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Just Passing Through?

Capital, Place, & the Data Center Buildout

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Contents

I	The West Race
II	The Central Question
III	What Makes Something an Economic Anchor
IV	.....	Data Centers Through The Anchor Lens
V	.....	Infrastructure, Not Industry
VI	.....	Why Scale and Symbolism Mislead
VII	.....	Same Asset, Different Outcomes
VIII	.....	The Landscape Is Moving
IX	.....	Implications
X	.....	Clear Distinctions, Better Decisions

SUMMARY

Communities evaluating data centers are asking whether they are "*good or bad*." That skips a more important question: what kind of capital investments are they? Large capital investments differ not just in size, but in whether they create local economic loops or simply pass through. The answer determines how deals should be structured, what expectations are realistic, and where civic attention belongs.



SECTION I

The West Race

In the 1840s, South Bend, Indiana was not much more than a trading post on the St. Joseph River. The river had the potential of power but the town had no reliable way to harness it. That changed when a group of local investors built the West Race, a millrace that diverted water from the river to power a series of mills, foundries, and workshops. It was not the first attempt. A decade earlier, Alexis Coquillard, one of South Bend's founders, had tried to build a different race connecting the Kankakee headwaters to the St. Joseph River. It failed, cost him nearly \$100,000 (almost \$4 million in today's dollars), and became known locally as "*Coquillard's Folly*."

The West Race succeeded where Coquillard's Folly did not and became one of the most important pieces of economic infrastructure in the region's history. If you ask people today if they know the history (or even know of) the West Race, most will admit they don't. But if you ask them if they know of the companies that grew from the West Race, that ratio inverts. The infrastructure was the setting of a stage, not the whole story.

Small firms set up foundries, machine shops, and mills on the Race. These started as modest operations run by people who could afford a plot near the water and had some idea of what to do with it. One of them was James Oliver, who in 1855 bought into a young, struggling foundry. Oliver was not a famous inventor or a wealthy industrialist. He was a Scottish immigrant with a colorful work history and an aspiration to own and run his own foundry.

Over decades, Oliver experimented with new ways to chill iron, in pursuit of improving the standard plow. He tested designs on local farms and competed in local fair competitions. He failed, iterated, and tried again. Over time, his plows became harder, more durable, and better suited to the heavy Midwestern soil. Demand grew and Oliver Chilled Plow Works became one of the largest agricultural equipment companies in the country. Oliver didn't build that company in isolation. He built it in a place where other firms, other workers, and other ideas were accumulating along the same stretch of water.

The West Race created what economists would now call agglomeration effects. Skilled workers trained at one shop and moved to another, carrying knowledge with them. Suppliers emerged to serve the growing cluster of metalworking firms. New businesses started because their founders could see what was working nearby and adapt it. The work built on itself.

This is the pattern that turns infrastructure like the West Race into an industry like manufacturing that South Bend became known for. The dam provided the power and the Race distributed it. But the industry — the decades-long accumulation of skill, experimentation, firm formation, and economic complexity — emerged because the infrastructure created conditions where local loops could form. Labor loops, where workers moved between firms and accumulated expertise. Supply chain loops, where local vendors developed specialized capabilities. Knowledge loops, where proximity enabled learning that could not happen at a distance. Demand loops, where each new firm's success attracted more activity.

None of this was guaranteed by the infrastructure itself. The Race was necessary, but not sufficient. If it had been built by an outside firm, bringing capital and expertise to export South Bend's water power for their own supply chain, the infrastructure would have been identical. Same river, same power. But none of the local loops would have formed. The productive activity would have been designed to operate as a closed system, drawing inputs from the local environment and delivering outputs to somewhere else entirely.



SECTION II

The Central Question

The question that most communities are asking about data centers is some version of, “*Are they good or bad for us?*”

The question matters, but skips a distinction worth making first. Before you can evaluate whether a major capital investment is good or bad for a community, you need to know what kind of investment it is in the first place. A core distinction here is deciding whether an investment is the *siting of infrastructure* or the *seeding of industry*.

Infrastructure and industry are both valuable and needed. But they are different economic development mechanisms, deliver different kinds of benefits, and should be evaluated against different expectations. When a community expects infrastructure to be industry — expecting it to generate new firms, thicken labor markets, and transform the local economy — it sets itself up for disappointment. And when civic attention is consumed by an infrastructure project that has been misclassified as an industrial one, the work of building real industry can get lost or neglected.

Water power was a prerequisite for manufacturing, but it wasn't the industry. Industry happened when people used that power to make things, learned from each other, and compounded that learning over decades. The question was never whether water power was good or bad. The question was whether the local conditions turned it into a local economic platform or a resource to export.

Today, compute infrastructure in the form of data centers is being proposed as a similar kind of transformative investment. Billions of dollars. Thousands of construction jobs. The promise of being part of the AI economy. It is worth slowing down and being thoughtful about what type of asset data centers, especially in the AI age, actually are for a local economy.



SECTION III

What Makes Something an Economic Anchor

The investments that actually transform a local economy over time are not defined by their size, their novelty, or their capital intensity. They are defined by what they cause to grow nearby.

The economic development literature identifies four mechanisms by which economic anchor investments generate broader local economic activity.^{1,2,3,4}

1. Labor Market Thickening: When a major employer operates in a region, it attracts workers with relevant skills. Those workers make the region more attractive to other employers who need similar skills. Over time, the pool of talent deepens, reducing hiring costs and increasing the range of firms that can operate viably. This is why auto suppliers have clustered near auto plants and why software companies cluster near universities that produce computer scientists.

2. Supplier Specialization: . As an anchor firm grows, local suppliers emerge to serve its demand. The best of them develop capabilities that are difficult to replicate elsewhere, shaped by years of close interaction and feedback loops with demanding customers. These specialized suppliers then attract additional firms who want access to the same capabilities.

3. Knowledge Spillovers: When skilled people work near each other, they learn from each other through formal collaboration and through informal channels: conversations, job changes, observation. Ideas developed inside one firm leak out and find application in another. This mechanism is the hardest to measure, but may be the most important because it is the engine of innovation and adaptation over time.

4. Adjacent & Downstream Firm Formation: Anchor investments create opportunities for new businesses: suppliers, service providers, complementary products, and spinoffs. When an employee sees an unmet need in the economic

1. Alfred Marshall, *Principles of Economics*, 1890

2. Paul Krugman, *Geography and Trade*, 1991.

3. Gilles Duranton and Diego Puga, "Micro-Foundations of Urban Agglomeration Economies", 2004.

4. Enrico Moretti, *The New Geography of Jobs*, 2012.

sphere of the anchor, their proximity gives them the knowledge, relationships, and confidence to start something new to serve it.

These four mechanisms — not capital intensity, scale, or novelty — are what separate economic anchors from just large capital expenditures. An investment can be enormous in terms of dollars and attention and still generate none of these effects in the local economy.



SECTION IV

Data Centers Through The Anchor Lens

The term "data center" now covers two meaningfully different categories.

Cloud computing and data storage facilities is the category of data centers built in Northern Virginia over the past two decades and generated most of the existing fiscal and employment data. They operate on relatively stable workloads with five- to six-year equipment refresh cycles⁵ and moderate power density (typically 7 to 10 kilowatts per rack)⁶. These are the facilities that produced the 20-year track record cited in most economic impact studies and consultant reports. They are low-risk infrastructure in most respects: predictable demand, long equipment life, stable counterparties.

The facilities being proposed today are predominantly AI-driven. They are training clusters and inference farms with power densities of 30 to 100+ kilowatts per rack (a 10x difference to traditional data centers)⁷, and industry-estimated GPU refresh cycles of two to three years⁸, liquid cooling requirements, and demand curves that depend on whether AI compute at scale produces returns sufficient to justify the investment. The economics are different in ways that matter for every governance question: depreciation speed, demand volatility, counterparty structure, overbuild exposure, and fiscal durability.

5. Uptime Institute, *Uptime Institute Global Data Center Survey*, 2022.

6. International Energy Agency, *Energy and AI*, 2025.

7. International Energy Agency, *Energy and AI*, 2025.

8. Aptly Technology, *End to End Data Center Lifecycle Management: A Blueprint for Scalable Infrastructure*, 2026.

The historical data comes from the former. Most of the current proposals, and most of the risk, come from the latter.

Data centers are by almost any measure among the most capital-intensive investments a community can host. A single hyperscale facility can cost \$500 million to over \$1 billion to build. The industry is expected to deploy nearly \$3 trillion globally by 2030, and the United States accounts for roughly half of all global capacity.⁹ These are big numbers and understandably generate excitement in communities that are offered the chance to host them.

But capital intensity is not a mechanism. The relevant question is whether data centers represent capital that passes through or stays and creates local loops? We can start to answer this by analyzing the four mechanisms that turn investments into economic anchors. The evidence suggests they largely do not create the local loops most communities would hope for.

1. Capital Structure: The economics of a hyperscale data center are dominated by specialized equipment (servers, GPUs, networking hardware, cooling systems) that is designed, manufactured, and often installed by firms headquartered far from the facility itself. At the gigawatt scale, a facility costs roughly \$10 billion to build, but the GPUs and IT equipment inside it cost another \$20 billion.¹⁰ The majority of the capital investment never touches the local economy. Construction costs are substantial. The average cost of building a data center increased from \$7.7 million to \$10.7 million per megawatt between 2020 and 2025. But construction is temporary, typically lasting 12 to 18 months per phase.¹¹ The permanent asset is a building filled with equipment that was built somewhere else and will be refreshed on a cycle determined by technology curves, not local relationships.

2. Employment: This is where the mismatch between perception and reality is most acute. A typical hyperscale data center employs between 50 and 150 permanent workers once operational.¹² Georgia, which hosts 63 active data centers, reports 5,471 total operations jobs across all of them, or roughly 87

9. JLL, *2026 Global Data Center Outlook*, 2026

10. National Center for Energy Analytics, [*The Rise of AI: A Reality Check on Energy and Economic Impacts*](<https://energyanalytics.org/the-rise-of-ai-a-reality-check-on-energy-and-economic-impacts/>), 2025.

11. JLL, *2026 Global Data Center Outlook*, 2026.

12. Brookings Institution, Nicol Turner Lee and Darrell M. West, *The Future of Data Centers*, November 2025.

permanent jobs per facility.¹³ A detailed third-party economic impact study of a proposed 1 GW exascale campus in Oregon projected 560 permanent employees for \$8 billion in capital investment, or \$14.3 million per permanent job.¹⁴

Construction employment is far larger totaling approximately 1,500 workers during peak construction. But it is temporary and often filled by workers who travel to the site and leave when the phase is complete. The resulting employment profile is unlike anything that would characterize an industry arrival: a sharp spike during construction followed by a 90-97% decline to a small permanent workforce.

Virginia, which hosts 13 percent of all global data center capacity, offers the most mature picture of what this looks like at scale. The state supports approximately 74,000 total jobs across the data center industry, generating \$5.5 billion in labor income.¹⁵ Those sound like anchor numbers. But Virginia achieved them by accumulating hundreds of facilities over more than two decades and by offering an equipment sales tax exemption that ballooned to approximately \$1.6 billion statewide in 2024, nearly three times the approximately \$600 million in annual state and local tax revenue the industry generated.^{16,17} At the individual facility level, a quarter-million-square-foot data center employs roughly 50 full-time workers, about half of whom are contractors.¹⁸

The permanent jobs that do exist are highly specialized (IT infrastructure, power systems, facility management) and pay well, 25-30% above regional averages.¹⁹ But they don't thicken the labor market. A region doesn't become more attractive to manufacturers or technology firms because it has 50 data center technicians. It only becomes more attractive to more data centers. Data center skills are deep but narrow; they build a workforce, not a labor market.

3. Supply Chains: Data center supply chains are highly standardized and globally sourced. The critical inputs are servers from Dell or HPE, GPUs from NVIDIA, networking equipment from Cisco or Arista, and cooling systems from

¹³. Georgia Department of Audits and Accounts, *State Report Says Data Centers a Boon to Economy, but Tax Breaks May Be Unnecessary*, 2024.

¹⁴. Johnson Economics, *Economic Impact Analysis of Prospective Exascale Data Center Campus*, Morrow County, Oregon, 2024.

¹⁵. Joint Legislative Audit and Review Commission (JLARC), *Data Centers in Virginia*, 2023.

¹⁶. JLARC, *Data Centers in Virginia*, 2023.

¹⁷. David Uberti, "The 'Godfather of Data Centers' Making Offers Big Tech Can't Refuse," *Wall Street Journal*, February 22, 2026.

¹⁸. JLARC, *Data Centers in Virginia*, 2023.

¹⁹. JLARC, *Data Centers in Virginia*, 2023.

Vertiv or Schneider Electric. They are purchased through corporate procurement channels that have little to do with local supplier relationships. There are limited opportunities for local firms to develop specialized capabilities through ongoing interaction with the facility, because procurement is designed for scale and standardization, not for the kind of iterative, relationship-intensive purchasing that builds local supplier ecosystems.

4. Spillovers and Firm Formation: Perhaps the most telling indicator is the absence of evidence that data centers generate meaningful knowledge spillovers or adjacent firm formation. In mature data center markets like Northern Virginia, the primary spillover has been the attraction of more data centers, a clustering effect driven by shared infrastructure (fiber and power) rather than by knowledge exchange between firms. There is little evidence that proximity to a data center makes it more likely that a new technology company will start, or that a local entrepreneur will develop a new product, or that a worker will leave a data center job to launch a business that builds on what they learned working inside.

If there is an honest counterargument to the above analysis, Northern Virginia is the one that deserves examination. Loudoun County has accumulated more than 300 data centers over 25 years and has developed something that genuinely looks like a cluster: specialized labor pools, design and engineering firms, power consulting practices, facility management services. Property tax revenue from data centers funds roughly 30% of the county budget. By most conventional measures, it worked. Some agglomeration dynamics have emerged, and it would be dishonest to pretend otherwise.

But two things are worth noting carefully. First, the clustering that developed in Loudoun stayed within the infrastructure service layer. The county became the best place in the country to host and service more data centers. It did not become a hub for AI startups, software companies, or technology manufacturers. The labor market thickened for data center workers, not for the broader economy. The supply chain specialized in data center inputs like power engineering, fiber installation, facility design, not in products that compete in external markets. If the best-case outcome after a quarter century and 300 facilities is that a region has become very good at hosting more of the same thing, that is agglomeration within an infrastructure category, not a jump from infrastructure to industry. It is the economic equivalent of a

port city developing an excellent warehousing and logistics cluster – valuable, but categorically different from what happened along the West Coast.

Second, planning to replicate Loudoun exposes oneself to two types of risk. The first is a survivorship bias problem: "*we will be the next Loudoun*" is eerily similar to "*we will be the next Silicon Valley*." Both are places where real agglomeration happened. But neither is a replicable playbook, because the conditions that produced them were partially emergent, partially path-dependent (early fiber investment, proximity to federal data demand, a first-mover advantage that compounded for decades), and not visible as a strategy to the people living through them. Loudoun did not set out to become the data center capital of the world. It became one because of specific historical conditions that cannot simply be reverse-engineered. Replication also runs the risk of a category error. Loudoun's clustering developed during the cloud and storage era, under fundamentally different economics than the AI-driven facilities being proposed today. The track record being cited as reassurance was built on a different type of asset, with different depreciation curves, different demand drivers, and different counterparty structures. A community evaluating its first AI data center proposal is not on a path to Loudoun any more than a city recruiting one software company is on a path to becoming Silicon Valley.

The question for most communities is not whether agglomeration is theoretically possible at sufficient scale. It is whether the one or two facilities being proposed will trigger any of these mechanisms. The evidence suggests they will not.

A data center is designed to process workloads as efficiently as possible, with minimal human intervention. The trend in the industry is toward greater automation through software-defined operations, robotic maintenance, remote management, not less. The entire business model is predicated on minimizing the number of people and the amount of local interaction required to keep the facility running. Even Buddy Rizer, the Loudoun County economic development director whom the Wall Street Journal calls "the Godfather of Data Centers," acknowledges the limits. Communities approach him regularly, and he tells some of them, "*It's probably not for you.*"²⁰

You can see the loose connection between place and this infrastructure through what could be called the fiscal efficiency paradox. In cost-of-community-services studies (a

²⁰. David Uberti, "The 'Godfather of Data Centers' Making Offers Big Tech Can't Refuse," *Wall Street Journal*, February 22, 2026.

standard tool for measuring fiscal impact by land use) data centers are an extreme outlier. In Loudoun County, Virginia, data centers generate \$26 in tax revenue for every \$1 the county spends servicing them. The service cost is four cents per tax dollar, compared to 24 to 35 cents for typical commercial and industrial development, and more than \$1.16 for residential.²¹

Exhibit 1: Fiscal Efficiency by Land Use Type

Land Use	Service Cost per \$1 of Tax Revenue	Translation
Data Centers	\$0.04	Extremely low service demand; minimal local interaction
Commercial / Industrial	\$0.24 - \$0.35	Moderate service demand; employees, traffic, supply chain activity
Farmland / Open Space	\$0.30 - \$0.37	Low service demand; minimal infrastructure wear
Residential	\$1.16 - \$1.50+	Net fiscal drain; school costs drive the ratio

Sources: American Farmland Trust cost-of-community-services studies; Loudoun County fiscal analysis (Mangum Economics, 2024); Kotchen & Schulte meta-analysis of 40+ COCS studies.

The industry cites this ratio as proof of data centers' value. And it is if you view it as a fiscal asset. But the same metric also tells another story. The reason data centers cost so little to service is that they ask almost nothing of the local community. Once constructed, they generate minimal traffic on local roads. They make few demands on emergency services. They are, in fiscal terms, almost invisible, which is exactly what makes them low-interface infrastructure rather than economic anchors. The metric that makes data centers look best as a fiscal investment is the same metric that measures their disconnection from local economic life.

A community that negotiates well can capture meaningful fiscal value from data centers. But the value is fiscal, not industrial.

21. Magnum Economics, [The Impact of Data Centers on Virginia's State and Local Economies 5th Biennial Report] (<https://e1.nmcdn.io/assets/loudoun/wp-content/uploads/2025/05/2024-NVTC-Data-Center-Report.pdf>), 2024.



SECTION V

Infrastructure, Not Industry

If data centers do not meaningfully trigger the mechanisms that define economic anchors — labor market thickening, supplier specialization, knowledge spillovers, adjacent firm formation — then what are they?

Simply put, they are infrastructure.

Infrastructure enables production but does not itself constitute an industry. A power line delivers electricity that factories use to make things, but no one considers the power line an industry. A fiber optic cable carries data that businesses use to operate, but the cable itself is not an economic engine. Infrastructure is evaluated by different criteria than industry: reliability, cost efficiency, capacity, and fiscal soundness.

Data centers fit this description. They are nodes in a global compute network. Data arrives from elsewhere, is processed internally by equipment designed and built elsewhere, and the output is delivered to users who are also elsewhere. The facility's siting is driven by the availability of inputs of power, water, land, and fiber connectivity, not by the density of local demand or the presence of a local supply chain that gives the facility a competitive advantage in a particular place.

The trend toward behind-the-meter power generation sharpens this point. As of early 2026, at least 46 data center facilities, representing 56 gigawatts and roughly 30 percent of all planned U.S. data center capacity, are building or planning their own dedicated power plants rather than relying on the local grid.²² Ninety percent of these projects were announced in 2025 alone, driven by grid interconnection wait times that now average four to seven years in major markets.

Exhibit 2: Behind-the-Meter Power Generation

Metric	Value
Facilities planning own power generation	46

²² Michael Thomas, Cleanview, *Bypassing the Grid: How Data Centers Are Building Their Own Power Plants*, February 2026.

Metric	Value
Combined planned capacity	56 GW
Share of all planned U.S. data center capacity	~30%
Projects announced in 2025 alone	~90%
Fuel source (natural gas)	~75%
Average grid interconnection wait time	4-7 years

Source: Cleanview analysis, February 2026.

Google's global head of data center energy, Amanda Peterson Corio, put it plainly: "The energy system, I would say, globally, is no longer fit for purpose, for serving the demands of AI."²³ When a facility builds its own power plant, it has severed one of its most significant operational dependencies on local systems. It no longer relies on local utilities, local grid planning, or local energy infrastructure investment. There are advantages to this and most communities are fighting for these kind of systems to ensure that residents are not thrust into cost escalations driven by power demand. But like the fiscal efficiency paradox, it is more evidence of the low interface of these facilities.

Not all infrastructure interacts with a local economy in the same way. An airport creates a substantial local economic interface, enabling face-to-face business relationships, supporting hotels and logistics firms, connecting the local economy to broader networks. Telecom infrastructure enables local firms to participate in remote markets at lower cost. Data centers, as currently structured, create very little local economic interface. They do not connect local firms to broader networks in the way an airport does. They do not lower the cost of local economic activity in the way telecom does. They are nodes in someone else's network that happen to be located in a particular place.

The economic expectations attached to industry are different from the expectations attached to infrastructure. Industry is expected to generate growth, firm formation, and compounding economic complexity. Infrastructure is expected to be reliable, durable, and fiscally sound. Confusing the two doesn't change what a data center is. It

²³ Katherine Blunt, "Google Is Spending Big to Build a Lead in the AI Energy Race", *Wall Street Journal*, February 2026.

changes how a community evaluates the deal and whether it governs the asset on terms that actually match what it is hosting.



SECTION VI

Why Scale and Symbolism Mislead

For a small city that has spent a decade losing manufacturing jobs and watching its young people leave, a billion-dollar investment announcement doesn't just sound like an opportunity. It feels like validation. When that investment is also associated with the technology that is dominating the cultural imagination of this decade, the emotional weight is enormous.

But the capital expenditure in a data center announcement is misleading as an indicator of local economic impact. A substantial share goes to equipment manufactured elsewhere and is installed inside a building designed to minimize the number of people who ever need to enter it. The actual local share of the capital investment is concentrated in construction, which is temporary, and in the building shell and site work, which are one-time expenditures.

The “AI” label is doing a lot of work here. The economic value in AI concentrates in the companies building the models and the chips. Think NVIDIA, the hyperscalers, and AI labs like OpenAI and Anthropic. A data center is the building they rent. Having one in your community puts you in the real estate and utilities business, not the AI business. Hosting the infrastructure captures tax revenue, construction employment, and utility income. Those are real, but they are a fundamentally different kind of value than increasing economic complexity.

Data center construction spending has already surpassed all other categories of U.S. commercial building construction.²⁴ The scale is significant, but it is not a mechanism. We have to ask how much of that investment creates local loops where economic activity begets more economic activity in the same place.

²⁴. National Center for Energy Analytics, *The Rise of AI: A Reality Check on Energy and Economic Impacts*, 2025.



SECTION VII

Same Asset, Different Outcomes

If data centers are infrastructure — and specifically, low-interface infrastructure — then the most important practical finding in the data center landscape is that identical assets produce wildly different outcomes depending on how the deal is structured. Consider five communities that have faced this question:

Exhibit 3: Same Asset Class, Different Governance, Different Outcomes

Location	Company	Investment	Permanent Jobs	Deal Structure	Fiscal Outcome
Hobart, IN	AWS	Not disclosed	500	Direct payments; AWS covers power & sewer	\$102M year one; \$50M/yr after buildout (vs. \$25M annual city tax levy)
Mesa, AZ	Google	\$1B (25 yrs)	TBD	GPLET excise tax w/ investment milestones	+\$61M net; \$16M foregone, \$33M+ captured
Richmond Co., NC	Amazon	\$10B (5 yrs)	500	Cash grants: 50% property + 65% personal property tax; 20-year term	~\$25-50M/yr after buildout; contingent on \$1B + 50 jobs by 2030
Prineville, OR	Meta + Apple	~\$2.5B	35+	15-yr improvement exemption; voluntary in-lieu payments	\$0 property tax on improvements; \$29M/yr foregone by school district
North Dakota	Multiple	Various	115 total	State sales tax exemption; no local negotiation	\$40.9M/yr exempted; \$356K per job in foregone revenue

Sources: Mayor Huddlestun (Hobart); DCD / AAED (Mesa); Business North Carolina / NC Commerce (Richmond County); Oregon Capital Chronicle / Central Oregon Daily (Prineville); Bismarck Tribune (North Dakota).

Hobart negotiated a deal where AWS makes direct payments that exceed the city's entire annual tax levy, and covers its own infrastructure costs. Prineville granted a 15-year improvement exemption and receives voluntary payments of roughly \$1 million

per year from Meta (non-binding and subject to corporate goodwill), while the school district lost \$29 million in annual revenue. Mesa structured a creative hybrid that forgoes \$16 million in property taxes but captures \$33 million through excise taxes and \$28 million in other revenue, with binding investment milestones at three checkpoints. Richmond County tied its 20-year cash grants to performance thresholds: Amazon must invest \$1 billion and create 50 jobs by 2030 to maintain eligibility. North Dakota exempted \$40.9 million in sales tax for facilities that collectively employ 115 people, with no local performance conditions.

Same asset class. Wildly different outcomes. The variable is governance: how the deal was designed, what conditions were attached, and whether the community treated the negotiation as infrastructure governance or as a bidding war. Virginia Delegate John McAuliff, whose district partially overlaps with Loudoun County, captured the structural problem: *"It's not their job to think about the state impact of their decisions. That is the way we've set up our world, and I don't necessarily know if it's the right way."*²⁵



SECTION VIII

The Landscape Is Moving

The governance question would be straightforward if data centers were a stable, well-understood asset class with predictable economics. They are not. Communities are negotiating 15- to 20-year agreements against an investment whose technology, economics, and even physical form factor could look fundamentally different within a few years. There are multiple dimensions where even small shifts could make already-signed, long-term deals look very different in hindsight.

1. Construction is automating. The one local benefit everyone agrees on — construction employment — is itself under pressure. Prefabrication and robotics are projected to cut on-site construction labor hours, with factory-built modules arriving "plug-and-play" and reducing the need for skilled trades on site. Welding cobots, autonomous drilling robots, and AI-driven scheduling are already being deployed at scale.²⁶ One drilling-robot pilot saved approximately eight weeks per data center across ten hyperscaler projects.²⁷ John Arnold, the energy trader and

²⁵. David Uberti, "The 'Godfather of Data Centers' Making Offers Big Tech Can't Refuse," *Wall Street Journal*, February 22, 2026.

investor, identified construction automation as one of the most interesting investment opportunities in the entire data center universe, precisely because it reduces the labor intensity of buildout.²⁸ If prefab shifts assembly to factories in other states while robotics shrink on-site crews, the construction jobs that currently justify local disruption could decrease, with many filled by a transient workforce rather than local hires.

2. The grid connection is severing. At least 46 data center facilities, representing 56 GW, roughly 30 percent of all planned U.S. capacity, are building their own dedicated power plants rather than relying on local utilities.²⁹ Ninety percent were announced in 2025 alone. When a facility generates its own power, it has severed a significant operational dependency on local systems.

3. Overbuild risk is real. Andy DeVries, head of utilities and power at CreditSights, notes that U.S. utilities are currently tracking 130 GW of firm data center connection commitments against third-party demand estimates of roughly 50 GW of additional capacity needed by 2030. That is more than twice the committed capacity as is actually projected to be required.³⁰ If not all of it gets built, communities whose fiscal plans assume it will are taking on risk.

4. The grid is vulnerable from the load side. In two separate incidents in Virginia in 2024 and 2025, clusters of data centers simultaneously dropped off the power grid when high-voltage lines malfunctioned, forcing the grid operator, PJM, to scramble to reduce supply to avoid damaging power plants. *"It didn't cause an emergency, but I would say it caused concern,"* said Mike Bryson, PJM's senior vice president of operations. *"What we're worried about is, what if that happens for 3,000 megawatts or 5,000 megawatts?"* Mark Christie, former chairman of the Federal Energy Regulatory Commission, requested a briefing on the risk and concluded that the system is now vulnerable to "being crashed from the load side." NERC's chief engineer, John Lauby, called it "one of our most important emerging

26. McKinsey & Company, "Scaling bigger, faster, cheaper data centers with smarter designs," McKinsey Insights, 2025.

27. DEWALT, "DEWALT Unveils the World's First Downward Drilling, Fleet-Capable Robot to Accelerate Data Center Construction," Stanley Black & Decker Newsroom, January 20, 2026.

28. John Arnold, *Invest Like the Best* podcast ("Best Seat in the Market"), Colossus LLC.

29. Michael Thomas, Cleanview, *Bypassing the Grid: How Data Centers Are Building Their Own Power Plants*, February 2026.

30. Andy DeVries, *Odd Lots* podcast ("The Utilities Analyst Who Says The Data Center Boom Is Overhyped"), Bloomberg.

risks."³¹ The grid is being built around these loads. If the loads disappear, whether through technology shifts, efficiency gains, or corporate consolidation, the infrastructure built to serve them becomes a stranded cost.

5. The counterparty may not be who you think it is. The scale and speed of the AI buildout has changed how facilities are financed. Hyperscalers increasingly build through special-purpose vehicles backed by private equity. In these structures, the facility is owned not by the technology company but by a financial intermediary, and the tech company's lease is the asset backing the bonds that fund construction. Data centers represent an estimated \$800 billion market for private equity firms through 2028 alone.³² Multiple data center leases can be combined into securities sorted into tranches based on default risk. While not identical to pre-2008 mortgage securitization, this is a financial architecture that shares structural similarities that some credit analysts have noted.

This matters locally because it changes the counterparty sitting across the table from the municipality. A community negotiating a 20-year fiscal arrangement may believe its counterparty is a company with a \$2 trillion market cap. The actual counterparty may be an SPV whose sole asset is a lease and whose investors are making a leveraged bet on the durability of AI compute demand. If that demand contracts, or if the leaseholder restructures, the entity making payments to the community is not the entity the community thought it was negotiating with. The check doesn't stop because the tech company goes bankrupt. It stops because the financing vehicle between the tech company and the community was never as durable as either side assumed. Communities negotiating data center deals should make sure to ask questions like who actually owns this facility and what is the legal structure of our counterparty's obligation?

6. Ratepayers may bear undisclosed costs. Data center electricity demand is large enough to reshape regional power markets. In Virginia, Dominion Energy projects that residential customer costs could increase by \$14 to \$37 per month in constant dollars by 2040, driven primarily by data center load.³³ These costs are borne by households and businesses that had no seat at the table when the deal was negotiated. A community that captures \$50 million in annual data center

³¹. Katherine Blunt and Jennifer Hiller, "A New Threat to Power Grids: Data Centers Unplugging at Once," *Wall Street Journal*, March 1, 2026.

³². Matteo Wong and Charlie Warzel, "The Silicon Valley Petrostate," *The Atlantic*, October 30, 2025.

³³. JLARC, *Data Centers in Virginia*, 2023.

revenue while its residents absorb \$20 million in higher electricity costs has a less attractive deal than the headline number suggests.

7. Model efficiency may reduce demand. If AI models become more compute-efficient, if demand redistributes geographically, or if operators consolidate to fewer and larger sites, communities built around data center revenue could face fiscal cliffs with obligations constructed on revenue that is no longer there. The municipal budget dynamic this creates is well-documented in other resource-dependent contexts. A new revenue source arrives at scale, gets incorporated into baseline spending within one or two budget cycles, and shifts from being opportunistic to being required. If the revenue then contracts, the community faces obligations built on a fiscal base that no longer exists.

8. Even the physical location is in play. Companies are evaluating space-based compute infrastructure, not because it's cheaper (orbital costs run roughly 110 percent higher than terrestrial alternatives, at approximately \$31.2 billion per GW compared to \$14.8 billion terrestrial) but because terrestrial capacity may be approaching the limits of what can be built fast enough to meet AI demand.³⁴ The fact that companies are willing to consider a far more expensive option rather than solve the local siting problem tells you how little the asset's value depends on being embedded in any particular place. There are even players exploring building data centers underwater in the ocean.³⁵ There is a certain irony that for regions with deep aerospace and advanced manufacturing supply chains, the best local industrial case for data centers might come from building the things that send them to orbit or under the sea, not from hosting them in their own backyard.

Any revenue source this concentrated, this capital-cycle-dependent, and this structurally unattached to place should be governed with the assumption that the current conditions are unlikely to be permanent.

³⁴. Ben Green and Terry Nguyen, *What Happens When Data Centers Come to Town*. University of Michigan Ford School of Science, Technology, & Public Policy. 2025.

³⁵. Matthew Gooding, *Underwater data center powered by tidal energy proposed off the coast of Maine*, 2026.



Implications

Governance and Incentive Design

Understanding what the buyer is actually purchasing sharpens every governance recommendation. Hyperscalers are not primarily buying cheap land or low taxes. They are buying speed to power, permitting certainty, political stability, and fast time-to-revenue on facilities that cost \$10 to \$12 billion per gigawatt to build. When a company with a \$2 or \$3 trillion market capitalization asks a municipality with a \$30 million tax levy for a property tax abatement, the proportionality is worth examining. The abatement is a rounding error on the company's capital budget. But for the community, tax revenue is essentially the only local benefit the asset generates. Data centers produce minimal long-term employment, no meaningful supply chains, and few knowledge spillovers. When the primary ask is to discount the one benefit the community actually receives, the community has more leverage than it may believe. The hyperscaler needs the site far more than it needs the tax discount.

Thirty-four states now offer sales and use tax exemptions for data center equipment, and the costs are large and accelerating. Georgia waived \$474 million in a single fiscal year and Texas saw its cost projections surge from \$130 million to \$1 billion in just 23 months.^{36,37} At least ten states now lose more than \$100 million per year in data center tax revenue, and twelve states do not disclose the cost at all. Most of these exemptions are uncapped and have no annual or per-facility limits. Illinois went from \$10 million to \$370 million between 2020 and 2024 alone.³⁸ A Georgia state report found that 70 percent of data center construction would occur without tax breaks. Again, the facilities are driven by power availability and network proximity, not by incentive packages.³⁹

³⁶. Ty Tagami, "State report says data centers a boon to economy despite tax giveaway", WABE, 2026.

³⁷. Good Jobs First, *Cloudy Loss of Spending Control*, 2025.

³⁸. Good Jobs First, *Cloudy Loss of Spending Control*, 2025.

³⁹. Georgia Department of Audits and Accounts, *State Report Says Data Centers a Boon to Economy, but Tax Breaks May Be Unnecessary*, 2024.

Sequencing

This raises an honest question, especially for fiscally distressed communities. If the data center revenue isn't industry, but it funds the capacity to *build* industry, isn't that worth capturing? The answer may very well be yes, but the two steps should not be confused. A community that uses data center fiscal revenue to fund a workforce development program, hire a full-time economic development director, or invest in a community college technical program is doing something logical. It is using *infrastructure revenue* to build the institutional capacity for *industrial strategy*. But that only works if the community actually captures the revenue, invests it deliberately, and doesn't mistake the fiscal stabilization for the industrial transformation itself.

The infrastructure-vs-industry distinction isn't a reason to say no to data centers. It's a way to say yes with clear terms and to have a plan for what you do with the proceeds.

Fiscal Durability

Data center revenue has a profile that looks like stable commercial tax revenue but behaves more like commodity revenue. It is concentrated in a single asset class, often a single operator. It is driven by a technology cycle that is refreshing every three to five years, if not faster. And it is generated by a facility with little structural attachment to the place it occupies — little workforce investment, few supplier relationships, and little accumulated institutional knowledge that would make departure costly for the operator. The things that make a manufacturer sticky don't exist.

The competitive landscape for data center deals is changing in ways that appear to resolve many concerns. Microsoft's recent announcement in St. Joseph County included no tax abatements. Operators are increasingly willing to cover their own power and water infrastructure. This will be read as evidence that the risks have been addressed. But the risk that remains is subtler: the fiscal risk that forms when revenue that arrives as a windfall becomes baked into ongoing budgets. Over time, usually within one or two budget cycles, data center revenue becomes incorporated into baseline spending. Services expand. Deferred maintenance gets funded. Positions get filled. But if the technology shifts, if compute demand redistributes, or if model efficiency reduces the need for raw capacity, the community faces obligations built on

revenue that is no longer there. Imagine how fast these projects could go away, considering how fast they showed up.

Any revenue source this concentrated should be governed with care: reserve funds sized to the exposure, explicit sunset provisions on revenue-dependent spending, diversification requirements, and contingency plans that assume the revenue may not be permanent. The better the deal, the more important this discipline becomes. The faster the revenue gets built into the budget, the larger the exposure if the landscape shifts.

The fiscal risk is not simply that data centers leave. It is that they stay long enough for their revenue to become an unquestioned assumption. And for facilities financed through SPVs and lease-backed securities, the fiscal risk includes a counterparty dimension. The entity making payments may be less durable than the building it occupies.

Attention

Civic attention is one of the scarcest resources a community has. Every hour that a city council, a planning commission, or an economic development team spends debating a data center proposal is an hour not spent on the investments that do have the potential to generate industry dynamics. Things like workforce development, local firm support, research partnerships, and supply chain development.

Infrastructure governance should be competent and proportionate. It should not dominate the economic development agenda.

The Real Spillover Opportunity

The place where infrastructure can potentially seed industrial dynamics lies not in the data center itself but in the inputs to data centers: energy systems, cooling technology, water management, construction methods, power electronics. These are domains where significant technical challenges exist, where innovation is needed, and where local firms and institutions could develop genuine expertise.

Finland offers a concrete example: a 75-megawatt Microsoft facility in Kirkkonummi feeds waste heat into the district heating system, warming homes five kilometers

away.⁴⁰ The data center is still infrastructure. But the design created a local interface that wouldn't exist without deliberate governance. Research partnerships between data center operators and local universities are another mechanism. The university has the capability to work on hard technical problems and it also has an institutional incentive to address community concerns around energy, water, and land use, because it is rooted in the same place.

The spillover opportunity, in other words, is not in AI. It is in the physical and engineering challenges of building and operating the infrastructure that AI requires. Communities that focus their industrial development attention on those domains, rather than on the data center itself, are more likely to capture durable economic value.



SECTION X

Clear Distinctions, Better Decisions

The West Race in South Bend did not guarantee that James Oliver would build one of the most successful agricultural equipment companies of his era. The infrastructure provided power. The industry emerged because a particular set of conditions — accessible infrastructure, local experimentation, accumulating skills, and firms that built on each other's work — created feedback loops that compounded over decades.

Modern compute infrastructure can operate at enormous scale without creating any of those conditions. A data center can sit on hundreds of acres, consume hundreds of megawatts of power, and represent billions of dollars in capital investment while employing fewer people than a small manufacturer and generating almost no local economic interaction.

That is the capital question beneath the infrastructure-or-industry distinction. Some capital arrives in a place and embeds, creating workforce depth, supply chain relationships, knowledge that accumulates, and firms that build on each other's work. Some capital arrives and passes through, generating fiscal events along the way but leaving the local economy structurally unchanged. Knowing which kind you are hosting

⁴⁰. Lars Paulsson, Kari Lundgren, and Kati Pohjanpalo, "Power-Hungry Data Centers Are Warming Homes in the Nordics", Bloomberg CityLab, 2025.

is key to making decisions about data centers and how they can support local economies.

This brief draws on economic development literature, public fiscal data, industry reporting, and case studies of communities that have negotiated data center deals. A full source library of approximately 50 sources is available through Q&R's research archive.

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