	12972	2670	687	1	1	12	12	6	1	1	6	23	6	1	1	13	36	26	2	1			
WILLACY TX	TX	21839	3631	0	2	2	20	21	11	2	2	11	38	11	2	2	22	60	44	3	2	x		x
WILLIAMSON TX	TX	508313	75554	1009	51	51	457	483	254	51	51	254	890	254	51	51	508	1398	1017	76	51			x
WILSON TX	TX	47205	9165	44	5	5	42	45	24	5	5	24	83	24	5	5	47	130	94	7	5	x		x
WINKLER TX	TX	7777	1051	19	1	1	7	7	4	1	1	4	14	4	1	1	8	21	16	1	1			x
WISE TX	TX	63247	12119	148	6	6	57	60	32	6	6	32	111	32	6	6	63	174	126	9	6			x
WOOD TX	TX	43315	13422	50	4	4	39	41	22	4	4	22	76	22	4	4	43	119	87	6	4			x
YOAKUM TX	TX	8481	1276	24	1	1	8	8	4	1	1	4	15	4	1	1	8	23	17	1	1			
YOUNG TX	TX	18166	4171	67	2	2	16	17	9	2	2	9	32	9	2	2	18	50	36	3	2			
ZAPATA TX	TX	14415	2289	0	1	1	13	14	7	1	1	7	25	7	1	1	14	40	29	2	1	x		x
ZAVALA TX	TX	12152	2067	0	1	1	11	12	6	1	1	6	21	6	1	1	12	33	24	2	1	x		x