

Expert Witness Analysis

Impact of Wind Turbines on Surrounding Land Values

Callahan County, TX

Prepared for Riggs & Ray, PC

Draft Report



May 19, 2023

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Background and Objectives

BACKGROUND

Riggs & Ray, PC ("Client") asked John Burns Research and Consulting, LLC ("JBREC") to analyze Ranchland Wind Project's value impact on Mr. Becky and Thomas Carlson's property (which is adjacent to the windfarm) (Parcel ID 0976001900402) "Subject" in Cisco, Callahan County, TX.

Our conversation with the Carlson's indicated that the Carlson's primarily use the Subject property for recreational and agricultural purposes.

OBJECTIVE & METHODOLOGY

The objective of this assignment is to quantify the value impact, if any, on adjacent and surrounding land parcels due to wind farm developments.

JBREC collected data on recent land and rural home transactions proximate to the Ranchland Wind Project, Century Oak Wind Project, Lone Star Wind Project, Mesquite Sky Wind Project, Buckthorn Wind Project, and Silver Star Wind Project, and compared to land transactions in the same market areas (all located within Callahan and Eastland counties) in Texas further from these projects and not impacted by windfarms. For the rural home transactions, we broadened our search to also include Shackelford and Stephens counties to collect sufficient data.

We spoke with ranch brokers, land brokers, and landowners to get their professional opinions on the impact of wind farms on land prices in the surrounding area in order to provide our opinion of the value impact to the Carlson's property which is adjacent to Ranchland Wind Project and its substation.

CONTACT INFORMATION

This analysis was prepared by John Burns Research and Consulting, LLC. Bryan Lawrence, Vice President, worked on this analysis and oversaw the study and conclusions. Jay Creighton, Consultant, assisted with the report and analysis. Follow-up questions should be directed to:

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Disclaimer: For this report we used publicly available information which is deemed reliable but neither its accuracy nor completeness is guaranteed.

Executive Summary

Executive Summary



This report analyzes the impact of wind turbines on the values of surrounding and adjacent land parcels in Callahan and Eastland counties and rural home sales in Callahan, Eastland, Shackelford, and Stephens counties in Texas. JBREC visited the Subject site and surrounding areas and determined that most properties analyzed in the area are used for a mix of recreational and agricultural purposes. We summarize conclusions from our analysis below.

Conversations with land brokers, ranch brokers, and landowners suggest that the presence of a wind turbine shrinks the prospective buyer pool of land parcels. The experts we spoke with detailed the motivations to buy land in the Subject's area include recreational, enjoyment of wildlife, scenery, peace and tranquility, and hunting. Based on statements from these experts, these uses are significantly reduced or eliminated upon the presence of a wind turbine.

The detrimental impacts of wind turbines directly reducing the value of land include visual and aesthetic impact, displacement of local wildlife, wildlife habitat destruction, bird fatalities, noise and vibration, economic concerns, ground water concerns, limited land availability, impact on cultural heritage, electromagnetic interference, disruption caused by the need for extensive transmission infrastructure, challenges associated with the decommission and disposal of wind turbines at the end of their operational lifespan, risk of accidents, disruption to farming activities, and potential damage from a burning or falling turbine.

Based on our analysis, the Subject property value has been negatively impacted by at least -26% as a direct result of the Ranchland wind turbines and substation. JBREC conducted an analysis of recently sold land parcels ranging from 10 to 875 acres, sold between November 10, 2021, and May 15, 2023. Our findings revealed that land tracts located within a two-mile radius of a wind turbine were sold at an average discount of -26% compared to land tracts situated more than two miles away from turbines. Similar analysis looking at rural home properties on land parcels of less than 10 acres showed a -27% diminution of value within 2 miles of a wind turbine. While our analysis evaluates diminution of value for land proximate to wind turbines, the degree of impact varies by site. JBREC believes the Subject's property, which is adjacent to the Ranchland Wind Project substation, and surrounded by turbines on all sides of the property, has been negatively impacted by an even greater percentage than our analysis suggests. **Our analysis concludes that the Subject property has been impacted between -32% to -50% of total property value.**



Introduction to Wind Farms

Introduction



Wind farms, consisting of multiple wind turbines, have rapidly expanded across the globe in recent years. While wind energy offers significant benefits, it is crucial to acknowledge and address the market perception of negative impacts associated with wind farms. This summary aims to provide an overview of some of the key concerns surrounding wind farms.

- 1. Visual and Aesthetic Impact:** One of the primary concerns associated with wind farms is their visual and aesthetic impact on the landscape. Large wind turbines, often spanning over 500 feet in height, can dominate the skyline and alter the natural beauty of rural and coastal areas. This impact is particularly concerning in regions with high scenic or cultural value, such as protected landscapes. Local residents and communities may also perceive wind turbines as eyesores, affecting property values and tourism revenue.
- 2. Noise and Shadow Flicker:** Wind turbines generate noise during operation, which can be a source of annoyance for nearby residents. While modern turbines are designed to minimize noise levels, the continuous swooshing or humming sound can still be disruptive, especially in quiet rural areas. Additionally, a phenomenon known as "shadow flicker" occurs when the rotating blades cast moving shadows that may cause visual disturbances for nearby homes, which studies suggest can lead to potential health concerns like headaches and irritation.
- 3. Wildlife and Ecological Impacts:** Wind farms can have adverse effects on wildlife and ecosystems. Bald eagles, migratory birds (including duck and dove), quail, turkey, and other birds, can collide with the spinning turbine blades, leading to significant wildlife fatalities. The impact is more pronounced in areas with high bird migration routes, such as Texas, or where endangered species reside. Wind farm infrastructure may also disrupt habitats, including nesting grounds and feeding areas, impacting the overall biodiversity and ecological balance of an area.
- 4. Land Use and Fragmentation:** Wind farms require large amounts of land to accommodate multiple turbines, transmission lines, and associated infrastructure. Consequently, extensive land use can lead to habitat loss and fragmentation, particularly in areas of ecological significance. The construction and maintenance of wind farms may involve deforestation, excavation, and alteration of natural landforms, further exacerbating environmental impacts and disrupting the local ecosystems.
- 5. Impact on Human Health:** Some studies suggest that the noise and infrasound generated by wind turbines could potentially cause adverse health effects on nearby residents. Reported symptoms include sleep disturbance, stress, anxiety, and even physiological ailments. While research on the subject is inconclusive, concerns persist, and further investigation is warranted to address potential health impacts comprehensively.
- 6. Interference with Radar Systems:** Wind turbines, particularly larger ones, can create radar interference due to their size and movement. This interference can affect the functioning of military and civilian radar systems, including air traffic control, weather monitoring, and national defense operations. As a result, wind farms might face opposition or restrictions in proximity to radar installations, limiting potential locations for wind energy development.

While wind farms play a crucial role in renewable energy generation, it is important to recognize and mitigate their negative impacts. The concerns surrounding wind farms primarily revolve around visual and aesthetic impact, noise, wildlife and ecological consequences, land use, potential health effects, and radar interference. JBREC believes that the prospective pool of buyers looking for land surrounding wind turbines will be significantly smaller, if it exists at all.

Survey of Land, Ranch Brokers



Statement from: Harlan Ray, Broker Associate, Chairman's Circle Platinum, Briggs Freeman Sotheby's International Realty

"Being in the business of Farm and Ranch Real Estate Brokerage and a rural landowner, I have had some dealings specifically with property adjacent to wind farm, specifically in Eastland/Erath County, and have also been through several meetings regarding solar farms in Bosque County as well.

In one deal that we sold a few years ago, that was adjacent to a wind farm that was under construction, it is my opinion that the property would have been sold for a greater price had the property not been overlooking a wind farm. I do not believe that the property achieved the highest value possible due to the visual and noise pollution created from the wind farm.

We have had several buyers in various counties throughout the state, make a statement that they do not want to buy anything adjacent to an existing alternative energy project, solar or wind. It is my opinion that being adjacent to either solar farms or wind farms has a negative effect on the value of the adjacent property because the desire and demand for being adjacent to such projects is almost nonexistent.

I have heard over the years from some landowners, that regret signing a lease with alternative energy companies for all the damage it does to the land. There is little research over the long-term effects of EMFs (Electro Magnetic Frequencies) that are emitted from power lines, wind turbines, and solar farms, but from my understanding the long-term exposure to these EMFs is not good for humans or animals. It is unfortunate that these alternative energy farms continue to be constructed and installed with such little data existing on the effects of this.

I do not believe that I would ever recommend that a buyer seek land adjacent to a property that has a solar or wind farm, from a value perspective, but also for the long-term health and safety of that buyer."

Statement from: Carter Kendall, Senior Vice President, CBRE | Land

I have brokered land in North Texas for 14 years, developed residential land and own investment in land. I have hunted and vacationed to ranches around Texas my whole life. The presence of wind turbines/wind farm development will dramatically change the value for the surrounding property owners. The presence of the structures alone would alter the natural view and beauty that existed prior to the installation of the wind farm. The view would be considered less desired for many landowners and reduce the value to a buyer wanting to enjoy a peaceful view out there back window. The noise from the development would drastically reduce the value as well. Most landowners near wind turbines own property for ranching, hunting or simply relaxing. The presence of the wind farm development would decrease the population of local animal herds, resulting in less economic opportunity for hunting guides and hunting outfitters. It is my opinion that if a wind turbine/farm was within a view corridor of a property, it would reduce the value in the range of 30-50%, depending on the proximity and the visual impact.

Additionally, Carter Kendall explained that Texas homebuilders would not buy land adjacent to wind farms to build homes on.

Survey of Landowner



Statement from John Bentley:

I own 550 acres of land in Montague County Texas. I raise cattle and use the property recreationally – hunting, fishing, hiking, etc. Around 2018 there was a proposal to install yet another wind farm in Montague County which would be subsidized by the local taxpayers. I opposed this construction of the wind farm for numerous reasons:

- **Aesthetically displeasing.** Ranchers and recreational sportsmen place a high value on the peace, quiet and the unobstructed views that the country life offers. The last thing we want to see is a 300' tower across the fence line. That's as tall as the Statue of Liberty! And that's only to the center of the hub.
- **Light Pollution.** The towers are required to have blinking lights. These lights can be seen for over 10 miles. When the wind towers are in proximity, it spoils the night sky.
- **Noise Pollution.** These turbines make a lot of noise – period. The wind farm developers referenced studies that said a turbine is no louder than a tractor- with no reference to even the size of the tractor. But even if that is factual, it is rare that you have 10 to 100 tractors all running at the same time in close proximity and all night long. For some reason wind turbine noise is substantially louder at night.
- **Soil Quality.** The excavation of the land to install the turbines disrupts the soil's natural composition and leads to erosion. This is a very serious concern in Montague County.
- **Wildlife displacement.** Wind turbines have a negative affect on wildlife populations by altering their habitats and migration patterns.
- **Ground water concerns.** Wind turbines require a significant amount of water for maintenance. This is another very serious concern in Montague County as we do not have large bodies of water nor do we have large aquifers, thus the negative impact on the local water supply is concerning.
- **Bird deaths.** Bald Eagles are present in Montague County and there have been sightings within 3 miles of my ranch. The federal government has issued operating permits to wind farms that allow the legal killing of Bald Eagles. Other than Bald Eagle deaths and Golden Eagle deaths, wind farms are not required to report bird deaths. Since the data is not available, we are left with common sense and observations in the field to assess the impact.

The result of the above is that if the wind farms had come into the area of my ranch, not only would my enjoyment of the property significantly decrease, but the value of my land would have been decimated. I recently had a firm offer to sell my property for \$11,200 per acre. There is little doubt in my mind that if there was a wind farm across the fence line that I would not have received an offer. In my opinion, wind farms do not only cause the value of recreational ranch properties in the area to decrease, but they also make contiguous properties unsaleable.



Subject Site Analysis

Wind Turbine Effects on Subject Property



We heard the following directly from the Subject landowners, each of which aligns with our findings in the market. Based on our experience and findings, JBREC believes that each of these shrink the buyer pool for the Subject property:

- “The wind turbines sound like a small plane flying over”
- “Wind going west or south towards the cabin amplifies the disturbing sound created by the wind turbines.”
- “We can hear [the wind turbines] with the television on and door closed at the cabin.”
- “It [night sky] was beautiful with all the stars before the wind farm. We can’t see as many stars as before.”
- “No one in their right mind would build a cabin where we did, knowing a wind farm would be developed.”
- “We can no longer enjoy the tranquil environment.”
- “There used to be turkeys that came out by the cabin, but not anymore.”

Subject Pictures



Views from center of Carlson's property

Source: JBREC

Subject Pictures



Directly east, adjacent to Carlson's property

Source: JBREC

Subject Pictures



View looking southeast from Carlson's house towards power substation and wind turbines

Source: JBREC

Subject Pictures



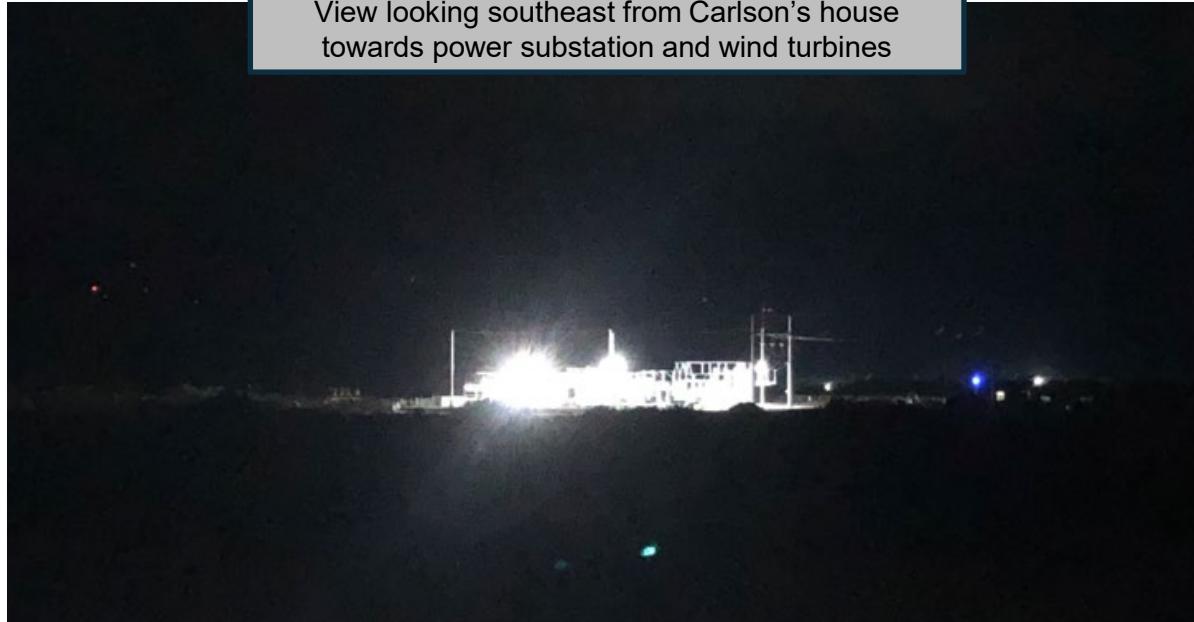
View looking west northwest from Carlson's house

Source: JBREC



Photos from Subject

View looking southeast from Carlson's house towards power substation and wind turbines

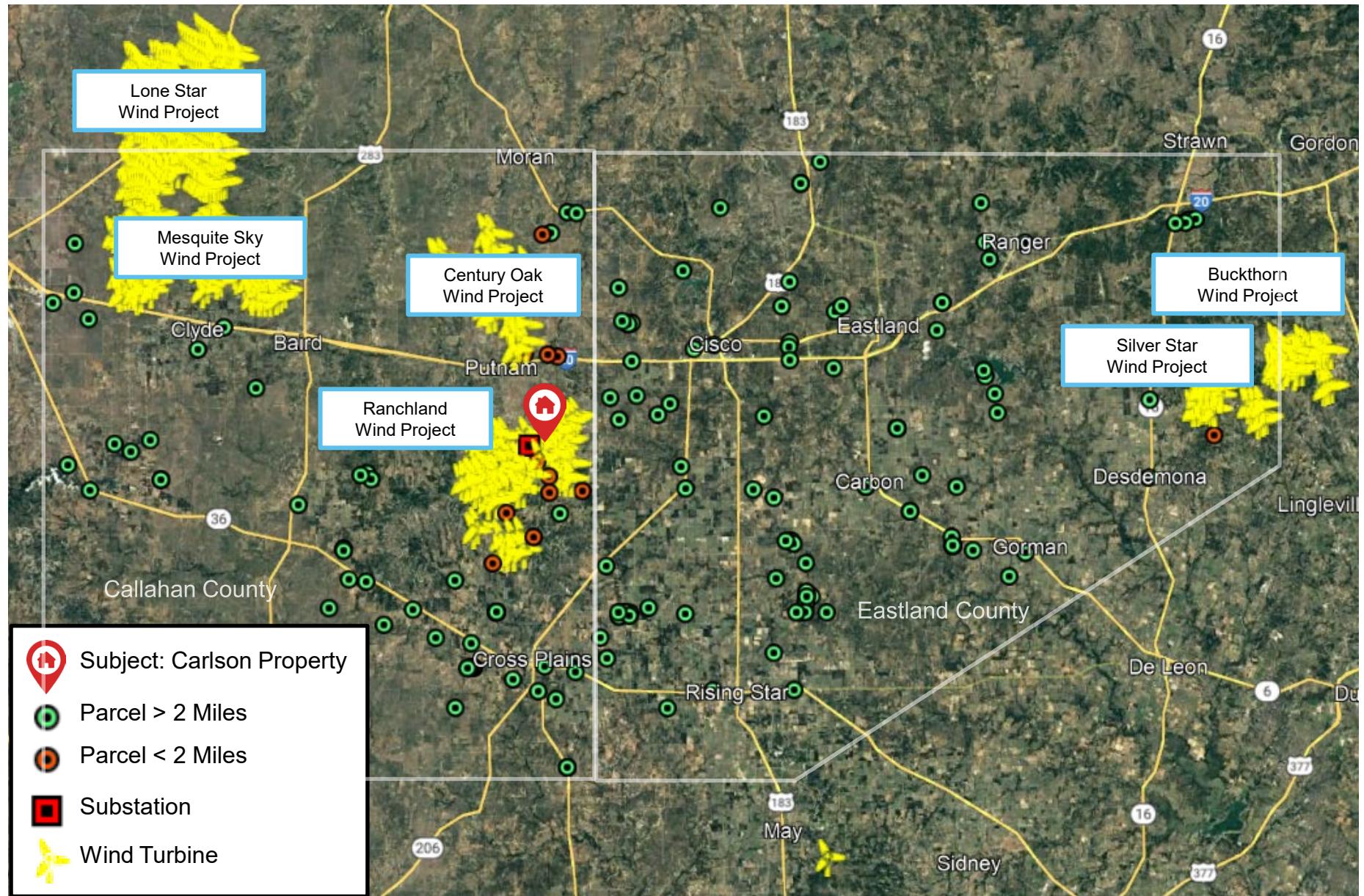


Source: Becky and Tom Carlson



Land Value Analysis

Recently Sold Land in Callahan and Eastland Counties



Source: North Texas MLS, US Wind Turbine Database, <https://www.callahancounty.org/>. All locations and distances are approximate.

Recently Sold Land in Callahan and Eastland Counties



JBREC analyzed recently sold land parcels (unimproved land sold between 11/10/2021 and 5/15/2023, between 10 acres and 875 acres). We focused on this lookback period of approximately 18 months in order to coincide with substantial construction progress of the Ranchland Wind Project (and others in the area) to evaluate a potential impact to surrounding land values. We considered a 2-mile threshold as appropriate because it presents a reasonable distance to a wind turbine where turbines remain visible, thus allowing for an appropriately sized comparison set. We controlled for proximity to urban centers, lakefront access, acreage, and additional factors. Our analysis (on the following page) shows a trend of impact to value with property located closer to a wind turbine.

Our analysis shows that the average days on market is much higher for property located within 2 miles of a wind turbine, suggesting less buyer demand (and thus a lower price per acre) compared to land farther from a wind turbine.

We determined that **land tracts that sold within two miles of a wind turbine sold for a -26% discount** (on average) relative to the average price per acre of land tracts 2+ miles from turbines.

Based on our site visit, comp analysis, and understanding of a smaller buyer pool who would be interested in buying a property surrounded by wind turbines, we believe that the Subject property could be impacted by an even larger number than -26%.

	> 2 Miles	< 2 Miles	Difference
Number of Comps	151	12	n/a
Price Per Acre	\$7,307	\$5,439	-25.6%
Days on Market	81.5	115.9	34.4

*mean used unless otherwise noted

Parcels By Acreage		
	Total	%
<100	129	79%
100-200	22	13%
200-300	5	3%
300+	7	4%
Total	163	100%

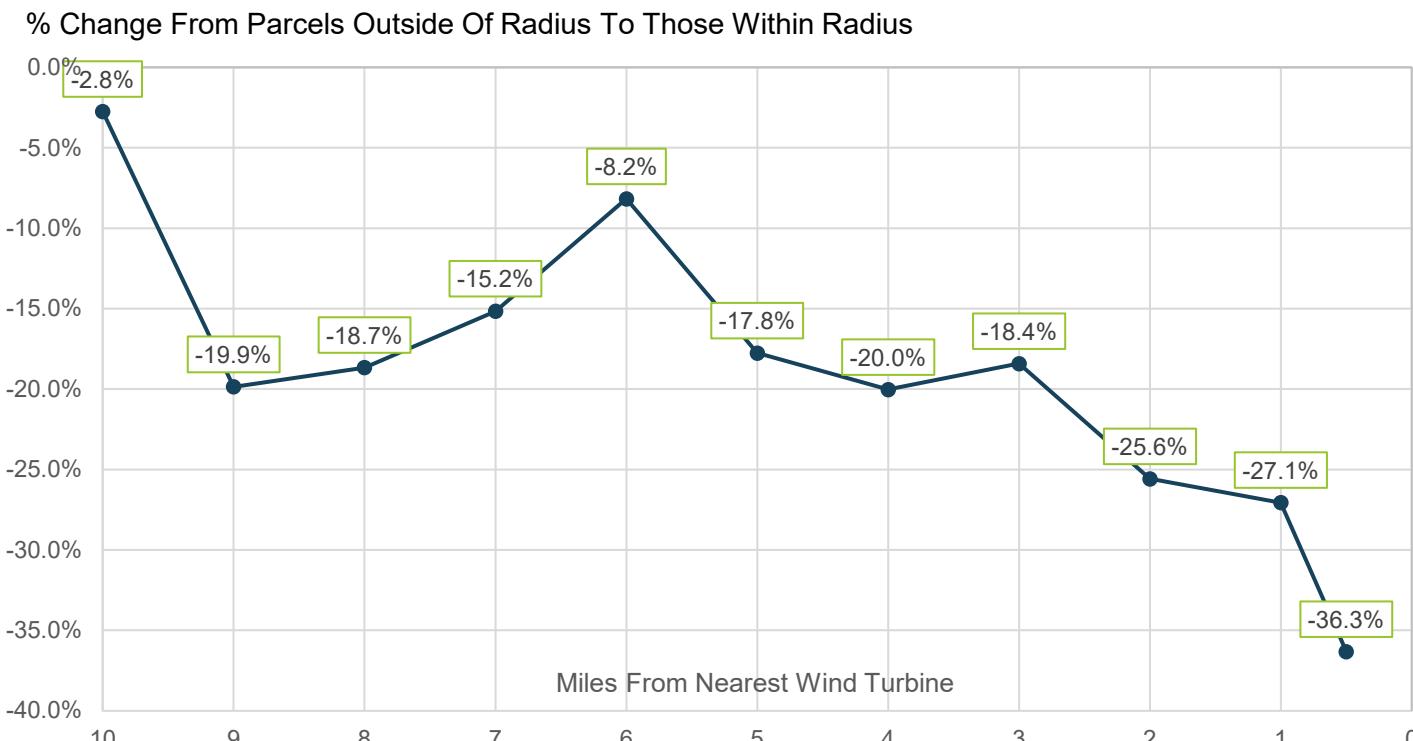
Source: North Texas MLS, US Wind Turbine Database, <https://www.callahancounty.org/>. All locations and distances are approximate.



Effect of Proximity on Value

Below we show the effect of proximity to wind turbines on land values. JBREC's analysis shows that generally, the closer to a wind turbine a property is, the larger the negative impact to land value. Our analysis shows that the land comps that were within .5 miles from a wind turbine were on average 36% lower on a price per acre basis relative to our land comps located greater than .5 miles from a wind turbine. **Comps within two miles of a wind turbine were -26% lower on average** (relative to the comps greater than two miles from a wind turbine). Comps within five miles of a wind turbine were -18% lower on average (relative to the comps greater than five miles from a wind turbine). Land comps located 10 miles from a wind turbine were impacted by -3% of value (relative to the comps greater than 10 miles from a wind turbine).

Effect of Proximity on Value as a Percent



Effect of Proximity on Value												
Miles From Nearest Turbine	10	9	8	7	6	5	4	3	2	1	0.5	
Percent Difference	-2.8%	-19.9%	-18.7%	-15.2%	-8.2%	-17.8%	-20.0%	-18.4%	-25.6%	-27.1%	-36.3%	

Source: North Texas MLS, US Wind Turbine Database, <https://www.callahancounty.org/>. All locations and distances are approximate.

Actively Listed Land on Realtor.com



Shown below are actively listed land properties that are all within 3.1 miles of the Ranchland Wind Project, and each are within 1.5 miles of a wind turbine. While the newest listing shown below (Property ID 4) is listed for \$7,429 per acre, we excluded this from our analysis as there is a 2009 built 3.0-bedroom / 4.5-bathroom home that is not listed on the Callahan County Appraisal District's website, and therefore we were not able to attribute a value to the dwelling improvements.

The three relevant actively listed land properties further support our analysis indicating a negative impact to land value directly attributed to proximity to wind turbines., at a \$5,426 average price per acre, which is a -26% discount from the \$7,307 average per acre sales price of closed property from our comp analysis of land greater than 2 miles from a wind turbine.

Furthermore, the three relevant actively listed properties have been **listed for an average 295 days, indicating lower demand for property proximate to wind turbines, even at a lower average price per acre** compared with the average of Callahan and Eastland counties.

Property ID	Asking Price	Acreage	\$/Acre	Days On Mkt
1	869,000	158	5,500	649
2	593,250	113	5,250	118
3	616,000	112	5,500	118
Total:	2,078,250	383	5,426	295

*Source: Realtor.com

Property ID	Asking Price	Acreage	\$/Acre	Days On Mkt
4	780,000	105	7,429	10

*Source: Realtor.com

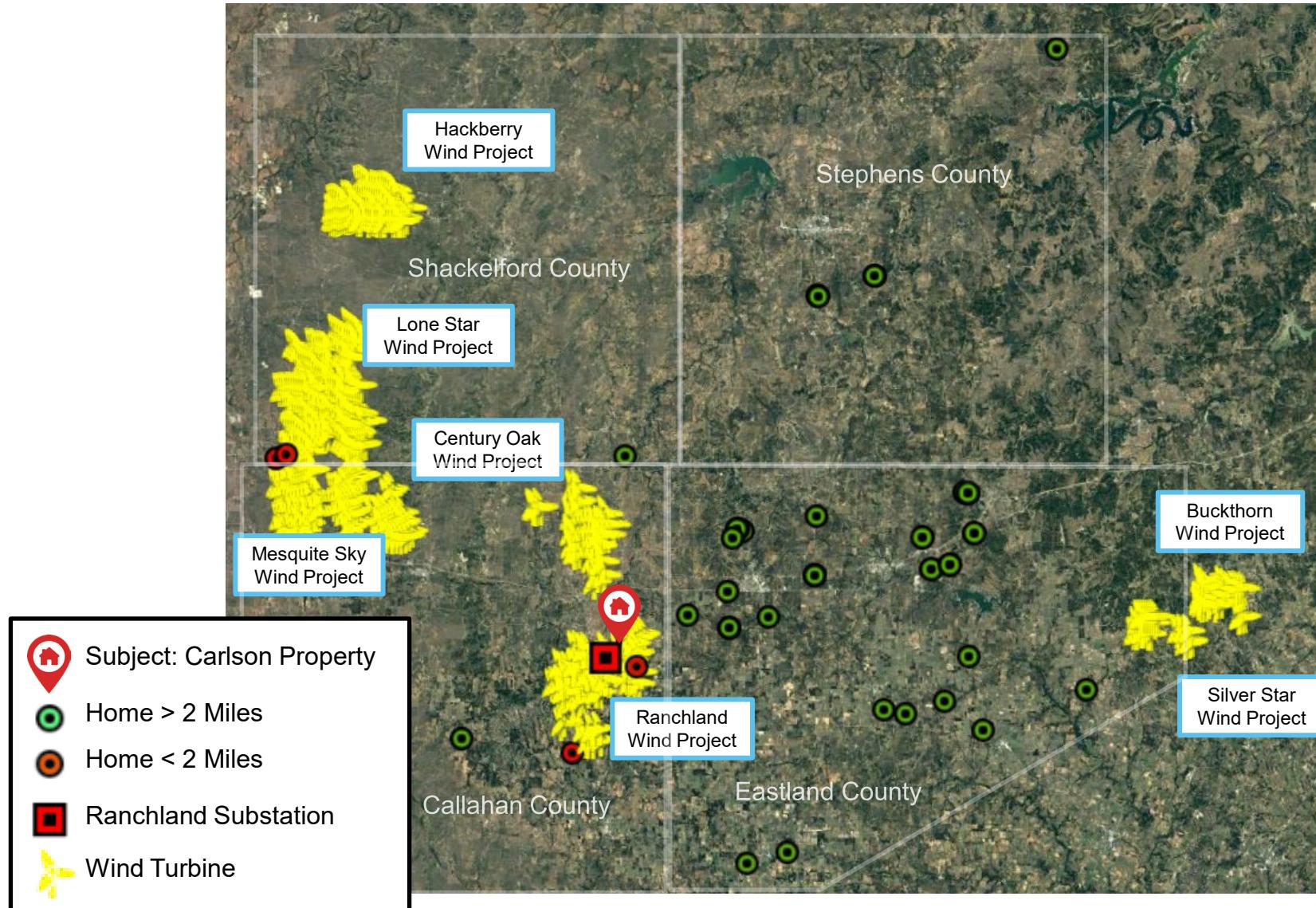
Source: Realtor.com



Recently Sold Rural Homes



Rural home sales in Callahan, Eastland, Shackelford, and Stephens Counties from 11/10/2021 to 5/15/2023



Source: North Texas MLS, US Wind Turbine Database, <https://www.callahancounty.org/>. All locations and distances are approximate.

Recently Sold Rural Homes



In order to isolate the impacts of wind turbines on improvements separate from the land, JBREC analyzed recently sold rural homes (sold between 11/10/2021 and 5/15/2023). We controlled for proximity to urban centers, lakefront access, and additional acreage. Similar to the unimproved land, we focused on this lookback period of approximately 18 months in order to coincide with substantial construction progress of the Ranchland Wind Project (and others in the area) in order to evaluate a potential impact to surrounding home values. We again considered a 2-mile threshold as appropriate because it presents a reasonable distance to a wind turbine where turbines remain visible, thus allowing for an appropriately sized comparison set.

Our analysis shows that the average days on market is much higher for property located within 2 miles of a wind turbine, suggesting less buyer demand (and thus a lower price per acre) compared to land farther from a wind turbine.

We determined that **rural homes that sold within two miles of a wind turbine sold for a -27% discount** (on average) relative to the average price per acre of land tracts 2+ miles from turbines.

Based on our site visit, comp analysis, and understanding of a smaller buyer pool who would be interested in buying a property surrounded by wind turbines, we believe that the Subject's house could be impacted by an even larger number than -27%.

	> 2 Miles	< 2 Miles	Difference
Number of Comps	33	4	n/a
\$ / SqFt	\$158	\$115	-26.8%
Days on Market	68	35	-33

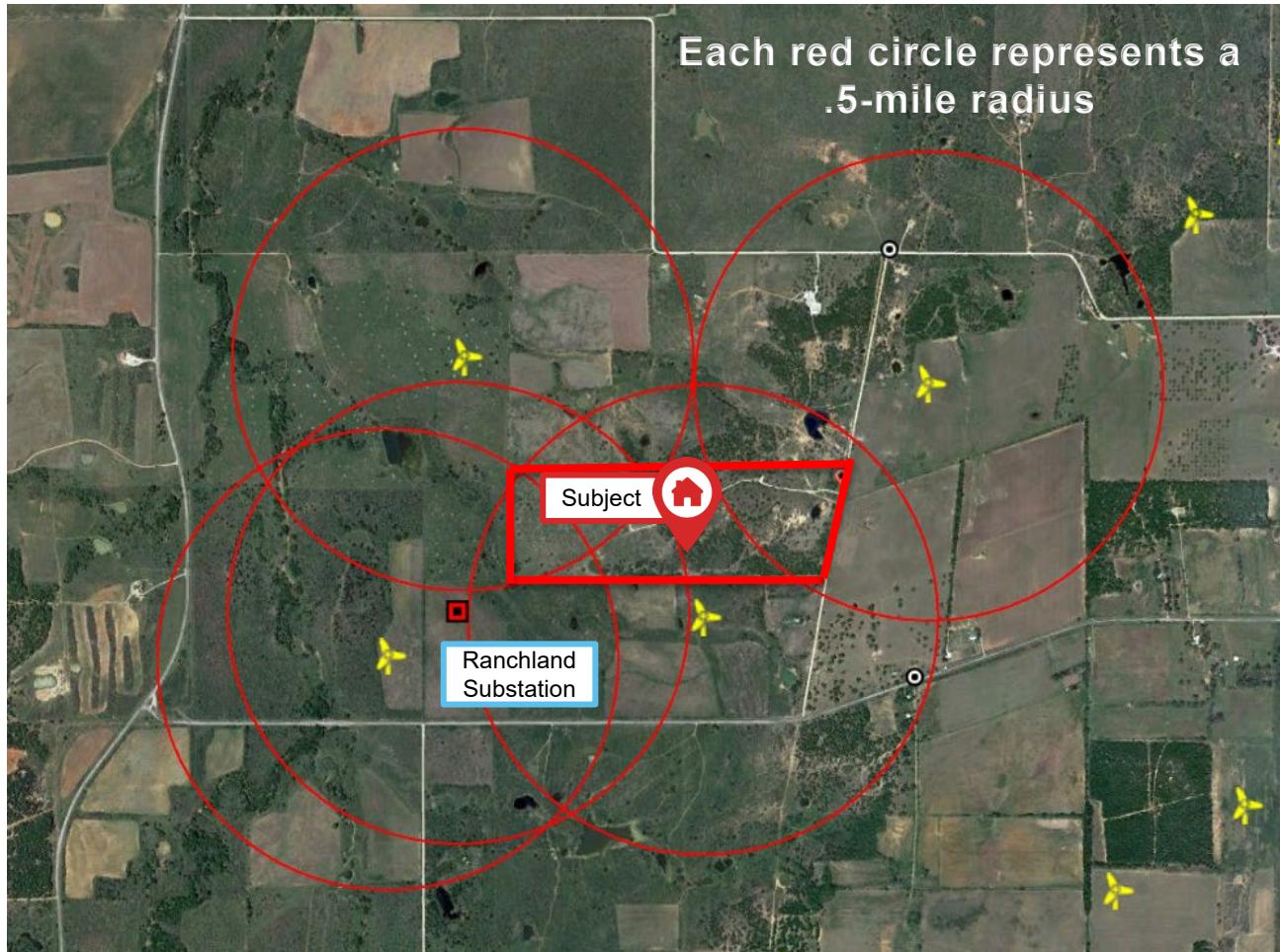
*mean used unless otherwise noted

Source: North Texas MLS, US Wind Turbine Database, <https://www.callahancounty.org/>. All locations and distances are approximate.

Direct Impact to Subject Property



Shown below is the Subject's property relative to Ranchland wind turbines and substation. Based on our analysis, 100% of the Subject's property is located within a half-mile radius of a wind turbine. Therefore, we have applied our analysis to the Subject property as follows. We provide absolute values as illustrative purposes only, and the analysis focuses on the discount as supported by our analysis.



Subject Property		Value Before Discount	% Discount	Value After Discount
Value				
Land value ¹	260,000	-36.3%	165,620	
Improvements ²	300,000	-26.9%	219,300	
Total Value	560,000	-31.3%	384,920	

Footnotes:

¹ Land value is based on Carlson's reported purchase price of the property

² Improvement value is based on the Carlson's estimated cost basis to build

However, the above analysis establishes a baseline for damages but does not account for the Subject's location within .5 miles of **four** wind turbines and the Ranchland substation. We believe that a conservative estimate, for example, is to assume 100% of the discount for the first turbine (-36.3%), half the discount for the second turbine (-18.2%), a quarter of the discount for the third (-9.1%) and one eighth discount for the fourth (-4.5%), equating to a **-68.1% discount before factoring in the proximity to the substation.**

Subject Property		Value Before Discount	% Discount	Value After Discount
Value				
Land value ¹	260,000	-68.1%	83,038	
Improvements ²	300,000	-26.9%	219,300	
Total Value	560,000	-46.0%	302,338	

Source: US Wind Turbine Database, <https://www.callahancounty.org/>. All locations and distances are approximate.

Conclusions

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The detrimental impacts of wind turbines directly reducing the value of land include visual and aesthetic impact, displacement of local wildlife, wildlife habitat destruction, bird fatalities, noise and vibration, economic concerns, ground water concerns, limited land availability, impact on cultural heritage, electromagnetic interference, disruption caused by the need for extensive transmission infrastructure, challenges associated with the decommission and disposal of wind turbines at the end of their operational lifespan, risk of accidents, disruption to farming activities, and potential damage from a burning or falling turbine.

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Appendix

Land Transaction Detail



Number	MLS Number	Address	City	State	Acres	\$/Acre	List Price	Closing Price	Closing Date	DOM	Miles to Turbine
1	14640754	TBD I 20 S Access Road	Cisco	Texas	60.0	\$5,880.12	\$352,807	\$352,807	November 10, 2021	42	12.61
2	14697597	630 Hwy 569	Cisco	Texas	32.3	\$9,587.13	\$329,817	\$310,000	November 17, 2021	5	5.30
3	14695520	Tract 5 Fm 2731	Cisco	Texas	13.8	\$7,173.91	\$99,000	\$99,000	December 2, 2021	8	6.70
4	14714969	169.24 Fm 880	Cisco	Texas	169.2	\$5,022.45	\$899,000	\$850,000	December 9, 2021	1	0.48
5	14659533	TBD Fm 569	Cisco	Texas	38.4	\$5,733.20	\$239,000	\$220,000	December 10, 2021	67	4.70
6	14696784	10625 County Road 430	Cross Plains	Texas	159.8	\$2,503.29	\$400,000	\$400,000	December 15, 2021	7	3.40
7	14662348	14385 County Road 304	Moran	Texas	110.0	\$4,727.70	\$570,000	\$520,000	December 15, 2021	58	2.15
8	14695986	TBD Co Road 271	Rising Star	Texas	117.7	\$4,798.71	\$595,000	\$565,000	December 17, 2021	55	11.88
9	14649122	TBD Hwy 16	Desdemona	Texas	160.0	\$5,906.25	\$960,000	\$945,000	December 21, 2021	11	2.72
10	14691840	TBD Fm 880 S	Cross Plains	Texas	20.0	\$6,250.00	\$135,000	\$125,000	December 22, 2021	35	0.84
11	14669626	TBD OaktreeLn&Nshorelkdr Drive	Cisco	Texas	33.1	\$6,820.23	\$249,500	\$225,545	December 24, 2021	106	10.36
12	14710804	21480 St Hwy 279	Cross Plains	Texas	32.8	\$10,369.01	\$350,000	\$340,000	December 28, 2021	1	8.04
13	14241217	8130 County Road 400	Cross Plains	Texas	175.8	\$2,498.58	\$441,100	\$439,335	December 29, 2021	426	9.35
14	14648305	TBD Cr 407 #66-005	Cross Plains	Texas	624.0	\$2,502.24	\$1,600,000	\$1,561,397	January 6, 2022	112	0.54
15	14631171	TBD Ih-20	Clyde	Texas	67.0	\$6,546.30	\$495,000	\$438,602	January 14, 2022	106	2.38
16	14681294	TBD Cr 349	Gorman	Texas	189.7	\$3,833.57	\$730,000	\$727,229	January 18, 2022	17	14.51
17	14720667	TBD P2 Hwy 16	Ranger	Texas	10.0	\$18,000.00	\$185,000	\$180,000	January 21, 2022	2	9.79
18	14685763	801 Co Road 180	Cisco	Texas	166.0	\$7,102.41	\$1,299,000	\$1,179,000	January 21, 2022	77	10.69
19	14699628	TBD County Road 432	Cross Plains	Texas	99.5	\$3,899.99	\$382,200	\$388,139	January 31, 2022	95	3.06
20	14468172	TBD Co Road 363	Gorman	Texas	122.4	\$3,758.78	\$492,000	\$460,000	February 7, 2022	401	16.13
21	14624051	TBD Cr 422	Cross Plains	Texas	199.2	\$2,900.00	\$577,100	\$577,564	February 8, 2022	200	6.25
22	14713968	476 M24 Road	Ranger	Texas	16.2	\$6,403.94	\$105,560	\$104,000	February 9, 2022	15	14.44
23	14695486	Tract 2 Cr 223	Cisco	Texas	13.8	\$6,521.74	\$97,000	\$90,000	February 10, 2022	53	6.57
24	14728749	10478 Fm 3265	Baird	Texas	13.9	\$6,474.82	\$99,500	\$90,000	February 22, 2022	32	0.84
25	14695450	Tract 1 Fm 2731	Cisco	Texas	27.6	\$5,978.26	\$194,000	\$165,000	February 24, 2022	85	6.40
26	14667806	TBD 1178	Eula	Texas	20.0	\$7,652.30	\$200,000	\$153,046	March 2, 2022	159	11.48
27	14733539	TBD Co Road 209	Cisco	Texas	76.5	\$7,448.06	\$570,000	\$570,000	March 4, 2022	59	6.45
28	14742766	9489 Fm 2707	Cross Plains	Texas	94.9	\$4,015.18	\$365,326	\$381,000	March 11, 2022	13	7.26
29	14705408	TBD County Road 290	Cisco	Texas	72.9	\$5,574.99	\$419,405	\$406,640	March 16, 2022	97	14.28
30	14764852	Tract 7 Fm 2731	Cisco	Texas	27.3	\$6,002.64	\$192,000	\$163,872	March 30, 2022	0	6.73

*Properties within two miles from a turbine are shaded red.

Source: North Texas MLS, US Wind Turbine Database, <https://www.callahancounty.org/>

Land Transaction Detail



Number	MLS Number	Address	City	State	Acres	\$/Acre	List Price	Closing Price	Closing Date	DOM	Miles to Turbine
31	20021523	8002 Cr 223	Clyde	Texas	122.0	\$6,147.54	\$750,000	\$750,000	April 1, 2022	1	8.59
32	14756923	315 Fm 880	Moran	Texas	315.4	\$4,278.91	\$1,417,500	\$1,349,517	April 1, 2022	49	1.75
33	20006653	000 Tract 4 Co Road 290 North	Carbon	Texas	11.1	\$7,875.79	\$90,000	\$87,500	April 7, 2022	1	14.36
34	14755463	730 Co Road 109	Cisco	Texas	111.0	\$9,815.32	\$1,097,000	\$1,089,500	April 7, 2022	12	5.95
35	14695387	408 Cr 252	Rising Star	Texas	11.7	\$7,124.46	\$86,900	\$83,000	April 8, 2022	132	9.89
36	14763859	661 County Road 102	Abilene	Texas	10.0	\$12,000.00	\$125,000	\$120,000	April 12, 2022	5	2.80
37	14623804	TBD Fm 2287	Cross Plains	Texas	122.0	\$3,261.72	\$436,450	\$397,930	April 13, 2022	253	6.86
38	14764656	517 Highway 36 E	Rising Star	Texas	314.0	\$6,351.74	\$1,999,000	\$1,994,447	April 14, 2022	3	10.00
39	14746047	TBD Hwy 36	Rowden	Texas	77.3	\$5,695.06	\$463,560	\$440,000	April 18, 2022	36	6.98
40	20003239	930 Co Road 109	Cisco	Texas	100.0	\$5,475.00	\$547,500	\$547,500	April 20, 2022	10	5.46
41	14766776	730 Co Road 109	Cisco	Texas	123.0	\$7,074.80	\$910,200	\$870,200	April 20, 2022	21	5.75
42	20007568	Tract 7 Cr 290 North Road	Carbon	Texas	10.0	\$8,217.13	\$85,000	\$82,500	April 26, 2022	27	15.08
43	20022628	15760 Highway 6	Cisco	Texas	25.0	\$5,982.39	\$149,500	\$149,500	April 28, 2022	3	3.70
44	14724196	TBD Cr 103 N	Abilene	Texas	18.9	\$6,000.00	\$122,780	\$113,400	April 29, 2022	110	2.44
45	20013832	TBD Pr 4691	Baird	Texas	44.2	\$7,700.00	\$386,036	\$340,571	April 29, 2022	5	7.75
46	20011071	16075 County Road 459	Cross Plains	Texas	27.1	\$10,151.35	\$289,900	\$275,000	May 2, 2022	4	5.79
47	14559848	TBD County Road 417	Cisco	Texas	101.4	\$3,347.81	\$431,000	\$339,602	May 2, 2022	367	0.48
48	20007471	Tract 6 Cr 290 North Road	Carbon	Texas	10.0	\$8,075.77	\$85,000	\$81,000	May 3, 2022	26	15.07
49	20002225	2404 County Road 137	Cisco	Texas	24.8	\$8,024.19	\$199,000	\$199,000	May 3, 2022	18	0.84
50	14671799	98 Ac I-20	Cisco	Texas	204.0	\$3,921.57	\$790,000	\$800,000	May 5, 2022	104	1.81
51	14761865	TBD Cr 404	Cross Plains	Texas	223.5	\$4,000.00	\$1,117,548	\$893,860	May 6, 2022	41	8.70
52	20007674	31.22 Ac Co Road 154	Cisco	Texas	31.2	\$8,007.69	\$265,370	\$250,000	May 9, 2022	34	12.92
53	20007636	Tract 9 Co Road 290	Carbon	Texas	10.0	\$7,992.01	\$85,000	\$80,000	May 10, 2022	37	16.79
54	20016442	801 County Road 340 Road	Ranger	Texas	91.5	\$5,027.87	\$686,175	\$460,000	May 12, 2022	36	16.74
55	14726903	TBD Co Road 281	Carbon	Texas	56.0	\$7,685.43	\$447,600	\$430,000	May 13, 2022	68	11.57
56	14722824	TBD C4 Hwy 16 Co Road 494	Ranger	Texas	12.0	\$19,583.33	\$249,000	\$235,000	May 16, 2022	128	9.65
57	14735642	18406 W Ih-20	Cisco	Texas	62.4	\$7,776.17	\$519,900	\$485,000	May 19, 2022	101	4.41
58	14729305	TBD Co Road 400	Carbon	Texas	156.0	\$5,115.14	\$858,000	\$797,962	May 23, 2022	98	16.79
59	14686509	TBD W I20	Clyde	Texas	11.3	\$19,469.03	\$250,000	\$220,000	May 25, 2022	202	9.24
60	14754272	77 Ac Co Road 125	Cisco	Texas	77.0	\$3,571.43	\$279,000	\$275,000	May 27, 2022	71	7.78

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Land Transaction Detail



Number	MLS Number	Address	City	State	Acres	\$/Acre	List Price	Closing Price	Closing Date	DOM	Miles to Turbine
61	14725890	TBD Cr 223	Abilene	Texas	15.7	\$12,196.75	\$200,000	\$191,489	May 31, 2022	117	10.20
62	20022399	TBD Co Road 361	Gorman	Texas	40.2	\$6,958.08	\$301,808	\$280,000	June 2, 2022	11	12.89
63	14682447	000 Cr 423	Cisco	Texas	40.6	\$5,418.72	\$239,900	\$220,000	June 8, 2022	187	0.32
64	20033485	TBD 40A County Road 470	Baird	Texas	40.9	\$8,806.05	\$495,000	\$360,000	June 10, 2022	16	5.41
65	20007645	Tract 10 Co Road 290	Eastland	Texas	10.1	\$8,457.71	\$85,000	\$85,000	June 14, 2022	81	14.98
66	20034801	19279 Highway 6	Gorman	Texas	28.5	\$7,187.94	\$215,000	\$205,000	June 17, 2022	17	15.95
67	20023640	8757 State Highway 36 E	Cross Plains	Texas	84.6	\$6,350.43	\$571,320	\$537,500	June 17, 2022	34	5.51
68	20007661	Tract 11 Co Road 290	Eastland	Texas	22.1	\$7,246.38	\$170,000	\$160,000	June 21, 2022	105	14.89
69	20007403	Tract 3 Co Road 290	Eastland	Texas	28.7	\$7,317.07	\$220,000	\$210,000	June 27, 2022	82	14.95
70	20050218	2535 Fm 2731 #45.973Acres	Rising Star	Texas	46.0	\$7,895.94	\$360,900	\$363,000	June 30, 2022	45	7.80
71	20011774	TBD Fm 570	Eastland	Texas	14.5	\$10,510.34	\$145,000	\$152,400	July 1, 2022	62	15.69
72	20052607	TBD County Road 164	Eastland	Texas	10.7	\$11,693.17	\$125,000	\$125,000	July 8, 2022	24	14.45
73	14571589	TBD Co Road 290	Rising Star	Texas	200.0	\$3,300.33	\$730,000	\$660,066	July 11, 2022	186	14.41
74	20066790	730 Co Road 109	Cisco	Texas	15.0	\$12,500.00	\$187,375	\$187,375	July 12, 2022	7	5.75
75	20077869	TBD Farm Market 2287	Cross Plains	Texas	82.5	\$5,000.00	\$519,750	\$412,500	July 12, 2022	16	7.86
76	20077926	0000 Fm 2287	Cross Plains	Texas	82.5	\$5,000.00	\$536,250	\$412,500	July 12, 2022	16	7.58
77	20074209	Tract 4 County Road 223	Cisco	Texas	27.3	\$5,272.79	\$144,000	\$144,000	July 13, 2022	212	6.57
78	20077407	13807 Fm 374	Cross Plains	Texas	20.2	\$7,330.36	\$148,000	\$148,000	July 13, 2022	1	7.03
79	20061728	TBD Highway 16	Desdemona	Texas	10.3	\$12,000.00	\$123,360	\$123,360	July 14, 2022	4	4.80
80	20030830	Tract 3 Fm 2287	Cross Plains	Texas	20.0	\$5,900.00	\$118,000	\$118,000	July 22, 2022	52	6.87
81	14695589	Tract10 Cr 223	Cisco	Texas	13.8	\$6,086.96	\$84,000	\$84,000	July 27, 2022	212	7.04
82	20030805	Tract 2 Fm 2287	Cross Plains	Texas	20.0	\$5,750.00	\$119,000	\$115,000	July 27, 2022	15	6.90
83	14722770	TBD C3 Co Road 494	Ranger	Texas	12.0	\$29,416.67	\$370,000	\$353,000	July 29, 2022	130	9.83
84	14702230	TBD Cr 581	Cisco	Texas	68.0	\$5,951.68	\$399,875	\$405,000	July 29, 2022	13	6.04
85	20087371	TBD 86 County Road 470	Baird	Texas	86.0	\$5,813.95	\$550,000	\$500,000	August 2, 2022	2	6.03
86	20062901	TBD 311 County Road 470	Baird	Texas	228.2	\$5,251.27	\$1,450,000	\$1,198,392	August 2, 2022	59	5.66
87	14695576	Tract 9 Cr 223	Cisco	Texas	13.8	\$5,145.36	\$84,000	\$71,006	August 5, 2022	172	6.99
88	20066081	TBD Hawk Lane	Clyde	Texas	13.2	\$11,729.10	\$159,000	\$155,000	August 5, 2022	62	3.43
89	20050277	TBD County Road 242	Rising Star	Texas	31.0	\$6,048.39	\$186,000	\$187,500	August 9, 2022	43	6.60
90	20012679	TBD Tract 2 Fm 2945	Cisco	Texas	35.0	\$6,000.00	\$229,000	\$210,000	August 11, 2022	73	3.77

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Land Transaction Detail



Number	MLS Number	Address	City	State	Acres	\$/Acre	List Price	Closing Price	Closing Date	DOM	Miles to Turbine
91	20030696	Tract 1 Fm 2287	Cross Plains	Texas	14.0	\$5,285.71	\$82,999	\$74,000	August 12, 2022	91	6.94
92	20087816	9005 Highway 6	Cisco	Texas	10.0	\$16,000.00	\$167,000	\$160,000	August 22, 2022	36	12.78
93	20098823	TBD Fm 604	Oplin	Texas	10.5	\$7,835.64	\$85,000	\$82,000	August 30, 2022	26	17.04
94	20073417	TBD Cr 511	Abilene	Texas	10.9	\$5,489.48	\$85,000	\$60,000	September 9, 2022	34	4.05
95	20101883	TBD 3C County Road 437	Eastland	Texas	15.0	\$10,000.00	\$172,500	\$150,000	September 12, 2022	39	12.35
96	20106365	TBD Cr 143	Cisco	Texas	48.2	\$10,223.97	\$493,000	\$493,000	September 12, 2022	46	2.08
97	20085983	20+- Ac Cr 400	Carbon	Texas	18.0	\$7,285.00	\$159,900	\$131,130	September 14, 2022	75	13.24
98	20099288	TBD Fm 2945	Cisco	Texas	38.3	\$5,975.99	\$250,000	\$229,000	September 14, 2022	24	7.69
99	20045717	TR2 Co Road 363	Gorman	Texas	20.0	\$5,627.15	\$130,000	\$112,543	September 19, 2022	101	16.15
100	20045714	TR1 Co Road 363	Gorman	Texas	18.0	\$6,252.39	\$142,000	\$112,543	September 19, 2022	101	16.14
101	20053403	12644 Hwy 36	Cross Plains	Texas	11.0	\$10,818.18	\$134,900	\$119,000	September 19, 2022	217	6.70
102	20085833	90+- Ac Cr 400	Carbon	Texas	92.0	\$6,850.00	\$616,500	\$630,200	September 19, 2022	64	12.77
103	20137916	TBD County Road 145	Cisco	Texas	48.0	\$5,500.00	\$263,945	\$263,945	September 21, 2022	8	4.54
104	20141380	1409 CR 156 Co Road 156	Eastland	Texas	30.0	\$6,200.00	\$210,000	\$186,000	September 28, 2022	25	16.47
105	20154335	1359 Co Road 145	Cisco	Texas	47.0	\$5,000.00	\$244,348	\$234,950	October 3, 2022	32	2.31
106	20016274	TBD Cr 475	Cross Plains	Texas	875.3	\$2,856.10	\$3,063,623	\$2,500,000	October 3, 2022	194	9.59
107	20034515	TR1 Fm 2563	Eastland	Texas	10.0	\$12,000.00	\$120,000	\$120,000	October 10, 2022	117	17.34
108	20034516	TR2 Fm 2563	Eastland	Texas	12.3	\$12,000.00	\$147,240	\$147,240	October 10, 2022	117	17.34
109	20159476	2600 County Road 246	Baird	Texas	19.6	\$14,066.50	\$275,000	\$275,000	October 10, 2022	8	5.17
110	20074392	21750 N Hwy 206 N	Cross Plains	Texas	83.0	\$4,939.76	\$456,500	\$410,000	October 12, 2022	132	12.69
111	20173637	12.3+/- Ac 10625 County Road 430	Cross Plains	Texas	12.3	\$6,666.67	\$63,960	\$82,000	October 13, 2022	7	3.39
112	20086017	17.5+- Ac Cr 398	Carbon	Texas	20.0	\$7,994.25	\$139,900	\$159,885	October 25, 2022	73	13.08
113	20069592	TBD Hwy 6	Carbon	Texas	22.0	\$7,272.73	\$173,800	\$160,000	October 28, 2022	66	17.58
114	20069617	TBD Co Road 167	Eastland	Texas	33.5	\$7,159.90	\$293,300	\$240,000	October 28, 2022	66	14.98
115	20162314	000 Co Road 406	Carbon	Texas	28.3	\$6,900.00	\$194,994	\$194,994	November 8, 2022	13	15.23
116	20170910	TBD 59.75 Acres Cr 203	Clyde	Texas	59.8	\$4,750.01	\$283,813	\$283,813	November 17, 2022	1	10.35
117	20208377	TBD 100 Acres Cr 203	Clyde	Texas	100.0	\$4,750.00	\$475,000	\$475,000	November 17, 2022	1	10.62
118	20174115	TBD Fm 3265	Cisco	Texas	16.7	\$5,991.61	\$125,175	\$100,000	November 22, 2022	7	2.03
119	20183099	TBD Cr 335	Eastland	Texas	37.0	\$5,959.46	\$221,630	\$220,500	November 22, 2022	29	3.52
120	20208400	TBD 75.781 Acres Cr 203	Clyde	Texas	75.8	\$4,749.99	\$359,960	\$359,959	November 28, 2022	1	10.62

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Land Transaction Detail



Number	MLS Number	Address	City	State	Acres	\$/Acre	List Price	Closing Price	Closing Date	DOM	Miles to Turbine
121	20193768	TBD Cr 239	Rising Star	Texas	18.0	\$4,784.24	\$86,208	\$85,925	November 29, 2022	9	12.24
122	20065047	0000 Hwy 2526	Carbon	Texas	78.2	\$5,151.52	\$450,000	\$402,591	December 14, 2022	33	16.31
123	20064448	TBD Hwy 36	Cross Plains	Texas	45.9	\$5,900.00	\$274,350	\$270,810	December 16, 2022	172	7.57
124	20030854	Tract 4 Fm 2287	Cross Plains	Texas	30.0	\$4,250.00	\$135,000	\$127,500	December 19, 2022	208	6.83
125	20121155	12 Acres Highway 6	Cisco	Texas	11.9	\$5,833.33	\$85,000	\$69,650	December 20, 2022	132	4.04
126	20182639	517 County Road 184	Cisco	Texas	80.2	\$7,000.87	\$599,900	\$561,470	December 22, 2022	49	10.32
127	20063756	9100 Highway 569	Cisco	Texas	91.1	\$7,707.55	\$754,500	\$702,312	December 22, 2022	192	7.78
128	20193183	TBD Co Road 154 Easement	Eastland	Texas	15.4	\$9,000.00	\$138,600	\$138,600	December 27, 2022	52	20.31
129	20157875	0 County Rd 407	Cisco	Texas	25.3	\$5,827.74	\$148,500	\$147,500	December 28, 2022	13	1.04
130	20173629	23+/- Ac County Road 430	Cross Plains	Texas	22.5	\$6,150.00	\$115,000	\$138,498	December 30, 2022	29	3.40
131	20173247	136+/- Ac County Road 430	Cross Plains	Texas	137.2	\$3,897.00	\$530,400	\$534,540	January 4, 2023	73	3.40
132	20177836	TBD Cr 437	Eastland	Texas	20.0	\$10,000.00	\$220,000	\$200,000	January 9, 2023	79	12.50
133	20119115	BMM EM2 Cr 494	Ranger	Texas	15.0	\$14,666.67	\$235,000	\$220,000	January 9, 2023	139	13.31
134	20218834	FM 603 Fm 603	Clyde	Texas	40.0	\$6,750.00	\$270,000	\$270,000	January 13, 2023	37	8.93
135	20225559	TBD Lot 3 County Road 437	Eastland	Texas	15.0	\$11,000.00	\$199,900	\$165,000	February 3, 2023	30	11.68
136	20162292	000 Co Road 290	Eastland	Texas	62.6	\$6,385.70	\$422,820	\$400,000	February 3, 2023	127	14.36
137	20238816	4918 Fm 2563 #107.12 Acres	Gorman	Texas	107.1	\$7,000.56	\$749,900	\$749,900	February 3, 2023	3	11.49
138	20078853	688 County Road 460	Baird	Texas	295.0	\$4,067.80	\$1,400,000	\$1,200,000	February 6, 2023	220	9.70
139	20178483	TBD 279 Highway	Cross Plains	Texas	96.3	\$5,250.00	\$553,840	\$505,680	February 9, 2023	377	12.69
140	14574404	12038 Fm 18	Clyde	Texas	361.3	\$4,155.00	\$1,517,544	\$1,501,284	February 10, 2023	331	2.39
141	14749866	TBD Co Road 123	Cisco	Texas	79.6	\$6,594.65	\$548,975	\$525,000	February 20, 2023	335	8.82
142	20030872	Tract 5 Fm 2287	Cross Plains	Texas	38.4	\$4,162.33	\$173,000	\$160,000	February 28, 2023	283	6.81
143	20115307	TBD Cr 454	Olden	Texas	17.0	\$7,381.70	\$144,500	\$125,415	March 3, 2023	176	15.89
144	20187020	0 Tbd Cr 348	Gorman	Texas	21.0	\$7,857.14	\$180,000	\$165,000	March 6, 2023	72	15.27
145	20160091	12732 County Road 469	Baird	Texas	76.7	\$6,909.14	\$547,500	\$530,000	March 6, 2023	129	7.74
146	20123253	TBD CR 493	Desdemona	Texas	15.2	\$7,879.19	\$175,145	\$120,000	March 10, 2023	226	1.46
147	20203300	TBD Cr 294	Carbon	Texas	101.0	\$4,752.48	\$530,250	\$480,000	March 10, 2023	102	13.03
148	20185598	tbd Highway 6	Carbon	Texas	34.8	\$8,492.24	\$342,000	\$295,360	March 13, 2023	123	17.58
149	20239187	1000 Co Road 375	Rising Star	Texas	74.4	\$5,041.00	\$349,875	\$375,000	March 13, 2023	10	12.37
150	20258147	TBD Cr156 Tract 1	Cisco	Texas	19.1	\$7,500.00	\$183,360	\$143,250	March 17, 2023	6	18.62

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Land Transaction Detail



Number	MLS Number	Address	City	State	Acres	\$/Acre	List Price	Closing Price	Closing Date	DOM	Miles to Turbine
151	20212224	TBD County Road 455	Ranger	Texas	24.3	\$7,613.17	\$194,640	\$185,000	March 17, 2023	68	15.20
152	20258182	TBD Cr 156 Tract 2	Cisco	Texas	35.0	\$7,285.71	\$318,500	\$255,000	March 17, 2023	6	18.62
153	20140836	TBD County Road 156 County Road 156	Cisco	Texas	54.1	\$9,163.59	\$501,860	\$495,750	March 17, 2023	189	13.34
154	20096126	ABST 1178 SEC 120 J S Calloway	Oplin	Texas	612.0	\$2,649.05	\$1,790,100	\$1,621,217	March 17, 2023	232	20.33
155	20255087	3945 Fm 1027	Carbon	Texas	424.0	\$6,004.97	\$2,633,645	\$2,546,107	March 17, 2023	5	14.28
156	20225591	TBD County Road 454	Olden	Texas	30.0	\$6,532.20	\$191,000	\$195,966	April 11, 2023	25	15.89
157	20159372	7756 County Road 241	Clyde	Texas	182.6	\$4,237.50	\$849,900	\$773,767	April 11, 2023	171	8.27
158	20113494	1844 County Road 104	Cisco	Texas	81.2	\$4,680.96	\$570,000	\$380,000	April 19, 2023	242	14.58
159	20034517	TR6 County Road 313	Eastland	Texas	15.7	\$9,535.92	\$157,300	\$150,000	April 20, 2023	324	17.34
160	20132408	46 Acres Fm 2945	Cisco	Texas	46.0	\$6,315.30	\$299,000	\$290,504	April 27, 2023	247	1.25
161	20282726	50+- AC TBD County Road 327	Gorman	Texas	50.0	\$5,769.44	\$275,000	\$288,472	May 1, 2023	11	14.56
162	20203883	TBD Lot 7 Highway 16 - 1416 Ranch	Ranger	Texas	10.9	\$18,000.00	\$196,020	\$196,020	May 4, 2023	116	9.70
163	20202301	301 County Road 156	Eastland	Texas	78.7	\$6,988.56	\$590,250	\$550,000	May 4, 2023	143	16.00

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Rural Home Transaction Detail



Number	MLS Number	Address	City	State	SqFt	\$/SqFt	List Price	Closing Price	Closing Date	DOM	Group
1	14654239	4798 Us Highway 183 S	Breckenridge	Texas	1978.0	\$74.82	\$155,000	\$148,000	December 9, 2021	47	Over 2
2	14548145	3272 Fm 207	Caddo	Texas	1500.0	\$78.67	\$125,000	\$118,000	December 13, 2021	185	Over 2
3	14697235	1332 Fm 2807	Cisco	Texas	1428.0	\$224.09	\$320,000	\$320,000	December 30, 2021	0	Over 2
4	14707304	221 County Road 154	Cisco	Texas	2482.0	\$199.44	\$515,000	\$495,000	December 31, 2021	52	Over 2
5	14689372	1018 County Road 451	Olden	Texas	2523.0	\$114.94	\$315,000	\$290,000	January 18, 2022	50	Over 2
6	14750257	203 County Road 133	Moran	Texas	2150.0	\$114.56	\$247,500	\$246,300	March 7, 2022	12	Over 2
7	14715990	3274 Fm 207	Caddo	Texas	768.0	\$240.89	\$185,000	\$185,000	March 11, 2022	78	Over 2
8	14501859	213 County Road 323	Breckenridge	Texas	2335.0	\$179.87	\$415,000	\$420,000	March 14, 2022	14	Over 2
9	14749079	1300 Highway 206	Cisco	Texas	1857.0	\$168.28	\$315,000	\$312,500	March 18, 2022	8	Over 2
10	14745664	101 Pr 4691	Baird	Texas	2554.0	\$158.42	\$379,900	\$404,596	March 23, 2022	32	Over 2
11	14748478	1754 Highway 570	Eastland	Texas	2048.0	\$112.30	\$230,000	\$230,000	April 1, 2022	18	Over 2
12	14737792	478 County Road 414	Carbon	Texas	1216.0	\$80.59	\$98,000	\$98,000	April 15, 2022	65	Over 2
13	20003629	9900 Fm 1079	Cross Plains	Texas	1350.0	\$100.74	\$129,900	\$136,000	May 9, 2022	19	Within 2
14	20047354	1210 County Road 327	Gorman	Texas	1164.0	\$122.42	\$149,500	\$142,500	May 19, 2022	5	Over 2
15	20032824	13465 Fm 1287	Graham	Texas	1596.0	\$119.05	\$195,000	\$190,000	June 3, 2022	2	Over 2
16	20043568	205 County Road 154	Cisco	Texas	2160.0	\$210.65	\$499,000	\$455,000	June 10, 2022	22	Over 2
17	20008318	5616 Cr 403	Cisco	Texas	1940.0	\$175.26	\$350,000	\$340,000	June 13, 2022	68	Within 2
18	14724698	3240 Highway 101	Ranger	Texas	1016.0	\$132.87	\$135,000	\$135,000	July 8, 2022	208	Over 2
19	20063152	16850 Interstate 20	Cisco	Texas	2200.0	\$164.77	\$375,000	\$362,500	July 12, 2022	5	Over 2
20	20089198	839 Hidden Shores Drive	Cisco	Texas	2659.0	\$470.10	\$1,199,000	\$1,250,000	July 14, 2022	14	Over 2
21	14713984	909 County Rd 266	Rising Star	Texas	2732.0	\$131.77	\$375,000	\$360,000	July 15, 2022	192	Over 2
22	20018259	5902 Fm 8	Desdemona	Texas	2308.0	\$86.66	\$250,000	\$200,000	July 29, 2022	70	Over 2
23	14705027	1540 County Road 150	Abilene	Texas	1051.0	\$56.14	\$76,000	\$59,000	August 10, 2022	18	Within 2
24	20103398	233 County Road 321	Gorman	Texas	2897.0	\$162.24	\$470,000	\$470,000	August 19, 2022	9	Over 2
25	20083941	125 County Road 155	Abilene	Texas	1232.0	\$129.06	\$159,000	\$159,000	August 23, 2022	33	Within 2
26	20098435	1518 Highway 36 E	Rising Star	Texas	2804.0	\$142.62	\$399,900	\$399,900	August 26, 2022	18	Over 2
27	20041598	1650 County Road 130	Cisco	Texas	2880.0	\$138.89	\$420,000	\$400,000	November 11, 2022	199	Over 2
28	20045375	7005 State Highway 183	Cisco	Texas	6900.0	\$115.94	\$800,000	\$800,000	November 14, 2022	116	Over 2
29	20181298	1300 Highway 206	Cisco	Texas	1857.0	\$193.81	\$359,900	\$359,900	November 18, 2022	3	Over 2
30	20162995	3337 Highway 101	Ranger	Texas	2432.0	\$65.38	\$159,000	\$159,000	December 7, 2022	85	Over 2
31	20216810	1226 County Road 361	Carbon	Texas	2286.0	\$113.74	\$260,000	\$260,000	February 7, 2023	67	Over 2
32	20156212	3810 Highway 2563	Eastland	Texas	2000.0	\$155.00	\$310,000	\$310,000	April 7, 2023	171	Over 2
33	20274116	969 N Shore Drive	Cisco	Texas	1168.0	\$243.58	\$299,900	\$284,500	April 17, 2023	8	Over 2
34	20289891	1109 Highway 570	Eastland	Texas	1624.0	\$167.80	\$275,000	\$272,500	April 28, 2023	31	Over 2
35	20060075	1017 North Shore Dr.	Cisco	Texas	1560.0	\$272.44	\$449,000	\$425,000	May 4, 2023	346	Over 2
36	20254834	318 Highway 2461	Ranger	Texas	1680.0	\$116.07	\$220,000	\$195,000	May 8, 2023	83	Over 2
37	20255998	2289 Highway 183	Cisco	Texas	1508.0	\$129.31	\$197,600	\$195,000	May 12, 2023	21	Over 2

*Properties within two miles from a turbine are shaded red.

Source: North Texas MLS, US Wind Turbine Database, <https://www.callahancounty.org/>

Quotes & Commentary From Recent Articles



According to a WSJ article, “Communities often complain about the rhythmic blinking red lights that flash atop turbines at night or the whooshing noise of blades. They also raise concerns about taking farmland out of production or the impact on wildlife.” - WSJ

“Ms. Coffman rotates corn and soybeans and has cattle pasture on her part of the family farm, which includes a wooded ribbon of water called Eight Mile Creek. Ms. Coffman doesn’t want to see native forest or prairie disturbed and thinks the industrial nature of towering wind turbines would change the community for the worse if a proposed project were built.” - WSJ

“In Kansas, wind power grew rapidly for two decades and supplies around 45% of the electricity generated in-state, ranking it third in the nation. But at least five counties in more-populous eastern Kansas have recently placed moratoriums or bans on new wind or solar projects, joining 18 others that already restricted wind development to preserve the tallgrass prairie ecosystem. Kansas lagged behind nearly every state in large project construction and new clean power capacity last year, according to the American Clean Power Association, an industry group for wind, solar and battery storage.” – WSJ

Limited life span of 25 to 30 years – “Recycling ‘end-of-life’ solar panels, wind turbines, is about to be climate tech’s big waste business” – CNBC May 15, 2023

- According to the article “Currently, about 90% of end-of-life or defective solar panels end up in landfills, largely because it costs far less to dump them than to recycle them.”
- What happens if the wind farm project owner/operator goes out of business or decides to “walk away” from a turbine or if a turbine becomes decommissioned? This is important as there have been reports of wind turbines ceasing to operate on land and the energy company failing to address the abandoned property. This is a negative impact to land value with a wind turbine that is no longer active. It would be costly for the landowner to dispose of this.
- There are also concerns about the impact of wind farms on local economies. While wind farms can create jobs during the construction and maintenance phases, they may not provide a significant boost to the local economy over the long term. Additionally, wind farms can be expensive to build and maintain, which can lead to higher energy costs for consumers.

Sources:

https://www.wsj.com/articles/inflation-reduction-act-backlash-clean-energy-wind-solar-f3d4d900?mod=Searchresults_pos2&page=1

<https://www.cnbc.com/2023/05/13/recycling-end-of-life-solar-panel-wind-turbine-is-big-waste-business.html?&qsearchterm=wind%20farms>

Limiting Conditions



This report's conclusions and recommendations are based on our analysis of the information available to us from our research and from the client as of the date of this report. We assume that the information is correct and reliable and that we have been informed about any issues that would affect project marketability or success potential.

Our conclusions and recommendations are based on current and expected performance of the national, and/or local economy and real estate market. Given that economic conditions can change and real estate markets are cyclical, it is critical to monitor the economy and real-estate market continuously and to revisit key project assumptions periodically to ensure that they are still justified.

Due to changes in market conditions, as well as changes in consumer psychology, projected and actual results will likely differ. Events and circumstances frequently do not occur as expected, and the differences may be material. We do not express any form of assurance on the achievability of any pricing or absorption estimates or reasonableness of the underlying assumptions.

In general, for projects out in the future, we are assuming "normal" real estate market conditions and not a condition of either prolonged "boom" or "bust" market conditions. We do assume that economic, employment, and household growth will occur more or less in accordance with current expectations. We are not taking into account major shifts in the level of consumer confidence; in the ability of developers to secure needed project entitlements; in the cost of development or construction; in tax laws that favor or disfavor real estate markets; or in the availability and/or cost of capital and mortgage financing for real estate developers, owners and buyers. Should there be such major shifts affecting real estate markets, this analysis should be updated, with the conclusions and recommendations summarized herein reviewed and reevaluated under a potential range of build-out scenarios reflecting changed market conditions.

We have no responsibility to update our analysis for events and circumstances occurring after the date of our report.

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- Proprietary Surveys

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- Burns Building Products Analysis & Forecast
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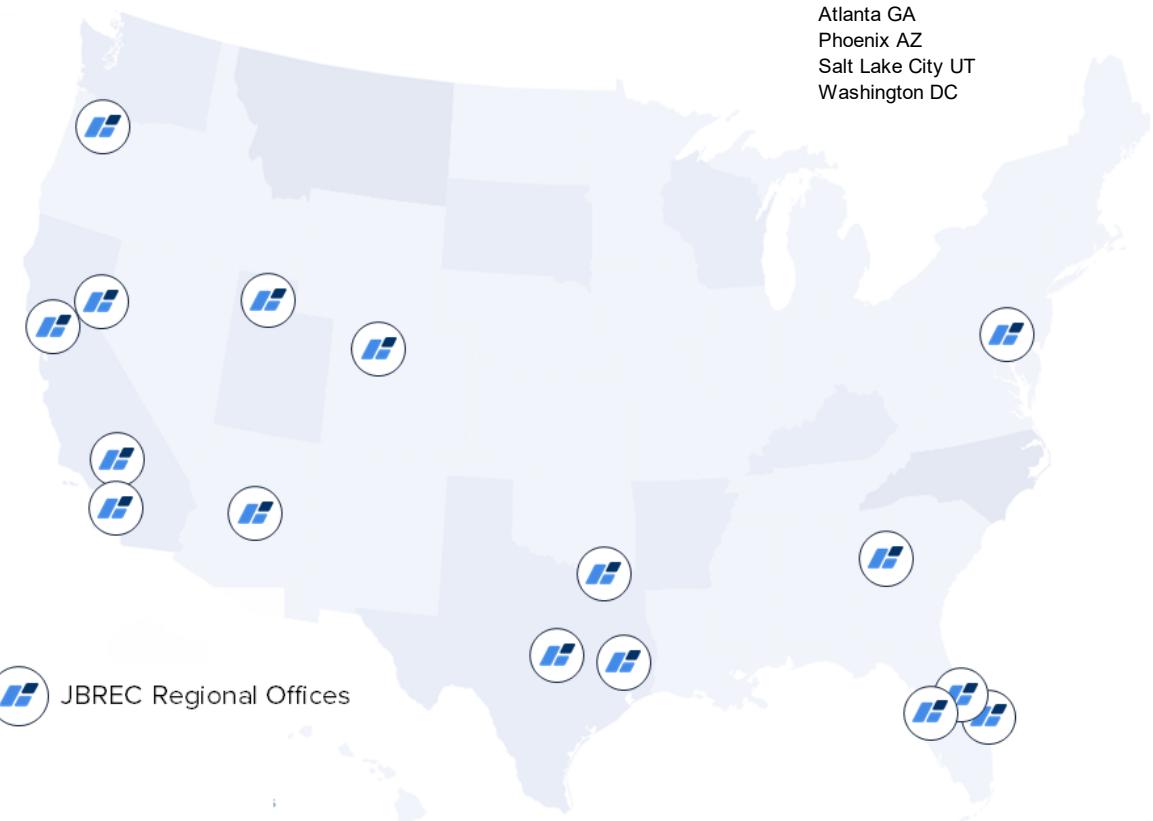
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