

National Study of Treatment and Addiction Recovery Residences Report TEXAS

The National Study of Treatment and Addiction Recovery Residences (NSTARR) constitutes the largest and most diverse study of recovery housing in the US to date. NSTARR compiled data from publicly available sources (e.g., Oxford House, National Alliance for Recovery Residences, and Substance Abuse and Mental Health Services Administration websites) and lists maintained by entities tracking recovery housing. Residences for which locating information was available were geocoded and linked with U.S. Census data on urbanicity, alcohol- and drug-involved mortality, and COVID vulnerability. Data collection began in January 2020 and is ongoing until June 2023. The NSTARR database currently contains information on 10,358 residences operated by 3,628 providers in all 50 states. For a detailed description of methods and national findings, please see Mericle et al., 2022.

KEY FINDINGS

The NSTARR team identified 583 recovery residences (2.06 houses per 100,000 population) in Texas (see Table 1). Compared to other states (which include DC), Texas ranked 33 in terms of recovery housing availability per capita. Ninety-two percent of residences in Texas could be geocoded for these analyses. Swisher County, an adjacent rural county, had the most recovery residences per 100,000 population, and 218 counties had no identified recovery residences, representing a mix of rural-urban classifications; 239 (86% of counties) had fewer than 5 recovery residences (see Figure 1).

We used geographic information systems to identify hot and cold spots in Texas. A hot spot is a cluster of high values (county with a high number of residences surrounded by other counties with high numbers of residences) and a cold spot is a cluster of low values (county with low counts surrounded by counties also with low counts). Our analyses found hot spots but no cold spots within the state (see Figure 2).

The age-adjusted alcohol- and drug-involved mortality rate (per 100,000 population) was 13.80 in Texas for the years 2009-2019. Texas ranked 41 on alcohol- and drug-involved mortality out of the 50 states and DC. Among the counties ranked, Baylor County had the highest alcohol- and drug-involved mortality rate and Starr County had the lowest alcohol- and drug-involved mortality rate. Of the five counties that had the highest mortality rates in Texas (i.e., Baylor, Llano, Nolan, Wichita, and Ector), three of them also ranked in the bottom half recovery housing availability per capita (they had no recovery housing at all), suggesting more recovery resources may be needed (see Table 1 and Figure 3).

COVID vulnerability was summarized using the county-level data from the Centers for Disease Control and Prevention's COVID Vulnerability Index (CCVI). The CCVI is a composite measure of seven social determinants of health, encompassing modified themes from the Centers for Disease Control and Prevention's Social Vulnerability Index in combination with COVID risk factors to identify communities in need of additional support during the COVID pandemic. A total of 116 counties were classified as having very high vulnerability, and 96 of these counties ranked in the bottom half of recovery housing availability per capita, again suggesting that more recovery resources may be needed (see Table 1 and Figure 4).

583
RESIDENCES
TOTAL

33
NATIONAL
AVAILABILITY
RANKING

218
COUNTIES
WITHOUT
RESIDENCES

Table 1. County-level Descriptive Statistics on Recovery Residences

County Name	Population ¹	RUCC Classification ²	Number of Recovery Residences ³	Recovery Residences Per 100,000 Population	Recovery Residences Availability per Capita (Rank) ⁴	Age-Adjusted Alcohol/Drug Mortality ⁵ Rate per 100,000 Population	Mortality Rate (Rank) ⁶	CCVI Quintile ⁷
TEXAS	28,260,856		583	2.06	33	13.80	41	
Anderson	57,810	Non-adjacent rural	0	0.00	254	22.40	143	Very high vulnerability
Andrews	18,036	Adjacent rural	0	0.00	254	26.10	97	Moderate
Angelina	87,322	Non-adjacent rural	0	0.00	254	24.50	113	Very high vulnerability
Aransas	24,462	Urban	0	0.00	254	47.90	6	Very high vulnerability
Archer	8,716	Urban	0	0.00	254	44.80	9	Very low vulnerability
Armstrong	1,973	Urban	0	0.00	254	Suppressed	-	Low
Atascosa	49,528	Urban	0	0.00	254	22.00	146	Very high vulnerability
Austin	29,764	Urban	0	0.00	254	21.70	150	Very high vulnerability
Bailey	7,100	Non-adjacent rural	0	0.00	254	Suppressed	-	High
Bandera	22,215	Urban	0	0.00	254	29.30	69	Moderate
Bastrop	84,522	Urban	1	1.18	26	29.70	67	Very high vulnerability
Baylor	3,577	Adjacent rural	0	0.00	254	68.80	1	Low
Bee	32,611	Adjacent rural	0	0.00	254	19.30	163	Very high vulnerability
Bell	348,574	Urban	3	0.86	29	24.50	113	High
Bexar	1,952,843	Urban	58	2.97	11	31.80	55	Very high vulnerability
Blanco	11,478	Adjacent rural	0	0.00	254	24.10	117	Low
Borden	613	Adjacent rural	0	0.00	254	Suppressed	-	Very low vulnerability
Bosque	18,296	Adjacent rural	0	0.00	254	32.70	47	High
Bowie	93,373	Urban	0	0.00	254	21.20	153	Very high vulnerability
Brazoria	360,677	Urban	0	0.00	254	20.00	161	Very high vulnerability
Brazos	222,981	Urban	3	1.35	24	21.10	154	High
Brewster	9,231	Non-adjacent rural	0	0.00	254	44.60	10	Moderate
Briscoe	1,457	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate
Brooks	7,141	Non-adjacent rural	0	0.00	254	27.30	87	Very high vulnerability
Brown	37,855	Non-adjacent rural	0	0.00	254	39.90	18	High
Burleson	18,058	Urban	0	0.00	254	21.50	151	Very high vulnerability
Burnet	46,530	Adjacent rural	0	0.00	254	26.90	89	High
Caldwell	42,144	Urban	0	0.00	254	26.10	97	Very high vulnerability
Calhoun	21,668	Adjacent rural	0	0.00	254	38.10	23	Very high vulnerability
Callahan	13,856	Urban	0	0.00	254	28.30	78	Low
Cameron	421,666	Urban	0	0.00	254	16.30	179	Very high vulnerability

Camp	12,878	Adjacent rural	0	0.00	254	26.90	89	Very high vulnerability
Carson	6,009	Urban	0	0.00	254	Suppressed	-	Very low vulnerability
Cass	30,059	Adjacent rural	0	0.00	254	26.60	95	Very high vulnerability
Castro	7,673	Adjacent rural	0	0.00	254	Suppressed	-	Moderate
Chambers	41,305	Urban	0	0.00	254	24.10	117	High
Cherokee	52,118	Adjacent rural	0	0.00	254	26.10	97	Very high vulnerability
Childress	7,253	Non-adjacent rural	0	0.00	254	33.70	42	High
Clay	10,403	Urban	0	0.00	254	39.40	19	Low
Cochran	2,887	Non-adjacent rural	0	0.00	254	Suppressed	-	High
Coke	3,303	Adjacent rural	0	0.00	254	Suppressed	-	Moderate
Coleman	8,334	Adjacent rural	0	0.00	254	35.60	34	High
Collin	973,977	Urban	17	1.75	20	16.70	174	Low
Collingsworth	2,969	Non-adjacent rural	0	0.00	254	Suppressed	-	Very high vulnerability
Colorado	21,224	Adjacent rural	0	0.00	254	21.10	154	Very high vulnerability
Comal	141,642	Urban	3	2.12	15	23.50	126	Moderate
Comanche	13,529	Non-adjacent rural	0	0.00	254	16.50	178	Very high vulnerability
Concho	3,266	Adjacent rural	0	0.00	254	Suppressed	-	Moderate
Cooke	40,041	Adjacent rural	0	0.00	254	35.50	35	Very high vulnerability
Coryell	75,280	Urban	0	0.00	254	22.30	144	High
Cottle	1,642	Non-adjacent rural	0	0.00	254	Suppressed	-	High
Crane	4,802	Adjacent rural	0	0.00	254	Suppressed	-	Low
Crockett	3,484	Non-adjacent rural	0	0.00	254	Suppressed	-	High
Crosby	5,836	Urban	0	0.00	254	Suppressed	-	Very high vulnerability
Culberson	2,214	Non-adjacent rural	0	0.00	254	Suppressed	-	High
Dallam	7,304	Non-adjacent rural	0	0.00	254	37.20	26	Moderate
Dallas	2,606,868	Urban	84	3.22	10	27.60	84	Very high vulnerability
Dawson	12,813	Non-adjacent rural	0	0.00	254	35.70	33	Very high vulnerability
DeWitt	20,340	Adjacent rural	0	0.00	254	30.90	57	Very high vulnerability
Deaf Smith	18,736	Adjacent rural	0	0.00	254	25.60	102	High
Delta	5,249	Adjacent rural	0	0.00	254	36.30	29	Moderate
Denton	833,822	Urban	9	1.08	28	16.60	177	Moderate
Dickens	2,203	Adjacent rural	0	0.00	254	Suppressed	-	High
Dimmit	10,438	Adjacent rural	0	0.00	254	28.40	76	Very high vulnerability
Donley	3,342	Adjacent rural	0	0.00	254	Suppressed	-	Low
Duval	11,268	Non-adjacent rural	0	0.00	254	35.90	31	Very high vulnerability
Eastland	18,273	Adjacent rural	0	0.00	254	20.70	156	Very high vulnerability
Ector	160,579	Urban	7	4.36	6	50.60	5	Very high vulnerability

Edwards	1,918	Non-adjacent rural	0	0.00	254	Suppressed	-	Low
El Paso	836,062	Urban	4	0.48	32	23.90	123	Very high vulnerability
Ellis	173,772	Urban	0	0.00	254	18.30	166	High
Erath	41,841	Adjacent rural	0	0.00	254	17.60	170	High
Falls	17,272	Urban	0	0.00	254	23.50	126	Very high vulnerability
Fannin	34,537	Adjacent rural	0	0.00	254	25.10	108	High
Fayette	25,141	Adjacent rural	0	0.00	254	17.10	171	High
Fisher	3,856	Adjacent rural	0	0.00	254	Suppressed	-	Moderate
Floyd	5,803	Adjacent rural	0	0.00	254	Suppressed	-	High
Foard	1,275	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate
Fort Bend	765,394	Urban	3	0.39	34	11.20	187	Moderate
Franklin	10,716	Non-adjacent rural	0	0.00	254	23.90	123	High
Freestone	19,714	Non-adjacent rural	0	0.00	254	20.00	161	Very high vulnerability
Frio	19,871	Adjacent rural	0	0.00	254	26.80	91	Very high vulnerability
Gaines	20,706	Non-adjacent rural	0	0.00	254	15.90	180	Moderate
Galveston	332,885	Urban	1	0.30	36	30.70	59	Very high vulnerability
Garza	6,070	Adjacent rural	0	0.00	254	Suppressed	-	Moderate
Gillespie	26,459	Non-adjacent rural	0	0.00	254	28.70	72	Moderate
Glasscock	1,510	Adjacent rural	0	0.00	254	Suppressed	-	Low
Goliad	7,565	Urban	0	0.00	254	22.00	146	High
Gonzales	20,731	Adjacent rural	0	0.00	254	34.60	38	Very high vulnerability
Gray	22,410	Adjacent rural	0	0.00	254	34.20	39	Very high vulnerability
Grayson	131,014	Urban	2	1.53	22	30.10	62	Very high vulnerability
Gregg	123,443	Urban	2	1.62	21	23.20	134	Very high vulnerability
Grimes	27,984	Adjacent rural	0	0.00	254	28.40	76	Very high vulnerability
Guadalupe	158,966	Urban	3	1.89	17	23.50	126	High
Hale	33,826	Adjacent rural	1	2.96	12	22.60	141	Very high vulnerability
Hall	3,048	Non-adjacent rural	0	0.00	254	Suppressed	-	Very high vulnerability
Hamilton	8,332	Adjacent rural	0	0.00	254	32.20	53	Very high vulnerability
Hansford	5,520	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate
Hardeman	3,945	Non-adjacent rural	0	0.00	254	Suppressed	-	High
Hardin	56,765	Urban	0	0.00	254	28.10	80	Moderate
Harris	4,646,630	Urban	91	1.96	16	24.30	115	Very high vulnerability
Harrison	66,580	Adjacent rural	1	1.50	23	27.90	82	Very high vulnerability
Hartley	5,669	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate
Haskell	5,726	Adjacent rural	0	0.00	254	25.60	102	Very high vulnerability
Hays	213,366	Urban	1	0.47	33	23.30	133	High

Hemphill	3,994	Non-adjacent rural	0	0.00	254	Suppressed	-	High
Henderson	81,070	Adjacent rural	0	0.00	254	39.00	20	Very high vulnerability
Hidalgo	855,176	Urban	0	0.00	254	11.90	186	Very high vulnerability
Hill	35,689	Adjacent rural	0	0.00	254	26.70	94	Very high vulnerability
Hockley	23,064	Adjacent rural	0	0.00	254	35.40	36	High
Hood	58,318	Urban	0	0.00	254	32.90	45	High
Hopkins	36,486	Adjacent rural	0	0.00	254	22.90	136	Very high vulnerability
Houston	22,954	Non-adjacent rural	0	0.00	254	16.70	174	Very high vulnerability
Howard	36,349	Adjacent rural	0	0.00	254	32.50	49	Very high vulnerability
Hudspeth	4,415	Urban	0	0.00	254	Suppressed	-	Very high vulnerability
Hunt	94,162	Urban	0	0.00	254	26.00	100	Very high vulnerability
Hutchinson	21,344	Adjacent rural	0	0.00	254	35.30	37	High
Irion	1,620	Urban	0	0.00	254	Suppressed	-	Low
Jack	8,852	Adjacent rural	0	0.00	254	37.00	27	High
Jackson	14,816	Adjacent rural	0	0.00	254	22.00	146	Very high vulnerability
Jasper	35,506	Adjacent rural	0	0.00	254	24.00	122	Very high vulnerability
Jeff Davis	2,241	Non-adjacent rural	0	0.00	254	Suppressed	-	Low
Jefferson	254,340	Urban	2	0.79	30	26.80	91	Very high vulnerability
Jim Hogg	5,231	Adjacent rural	0	0.00	254	Suppressed	-	Very high vulnerability
Jim Wells	40,972	Adjacent rural	0	0.00	254	30.00	65	Very high vulnerability
Johnson	167,212	Urban	0	0.00	254	23.70	125	Very high vulnerability
Jones	19,943	Urban	0	0.00	254	24.70	110	Moderate
Karnes	15,545	Adjacent rural	0	0.00	254	23.40	129	Very high vulnerability
Kaufman	123,804	Urban	0	0.00	254	22.90	136	Very high vulnerability
Kendall	43,769	Urban	0	0.00	254	18.40	165	Moderate
Kenedy	568	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate
Kent	647	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate
Kerr	51,843	Adjacent rural	0	0.00	254	44.00	13	High
Kimble	4,373	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate
King	237	Non-adjacent rural	0	0.00	254	Suppressed	-	Low
Kinney	3,659	Non-adjacent rural	0	0.00	254	Suppressed	-	High
Kleberg	30,974	Adjacent rural	0	0.00	254	30.10	62	Very high vulnerability
Knox	3,705	Non-adjacent rural	0	0.00	254	Suppressed	-	High
La Salle	7,416	Adjacent rural	0	0.00	254	30.10	62	High
Lamar	49,611	Non-adjacent rural	0	0.00	254	29.10	70	Very high vulnerability

Lamb	13,123	Adjacent rural	0	0.00	254	32.70	47	Very high vulnerability
Lampasas	20,862	Urban	0	0.00	254	21.90	149	High
Lavaca	20,021	Adjacent rural	0	0.00	254	17.80	168	High
Lee	17,058	Adjacent rural	0	0.00	254	17.90	167	High
Leon	17,225	Adjacent rural	0	0.00	254	32.00	54	High
Liberty	83,702	Urban	0	0.00	254	27.00	88	Very high vulnerability
Limestone	23,417	Adjacent rural	0	0.00	254	26.00	100	Very high vulnerability
Lipscomb	3,398	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate
Live Oak	12,139	Adjacent rural	0	0.00	254	25.50	104	Very high vulnerability
Llano	21,047	Non-adjacent rural	0	0.00	254	55.30	2	High
Loving	98	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate
Lubbock	304,808	Urban	13	4.26	7	33.80	41	High
Lynn	5,830	Urban	0	0.00	254	Suppressed	-	High
Madison	14,197	Adjacent rural	0	0.00	254	29.60	68	Very high vulnerability
Marion	10,017	Adjacent rural	0	0.00	254	43.50	14	Very high vulnerability
Martin	5,649	Urban	0	0.00	254	Suppressed	-	Low
Mason	4,186	Non-adjacent rural	0	0.00	254	Suppressed	-	Low
Matagorda	36,774	Adjacent rural	0	0.00	254	24.10	117	Very high vulnerability
Maverick	58,174	Non-adjacent rural	0	0.00	254	13.20	185	Very high vulnerability
McCulloch	8,057	Non-adjacent rural	0	0.00	254	Suppressed	-	High
McLennan	251,089	Urban	11	4.38	5	32.30	52	Very high vulnerability
McMullen	774	Non-adjacent rural	0	0.00	254	Suppressed	-	High
Medina	50,057	Urban	0	0.00	254	15.00	182	High
Menard	2,119	Non-adjacent rural	0	0.00	254	Suppressed	-	High
Midland	168,167	Urban	2	1.19	25	28.00	81	High
Milam	24,770	Adjacent rural	0	0.00	254	22.60	141	Very high vulnerability
Mills	4,889	Non-adjacent rural	0	0.00	254	Suppressed	-	Very high vulnerability
Mitchell	8,523	Non-adjacent rural	0	0.00	254	35.80	32	Moderate
Montague	19,489	Adjacent rural	0	0.00	254	40.60	17	High
Montgomery	571,949	Urban	0	0.00	254	24.10	117	High
Moore	21,399	Non-adjacent rural	0	0.00	254	30.00	65	High
Morris	12,373	Adjacent rural	0	0.00	254	25.10	108	Very high vulnerability
Motley	1,252	Non-adjacent rural	0	0.00	254	Suppressed	-	High
Nacogdoches	65,339	Non-adjacent rural	0	0.00	254	26.60	95	Very high vulnerability
Navarro	48,995	Adjacent rural	0	0.00	254	27.50	86	Very high vulnerability

Newton	13,914	Urban	0	0.00	254	33.40	44	Moderate
Nolan	14,904	Adjacent rural	0	0.00	254	54.70	3	Very high vulnerability
Nueces	361,540	Urban	18	4.98	4	41.80	15	Very high vulnerability
Ochiltree	10,131	Non-adjacent rural	0	0.00	254	17.80	168	Moderate
Oldham	2,094	Urban	0	0.00	254	Suppressed	-	Low
Orange	84,069	Urban	0	0.00	254	38.10	23	Very high vulnerability
Palo Pinto	28,540	Adjacent rural	0	0.00	254	44.40	11	Very high vulnerability
Panola	23,327	Adjacent rural	0	0.00	254	25.30	106	Very high vulnerability
Parker	133,811	Urban	1	0.75	31	24.10	117	High
Parmer	9,718	Non-adjacent rural	0	0.00	254	21.50	151	High
Pecos	15,815	Non-adjacent rural	0	0.00	254	23.00	135	High
Polk	48,913	Adjacent rural	0	0.00	254	34.00	40	Very high vulnerability
Potter	119,674	Urban	0	0.00	254	47.90	6	Very high vulnerability
Presidio	6,975	Non-adjacent rural	0	0.00	254	Suppressed	-	Very high vulnerability
Rains	11,766	Adjacent rural	0	0.00	254	24.20	116	Moderate
Randall	134,026	Urban	0	0.00	254	24.60	111	Moderate
Reagan	3,766	Adjacent rural	0	0.00	254	Suppressed	-	Moderate
Real	3,408	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate
Red River	12,171	Adjacent rural	0	0.00	254	22.70	140	High
Reeves	15,492	Non-adjacent rural	0	0.00	254	38.50	21	High
Refugio	7,145	Adjacent rural	0	0.00	254	46.50	8	Very high vulnerability
Roberts	805	Non-adjacent rural	0	0.00	254	Suppressed	-	Very low vulnerability
Robertson	16,990	Urban	0	0.00	254	32.40	51	Very high vulnerability
Rockwall	97,175	Urban	0	0.00	254	17.10	171	Moderate
Runnels	10,277	Adjacent rural	0	0.00	254	30.90	57	High
Rusk	53,755	Urban	0	0.00	254	20.30	160	Very high vulnerability
Sabine	10,471	Adjacent rural	0	0.00	254	32.90	45	Low
San Augustine	8,286	Non-adjacent rural	0	0.00	254	25.40	105	Very high vulnerability
San Jacinto	28,180	Adjacent rural	0	0.00	254	28.20	79	High
San Patricio	67,008	Urban	0	0.00	254	37.30	25	Very high vulnerability
San Saba	5,991	Non-adjacent rural	0	0.00	254	Suppressed	-	High
Schleicher	2,983	Adjacent rural	0	0.00	254	Suppressed	-	Moderate
Scurry	17,096	Non-adjacent rural	0	0.00	254	30.60	60	High
Shackelford	3,296	Adjacent rural	0	0.00	254	Suppressed	-	Moderate
Shelby	25,349	Non-adjacent rural	0	0.00	254	29.00	71	Very high vulnerability
Sherman	3,059	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate

Smith	227,449	Urban	9	3.96	9	22.10	145	Very high vulnerability
Somervell	8,860	Urban	0	0.00	254	Suppressed	-	High
Starr	64,078	Adjacent rural	0	0.00	254	8.30	188	Very high vulnerability
Stephens	9,364	Non-adjacent rural	0	0.00	254	25.20	107	Very high vulnerability
Sterling	1,231	Adjacent rural	0	0.00	254	Suppressed	-	High
Stonewall	1,476	Non-adjacent rural	0	0.00	254	Suppressed	-	Low
Sutton	3,824	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate
Swisher	7,432	Adjacent rural	1	13.46	1	24.60	111	High
Tarrant	2,049,770	Urban	38	1.85	18	22.90	136	Very high vulnerability
Taylor	136,870	Urban	17	12.42	2	38.20	22	High
Terrell	896	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate
Terry	12,528	Adjacent rural	0	0.00	254	15.30	181	Very high vulnerability
Throckmorton	1,436	Non-adjacent rural	0	0.00	254	Suppressed	-	Low
Titus	32,640	Non-adjacent rural	0	0.00	254	15.00	182	Very high vulnerability
Tom Green	117,986	Urban	5	4.24	8	28.60	75	Very high vulnerability
Travis	1,226,805	Urban	107	8.72	3	28.70	72	High
Trinity	14,620	Non-adjacent rural	0	0.00	254	36.70	28	Very high vulnerability
Tyler	21,518	Adjacent rural	0	0.00	254	32.50	49	High
Upshur	41,018	Urban	0	0.00	254	26.80	91	Very high vulnerability
Upton	3,659	Adjacent rural	0	0.00	254	Suppressed	-	Moderate
Uvalde	26,920	Adjacent rural	0	0.00	254	22.80	139	Very high vulnerability
Val Verde	48,969	Non-adjacent rural	0	0.00	254	20.70	156	Very high vulnerability
Van Zandt	55,103	Adjacent rural	0	0.00	254	23.40	129	Very high vulnerability
Victoria	92,109	Urban	1	1.09	27	31.50	56	Very high vulnerability
Walker	72,321	Adjacent rural	0	0.00	254	14.30	184	High
Waller	51,832	Urban	0	0.00	254	20.60	158	Very high vulnerability
Ward	11,658	Adjacent rural	0	0.00	254	41.50	16	High
Washington	35,163	Adjacent rural	0	0.00	254	16.70	174	Very high vulnerability
Webb	273,526	Urban	1	0.37	35	27.60	84	High
Wharton	41,577	Adjacent rural	1	2.41	13	20.50	159	Very high vulnerability
Wheeler	5,338	Non-adjacent rural	0	0.00	254	Suppressed	-	Very high vulnerability
Wichita	131,596	Urban	3	2.28	14	52.20	4	Very high vulnerability
Wilbarger	12,833	Adjacent rural	0	0.00	254	33.50	43	Very high vulnerability
Willacy	21,588	Adjacent rural	0	0.00	254	23.40	129	Very high vulnerability
Williamson	547,604	Urban	10	1.83	19	18.50	164	Moderate

Williamson	547,604	Urban	10	1.83	19	18.50	164	Moderate
Wilson	49,173	Urban	0	0.00	254	16.80	173	High
Winkler	7,867	Adjacent rural	0	0.00	254	36.00	30	High
Wise	66,290	Urban	0	0.00	254	23.40	129	Very high vulnerability
Wood	44,366	Adjacent rural	0	0.00	254	30.40	61	Very high vulnerability
Yoakum	8,631	Non-adjacent rural	0	0.00	254	Suppressed	-	Moderate
Young	18,036	Non-adjacent rural	0	0.00	254	44.10	12	Very high vulnerability
Zapata	14,304	Adjacent rural	0	0.00	254	27.80	83	Very high vulnerability
Zavala	12,039	Non-adjacent rural	0	0.00	254	28.70	72	High

¹Population data were downloaded from tables in Social Explorer's ACS five-year estimate (2015-2019). American Community Survey 5-year Estimates, 2015-2019. Social Explorer tables, ACS 2015-2019. Social Explorer.

²The Rural-Urban Continuum Code (RUCC) was used to classify each county as urban, adjacent rural, or non-adjacent rural. Urban counties are counties with codes 1 (Counties in metro areas of 1 million population or more), 2 (Counties in metro areas of 250,000 to 1 million population), and 3 (Counties in metro areas of fewer than 250,000 population). Adjacent rural counties are counties with codes 4 (Urban population of 20,000 or more, adjacent to a metro area), 6 (Urban population of 2,500 to 19,999, adjacent to a metro area), and 8 (Completely rural or less than 2,500 urban population, adjacent to a metro area). Non-adjacent rural counties are the remaining three codes - 5 (Urban population of 20,000 or more, not adjacent to a metro area), 7 (Urban population of 2,500 to 19,999, not adjacent to a metro area), and 9 (Completely rural or less than 2,500 urban population, not adjacent to a metro area). Rural-Urban Continuum Code (RUCC). <https://www.ers.usda.gov/data-products/rural-urban-continuum-codes.aspx>

³Recovery residences are from the NSTARR project and are current as of 2020. Forty-nine (49) recovery residences in the state were not successfully geocoded due to lack of adequate address information, and thus were not assigned to a county.

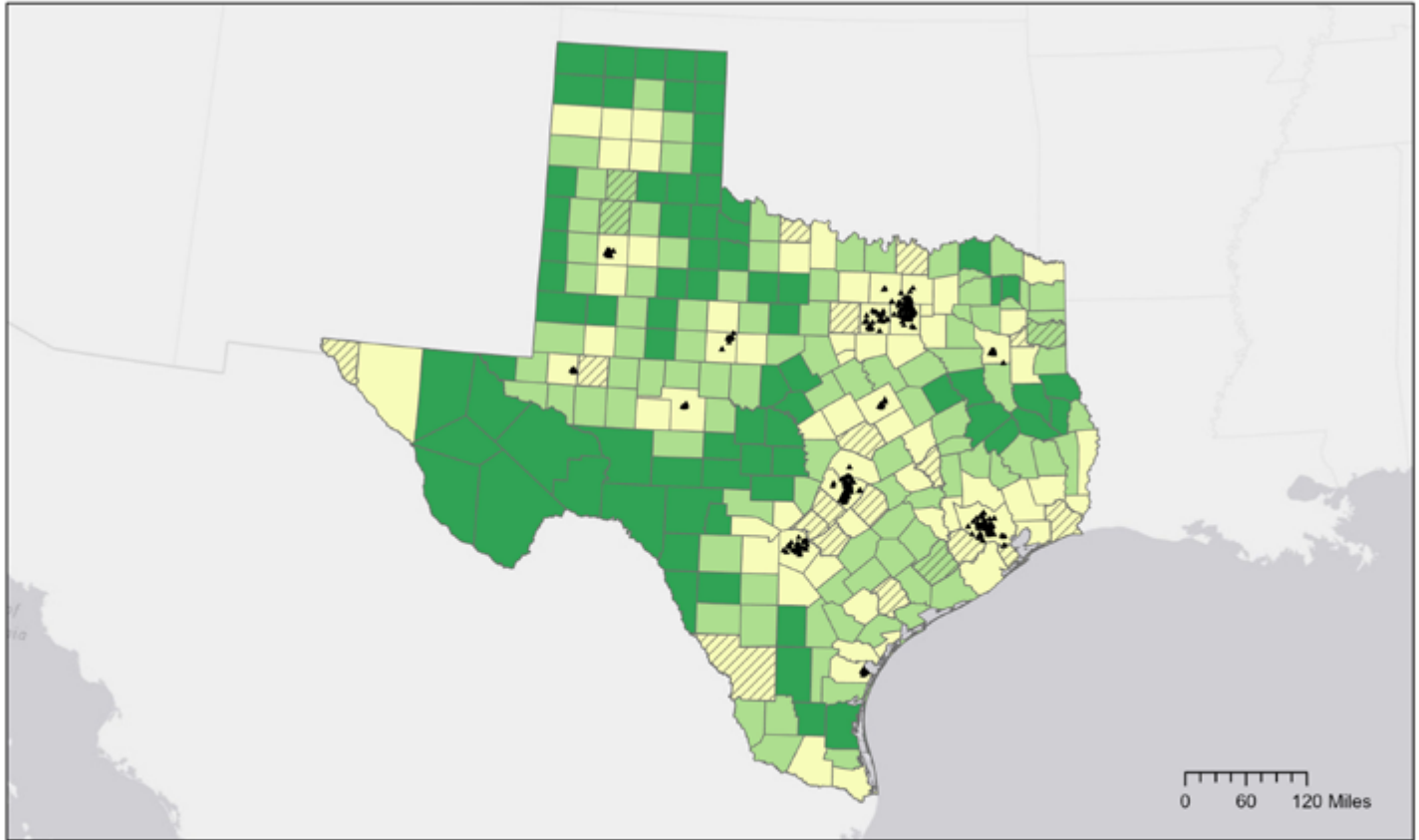
⁴Recovery residences availability per capita is ranked in order of decreasing recovery residence density per 100,000 population per county, with 1 (highest number of residences per 100,000) to 254 (lowest number of residences per 100,000 population). Counties without recovery residences were all assigned a tied rank of 254.

⁵Alcohol- and drug-involved mortality included all deaths as underlying causes of death and selected ICD-10 codes mentioning or attributed to alcohol or drugs as contributing cause of death. Data from the Centers for Disease Control and Prevention, 2020. CDC Wonder (Wide-ranging Online Data for Epidemiologic Research). U.S. Department of Health and Human Services, Atlanta, GA. Available at: <https://wonder.cdc.gov/>. For more information on coding multiple causes of death, see: Centers for Disease Control and Prevention, About Multiple Cause of Death, 1999-2019. <https://wonder.cdc.gov/mcd-icd10.html> accessed on August 9 2021.

⁶Mortality rate is ranked in order of decreasing alcohol- and drug-involved mortality from 1 (highest mortality per 100,000 population) to 188 (lowest mortality per 100,000 population).

⁷COVID-19 Community Vulnerability Index (CCVI) scores range in value from 0 – 1, with 0 being least vulnerable and 1 being the most vulnerable. Each county is ranked relative to all counties across the country, based on seven themes/domains. Each county was grouped into quintiles: very high (score of 0.8-1), high (0.6-0.8), moderate (0.4-0.6), low (0.2-0.4), and very low (0-0.2). For more information on how the CCVI is calculated, see: COVID-19 Community Vulnerability Index (CCVI) methodology. Retrieved from [https://covid-static-assets.s3.amazonaws.com/US-CCVI/COVID-19+Community+Vulnerability+Index+\(CCVI\)+Methodology.pdf](https://covid-static-assets.s3.amazonaws.com/US-CCVI/COVID-19+Community+Vulnerability+Index+(CCVI)+Methodology.pdf)

Figure 1. Distribution of Residences by Rural-Urban Classification



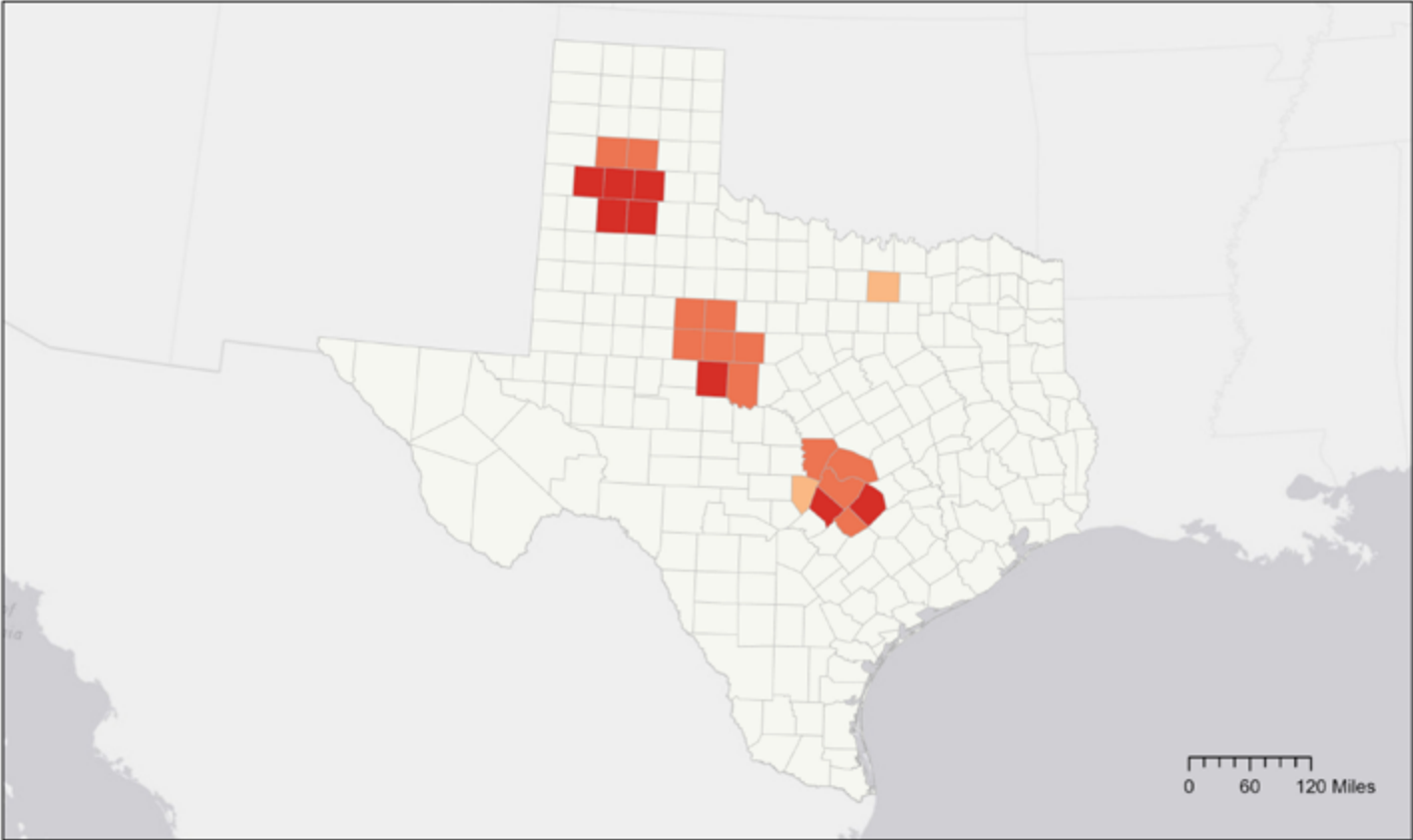
- ▲ Recovery residences
- Rural-Urban Classification Code (RUCC)**
- Urban
- Adjacent rural
- Non-adjacent rural
- Counties with residence locations suppressed (1-4 residences) to protect privacy



Data Credits: Esri, HERE, Garmin, USGS, EPA
Recovery residence locations: 2020
Created by: NSTARR Project (May 2022)



Figure 2. Hot/Cold Spot Analysis of Recovery Residence Locations



Hot Spot Analysis (Getis-Ord GI*)

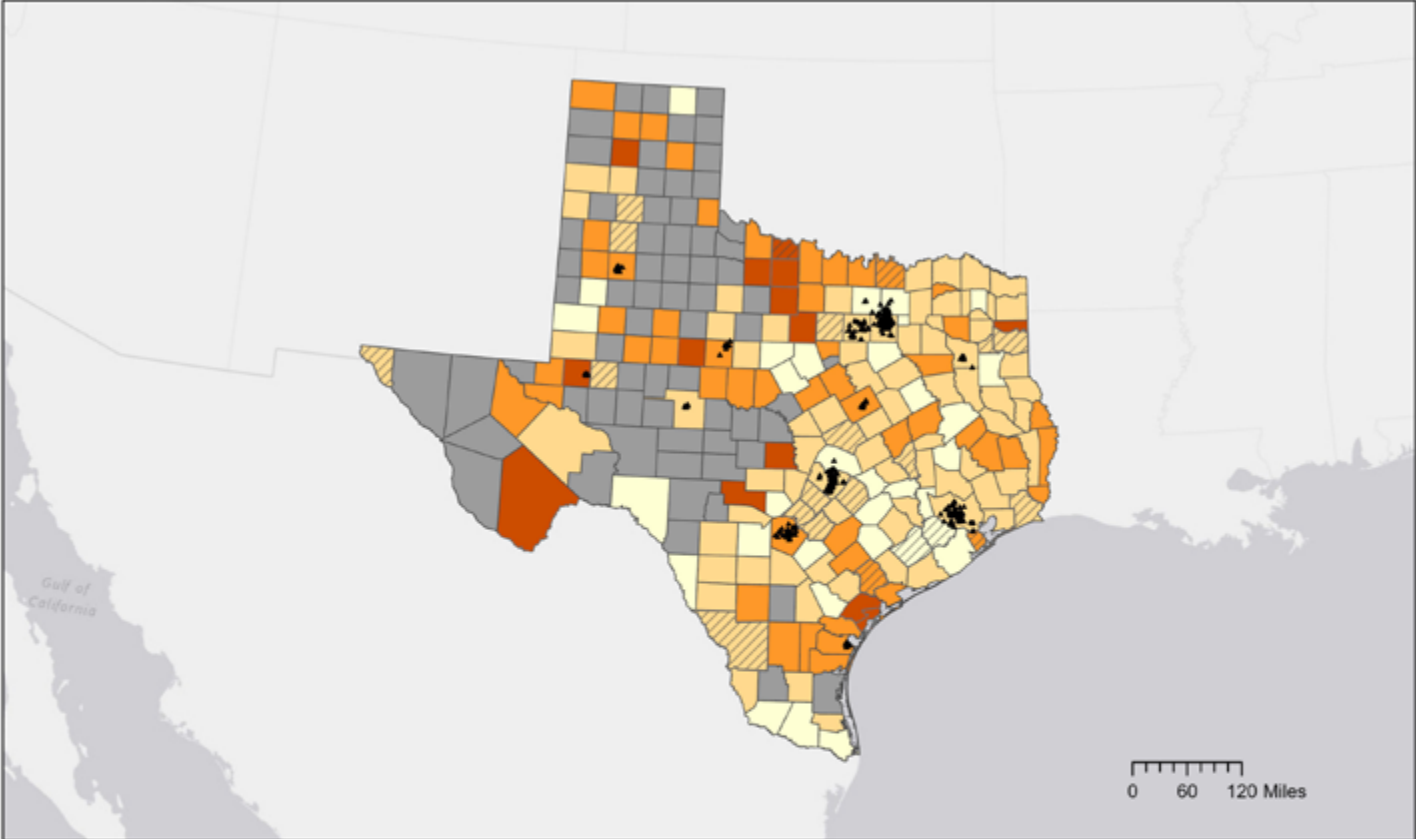
- Cold Spot with 99% Confidence
- Cold Spot with 95% Confidence
- Cold Spot with 90% Confidence
- Not Significant
- Hot Spot with 90% Confidence
- Hot Spot with 95% Confidence
- Hot Spot with 99% Confidence



Data Credits: Esri, HERE, Garmin, USGS, EPA
Recovery residence locations: 2020
Created by: NSTARR Project (May 2022)



Figure 3. Distribution of Residences by Age-adjusted Alcohol- and/or Drug-involved Mortality



▲ Recovery residences
 Age-adjusted alcohol and drug mortality rate per 100,000 population

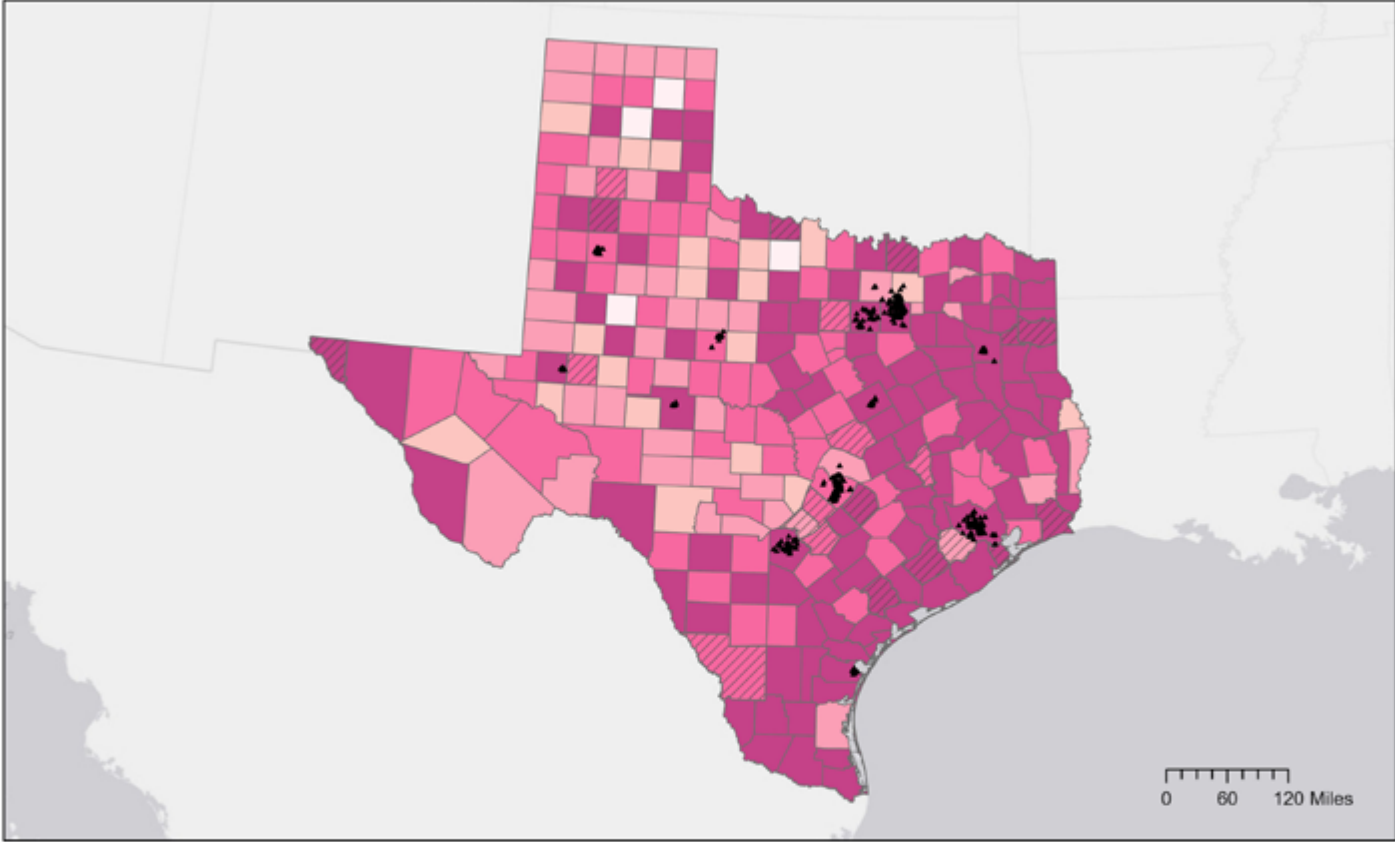
- 8 - 20
- 21 - 29
- 30 - 41
- 42 - 68
- Suppressed/Unreliable
- Counties with residence locations suppressed (1-4 residences) to protect privacy

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 Recovery residence locations: 2020
 Created by: NSTARR Project (May 2022)



Figure 4. Distribution of Residences by COVID-19 Community Vulnerability Index



- ▲ Recovery Residences
- COVID-19 Community Vulnerability Index (CCVI)
- Very low vulnerability
- Low
- Moderate
- High
- Very high vulnerability
- Courties with residence locations suppressed (1-4 residences) to protect privacy



Data Credits: Esri, HERE, Garmin, USGS, EPA, NPS
 Recovery residence locations: 2020
 Created by: NSTARR Project (May 2022)





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Funding for this project was provided by the National Institute on Alcohol Abuse and Alcoholism at the National Institutes of Health under award R01AA027782 (PI: Mericle).

