TEXAS STATE AND LOCAL TAX REVENUES FROM DATA CENTERS

PREPARED FOR

DATA CENTER COALITION

PREPARED BY

MANGUM economics

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The estimates provided in this report are based on the best information available and all reasonable care has been taken in assessing the quality of that information. However, because these estimates attempt to foresee the consequences of circumstances that have not yet occurred, it is not possible to be certain that they will be representative of actual events. These estimates are intended to provide a good indication of likely future outcomes and should not be construed to represent a precise measure of those outcomes.

Executive Summary

This report quantifies the tax contribution that data centers make to the State of Texas and to the metropolitan statistical areas of Greater Austin, the Dallas-Fort Worth Metroplex, Greater Houston, and Greater San Antonio. The report also estimates the annual state and local tax revenue that will be generated by planned data center development in Texas, once it all becomes operational.
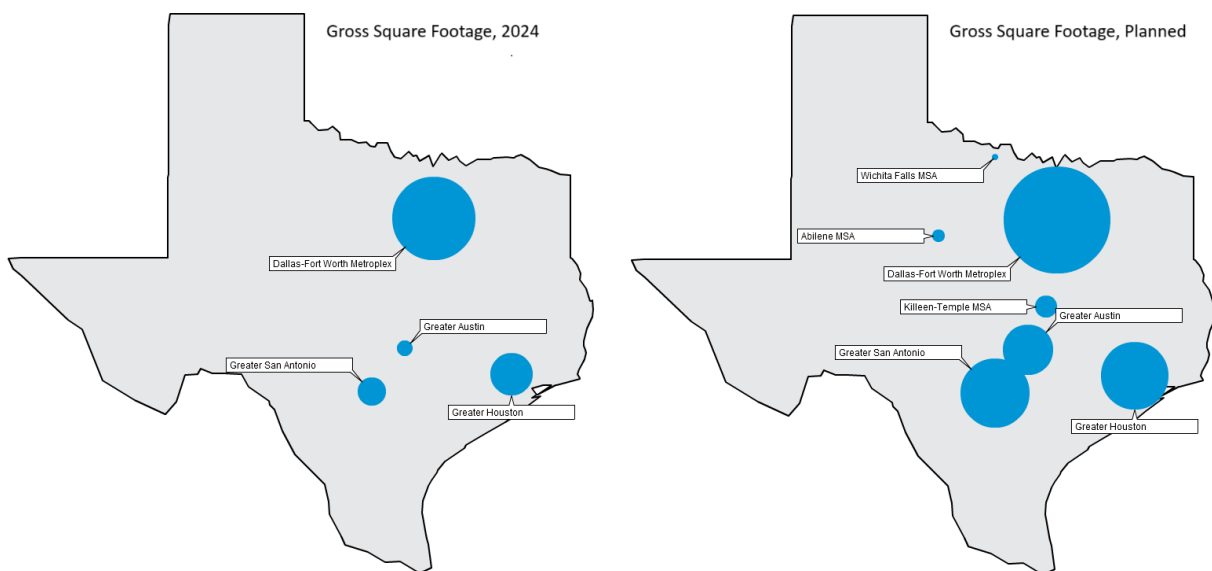
As of the end of 2024, Texas had almost 41 million gross square feet of data center capacity– the majority in the Dallas-Fort Worth Metroplex.

In 2024, data centers provided the State of Texas with over $1.6 billion in tax revenue, and statewide, data centers generated almost $1.6 billion for local taxing authorities in Texas.

The state's robust economic environment, reliable energy infrastructure, skilled labor pool, and data center-friendly economic development programs have paved the way for numerous planned data center projects across the state in the coming years. Statewide, there are plans to add almost 117 million gross square feet of data center capacity. In addition to the major data center additions and expansions planned for the four major metropolitan areas, in the next several years, there are major data center developments planned for the Abilene, Killeen-Temple, and Wichita Falls metropolitan statistical areas (MSAs).

Over the next several years, planned data center development across the state will provide almost $3.8 billion in additional revenue for the State of Texas and over $4.9 billion in additional revenue for schools and local governments in Texas.

Planned Growth in Texas Data Center Concentrations

Economic Profile of Data Centers in Texas

Each of the four largest metropolitan areas in Texas (Greater Austin,[1] the Dallas-Fort Worth Metroplex,[2] Greater Houston,[3] and Greater San Antonio[4]) is home to a major concentration of commercial data centers.[5] According to the data center real estate services firm, datacenterHawk,[6] as of the end of 2024, Texas had almost 41 million gross square feet of data center capacity – 64 percent of the total is in the Dallas-Fort Worth Metroplex, 20 percent is in the Greater Houston area, 10 percent is in the Greater San Antonio area, and 4 percent is in the Greater Austin area.

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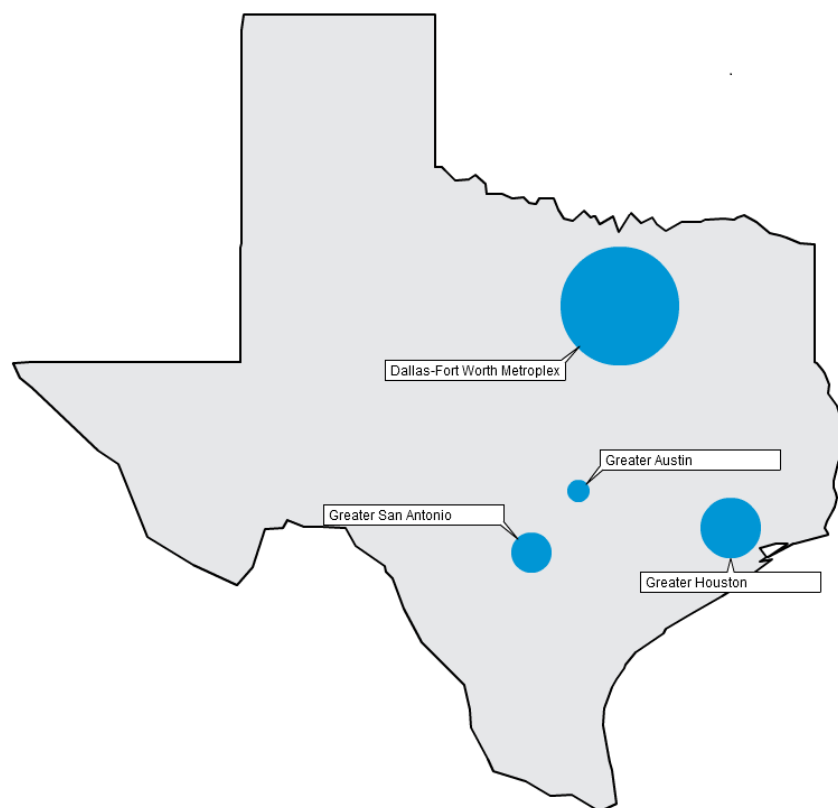
[1] Throughout the report we use Greater Austin to refer to the five-county region of the Austin-Round Rock-San Marcos metropolitan statistical area.

[2] Throughout the report we use Dallas-Fort Worth Metroplex to refer to the eleven-county region of the Dallas-Fort Worth-Arlington metropolitan statistical area.

[3] Throughout the report we use Greater Houston to refer to the ten-county region of the Houston-The Woodlands-Sugar Land metropolitan statistical area.

[4] Throughout the report we use Greater San Antonio to refer to the eight-county region of the San Antonio-New Braunfels metropolitan statistical area.

[5] This report does not cover data centers that are owned and operated exclusively for the use of a company that primarily operates in another line of business, for example, the Texas data centers of Tesla, ERCOT, and many other telecommunications, energy, banking, and healthcare companies. Cryptocurrency mining facilities are not data centers.

[6] See data center real estate with new clarity - datacenterHawk, last accessed 12/19/24.

Table 1 shows key economic metrics for data centers in the four metropolitan areas and statewide.

Table 1. Key Economic Metrics of Data Centers in Texas, 2024[7]

	Greater Austin	Dallas-Fort Worth Metroplex	Greater Houston	Greater San Antonio	Other Areas	Texas
Gross Square Footage of Data Centers (millions)	1.8	26.3	8.1	4.2	0.5	40.9
Cost of Real Estate Investment (billions)	$2.2	$31.5	$10.0	$5.0	$0.4	$49.1
Cost of Installed Tangible Personal Property (billions)	$4.4	$63.0	$19.3	$10.1	$1.4	$98.2

It is estimated that there is about $49 billion in real property (the data center facility buildings) and about $98 billion in tangible personal property (e.g., computer equipment housed inside of data center buildings) on local tax rolls statewide.[8]

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[7] Data Sources: datacenterHawk and Mangum Economics modeling and calculations
[8] See the Data and Methods section at the end of this report for more explanation.

Fiscal Impact from Data Centers in Texas

Data centers in Texas generate revenues for the State government and local taxing authorities primarily through property taxes, sales taxes, and the State franchise tax.

DIRECT PROPERTY TAXES

Data centers pay property taxes on data center facilities to local taxing authorities, such as counties, school districts, towns, and cities. Data centers also pay property taxes to local taxing authorities on the data center computing equipment that is housed inside of the buildings. A significant percentage of this expensive data center equipment is replaced with new equipment every few years. Taxation of this equipment is the reason the annual tax revenue from data centers is so high and does not decline significantly over time. Local governments are taxing a large amount of expensive new data center equipment every year. In other types of businesses where the equipment is replaced much less frequently, the annual tax revenue declines faster.

Some property tax revenue collected by some school districts goes to the State of Texas under the State's recapture policy. As explained by the Texas Education Agency, if local school districts collect more than an amount determined by the Texas Education Agency, "the Texas Education Code makes provisions for certain school districts to share their local tax revenue with other school districts…. [R]ecaptured funds are redistributed by the [Texas State] school finance system to assist with the financing of public education for all school districts."[9]

DIRECT SALES TAXES

All multitenant data centers pay local sales and use taxes on the new data center equipment when it is installed and on the electricity used by the data centers.

Some single-occupant data centers qualify for the State's temporary exemption from the 6.25 percent sales and use tax on certain items including the data center equipment and electricity.[10]

DIRECT FRANCHISE TAX

Data centers (and most other companies with more than $2.47 million of annualized total revenue) pay Texas' franchise tax – a variation of a 0.0075 percent gross receipts tax.[11]

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[9] Excess Local Revenue | Texas Education Agency
[10] State Sales Tax Exemption for Qualified Data Centers
[11] Franchise Tax

INPUTS AND ASSUMPTIONS

Our tax revenue estimates are based on the following inputs and assumptions.

- Tangible personal property in data centers is replaced on a five-year cycle.
- Local taxes apply to real and tangible personal property and to electricity purchases.
- Tangible personal property is taxed at its depreciated value using depreciation schedules for computer or data center equipment from each county.
- The effective average depreciation rate on installed tangible personal property in each of the four areas[12] is
  - o Greater Austin – 37 percent
  - o Dallas-Fort Worth Metroplex – 39 percent
  - o Greater Houston – 55 percent
  - o San Antonio – 27 percent.
- The weighted average tax rate levied on real and tangible personal property by local taxing authorities other than schools in the four areas[13] is
  - o Greater Austin – 0.75 percent
  - o Dallas-Fort Worth Metroplex – 0.85 percent
  - o Greater Houston – 0.83 percent
  - o San Antonio – 0.82 percent.
- The weighted average tax rate levied on real and tangible personal property by local schools for interest and sinking costs (which stays with the local schools) in the four areas[14] is
  - o Greater Austin – 0.29 percent
  - o Dallas-Fort Worth Metroplex – 0.30 percent
  - o Greater Houston – 0.28 percent
  - o San Antonio – 0.34 percent.
- The weighted average tax rate levied on real and tangible personal property by local schools for maintenance and operations costs (which is subject to recapture by the State government) in the four areas[15] is
  - o Greater Austin – 0.70 percent
  - o Dallas-Fort Worth Metroplex – 0.75 percent
  - o Greater Houston – 0.70 percent
  - o San Antonio – 0.68 percent.
- Assume all hyperscale data centers have been certified to qualify for exemption from the State's 6.25-percent sales and use tax.
- Twenty-five percent of multitenant data centers have been certified to qualify for exemption from the State's 6.25-percent sales and use tax.
- All multitenant data centers are subject to a local 2-percent sales and use tax.

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[12] Based on county-by-county research and calculations by Mangum Economics.
[13] Based on county-by-county research and calculations by Mangum Economics.
[14] Based on ISD-by-ISD research and calculations by Mangum Economics.
[15] Based on ISD-by-ISD research and calculations by Mangum Economics.

- All revenue funding maintenance and operations of local schools is recaptured by the government of the State of Texas from the following independent school districts where there are data centers
  - Allen ISD
  - Austin ISD
  - Carrollton-Farmers Branch ISD
  - Dallas ISD
  - Fort Worth ISD
  - Frisco ISD
  - Houston ISD
  - Hutto ISD
  - Lewisville ISD
  - McKinney ISD
  - Northwest ISD
  - Pflugerville ISD
  - Plano ISD
  - Richardson ISD
  - Round Rock ISD
  - Texas City ISD
- All data centers and supported businesses are subject to the Texas State franchise tax.
- The supported economic activity derived from the operational spending by data centers generates state and local tax revenue estimated by IMPLAN.[16]
- Estimates are not adjusted for any local incentive arrangements due to the lack of public information.

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[16] IMPLAN is produced by IMPLAN Group, LLC.

STATE AND LOCAL TAX REVENUES FROM DATA CENTERS IN TEXAS

Data centers are an important revenue source for both the State and local governments of Texas. As shown in Table 2, in 2024, data centers provided the State of Texas with over $1.6 billion in tax revenue, and statewide in 2024 data centers generated almost $1.6 billion for local taxing authorities in Texas.

Table 2. Fiscal Impacts of Data Centers in 2024 (millions)[17]

	Greater Austin	Dallas-Fort Worth Metroplex	Greater Houston	Greater San Antonio	Other Areas	Statewide
School Property Taxes Recaptured by the State	$10.1	$345.3	$63.7	$0.0	$0.0	**$419.1**
State's Share of Sales and Use Tax on Tangible Personal Property	$38.5	$537.3	$181.4	$32.7	$0.3	**$790.2**
State's Share of Sales and Use Tax on Electricity	$2.2	$20.5	$5.0	$2.4	$0.2	**$30.3**
State Tax Revenue from Operational Purchases by Data Centers	$10.1	$126.9	$50.0	$18.2	$34.8	**$240.0**
State Franchise Tax Revenue from Data Centers	$6.4	$81.7	$25.9	$11.6	$6.1	**$131.7**
TOTAL STATE REVENUE	**$67.3**	**$1,111.7**	**$326.0**	**$64.9**	**$41.4**	**$1,611.3**
Local Non-School Property Tax Revenue	$29.0	$476.2	$168.6	$64.0	$47.1	**$784.9**
Local School Property Taxes Kept Locally	$16.9	$78.0	$78.6	$52.8	$14.4	**$240.7**
Local Governments' Share of Sales and Use Tax on Tangible Personal Property	$16.4	$229.3	$77.4	$14.0	$0.0	**$337.1**
Local Governments' Share of Sales and Use Tax on Electricity	$0.9	$8.7	$2.2	$1.0	$0.2	**$12.9**
Local Tax Revenue from Operational Purchases by Data Centers	$9.9	$116.1	$50.9	$15.8	$29.2	**$221.9**
TOTAL LOCAL REVENUE	**$73.1**	**$908.3**	**$377.6**	**$147.6**	**$90.9**	**$1,597.5**

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[17] Data Source: Mangum Economics modeling and calculations

The Expected Growth in Texas Data Centers

The increasing need for data centers and their services is being driven by more than just the often-discussed impact of artificial intelligence and machine learning. Data centers house the computing power needed for the latest technological advancements in areas like autonomous driving, space exploration, and the Internet of Things. Digital technologies are being developed for many industries such as construction, hospitality, and agriculture that have previously not been changed by technical advancements. The rapid growth in software companies and products has led to an exponential increase in demand for data center cloud services, as software's scalability and frequent updates drive the need for robust hosting solutions. Increasingly, government services and regulations require the electronic networking and data storage services provided by data centers. Also, businesses and individuals in our 21st-century economy are becoming more reliant on the digital infrastructure provided by data centers to accomplish daily tasks like email, video calls, banking, and more.

Because Texas has a strong business climate, available power supplies, a strong workforce, and state sales and use tax economic development programs that take into account the special circumstances of the data center industry, there are many additional data center developments planned for the state over the next several years.

For this report we used information collected and reported by datacenterHawk on the plans of commercial hyperscale and multitenant data center companies for new data center projects and for expansions of existing developments. The information reported by datacenterHawk is collected from extensive contacts with data center companies, as well as from public announcements, and from public filings with government agencies that regulate development activities.

According to datacenterHawk, statewide, there are plans to add almost 117 million gross square feet of data center capacity to what is already operating in Texas. It is notable that while there are major data center additions and expansions planned for the four major metropolitan areas, in the next several years there are major data center developments planned for three additional metropolitan areas – the Abilene MSA, Killeen-Temple MSA, and Wichita Falls MSA. Some examples of the planned major developments include:

- Abilene MSA: Crusoe's AI data center campus[18]
- Greater Austin: Skybox Datacenters' campus,[19] Prime Data Centers' campus,[20] EdgeConneX's data center,[21] AWS' data center,[22] and Switch's data center expansion[23]

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[18] Crusoe to Build Initial 200 MW AI Data Center With Plans to Expand at 1.2 GW Lancium Clean Campus
[19] PowerCampus® Austin | Skybox Datacenters
[20] Prime Data Centers looking to build $1.3bn data center near Austin, Texas - DCD
[21] Bastrop County grants tax abatement incentive to multibillion-dollar data center | Community Impact
[22] Amazon granted zoning permission for data center & distribution site in Round Rock, Texas - DCD
[23] Switch granted planning permission for data center in Round Rock, Texas - DCD

- Dallas-Fort Worth Metroplex: Google's data center campus,[24] NTT Global's data center,[25] CyrusOne's data center,[26] PowerHouse Data Center's campus,[27] Digital Realty's data centers,[28] Aligned Data Centers' data centers,[29] and QTS Data Center's data center[30]
- Greater Houston: Serverfarm's data center expansion[31]
- Killeen-Temple MSA: Meta's data center campus[32] and Rowan Digital Infrastructure's campus[33]
- Greater San Antonio: Microsoft's data centers,[34] Rowan Digital Infrastructure's campus,[35] Stream Data Centers new campus,[36] CloudHQ's data centers,[37] and CyrusOne's data center[38]
- Wichita Falls MSA: DataNovaX's data center campus[39]

This planned development will take an undetermined number of years for full build-out and occupancy to occur. However, all across the country, data center construction and occupancy are taking place as fast as possible.[40] The amount of multitenant data center space that is under construction in Austin and San Antonio in 2024 was four times as much as was under construction in 2023. Additionally, multitenant vacancy rates in primary markets in the U.S. have fallen to below three percent. So, most of the planned development is likely to be operating within the next five years.

It is important to note that the 117 million gross square feet of planned development for Texas does not include data center developments by commercial real estate development companies. Commercial developers contract for and prepare tracts of land to secure government approvals and the provision of necessary utilities to meet the needs of data center operators. Once developers have sufficiently prepared sites, they sell them to agents of data center owners and operators. Only at that time would these projects be captured by datacenterHawk. So, the 117 million gross square foot estimate of planned data center development is not a "castles in the air" number. It represents very concrete plans for construction and operation and likely underestimates the actual potential for data center development in Texas over the next several years.

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[24] Google to invest $1bn expanding Dallas data centers, signs 375MW in solar PPAs - DCD
[25] North Texas is becoming data center industry powerhouse. NTT Global Data Centers Americas set to invest in Lancaster.
[26] CyrusOne to build $200M data center in north Fort Worth | Community Impact
[27] PowerHouse Irving, a New 200 MW Campus
[28] Digital Realty data center coming to Garland, Texas: What we know | wfaa.com
[29] (25) Post | LinkedIn and Plano council approves permit to allow new data center | Community Impact
[30] QTS plans $288M data center project south of Dallas | Corgan
[31] Manulife-Backed Serverfarm Acquires Two Data Centers Providing Over 500MW of New Potential Capacity in the Houston Market
[32] Texas-Temple.pdf
[33] MORIAH - Rowan Digital Infrastructure
[34] Microsoft plans $482m data center in San Antonio, Texas - DCD
[35] CINCO - Rowan Digital Infrastructure
[36] Data Centers San Antonio | Texas Colocation
[37] CloudHQ SAT Campus
[38] CyrusOne Data Centers in Texas: SAT5, San Antonio
[39] DataNovaX Announces Opening of $1 Billion Pioneer Park Build-to-Suit Data Center Campus in North Texas – DataNovaX
[40] North America Data Center Trends H1 2024 | CBRE

Figure 2 shows how data center development is already planned to expand across the state from what existed in 2024. The sizes of the circular areas are scaled proportionally across both maps. So, the development planned for the Abilene, Killeen-Temple, and Wichita Falls MSAs is greater than all of the data center development currently operating in Greater San Antonio. The planned development in the Dallas-Fort Worth Metroplex exceeds the current data center capacity in the entire state of Texas.

Figure 2. Planned Growth in Texas Data Center Concentrations
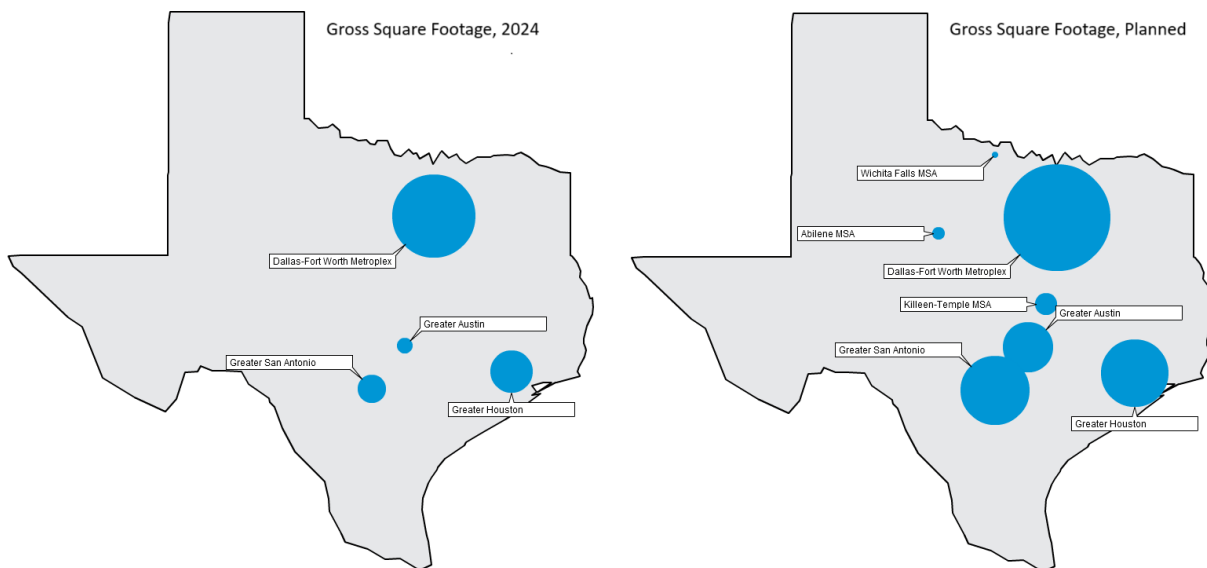
Additional data center development means more construction jobs, more construction spending that affects the local and state economies, and more economic activity that generates additional local and state tax revenue. Once the data centers are operational, they create additional operational jobs, spending in the local and state economies, and additional local and state tax revenue.

Table 3 shows the additional tax revenue going to the State of Texas from the planned new data center development. **We estimate that, statewide, the planned data center development will provide almost $3.8 billion in additional revenue for the State of Texas.**

Table 4 shows the additional tax revenue going to school districts and local governments from the new planned data center development. **We estimate that, statewide, the planned data center development will provide over $4.9 billion in additional revenue for schools and local governments in Texas.**

Table 3. Texas State Government Tax Revenues from Additional Data Center Development Planned for Texas (in millions)[41]

	Greater Austin	Dallas-Fort Worth Metroplex	Greater Houston	Greater San Antonio	Abilene MSA	Killeen-Temple MSA	Wichita Falls MSA	Other Areas	Statewide
Additional Gross Square Footage of Data Centers	13.6	41.1	19.1	24.2	1.0	3.2	0.3	14.0	**116.5**
School Property Taxes Recaptured by the State	$130.6	$370.9	$0.0*	$0.0*	$0.0*	$0.0*	$0.0*	$0.0*	**$501.5****
State's Share of Sales and Use Tax on Tangible Personal Property	$289.2	$861.2	$102.6	$280.5	$236.7	$1.8	$6.8	$1.4	**$1,780.2**
State's Share of Sales and Use Tax on Electricity	$36.0	$98.7	$11.9	$32.5	$30.1	$0.3	$3.9	$16.5	**$229.9**
State Tax Revenue from Operational Purchases by Data Centers	$101.8	$346.8	$85.7	$113.5	$13.0	$14.0	$3.0	$145.1	**$822.9**
State Franchise Tax Revenue from Data Centers	$60.1	$140.7	$16.9	$61.1	$4.7	$7.2	$1.3	$30.0	**$322.0**
TOTAL ANNUAL STATE REVENUE	**$631.3**	**$1,859.4**	**$236.2**	**$511.8**	**$285.5**	**$23.6**	**$18.2**	**$207.0**	**$3,773.0****

* The development planned for these areas is in ISDs that have not had recapture in fiscal year 2023-2024, so we do not estimate recaptured revenue for the planned development. However, it is very possible that some of the new school revenue provided by data centers in these areas will be recaptured.
** If the State of Texas recaptures some of the revenue provided by the new data center development, then this is an underestimate of the likely state revenue from the new data center development.

[41] Data Sources: datacenterHawk and Mangum Economics modeling and calculations

Table 4. Local Fiscal Impacts of Additional Data Center Development (in millions)[42]

	Greater Austin	Dallas-Fort Worth Metroplex	Greater Houston	Greater San Antonio	Abilene MSA	Killeen-Temple MSA	Wichita Falls MSA	Other Areas	Statewide
Non-School Property Tax Revenue	$324.6	$832.7	$48.1	$347.5	$266.7	$66.6	$15.1	$104.1	**$2,005.4**
School Property Taxes Kept Locally	$74.6	$287.2	$77.9*	$262.1*	$216.4*	$84.6*	$14.5*	$286.2	**$1,303.5****
Sales and Use Tax on Tangible Personal Property	$123.4	$367.4	$43.8	$119.7	$101.0	$0.8	$2.9	$0.5	**$759.5**
Sales and Use Tax on Electricity	$15.4	$42.1	$5.1	$13.9	$12.8	$0.1	$1.7	$7.0	**$98.1**
Tax Revenue from Operational Purchases by Data Centers	$99.9	$317.3	$87.1	$98.1	$7.6	$8.7	$1.9	$121.2	**$741.8**
ANNUAL TOTAL REVENUE ON ADDITIONAL DATA CENTERS	**$637.9**	**$1,846.7**	**$262.0**	**$841.3**	**$604.5**	**$160.8**	**$36.1**	**$519.0**	**$4,908.3**

* The development planned for these areas is in ISDs that have not had recapture in fiscal year 2023-2024, so we do not estimate recaptured revenue for the planned development. However, it is very possible that some of the new school revenue provided by data centers in these areas will be recaptured.

** If the State of Texas recaptures some of the revenue provided by the new data center development, then this is an overestimate of the likely local revenue from the new data center development.

[42] Data Source: Mangum Economics modeling and calculations

Conclusion

This report quantifies the contribution that data centers make to the State of Texas and to the four largest metropolitan statistical areas. The report also estimates the annual state and local tax revenue that will be generated by planned data center development in Texas, once it all becomes operational.

As of the end of 2024, Texas had almost 41 million gross square feet of data center capacity – 64 percent of the total is in the Dallas-Fort Worth Metroplex, 20 percent is in the Greater Houston area, 10 percent is in the Greater San Antonio area, and 4 percent is in the Greater Austin area.

In 2024, data centers provided the State of Texas with over $1.6 billion in tax revenue, and statewide, data centers generated almost $1.6 billion for local taxing authorities in Texas.

With its thriving business ecosystem, ample power resources, talented workforce, and tailored economic development programs for data centers, Texas is poised to see a significant increase in data center developments throughout the state over the next several years. Statewide, there are plans to add almost 117 million gross square feet of data center capacity. In addition to the major data center additions and expansions planned for the four major metropolitan areas, in the next several years, there are major data center developments planned for the Abilene, Killeen-Temple, and Wichita Falls MSAs.

So, the development planned for the Abilene, Killeen-Temple, and Wichita Falls MSAs is greater than all of the data center development currently operating in Greater San Antonio. The planned development in the Dallas-Fort Worth Metroplex exceeds the current data center capacity in the entire state of Texas.

Statewide, over the next several years, the planned data center development will provide over $3.8 billion in additional revenue for the government of the State of Texas and over $4.9 billion in additional revenue for schools and local governments in Texas.

Data and Methods

For information on the volume of current and planned data center capacity, this report relies on information from datacenterHawk – the premier source for reliable metrics on data centers globally.[43] The platform provided by datacenterHawk is used by data center operators, data center tenants, private equity investors, and business analysts. This data center real estate services company provides subscribers with detailed information on the exact location of every commercial hyperscale and multitenant data center in the United States along with information on the acreage, square footage, and megawatts of critical capacity that are owned, commissioned, under construction, and planned for development. No other source provides this level of granularity and accuracy. Its team of market experts updates information for each data center facility on a quarterly basis. This is especially important in such a fast-changing business.

In order to turn these metrics on the physical characteristics of data centers into estimates of state and local tax revenue, we estimate the value of the real and tangible personal property that is currently invested in each data center in Texas. Our estimates are based on our proprietary modeling developed through extensive experience with the data center business and research into data centers in Texas. Our model is updated annually to reflect the latest data center developments and business cost structures.

Mangum Economics has estimated the economic and fiscal impacts of data center projects and the data center business for a decade in many places from Texas to Michigan, Nebraska to Georgia, and California to Maryland. Because of our extensive experience with data centers, our services have been engaged by trade associations, data center owners and operators, commercial developers, and local governments to quantify the economic impact of this important business.

We work to provide only realistic estimates of likely outcomes, and we choose to err on the side of making lower estimates where there is uncertainty. Our model has been validated with feedback from local government officials and data center experts. Our reports provide reliable and unbiased estimates.

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[43] See data center real estate with new clarity - datacenterHawk

About Mangum Economics, LLC

Mangum Economics is a Glen Allen, Virginia based firm that was founded in 2003. Since then, we have become known as a leader in industry analysis, economic impact assessment, policy and program evaluation, and economic and workforce strategy development. The Mangum Team specializes in producing objective and actionable quantitative economic research that our clients use for strategic decision making in a variety of industries and environments. We know that our clients are unique, and that one size does not fit all. As a result, we have a well-earned reputation for tailoring our analyses to meet the specific needs of specific clients, with a specific audience.

Most of our research falls into four general categories:

- **Information Technology:** Working with some of the largest names in the industry, to date the Mangum Team has produced analyses of the economic and fiscal impact of the data center industry in multiple states. Among those, were studies conducted in Arizona, Illinois, and Maryland that were instrumental in the passage of industry-specific legislation.

- **Economic Development and Special Projects:** The Mangum Team has performed hundreds of analyses of proposed economic development projects. One recent example was an analysis of the proposed $2.3 billion Green City "net-zero eco district." The Mangum Team has also authored multiple economic development plans, including identifying industry recruitment opportunities created by the high-speed MAREA and BRUSA sub-sea cable landings in Virginia Beach.

- **Energy:** The Mangum Team has produced analyses of the economic and fiscal impact of over 35 GW of proposed solar, wind, battery, and hydro projects spanning at least twenty-nine states. Among those projects was Dominion Energy's 2.6 GW Coastal Virginia Offshore Wind project off of Hampton Roads. In addition, the Mangum Team has also performed economic and fiscal impact analyses for the natural gas, nuclear, oil, and pipeline industries.

- **Policy Analysis:** The Mangum Team also has extensive experience in identifying and quantifying the intended and unintended economic consequences of proposed legislative and regulatory initiatives.

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