The AI Factory

Data Centers, Power, and Resistance in Late Industrial Pennsylvania

BY MAIA WOLUCHEM, LIVIA GAROFALO, ANA CAROLINA DE ASSIS NUNES, JOAN MUKOGOSI, AND CELLA SUM





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Executive Summary

Across Pennsylvania, powerful "AI boosters" — developers, energy companies, and policymakers — are pushing an image of the state as the seat of AI infrastructure and industrial development. Their rhetoric is premised on a narrative of inevitability rooted in both history and opportunity. As the boosters' story goes, AI is the future of American innovation, and the technology's material footprint is ideal for a state whose land, energy, water, labor, and residual infrastructure signify a legacy of industrial strength. With more than 137 active or proposed data center projects across the commonwealth today, the boosters are making progress in selling their vision of Pennsylvania as an "AI factory."

But local communities are drawing very different lessons from their state's industrial past, and have their own visions for its future. Over 18 months of ethnographic fieldwork throughout Pennsylvania, we saw clearly that:

The AI industry's material needs are overwhelming, and industrial development in places like Pennsylvania will be key to its ambitions. Digital, networked technologies require massive amounts of physical infrastructure to exist. Projects in Pennsylvania reveal the unbridled hunger for land, water, and energy that underpins these technologies, as well as the lengths the industry will go to secure them.

The narrative of data center inevitability is created by those whose interests it serves. Those selling AI infrastructure development do so by knitting together a number of historical ideologies, combining industrial nostalgia, nationalist fervor, and union pride in an attempt to mask the power grab at the heart of their vision. Investments by many of AI's strongest proponents do little to meet their stated public ambitions of a more innovative and equitable future. Instead, they follow long-established patterns of earlier industrialists that concentrate wealth and siphon resources away from public services.

Amid a rising sense of precarity and disinvestment, communities see data center resistance as a means for resisting the larger, remote systems of power that structure their lives. While many communities approach data center fights from a lens of environmental protection, public health, local democracy, or civic science, others see this moment as a critical reconstruction of local power in the face of intersecting public crises.

The fight against data centers is about more than AI. Our research shows that data centers represent a lightning rod issue for broad, diverse communities that desire both prosperity and power. Meanwhile, for powerful corporations that have otherwise seemed indomitable, data centers represent an Achilles heel. Ultimately, the unfolding case of Pennsylvania reveals the limits of AI's supposed inevitability within the state's borders and beyond them.

Introduction



The site of the PAX-1 data center campus in Cumberland County, PA.

The Amtrak ride from Philadelphia to Pittsburgh is a nine-hour trip across Pennsylvania and an abridged course in the state's history. Leaving from the first capital of the United States, the train proceeds westward into farmland and forests. The many streams and rivers of the state frequently run parallel to the tracks. Small towns with coal mining history – places of extraction to serve big cities – are interspersed with old industrial projects and new large warehousing facilities. The train passes Harrisburg, the state capital, on the Susquehanna River, then nuclear smokestacks and electric power stations. The Allegheny Mountains, covered in abundant trees once stripped for lumber, give way to Pittsburgh, "Steel City," seat of Gilded Age industrial power and brawn. These are the landscapes currently being sold as the perfect home for the next generation of data centers.

We chose to study Pennsylvania because its current moment of industrial development exemplifies the data center dilemma happening across the country. In the last several years, Pennsylvania has seen an "AI boom" driven by tech giants, developers, national, state, and local leaders. This boom includes data centers (the physical infrastructure sustaining the cloud, and, more recently, artificial intelligence) as well as large investments in nuclear, coal-fired, and natural gas infrastructure to support them. As in the rest of the United States, data center projects have been proposed in every part of the commonwealth. They have recently made headlines and generated public outcry, particularly as people learned about such facilities' consumption of electricity, water, and other natural resources.[1] We focus on Pennsylvania not because it is uniquely affected by data centers — these same tensions are playing out across the US and around the world — but because the questions we have require local knowledge and sustained investigation in a particular place.

During 18 months of fieldwork in the state of Pennsylvania, our team pieced together old and new stories about industrial development in the state. As today's industrial giants make new claims about AI as America's enterprise, we set out to follow the ideological and material development of this plan. To "develop AI" does not only mean computer scientists developing new software systems; it also means clearing new land, erecting new buildings, consuming natural resources, and establishing the material infrastructure of these technologies. We saw a significant push from federal and state leaders to boost this effort alongside multinational corporations, lobbyists, and other institutions across the state. We tracked developers breaking ground across many data center sites, emergent energy projects, and land deals. We also saw the political, economic, and labor shifts unfurl as policymakers adjusted under the weight of significant community pushback.

Partway through our research process, a major event captured the contrast between those pushing for AI-first industrial development and those resisting it. In July 2025, Carnegie Mellon University hosted the inaugural Pennsylvania Energy and Innovation Summit, organized by Senator Dave McCormick. The summit, which hosted Governor

Josh Shapiro, President Trump, and several private sector leaders from critical energy developers, tech companies, and private equity, celebrated over $90 billion in private investments in data center and AI infrastructure in the state.[2] Among these critical investments were those meant for expansion of grid capacity to support growing data center demands, financial gifts to Carnegie Mellon University to support high potential AI start-ups, and "tens of thousands" of construction jobs to support data center and infrastructure development.[3]

Outside the doors of the summit, a "Stop the Summit" rally faced off with Pittsburgh's police department.[4] Organizers criticized Carnegie Mellon for hosting President Trump, raised the environmental risks of data centers on Pennsylvania communities, and protested the overlapping economic, immigration, environmental, and health crises unfolding across the country at this point in the administration. This was a critical signal of the narrative dissonance that would soon unfold over our next year of research. As we would learn, the public's understanding of the collective problems they were facing and the public-facing solutions provided by AI's biggest proponents were largely misaligned.

The focus on developing Pennsylvania for AI only intensified during our fieldwork. That September, government and industry again gathered in Pittsburgh for another event — this one the AI Horizons Summit. The conference explored AI's expanding role across different fields such as physical AI and robotics, healthcare, energy infrastructure, and more.[5] The summit also highlighted how social, historical, economic, and natural aspects of Pennsylvania made it an exemplary AI-ready state.[6] Before speakers took turns expanding on this vision, a voice-over narration blared from the audio system linking the state's industrial legacy to its future — and inevitable — position as an AI leader and data center hub:

> **"We carry a legacy where grit meets energy. From the first sparks of steel to the steady pulse of nuclear to the all-time high demand of natural gas. Why here? Because Pittsburgh and Pennsylvania offer what others can't. Direct access to the toughest, real world problems in energy, healthcare, manufacturing, and defense. Problems worth solving. Problems that forge billion dollar companies and the next generation of industry titans, just as Andrew Carnegie once did.**

Both convenings and their speakers delivered a strong message: AI and the data centers that support it are not only desirable and a benefit to all, but also *inevitable*. Pennsylvania could not and would not up pass the opportunities that this "AI revolution" would surely bring.

This message of *data center inevitability* has landed unevenly for Pennsylvanians, as people who have experienced the promise, the aftereffects, and the letdowns of several industrial booms and extractive cycles throughout their history. The inevitability presented by such "AI boosters" has been received not only with skepticism, but with strong opposition, as residents increasingly question and push back on the touted benefits of what is presented as the next industrial revolution. As one organizer from Central Pennsylvania told us about a data center development in her area:

> **"This is an AI factory. And it's extractive in the same way that mining is extractive. … Essentially, resources are being taken from an area to churn out widgets of some sort. And in this case, models and tokens are what's being produced, and power and water is what's being taken.**

This "AI factory" — while presented as new — is recognized by many Pennsylvanians as quite familiar: something that takes resources from places to produce wealth elsewhere. Drawing on ethnographic and archival research conducted from November 2024 to April 2026, this report investigates the following questions:

1. What is different about the industrial project of AI infrastructure compared to earlier episodes of development in Pennsylvania?

2. How is the AI industry attempting to sell data center inevitability to local communities?

3. How and why are community groups opposing the AI-first vision of industrial development?

We spent months traversing the state — riding hours on the Pennsylvanian Amtrak, driving through rural municipalities, attending township meetings, having coffee with local residents, knocking on doors, attending industry events, and visiting changing industrial sites, documenting what it feels like for Pennsylvanians to be at the forefront of the "AI revolution." We spoke to a range of actors who provided us with competing perspectives on this moment in Pennsylvania: subject matter experts, organizers, union representatives, local historians and archivists, residents, and local government officials. Labor in coal plants, steel mills, agricultural farmland, and warehouses built today's Pennsylvania and left families with legacies of belonging, pride, ownership, and ascendance, but also dispossession and abandonment. We visited museums and libraries, examining how these Pennsylvania histories are made alive again, day by day.

Through this work, we argue that the inevitability of data centers is a narrative shared by companies, national leadership, and media outlets trying to sell a single vision of a future, one with profound weaknesses and flaws. Through this data center development boom, Pennsylvania communities, accustomed to being extracted from and subsequently abandoned, are experiencing yet again the manifold effects of corporate power, obfuscation, and collusion. Using different strategies and assembling coalitions that challenge political categorization, residents are pushing back on this project, and, in some cases, even winning.

The infrastructure sustaining our digital lives is complex and nuanced, enmeshed with historical narratives and political will. The AI boosters selling the AI factory present data centers as both the latest instantiation of industrial progress and as a new, cutting-edge sector that will bring prosperity. We argue that this narrative is not about Pennsylvania's natural suitability for data center development, but is a justification for resource extraction and power consolidation by already-powerful corporations. This report shows the limits of that narrative and shows the alternative narratives that Pennsylvania residents are already starting to organize behind.

But this report is not just about data centers. As one of our interlocutors shared, "this conversation is about infrastructure, and it is also couched in a broader federal conversation around AI, and potentially corporate power and the role of big tech companies in rulemaking, citymaking, democracy." Ultimately, we highlight how important a place is when thinking about infrastructural build-out. We focus on Pennsylvania as one such place, a state where the materiality of tech meets ideologies of industrialism, national identity, labor power, and resource abundance.

With this in mind, the report is divided into three parts. After a brief methods section describing how we conducted our research in Pennsylvania, **Part One** focuses on data centers and their material footprint. We show how the data center industry in the state is built on ruins and extraction, the leftovers from previous periods of industrial development. Pennsylvania's industrial legacies and regional variations provide both the backdrop and the justification for the AI factory project. In **Part Two**, we examine the key actors in the political-industrial landscape of Pennsylvania and the myths and narratives they tell to portray digital technologies as an ever-new invention. Today's industrialists have tried to marshal support for the data center effort by leveraging nostalgia and mythology from that industrial era, appealing to nationalistic and working-class rhetoric as they attempt to garner the raw materials, labor, and political will to enact their goals. Finally, in **Part Three**, we look at how Pennsylvanians have identified critical holes in the mythologies of the inevitability and the benefits of the AI factory, reclaiming the power that municipalities, governments, and legislators have given over to corporate actors.

These organizers present critical new pathways for development that actually center Pennsylvania's needs, rather than facilitating a large transfer of wealth, power, and benefits to today's industrialists.

We conclude by describing how diverse coalitions of civically engaged Pennsylvanians are remaking the state's industrial landscape and influencing policymaking across state lines. Although the data center industry is trying to dominate the current moment of late industrialism, we are also at a critical juncture to change its direction.[7]

If the AI boosters are successful in selling data center inevitability, then Pennsylvania will see another round of extractive development, once again transforming its landscape. What remains to be seen is how effectively the people of Pennsylvania will organize around alternative narratives, leveraging historical patterns and political will to create a better future.

Methods: Traveling Pennsylvania in Search of the AI Factory

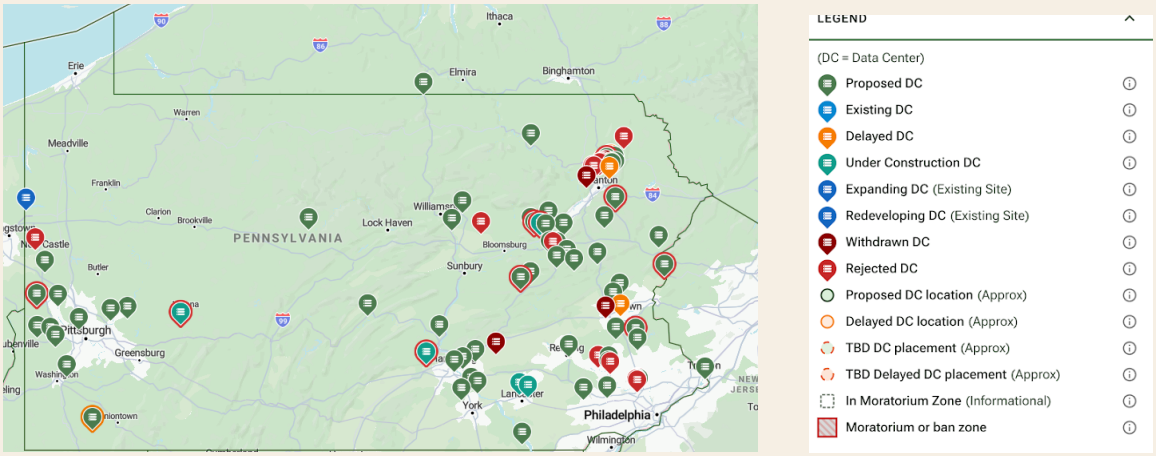
In November 2024, just one week after the US presidential election that inaugurated the second Trump term, we began our fieldwork. Making our way from Philadelphia to Pittsburgh in what would be the first of several trips, we traveled east to west through landscapes dotted by Dollar General stores and funeral homes. In these stretches of land, developers have identified the locations of an "ideal" future: woods and farmland, industrial parks and nuclear plants, rivers and railroads, active steel mills and abandoned coal mines, all proposed sites for data centers. In these trips we also observed pervasive civic opposition to data center development by Pennsylvanian communities, people who have experienced recurring cycles of boom and bust in the state's long industrial history.

According to the US Census, Pennsylvania has approximately 13 million inhabitants.[8] While white people of different ethnicities make up the majority of this general population, African Americans, Latino and Hispanic people, Asian-Americans, and biracial people are a significant and growing proportion of the state's population.[9] Across different political and demographic lines, townships, and local associations, people have been organizing around, debating, and contesting visions of the present and future of their region. We took our last trip through Pennsylvania in spring 2026, during America's 250th anniversary. Signs and banners celebrating this American birthday welcomed us in each town of the state, one of the foundational first 13 colonies. These temporal bookends of this research locate our work in a moment of crisis, but also one of debate.



People in community meetings, halls of power, group chats, and around the dinner table are all reconsidering what the future should look like within Pennsylvania and the United States more generally. Data centers and their opposition — the myth of AI revolution and the realities of the AI factory — represent one ground of such debate.

At the time of this writing, Pennsylvania has 71 active and 66 proposed data center sites throughout the state.[10] While we could not follow each site fight, we traveled east to west and west to east, from Philadelphia to Pittsburgh. We identified three broad regional areas of our investigation, keeping in mind the deep diversity of the state: Eastern Pennsylvania, Central Pennsylvania, and Western Pennsylvania.



Data Center Map of PA, with existing, proposed, active, and stopped data center projects
Source: Data Center Proposal Tracker, https://trackdatacenters.com/state/pennsylvania
Accessed: September 17, 2026

Eastern Pennsylvania

Anchored by Philadelphia at its southernmost corner, Eastern Pennsylvania is the most densely populated area of the state. Cities like Bethlehem and Scranton were the protagonists of the industrial booms of the 19th and 20th centuries.[11] Bethlehem, along the Lehigh River, is equidistant from New York and Philadelphia and has always served as a commercial and industrial node, from railroads to coal to steel. Bethlehem Steel, once known as the "Steel Colossus," employed up to 31,000 people at its peak.[12] Though the old steel stacks still tower over the town, the Lehigh Valley is now best known as a warehousing hub for Amazon and other large conglomerates. Further north, Scranton is at the heart of the coal and anthracite region, and was once the regional point of reference for coal mining and transportation.[13]

The end of both coal mining and intense steel production forced the region to shift its economic focus to higher education and biomedicine.[14] Yet Eastern Pennsylvania still boasts an abundant supply of both water and power stations that make it attractive to data center developers. Though there are several data centers proposed for Philadelphia and other parts of the region, we focus on two projects in the northeastern corner of the state where coal once reigned supreme. Salem Township, where Amazon is forging ahead on a $20 billion investment, is the single largest private investment in the state to date.[15] Another case, Archbald, is a cluster of six data center campuses proposed along the Lackawanna River, which has caught significant public pushback from the mining town at the center of this development.[16]

Central Pennsylvania

This section of the state is characterized by extensive and fertile farmland and agricultural production.[17] Harrisburg, the state capital, is the seat of state power and decision-making. Most recently, this region's development has centered around warehousing and the logistics sector.[18]

In south-central Pennsylvania, we focused on a large data center complex named Pennsylvania Digital 1 (PAX-1), proposed near Carlisle, in Middlesex Township. There, a significant community effort has opposed its construction. A few miles south on the Susquehanna River is Three Mile Island (TMI), a former nuclear plant that was the site of the 1979 largest commercial nuclear accident in the country.[19] Since 2024, Constellation Energy has planned to restart one of TMI's reactors.[20] Under their current contract, it will supply power to Microsoft's data centers.

Western Pennsylvania

Western Pennsylvania is defined by the Appalachian mountains and the city of Pittsburgh, a place of labor, industry, bridges, and invention. In the American Gilded Age, the accumulation of wealth and expansion by industrial titan families — Heinz, Carnegie, and Mellon, among many — allowed Pittsburgh to become one of the wealthiest cities in the country.[21] While the steel industry provided thousands of working class jobs and a sense of identity and pride, it also created intense pollution and environmental damage. Environmentalist and writer Rachel Carson was born in Springdale, a few miles from Pittsburgh, where she wrote and witnessed firsthand the long-term health and environmental effects of this history. With deindustrialization and the closing of most of its factories, Pittsburgh has attempted many economic revivals, some more successfully than others. Today, the city is a hub for education — it boasts more than 29 colleges and universities, including Carnegie Mellon University and the University of Pittsburgh, and has also developed a strong medical and robotics sector.[22] These institutions have helped make the city an intellectual engine for AI investment. Several data center proposals are underway or in development in Western Pennsylvania, including the Homer City Generating Station project.

CASE STUDY

Three Mile Island/Crane Clean Energy Center, Middletown, Pennsylvania



Three Mile Island, now renamed Crane Clean Energy Center in Middletown, PA

Three Mile Island is a former nuclear power plant sitting on a small island on the Susquehanna River, in Middletown, outside of Harrisburg. The Three Mile Island Nuclear Generating Station (TMI), contained two nuclear reactors: TMI Unit 1 (TMI-1) commissioned for use in 1974, and TMI Unit 2 (TMI-2) commissioned for use in 1978.[23] TMI-2 suffered a partial meltdown on March 28, 1979, resulting in the most significant nuclear accident in US history.[24] Two million people were exposed to radiation, and although official epidemiological reports have not found long-term adverse health effects on the population, many residents reported higher rates of thyroid cancer and other diseases following exposure.[25] The accident shaped future nuclear policy, heavily affected American public opinion on nuclear energy, and boosted anti-nuclear activism.[26] TMI-1, the undamaged reactor, remained operational until 2019 under Exelon, when it was shut down due to unprofitability.[27] In 2022, Constellation Energy

CASE STUDY

acquired TMI-1 and announced its restart in September 2024 with a 20-year deal with Microsoft, which will use the energy produced to power its data centers.[28] The site will relaunch in 2027 as the Crane Clean Energy Center, sending an additional 835 megawatts of power to the Pennsylvania grid.[29] A study commissioned by Pennsylvania Building & Construction Trades Council estimates 3,400 jobs will be created, while contributing $16 billion to the state's economy.

On our first trip, a blue "Keep Pennsylvania Beautiful" sign welcomed us to Middletown. In the distance, the monumental cooling stacks of the nuclear plant towered over a little strip of land in the middle of the river. Along the road that follows the Susquehanna, the proximity of the plant to homes and small farms is staggering. Railroad tracks and a sign warning not to trespass divide the plant from the road. On subsequent trips, we noticed increased traffic activity going in and out of TMI. Middletown itself is a small town, just over 9,000 people, with a main street, a train station, small businesses, schools, and football fields. One of these businesses is Kuppy's Diner, a family-run establishment. In 1979, in the aftermath of the accident, Kuppy's became a mainstay for journalists following the ongoing story. On a wall behind the diner tables, news snippets from this era are still memorialized. The mayor at the time of the accident, Robert Reid, is now in his 90s and still comes to Kuppy's to have breakfast. He was seated at the diner counter on our first visit.

The Constellation-Microsoft deal has elicited a range of reactions. Despite fears, some have welcomed it as a potential booster for local employment and the town's small businesses. Others, not so much. One of these is Eric Epstein, lawyer and chairman of TMI Alert, a nonprofit citizen and nuclear watchdog association. He asked: "If a data center attached to a nuclear plant is shut down due to weather conditions — who gets electricity first? The people, the farm animals, or the robots?"

Part 1: The Footprint

Where Does a Data Center Go?



Brunner Island Steam Electric Station as seen from the Susquehanna River in Middleton, PA.

Data centers are one of the most resource-intensive infrastructural projects to come to Pennsylvania.[30] They have been described as capital's new factories, stemming from the commodification of data propping up today's economy.[31] To understand why the state is framed as an "ideal" location for them, we first give a brief overview and history of data centers and then discuss how their development is layered on top of other, residual infrastructures. We argue that the data center industry presents Pennsylvania's history of resource extraction and industrial heritage as an ideal locale for its AI factories.

Pennsylvania: A Perfect Home for Data Centers?

Data centers can be housed in different terrains and locations. However, since the physical infrastructure sustaining the cloud deeply affects local communities and resources, data centers must adapt to local historical, economic, and environmental realities. In Pennsylvania, the state's past has been leveraged in careful and strategic ways, as companies try to frame it as a natural home for data centers.

Pennsylvania is one of the country's four commonwealth states, "one founded on law and united by compact or tacit agreement of the people for the common good."[32] This common good is defined in many ways across nearly 45,000 square miles of land mass, 2,555 municipalities, and more than 13 million people who reside in them.[33] Called the Keystone State because it was located in the heart of the first 13 colonies, Pennsylvania spans the Delaware River in the east to the Appalachian mountains in the west. Philadelphia and Pittsburgh, the cities that geographically bookend it, have different foundational stories of promise, peril, and American identity. It is rich in natural resources: hardwood forests, deposits of coal and anthracite, and natural gas. The state is traversed by over 80,000 miles of rivers and streams, and hardwood forests cover about 60 percent of the state. It is also an important energy producer and exporter, replete with power lines, nuclear plants, fracking wells, and hydroelectric stations. In other words, Pennsylvania is a land of invention and of extraction, of pillage and prosperity, and of exhaustion and potential.[34]

The concept of "working landscapes" by historian Allen Dietrich-Ward is helpful to understand the varied ways that Pennsylvania's land has been worked, altered, and layered to adapt to evolving social and economic needs.[35] A working landscape is a description of the environment shaped by a particular industry. What natural features does farming transform? How does coal mining or steel smelting change the landscape? Dietrich-Ward argues that the state's working landscapes have been continuously layered upon one another, allowing for a versatility of land use. In addition to a growing population and agricultural hub, the region was an early craft and industrial workshop,

a place where transportation infrastructure rapidly developed, from roads and canals to railroads. Intense industrialization in the 19th century transformed Pennsylvania into a place of extensive coal mining, resource extraction, and steel production.

The subsequent century — and its economy of war(s) — consolidated the state's identity as an industrial powerhouse, with corporate giants like US Steel and Bethlehem Steel supporting both local employment and US imperialism. Energy extraction and production, from hydropower to coal, was intensified to supply increased national and international demands from the world wars.[36] In the 1970s and 1980s, deindustrialization and the decline of local manufacturing hit hard, leaving many communities that had relied on stable unionized jobs to face the consequences of corporate abandonment. The data center industry, it appears, is banking on what these communities lack.



Goats in Middlesex Township, in the vicinity of PAX-1 Data Center

The data center industry, it appears, is banking on what these communities lack.

Data Centers as Infrastructure

Data centers are preceded by a long lineage of large-scale communication infrastructures, including satellite networks, the telegraph, the telephone, and the railway.[37] Working in tandem with the internet, or the cloud, and other technological artifacts, data centers make our deeply interconnected world and online activities possible. As a facility where data is processed or stored; where computer power is redistributed, where "the cloud… touches the ground," a data center signals a centralization of information processing and distribution, itself an infrastructural node.[38]

Modern data centers have many formats and sizes, depending on what they best serve, which can be information processing, storing, distribution, or cloud-enabled technology.[39] IBM claims that the first data center was the US military's ENIAC, or Electrical Numerical Integrator and Computer, at the University of Pennsylvania in the 1940s.[40] By the 1980s, data centers took the form of mainframes, big computers that occupied entire rooms. Dedicated data center buildings, often devoted to telecommunication operations, began appearing in the 1990s. By the 2000s, multi-tenant data centers became more common, accelerating as software as a service (SaaS) and cloud computing attracted the involvement of big corporations and single tenants. Over the past decade, data centers that support artificial intelligence have come into the spotlight.[41]

Data centers differ depending on whether they have one or many owners, the technologies they use for computing, storage capacity, and energy efficiency. A typology of this infrastructure includes AI data centers, enterprise, managed services, colocation, cloud and edge data centers.[42] Hyperscale data centers are notable for their size, which can easily encompass millions of square feet, and redundancy, meaning that backup measures are constantly in place in case equipment fails or power is lost.[43] Additionally, hyperscale data centers are custom-built and operated by a single company.[44]

According to infrastructure scholar Lauren Bridges, hyperscale data centers are typically defined as infrastructure containing at least 5,000 servers, covering more than 10,000 square feet, and with over 40 megawatt (MW) capacity.[45] These data centers are more likely to be concentrated in areas with favorable tax incentives, a strong fiber network, reliable and inexpensive energy, proximity to major national customers and metro areas, available land, and access to water resources such as major rivers.[46]

The data center industry also tends to select municipalities that have experienced recent struggles, proposing developments in locations that anthropologist Alix Johnson identifies as giving off the "scent of economic failure."[47] This means that data centers are attracted

to marginality, and communities experiencing financial and populational decline become prime spots for these facilities.[48]

Where to Put a Data Center? "Working Landscapes" Across Pennsylvania

Pennsylvania's history is not overlooked by the data center industry, which draws on the lineage of energy and expansion. Fossil fuels have been mined and extracted since the 1700s — first coal, then oil, and finally gas.[49] Pennsylvania also houses the first full-scale commercial nuclear power plant in the country, constructed in 1957.[50] Today, data center developers envision this lineage as the foundation of the AI industry. Their vision rests on Pennsylvania's unique abundance of land, water, and energy.

Land

Available acreage is the first thing a data center needs, and Pennsylvania offers it. Geographers and other scholars have pointed out that data center developers are expanding their scope into land management, reorganizing the environment through retrofitting or revitalization interventions.[51] In Pennsylvania, this often occurs through the buying up, rezoning, and subdivision of land. One resident told us the following:

> **They identified the acreage. It was all professional people and supervisors and planning commissioners and stuff involved in that process. As soon as they identified it, all of a sudden these land speculators, land bankers were showing up and saying, 'Well, we're not the data center, but we want to buy 500 acres, and we'll find somebody for this land. We'll be the brokers, basically.' This land slowly parceled out to speculators, and then the speculators controlled the land.**



Land available outside of Carlisle, PA

According to our interviewee, someone who has experienced many visits of data center representatives to their town, the identification of suitable acreage by local supervisors and commissioners of townships and municipalities is often the first step in the data center development process. Developable land is attractive to the data center industry: developers are looking forward to buying land, and often do so even before they have a contract with a specific data center company. New stories about data center developers offering exorbitant sums to farmers for their land — often many times what the land is worth — have become

Land (cont.)

commonplace. However, few know if the construction of such facilities will eventually materialize, even as these sales continue.[52]

Land located near water streams and power lines are especially attractive to data center developers. As one interviewee, an expert on the Susquehanna River, mentioned:

> **Industrial facilities have options. They can be self-sourced or a lot of them will be located in proximity to a drinking water system, a supplier, which can be municipal or it can be private. And it really comes down to how much water they need, what their capabilities are.**

The quote summarizes what we heard many times from the road: the data center industry presents the combination of these three elements — land, water, electricity — as the indispensable mix making Pennsylvania perfect for their facilities.

Water

Pennsylvania is rich in water resources, counting more than 80,000 miles of streams, rivers, and groundwater, which can be 30 times more voluminous than surface water.[53] Much of this water has already been drawn upon for other industrial, residential, and farming uses.[54] The Susquehanna River, for example, is one of the largest watersheds on the East Coast and a substantial source of hydropower and generating stations.[55]

We spoke with experts from the Susquehanna River Basin Commission and the Lower Susquehanna Riverkeeper Association, two organizations that monitor water use, watershed health, and evaluate new developments along the waterway. They remarked on the importance of discernment when it comes to additional land use and development, which includes attention to water consumption:

> **We already have developed lands, close to power, close to water. Use those rather than developing others. We need those natural lands for healthy water, healthy watersheds. And we have tools in place to pinpoint right areas that should be preserved for groundwater infiltration and those that are more amenable to development.**

Representatives for these organizations caution against using land close to healthy water streams to house data centers and other industries. They emphasize the idea of "amenable development" or the reutilization of already developed land connected to water systems to power data center projects.

According to our interviewees, data center developers and municipalities repeatedly sidestep the question of water use. We were told that estimates on water usage are often approximate or inaccurate as townships don't have control over water management. There are also different regulations in place for drinking water, industrial, and other types of water usage, that further complicates the problem.

> **Water is an overlooked issue by companies. They plan everything and realize they need water at the end. They need electricity, land. Water is just an afterthought, then the municipality solves it at the end.**

From the perspective of local and state water management, the new AI factories aren't different from other industries they've seen and worked with. The same expert from the Susquehanna River Basin Commission explained that with data centers, "It just has a different purpose. But how it happens, the water aspect of it, is something we're familiar with."

Energy

Researchers in science and technology studies have noted that infrastructures are built on top of what was left behind by previous industries and phases of capitalist regimes.[56] In other words, infrastructure is never new. We've been using the term "amenable development" to describe a similar phenomenon: data centers are usually built on top of old, residual infrastructure.[57] Some of our interlocutors noted that although data centers benefit from previous infrastructure, they are profoundly different from other industries due to their intense energy requirements.

Simply put, when it comes to the energetic needs of data centers, it is easier to retrofit an already existing facility or site than to start from scratch, our interviewees told us. Such installations are usually already connected to power grids which have had permits to operate in the past. In this way, developers often take advantage of infrastructural legacy, both at the material and legal level.



Plan for the retrofitting of Homer City's Generating Station into an over 3,200 acre data center campus.

One such example of this industrial layering comes from the development of Homer City Energy Campus, once the largest coal-burning power plant in Pennsylvania.[58] In operation from 1969 to 2023, the Homer City Generating Station was once a 2 gigawatt (GW) plant.[59] It is now targeted as a site of future energy development for data centers that could be running as soon as 2027.[60]

Energy (cont.)

The project developers claim that Homer City Redevelopment should generate over 10,000 jobs. A small footnote clarifies that this number refers to 10,000 construction jobs over a five-year-period. Local community members opposing the project argue that the construction jobs will be over as soon as the facility is built, and that construction jobs will possibly not go to state residents, as it is a common practice for contractors to travel the country from project to project.[61] Western Pennsylvania residents also point out that utility costs will increase as residents subsidize the data center's energy consumption. Further, they also anticipate public health will suffer due to air and noise pollution.[62]

For activists opposing Homer City, talking about data centers means also talking about gas plants and fracking. For them, data centers are a strategy that oil and gas companies have deployed to expand their infrastructure in Pennsylvania. It is as if data centers were less about AI and more about fossil fuels, or about an infrastructure that is already in place from other industrial eras. As expressed by one of our interviewees: "The big winner right now is coal. The tech bros need the energy now."

As this activist stressed, existing data centers need energy. Gas is what is available in Pennsylvania.[63] It is the dominant energy source in the state, and most data center projects plan to either bring their own energy or connect to the existing grid, a large part of which still relies on gas. To most organizers, the current needs of data centers are power-related: corporations need to work with what is already there. Groups like FracTracker Alliance, the Center for Oil and Gas Organizing, and Physicians for Social Responsibility PA originally formed to monitor health concerns and data gaps related to the oil and gas industry in Western Pennsylvania. They have recently shifted gears to address the increasing harm caused by the presence of data centers. Even organizing and data center opposition stems from a legacy of other fights, namely coal, gas, and petrochemicals. Like infrastructure, they do not start from scratch.

As another interviewee noted, "Whatever you think about data centers, you've gotta be in the grid reform conversation." It is easier to take advantage of what is already there and available.

Why Data Centers in Pennsylvania, and Why Now?

Among critical scholars of infrastructure, it is a well-worn cliche that using terms like "the cloud" to describe network and data technologies hides their messy, polluting, and very material bodies.[64] Data centers are perhaps the most concentrated instantiation of the network's body, taking years to construct, housing thousands of servers, and putting huge draws on local resources.[65] Our interlocutors, who have seen many industries come and go in their backyards, identified how data centers are yet again about land, water, and electricity.

Still, many of those we spoke with desired something like "amenable development," but it requires industries and governments to take local histories and local community interactions with pre-existing infrastructure into account as data centers are proposed and built across the state. For example, one interviewee said:

> **We have a nuclear facility in Beaver County. And it has a power plant, the Bruce Mansfield Power Plant. And they're talking about re-upping that plant to support data centers. And I think a lot of people in Beaver County are like — you know what, that makes sense. That facility is already there. They had been decommissioning it. You know, people did work there. They've lost their jobs. If there's an opportunity to get those jobs back, people are like — yes, like that one makes sense to us.**

As this resident and activist shared, data centers should make use of what is already there rather than use new land and carve new routes for water and electricity to be brought to a certain location. Such agreements should be decided with each community, as each community has its own needs and has had different encounters with infrastructural projects. This same activist told us that thinking about the particularity of each location, each county or municipality, helps us understand why residents of Beaver County might favor a data center in their community, while residents of Dauphin County — home of Three Mile Island nuclear plant — might not want a data center in their backyard.

Data center futures should factor in the deep relationships communities have with their land, water, and energetic infrastructure. Data center developers must consider the local historical, economic, and environmental realities of where these AI factories are being placed.

CASE STUDY

Archbald Borough, Lackawanna County, Pennsylvania



No Data Center signs in Archbald, PA

Another small former mining town, Archbald, is located north of Scranton. It is one focus area of the state's data center boom, with the most data center project applications in the state. Six data center proposals are clustered around the town, which sits near the Pocono Mountains along the Lackawanna River.[66] The six data center campuses are proposed to total 51 individual buildings, covering about 14 percent of the town.[67] The cluster will benefit from the abundance of water and the Susquehanna-Roseland power line that cuts through the county. In 2025, dissent and opposition started to mount, with community groups appearing at town halls and building social media presence.[68] The STOP Archbald Data Centers group has gathered residents and community members opposing these different developments, which are all in different stages of approval or review (one project has been revoked). Among their concerns are environmental and health effects, noise pollution, and exposure to fine particulate matter.[69]

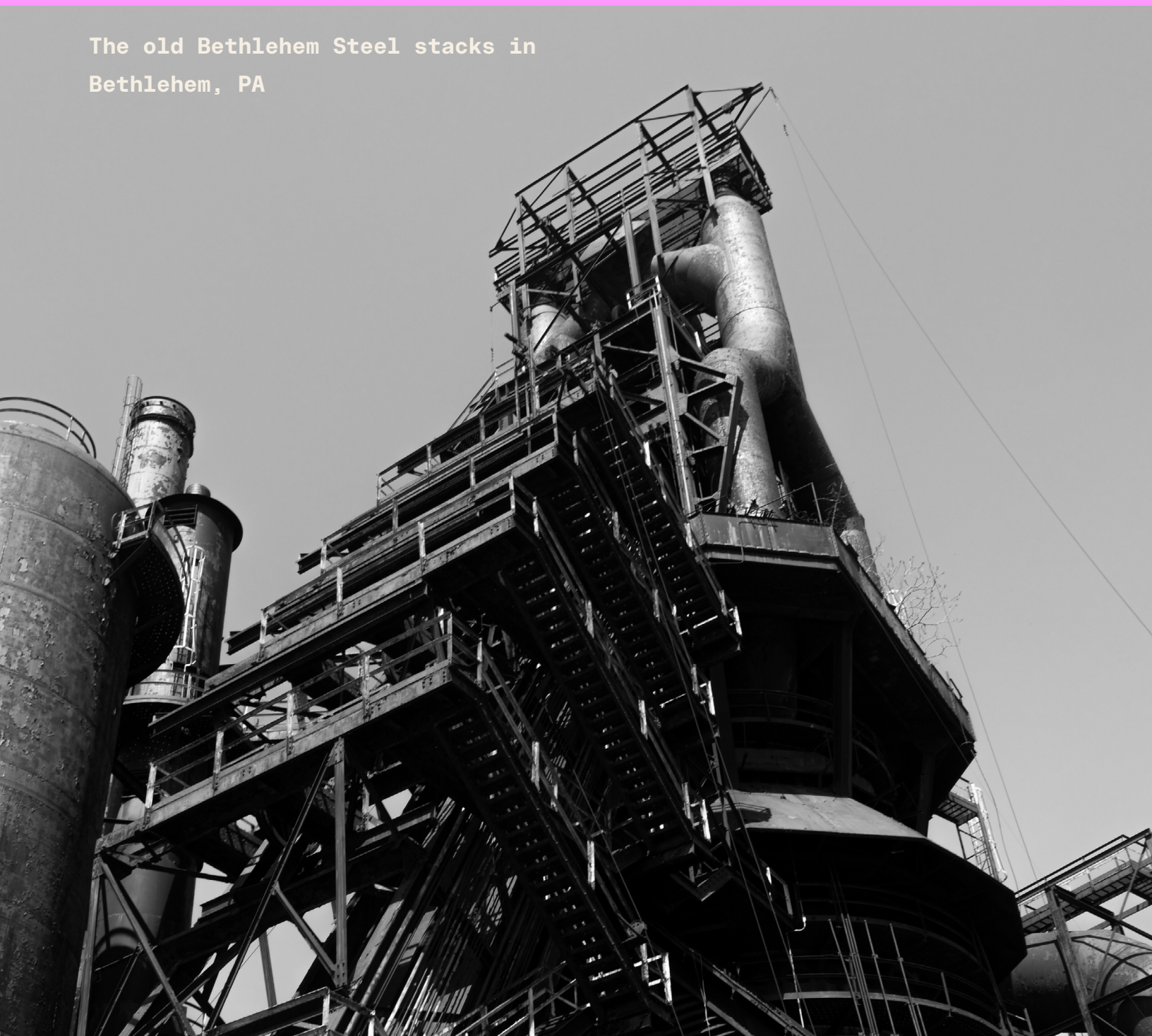
CASE STUDY

In spring of 2026, we drove northward from Philadelphia for an eastern Pennsylvania leg of our trip. A cluster of the Archbald developments is slated to sit within Archbald Pothole State Park, which at this point in its construction looked nothing like we expected. From the north end of the park, we could see the Pennsylvania hills characteristic of the anthracite region, towering powerlines, and tall forests, but nothing of the flat land and machinery we had grown accustomed to seeing at other sites across the state. As we would soon see from the south end of the park, construction crews had indeed already started "clear-cutting" this forest, felling trees and leaving piles of organic material within walking distance of residential neighborhoods.[70] From this side of the development, yellow "No Data Center" signs were all across the landscape — planted on lawns, alongside roadways, and in front of businesses. As we continued south from Archbald, first to the Anthracite Heritage Museum and then to Bethlehem's National Museum of Industrial History, historians at each situated this development within a longer history of industrialization in the region. One noted that the Archbald projects were likely to benefit in some way from the region's residual mine infrastructure and high water table found within the abandoned sites. Another mentioned that the gas and electrical transmission lines were likely to aid in power generation. But both questioned the idea that this data center would really bring about the AI-driven future crafted by the site's developers. As one historian mentioned during our museum visit:

> **"There is clearly a demand for it, but just a historian in me has to wonder how long is this demand going to last? Because Bethlehem Steel was building buildings in the 1940s for World War II, and then by the 1960s, they weren't using them.**

Part 2: The Making of a Myth

Data Centers as Pennsylvania's Inevitable Future



The old Bethlehem Steel stacks in Bethlehem, PA

Data centers need Pennsylvania's energy, water, land, and tax incentives. Though AI's supporters present a vision for the future dependent on private developers and tech companies, data centers do not come into existence without Cumberland County's land, the water of the Susquehanna River Basin, and agreements with small municipal governments. Their proponents, which include data center developers, technology companies, and political leaders, have had to build consensus and alignment toward this investment. Residents, organizers, policymakers, and other interviewees shared that building an "inevitable" vision of AI has been a core part of this strategy. By courting municipal allies, labor unions, and the public into a narrative strategy built on hype, boosterism, and power, they attempt to sell Pennsylvania a future vision of itself that can only be executed through AI and its infrastructure.

Crafting an inevitability framework about AI, and Pennsylvania's role in that development, requires money, speed, and occasional obfuscation — tools that we observed a range of actors using interchangeably over the last two years of study. Pennsylvania's "AI boosters" are concentrated within national and state leadership, the state's educational institutions, some labor unions, and energy companies. For example, Pennsylvanian Senator Dave McCormick has been a strong champion of AI investment, publicly aligning with President Trump, Governor Shapiro, Carnegie Mellon University, and major companies like Anthropic, Westinghouse, and Meta, as investors in this vision.[71]

The Data Center Coalition (DCC), a trade association for the data center industry, has also had a large impact across the state, often appearing at community meetings, statewide summits, and alongside labor unions to advocate for data center construction. DCC lobbyists spent more than $500,000 in the last quarter of 2025 lobbying federal officials, and regularly testify at Pennsylvania's legislative hearings.[72] Their mission supports "a strong business climate, policies and investments that support the growth and success of the sector," often in partnership with local municipal leaders.[73] Regional actors such as Pittsburgh's AI Strike Team — the organization behind the AI Horizon Summit — also factor heavily, aligning business, state, and corporate leaders to signal AI-readiness, invest in AI start-ups, and share information and education to ease business investment across the state.[74] The AI Strike Team has since expanded into a deeper relationship with Team Pennsylvania, a nonprofit organization helmed by Governor Shapiro, whose 10-year Energy, Data Center, and Artificial Intelligence Roadmap has galvanized much public-private partnership to support these deals.[75] Among other essential actors are Pennsylvania's top energy companies and the workers within the North American Building Trades Union (NABTU), all of whom stand to benefit from the investment in energy infrastructures that are expected to come from the data center boom.

NABTU recently celebrated a collaboration with OpenAI to support data center construction, announcing:

> **No workforce matches our skill, capacity, productivity, or safety. And no one is better positioned to deliver the scale of construction needed for the advanced AI facilities, modern transmission systems, and new energy generation driving America's economic growth. ... Today's AI construction surge demands precision, speed, and expertise, and this is exactly what we do best. Our workforce development pipeline is built for moments like this, and we are ready to deliver.**[76]

These actors have shared many reasons to invest in an AI-forward vision — increase in employment, the growth in the tech sector, innovation for innovation's sake, or broad local investment. However, over the past two years of summits, public meetings, and company conferences, this specificity has been overtaken by a larger narrative: sweeping, monumental, transformative change is on its way. Farnam Jahanian, the president of Pittsburgh's Carnegie Mellon University, epitomized this sentiment at the Pennsylvania Energy and Innovation Summit in July 2025:

> **We bring together across sectors, across disciplines, across diverse perspectives, to tackle the most pressing challenges of our time, and today is no exception. This summit comes at a defining moment for our country and perhaps for all of humanity, we are in the midst of a sweeping technological transformation, driven, of course, by the advances that we all see, in particular the growing power, power of artificial intelligence. Perhaps it's the most important intellectual development of our time, with profound impacts on every sector of our economy and broad implications for our labor market, workforce and our way of life.**

The hyperbolic tone used here — "a defining moment of all of humanity," "the most important intellectual development of our time" — provides a fitting example of AI boosterism discourse.

This vision — one in which a small group of powerful decisionmakers crafts an offering the public should accept — is a distinct marker of this political era, and of a (late) industrial one as well. According to historian Quinn Slobodian and journalist Ben Tarnoff, the industrial model of the 20th century, marked by Fordism, promised higher living standards and climbing wages.[77] In Pennsylvania, for example, factory towns propped up by Bethlehem Steel, or even Hershey's Chocolate, saw the systemic benefits of new housing, transportation, or public library systems. But in the 21st century, the industrial

model is marked by the figure of the CEO. This new model, which the authors call Muskism, is marked by fewer rewards and a technological promise of "sovereignty through technology." Rather than focusing on the societal issues at the heart of American politics, boosters instead posit that the public should trust them to build their AI and the societal benefits will follow.[78]

Rather than focusing on the societal issues at the heart of American politics, boosters instead posit that the public should trust them to build their AI and the societal benefits will follow.

An example of this argument is offered by Pennsylvania Connects, a promotion campaign by the Data Center Coalition, which purports to represent "stakeholders who support the essential infrastructure data centers provide in our daily lives and modern 21st-century economy."[79] They describe data centers as good for families, businesses, and the energy grid through ambient infrastructure improvements to online education, health records, and photo storage.[80] Here, rather than directly addressing broader public conditions like the inaccessibility of healthcare, rising education costs, and the affordability crisis, AI's benefits eventually trickle down to Pennsylvanians through corporate tech solutions or sectoral transformations that rely on the tech as the most essential element of the chain. Instead of the direct investment in the public right-of-way, private industry offers its own strength, and the increased use of its technology, as the benefit. Pennsylvania Connects is one of many efforts pushed by the Data Center Coalition across key states, including Indiana, Virginia, Oregon, Texas, Ohio, and North Carolina.[81]

Pennsylvania Connects shows just how much institutional support (and investment) there is for a Muskism-style approach. Under this premise, data centers are both an inevitability that Pennsylvanians should (enthusiastically) surrender to and an opportunity they cannot afford to pass up. For the towns targeted for data center development, such projects offer a temporary increase in construction jobs and potential community benefits agreements, but mostly the honor to lead this "new industrial era" forward.[82] Paradoxically, AI developers offering these localized benefits also warn of widespread job losses resulting from their own vision.[83] Nonetheless, the irony of promising jobs to help eliminate more jobs does not impede what is marketed as progress.

Three Hallmarks of Pennsylvanian Data Center Hype

As sociologist Andreu Belsunces Gonçalves describes, hype creates a "fascination with future-oriented technologies: exaggerated and unrealistic promises of value development … coupled with a strident optimism that captures the attention of investors, technologists, politicians, journalists, and the general citizenry."[84] We find this definition of hype particularly useful to understand how data centers are being framed as the promise of the future adapted to the Pennsylvanian context.

Our research identifies three foundational myths that Pennsylvania's AI boosters rely on as hallmarks of their messaging. These are *national identity and war; industrial nostalgia; and the revitalization of labor*. Through these ideological moves, AI boosters lay out a corporate and political strategy that relies on past generations of economic pain and trauma to justify the solutions offered by today's generation of capitalists. As we observed during our research, while this narrative does leverage Pennsylvania's rising stature in the AI race and its national position on AI, it does not offer direct answers that match the scale of harm caused by rapid deindustrialization and today's resultant crisis of affordability, nor does it meaningfully attend to the potential future harm caused by AI infrastructure's strain on Pennsylvania's resources. Here, we examine how political and corporate narrative can force a top-down perspective of development upon localities and push the AI factory into existence. We explore these three key components below.

Nationalism and State Identity

> **"This is a global race for both energy dominance and AI dominance, and we need homegrown Pennsylvanians to be doing this work, and we need investment from all across the country and all across the globe. We do not want China to beat us in this AI race.**
>
> **— Governor Josh Shapiro, PA Energy and Innovation Summit, July 2025**

Though American companies maintain a healthy global market share of AI models, infrastructure, and chips manufacturing, the Trump administration has persistently framed AI as a race between two global superpowers: the US and China.[85] While the American rhetoric of the AI race accelerated with the release of US-based ChatGPT, it was cemented as national policy in President Trump's *Winning the Race: America's Action Plan*, released in July 2025. The White House describes the effort as such: "America is in

a race to achieve global dominance in artificial intelligence (AI). Winning this race will usher in a new era of human flourishing, economic competitiveness, and national security for the American people."[86] The administration's rhetoric has also manifested in the public discussion of Pennsylvania's role in this AI race.

America's global expansion in the the mid-20th century was fueled by the United States' strengths in hard manufacturing, energy, war, and land, all handily supplied by Pennsylvanian steel mills, coal plants, and veterans.[87] As we saw throughout our fieldwork, many towns in the midst of data center or energy investment — Middletown Township, home to Three Mile Island, and Springdale Borough, home to the Springdale AI Data Center Redevelopment project, to name a few — still had placards on each streetlight honoring fallen soldiers from the World Wars, Korean War, and Vietnam War. While the war effort remains a key part of town culture and local lineage, it also featured heavily in the growth of the steel industry, which provided wartime production during World War II.[88] As Pennsylvania's strengths moved from coal and steel to other materials of national import like natural gas and nuclear energy, national leaders found key narrative hooks that give the Pennsylvania story public, nationalistic meaning, even if conditions on the ground were more fractured than it seemed.

In a 2012 book about Pennsylvania's industrial past, researcher Carolyn Kitch captures the general feeling of Pennsylvania residents, writing that "things cannot possibly get any worse than they are here."[89] A journalist during our research echoed this sentiment, whereby the feeling of marginality that many communities in Pennsylvania have experienced is contrasted by discourses that re-emphasize the US at the center of world order. He shared: *"Well, I think a lot of it is in the sort of rhetoric you hear around the data center or the AI race. … They make it sound almost like the fortunes of the nation's economic future, you know, hinge entirely on this."*

Importantly, the AI race has hit its fever pitch in the midst of an emergent "America First" national politic, which emphasizes an adversarial position toward global partners and American leadership over energy, manufacturing, and infrastructure.[90] In public statements and local appearances, national leaders aligned AI's expansion with militarism, national security, and economic prosperity, all of which echo across Pennsylvania's industrial history. Each has been repeated over the course of two years, at various levels of government. In Donald Trump's appearance during the 2025 PA Energy and AI Summit, he stated, "Today's commitments are ensuring that the future is going to be designed, built, and made in Pennsylvania, right here in Pittsburgh, and right here in the USA."[91] Despite political differences, Governor Shapiro's announcement of Amazon's unprecedented $20 billion investment in the state reflected this sentiment: "Pennsylvania

is competing again."[92] The Allegheny Conference on Community Development followed suit, noting: "With AI described as the next Manhattan Project and Westinghouse leading a new era of nuclear innovation, our region is positioned to lead across every sector that defines American competitiveness."[93]



A fence marks the border of Pennsylvania Digital-1 (PAX-1), in Middlesex Township, Pennsylvania

The impact of this rhetorical framework is neither benign nor without consequence. Nationalistic arguments imply a zero sum game, through which only one global winner emerges. Though companies have hesitated to name what it might look like to "win" the race, the federal government has established its preference for global dominance measured in market share, influence, soft power, and military strength. However broad the goals, each of these arguments still requires local alignment and participation to uphold, built by the labor, land, and resources of Pennsylvanians in Archbald, Homer City, and Cumberland County. As we learned from residents, this emergent patriotism alone does not will a municipality to accept a data center deal. Instead, it crafts a sharper national vision that they struggle to oppose, shifting the power towards developers, boosters, and private companies. Perhaps most worrisome, by positioning AI as a nationalist project, the Trump administration can characterize anti-data center activism as un-American and therefore dangerous.[94]

A journalist we spoke to recounted such an exchange with a Pittsburgh veteran, noting the shift: *"What does it mean to win the war on AI? What does this war mean? What does it mean to people like myself, who have served and actually fought in wars?"*

Industrial Nostalgia

An organizer in Carlisle described how Pennsylvania's history can be used by both pro- and anti-data center forces:

> **If somebody does not want a data center, or a natural gas processing plant, or whatever, they can very easily invoke Pennsylvania's rich history of being sort of an industrial wasteland, because we've built all these things, but what has it gotten us kind of thing, right? ... And then the people who want this stuff can say basically the same thing, like, we, you know, our steel is in the Empire State Building, and we helped win World War One, and you know, all that stuff.**

Here, we see how industrial nostalgia can provide the justification for further industrial development. Scholar Deborah Rudacille has written about "smokestack nostalgia" to refer to the yearning of a community for an industrial past that once characterized it.[95] Bringing examples from communities in the Rust Belt, she identifies the sense of bittersweet nostalgia that residents experienced after the closing of industries in their backyards.[96] This term also fits Pennsylvania. In the 20th century, coalminers, steelworkers, and other tradespeople succeeded not only through raising wages, but often secured homeownership and family-forming stability that changed the trajectory of households across the state. As we saw in Bethlehem, Allentown, Harrisburg, Scranton, and other sites, industrialization contributed greatly to the state's self-image, and enabled families in dozens of towns between Pittsburgh and Philadelphia to achieve the American dream.

Today's nostalgic narrative strategy relies on a few core components. It recalls Pennsylvania's industrial brawn, fits it within American exceptionalism, and connects both to the promise of economic development at the hands of a large corporation. In alignment with more nationalistic aims, this top-down strategy simplifies the historical record to one in which industrialization was a golden era of American politics. In Trump's AI Action Plan, released in January 2025, the administration writes:

> **An industrial revolution, an information revolution, and a renaissance — all at once. This is the potential that AI presents. The opportunity that stands before us is both inspiring and humbling. And it is ours to seize, or to lose.**

The AI Action Plan pulls on the American promise of hard manufacturing and labor wins, both of which can be found in different historical moments in Pennsylvania. However, nostalgia hides a more urgent reality: in the wake of the smokestack's closure, towns are

eager for economic development.[97] This positions AI companies as a partner to municipal leaders eager for an economic lifeline.

The data center industry is good at smelling the "scent of failure," strategically selecting the location for their plants among poor communities in desperate financial need. Lobbyists like the Data Center Coalition have used this rhetoric, noting that data centers can be strategic partners with communities who need a restart.[98] As representative Dan Diorio mentioned on stage at the March 2026 PA Data Center & Energy Innovation Summit, "I look around the room … and all these partners and companies contracted with the data center industry. Look at economic impact and community impact. Illustrate how industry is creating an economic development philosophy, bringing in more jobs and more opportunity. It's a key story to tell. We need all your help to do that, we need to be able to tell the full picture."[99]

However, this tactic at times fails to meet the needs of a public that requires more depth and meaningful engagement. For example, in both Eastern and Western Pennsylvania, active coal mines are still a part of the landscape. While some mines are still open, both to work and to memory, many other mining sites in Eastern Pennsylvania represent a monument of the environmental, economic, and human cost of the industry. In Scranton, a museum historian who grew up in the region explained how this played out:

> **"Deindustrialization, there was no real plan for that here, so basically what happened was very haphazard. Mining companies or the factories that produced mining equipment, when they went out of business, they shut down. There was nothing. It was just vacant lots with industrial residue, and that was primarily it. … In 1966, that mine shut down, and the company that operated the mine shut down. They weren't producing anything. They disavowed all responsibility. So this was essentially 125 acres of industrial wasteland.**

"Industrial wasteland" was used by some interviewees to convey a sense of theft, loss, and grief about landscape, lifeways, and even family. An interviewee noted, "My great-grandfather lost a brother in the mines, and he lost part of his thumb in the coal mines." The Knox Mine Disaster, memorialized at the Anthracite Heritage Museum in Scranton, refers to the collapse of the River Slope Mine in 1959. A failure of the mine wall caused 2.7 million gallons of the Susquehanna River to flow through per minute, killing 12 people.[100] As data center developers in Archbald search for 3.3 million gallons of freshwater per day to support their 500-acre project, developers are considering tapping mine water, which has accumulated through rainfall and residual runoff in empty and abandoned mines in the area.[101]

These places of extraction and their re-opening also show contrasting experiences of the past and the double-edged nature of nostalgia for Pennsylvanians. Nonetheless, the AI hype discourse selectively pulls from such history to make its case. Importantly, this narrative strategy focuses nostalgia on large-scale private development, rather than public investment in shared infrastructure that was also a hallmark of this time. Today, tech companies like Meta, Amazon, and Microsoft have each stepped in as more complete neoindustrialists, transforming their role from tech giant to land developer. The company rhetoric has expanded to match this, recalling a more nostalgic vision of what the industry's data centers can bring to Pennsylvania's towns.

Labor Strong: "Jobs Will Come!"

Alongside nostalgia, union support is a key element of Pennsylvania's data center mythology, despite the relative lack of organized labor within the tech industry itself. Data centers are, at their heart, grounded infrastructure reminiscent of traditional construction projects. They require electrical lines, earthmovers, pipelines, boots, and billions of dollars to construct. Building on the nostalgia of mid-century industrialists, data center developers aligning with the building trades are crafting a narrative that they are ushering in a sustainable jobs boom for Pennsylvania's small towns and cities.

Speaking from the 2025 Summit stage, Mike Rowe of the TV show Dirty Jobs applauds a return of plumbers, electricians, and other blue-collar labor, a boon for Pennsylvania's working class:

> **Yeah, well, AI is coming for the coders. They're not coming for the welders. They're not coming for the plumbers. They're not coming for the steam fitters or the pipe fitters or the HVAC. They're not coming for the electricians.**

While this may imply a welcome return of labor unions to political power, it doesn't fully reflect the reality of Pennsylvania's working-class politics. The state's rapid mid-century deindustrialization era gave way to a care economy, building a strong workforce of "eds and meds."[102] The number of hard manufacturing unions decreased 33 percent in the past two decades, replaced instead by unionized nurses, teachers, and municipal workers.[103] As described by a local historian at the Anthracite Museum, care work is among the largest forces in the state:

> **The strongest unions in the region today would represent government employees and in some cases probably some medical employees like nurses. So they're the strongest unions. Historically, like the most significant unions, like the United Mine Workers of America ... there's**

> **only about 1,000 mine workers in all of northeastern Pennsylvania now, down from 142,000 at its peak.**

AI boosters discursively highlight Pennsylvania's legacy to the working man, one forged by steel, coal, and brawn (and eminently masculine).[104] The focus on this legacy has persisted through intentional partnerships between tech companies and North America's Building Trades Unions (NABTU), as well as popular rhetoric focused mostly on the construction jobs promised through data center investment.[105] An announcement from Senator McCormick's office summarizing the 2025 CMU Summit touts $90 billion of investment, highlighting: "These commitments will create tens of thousands of construction jobs and thousands of permanent jobs, signaling Pennsylvania's readiness to power the AI and energy revolution, further strengthening America's resilience and independence."[106] Likewise, the Pennsylvania Building and Construction Trades Council stands in favor of data center development, citing a return of opportunity unseen in years. In an interview, a labor leader explained:

> **Now walk into a union hall, you might see 30 percent minorities and people of color. You might see 15 to 18 percent females in the construction trades now. Which is very exciting because we're opening up doors for people that 30 years ago, they never thought there was a place for them.**

The members of the North American Building Trades Unions — which count IBEW, Teamsters, plumbers, roofers, boilermakers, and ironworkers among their ranks — have been preparing for their work to transition to data centers, building apprenticeship programs, expanding their ranks, and appearing publicly alongside Governor Shapiro, the Data Center Coalition, and other data center developers to support this boom. Their presence is an important piece of this narrative construction, as data center opponents across the country often cite poor jobs numbers as a key detriment to the "data center as economic driver" argument. Indeed, data centers do, once constructed, require very few employees to maintain.[107] However, as the story told by unions goes, Pennsylvania's tradesmen will benefit the most from investments in the energy grid needed to support data centers, which will put many back to work.[108]

At the March 2026 PA Data Center Energy and Innovation Summit, a panel called "Meet the Builders" convened representatives from five of the region's largest trade unions to discuss the benefits they can expect from this infrastructure push. As one representative shared, "I want to build infrastructure for the governor, for Trump, Senator Costa, for anyone who wants to build it. I want to give family-sustaining blue collar wages that have a future retirement and pension. I've been around for 130 years and I want to be out here

for a lot longer."[109] The panel was moderated by a senior vice president of Aon, a company providing risk management, insurance, and resilience planning to data center developers.[110]

Combined with a return to nostalgic Americana, union strength has pulled many municipal leaders toward the data center lobby. A strong union showing has also scrambled traditional political alliances, at times pitting the building trades against other community groups organizing toward the public interest, and often against data centers. One interviewee noted that the unionized data center jobs, beyond construction, are likely to be lean. "They might promise that the jobs in the data center will be union, but there won't be a lot of them." Another remarked that the union strength made it hard to engage with municipal leaders, who would not organize against the union.

Some union representatives did discuss these corporate tactics, even acknowledging a potential AI market bubble. As one labor leader shared:

> **"So if we do our jobs and say this is what is reasonably achievable on a real construction schedule, we can control that bubble and make it more of a bell curve. And what you really hope to see is your curve's going up and maybe have a little dip and then it levels out, and then all of a sudden you're on the right path. And we're in a unique position to help shape that curve. So I don't really anticipate a bubble. What you might see is too many people trying to apply for projects and then they're just not coming to fruition.**

Even if corporate visions do not materialize, unions are eager to find a lifeline to develop apprenticeship programs and regrow their ranks. Through tears, a union-aligned interviewee described a renewed vision of union members owning homes, transcending economic disparities, and again realizing the American dream. Interviewees across the state disagree on where wealth transfer will land — in libraries, museums, and philanthropic monuments, on corporate balance sheets, or in the pockets of Pennsylvanians themselves. Even if in 15 years these jobs disappear again, some union workers believe the effort will have been worth it, and this is not an opportunity to be passed on.

The Limits of Hype: Historical Precedent as Myth

For the past two centuries, the local leaders of Pennsylvania have enshrined a history of progress based on leveraging natural and other resources made profitable by the hard work of local workers. However, histories of progress are not without friction. They are also histories of dispossession.[111] Despite having no state or federally recognized tribes to this day, the history of Pennsylvania includes the many indigenous people living in the region: the Lenape, Susquehannocks, Haudenosaunee, Erie, Massawomeck, and Shawnee, among others.[112] Following colonization and land agreements based on indigenous land theft, in 1681 King Charles II of England granted the province of Pennsylvania — literally, Penn's Woods — to William Penn to resolve the settling of his father's debt. The following year, Penn founded the city of Philadelphia, which would soon after become one of the protagonists of the American revolution and the first United States capital. From here, many foundational firsts and historical turning points followed: the founding narratives of the American experiment and the first institutions of the country's republic.

Pennsylvania historian Philip Scranton writes that "Pennsylvania, a political unit, had multiple experiences of industrialization which generated diverse and distinctive productive spaces. ... These varied constructions generated the image of our ragged rectangle as a particular sort of economic unit, Industrial Pennsylvania; but this was always a fiction."[113]

Such fictions and myths are simultaneously in crisis and yet being leveraged to justify and boast more extraction and working of already intensely altered landscapes. Historian Dietrich-Ward notes that, in these waves of development, "each succeeding generation was not presented with a blank slate of unblemished green space but, instead, found its activities constrained by its ancestors' use (and abuse) of the environment."[114] We saw this throughout our drives and train rides: hulking facilities of rust; railroad tracks with long freight trains; mountains drilled and mined; forests, existing and removed; and rivers and streams that hold trout and wildlife as they carry the memory of centuries of pollution.

Intergenerational history and memory of these layered pasts are present in how new developments get proposed and realized. On one hand, as we have shown, developers and AI boosters use different arguments to support a continuous and inevitable vision leading to data center expansion. But on the other hand, residents see through the fallacy of linear progress narratives, which, despite their fictional nature, shape the lives of their families and continue to shape their own. A resident and organizer from Western Pennsylvania who

grew up in Appalachia explained this sentiment well, as she described the succession of cycles of booms and busts:

> **So much of Appalachia … we're constantly being fed these false promises since really the death of the coal and steel industry. There's always this new thing that's going to save us and make us the rich and vibrant communities we once were in the Rust Belt. And so every couple of years, there's this new grift, this new thing that's going to make us all rich again. … None of them came true. And a lot of Pennsylvanians are very open and they feel like they want to be saved, right? We're not doing well.**

These myths and narratives of Pennsylvania identity, of hard work and abandonment, of wealth and prosperity that was never for all, come back in the new discourses of data center expansion. However, they are not taken at face value. The labor, nostalgia, and nationalistic imperatives we illustrated in this chapter are being questioned as people increasingly understand these discursive moves as forms of political power, as empty promises, and "new grifts." For this reason, Pennsylvanians have been organizing in different coalitions to push against the data center expansion in their state, using multiple strategies and tactics, and imagining alternative futures for their home.

CASE STUDY

Salem Township Innovation Campus, Salem Township, Luzerne County, Pennsylvania



The Susquehanna Steam Electric Station nuclear plant as seen from a country road in Salem Township, PA

A part of the announced $20 billion investment by Amazon, the 1,600 acre, 1,920 megawatt (MW) Salem Township Innovation Campus is a data center and cloud computing campus located in Salem Township in northeastern Pennsylvania, on the north branch of the Susquehanna River.[115] Per the project's website, the campus will feature 20 data centers and support approximately 1,000 permanent jobs.[116] Amazon Web Services (AWS) has stated that the data center and hub in the township is part of a "historic commitment to expanding digital infrastructure, creating high-skilled jobs, and positioning the Commonwealth at the forefront of global innovation."

CASE STUDY

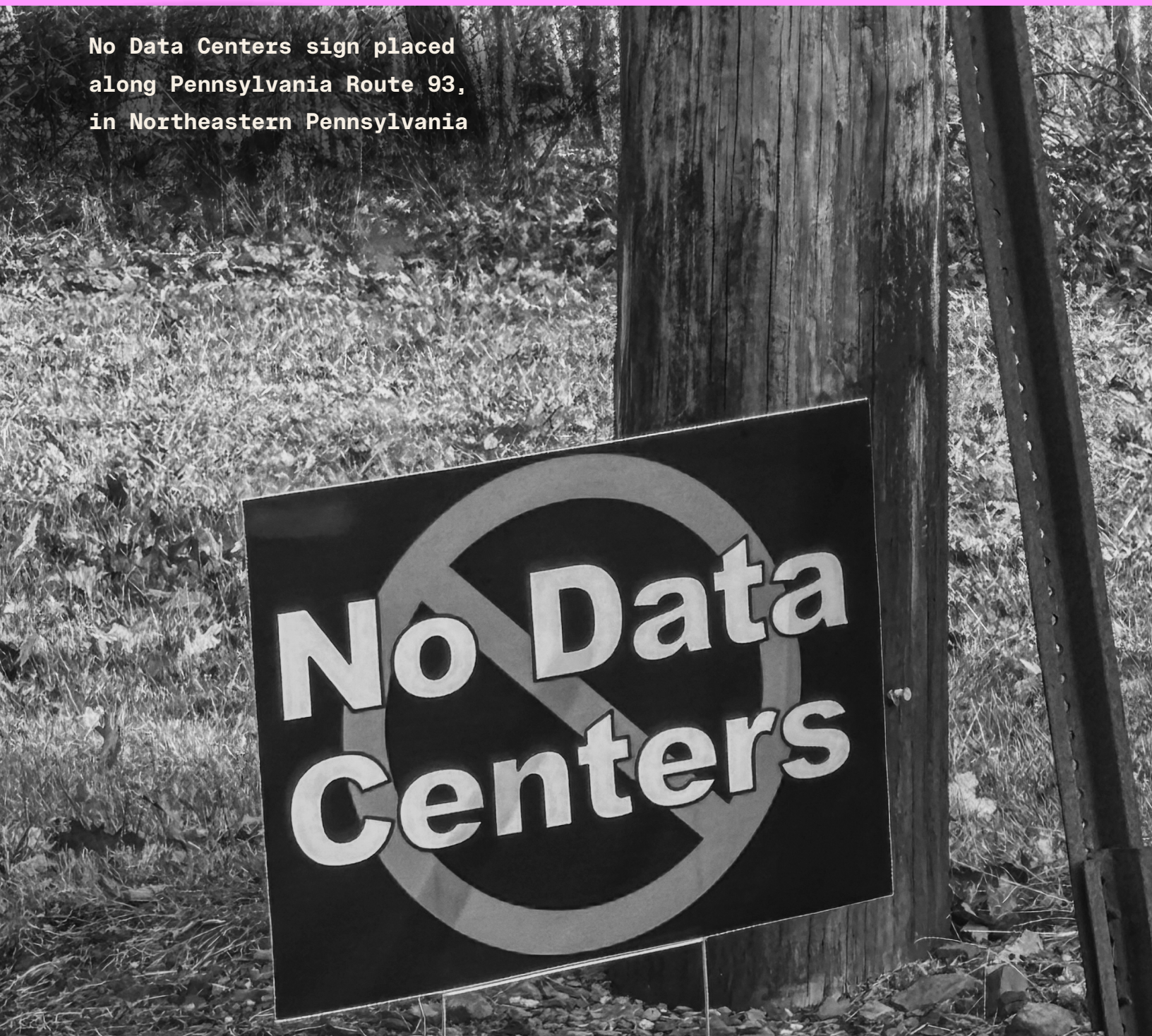
The campus is being built close to an existing nuclear power plant, Talen Energy's Susquehanna Steam Electric Station. AWS has entered into an $18 billion agreement with Talen Energy that will last through 2042 to provide power to the campus.[117] The development received fast tracking approval from the Commonwealth's Fast Track permitting program.[118] Amazon claims that the community will benefit from STEM education, workforce development, and the revitalization of the community theater in neighboring Berwick, another small town along the Susquehanna River. Some trade unions have expressed deep support in favor of the project, as have local and state authorities.[119]

The town of Berwick was a mining town when anthracite was the charismatic fossil fuel of northwestern Pennsylvania. After the decline of the industry in the 1950s, there were several unsuccessful attempts to bring back industrialization. The area then invested in nuclear energy, led by the Susquehanna Steam Electric Station. The AWS investment, as a historian told us, is layered on top of these previous histories and attempts of revitalization.

In November 2025, we stopped in Berwick. The nuclear plant is visible in the distance, across some corn fields, the vapor coming out of the cooling towers. We spoke to a local journalist who has been covering the Amazon development, and had many questions: "I want to know where they're getting the water, because they're building pipes that are going to the aquifer. ... Another real big question is, the amount of electricity they're talking about. ... I mean, this is going to be a problem for the whole grid, but where are we going to get all this power?"

Part 3: Pushing Back

Against Data Center Inevitability



No Data Centers sign placed along Pennsylvania Route 93, in Northeastern Pennsylvania

The first things we noticed about Protect PT's building were the pride flag on the front door and the free library outside the entrance. Protect PT is a local nonprofit organization dedicated to the protection of the economic, environmental, and legal rights of the people in Westmoreland and Allegheny counties. Westmoreland County has over 50 percent more registered Republicans than Democrats and remains politically split.[120] Yet it maintains a strong community of diverse organizers, helmed by Protect PT and other groups focused on fighting data center intrusion across western Pennsylvania. As we were told on our first visit, the organization started in 2014 when Gillian, a local mom, pushed back against a proposed fracking well pad in her backyard. Protect PT has since grown into a small but mighty community-based environmental advocacy group.

Inside the building, canvassing posters and a water line locator map hung on the walls as a handful of people were hard at work in Zoom calls and meeting spaces. We sat down with Gillian and her colleague Lauren, who quickly applied their years of experience fighting the fracking industry to the current fights emerging around data centers. Both campaigns involved air pollution, noise pollution, water contamination, microplastics, and PFAs.

Since we first met Project PT in 2024, the number of data center projects moving forward in the area has expanded significantly. Since then, Lauren, Gillian, and their team have campaigned against sites like Springdale, Homer City, and the TECfusions data center site planned on a former Alcoa research facility in nearby Upper Burrell Township. The remnants of water infrastructure, natural gas power, and land recall prior industrial eras, and provide a justification for what TECfusions describes as the "company's commitment to adaptive reuse and community revitalization."[121] As part of their work helming the southwestern Pennsylvania community of organizers, Protect PT builds education, outreach, and strategy to help community members find their way into these fights.

In our initial visit, Lauren and Gillian talked about the history of industries over-promising and under delivering, all while harming local public health and quality of life. They feared that the TECFusions site will do the same. TECFusions will run on natural gas, similar to the fracking wells that inspired Gillian to found Protect PT. In our initial visit, they anticipated it might take years for the site to come online, but in July 2026, Florida-based TECfusions announced an intention to go public, with an expected valuation of over $4 billion.[122] Nevertheless, Project PT pushed for a data center moratorium and is helping residents organize the resistance to the data center project in Upper Burrell.[123]

Over the course of our research, we spoke with many organizers and activists across the state. Some were long-established organizers who had engaged in fights to slow fracking

or other extractive community harms, now shifting their focus toward data centers. Others were homeowners, residents, and teachers who found out about a local data center project from a canvasser at their doorstep or an online post. Many were regular participants in town hall meetings dismayed by a surprise data center announcement or the corporate buyout of their municipal leaders. Most are reshaping power in unexpected ways, recalling patterns of resistance that long preceded this data center fight.

The Pennsylvanians with whom we spoke identified data centers as a lightning rod for local organizing. In the eyes of many of our interviewees, national, state, and municipal leaders have failed to make worthy public investment in transportation, healthcare, education, and the cost of living crisis, instead relying on private sector investment to carry Pennsylvania forward. When a data center developer comes into town — often unannounced and under the radar — residents who may otherwise be disengaged or disconnected have a focus for their frustrations with corporate greed, environmental destruction, rising utility costs, and disillusionment with democratic systems in a single material adversary.[124] As an object that can be easily identified and critiqued, data centers are the material Achilles' heel for large systems of power.

As an object that can be easily identified and critiqued, data centers are the material Achilles' heel for large systems of power.

For Pennsylvanians living in the aftermath of failed industries, the weakness of old industrial giants and the ineffectiveness of economic revitalization efforts have sowed distrust in the institutions that hold power over their communities' wellbeing. Broader struggles over housing affordability, economic and environmental justice, and even global systems of war, surveillance, and capital have created a groundswell of disillusionment. While politicians and local leaders embody some of these frustrations, forces like private equity, global capital, and the AI lobby are immaterial and inaccessible by design.

The state's largest boosters — among them the Data Center Coalition, AI Strike Team, the Governor's Office, companies like Amazon, Microsoft, Meta, and developers like TECFusions — have been both difficult to engage with and occasionally intentionally opaque, aligning deals without the public's approval.[125] As a result, data centers are challenging to organize around. To counter the increasing speed of data center investment and hype, residents across the state pushed forward a significant organizing effort that brought the wide-reaching anger with untrustworthy, immaterial institutions into focus.

Transforming their distrust in large systems of power into trust in their communities, local residents took matters into their own hands.[126] Over two years, thousands of people across rural areas, cities, coal towns, and suburbs showed up at town hall meetings, on Zoom, in Signal chats, and at the ballot box. Fueled by far-reaching desires and united by a common enemy, Pennsylvanians constructed diverse coalitions to stand up against powerful institutions and fight for their communities.

In creating a movement around a broad set of engaging issues — fair democratic practice, clean air and water, concerns over rising utility bills, and a righteous disdain for the tech sector — Pennsylvanians are envisioning and creating positive alternative paths forward for the state's future. Rather than submitting to the idea that data centers are the only viable future for Pennsylvania, residents in several interviews offered visions of the future that prioritized protecting natural resources, ensuring democratic accountability, and investing in public infrastructure instead of extractive industries. In a state long defined by what has been taken from it, these communities are insisting on their right to decide what comes next.

In this chapter, we provide an overview of the kinds of data center resistance we observed in the state. We then focus on three tactics that are employed by organizers: mythbusting and countering ideologies; unveiling corporate plans and local municipality cover-ups; and data center tracking. Finally, we detail the ideas that Pennsylvanians have for the future of their state, a vision for what their communities can become without data centers.

A Brief Anatomy of Data Center Resistance

In our fieldwork, we observed we observed that data center resistance was anchored by intersecting work done by different groups. These groups include:

- **Environmental groups:** These organizations oppose fracking and other fossil fuels and are generally focused on environmental protection, meaningful community involvement, and equitable access to a clean, healthy environment. Examples include Protect PT, Move Past Plastic, Center for Coalfield Justice, Better Path Coalition,Food & Water Watch.

- **Groups emerging from specific and local anti-data center fights:** These coalitions and groups have coalesced around attempts to stop a particular development or developer. They include the Coalition to Protect Cumberland County PA from Data Centers, Stop Archbald Data Centers, Concerned Residents of Western PA, and Save Allegheny Valley Environment, among others. Many of these groups are informal coalitions that began as Facebook groups.

- **Civic science/citizen scientists:** Actors in these groups use their own expertise to fill informational gaps regarding different aspects of data centers. Examples include the Data Center Proposal Tracker, a mapping project developed by a former Pennsylvania resident.[127]

- **Groups expanding data center fights to more intersectional struggles:** Groups have formed around issues such as utility costs, homelessness, immigration, surveillance, and AI advocacy. Groups like this include Make the Road, PA Climate Equity Table, Pennsylvania Utility Law Project and others.

Local groups often engage in strong state-wide coalitions and national campaigns that support local fights through knowledge sharing, policy toolkits, and rapid response. Working in tandem, these multilevel groups and networks supply more seasoned activists, novices, and anyone interested in fighting data centers with information usually not easily made public by corporations and government. All of this work lays a foundation for organizing against powerful lobbies and developers, mobilizing residents around energy infrastructure, and engaging a network of activists.

This web of actors uses these interlocking strategies to fight against the AI industry's inevitability as it is manifested through material consequences wrought by communities and also as a sociopolitical force. As we have shown, data centers have become a symbol of the times for many of our interviewees, representing a growing distrust in corporations and the state to hold the public interest. This organizing effort rebuilds trust as an element of power-building, creating new models of development that recenter the public right of way.

Myth-busting as Strategy

Governor Shapiro positioned Pennsylvania's leadership in energy development and touted its wealth in nuclear, fracked gas, and coal as key resources that could support data center buildout and investment across the state.[128] We spoke with Pennsylvania residents who are descendants of coal miners, steel workers, and farmers, and can recall the devastating impacts of the presence — and the retreat — of big industries in their towns and communities. These residents are mobilized into action because the collective disenfranchisement that data centers bring to their communities resonates with a sense of collective trauma and long-term health effects from the extractive coal and steel industries.[129] As one resident shared with us:

> **Being here in Pennsylvania, some of the locations, especially … like northeast Pennsylvania, I think they have so much PTSD from coal mines. Then fracking came into town. … I've heard from so many people in these communities say, oh no, you're not getting me a third time. … We're not dealing with the fallout. We're hearing the same message: 'This is gonna be great for your community. This is gonna be awesome.' And for good or for bad, the data center thinks they're coming in and saying the same things that they've heard in the past. And this time they're like, we're not getting forward. I'm not saying that data centers are gonna come in and do damage the way that maybe, you know, coal mining did, but … I don't want to wait until they've failed us again.**

Despite being a fracking hub, some Pennsylvania communities are experiencing brownouts and energy constraints.[130] For communities already facing high energy bills and unreliable service, data centers pose a threat to their budgets. Interviewees whose work focused on utility costs cited expectant high energy bills coming from data center development as a financial strain that could tip Pennsylvania residents into homelessness, exacerbating existing crises. Although some data center developers promised to develop their own power sources, and Governor Shapiro's GRID framework incentivizes them to do so, residents are skeptical this will work, because the framework relies on voluntary agreements that fail to adequately hold companies accountable for breaching the guidelines.[131] Building upon the existing work of energy-conscious environmental groups and galvanizing regular citizens, anger, fear, and frustration about energy costs found an outlet in the data center fight. In other words, data center opposition is a response to overlapping issues, including affordability. As one expert shared with us:

> **The problem with energy affordability is data centers. And that's the thing. It doesn't matter how many solar panels we put in place right now. If you are exponentially increasing greenhouse gas emissions to fuel data centers, it doesn't matter. This is the fight. This is the environmental fight.**

Identifying data centers as a key issue for environmental justice, some anti-fracking and energy affordability groups engaged a broad community of organizers around a single problem that could be addressed through local action. In places where constituents lean more progressive, this strategy was replicated across other grounds for solidarity: concerns about immigration policy, housing justice, the war economy, and corporate extractivism are rendered tangible by the physical presence of a data center project. Each entry point found a home in a data center fight, expanding the range of motivated actors across

geographic, ideological, and demographic boundaries. Reflecting on the coalescent role that data centers play, one organizer noted:

> **It's so important to look at it through an intersectional lens because it's not just affecting one facet of our lives. It's not just impacting the environment through the use of natural gas to power their backup generators or whatever. And it's not just disrupting communities that we feel are more expendable. And it's not just contributing to their surveillance state and these mass deportations. It's doing all of those things and probably more things we're not even thinking about.**

It is the intersectional nature of the simultaneous forms of extraction and injustice that Pennsylvania communities are subject to that fuels these bi-partisan, cross-coalition organizing efforts. The narrative arguments that developers had traditionally relied on — trickle down economics, corporate welfare, jobs, community benefits — proved unsatisfactory in an environment of such precarity. As developers required urgency as a function of their investment, communities grew skeptical that the same experience couldn't be applied to the real policy problems facing them today. Another organizer shared:

> **With the state of the world and every new injustice, it's creating these new sects of people that are enraged, and that are critical and that are looking at things with a new lens. One day it might be people that are immigrants or care about the immigrant community, then it's trans people, then it's women, then it's veterans. And there's been many different types of injustices at this point, for every sect of person, that net just keeps growing. And people are just getting frustrated, concerned and critical of everything around them. And so that's why I think this time is different. Because it's not just about this one issue that can harm people. Every issue right now is harming everyone. And not only is it harming people, people can't pay their bills. And so when you add that on top of civic injustice, when people can't make ends meet, but they work multiple jobs, and there's just no general generational wealth anymore. Like my electricity bill is now more than my car payment. You take all of that, it makes people full of rage. And the thing right now people are pointing some of that rage towards is data centers.**

Beneath all of the intersecting problems is a complex relationship with AI and its connections to data centers. For some organizers, AI was not a major talking point in their anti-data center communication strategies — tangible concerns about water, land, and

energy were prioritized over broader concerns about AI's role in society. Other residents we spoke with described being "very against" AI, citing detrimental impacts on mental health and creativity, ethical concerns, and widespread job losses as more work gets automated. Better Path Coalition transformed these concerns into action by protesting a jobs fair in Harrisburg. Dressed up as robots, members of the coalition made it clear that Pennsylvanians are "not AI ready" and drew connections between the myth that data centers create lasting jobs and the reality of layoffs at major tech companies who plan to automate labor.[132]

Unveiling Networks of Power and Collusion as Tactic

Data center opposition is about more than AI. Often, data center developers strategically push through deals with municipal leaders without public insight, creating a growing crisis for local democracy.[133] Through protests, canvassing, coordinated lobby days, and sustained participation in municipal processes, these communities are reclaiming their local power.[134]

We spoke with organizers who found out about local data center projects after the projects had already started. In their attempts to evade public attention, data center developers achieved the opposite — firing up local residents to call out and organize against backroom deals to decide the future of land use in their communities. Despite the difficulties in bridging knowledge-sharing to collective action and navigating a sense of shared disillusionment and resignation, many residents and organizers are actively reshaping the narrative of inevitability surrounding AI infrastructure and data center expansion.

Pennsylvania residents rarely know which companies are behind the data centers in their backyard. The playbook used by US corporations abroad is being used at home: following the lead of other industries, data center developers work with brokers and subsidiaries to outsource their harms. They use what anthropologist Amy Elizabeth Stambach calls a "corporate alibi," or "a claim or evidence indicating that a person was elsewhere at the time of a crime, and, therefore, is not implicated."[135] For example, if an accident happens in a work site, an Amazon subsidiary may be legally responsible, not Amazon.com Inc. per se. The legal separation of companies from their subsidiaries leads to the erosion of independent regulatory frameworks.[136] Non disclosure agreements (NDAs) are part of what keeps the story hidden. Recounting attempts to seek information from data center boosters, one Pennsylvania resident told us that:

> **The people they would typically talk to, those lines of communication in many instances are not open because those people have signed NDAs. That is something none of these communities are used to. Even with oil and gas, NDAs weren't really utilized that much, at least in the work that I've done in communities over the past five-plus years.**

A recent disclosure from a Right to Know request — an essential strategy for organizers looking to better understand public-private relationships — has revealed closer relationships between government entities and corporate developers, contributing to the distrust permeating across communities. In April 2026, the Concerned Citizens of Montour County released emails between the governor's office and Amazon's AWS developers in which the company complained about community pushback and threatened to pull out of its announced deals across the state.[137] This level of opacity is a strategy to obfuscate power and avoid responsibility — companies are not constructing shining gilded buildings, which are also part of Pennsylvania's history, but buildings that look like fortresses that hide in plain sight.

Among the key challenges that local residents face in their fights against data centers is the strength of the pro-data center lobby that works to push through deals with municipal leaders before the public gets a say. They are facing well-funded and well-organized opponents who can influence local leaders to aid in the obstruction of information and power, and strategically manufacture a feeling of inevitability among local communities. They are designed to seem unstoppable. This power differential between communities and corporations means that many of these data center projects are perceived to be a "done deal" by the time they reach public knowledge. One resident explained the tactic to us:

> **They negotiated all these data center fields behind closed doors. And so a lot of stuff was already planned before the public ever heard about it. And the way it works here is that the first time the public hears about it is when they're having some kind of permit review for something and by that time it's pretty much a set of complete and all you're doing is, you know, railing against the thing hoping that they'll tweak it a little even though you know, we're always aiming to stop things. But in reality once it's that far along in the process, it's really hard to stop it. And so we'd need to stop it now before all these things get permitted and we need to stop it as a category.**

Another interviewee described this by saying, "At every level, it's like a power grab right now. And that makes people feel very powerless." Pennsylvanians can sense this obfuscation and organize around their anger and frustration that corporate power is overriding, and in some cases influencing, local power:

> **The one thing I'm seeing across the board, across political spectrums and communities, is people upset that they feel the local power is being taken away. And they feel like it's not a democratic process. We saw this a lot with the proposed data center in Wampum, PA. As soon as people got word they started going to the municipal meetings. But all of those municipal leaders had signed NDAs. And so they would refuse to speak.**

Despite strategies used by data center companies to obfuscate their power and influence in local politics, concerned citizens are connecting the dots — compiling data from different public agencies, filling out FOIA requests, doing site visits, and asking corporations for clarification on their intentions and plans for a designated area. This tactical lack of transparency on behalf of data center development projects is designed to discourage local push-back. Building momentum to stop data projects after they've already started presents a massive barrier for organizers and limits their options for achieving their goals.

Matching the diversity of concerns that community members hold about data centers, and channeling their frustrations about data center developers' secrecy, activists and community groups in Pennsylvania are engaging a diverse set of tactics in their efforts to stop data center development. Many people we interviewed talked about attending and speaking at municipal meetings about data centers, identifying these gatherings as key sites of decision-making about local development projects. Some attended to gather information and attempt to gain some transparency about development plans, while others provided public comment and used the space to make their argument against data centers. This tactic of grassroots information sharing led to a growing network of communities across the state working on disparate, yet interconnected fights against data centers. Where municipalities failed to act quickly, community members showed up. We heard from an organizer who said:

> **We learn from each other. What happens there can happen here. What happens here can happen there. It can be a broader coalition, whether it's titled that or not. And it's not like we can help Archbald, but we can certainly share. They can cry on our shoulders and we can cry on theirs. And we can maybe, as a Pennsylvania community, we can draw on each other if we need to.**

Pennsylvania residents also formed online networks for information sharing and public education. Local Facebook groups, for example, house resources and update local residents about the latest developments of data center projects in their area.

Moving offline, organizers executed door-knocking and canvassing campaigns to inform residents about planned data center projects and learn more about their questions and concerns. They also hosted informational teach-in sessions in-person at local restaurants and community spaces. This work helped provide the foundation for pressure on local and state elected officials to better represent the needs and desires of communities that expressed dissatisfaction with data centers. Organizers who focused on connections with local and state governments succeeded in codifying their resistance. This work included engaging in policy discussions about model ordinances, pushing for a state-wide moratorium, and effectively moving political candidates away from data center support. This pushback has been cited as one reason for Governor Shapiro's GRID framework, which responds to rampant concern about high utility costs.[138]

These organizing efforts have seen successes: Several projects have been stopped across the state, Senator Katie Muth has proposed a state-wide moratorium, and lawmakers on both sides of the aisle express their reservations about this trajectory.[139] These successes are felt most at the local level where organizers feel like they can actually make a difference:

> **"At the local level is where we can stop these things. When people say to me, 'you're not going to stop this, like this AI thing is taking off.' And I'm like, I don't really think so. And now this big plan by the tech industry doesn't happen without these things being built. And as long as we have local control, they don't get built without local approvals. And that's where our voices are the loudest. So at a time when we're not able to see many victories, certainly at the federal level, at the state level, we can stop things locally.**

Even when community members feel that all of their demands haven't been met, they take pride in the fight. A win, in this sense, is as simple as discouraging data center developers from returning to their community or disenfranchising another community:

> **"I think my biggest hope is we show enough chutzpah and resistance that other data centers and other companies don't try to come and put these here. They know it's not going to be an easy win for them."**

Some community organizers told us that they felt burnt out. However, they remained determined to put in an effort:

> **"What do you do when you can't do nothing, but there's nothing you can do? You do what you can. I'm just trying to do what I can, I guess.**

Despite the uphill battle they face, communities are not passive observers of data center developments, but actively fighting against them. Drawing on the strength of their local groups, state-wide coalitions, and national networks, activists are finding ways to expose backroom deals, navigate complex zoning and infrastructure laws, and counteract millions of dollars in investment.

Data Center Tracking as Resistance Strategy

Several organizations and individual activists have attempted to analyze and dissect the playing field of data center development in the US, some groups focusing specifically on Pennsylvania actors. Maps and data center trackers are usually fed by user-contributed data. Through grassroots research efforts that identify and track data center developments and their potential impacts, Pennsylvanians are sharing information.

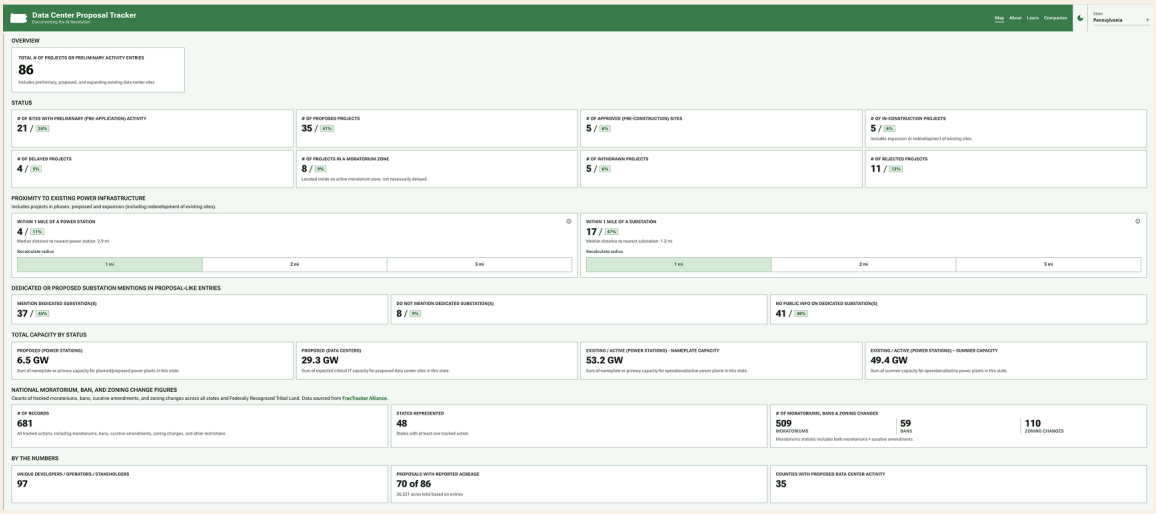
We spoke with a former Pennsylvania resident who used her background in computer science to create the Data Center Proposal Tracker, an independent research project to map data center proposals in the state. An early lover of technology, she told us that she always knew "she'd be doing something with the computer," but it would probably have to be out of her home state. Last year, she read about the large AI summit in Pittsburgh: "I remember reading about this at the time. … and I knew at that moment that it was probably going to be a big thing in Pennsylvania, especially since they were suggesting making Pittsburgh a sort of an AI capital, or an AI hub." She then learned about a data center that was being built near her hometown in Northeastern Pennsylvania, which she found odd. Why would they be locating a data center in a place that had seemed so antithetical to being the epicenter of technology?

> **"I just kept hearing about more proposals. So I decided, I'm going to map these because I can't find a lot of information in one place. I decided to go on this deep research route where I originally started doing northeastern Pennsylvania. I started with the ones around Berwick and, like, Salem Township, like the big AWS ones. And then I moved up the valley into the Archbald area.**

After watching one of the Archbald Council hearings, she realized that the map needed other layers that included the other infrastructures of Pennsylvania. As she shared with us, "I wanted to chart it against coal mines, because growing up in northeastern PA, coal was such a major part of our economy, and Scranton's identity. I was just curious to see if there was any correlation between where coal mines were and where data centers were." Next, she added power stations, subsubstation locations, and power lines. She started to track proposals in the whole state. By connecting publicly available data gathered through

Wikipedia and government websites, crowdsourced information from other local residents and FOIA requests, she has expanded the work to other states outside Pennsylvania. As of July 2026, the Data Center Proposal Tracker includes 156 projects currently under review.

Different data center tracking efforts — a form of what Tamara Kneese calls counter-data — are underway in Pennsylvania and across the nation.[140] Data center projects are so opaque that each mapping and tracking application identifies a different number of data centers planned or in operation in the state. For example, as of September 2026, FracTracker Alliance points to the existence of 219 operating data centers in Pennsylvania.[141] The Data Center Map shows 174 data centers currently in operation in the state, as of September 2026.[142]



Breakdown of proposals, including energy needs and uses, as of September 10, 2026, **Source:** https://trackdatacenters.com/.

Since these projects are fed by different community data, and define data centers in different terms, a discrepancy in what they show is to be expected. In addition, the data center industry's strategic opacity, as well as the high volume of new proposals, muddies the waters. However, the existence of these and other mapping tools, which are flourishing in the country, point to a deeper need that communities have to understand: Who are the actors behind these developments, and how many data centers are there?

Against Inevitability: A New Pennsylvania Mythology

Part of what constitutes a win for anti-data center organizers is a refusal to submit to the idea that data centers are inevitable. Although they are up against powerful companies and lobbyists who are determined to make data centers the industry of the future in Pennsylvania, organizers actively resist this pre-determined destiny. At the end of each interview, we asked participants to describe Pennsylvania and its uniqueness in their own words: "What makes Pennsylvania special?" or "What do you hope for in the future?" The visions they offered for what comes next are self-reflective, expansive, and hopeful. They imagine a future that is distinct from a dirty industrial past, that prioritizes care and sustainability, that cherishes Pennsylvania's natural beauty, and that believes in the strength and perseverance of its communities:

> **"You know, what really struck me when we first moved to Pennsylvania was just how beautiful it is. And we still have so many beautiful places. ... And this fight has taken me to many parts and I would like to see that protected. We have a long history of polluting extractive industries. And I would like us to instead of being proud of that dirty past, like 'we had the first oil well,' 'we built this country on our coal,' and now it's, 'we're gonna save the world with fracking and data centers.' Instead of that being what we're proud of, let's be proud of protecting our natural resources. And we can build an economy on that. And we can build jobs on renewable energy, far more jobs. So, let's do that.**

In the same way that data centers are a lightning rod for a broad range of social economic issues, they also serve as a conduit through which people can imagine and fight for alternative solutions to those issues. For the Pennsylvanians we spoke with, fighting against data centers that their communities dislike also means fighting for the futures that their communities desire:

> **"People care deeply about the future for themselves and their children, and what makes them brave is the idea of fighting for each other, like fighting for their community, not fighting against a fucked-up enemy, but fighting for something we want.**

Embedded in these alternative visions for Pennsylvania's industrial future is a commitment to continuing a long-term power struggle against extractive industries. Pennsylvanians organizing against data centers are operating at the precipice of what data center proponents characterize as "the infrastructure for the future." Their activism and organizing is both informed by their pasts and inspired by the futures of their communities. As a result, they are playing the long game in a fight for safe environments, clean air, and community businesses. Rather than submitting to the inevitability of data centers as the only option for revitalizing local economies, they are organizing against a predetermined future for Pennsylvania:

> **"I wish we had more of a value for the natural environment in Pennsylvania. I wish we had more of a push to sort of conserve and grow that natural environment, and also more of a push and more of a prioritization for small businesses in the economy rather than these big players from on high who are going to benefit so much more than the local areas.**

Sharing knowledge and resources using digital technologies has better equipped local communities to fight the lies and false promises of the data center industry and its boosters. Armed with information, respect for their land, and a desire to protect their communities, a coalition of diverse actors are fighting — and winning — battles with big tech corporations and external actors who only want to extract.

These diverse, and at times provisional, collectives are united by concerns over strain on water and energy resources, public health risks, increased noise and traffic, threats to property values, and anxieties about AI, as well as outrage over a lack of transparency around how corporations are receiving approval to build massive installations in their back yards. While AI has been framed as abstract and difficult to challenge, communities are demonstrating that data centers, in their physical and highly localized form, offer a tangible point of intervention. By targeting these facilities at the local level, residents are not only disrupting the AI supply chain but also asserting influence over policymakers and major tech companies. This is bottom-up democracy in action, emerging amid an increasingly centralized and authoritarian mode of governance at the federal and state level.

CASE STUDY

Pennsylvania Digital 1 (PAX-1) Data Center, Middlesex Township, Pennsylvania



The site of the proposed PAX-1 data center in Middlesex Township, PA

The Pennsylvania Digital 1, also called PAX-1, is a 1,350 megawatt (MW), 700-acre data center development project in Middlesex Township. PAX-1 is close to Carlisle, about 25 miles west of Harrisburg. The acres of land, mostly rural and bordering farmland, were originally bought in 2023 to be developed for housing.

In 2025, an agreement between PowerHouse Data Centers, the fifth largest data center developer in the country, and Pennsylvania Data Center Partners was announced to build a large data center campus on 700 acres of land with three data centers of over 4 million square feet.[143] The project was lauded by Pennsylvania Senator Dave McCormick, who praised the venture as “a bold and meaningful investment that puts

CASE STUDY

Pennsylvania at the heart of America's emerging AI tech economy."[144] Municipal leaders changed the ordinance to allow a data center to be built there without community input. In September 2025, Pennsylvania Data Center Partners and PowerHouse hosted a "community event" to inform the public about the project. Since then, residents and other community groups like Protect Cumberland County have requested information, organized, participated in town halls, and pushed for more transparency on the project, and even a data center moratorium, which would pause the construction of such facilities.[145]

Carlisle and its environs are different from other parts of the state. Cumberland County, where Middlesex is located, is one of the only growing parts of Pennsylvania, and has constant external investments through the service industry, consulting, healthcare, and warehousing/logistics. According to one organizer we spoke to, data centers are perceived as another kind of investment in an area that has seen much of it the past 20 years.

We drove by the future PAX-1 location several times. It is surrounded by farms; power lines cross the fields into the woods in the background. There are housing developments less than a mile away, fresh water trout streams in the vicinity, and a section of the Appalachian Trail.[146] On the other side of the hill, toward Interstate 76, there are warehousing facilities and long trucks docked to be filled. The next stage of the development, which was already underway during our last visit, is the building of the first electric substation. We stopped in town for dinner at a local restaurant where we asked some locals what they thought of the plan. "We don't need data centers, we don't need AI. I can still write with pen and paper," one of them told us.

Conclusion



The LeTort Spring Run,
Cumberland County, PA

This report examines how an "AI factory" comes into being. Building from generations of industrial churn, decades of significant economic downturns, and emerging environmental wealth, data centers are being presented to Pennsylvanians as the new American opportunity. But despite corporate discourse, Pennsylvania residents are increasingly put off by these designs. Just as data centers are about more than data, data center opposition is a sign of the times.

Data centers are a new iteration of what factories used to be: an operational and extractive system. Though this system provided employment, benefits, and stability for factory workers, the benefits did not prove to be longlasting. Larger economic changes after the end of the Cold War, shifts in defense and research funding, and offshoring of manufacturing jobs completely changed this landscape, leaving many Americans unemployed or underemployed by the end of the century. In the years since, many workers have transitioned out of hard manufacturing, often to gig work, to maintain employment. The foundations of a stable life once found here — healthcare, access to education, a livable wage — are dwindling. In this landscape, AI is presented as a critical lifeline to a better future.

After many generations of disappointments, Pennsylvanians can recognize that these wins rarely trickle down in a positive way. The information landscape has changed since Fordist factories first appeared in the American imagination. Today, people have access to a myriad of sources that can challenge the stories companies are trying to sell and the myths crafted by the US government. The current moment, marked by deindustrialization and a breadth of digital connections, converge with other stressors such as high unemployment rates and an affordability crisis. Americans feel lied to by government and by corporations. All these factors breed distrust that finds an outlet in this data center fight. Here we find new ways of interacting with American industries, new ways of constructing power, and emergent paths forward.

In creating a movement around a broad set of engaging issues — fair democratic practice, clean air and water, concerns over rising utility bills, and a righteous disdain for the tech sector — Pennsylvanians are envisioning and making good alternative visions for the state's future. Rather than submitting to the idea that data centers are the only viable future for Pennsylvania, we can seek future visions that prioritize the protection of natural resources, democratic accountability, and investment in infrastructure that serves the public. In a state long defined by what has been taken from it, these communities are insisting on re-investing in what makes it thrive — community trust, cooperation, and a righteous fight for a more just future.

Appendix: Methodology

This research consisted of a two-year collaborative, on-the-ground, ethnographic project. Our full team conducted four week-long trips in Pennsylvania (November 2024, May 2025, November 2025, April 2026), crossing the state by car or train, each with a slightly different itinerary. Many smaller trips were conducted over the course of the research period. Given the speed and the number of data center projects being planned by different developers, we did not track specific projects in detail, deciding to focus on specific areas and sites, as detailed in the report and its case studies. The sites and locations we focused on are (listed east to west): Philadelphia, Mount Bethel, Archbald, Hazleton, Berwick, Scranton, Bethlehem, Harrisburg, Middletown, Carlisle, Middlesex Township, Homer City, Upper Burrell, New Kensington, Springdale, Braddock, and Pittsburgh.

We interviewed 44 participants, both virtually and in person. Interviewees included experts, activists and organizers, labor unions, policymakers, institutional leaders, archivists, and residents. With consent, interviews were audio recorded and transcribed with transcription software. We then began collective, iterative, qualitative coding in Atlas TI. In addition to the interviews, we collected extensive photographic, audio-visual, media, and archival material. We attended key industry events virtually and in person, including the aforementioned inaugural Pennsylvania Energy and Innovation Summit (July 2025) and the 2026 Pennsylvania Data Center and Energy Innovation Summit. Members of our team also participated in a state lobbying day, regular statewide and regional coalition meetings, shadowed organizers during door-knocking, and attended municipal and state hearings where able.

When they were able to accept payment, participants were compensated $50 for their time. This study received ethics approval from Pearl IRB (Protocol "The Rise of Data Centers and Community Transformations in Pennsylvania," co-PI Woluchem, Garofalo).

Our team is composed of people with different positionalities, backgrounds, expertise, and connections to the state of Pennsylvania: Woluchem graduated from the University of Pittsburgh, Mukogosi was raised in Pittsburgh, Garofalo resides in Philadelphia, Sum is originally from Carlisle, Pennsylvania and did her PhD at Carnegie Mellon University, and de Assis Nunes has studied data center development and its connections to US industrialization. As a team of women of different backgrounds, races, and nationalities, we traveled and collaborated, aware of our positionalities and different connections to the state and this work. These differences enriched our analysis and are co-constitutive of this research.

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Endnotes

1 Robert J. Szczerba, "Why Data Centers Are Booming—And What They're Actually For," *Forbes*, July 9, 2026, https://www.forbes.com/sites/technology/article/what-is-a-data-center/.

2 Brad Plumer, "Trump Hails $90 Billion in AI Infrastructure Investments at Pennsylvania Summit," *The New York Times*, July 15, 2025, https://www.nytimes.com/2025/07/15/us/politics/trump-ai-pittsburgh-speech.html.

3 "Fact Sheet: More Than $90 Billion in Investments Announced at Senator McCormick's Pennsylvania Energy and Innovation Summit," U.S. Senator Dave McCormick (website), July 15, 2025, https://www.mccormick.senate.gov/news/press-releases/fact-sheet-more-than-90-billion-in-investments-announced-at-senator-mccormicks-pennsylvania-energy-and-innovation-summit/.

4 Chrissy Suttles, "Tense Protests as Trump Visits CMU," *Axios*, July 15, 2025, https://www.axios.com/local/pittsburgh/2025/07/15/trump-protests-pittsburgh-ai-summit.

5 "Pittsburgh Deploys the Future of AI," Carnegie Mellon University, September 11, 2025, https://www.cmu.edu/news/stories/archives/2025/september/pittsburgh-deploys-the-future-of-ai.

6 Ana Carolina de Assis Nunes and Cella Sum, "Data as Destiny in the SteelCity: How Pittsburgh's Industrial Past Is Being Leveraged for an AI Future," *Nonprofit Quarterly*, January 30, 2026, https://nonprofitquarterly.org/data-as-destiny-in-the-steel-city/.

7 "Late industrialism," as opposed to the often more popular "post-industrialism," points to a time of exhaustion and potential. It is a time when infrastructure, which is material, social, and philosophical, becomes ruins, poses risks, and is retrofitted into something else. Chloe Ahmann and Alison Kenner, "Breathing Late Industrialism," *Engaging Science, Technology, and Society* 6 (November 2020): 416–38, https://doi.org/10.17351/ests2020.673.

8 "QuickFacts: Pennsylvania," United States Census Bureau, accessed August 4, 2026, https://www.census.gov/quickfacts/fact/table/PA/PST045225.

9 The broad racial categories used by the federal administration has been the target of several criticisms by interest groups, scholars, and NGOs alike. Examples of this critique include Cecilia Nuñez, Julia Silver, Misael Galdámez, and Nancy López, "Latino Is Not a Race: Understanding Lived Experiences Through Street Race," UCLA Latino Policy & Politics Institute, August 7, 2024, https://latino.ucla.edu/research/latino-is-not-a-race/.

10 US Data Center Proposal Tracker (website), accessed July 31, 2026, https://trackdatacenters.com/.

11 "U.S. History Primary Source Timeline," Library of Congress, accessed July 31, 2026, https://www.loc.gov/classroom-materials/united-states-history-primary-source-timeline/rise-of-industrial-america-1876-1900/overview/.

12 Bethlehem Steel: The People Who Built America," *WLVT Specials*, Season 2021, Episode 12, October 1, 2021, https://www.pbs.org/video/bethlehem-steel-the-people-who-built-america-r50tyv/.

13 "About Scranton," City of Scranton (website), accessed August 4, 2026, https://scrantonpa.gov/our-community/work-from-here/.

14 "Pennsylvania's Biggest Coal Plant, Homer City, Will Shut Down In July," *West Virginia Public Broadcasting*, June 6, 2023, https://wvpublic.org/story/energy-environment/pennsylvanias-biggest-coal-plant-homer-city-will-shut-down-in-july/.

15 Governor's Press Office, "Governor Josh Shapiro Announces Amazon Plans to Invest $20 Billion in Pennsylvania for AI Infrastructure in Largest Capital Investment in Commonwealth History," *PA Department of Community & Economic Development*, June 9, 2025, https://dced.pa.gov/newsroom/governor-josh-shapiro-announces-amazon-plans-to-invest-20-billion-in-pennsylvania-for-ai-infrastructure-in-largest-capital-investment-in-commonwealth-history/.

16 Rebecca Egan McCarthy, "Archbald, PA, Fights Data Centers in AI Development Rush," *Spotlight PA*, March 19, 2026, https://www.spotlightpa.org/news/2026/03/pennsylvania-data-centers-archbald-ai-evictions-environment/.

17 Timothy W. Kelsey and Emily O'Coonahem, "The Joy of Farm Watching: A Roadside Guide to Pennsylvania Agriculture," December 21, 2022, https://extension.psu.edu/the-joy-of-farm-watching-a-roadside-guide-to-pennsylvania-agriculture.

18 Justin Sweitzer, "Warehouses Have Become PA's Biggest Cash Crop – for Better and Worse," *City & State PA*, March 28, 2025, https://www.cityandstatepa.com/policy/2025/03/warehouses-have-become-pas-biggest-cash-crop-better-and-worse/404139/.

19 "Three Mile Island Accident," World Nuclear Association, March 23, 2026, https://world-nuclear.org/information-library/safety-and-security/safety-of-plants/three-mile-island-accident.

20 Charles Thompson, "Former TMI Nuclear Plant Restart Continues Checking Boxes and Stoking Fears," *PennLive*" July 29, 2026, https://www.pennlive.com/news/2026/07/crane-nuclear-plant-restart-continues-checking-boxes-and-stoking-fears.html.

21 Aakanksha Agarwal, "Gilded Not Golden," *Pittsburgh Quarterly*, Summer 2025, https://pittsburghquarterly.com/articles/gilded-not-golden/.

22 "Colleges & Universities in Pittsburgh," Visit Pittsburgh, accessed July 8, 2026, https://www.visitpittsburgh.com/about-pittsburgh/relocation/education/colleges-universities/.

23 "Three Mile Island Collection at the State Library of Pennsylvania," State Library of Pennsylvania, accessed August 4, 2026, https://digitalcollections.statelibrary.pa.gov/three-mile-island-collection.

24 "Backgrounder on the Three Mile Island Accident." Nuclear Regulatory Commission," October 2, 2025, https://www.nrc.gov/reading-rm/doc-collections/fact-sheets/3mile-isle.

25 "Possible Correlation Shown Between the Partial Meltdown at TMI and Thyroid Cancers," *Penn State Health News*, May

31, 2017, https://pennstatehealthnews.org/2017/05/possible-correlation-shown-between-the-partial-meltdown-at-tmi-and-thyroid-cancers/; Evelyn O. Talbott, Ada O. Youk, Kathleen P. McHugh-Pemu, and Jeanne V Zborowski, "Long-Term Follow-Up of the Residents of the Three Mile Island Accident Area: 1979-1998," *Environmental Health Perspectives* 111, no. 3 (2003): 341–48, https://doi.org/10.1289/ehp.5662.

26 *TMI-2 Lessons Learned Task Force Final Report* (NUREG-0585), U.S. Nuclear Regulatory Commission, October 1979, , https://www.nrc.gov/docs/ML0614/ML061430367.pdf; B. D. Melber, *The Impact of TMI upon the Public Acceptance of Nuclear Power*, 10, no. 3 (1982): 387–98, https://doi.org/10.1016/0149-1970(82)90015-4.

27 "Three Mile Island Unit 1 To Shut Down By September 30, 2019," Constellation, May 8, 2019, https://www.constellationenergy.com/news/2019/three-mile-island-unit-1-to-shut-down-by-september-30--2019-aspx.html.

28 Richard Luscombe, "Three Mile Island Nuclear Reactor to Restart to Power Microsoft AI Operations," Environment, *The Guardian*, September 20, 2024, https://www.theguardian.com/environment/2024/sep/20/three-mile-island-nuclear-plant-reopen-microsoft.

29 "Constellation to Launch Crane Clean Energy Center, Restoring Jobs and Carbon-Free Power to The Grid," Constellation, September 20, 2024, https://www.constellationenergy.com/news/2024/Constellation-to-Launch-Crane-Clean-Energy-Center-Restoring-Jobs-and-Carbon-Free-Power-to-The-Grid.html.

30 Sadasivan Shankar, "Challenging Trends in Energy of Computing for Data Centers," *Computer* 57, no. 12 (2024): 134–42, https://doi.org/10.1109/MC.2024.3468568.

31 Steven Gonzalez, "Cloud Ecologies: An Environmental Ethnography of Data Centers" (Massachusetts Institute of Technology, 2023), https://hdl.handle.net/1721.1/154209.

32 Anna Price, "What's in a Name? The Four U.S. States That Are Technically Commonwealths," In *Custodia Legis* , August 16, 2023, https://blogs.loc.gov/law/2023/08/whats-in-a-name-the-four-u-s-states-that-are-technically-commonwealths; "Commonwealth noun," Merriam-Webster, accessed July 7, 2026, https://www.merriam-webster.com/dictionary/commonwealth.

33 "Municipal Statistics," Pennsylvania Department of Community & Economic Development, accessed July 31, 2026, https://dced.pa.gov/local-government/municipal-statistics/.

34 Ahmann and Kenner, "Breathing Late Industrialism."

35 Allen Dieterich-Ward, *Cradle of Conservation: An Environmental History of Pennsylvania*, (Pennsylvania Historical Association, 2024).

36 Marilyn Pereboom, "An Energy Transition by War-Scale Action: Here's What That Looked Like in WWII Philadelphia," Kleinman Center for Energy Policy, September 14, 2022, https://kleinmanenergy.upenn.edu/commentary/blog/an-energy-transition-by-war-scale-action-heres-what-that-looked-like-in-wwii-philadelphia/.

37 Julia Velkova and Jean-Christophe Plantin, "Data Centers and the Infrastructural Temporalities of Digital Media: An Introduction," *New Media & Society* 25, no. 2 (2023): 273–86, https://doi.org/10.1177/14614448221149945.

38 Tom Boellstorff, "A Typology of Ethnographic Scales for Virtual Worlds," in *Online Worlds: Convergence of the Real and the Virtual*, ed. William Sims Bainbridge (Springer, 2010), 123–133.

39 "What Is a Data Center," Cisco, accessed August 4, 2026, https://www.cisco.com/site/us/en/learn/topics/computing/what-is-a-data-center.html.

40 Stephanie Susnjara and Ian Smalley, "What Is a Data Center?" IBM, accessed July 31, 2026, https://www.ibm.com/think/topics/data-centers.

41 Jeff Omelchuck, "Data Center Overview," PowerPoint presentation, Oregon Data Center Advisory Committee, Oregon Department of Energy, Salem, OR, February 27, 2026.

42 "What Is a Data Center," Cisco.

43 Phill Powell and Ian Smalley, "What Is a Hyperscale Data Center?," accessed August 4, 2026, https://www.ibm.com/think/topics/hyperscale-data-center.

44 "What Is an Enterprise Data Center?," HPE, accessed August 4, 2026, https://www.hpe.com/ae/en/what-is/enterprise-data-center.html.

45 Lauren E. Bridges, "Environmental Impacts of AI," in *Oxford Research Encyclopedia of Science, Technology, and Society*, ed. Rayvon Fouché (Oxford University Press, June 25, 2026), https://doi.org/10.1093/9780197852712.003.0078.

46 Desmond Bast, Constance Carr, Karinne Madron, and Ahmad Mafaz Syrus, "Four Reasons Why Data Centers Matter, Five Implications of Their Social Spatial Distribution, One Graphic to Visualize Them," *Environment and Planning A* 54, no. 3 (2022): 441–45, https://doi.org/10.1177/0308518X211069139.

47 This phenomenon was also observed and described by anthropologist Alix Johnson in her book *Where Cloud Is Ground: Placing Data and Making Place in Iceland* (University of California Press, October 2023). In it, Johnson also presents a formula—"distance + simplicity + economic desperation"—as elements that make certain locations attractive to data centers.

48 Johnson, *Where Cloud Is Ground*.

49 Janice Lane Palko, "Western Pennsylvania's Long History of Energy Production," *Positively Pittsburgh*, accessed August 20, 2026, https://positivelypittsburgh.com/pittsburghenergy/; Ben Goldman, "Pennsylvania's Energy Heritage," Earth Archives, accessed August 1, 2026, https://eartharchives.psu.edu/2020/04/13/pennsylvanias-energy-heritage/; Pereboom, "An Energy Transition by War-Scale Action."

50 Joseph L. Spradley, "First U.S. Commercial Nuclear Plant Opens," EBSCO, 2021, https://www.ebsco.com/research-starters/power-and-energy/first-us-commercial-nuclear-plant-opens.

51 Michael Davidson, *A Planners Dictionary*, Planning Advisory Service Report, no. 521/522 (American Planning Association, 2004), https://www.planning.org/publications/report/9026853/; Graham Pickren, "The Factories of the Past Are Turning into the Data Centres of the Future," *Imaginations: Journal of Cross-Cultural Image Studies* 8, no. 2 (2017): 22–29, https://doi.org/10.17742/IMAGE.LD.8.2.3; Daniel Greene, "Landlords of the Internet: Big Data and Big Real Estate," *Social Studies of Science* 52, no. 6 (2022): 904–27, https://doi.org/10.1177/03063127221124943.

52 Will Parker, "The Americans Striking It Rich in the Data-Center Buildout," *The Wall Street Journal* July 13, 2026, https://www.wsj.com/real-estate/commercial/the-americans-striking-it-rich-in-the-data-center-buildout-71c6a8a8.

53 "Groundwater," Commonwealth of Pennsylvania, accessed August 13, 2026, https://www.pa.gov/agencies/dcnr/conservation/water/groundwater.

54 Andy Yencha, "Can Property Owners Remove Water from Their Backyard Stream?" PennState Extension, January 21, 2026, https://extension.psu.edu/can-property-owners-remove-water-from-their-backyard-stream.

55 "Susquehanna River Basin," Susquehanna River Basic Commission, accessed August 4, 2026, https://www.srbc.gov/portals/susquehanna-atlas/data-and-maps/susquehanna-basin/.

56 Alix Johnson, "Data Centers as Infrastructural In-Betweens," *American Ethnologist* 46, no. 1 (2019): 75–88, https://doi.org/10.1111/amet.12735; Patrick Brodie and Julia Velkova, "Cloud Ruins: Ericsson's Vaudreuil-Dorion Data Centre and Infrastructural Abandonment," *Information, Communication & Society* 24, no. 6 (2021): 869–885, https://www.tandfonline.com/doi/epdf/10.1080/1369118X.2021.1909099?needAccess=true; Velkova and Plantin, "Data Centers and the Infrastructural Temporalities."

57 This term was mentioned by different interviewees, and in this section we use the term as brought up by them. The way they use this term might be different from an official or disciplinary definition of it.

58 "Project Overview," Homer City Redevelopment, accessed August 4, 2026, https://www.homercityredevelopment.com/project-overview.

59 For comparison, according to a general industry standard for utilities, a single gigawatt can power about 750,000 homes. See Marc Levy, "Federal Government to Turn a Kentucky Uranium Plant into an AI Data Center and Gas Power Complex," *AP News*, July 30, 2026, https://apnews.com/article/ai-data-center-kentucky-uranium-gas-a4cf07af1b6776971dc5d609c996ca13.

60 This retrofitting proposal would expand the plant production of energy to 4.5 GW, which is greater than the previous coal plant (2 GW). See "Project Overview," Homer City Redevelopment.

61 Concerned Residents of Western PA, *What You Should Know About the Proposed Fracked-Gas Power Plant & AI Data Center*, n.d., accessed August 1, 2026, https://concernedresidentsofwesternpa.com/wp-content/uploads/2025/12/crow-pamphlet-12.15-bifold.pdf; Karen Weise, "An A.I. Boom Makes Electricians Flock to Central Washington,"*The New York Times*, December 25, 2024, https://www.nytimes.com/2024/12/25/technology/ai-data-centers-electricians.html.

62 Weise, "An A.I. Boom Makes Electricians Flock to Central Washington.".

63 "United States - U.S. Energy Information Administration (EIA)," accessed August 14, 2026, https://www.eia.gov/states/PA/analysis.

64 The cloud figuratively stood for the vast complexity of the internet in earlier mapping of infrastructures of computer networks. Amoore, L. (2020). *Cloud Ethics: Algorithms and the Attributes of Ourselves and Others.* Duke University Press; in the 1970s, "engineers used the symbol to represent an unpredictable network — whether telephone or internet." Hu, T. H. (2015). *A Prehistory of the Cloud.* MIT Press.

65 In other words, the industry tries to present the cloud as immaterial. Louise Amoore, "Cloud Geographies: Computing, Data, Sovereignty," *Progress in Human Geography* 42, no. 1 (2018): 4–24, https://doi.org/10.1177/0309132516662147.

66 "Interactive: Data Center Proposals in the Archbald Area," *Grist*, March 17, 2026, https://grist.org/project/updates/interactive-archbald-data-center-map/.

67 "Archbald, PA, Fights Data Centers in AI Development Rush," *Spotlight PA*, March 19, 2026, https://www.spotlightpa.org/news/2026/03/pennsylvania-data-centers-archbald-ai-evictions-environment/.

68 Tim Craig, "Data Centers Could Surround the Tiny Pennsylvania Town of Archbald," April 26, 2026, *The Washington Post*, https://www.washingtonpost.com/nation/2026/04/26/archbald-pennsylvania-data-centers/.

69 Frank Lesnefsky, "Stop Archbald Data Centers Makes Case against Proposed Wildcat Ridge Campus," July 7, 2026, *The Scranton Times-Tribune* https://www.thetimes-tribune.com/2026/07/07/stop-archbald-data-centers-makes-case-against-proposed-wildcat-ridge-campus/.

70 Frank Lesnefsky, "Will Data Center Demands Strain Archbald Power, Water, Wildlife?" *The Scranton Times-Tribune*, November 14, 2025, https://www.thetimes-tribune.com/2025/11/14/feasibility-and-impacts-of-29-data-centers-concentrated-in-archbald/.

71 "Fact Sheet: More Than $90 Billion in Investments Announced at Senator McCormick's Pennsylvania Energy and Innovation Summit," U.S. Senator Dave McCormick's office, July 15, 2025, https://www.mccormick.senate.gov/news/press-releases/fact-sheet-more-than-90-billion-in-investments-announced-at-senator-mccormicks-pennsylvania-energy-and-innovation-summit/.

72 "Big Tech Lobbies Heavily to Support Data Center Boom," *Spotlight PA*, January 22, 2026, https://www.spotlightpa.org/news/2026/01/data-centers-tech-industry-

lobby-energy-federal-government/.

73 "About DCC," 2025. Accessed July 31, 2026, https://datacentercoalition.org:443/cpages/about.

74 AI Strike Wire, "Home," AI Strike Team, accessed July 31, 2026, https://www.aistriketeam.com/.

75 "Team Pennsylvania's Energy, Data Center, and Artificial Intelligence Roadmap," Team PA Foundation, accessed August 4, 2026, https://teampa.com/energy/edcai-roadmap/.

76 "NABTU & Open AI join forces to train the next generation of skilled construction workers," *NABTU*, March 11, 2026, https://nabtu.org/press_releases/nabtu-openai-join-forces-to-train-the-next-generation-of-skilled-construction-workers/.

77 Quinn Slobodian and Ben Tarnoff, *Muskism: A Guide for the Perplexed* (Harper, 2026).

78 Quinn Slobodian and Ben Tarnoff, "Muskism as Fordism," *LPE Projec*t, April 22, 2026, https://lpeproject.org/blog/muskism-as-fordism/.

79 "Pro-Data Center Industry Group behind Ad Campaign in Oregon, Pennsylvania and Five Other States," *Pennsylvania Capital-Star*, July 28, 2026, https://oregoncapitalchronicle.com/2026/07/28/pro-data-center-industry-group-behind-ad-campaign-in-oregon-six-other-states/.

80 "Home," Pennsylvania Connects, accessed July 7, 2026, https://pennsylvaniaconnects.com/.

81 "Pro-Data Center Industry Group behind Ad Campaign in Oregon, Pennsylvania and Five Other States," *Pennsylvania Capital-Star*.

82 Tamara Kneese and Maia Woluchem, "Data Centers Aren't the Future of American Prosperity," *Data & Society*, July 22, 2025, https://datasociety.net/research-library/data-centers-arent-the-future-of-american-prosperity/.

83 Eva Roytburg, "Nobel Laureate Economist Warns AI Jobs Apocalypse Fears Could Become a Self-Fulfilling Prophesy," *Fortune*, June 27, 2026, https://fortune.com/2026/06/27/ai-job-apocalypse-backlash-robert-shiller-nobel/.

84 Kim Fortun, "Ethnography in Late Industrialism," *Cultural Anthropology* 27, no. 3 (2012): 446–64, https://doi.org/10.1111/j.1548-1360.2012.01153.x; Andreu Belsunces Gonçalves Bareis Jascha, "Expanding Hype Literacy to Protect Democracy," *Tech Policy Press*, August 21, 2025, https://techpolicy.press/expanding-hype-literacy-to-protect-democracy.

85 Laurie Chen, "As AI Grows More Powerful, a US-China Feud Threatens Safety Efforts," Litigation, *Reuters*, July 24, 2026, https://www.reuters.com/legal/litigation/ai-grows-more-powerful-us-china-feud-threatens-safety-efforts-2026-07-24/; Brian J. Chen, "The Big AI State: How the Trump Administration Is Shaping US Industrial Policy Toward "Global Technological Dominance," *Data & Society*, 2026, https://datasociety.net/research-library/the-big-ai-state-how-the-trump-administration-is-shaping-us-industrial-policy-toward-global-technological-dominance/.

86 *Winning the Race: America's AI Action Plan* (The White House, July 2025), https://www.whitehouse.gov/wp-content/uploads/2025/07/Americas-AI-Action-Plan.pdf.

87 PA National Guard History, *History*, accessed August 2, 2026, https://www.pa.ng.mil/History/.

88 "The Steelworker's Work Whistle on VE Day: Three Dots and a Dash," *Heinz History Center*, July 12, 2016, https://www.heinzhistorycenter.org/blog/detre-library-archives-steelworkers-work-whistle-ve-day-three-dots-dash/.

89 Carolyn Kitch, *Pennsylvania in Public Memory: Reclaiming the Industrial Past* (Penn State University Press, 2012), https://muse.jhu.edu/pub/2/monograph/book/14559.

90 "President Trump's America First Priorities," The White House, January 20, 2025, https://www.whitehouse.gov/briefings-statements/2025/01/president-trumps-america-first-priorities/.

91 Julia Terruso, "Dave McCormick, Donald Trump Announce Billions in AI and Energy Investments in Pa. at Innovation Summit: 'The Nation's Future Depends on Us,'" *The Philadelphia Enquirer*, July 15, 2025, U.S. Senator Dave McCormick's office,accessed July 9, 2026, https://www.mccormick.senate.gov/news/in-the-news/dave-mccormick-donald-trump-announce-billions-in-ai-and-energy-investments-in-pa-at-innovation-summit-the-nations-future-depends-on-us/.

92 Governor's Press Office, "Governor Josh Shapiro Announces Amazon Plans to Invest $20 Billion in Pennsylvania for AI Infrastructure in Largest Capital Investment in Commonwealth History," June 9, 2025.

93 "Statement from the Allegheny Conference: Unpacking $90B in Business Investments and Capitalizing on Momentum," *Allegheny Conference*, accessed August 2, 2026, https://alleghenyconference.org/statement-from-the-allegheny-conference-unpacking-90b-in-business-investments-and-capitalizing-on-momentum/.

94 Daniel Boguslaw, "US Law Enforcement Warns of 'Anti-Tech Extremism' as AI Hatred Grows," *WIRED*, May 26, 2026, https://www.wired.com/story/us-law-enforcement-warns-of-anti-tech-extremism/.

95 Deborah Rudacille, *Roots of Steel: Boom and Bust in an American Mill Town* (Knopf Doubleday Publishing Group, August 23, 2011).

96 Rudacille, "How Toxic Is Smokestack Nostalgia?" *Aeon Essays* April 23, 2015, https://aeon.co/essays/how-toxic-is-smokestack-nostalgia.

97 "The Fantasy vs. Reality of Trump's 'Smokestack Nostalgia'," *It's Been a Minute*, NPR, May 7, 2025, https://www.npr.org/2025/05/07/1263527111/its-been-a-minute-bringing-back-factory-jobs-fantasy-vs-reality.

98 Johnson, *Where Cloud Is Ground*; DCC, "About."

99 Fieldnotes, March 27, 2026, PA Data Center and Energy Innovation Summit, Pittsburgh, PA.

100 Lauren Berger, "Death Underground: The Knox Mine Disaster," Pennsylvania Center for the Book, Fall 2009, https://pabook.libraries.psu.edu/literary-cultural-heritage-map-pa/feature-articles/death-underground-knox-mine-disaster.

101 Frank Neslefsky, "Wildcat Ridge Data Center in Archbald to Use Huge Amounts of Power, Water," *The Times-Tribune*, Jan. 18, 2026 https://www.thetimes-tribune.com/2026/01/18/wildcat-ridge-data-center-in-archbald-to-use-huge-amounts-of-power-water/.

102 "Eds and Meds: Variability of Anchor Institution Employment Impacts Across U.S. Regions," May, 2026, Federal Reserve Bank, Philadelphia, https://www.philadelphiafed.org/community-development/workforce-and-economic-development/eds-and-meds-variability-of-anchor-institution-employment-impacts-across-us-regions.

103 Cassie Miller, "The Decades-Long Decline of Manufacturing Jobs in Pa.," *Pennsylvania Capital-Star*, November 16, 2020, https://penncapital-star.com/labor/the-decades-long-decline-of-manufacturing-jobs-in-pa-the-numbers-racket/; Gabriel Winant, *The Next Shift: The Fall of Industry and the Rise of Health Care in Rust Belt America* (Harvard University Press, 2021).

104 Ana Carolina De Assis Nunes and Cella Sum, "Data as Destiny in the Steel City: How Pittsburgh's Industrial Past Is Being Leveraged for an AI Future," *Data & Society*, January 14, 2026, https://datasociety.net/research-library/data-as-destiny-in-the-steel-city-how-pittsburghs-industrial-past-is-being-leveraged-for-an-ai-future/.

105 "Big Tech Promised Jobs. Cities Gave Millions. Where Are the Workers?" *Good Jobs First*, June 20, 2025, https://goodjobsfirst.org/big-tech-promised-jobs-cities-gave-millions-where-are-the-workers/.

106 "Fact Sheet: More Than $90 Billion in Investments Announced at Senator McCormick's Pennsylvania Energy and Innovation Summit," *U.S. Senator Dave McCormick*, n.d., accessed July 8, 2026, https://www.mccormick.senate.gov/news/press-releases/fact-sheet-more-than-90-billion-in-investments-announced-at-senator-mccormicks-pennsylvania-energy-and-innovation-summit/.

107 Stephen Bisaha, "Data Centers Bring Money to Small Towns. But Do They Also Bring Jobs?" Economy, *NPR*, April 10, 2025, https://www.npr.org/2025/04/10/nx-s1-5355017/data-centers-bring-money-to-small-towns-but-do-they-also-bring-jobs.

108 George Weykamp, "Labor Unions Divided Over Data Center Construction, AI Use," *Bloomberg Law Daily Labor Report*, June 17, 2026, https://news.bloomberglaw.com/daily-labor-report/labor-unions-divided-over-data-center-construction-ai-use.

109 Fieldnotes, March 27, 2026, PA Data Center and Energy Innovation Summit, Pittsburgh, Pennsylvania.

110 "Digital Infrastructure and Data Center Solutions," *Aon*, accessed August 4, 2026, https://www.aon.com/en/capabilities/digital-infrastructure-solutions.

111 Anna Lowenhaupt Tsing, *Friction: An Ethnography of Global Connection*, (Princeton University Press, 2024).

112 "Indigenous Peoples in Pennsylvania History: Maps," PennState University Libraries, April 19, 2026, https://guides.libraries.psu.edu/c.php?g=1145236&p=8358593; "Chesapeake Tribes Today - Captain John Smith Chesapeake National Historic Trail," U.S. National Park Service, January 7, 2025, https://www.nps.gov/cajo/learn/historyculture/american-indian-tribes-today.htm.

113 Philip Scranton, "Conceptualizing Pennsylvania's Industrializations, 1850–1950," *Pennsylvania History: A Journal of*

Mid-Atlantic Studies 61, no. 1 (1994): 6–17.

114 Dieterich-Ward, *Cradle of Conservation*.

115 Emilia, "US Data Center Proposal Tracker," US Data Center Proposal Tracker, accessed July 31, 2026, https://trackdatacenters.com/.

116 Georgia Butler, "Amazon to Invest $20bn in Data Centers in Pennsylvania," *Data Center Dynamics*, July 29, 2026, https://www.datacenterdynamics.com/en/news/amazon-to-invest-20bn-in-data-centers-in-pennsylvania/.

117 "Salem Township Innovation Campus - Amazon Innovation Campuses in Pennsylvania," Amazon Innovation in PA, June 9, 2026, https://www.amazoninnovationinpa.com/salem-township-innovation-campus/.

118 Ethan Howland, "Talen to Sell Amazon 1.9 GW from Susquehanna Nuclear Plant," *Utility Dive*, June 11, 2025, https://www.utilitydive.com/news/talen-amazon-aws-susquehanna-nuclear-data-centert/750440/.

119 "Salem Township Data Center Development | Office of Transformation & Opportunity," accessed August 17, 2026, https://www.pa.gov/agencies/oto/fasttrack/salemtownshipdatacenterdevelopment.

120 Associated Press, "Data center demand is making bedfellows of construction unions, tech industry" *Spotlight PA*, May 4, 2026, https://www.spotlightpa.org/news/2026/05/data-centers-construction-building-trades-unions-pipefitters-tech-industry-environment/.

121 "Westmoreland County, Pennsylvania," *Ballotpedia*, accessed August 2, 2026, https://ballotpedia.org/Westmoreland_County,_Pennsylvania.

122 TECfusions, "TECfusions Unveils Massive 1400-Acre Data Center Project in Pennsylvania, Revitalizing Former Industrial Plant," January 14, 2024, https://www.prnewswire.com/news-releases/tecfusions-unveils-massive-1400-acre-data-center-project-in-pennsylvania-revitalizing-former-industrial-plant-302350041.html.

123 TECfusions Inc., "TECfusions, a Rapidly Growing Developer and Operator of AI-Ready Data Centers and Power Infrastructure, Signs Business Combination Agreement with Apex Treasury Corp.," *Yahoo Finance*, July 22, 2026, https://finance.yahoo.com/technology/ai/articles/tecfusions-rapidly-growing-developer-operator-120000971.html.

124 "Upper Burrell Puts Temporary Pause on New Data Center Developments," *TribLIVE*, accessed August 14, 2026,, https://triblive.com/local/valley-news-dispatch/upper-burrell-puts-temporary-pause-on-new-data-center-developments/; "Organizations Look to Discuss Impacts of Data Centers with Residents, Request Pause on Developments" *WPXI*, accessed August 14, 2026, https://www.wpxi.com/news/local/organizations-look-discuss-impacts-data-centers-with-residents-request-pause-developments/EOQJVMCFORBSHO4DZVTAEQNZ5E/.

125 Viktor Valgarðsson et al., "A Crisis of Political Trust? Global Trends in Institutional Trust from 1958 to 2019," *British Journal of Political Science* 55 (January 2025): e15, https://doi.org/10.1017/S0007123424000498.

126 "Amazon to Install 280 Gas-Fired Generators at Bucks County Data Center Site," *WHYY*, n.d., accessed July 15, 2026, https://whyy.org/articles/amazon-data-center-bucks-county-pa-gas-generators-impact/.

127 Amrute, Sareeta, Robyn Caplan, Siera Dissmore, et al. Trust Issues: An Anthology. *Data & Society*, 2025. https://doi.org/10.69985/NCYO6566.

128 Emilia Doda, "US Data Center Proposal Tracker," US Data Center Proposal Tracker, accessed August 4, 2026, https://trackdatacenters.com/.

129 "The Governor's Responsible Infrastructure Development (GRID) Standards," *Pennsylvania Department of Community & Economic Development*, n.d., accessed August 2, 2026, https://dced.pa.gov/business-assistance/data-center-resources/grid-standards/.

130 Amy Moran-Thomas, "Battle in the Clouds," *American Anthropologist* 127, no. 3 (2025): 594–610, https://doi.org/10.1111/aman.28075.

131 Nick Valdala, "Power Outages in Philadelphia History: Peco's Biggest Storms," *Philadelphia Inquirer*, accessed August 4, 2026, https://www.inquirer.com/weather/power-outages-peco-most-history-20250626.html.

132 GRID stands for the Governor's Responsible Infrastructure Development plan and would require developers to apply for certain certification in order to receive different benefits from the state. The money brought in by corporations would help with modernizing the electrical grid while protecting families from rising costs, especially associated with data center development in the state. See: Peter Hall, "Shapiro Pitches Sustainability, Transparency Requirements for Data Center Developers," *Pennsylvania Capital-Star*, May 27, 2026, https://penncapital-star.com/economy/shapiro-pitches-sustainability-transparency-requirements-for-data-center-developers/.

133 Frontlines to FERC, "At the #AI Jobs Fair in Harrisburg, the gap between political slogans and community reality" (Reels), Facebook, accessed August 20, 2026, https://www.facebook.com/reel/777431351983164.

134 "The Secret Data Center Buildout," *Public Citizen*, July 8, 2026, https://www.citizen.org/news/the-secret-data-center-buildout-how-states-can-stop-big-techs-abuse-of-ndas/.

135 Cella Sum and Maia Woluchem, "Pennsylvania's Power: Why Local Authority Is the Key to AI Infrastructure Decisions," *Data & Society*, April 8, 2026, https://datasociety.net/research-library/pennsylvanias-power-why-local-authority-is-the-key-to-ai-infrastructure-decisions/.

136 Amy Elizabeth Stambach, *The Corporate Alibi: Capitalism and the Cultural Politics of US Investments in Africa* (University of California Press, 2025).

137 Sum and Woluchem, "Pennsylvania's Power: Why Local Authority Is the Key to AI Infrastructure Decisions," *Data & Society*; Stambach, *The Corporate Alibi*.

138 Ginny Kerslake,"Amazon Web Services (AWS), a Major Player in the proposed AI data caenter buildout," Facebook, April 27, 2026 https://www.facebook.com/Ginny4 PA/posts/pfbid0255S4vw2cHB6MFZGhxt5TnXULxFKtdpodmPqB-nr359XqVpwhFGCxe2W2rny2FHq2Yl.

139 Justin Sweitzer and Harrison Cann, "Gov. Josh Shapiro's New Data Center Standards Reflect New Reality," *City & State Pennsylvania*, May 27, 2026, https://www.cityandstatepa.com/policy/2026/05/

gov-josh-shapiros-new-data-center-standards-reflect-new-reality/413789/.

140 Sanya Mansoor, "How the Fight over US Datacenters Is Scrambling This State's Politics: 'We Don't Want It,'" Technology, *The Guardian*, June 16, 2026, https://www.theguardian.com/technology/2026/jun/16/pennsylvania-datacenters-debate-politicians; Daniel Urie, "Data Center Developer Pauses Applications for Dauphin County Project," *Pennlive | Patriot News*, August 4, 2026, https://www.pennlive.com/business/2026/08/data-center-developer-pauses-applications-for-dauphin-county-project.html; Grace DeLallo, "PA Sen. Muth Introduces Comprehensive Bipartisan Data Center Moratorium," *Food & Water Watch*, June 1, 2026, https://www.foodandwaterwatch.org/2026/06/01/pa-senator-katie-muth-introduces-comprehensive-bipartisan-data-center-moratorium/.

141 FracTracker Alliance, "U.S. Data Centers Tracker," U.S. Data Centers Tracker, accessed September 18, 2026, https://experience.arcgis.com/experience/5a4d072ad01449bba5698a80103fb909

142 Data Center Map, "Pennsylvania Data Centers," Data Center Map, accessed September 18, 2026, https://www.datacentermap.com/usa/pennsylvania/

143 Tamara Kneese, "Turning the Tide: Climate Action In and Against Tech," *Data & Society,* December 10, 2025. https://datasociety.net/research-library/turning-the-tide-climate-action-in-and-against-tech/; "AI Data Centers Across the United States," Brockovich AI Data Center Reporting,, April 22, 2026, https://www.brockovichdatacenter.com/.

144 "Pennsylvania Digital 1 ((PAX-1)," Pennsylvania Data Center Partners, accessed August 4, 2026. https://www.padatacenters.com/campus; "Pennsylvania Data Center Partners and PowerHouse Data Centers Launch Joint Venture to Build Next-Gen 1.35 GW Hyperscale Data Center Campus in Carlisle, Pennsylvania," PowerHouse Data Centers, July 15, 2026, https://www.powerhousedata.com/news/pennsylvania-data-center-partners-and-powerhouse-data-centers-launch-joint-venture-to-build-next-gen-1-35-gw-hyperscale-data-center-campus-in-carlisle-pennsylvania.

145 "Pennsylvania Data Center Partners and PowerHouse Data Centers Launch Joint Venture" PowerHouse Data Centers.

146 "3 Cumberland Commissioners Back Data Center Moratorium," *CityView*, March 24, 2026, https://www.cityviewnc.com/stories/3-commissioners-back-data-center-moratorium-as-public-opposition-intensifies/.

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