Vinson&Elkins

Data Center Impact on Tax Base and the Energy Grid

Prepared for TXOGA 2026 Ad Valorem Tax Committee Annual Conference

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Vinson & Elkins Profile

Jeffrey Jakubiak

Partner — Energy Regulation

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Jeffrey counsels clients regarding a broad variety of electric, natural gas, and oil matters at the Federal Energy Regulatory Commission (FERC). His practice focuses on matters at the crossroads of law and economics, particularly cost-of-service ratemaking, energy transactions, electric company mergers and power sales, energy market manipulation, and the workings of energy markets. He has a deep understanding of the methodologies used by FERC to set returns on equity and to analyze generation market power, and has developed proprietary quantitative analytical tools that he uses to advise clients on electric asset transactions, market-based rate authorizations, and litigation risk.

Jeffrey's FERC experience has been recognized by *Chambers USA* and *Chambers Global*. Clients have noted he is "an outstanding attorney who has full command of all aspects of the energy industry" and "is an excellent strategic thinker, and has exceptional analytical and writing skills" (*Chambers USA* 2019). In particular, he is "extremely experienced in FERC matters and understands the nuts and bolts of the law in this area" (*Chambers USA* 2016).

Vinson & Elkins Profile

Kathy Pakenham

Partner — Tax

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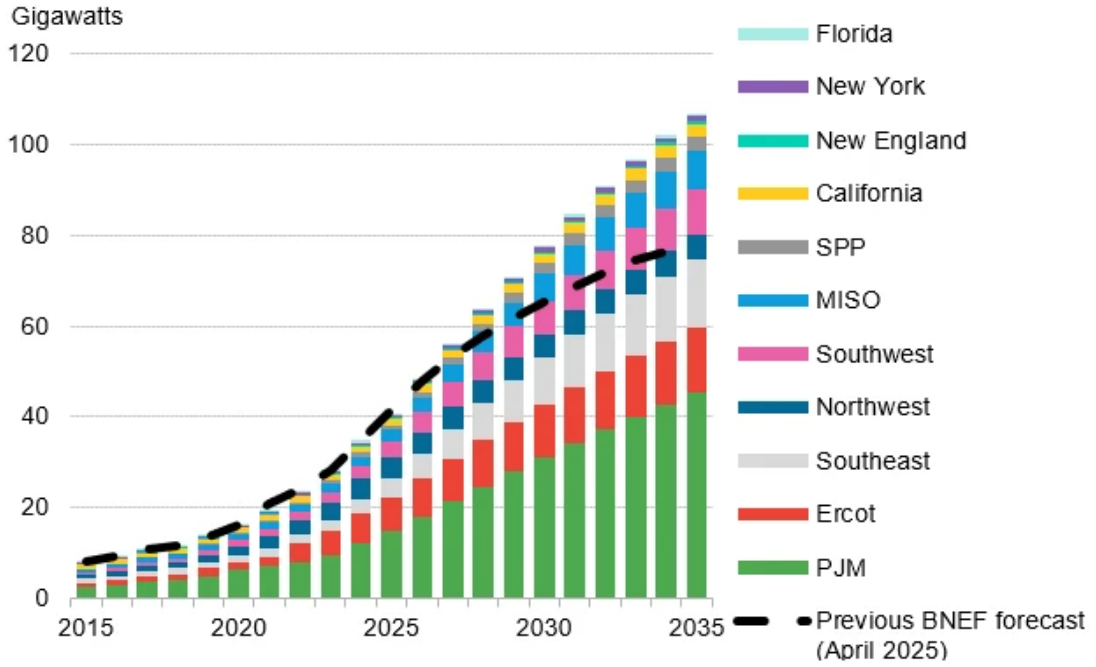
Kathy is Co-Head of the firm's Tax Controversy Practice. She is one of the nation's most sought-after tax controversy lawyers. She has represented clients in major tax controversies relating to a full range of tax issues, with particular emphasis on partnership tax, transfer pricing, valuation, and tax procedure. Kathy has extensive experience advising clients at the pre-litigation phase, in particular examinations and administrative appeals under the centralized partnership audit regime under the Bipartisan Budget Act. She also represents clients involved in internal and governmental investigations, in addition to state and federal trial and appellate matters. Her clients include Fortune 500 companies and large partnerships in diverse sectors such as banking, energy, private equity, technology, and pharma.

Kathy has been recognized consistently as a leader in the tax litigation and controversy practice area by *Chambers USA* and *The Legal 500 U.S*. One client notes "She is incredibly knowledgeable" (*Chambers USA* 2025).

Insatiable (?) Demand for Data Centers

- Data centers require exceptionally large amounts of electricity
  - Running servers
  - Cooling
- Some projections forecast ~25 GW of increased load by 2030 and an additional ~30 GW by 2035
  - But predictions in 2025 were often revised upward
- Unclear whether the full amount of the projected growth will materialize
  - Improvements in chip efficiency may be underestimated
  - Data centers may be limited by electrical supply and lack of grid infrastructure

BloombergNEF Forecast of US Data-Center Power Demand, Issued Dec. 1, 2025



Source: BloombergNEF, https://about.bnef.com/insights/clean-energy/ai-and-the-power-grid-where-the-rubber-meets-the-road/

Electricity's Two-Pronged Problem

- Demand (load) growth generally requires both new electric generation and new electric transmission
  - Electric generation supplies the energy
  - Electric transmission moves the energy from the generating facility to the load
- Both take a considerable time to build
  - Current electric generation build times range from 30 months to 60 months (depending on technology)
    - Solar and wind are relatively quick to build
    - Gas turbine order queue is very long
  - Current electric transmission build times range from 24 to 84+ months
- Generation and transmission can be substitute products to a certain extent
  - Generation near load reduces (but likely does not eliminate the need for transmission)
  - Transmission can reduce or eliminate the need for new generation *if the grid has available supply*

The Grid Is Overstretched

- Both electric generation and electric transmission are in short supply in the U.S.
  - The grid must be able to supply the absolute (“needle”) peak of demand, which can be considerably higher than average peak demand
  - Although the grid has ample supply most of the time, there is a marked lack of supply at peak demand times
  - Data centers need 24/7/365 uninterruptible supply
- Electric utilities by and large lack the current infrastructure to reliably supply near term data center growth, let alone that in the longer term (5-10 years)
  - Some utilities can supply data centers 98% - 99% of the hours of the year
  - But data centers generally lack the ability to curtail demand for any period of time
- Co-locating data centers with generation “behind the meter” can help but is no panacea
  - Generating facilities by and large cannot run 24/7/365
  - Data centers want to be able to pull energy from the grid in an emergency
- Thus, even when generation and transmission are co-located, significant electric transmission infrastructure is needed

Utility Regulators Can Help

- Electric infrastructure growth has by and large been driven by responses to specific requests for service
  - Large load asks to connect, utility studies the matter, engineers and builds the infrastructure – time consuming
  - Utilities will build in anticipation of growth, but only if it has a high likelihood of occurring and growth is “smooth”
- Data center growth is “chunky”
  - A new, “hyperscaled” data center has the same demand as 700,000 to 1 million homes
  - Utilities presently build infrastructure for data centers in response to specific requests
- Utility infrastructure development is driven largely by ability recover costs
  - Electric utilities still largely operate on a “cost plus” model (deregulation is a misnomer)
  - Electric utilities will not build costly infrastructure without (virtually) guaranteed cost recovery
- Utility commissions hold the power to guarantee cost recovery
  - Utility commissions historically will only grant a permit to build infrastructure if the need is clear and tangible
  - Data centers do not have time to pursue the usual utility process – they need supply in 18 months

If You Build It, They Will Come

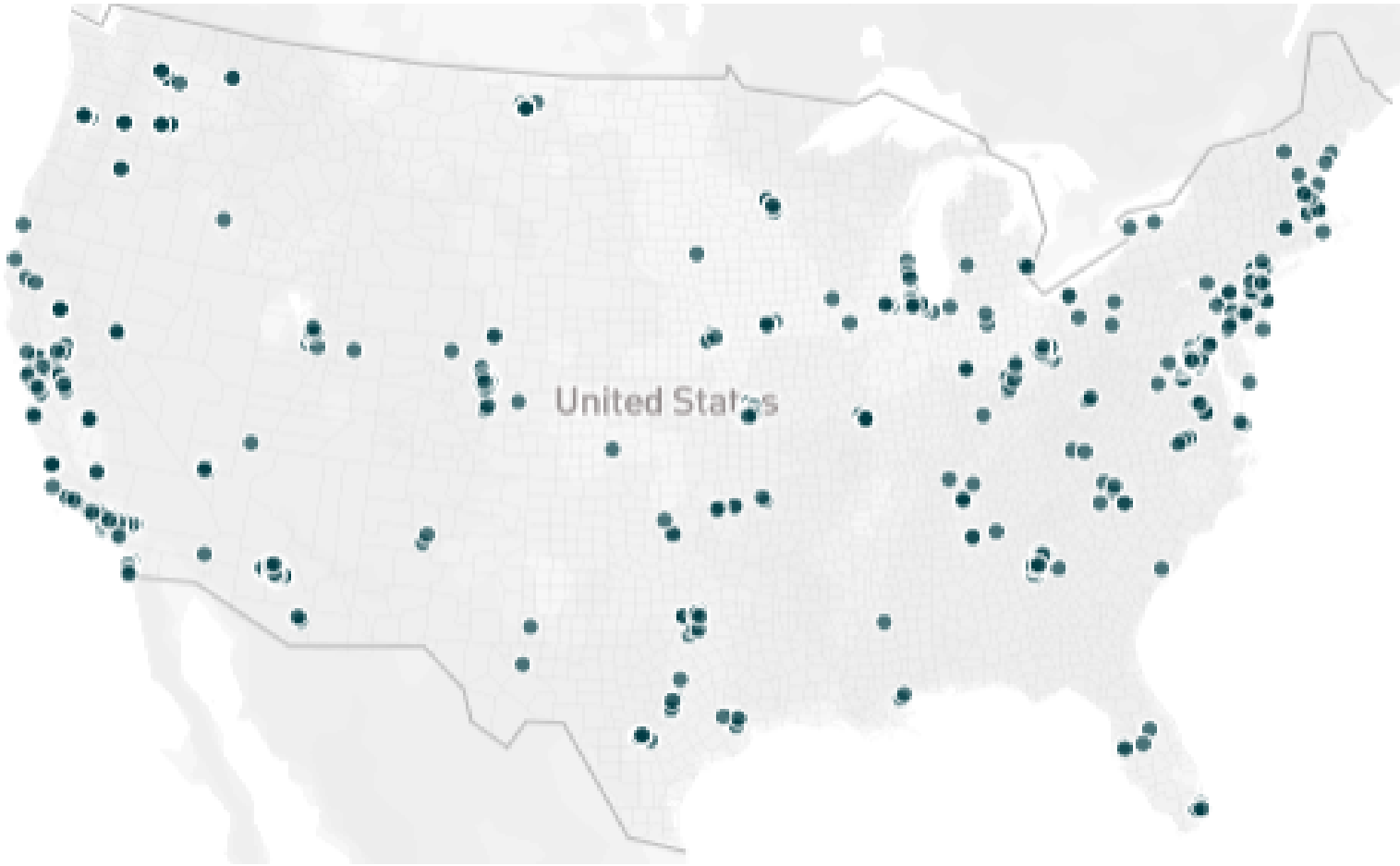
- Utilities and utility commissions can get “in front of the wave” by building generation and transmission infrastructure in an effort to attract data centers
  - Utility commissions have historically thought of themselves as cost-containment agencies
  - They should start thinking of themselves as agents of economic growth and permit utilities to build generation and transmission in advance of requests from data centers
- Data center developers are desperate to find available generation and transmission
  - Available energy supply and transmission are presently the single most important factor in determining where a data center is cited
  - If the utilities build the infrastructure, they will attract the demand

Data Center Impact on Tax Base

Why State and Local Taxes Influence Data Center Siting

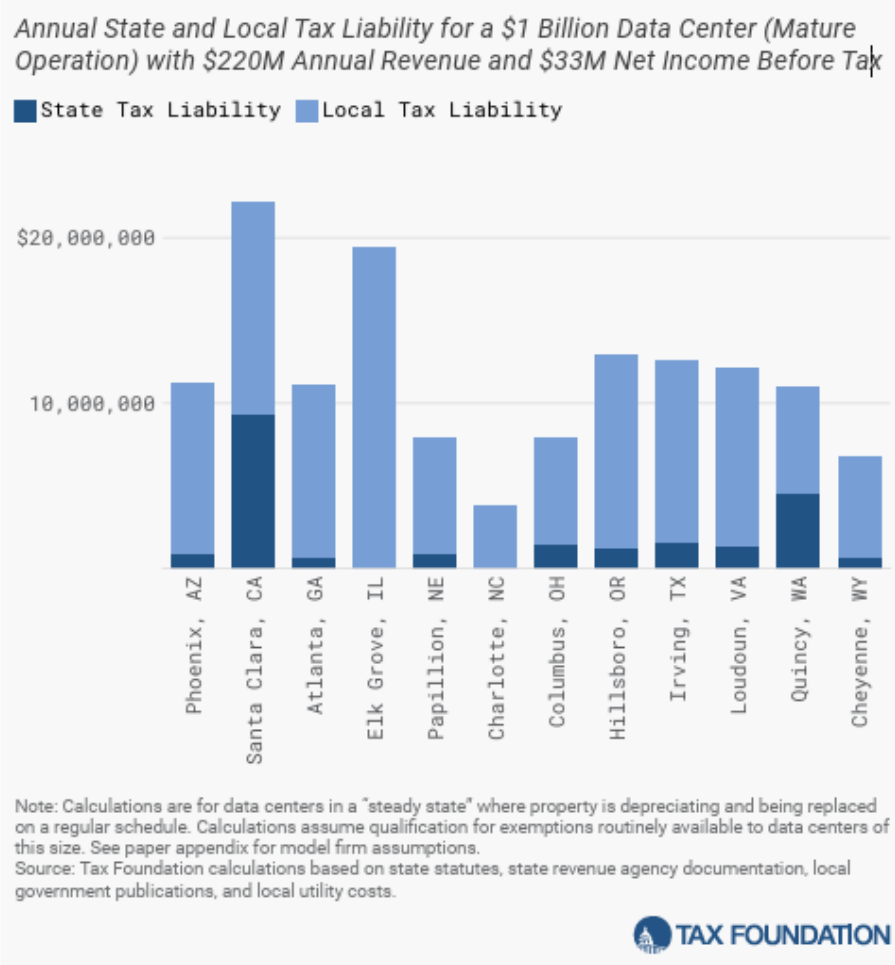
- Capital-Intensive Equipment Taxation
  - Sales and use taxes on servers and cooling systems significantly increase recurring operating costs due to refresh cycles.
- Property Tax Impact
  - Taxation on tangible personal property like servers and electrical gear drives substantial annual property tax burdens for data centers.
- Electricity Tariff Surcharges
  - Local taxes and fees embedded in electricity tariffs directly affect data centers' long-term operating expenses and site competitiveness.

US Data Center Locations



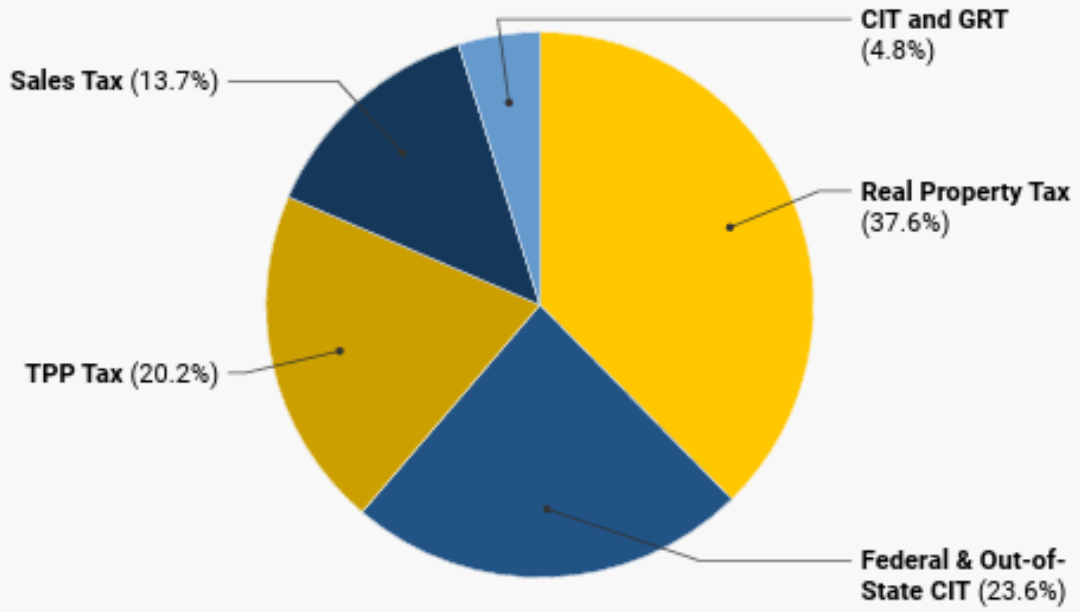
Source: Business Insider, Sept. 2025

Data Center Tax Liability Varies Significantly Among Jurisdictions



Taxes Paid by Data Centers

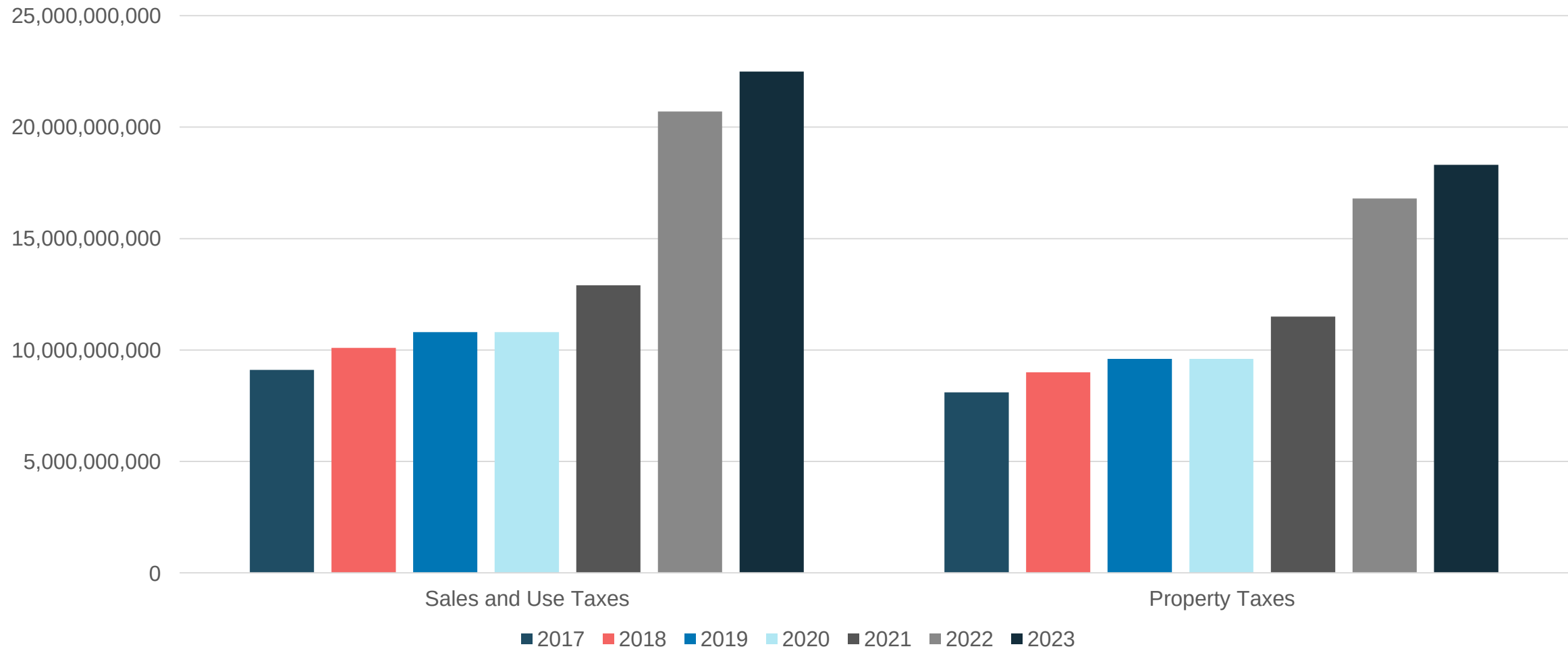
Share of Tax Burden by Tax Type for a $1 Billion Model Data Center



Notes: Calculations are for average tax liability over the first 10 years of operations to capture both new and depreciating property and taxable purchases, and represent an average across data centers in 12 modeled jurisdictions. The model firm has $220 million in gross revenue and 15 percent net income before tax, and calculations assume qualification for exemptions routinely available to data centers of this size. See paper appendix for additional model firm specifications.
Source: Tax Foundation calculations based on state statutes, state revenue agency documentation, local government publications, and local utility costs.

TAX FOUNDATION

Taxes Paid by U.S. Data Center Industry



Source: 2025 PwC Report Prepared for Data Center Coalition

Data Centers and the Local Tax Base: Property, Sales & Other Ad Valorem Impacts

Key Aspects of Data Centers from an Ad Valorem Tax Perspective

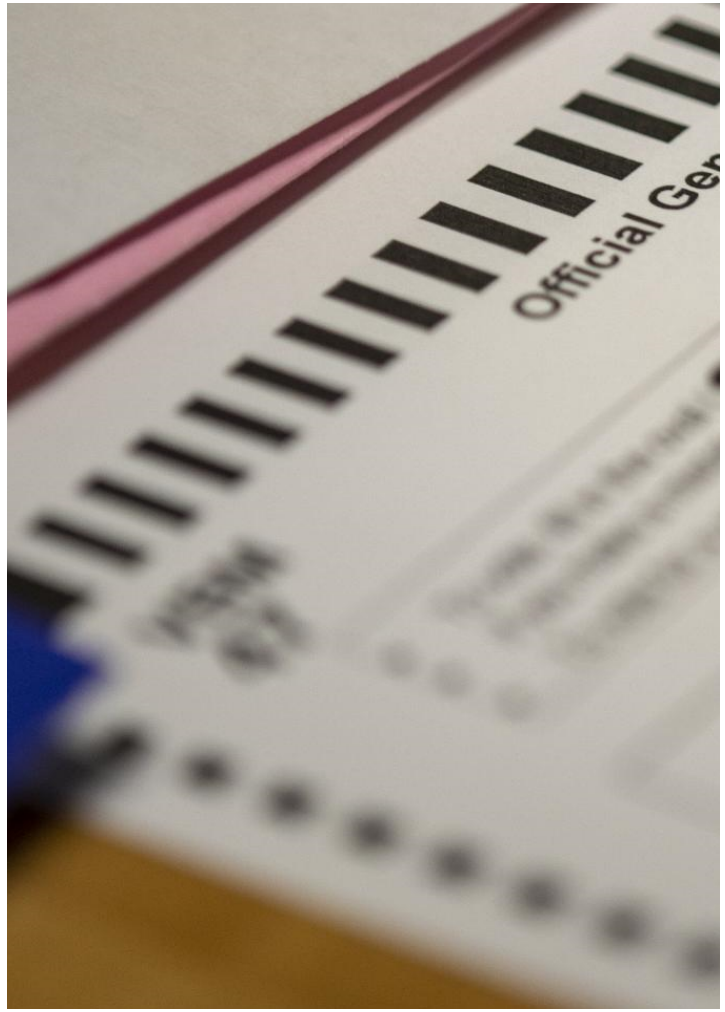
- Large footprint
- Capital intensive, equipment-heavy facilities
- Tax impact driven by assets, not jobs

Taxes Relevant to Data Centers

- Real property (land and buildings)
- Business tangible personal property (equipment, servers)
- Sales and use taxes on purchases

Utility Gross-Receipts Taxes, Franchise Fees, Riders, and Delivered Power Cost

- Impact of Gross-Receipts Taxes
  - Utility gross-receipts taxes add percentage-based costs to electricity bills, significantly increasing data center expenses.
- Municipal Franchise and Consumption Fees
  - Franchise and local consumption fees vary by jurisdiction, adding layers of cost complexity to power pricing models.
- Tariff Riders and Cost Recovery
  - Tariff riders for transmission upgrades and demand management increase per-kilowatt-hour charges affecting delivered power prices.
- Comprehensive Tax-Inclusive Pricing Model
  - Integrating all taxes and fees in power pricing models ensures accurate site comparisons and better capital deployment decisions.



Case Study: Loudoun, VA

Loudoun County, VA

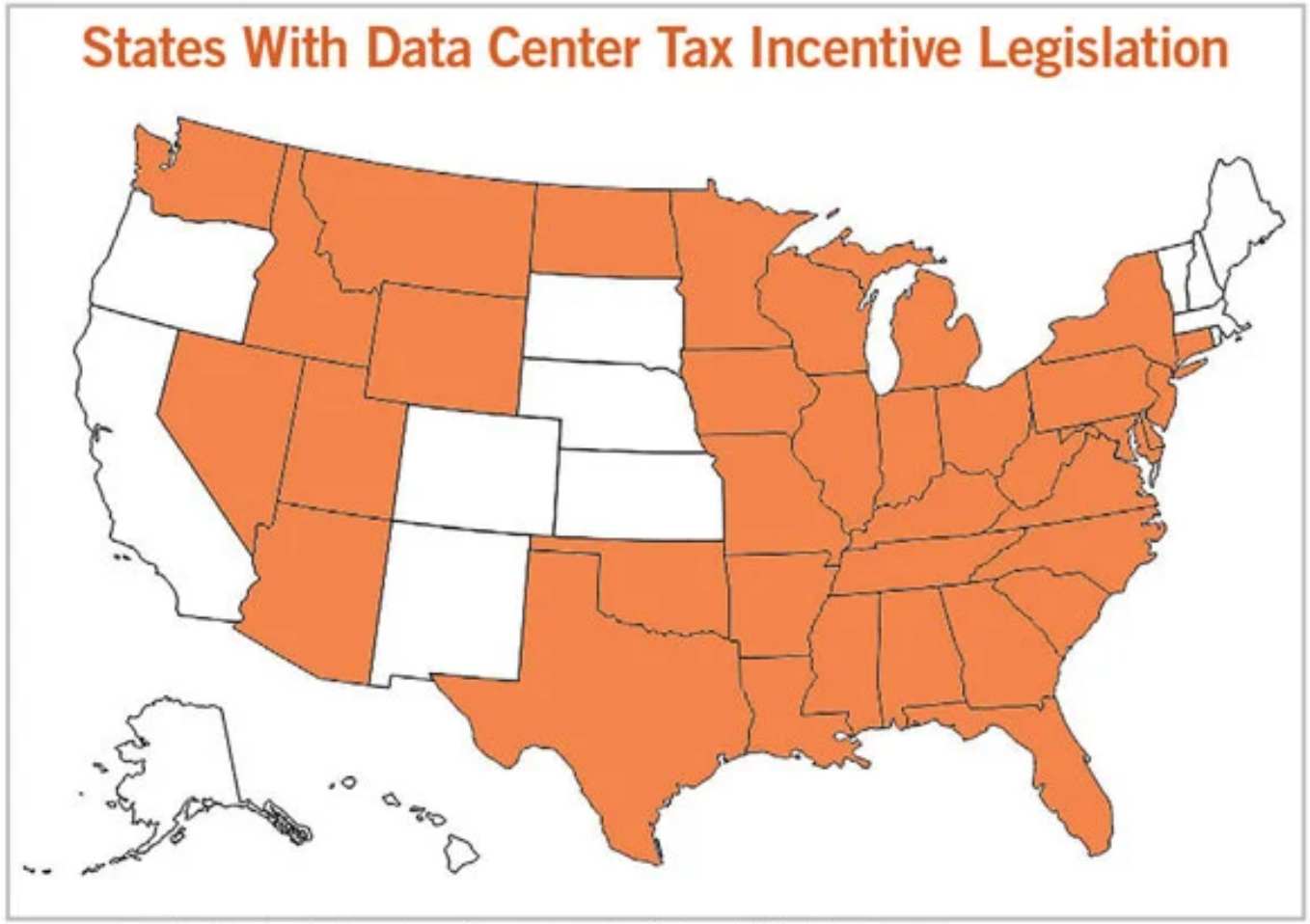
- Global concentration of data centers
- County explicitly tracks fiscal reliance
- Data centers = small share of parcels, large share of revenue
- Equipment taxation is key

Loudoun: Revenue Concentration

- ~4% of commercial parcels
- ~38% of general fund revenue
- Almost 50% of property tax revenues
- $100MM of new revenue annually in recent years
- Allowed county to lower real property tax rate from $1.285 to $0.805 since 2008, while expanding public services
- Assessed value per square foot of data centers is $609, which is around triple the value of other commercial uses

State Tax Incentives

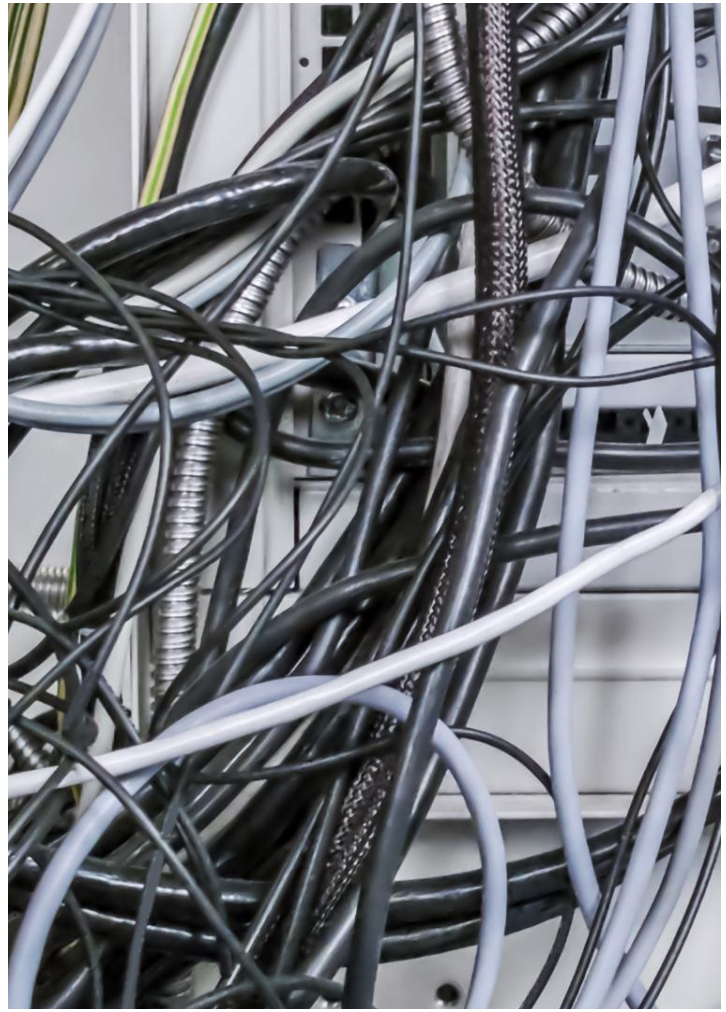
States with Data Center Tax Incentive Legislation



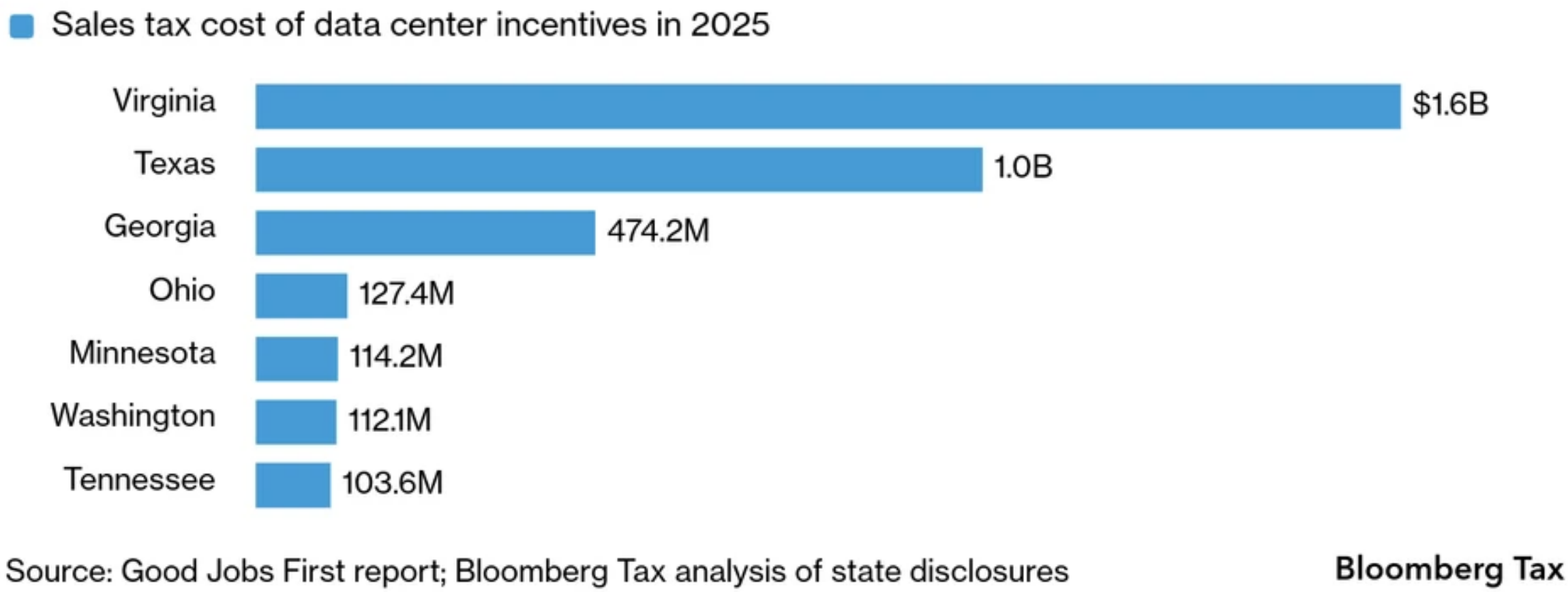
Source: Husch Blackwell, Tax Incentives for Data Centers 50-State Survey

Incentives

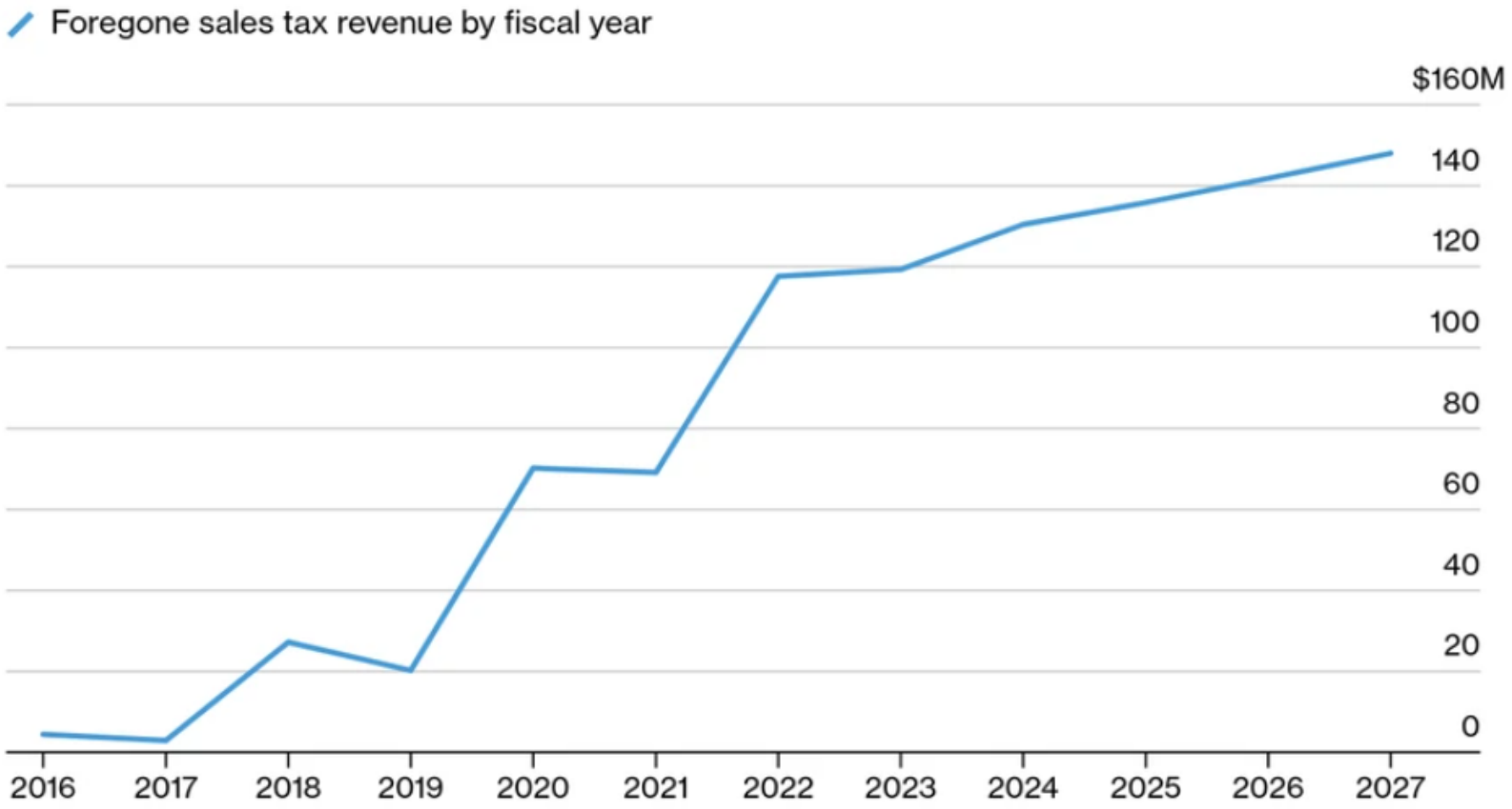
- Incentives vary widely—they range from sales and use tax exemptions on construction materials and computer equipment to low or no taxes on electricity rates
- Many states require minimum level of job creation to receive incentives (Delaware, Maryland, and Missouri—5 jobs; Louisiana—50 jobs)
  - While construction requires large crews over multiple years, day to day operations only require about 15-100 employees
  - But some estimates say that each direct job in the data center industry creates 6 more in the U.S. economy
- Data is not widely available, but there are some exceptions:
  - Virginia's incentives are estimated to be $1.6 billion annually



Cost of Sales Tax Revenue Incentives: 2025



Example: Cost of Ohio Data Center Sales Tax Over Time

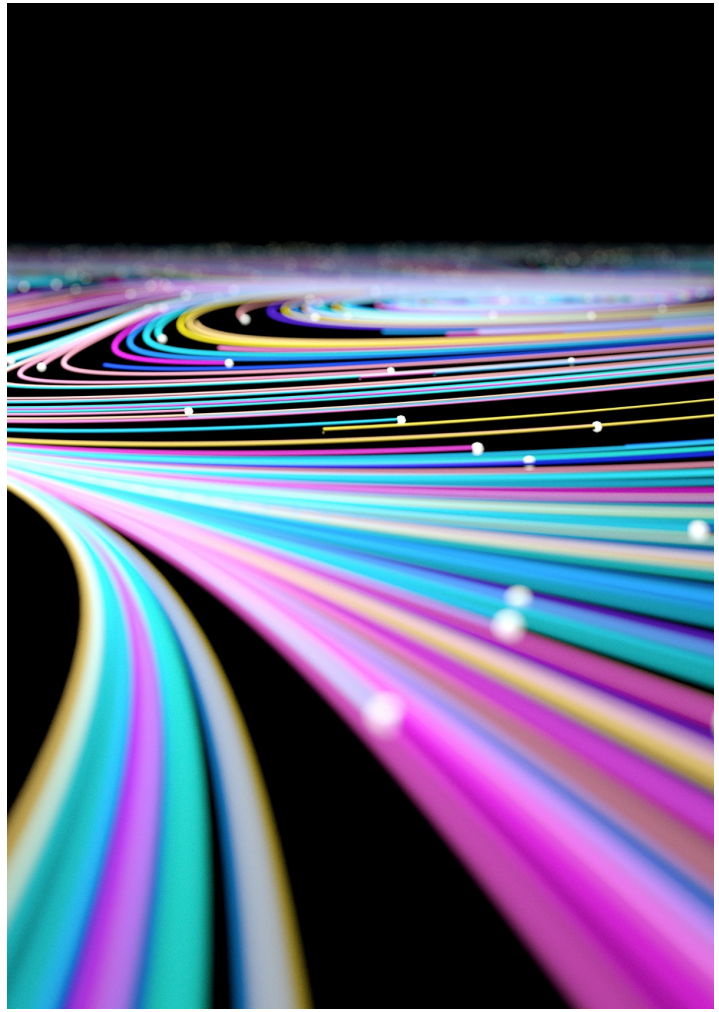


Source: Ohio tax department reports; state development department surveys
Note: FY2026 and FY2027 are estimated

Bloomberg Tax

But Not All States Are Proposing Incentives

- Delaware: Proposed legislation require utilities to charge higher rates to data centers
- Florida: Proposed legislation requiring utilities to charge different rates to data centers
- Georgia: Proposed legislation to limit the ability of utilities to pass on infrastructure costs associated with large data centers to regular ratepayers
- New York: Proposed 3 year moratorium on new, large data centers to study grid and environmental impacts
- Oklahoma: Proposed 3 year moratorium on new, large data centers to study grid, property tax, and environmental impacts
- Oregon: Enacted legislation requiring utilities to charge different rates to data centers



Thank You!