EXTENSION

ECONOMIC CONSIDERATIONS OF DATA CENTERS

Mckenzie Boyce and Brian Whitacre

OSU Agricultural Economics Rural Economic Outlook Conference

November 4, 2026

Enid natives propose multibillion-dollar project with data center, corridor

Story by Jeff Elkins, The Oklahoman • 2h • 5 min read

Data centers' payoff far outweighs the costs | Opinion

Oklahomans face a clear choice: Cling to the status quo and remain mired in the bottom percentiles for education, crime, wages, infrastructure and opportunity, or seize the moment to modernize.

Pedro Israel Orta Guest columnist

Updated Feb. 5, 2026, 12:09 p.m. CT

LOCAL

Oklahoma City passes moratorium to block new data centers through 2026

Maria Guinnip and Steve Lackmeyer The Oklahoman

April 22, 2026, 5:35 a.m. CT

Meta Breaks Ground on New $1 Billion Data Center in Tulsa

Arrest made during heated Claremore meeting over proposed data center

Claremore police arrested a man during a heated meeting about a proposed data center as residents raised concerns over water use and infrastructure.

SAM CARRICO

FEBRUARY 17, 2026 10:07 PM • 4 MIN READ

April 3, 2026

Data center project leads to recall effort in Sand Springs

In Oklahoma, details about data centers are often shrouded in secrecy

By : **Kayla Branch** // The Frontier // September 15, 2025 // **3 Minute Read**

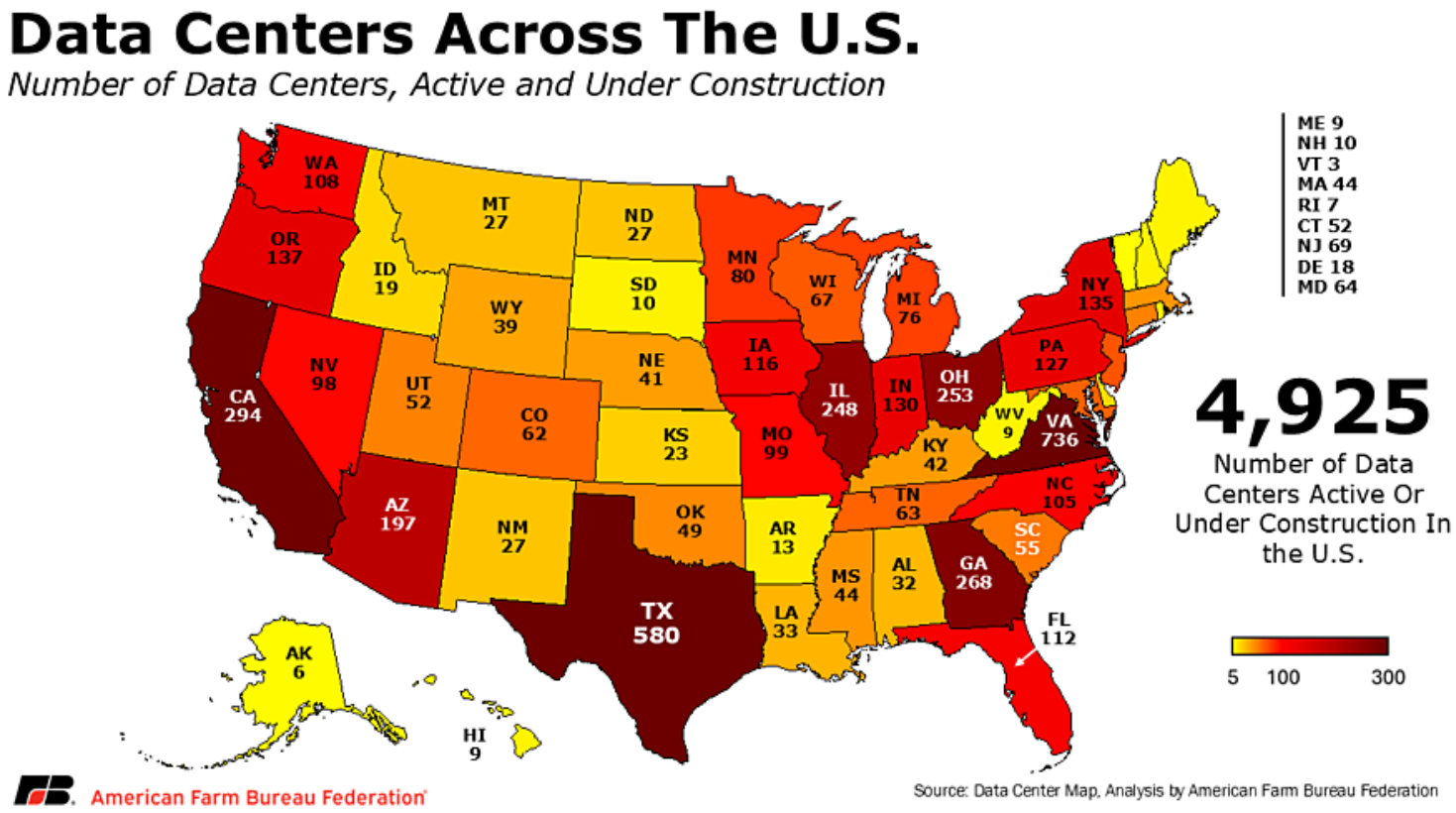
WHAT IS A DATA CENTER?

Specialized facilities that house servers, storage systems, and networking equipment used to support cloud services and digital applications.

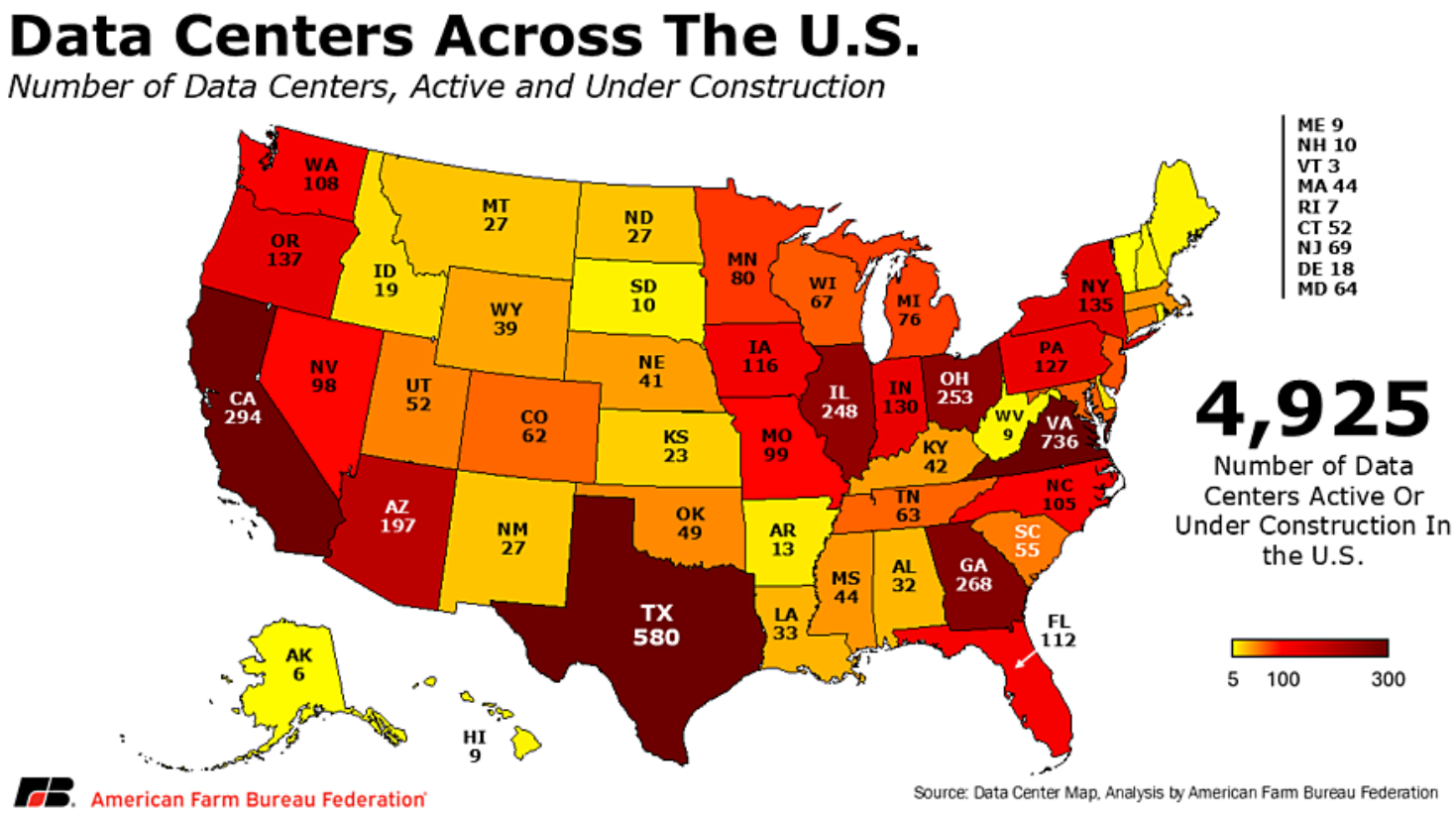


OSU Data Center

WHY OKLAHOMA?



WHY OKLAHOMA?



- Available land
- Low land costs
- Lack of zoning
- Energy sources
- State and local incentives
- Behind the meter legislation

KEY ECONOMIC CONSIDERATIONS

- Revenue
- Employment
- Infrastructure
- Housing Values

REVENUE

REVENUE MECHANISMS

- Property taxes (real and personal)
- Payment in lieu of tax agreements (PILOTs)
- Sales taxes
- Utility franchise fees
- Community betterment payments

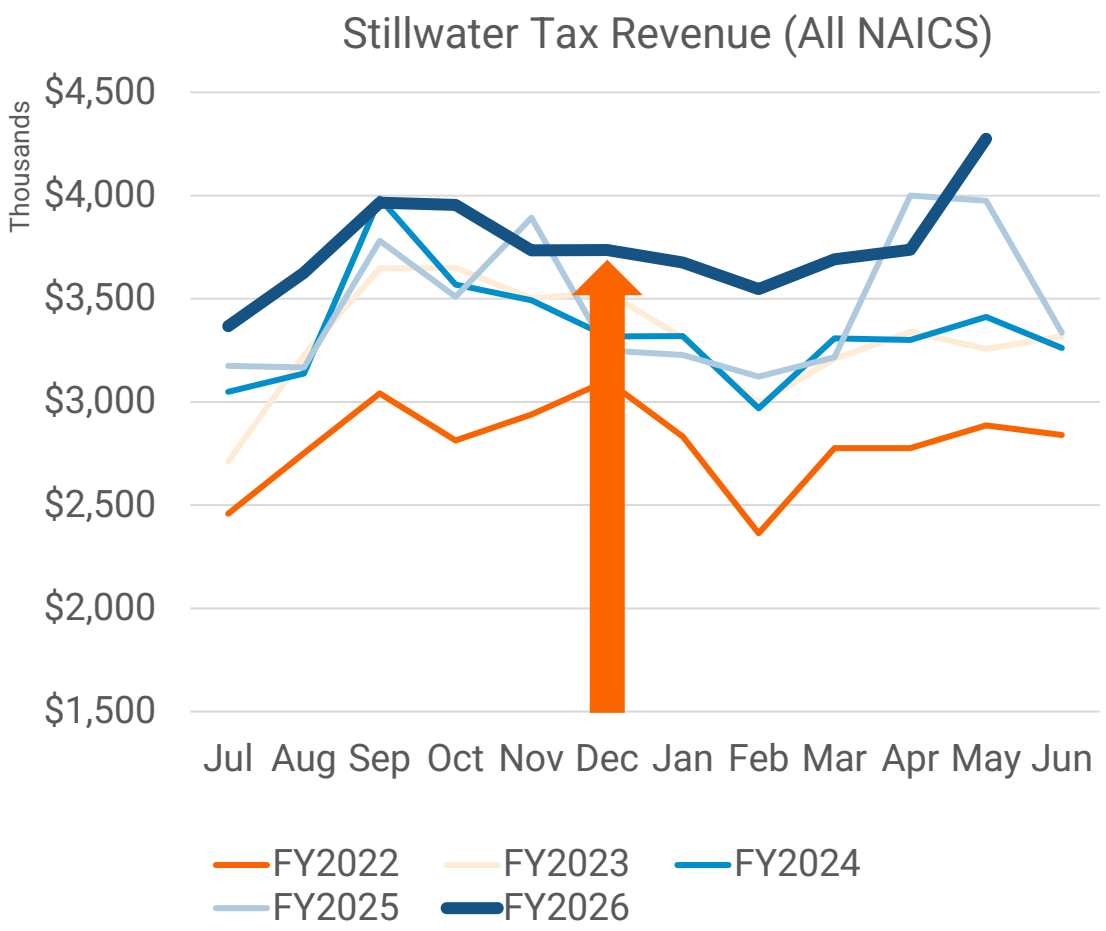
(Boyce & Whitacre, 2026)

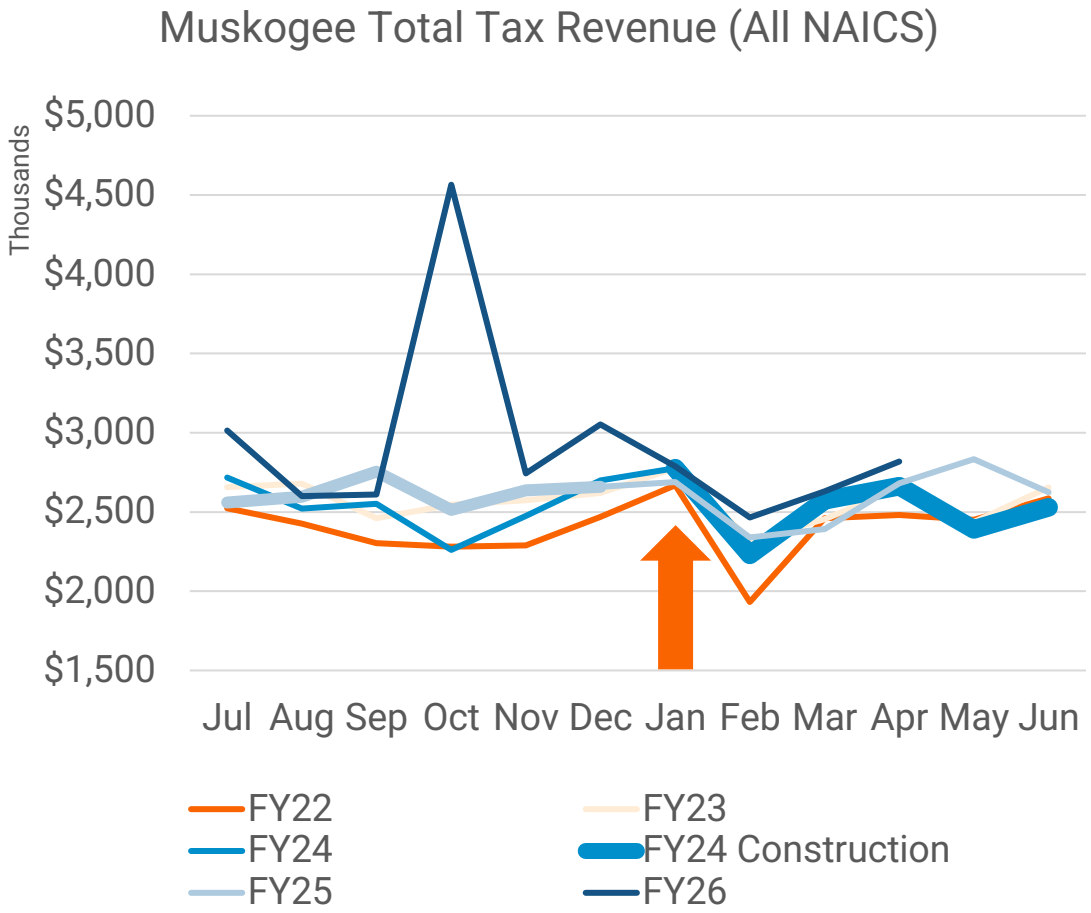
PROPERTY TAXES / PILOTS

Property taxes may not be collected (Ao et al., 2026).

Taxing Jurisdiction	Annual PILOT Payment
Stillwater Public Schools	$624,023
Meridian Technology Center	$135,599
Payne County	$89,985
P.C. Health Department	$17,961

SALES TAXES





(Eisenhauer, Whitacre, & Boyce, 2026)

UTILITY FRANCHISE FEES

- In Prineville, Oregon, electricity franchise fees increased 500% from 2006 to 2018. They were $1 million more than property tax collections for the town (Burrell, 2020).
- Stillwater will receive a franchise fee of approximately $2.25 million per data center per year once operational (+1% annual increase).

COMMUNITY BETTERMENT PAYMENTS

- Negotiated payments to directly support community priorities.
- In Stillwater, $132,432 per year (1% annual increase).
- Together with the utility franchise fees collected, this will support public facilities & amenities, operations, infrastructure and economic development, and administration.

EMPLOYMENT

CONSTRUCTION VS PERMANENT JOBS

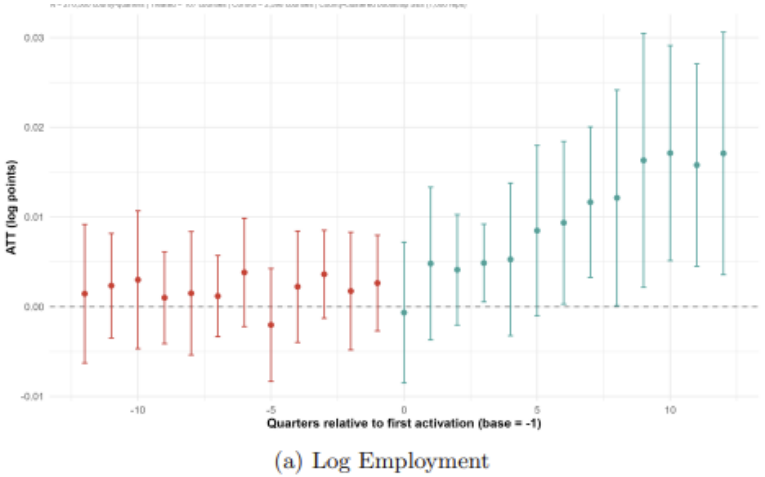
Most "Economic Impact" studies of data centers acknowledge that the direct operational jobs needed / created are far less than the number needed to construct the facility.

Hicks et al. (2026)

Study	Location	Direct Construction Jobs	Direct Operational Jobs
PWC (2023)	USA National	1,000–10,000 per campus	50–300 per campus
JLARC (2024)	Virginia	3,000–5,000	100–400
U.S. Chamber (2017)	"Typical" Facility	1,688 (local phase)	157 (annual)
Thompson / BBR (2019)	Sarpy County, NE	9,627 (Omaha MSA)	430
SRC Evalmetrics (2025)	Ohio	19,537	17,320
Sage Policy (2024)	Frederick Co, MD	~2,000	~200
Morrow County (2024)	Morrow County, OR	1,500	80–120

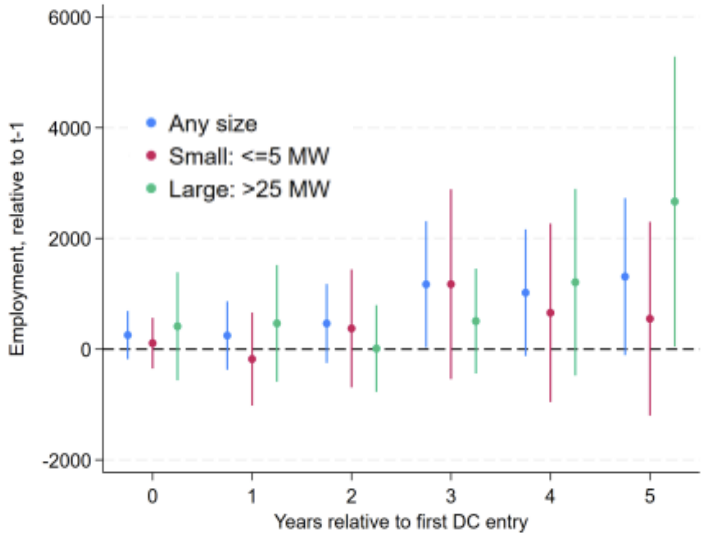
DO DATA CENTERS LEAD TO MORE JOBS OVERALL?

Research in progress shows mixed evidence:

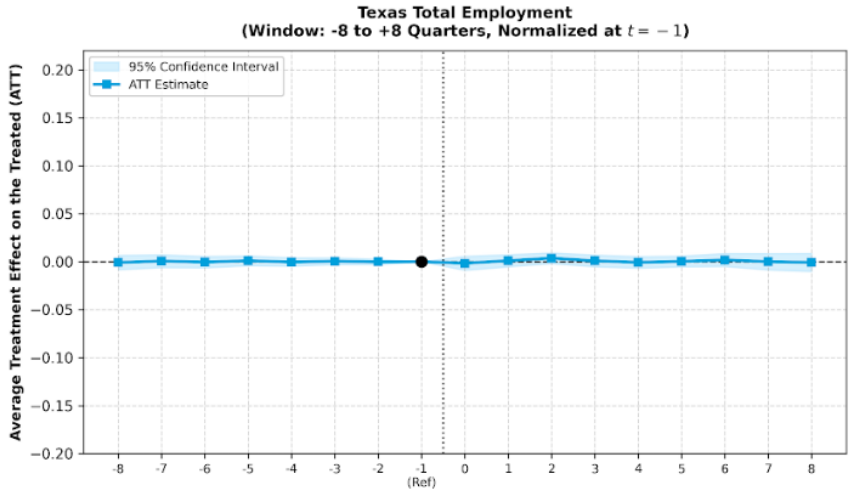


(a) Log Employment

Yue and Zeng (2026): 3.5%



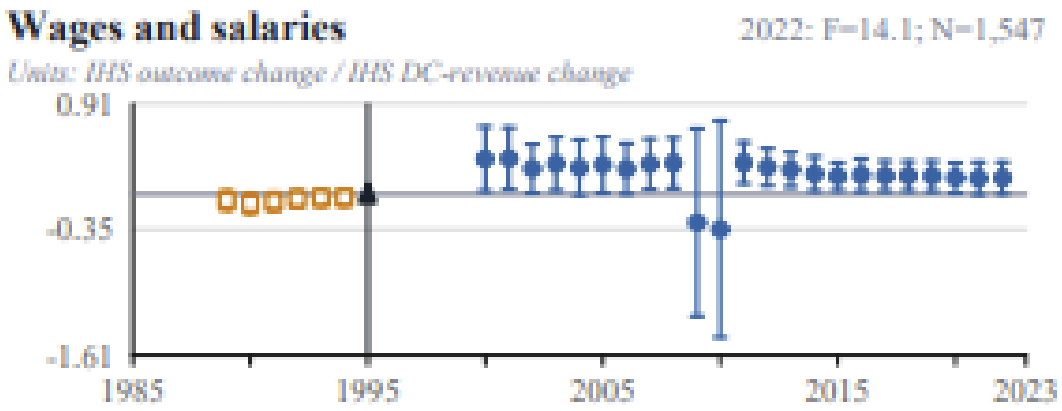
Aldana et al. (2026): ~1,000 additional jobs



Hicks et al. (2026) (Texas only): No impact

WHAT ABOUT WAGE GROWTH?

Findings are similarly mixed for wage growth.



Alvarez et al. (2026): 1.9% wage ↑



(b) Log Total Wages

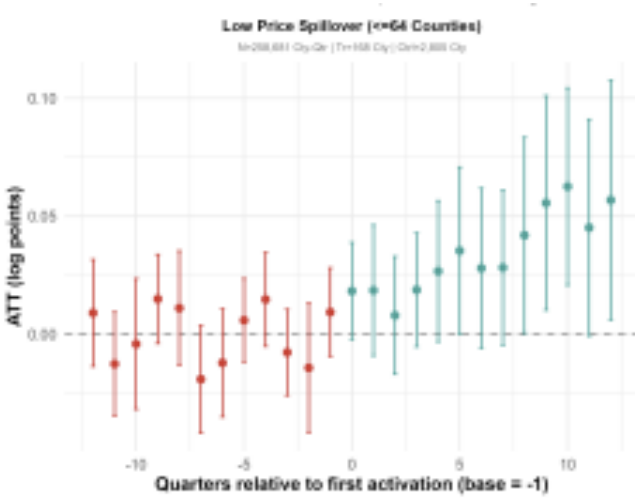
Yue and Zeng (2026): no wage growth in non-metro

INFRASTRUCTURE

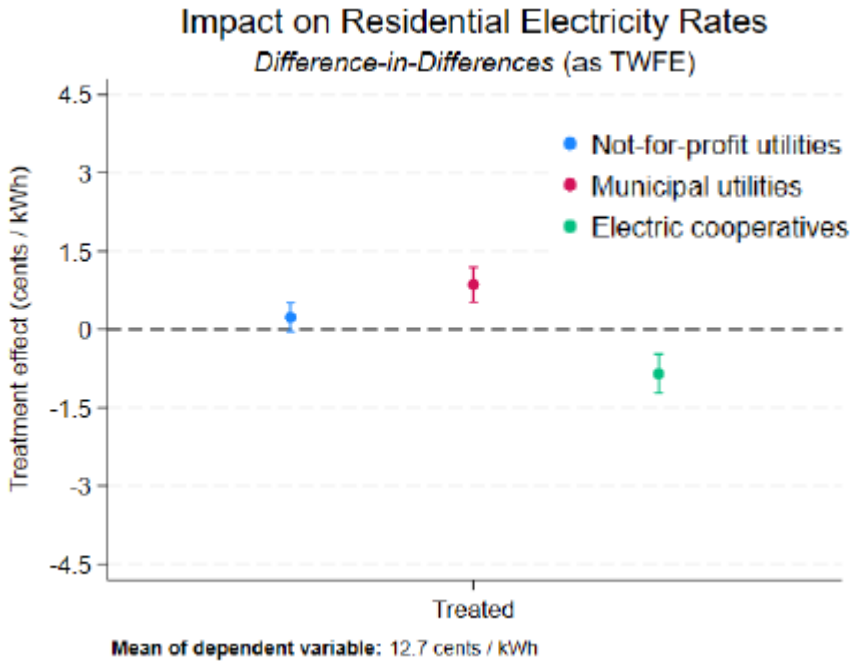


DATA CENTER EFFECTS ON ELECTRICITY PRICES

Again – evidence is mixed:



Yue and Zeng (2026): prices **rise** In locations where <64 counties share a utility



Zhuang (2026): Residential rate impacts **vary** by type of utility provider

We estimate that data centers caused average retail electricity rates to fall modestly in the United States from 2015 to 2024 using an instrumental variables approach. Despite prevail-

Watten et al. (2026): Residential rates are 3.5% **lower** after data center entry

DATA CENTER EFFECTS ON WATER USAGE

Again – evidence is mixed:

Congressional Research Service
Informing the legislative debate since 1914

Data Centers and Water: Frequently Asked Questions

July 31, 2026

Large difference between open loop / closed loop systems

Estimates municipal water systems provide 97% of data centers on-site water

Avg surplus by size of water system (Millions of Daily Gallons)

Category	100 or Less	101 - 500	501 - 3,300	3,301 - 10,000	10,001 - 50,000	50,001 - 100,000	100,001- 500,000	Over 500,000	All Sizes
Average Surplus	0.08	0.14	0.34	0.68	0.84	2.48	3.86	9.41	0.72
Median Surplus*	0.03	0.10	0.23	0.89	3.00				0.20

Ren et al. (2026): "Many U.S. public water systems lack the capacity to accommodate new, large-scale industrial peak demands."

Examples cited:

- A 1.2 MGD capacity request in a town with less than 2 MGD of remaining capacity triggered upgrades costing the developer more than $100 million.
- A modest request of 0.1 MGD water and 0.08 MGD wastewater still required a new pump station costing $5.4 million, paid by the data center.

DO DATA CENTERS USE BROADBAND?

Connect via "long-haul" or "middle mile" carriers or build their own.

- Generally do not rely on/overwhelm local Internet Service Providers (ISPs).
- Some infrastructure may create future public broadband opportunities
- Fiber demand could impact ongoing rural broadband builds

WHAT ABOUT ROAD INFRASTRUCTURE?

Day-to-day operations generate almost no trips.

Construction is another story – it is a major infrastructure project.

- Heavy trucks use local roads not built for sustained cargo.
- Traffic surge can often fall outside peak hours.

Many communities are including road-use agreements, developer-funded repairs as part of deal.



HOUSING VALUES

RESEARCH ON DATA CENTERS & HOUSING VALUES

Negative	Neutral	Positive
Ao et al., 2026 (US): slow growth in housing prices by 1 – 3 pp	Priest, 2026 (Virginia): +/- 0.4%	Alvarez et al., 2026 (US): 4.4 pp increase in house-price growth
Chia et al., 2026 (US): 6.8% decline		Waters & Clower, 2025 (Virginia): proximity to data center positively associated with housing values

POSITIVE EFFECT?

- Stimulate local labor demand
- Attract population inflows
- Raise household income
- Expand the local tax base, which in turn supports better public resources

(Ao et al., 2026)

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NEGATIVE EFFECT?

- Limited permanent employment
- Straining local power infrastructure
- Raising energy prices
- Depleting water resources
- Noise
- Light

(Ao et al., 2026)

CONCLUDING REMARKS

TAKEAWAYS

- Data centers can generate economic benefits, but the magnitude and distribution can vary widely.
- Local economic outcomes will depend on the specifics of the project and community.
- The “right” question is not whether communities should be for or against data centers, but what terms make these projects acceptable to the community (Hochard & Bogus, 2026).

OSU EXTENSION RESOURCES

EXTENSION

BAE-1772

Considerations for communities evaluating proposed data centers

July 2026

This document compiles key questions raised by researchers and community stakeholders regarding data center development. It is intended to highlight important considerations when evaluating proposed projects and does not represent an official position of Oklahoma State University. These questions were reviewed by the Oklahoma State University Data Center Research Committee prior to publication.

The OSU Data Center Committee is a collaborative working group focused on informing the public and identifying research needs related to data centers. The Committee is developing a series of research-based fact sheets addressing topics such as water use, energy demand, economic impacts and other relevant considerations.

Questions about this document, other related fact sheets, data centers in general or any answers to these questions obtained from town or city hall meetings may be directed to the Oklahoma Water Resources Center at water@okstate.edu.

Understanding the proposal and what is being approved

- Is this proposal for a single building, or is it part of a larger campus or phased development?
- How many phases are planned?
- What specifically triggers approval of each future phase?
- What is the maximum total build-out allowed under current zoning or development agreements?
- Are future expansions subject to new public hearings, or can they proceed administratively?
- Are approvals tied to this specific operator, or can the facility be sold, leased or transferred without public review?
- Can building density, computing density or infrastructure capacity increase without reopening approvals?

Expansion safeguards and limits

- Can water use, electricity demand or land use increase without additional community approval?
- Are there enforceable caps on:
  - Total water use
  - Total electricity demand
  - Total building square footage
  - Number of backup generators
- Do these caps apply per phase, or to the entire project lifespan?
- What automatic actions occur if a cap is exceeded?

OKLAHOMA STATE UNIVERSITY | DIVISION OF AGRICULTURAL SCIENCES AND NATURAL RESOURCES

EXTENSION

AGEC-924

The economics of data centers: Considerations for communities

June 2026

The primary reason communities consider recruiting or approving data centers is their anticipated economic impact. It is often expected that these facilities will generate jobs and increase revenue to support public services. However, the actual economic impact that data centers will have on the local community remains uncertain. Large data centers—often 10,000 square feet or more—are still new, and their local effects are largely speculative, often depending on the specifics negotiated for each project.

This fact sheet begins with a brief overview of data centers and a discussion on why Oklahoma is being considered as a potential location for these facilities. This is followed by an overview of some of the most frequently discussed economic considerations, including revenue, employment and infrastructure. The purpose of this fact sheet is to offer a high-level introduction for communities navigating data center proposals. Additional fact sheets will explore specific topics (such as water or electricity use) in greater detail. This fact sheet is informational only and does not indicate support for or against data centers.

What is a data center?

Data centers are specialized facilities that house servers, storage systems and networking equipment used to support cloud services and digital applications. They enable the storage, processing and transfer of vast amounts of data, making modern digital services possible. Everyday activities like sending a text, checking an email, streaming a movie, using GPS navigation or posting on social media depend on data centers to process information quickly and deliver results in real time. The deployment of Artificial Intelligence (AI) platforms like ChatGPT, Claude or Gemini requires significant computational power and data storage to support the complex models that power them. As a result, data centers have become essential infrastructure in today's technology-driven society.

Why Oklahoma?

Oklahoma has attracted growing interest as a location for data center development. As of 2026, several facilities are already operating in the state, with additional projects in various stages of planning and construction. While Oklahoma currently has fewer data centers than states like Virginia or Texas (Figure 1), demand for new sites is growing in Oklahoma, as it is across the nation.

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EXTENSION

AGEC-925

Data center construction and tax revenue: Two case studies from Oklahoma

August 2026

Across the United States, data center construction has accelerated rapidly, driven by the expansion of cloud computing, artificial intelligence (AI) and digital services. These facilities have become indispensable to modern economic and social activity. They house vast networks of servers used to store, transmit and process data, supporting activities ranging from financial transactions and emergency communications to streaming content and cloud storage.

As their footprint grows, data centers have also become a source of increasing public attention and, at times, contention. Popular press coverage often highlights concerns over energy and water consumption (Borenstein, 2026; Greenfield, 2026) while simultaneously emphasizing potential economic benefits, including gains from construction-related spending and tax revenue (Maher, 2026). Although these narratives frequently suggest that construction activity generates meaningful local tax receipts, we are not aware of any research that directly quantifies these effects.

Oklahoma is uniquely positioned to examine whether there is increased tax revenue associated with data center construction. Unlike most states, Oklahoma makes available city-level tax revenue data by NAICS (North American Industry Classification System) sector. This allows for precise analysis of economic activity associated with specific industries. Additionally, the state has attracted multiple data center projects in recent years. This combination of detailed tax data and ongoing data center development activity provides a rare setting to evaluate whether and to what extent data center construction materializes into increases in local tax revenue.

This fact sheet examines two recent data center projects in Oklahoma: one in Stillwater and one in Muskogee. We provide a comparison of the key characteristics of the two projects selected in Table 1. Despite differences in scale, structure and intended use, the two projects provide a useful basis for comparison. Together, they offer an opportunity to evaluate how different types of data center construction may influence local tax revenues.

Table 1. Comparison of selected Oklahoma data center projects.

Characteristic	Stillwater project	Muskogee project
Developer / operator	Google	Polaris Technologies, Inc.
Primary purpose	Cloud / AI	Bitcoin / cryptocurrency mining
Construction start	Late 2025 (Phase 1)	Early 2024 (Phase 1)
Operational timeline	2027 (Phase 1)	Mid-late 2024 (Phase 1)
Investment size	$500 million (Phase 1)	$100 million (Phase 1)
Planned capacity	Not yet disclosed	200 MW (Phase 1)
Site size	387 acres total of which 77 acres makes up Phase 1	42 acres
Infrastructure type	Traditional concrete data center buildings	Modular "server containers"
Development scope	Up to six phases, with each phase having an investment of around $500 million	Expected to double investment and capacity in Phase 2

extension.okstate.edu

USDA United States Department of Agriculture

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