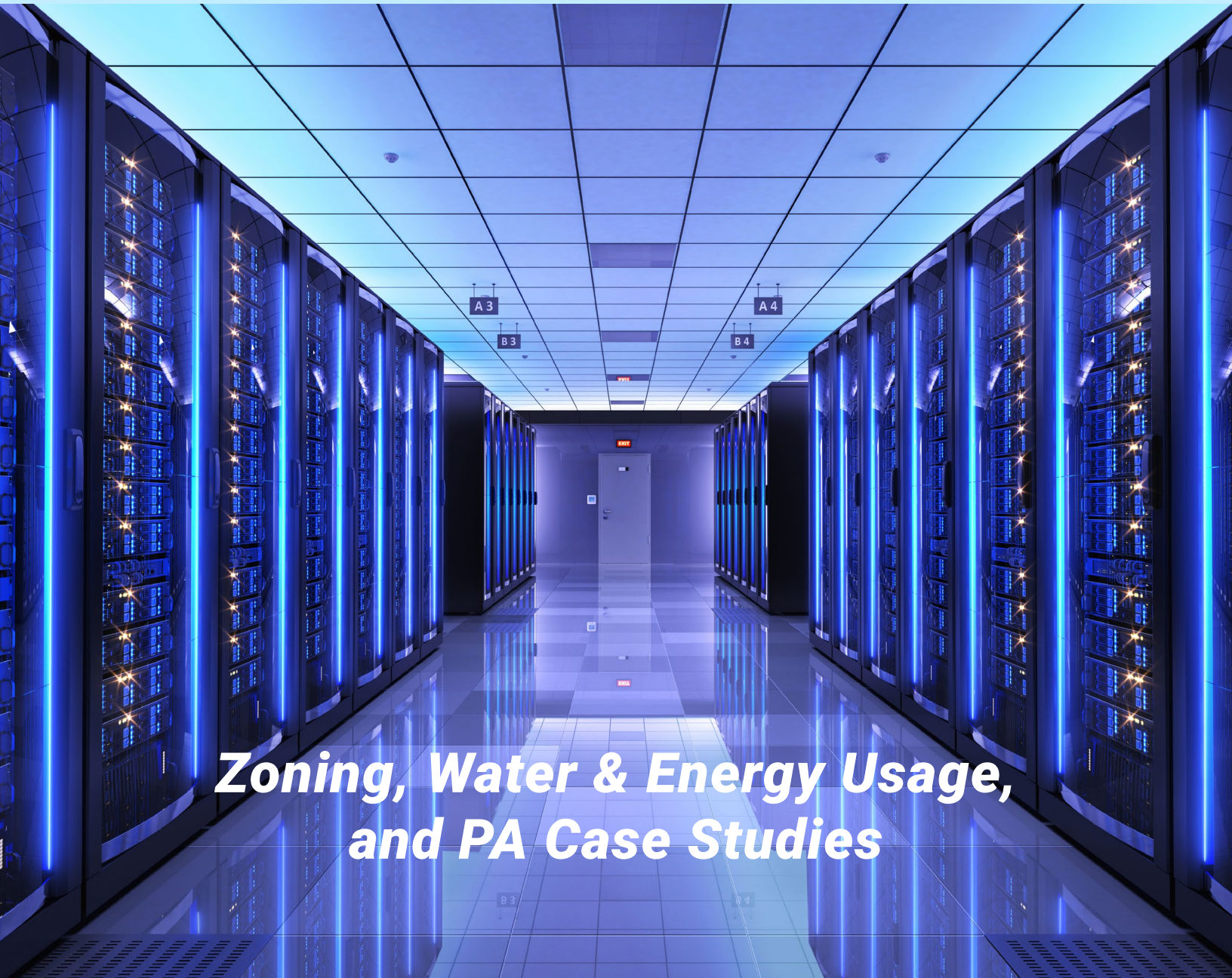




Municipal Reporter

PENNSYLVANIA DATA CENTERS *EDITION*



***Zoning, Water & Energy Usage,
and PA Case Studies***

PENNSYLVANIA DATA CENTERS

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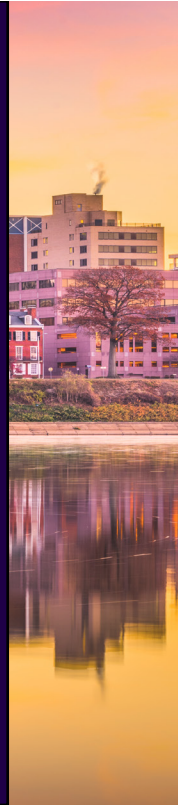
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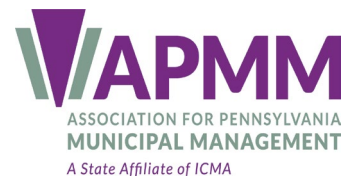
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Our Mission

The Pennsylvania Municipal League strengthens and empowers effective local government through advocacy, education, and support for our members.

The League is a nonprofit, nonpartisan organization established in 1900 as an advocate for Pennsylvania's 3rd class cities. Today, The League represents participating Pennsylvania cities, boroughs, townships and home rule communities that all share The League's municipal policy interests. Our Board of Directors oversees the administration of a wide array of municipal services including legislative advocacy (on both the state and federal levels), publications designed to educate and inform, education and training certification programs, membership research and inquiries, programs, and group insurance trusts.

We are continually monitoring the needs of our members and are committed to providing the commonwealth's municipalities with cost-effective programs and services required to meet the distinct needs of their communities.

The *Municipal Reporter* is a publication of the Pennsylvania Municipal League, the Pennsylvania State Association of Township Commissioners and the Association for Pennsylvania Municipal Management. It is published six times a year on a bimonthly basis. Opinions expressed by

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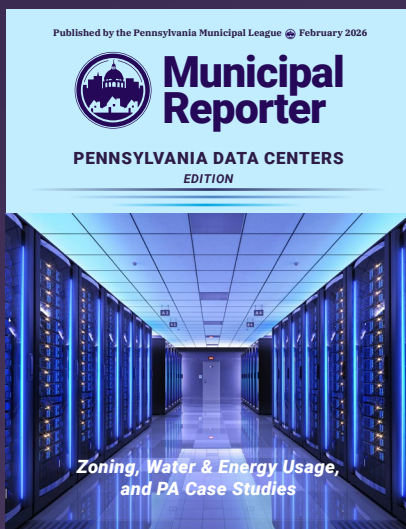
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FEBRUARY 2026 | PENNSYLVANIA DATA CENTERS EDITION

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Annual subscription rate for The League's Municipal Reporter – \$65.

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Mark Your Calendar



2026

League Learning Academy
**Introduction to Local Government
Accounting**
February 24-25
Virtual

**PennPRIME Board of Trustees
Subcommittee and Board Meetings**
February 26-27
Virtual

League Learning Academy
Essentials of Municipal Administration
March 4
Virtual

Northcentral District Meeting
March 11
City of Johnstown | Frank J. Pasquerilla

Southcentral District Meeting
March 12
Camp Hill Borough Office | Prosser Hall

League Learning Academy
**Unlocking Grant Success - Essential
Skills for Winning Proposals**
March 18
Virtual

Annual PELRAS Conference
March 25-27
Hershey Lodge and Convention Center

League Learning Academy
Foundations of Fiscal Management
April 1
Virtual

League Learning Academy
Municipal HR Best Practices
April 7-8
Virtual

Southeast District Meeting
April 15
Abington Township | Crestmont
Clubhouse

Northeast District Meeting
April 17
City of Carbondale | Anthracite Hotel

League Learning Academy
**Public Procurement & Bidding Essentials
for Municipal Officials**
April 21-22
Virtual

Northwest District Meeting
April 28
City of Warren | Conewango Club

Southwest District Meeting
April 29
South Fayette Township | Municipal
Center



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The League President's Message



WILLIAM J. REYNOLDS
MAYOR
CITY OF BETHLEHEM



It is with great honor, gratitude, and enthusiasm that I step into the role of President of the Pennsylvania Municipal League for 2026. Serving alongside municipal leaders from across the Commonwealth has been one of the most rewarding aspects of my public service, and I am deeply thankful for the trust placed in me by my colleagues. The League has long been a powerful and unifying voice for local government in Pennsylvania, and I look forward to continuing to build on the strong relationships and collaborative spirit that define this organization.

As we look ahead to 2026, my vision for the League is grounded in strengthening our collective capacity to advocate for vibrant, resilient, and equitable communities. Pennsylvania's municipalities are on the front lines of addressing the challenges and opportunities facing our residents every day, from infrastructure and public safety to housing, economic development, and environmental stewardship. My goal is to further elevate the League as a trusted partner to state leaders and as a vital resource for municipal officials navigating an increasingly complex policy landscape.

Above all, I am excited about the opportunity to work with municipal leaders from every corner of Pennsylvania. The strength of the League lies in its diversity, bringing cities, boroughs, townships, and home rule municipalities together with a shared commitment to effective local government and I look forward to collaborating on our shared priorities.

I am humbled by this opportunity and deeply grateful for the support of my colleagues. Together, we will carry forward the League's mission to strengthen, empower, and advocate for Pennsylvania's municipalities. By working collaboratively and strategically, we can ensure that our communities remain places where residents feel safe, supported, and proud to live.

Sincerely,

William J. Reynolds

*William J. Reynolds
Mayor, City of Bethlehem*

The League Executive Director's Message

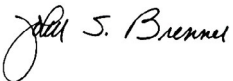
Our appetites for technology seem to grow exponentially as we move through the 2020's. One commentator said recently that we have more power now in the palm of our hands than the astronauts had on the Appollo 13 mission. To quench our insatiable desire for more technology tools, in our hands, in our homes, in our organizations, governments, and society, enter the need for data centers.

Government leaders at all levels are wrestling with what they mean, their impact on our local economies, on our utilities and, yes, on our communities and individual needs for technology.

Last fall we held a very successful webinar on data centers with Cumberland County Planning Director Kirk Stoner and Salem Township, (Luzerne County), Zoning Officer Brian Rhone discussing their experience working on proposed data centers. They offered sound advice on studying this issue, potential impacts and facts around the decision-making process. These are two examples of the numerous municipal leaders now being asked to consider data center projects.

*This issue of the Municipal Reporter dives deeper into this timely and important topic. As we all adapt to the new realities of AI, our need for technology, its possibilities and perils, we must keep learning from each other, share best practices and make the best decisions we can for our local communities. During this debate about data centers, one thing remains crystal clear—these are important **local** decisions.*

Sincerely,



John S. Brenner



JOHN BRENNER



Executive Director's Video Report



Inside The League



ABE AMORÓS
DEPUTY EXECUTIVE DIRECTOR -
OPERATIONS – CHIEF DIVERSITY OFFICER

Last November, I attended a workshop on Data Centers during the National League of Cities' City Summit in Salt Lake City. The workshop took place on a Saturday morning at 9 a.m. and was standing room only in a rather large room that seated more than 250 people. To say I was shocked was an understatement.

The speakers all lined up to discuss pros and cons of Data Centers in their communities throughout the nation. Those who supported them did so with caution. Those who opposed them spoke of concerns regarding planning and zoning along with infrastructure issues, such as electricity, water, and renewable sources of energy. Interestingly, they all said the same thing when it came to how to approach Data Centers. They had the following themes in common:

- *Developers need to engage local communities from Day 1.*
- *All local considerations must be taken seriously with public input at all times.*
- *Strategic planning must come first followed by sharing long-term economic prosperity.*
- *Honest discussions on tradeoffs such as economic benefits versus depletion of resources.*
- *Resiliency issues must be addressed and always in public.*

While Data Centers also provide a short-term boost in employment, particularly in construction, municipal leaders must also ask themselves what happens to that workforce after the project is done. Pollution (i.e., noise, water, environmental) must also be taken into account. Several speakers also chimed in on what happens in areas where water preservation is a major concern, particularly in water-stressed regions, such as Tucson, AZ, where a major project was proposed. It was also revealed that two thirds of data centers were located in areas considered to be "water stressed regions."

Other questions regarding the fast-tracking of permits, along with impacts on natural gas and wind turbines must also be asked of the business community along with elected and appointed officials who must make long-term decisions.

Speakers all agreed on putting together "scorecards" with honest dialogue centered around plusses and minuses while also holding frank discussions on negative impacts. The final speaker said it best when it came time to determining whether a Data Center was viable: Approach every scenario and comment from the public with one word: humility.

From Inside The League,

A handwritten signature in black ink that reads "Abe Amorós". The signature is written in a cursive, slightly stylized font.

Abe Amorós



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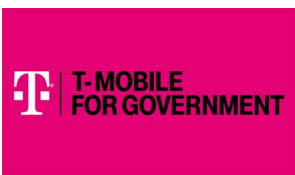
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LEAGUE LEARNING ACADEMY

Feb-May 2026 Schedule

FEBRUARY

- 3** From Agenda to Action - Running Productive Municipal Meetings
- 10 & 11** Elected Auditors Masterclass
- 18** Capital Budgeting and Planning
- 19** Lunch & Learn - Where to Begin Creating Your HR Employee Policy Manual
- 24 & 25** Introduction to Local Government Accounting

DETAILS

- **Courses are 9:00 a.m. to Noon**
- **Lunch & Learns are 12:10 to 1:10**
- **All sessions are online via Zoom**
- **Click [here](#) for details and registration or scan the QR code below**

MARCH

- 4** Essentials of Municipal Administration
- 18** Unlocking Grant Success - Essential Skills for Winning Proposals
- 19** Lunch & Learn - topic TBD

APRIL

- 1** Foundations of Fiscal Management
- 7 & 8** HR Municipal Best Practices
- 15** Core Municipal Operations
- 16** Lunch & Learn - topic TBD
- 21 & 22** Public Procurement & Bidding Essentials for Municipal Officials

MAY

- 5** Advanced Fiscal Management Strategies
- 12 & 13** Best Practices Municipal Performance Management
- 14** Lunch & Learn - Topic TBD



Data Centers in Pennsylvania: The Dilemma Between Economy and Environment

BY SUSAN SCHRACK WOOD, DIRECTOR OF COMMUNICATIONS, THE LEAGUE

Data Center development is a hot topic right now in communities across Pennsylvania with local governments, residents, business owners, investors, environmentalists, and politicians all weighing in on various (and often competing) issues of concern.

Data Centers are large, warehouse-looking structures that house powerful computers that run software, store unfathomable amounts of information, and keep digital services functioning. They are 24/7 facilities that seemingly run the world. Think of all of the electronics and “smart” tech items you use on a daily basis or at least have in your home. All of those items require energy, particularly those that use generative artificial intelligence (AI.)

Pennsylvania is becoming a hot spot for data center development, as it is the second largest energy producer in the nation, and has a lot of land, much of it rural. It has water resources, and educational institutions to train and develop a skilled workforce to support construction and operations.

According to Data Center Maps, Pennsylvania has at least 109 data centers, with the greatest concentration of facilities in the greater Pittsburgh and Philadelphia areas. But the development requests are coming into smaller communities as well, leaving local governments to weigh the costs versus the benefits of approving data center development in their communities. Some municipalities say “yes” others say “not here.”

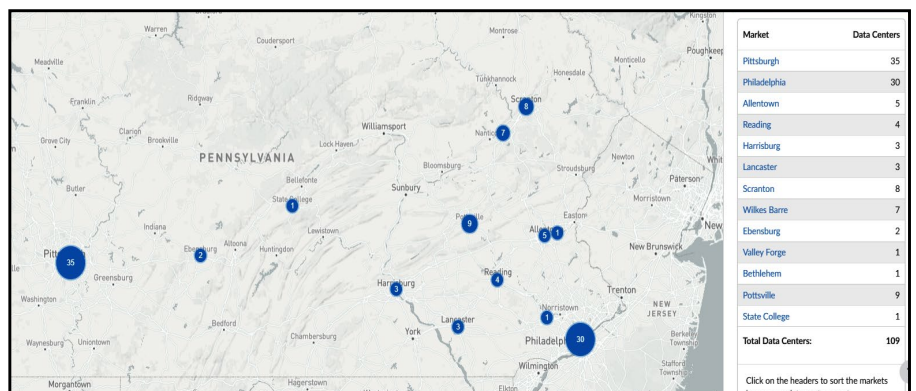
Plainly put, data centers consume resources. They use large amounts of land, electricity, and water. At the same time, there is hope that these facilities will generate jobs and promote some economic growth. An analysis from Business Insider found most data centers employ fewer than 150 people and that some smaller facilities employ only a few dozen- the equivalent of

simply opening a chain restaurant in terms of lasting economic benefit to a community.

Governor Josh Shapiro sees an enormous opportunity for Pennsylvania to get into the data center industry early on and capitalize on its anticipated growth. WHYY reports that financial experts predict the data center industry to grow by 10% each year through 2030, with AI accounting for 30% of the market. The popularity of AI use is spurring this explosion with a typical generative AI prompt needing 10 times the energy as an old-fashioned Google search (prior to 2022.)

There are extreme concerns. Land use as well as energy and water use in terms of demand, supply, and who pays for it all. On the other hand, there is extreme concern about keeping Pennsylvania economically viable and attractive to residents, investors, and employers. If the state and its municipalities reject this industry, will we regret not investing? Can we afford not to invest? Those questions do not have easy answers, and each application is unique to the municipality.

This issue of The Municipal Reporter attempts to answer as many questions as possible regarding data center development. There are articles exploring a wide range of issues and opinions on development. We hope that you find this issue to be a useful resource in your decision-making process.



The Public Private Partnership Opportunity of a Lifetime: Thoughtful Data Center Development, Investing in Local Infrastructure and Strengthening Communities

BY IGAL J. FEIBUSH, FOUNDER AND CEO, PENNSYLVANIA DATA CENTER PARTNERS

Across Pennsylvania, state and local government officials are steering their communities through a period of profound challenges. According to a recent Philadelphia Inquirer article, this past year alone, 412 out of the 500 public school districts in the Commonwealth were underfunded to the collective tune of over \$6.2B. It's also a well-known fact that our roadways, bridges, recreation areas and other public facilities, built decades ago, are being pushed to their limits and falling apart. To add insult to injury, pandemic-related federal stimulus funds local governments have come to rely on are now gone, causing municipal coffers to shrivel. Historically, the only solution for budget shortfalls has been residents footing the bill via wave after wave of property tax increases.

However, a new type of public private partnership provides an opportunity for both the public and private sector, to mutually benefit and thrive. The opportunity is unique and very rare. Due in part to the surge of Artificial Intelligence (AI), there is a crucial need for enhanced and robust digital infrastructure, including new data centers. This growing infrastructure gap creates a once-in-a-lifetime moment to align public goals with private capital to deliver lasting benefits for local communities.

Why Data Centers?

Data centers are the unseen engine behind the systems our communities and our nation depend on for public safety communications, transportation networks, water and utility management, hospital records, business operations, and the myriad of

educational tools used in classrooms every day. They also support everything from shopping and communication to entertainment, navigation, and countless other everyday tasks we often take for granted.

The question is not whether data centers will be built, but, whether Pennsylvania will lead or fall behind. Just as many in the past grappled with decisions regarding railroads, bridges, highways and other hallmarks of industrial progress, the choices that are made today about data centers will echo for generations.

Regardless of how vital the need for this type of development is, Pennsylvania officials and residents have every right to ask tough, informed questions. Communities have a need and a desire to understand how data center development and their ongoing operations (once built) will affect the land, environment, water resources, electric systems and rates as well as many other issues that govern their overall quality of life. **Getting answers to these questions is essential to getting development right.**

A Local, Community-Driven Model

At Pennsylvania Data Center Partners, we care about our communities because we also call Pennsylvania home. Most of our team lives here, work here and are raising our families here. When we plan our projects, we consistently engage directly with local leaders and residents.

We are dedicated to safe building standards, environmental stewardship and long-term

sustainability. Every community and project is unique, but our commitment to environmentally responsible development is constant.

Each data center we develop reflects years of scientific study, ecological mapping, buffer protections, and advanced stormwater engineering. When done well, these projects protect waterways, preserve habitats, and adapt land for long-term ecological health. Our facilities will not only meet but surpass sustainability standards, complementing their surroundings with native landscaping and green space preservation. Advanced design protects nearby streams and water bodies, while energy-efficient systems minimize impact. When progress is paired with stewardship, communities and the environment thrive together.

A Real World Example: PAX 1

Our partnership with Middlesex Township and Cumberland County to develop the Pennsylvania Digital 1 (PAX-1) data center project shows what this new type of public private partnership can look like in practice: how data center investment, when done thoughtfully and responsibly, can reinforce the objectives and goals local leaders are already working hard to solve.

PAX 1, when complete, is projected to deliver approximately \$45 million of tax revenue annually

to the Cumberland Valley School District, along with close to \$10 million each year for Middlesex Township and another \$10 million for Cumberland County. When broader economic activity is included, the project is expected to generate over \$100 million in annual state and local revenue.

For school districts, new, long-term revenue streams like those from PAX-1 enable transformative investments, which include more teachers, better facilities, cutting-edge technology, and stronger STEM programs, all without burdening families with higher taxes. The foundation of every community begins with its kids. This reliable funding provides for better educational resources, thereby elevating the entire community.

Data centers also drive sustained workforce development for adults by creating demand for skilled trades, engineers, and tech professionals. This directly strengthens Pennsylvania's STEM and skilled trades pipeline, ensuring local talent will power the state's future.

Strengthening Infrastructure Without Raising Taxes

For municipalities fighting to modernize aging systems, data centers bring another benefit: infrastructure funding.



Our partnership with Middlesex Township and Cumberland County and the development of PAX-1 will provide for major public infrastructure upgrades, at no cost to taxpayers. These infrastructure upgrades will include:

- Public water system upgrades, expanded storage, and stronger pumping capacity
- Modern stormwater management designed to improve downstream water quality
- Road resurfacing, widening, and safety enhancements
- Significant power grid improvements that benefit entire regions

Pennsylvania Data Centers . . .

Large-load customers like data centers also help balance energy planning and contribute heavily to long-term grid upgrades. Utilities such as PPL have stated that adding data centers can lower the transmission portion of residential bills because these facilities pay such a significant share of systemwide improvements.

In short, data centers shoulder infrastructure costs so residents don't have to.

Moving Forward, Together

Pennsylvania's municipalities and state leaders are at a pivotal moment. Communities that plan proactively by setting clear expectations, asking informed questions, and partnering early can capture the economic and infrastructure benefits that responsible digital development can bring.

People should not feel they are being forced to make a choice between growth and community. With thoughtful, inclusive leadership, we can achieve both and ensure that the expansion of this industry reflects the vision and priorities of the people of Pennsylvania.

This Commonwealth has never shied away from big shifts. By approaching digital infrastructure with care, collaboration, and vision, Pennsylvania can lead - and thereby ensure that our communities remain strong, competitive and connected for decades to come.



Author's Note: [Igal J. Feibush](#), Founder and CEO of Pennsylvania Data Center Partners, is dedicated to excellence and delivering lasting value for communities and stakeholders. To learn more, please visit [PADataCenters.com](#).

Data Center Development in Pennsylvania: A Legislative Framework to Protect Ratepayers & Support Local Decision-Making

BY SENATOR LISA M. BOSCOLA (D-LEHIGH/NORTHAMPTON), DEMOCRATIC CHAIR, SENATE CONSUMER PROTECTION & PROFESSIONAL LICENSURE COMMITTEE

Pennsylvania is seeing growing interest in large, AI-scale data centers. These projects bring jobs and private investment, and the technology they support has real benefits across many industries, including healthcare, logistics, and public safety. At the same time, data centers require enormous amounts of electricity and, in many cases, significant water resources to operate. It is that scale, rather than the technology itself, that is driving new policy questions for communities across the Commonwealth.

Many municipalities are encountering data center proposals for the first time. Others are receiving early inquiries from developers seeking sites with ideal access to electric capacity, water infrastructure, and transportation networks. In either case, local officials are being asked to evaluate projects that can have long-term implications for land use, infrastructure, and quality of life, often using ordinances and zoning frameworks that were not written with facilities of this size and intensity in mind.

At the same time, Pennsylvania's electric system is undergoing rapid change. PJM Interconnection is the regional transmission organization that coordinates the movement of electricity across the electric grid serving Pennsylvania and a large portion of the Mid-Atlantic and parts of the Midwest. PJM manages the regional power market and is responsible for ensuring reliability across its multi-state footprint, which includes Pennsylvania and the District of Columbia, along with all or parts of states such as New Jersey, Maryland, Delaware, Virginia, West Virginia, Ohio, Indiana, Illinois, Michigan, Kentucky, North Carolina, and Tennessee.

Because PJM operates a shared regional grid, major new electricity demand in any PJM state can affect system planning, generation needs, and market prices across the entire region. That means the rapid expansion of AI-scale data centers is not simply a Pennsylvania issue. If these projects are built anywhere within PJM's footprint, the impacts on the grid and on electricity costs can be felt across multiple states. For Pennsylvania, the question is not whether the region will see this growth, but whether we will have a framework that protects consumers while allowing communities here to benefit from the economic development and local decision-making that comes with hosting these projects.

With that in mind, this growth creates opportunity, but it also raises questions that matter to residents and local governments alike. How do we ensure that serving very large new electric loads does not result in higher electric bills for families and small businesses? How do we protect grid reliability as demand increases? And how do we make sure municipalities have clear and workable tools to review projects that may operate continuously and place significant demands on local infrastructure?

From my perspective as Democratic Chair of the Senate Consumer Protection and Professional Licensure Committee, these questions call for a thoughtful and balanced response. That is why I am preparing to introduce a package of legislation known as the Protecting Pennsylvanians' Power Act, a coordinated set of bills focused on protecting ratepayers, strengthening reliability oversight, and clarifying local authority under the Municipalities

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Planning Code. This is not an effort to stop data center development. Pennsylvania can and should compete for investment. The goal is to ensure that growth proceeds responsibly and that communities and consumers are protected as these facilities locate across the state.

“Pennsylvania can support economic growth while protecting electric affordability and preserving meaningful local decision-making. It does not have to be either-or.”

– Senator Lisa M. Boscola

Protecting Ratepayers from Cost Shifting

One of the most consistent concerns I hear from constituents is affordability. Households are already struggling with rising utility bills, and they are understandably concerned about new development that could place additional pressure on the electric grid. Without clear policy guardrails, the costs associated with serving very large new electric loads can be shifted onto existing customers through higher rates.

The first group of bills in the Protecting Pennsylvanians’ Power Act is focused on preventing that outcome by clarifying cost responsibility and protecting residential and small business customers.

Data Center Cost Responsibility Act: *Assigning responsibility for grid upgrade costs*

This proposal is built around a straightforward principle. Residential and small business customers should not be required to pay for grid or distribution upgrades driven by a single, very large data center project.

The bill would amend the Public Utility Code to prohibit utilities from charging those customers for upgrades caused by large new data center loads. It would also require Pennsylvania Public Utility Commission approval of large-load service agreements, which can have long-term implications for system planning and customer costs.

Grid Impact Fee and Customer Credit Act: *Returning benefits to affected communities*

Large data centers can impose system impacts that extend beyond the boundaries of a single site. This proposal would establish a per megawatt-hour impact fee on large data centers, with the revenue returned to customers in the affected electric distribution grid-zone as bill credits.

The intent is to ensure that projects placing extraordinary demands on local infrastructure contribute back to the communities and customers who bear those impacts. As data centers continue to locate in Pennsylvania, families and small businesses should benefit from that growth, not be asked to pay more simply to keep the lights on.

Excess Generation Cost Protection Act: *Preventing above-market power costs from reaching ratepayers*

Some data centers include on-site generation that may produce excess electricity sold back to the grid. This proposal is intended to ensure that as data centers become more efficient and look to monetize the sale of excess power from on-site generation, utilities do not pass above-market generation costs onto ratepayers.

Grid Reliability and System Oversight

Reliability is not an abstract concern. When the electric grid is stressed, municipalities feel the impacts immediately, whether through disruptions to public safety facilities, water and wastewater operations, or other essential services residents rely on.

The next set of bills in the Protecting Pennsylvanians’ Power Act focuses on ensuring that very large new loads are integrated into the system in a way that prioritizes reliability and fairness.

Priority Power Act: *Managing the timing of large new electric loads*

This proposal would give the Public Utility Commission authority to delay or phase in service to large new electric loads when immediate service would threaten system reliability or impose unreasonable costs on other customers.

Data Center Demand Response and Flexible Load

Act: *Requiring large loads to provide operational flexibility*

Many large data centers have the technical ability to adjust demand or rely on on-site resources during peak conditions. This proposal would require large data centers to participate in Pennsylvania Public Utility Commission-approved demand response programs or demonstrate equivalent flexibility.

Clarifying Municipal Authority Under the Municipalities Planning Code (MPC)

This portion of the Protecting Pennsylvanians' Power Act is intended to support local decision-making and reduce uncertainty for municipalities reviewing large data center proposals.

Local governments are often the first to confront the siting and quality-of-life impacts of large data centers. These facilities may operate around the clock, generate persistent noise, require extensive cooling systems, and create off-site infrastructure demands. When statutory authority is unclear, municipalities can be left navigating resident concerns and enforcement challenges without clear guidance.

Municipal Protections for Data Center Development

Act: *Strengthening local authority and clarifying municipal review tools*

This bill is designed to strengthen and clarify local authority under the Municipalities Planning Code, not to mandate outcomes or limit responsible development.

Key elements include:

- **Disclosure of water use and infrastructure impacts**
Applicants would be required to disclose projected water use and related infrastructure impacts so municipal review is based on actual operational needs.
- **Consideration of water capacity and affordability**
Municipalities would be permitted to consider whether a project's water demands could affect

capacity or affordability, particularly in areas with constrained resources.

- **Clarification of industrial classification**
The bill would clarify the classification of large data centers as industrial uses for MPC purposes, helping align zoning review with the intensity of the use.
- **Enforceable noise standards, including low-frequency sound**
The proposal authorizes enforceable noise standards, including low-frequency sound, allowing municipalities to set clear expectations and enforce compliance.
- **Confirmation of authority for setbacks, buffering, and site-specific conditions**
The bill confirms municipal authority to impose reasonable setbacks, buffering, visual mitigation, and other site-specific conditions tailored to surrounding uses.

Importantly, this proposal does not require municipalities to approve or deny any particular project. Local governments would retain discretion to apply their ordinances and standards based on the facts of each application. The intent is to provide clearer and more defensible tools so municipalities are not left managing impacts without adequate authority or information.

Moving Forward

As this legislative package moves toward introduction, I intend to continue engaging with stakeholders in the data center industry, municipal leaders, planners, utilities, consumer advocates, and regulators. Municipal input is essential to ensuring these proposals are practical and responsive to real-world conditions.

The Protecting Pennsylvanians' Power Act is intended to provide a clear framework that protects families from higher electric bills, preserves grid reliability, and ensures municipalities have the tools they need to serve their residents. Pennsylvania can

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support economic growth while protecting electric affordability and preserving meaningful local decision-making. It does not have to be either-or. However, achieving that balance requires clear and thoughtful policy choices.

To that end, I look forward to continued collaboration with the Pennsylvania Municipal League and local officials across the Commonwealth as this important policy work moves forward.



Senator Lisa M. Boscola (D-18, Lehigh/Northampton) is a proud steelworker's daughter and lifelong Lehigh Valley resident. She was first elected to the State House in '94 and is currently serving her sixth term in the State Senate. Boscola serves as the Min. Chair of the Senate Consumer Protection & Professional Licensure Committee. She was recently named "Most Effective Legislator" by the Center for Effective Lawmaking and received the Pennsylvania Impact 75 Award for her leadership and public service. She resides in Bethlehem Township with her husband, Ed.

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Data Centers: A Transformative Opportunity for Pennsylvania's Economy and Communities

BY JON ANZUR, SENIOR VICE PRESIDENT OF PUBLIC AFFAIRS AT THE PENNSYLVANIA CHAMBER OF BUSINESS AND INDUSTRY

Pennsylvania stands at an inflection point.

Towns across the Commonwealth have seen industries fade—and with them, the economic opportunities that our young people need to stay and raise their families. As a result, Pennsylvania's population has been flat or declining for years, with the Commonwealth losing residents in recent decades as more people move out than move in.

But here's the good news: The Keystone State has a golden opportunity to change that.

As demand for digital services accelerates—from telehealth and online banking to advanced manufacturing, artificial intelligence, and logistics—states across the country are competing to attract the infrastructure that makes the modern economy possible. At the center of this competition are data centers, the physical backbone of the digital world.

For Pennsylvania, data center development represents a once in a generation opportunity: to attract historic private investment; create new and diverse career pathways that would help reverse decades of population stagnation and decline; strengthen local tax bases with the resources to fund our schools, infrastructure, and public safety; and empower communities to build long term, sustainable prosperity.

The Infrastructure Behind the Digital Economy

Data centers are highly secure, purpose built facilities that store, process, and transmit data powering nearly every aspect of daily life—from smartphones and streaming services to hospital systems, financial institutions, energy grids, and emergency response networks.

As global data generation continues to grow at an extraordinary pace, the need for modern, reliable data center infrastructure is expanding just as quickly. States that position themselves to meet that demand will benefit from sustained economic growth, create good-paying careers, and drive local investments to communities that need them.

And, given that Pennsylvania is a top energy producer due to our robust natural resources, coupled with modern data center technologies that allow for efficient energy and water usage, the Commonwealth is uniquely positioned to capitalize while lowering energy costs and protecting ratepayers.

Historic Investment with Long Term Impact

Data centers represent some of the largest private sector capital investments a community can attract. A single data center campus can involve hundreds of millions—or even billions—of dollars in upfront investment in land, construction, equipment, and electrical infrastructure.

Importantly, these investments are not short term. Data centers are designed to operate for decades, meaning communities benefit from long term property tax revenue that supports schools, infrastructure, public safety, and local services—often without placing significant new demands on those services.

Consider that in Loudon County, Virginia, data centers comprise three percent of the land but contribute 40 percent of the tax revenue. For context, it would take more than 75,000 homes to generate the same revenue. And a data center project proposed in central Pennsylvania will generate over \$65 million in direct tax revenue – doubling the township's operating budget, covering a quarter of the school district's

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annual budget, and providing a 12 percent increase to the county's overall tax base.

For rural and post industrial communities in particular, this type of stable, long term investment can be transformative, providing a new economic anchor where traditional industries have declined.

New Careers—and New Pathways to Opportunity

While data centers are highly automated, they still support a wide range of good paying careers, both directly and indirectly. Each direct data center job supports six additional jobs in industries including construction, maintenance, and local services.

Data center development creates:

- Permanent, high skill roles in IT, cybersecurity, facilities management, and engineering.
- Skilled trade jobs during development and expansion.
- Indirect employment through local suppliers, contractors, and service providers.

Just as important, data centers help create career pathways that align with Pennsylvania's workforce priorities. They partner naturally with community colleges, technical schools, and apprenticeship programs—providing opportunities for Pennsylvanians to access stable, future focused careers without leaving their home regions.

Addressing Concerns with Facts

Questions about water and energy use often arise when discussing data center development. These are real concerns that deserve factual, science based answers.

The servers and equipment inside data centers produce heat, requiring cooling to prevent damage to digital infrastructure and impede services. There is no single cooling solution that works everywhere, as the best approach depends on local climate conditions and water availability, including recycled or reclaimed sources. However, data centers are some of the most efficient users of water in our economy.

For instance, many modern data centers increasingly rely on closed loop cooling systems, which dramatically reduce water consumption by reusing the same water repeatedly rather than drawing continuously from local supplies.

In many cases, data centers use less water than other common industrial or agricultural activities, comparable to or less than a golf course or restaurant. According to December 2024 report by Virginia's Joint Legislative Audit & Review Commission, 83% of data centers in Virginia used the same amount of water (or less) than an average large office building. Additionally, operators routinely work with local water authorities to ensure systems are designed to protect community resources—particularly in water stressed areas.

Energy Use—and Energy Opportunity

Pennsylvania is the nation's top electricity exporter and a leading producer of baseload energy (like natural gas, coal, and refined petroleum). In fact, Pennsylvania sends approximately 26 percent of the electricity we generate to other states in the PJM grid, subsidizing economic development and jobs there rather than at home.

Despite our high rate of energy production, reliability is at risk, and electricity prices have increased. This is due in part to accelerated retirements of reliable baseload energy generation resources, which have outpaced the ability to bring new energy generation sources online. As Pennsylvania has failed to supply the reliable energy generation needed to meet demand, electricity prices have risen — a trend that started well before data centers.

According to the U.S. Energy Information Administration (EIA), the average residential price in Pennsylvania rose 34 percent between 2022 and 2025, before more than \$90 billion in investments in data centers and related technologies were announced.

Pennsylvania has an opportunity to keep our home-grown electricity in-state to power the jobs and innovation our local communities need. When managed correctly, energy demand can be an asset, not a liability. Data centers do require significant

electricity, but many data center developers are funding new baseload generation (including from natural gas, nuclear, and hydrogen). These projects are entirely funded by private capital, not ratepayers, reducing congestion costs and ensuring that residents maintain access to accessible, affordable power.

For example, the Homer City Energy Campus in Indiana County, a privately funded redevelopment of a retired coal facility into a gas fired plant that will generate enough power to not only service the data center campus but also send enough excess electricity to the grid to power three million homes.

Data centers are not just large energy users; they are critical enablers of efficiency and energy savings for homes, businesses, industry, and utilities. Across Pennsylvania, technologies like smart thermostats, EV charging management, smart meters, and grid enhancing tools depend on data center infrastructure.

In Pennsylvania, data centers can help drive investment in energy infrastructure that benefits all customers, supports economic development and job growth at home, and reinforces the Commonwealth's role as a national energy leader.

A Sustainable Path Forward

Perhaps most importantly, data centers offer Pennsylvania a way to build sustainable, community driven prosperity.

They do not replace traditional industries—they complement them. They do not require communities to change who they are—they provide tools to shape what comes next.

With the right policies in place, data center development can help Pennsylvania:

- Compete nationally for investment.
- Keep talent in state.
- Revitalize local economies.
- Strengthen public finances.
- Support innovation across every sector.

Pennsylvania has everything it takes to lead in the digital economy—energy, talent, infrastructure, and communities ready to prosper. Data centers offer a rare chance to turn those strengths into lasting investment, good-paying careers, and stronger local governments across the Commonwealth. With smart policy and local partnership, data centers can help keep talent here, power innovation, and write Pennsylvania's next economic chapter. The opportunity is real—and the choice to lead is ours.



Jon Anzur is the Senior Vice President of Public Affairs at the Pennsylvania Chamber of Business and Industry, the Commonwealth's largest broad-based business advocacy organization representing more than 12,000 members of all sizes and industries statewide.

Is Your Municipality Prepared: Key Lessons from Cumberland County Planning

BY KIRK STONER, DIRECTOR OF PLANNING, CUMBERLAND COUNTY

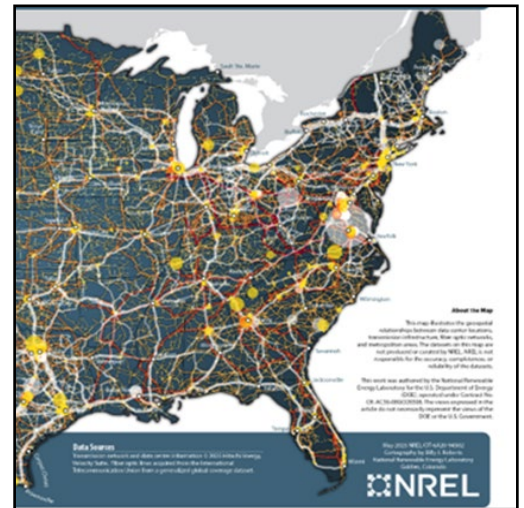
“Happy people don’t attend night meetings,” my internal voice whispered as I pulled into the overflowing municipal parking lot. Judging by the line at the sign in table, it was going to be a long evening. Inside, the familiar scene unfolded: residents in coordinated shirts gathered in the back, comparing notes, while the development team, polished and prepared, occupied the front row. A quiet tension settled over the room as the township supervisors took their seats. Within a few hours, the fate of data centers in the township would be decided.

Data centers have become one of the most pressing issues in municipal land use planning across Pennsylvania. A newly released map from the National Renewable Energy Laboratory shows why. A quick glance at the map shows corridors of transmission lines and fiber optic lines reaching north to Pennsylvania from Ashburn, Virginia, the recognized data center capital of the world that is often referred to as the “center of the internet.” When coupled with proximity to high demand markets, available land, and abundant water, data centers quickly spring up along these infrastructure tentacles in Pennsylvania.



Credit: PennLive. Project Bolt meeting in Middlesex Township

With this infrastructure in place, data center project proposals and zoning amendments are the main event at municipal meetings across the Commonwealth. Whether you



<https://docs.nrel.gov/docs/gen/fy25/94502.jpg>

are in rural Salem Township in Luzerne County, the urbanized City of Lancaster, or the rapidly growing suburbs of Cumberland County, data centers are on the forefront of community interest and concern. The issues of the expanding digital economy, data security, tax revenue, energy usage, water supply, and job creation are hotly debated as this new land use creeps into the Commonwealth’s landscape.

Cumberland County is home to one of the largest data center projects in the state. Nicknamed “Project Bolt,” the 700-acre project site is in Middlesex Township, Cumberland County. The project will include 3 campuses with 18 total buildings comprising 4.2 million square feet of floor space. The site provides access to 17 metropolitan fiber optic networks and is anticipated to be fully operational by 2030.

Even before Project Bolt was announced, the Cumberland County Planning Commission (CCPC)



Credit: Rendering of Project Bolt. Courtesy of Project Bolt.

had begun preparing for the data center boom. At its 2023 board retreat, the CCPC identified data centers as an emerging land use trend requiring research and guidance. Staff developed a white paper outlining data center basics and regulatory considerations for the county's 33 municipalities. Requests for technical assistance quickly followed as local governments sought to update their ordinances.

The experience in Cumberland County offers data center best practices that are widely applicable to local governments across the state. Through research, project review, industry collaboration, and municipal assistance, several key lessons have emerged.

1. Define the use

Land use case law requires that municipalities that choose to zone, must accommodate all lawful land uses. Municipalities cannot simply prohibit data centers or hope that development proposals bypass their community. A data center is an emerging use, one projected to only grow in the future...they are not going away. Proactive planning will enable municipalities to benefit from data centers while avoiding negative impacts.

So, what does proactive planning look like? First, zoning ordinances should include a solid, industry accepted definition of data centers. Data centers vary in size and scale, from small modular units to large hyperscale facilities consuming 1000 acres or more.

Properly defining the use enables a municipality to compatibly match the type of data center to the most appropriate commercial or industrial zoning district. Additionally, data centers commonly include accessory uses such as energy generation, backup power storage, or water storage towers. Understanding and including those accessory uses in the definition allows reasonable, expected data center development while avoiding time consuming, costly trips to the zoning hearing board for trivial relief from narrowly defined zoning standards.

2. Locate the use where it belongs

Proactive planning permits data centers in the most appropriate locations and discourages their development in locations where natural resource or land use compatibility concerns may arise. Data centers function best where electric transmission, fiber optic networks, and water resources converge. Coordination with public utilities, public water suppliers, and telecommunications providers will help municipalities further match siting requirements with available land.

At the same time, siting must respect natural resources and community character. Facilities should avoid critical aquifer recharge zones, prime farmland, sensitive habitats, and areas where noise or lighting could affect residential neighborhoods. These community factors should be prioritized for all land uses in a community, not just data centers.

3. Zone consistently

Despite their energy and water demands, data centers are fundamentally industrial buildings housing computer servers. Municipal zoning ordinances often miss this fact and impose disproportionate restrictions that can unintentionally (or intentionally) preclude the use and expose municipalities to legal challenges.

For example, new data center regulations may require extensive building setbacks of 100 feet or more while other industrial uses such as distribution centers or manufacturing operations carry lesser standards. Decommissioning requirements may require

data center developers to post financial security to dismantle a vacated project while surrounding overgrown office buildings and blighted shopping malls carry no such requirement. Meticulous façade requirements applied exclusively to data centers ignore the unimproved aesthetics of the industrial warehouse located directly across the street.

Municipalities should treat data centers similarly to other commercial and industrial uses, while allowing room for heightened regulation of characteristics unique to data centers.

4. Recognize developers as partners, not adversaries

Too often, data center developers are unfairly portrayed as unethical opportunists seeking to exploit a community's environment and quality of life for personal gain, only to disappear once profits are secured. Developers share the same concerns about natural resources and quality of life as residents; without these, they cannot attract clients or sustain operations. Their projects often bring significant benefits, including improved infrastructure, increased tax revenue, and the creation of local jobs.

Early engagement is invaluable. Prior to project proposals, municipalities should meet with industry representatives to learn about trends, understand best practices, determine likely locations for projects, review proposed zoning regulations, and discuss critical infrastructure.

Site visits to existing data center projects, especially those in nearby Ashburn, VA, offer firsthand insight into noise levels, aesthetics, and surrounding land uses. Stand near or walk by an actual data center. How loud is it? Does it look nice? What other uses are located nearby? How does it compare with other commercial or industrial buildings in the area?

Often data centers developers are willing to enter into community benefit agreements, or CBAs, where they voluntarily agree to fund important projects in a community. Fire apparatus, parks, workforce development, and infrastructure development

projects are commonly found in CBAs. Creating a positive relationship with data center developers facilitates such agreements with long term benefits for the developer and the community.

5. Collaborate on what you cannot control

Energy pricing and water allocation are major public concerns, yet municipalities have limited authority over either. Electricity generation, transmission, and pricing are governed at the regional grid level, while large water withdrawals fall under the jurisdiction of water authorities, public water providers, and regulatory agencies.

Municipalities can, however, collaborate with these entities. Seeking and sharing information from PJM, the grid manager for the northeast, and public utilities may help municipalities, and their residents understand the preventive measures taken elsewhere to protect against data center induced price increases. Similarly, meetings with the municipal water authority, river basin commission, or public water supplier can help to coordinate municipal land use policies to ensure that enough water is available to support a preferred future land use plan and not just data centers.

By seeking and sharing this information with residents, municipalities can close an information gap that fuels resident frustration when they do not understand all aspects of a data center project.

6. Prioritize transparency

Pennsylvania's nearly 2,600 municipalities reflect a strong preference for local decision making. Municipal elected officials have the daunting challenge of ensuring that all voices are heard and lawful decisions reflect the will of the people.

Transparency begins with the basics of public meeting execution. Broad advertising, timely information distribution in multiple formats, and accessible room setups, adequately sized for everyone to see and hear lay the foundation for genuine participation. Skilled chairpersons who clearly outline input procedures

help maintain order and ensure everyone can speak. When any of these critical best practices is missed, meetings quickly spiral out of control, sowing the seeds of distrust and frustration while complicating the decision-making process.

Data center projects often draw regional interest, raising questions about who should be allowed to speak. While elected officials represent their own constituency, impacts such as noise, stormwater, groundwater, and school taxes cross municipal boundaries. Nonresidents can be impacted by data center projects just like residents of the host municipality. Establishing clear standards for regional input ensures that all affected parties have a voice.

7. Preparing to succeed

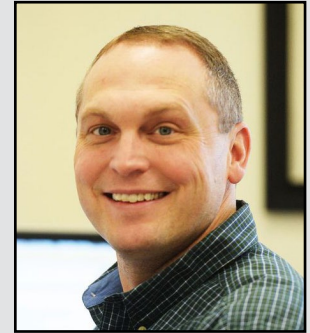
As Pennsylvania communities navigate our nation's increasingly digital future, the rise of data centers is not a remote possibility but rather an active force shaping local economies, landscapes, and infrastructure. Benjamin Franklin's timeless warning that "by failing to prepare, you are preparing to fail" should resonate with Pennsylvania's municipal leaders. Municipalities that proactively plan for data center development through thoughtful zoning, collaborative partnerships, and transparent community engagement, position themselves to enjoy reliable digital access, job creation, and increased tax revenue. Those that do not risk being caught off guard, facing irreversible strains on natural resources, degradation of quality of life, and missed economic development opportunities. Is your municipality prepared?

References

ⁱ <https://www.datacenters.com/news/why-is-ashburn-the-data-center-capital-of-the-world>

ⁱⁱ *The 1965 legal case National Land & Investment Co. v. Easttown Twp. Board of Adjustment, PA Supreme Court set the stage for requiring municipalities to provide for all uses. The court invalidated a 4-acre minimum lot size and in doing so offered that. "Zoning is a means by which a governmental body can plan for the future -- it may not be used as a means to deny the future."*

Kirk Stoner is the Director of Planning for Cumberland County where he manages land use, transportation and environmental planning initiatives in cooperation with the county's 33 municipal governments. Prior to joining



the county in 2003, Kirk worked for the Cumberland Area Economic Development Corporation as a business development specialist and Gannett Fleming as a transportation planning project manager. Kirk is a member of the American Institute of Certified Planners and is in his eighth year of service on the Pennsylvania State Planning Board where he advises the Governor's Office on planning, development and land use issues. He is also the Past President of the Planning Directors Association of Pennsylvania and past Chairman of the South Middleton Township Zoning Hearing Board. Kirk received both a BS and MS from Shippensburg University in Geoenvironmental Studies with a land use specialization. Kirk resides in Boiling Springs, PA and is an avid husband, father, golfer, and outdoorsman.

Reshaping Energy Infrastructure to Support Pennsylvania's Digital Future

BY MELISSA RAYMOND, ASSOCIATIONS MANAGER, CONSTELLATION ENERGY

As Pennsylvania's digital economy continues to expand, local governments across the Commonwealth are increasingly affected by the rapid growth of data centers and other energy intensive facilities. These developments bring both opportunity and challenge for municipalities, as communities work to balance economic growth with reliable power delivery, infrastructure planning, and long term sustainability.

Data centers support everything from cloud computing and artificial intelligence to real time data processing. To operate, they require large amounts of uninterrupted electricity, placing new and sustained demands on local and regional energy infrastructure. For municipalities, this trend is reshaping how communities plan for growth, coordinate with utilities, and manage the impacts on residents and existing businesses.

Understanding the Impact of Data Center Growth on Local Communities

The expansion of data centers is accelerating changes already underway in Pennsylvania's energy landscape. Utilities, independent system operators (ISOs), and energy providers are now facing a reality where significant and sustained load growth is no longer speculating. It is happening now and moving faster than many planners anticipated.

For municipal governments, this creates a new layer of complexity. Communities must consider how large new loads affect local

substations, transmission infrastructure, emergency planning, zoning decisions, and long term economic development goals. Traditional grid planning approaches are being tested, and collaboration among municipalities, utilities, developers, and state agencies is becoming more critical than ever.

Some of the key grid related challenges affecting Pennsylvania local governments include:

- **Demand forecasting:** Understanding which proposed data center and industrial projects are likely to move forward is essential for effective land use planning and infrastructure coordination. Accurate forecasting helps communities avoid overburdening local systems or delaying projects due to insufficient capacity.
- **Infrastructure constraints:** long lead times for transformers, substations, and transmission upgrades can delay development and limit regional growth. These delays often affect municipal budgets, public safety planning, and community expectations.
- **Capacity limitations and reliability:** In areas where supply is already tight, including portions of the PJM region—municipalities must balance the introduction of new large loads while maintaining reliable electric service for residents, small businesses, and critical facilities such as hospitals, schools, and emergency services.

Exploring Challenges and Opportunities for Municipalities

A recent industry survey conducted by Constellation and Datacenter Dynamics underscores the growing recognition that data centers and large energy users must play a more active role in grid management. Eighty five percent of respondents agreed that greater collaboration is needed to effectively meet rising power demand, reflecting a broad industry shift toward shared responsibility and flexible solutions.

For Pennsylvania municipalities, this presents an opportunity to engage early with developers and utilities to discuss infrastructure needs, resiliency planning, and community impacts. Coordination at the local level can help ensure projects align with municipal goals while supporting regional grid reliability.

Optimizing the Grid to Meet Future Community Needs

Instead of relying solely on traditional expansion strategies—such as building new, large scale generation facilities, the energy sector is moving toward smarter and more flexible approaches. Grid optimization offers a faster and often more cost effective path to improving resilience while supporting sustainability objectives valued by many Pennsylvania communities.

These strategies focus on enhancing existing infrastructure and deploying targeted technologies so the grid can accommodate new demand without lengthy construction timelines or excessive costs. Approaches gaining traction include:

- **Accelerated deployment:** Infrastructure upgrades that can be implemented more quickly than new generation projects, helping communities respond to growth without prolonged disruption.

- **System flexibility:** The use of distributed energy resources—such as batteries or on site generation—to respond to changing grid conditions and improve reliability during peak demand or emergencies.
- **Decarbonization support:** Reducing reliance on higher emission fuels while maintaining dependable electric service, aligning with sustainability goals adopted by many Pennsylvania municipalities.

Constellation's Commitment to Supporting Municipalities

As the energy market continues to evolve, Constellation Energy remains committed to helping municipalities achieve their energy goals. Whether your focus is on reducing emissions, managing energy costs, or adopting new technologies, Constellation offers tailored solutions to meet the unique needs of each municipality.

For more information or to explore how Constellation can help your municipality achieve its energy goals, reach out to Matt Shortall at matthew.shortall@constellation.com or 443-602-5755 and begin building your tailored energy strategy. Together, we can ensure a sustainable and cost-effective energy future for Pennsylvania's municipalities.



Melissa Raymond is an accomplished Associations Manager who has been with Constellation since 2022. She holds a Bachelor of Science in Marketing from York College of Pennsylvania and brings more than 15 years of experience in association business development. In her current role, Melissa leads and supports Constellation's higher education and municipal association partnerships across the Mid Atlantic region, driving strategic value and long term success. Known for her collaborative approach, she builds trusted relationships with association members and helps organizations define, implement, and achieve their energy goals. Melissa's commitment to partnership excellence ensures her clients receive exceptional guidance, insight, and support.

Data Centers and Gas-Fired Power Plants: A Dangerous Combination

SUBMITTED BY BRIGITTE MEYER AND DONNA KOHUT, PENN FUTURE

State leadership and policymakers have declared data centers as the “future” of Pennsylvania’s economy. Unfortunately, this short-sighted plan locks Pennsylvania into a continued dependence on dirty, unreliable fracked gas and pressures municipalities to make way for these massive energy-intensive and environmentally harmful facilities. In this article, we’ll explain the statewide push for data centers and accompanying gas-fired power plants and highlight ways that municipalities can best prepare for development—protecting themselves from lawsuits while mitigating the impacts to their communities.

Data Centers: How Big Tech is Reshaping Our Landscape

The data center industry is reshaping Pennsylvania’s natural, economic, and energy landscapes. The industry is attracted to our available open space, abundant water resources, relatively low risk of natural disasters, and state leadership’s promise of cheap, accessible gas reserves. Recently, the Team Pennsylvania Foundation (Team PA), a non-profit economic development organization co-chaired by the Governor and gas industry executives, unveiled a ten-year energy plan that establishes the AI and data center industries as the foundation for the statewide economy and fracked gas as the primary source of fuel for these facilities.

Team PA’s “Energy, Artificial Intelligence, and Data Center Roadmap” is an extensive plan outlining financial incentives, policies, and local governance tools that could be leveraged to expedite data center development across the Commonwealth. Team PA acknowledges that while this plan will boost state GDP, it will not provide significant employment opportunities for host communities, and depending on the tax breaks offered to industry, it may not even bring in meaningful tax revenue.



What’s more, this plan is underscored by the explicit bias towards the expansion and development of fracked gas infrastructure—including massive gas-fired power plants. In the past, gas was billed as the bridge to clean energy, but Team PA moved the goal post; gas is now the bridge to nuclear energy, and because new nuclear generation is always ten to fifteen years away, gas has become the bridge to nowhere.

Fracked gas favoritism is perhaps most evidenced by the Roadmap’s focus on the importance of data centers building their own sources of generation—gas-fired power plants—while promoting faster permitting times and calling for reduced regulation to facilitate their development. Consequently, communities that are unprepared for data centers may also be caught unprepared for polluting energy generation facilities, having never considered this scope or novel land use combination.

Communities and environmental organizations alike are expressing numerous concerns—from energy affordability to air pollution from gas-fired power plants. Both national and state governments are aggressively courting this new industry, and consequently, municipalities cannot afford to ignore these issues. Local governments are on the frontlines,

and they must protect the safety and quality of life for host communities by addressing concerns head-on.

Why Municipalities Must Plan for Data Center Development

It is understandable that, upon hearing about the potential impacts of data centers, municipalities may be interested in banning or “zoning out” these uses. However, Pennsylvania municipalities cannot do this. The authority to enact zoning rules does not extend to “arbitrary, unnecessary, or unreasonable intermeddling with the private ownership of property,” and while it is fundamentally reasonable for a zoning ordinance to allocate different types of activities to different locations in the community, the Pennsylvania Supreme Court has held that zoning ordinances that totally prohibit a legitimate use from an entire community are almost always unconstitutionally unreasonable.

Thus, with very few exceptions, every municipality in Pennsylvania must provide for the possibility of every legitimate land use somewhere within its borders and cannot impose restrictions that make any use effectively impossible to build.

A landowner or developer may bring a legal challenge against an exclusionary ordinance (called a substantive validity challenge), and if that challenge is successful, the ordinance will be declared invalid and struck down. More importantly, the successful challenger is generally entitled to build the “excluded” use at their chosen location, regardless of how that property is zoned. This means that, if a data center developer that owns property in a residential zoning district and wins a substantive validity challenge, it must be permitted to develop its property for a data center, even if it is not compatible with the surrounding residential uses. While this does not equate to *carte blanche* for a developer to build whatever it wants, it does mean that the municipality no longer controls where the use can be located.

What Should Municipalities Do?

The threat of a substantive validity challenge is not just theoretical. Data center development is moving with extraordinary speed and is well-funded, placing

enormous pressure on municipalities, some of whom are being caught unawares. Consequently, many municipalities that are in data center developers’ crosshairs lack zoning ordinances addressing this use. This is a recipe for validity challenges, and data center developers have already used them, or the threat of them, to intimidate municipalities across the state.

To eliminate this threat, and to regain control over data center development, municipalities must act quickly to adopt ordinances that address this use.

There are two options for a municipality. The first is through the standard process for amending a zoning ordinance. The second is to use what is known as the municipal “curative amendment” process. Under the Pennsylvania Municipalities Planning Code, the curative amendment process gives the municipality some breathing room to fix the problem without the threat of a legal challenge. To start the process, a municipality must take official action to declare its own ordinance invalid and adopt a resolution identifying the deficiencies. Then the municipality may take up to six months to adopt an amendment to “cure” the problem (hence the name “curative” amendment), during which period it does not have to entertain any substantive validity challenge based on the same ordinance defect identified in the resolution. The catch is that a municipality cannot trigger this process after a validity challenge is filed, and it is only allowed to use it once every three years. Therefore, municipalities must choose when to exercise this option wisely.

What Should Data Center Ordinances Include?

There are several things municipalities should consider when crafting an ordinance to ensure it will be effective.

Definitions

First and foremost, the municipality must decide how a “data center” will be defined for purposes of the zoning ordinance. When doing this, it is useful to remember that the purpose of a zoning ordinance definition is not to provide an encyclopedic description of a use, but to identify the essential

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description of a use, but to identify the essential characteristics that distinguish that use from other uses so that it is clear which zoning regulations apply to it.

Other issues that municipalities should consider when crafting definitions include:

- Whether facilities that include multiple data center buildings warrant unique regulations such that a “data center campus” or similar use should be separately defined;
- Whether similar uses like cryptocurrency (bitcoin) mining should be included within the definition of a data center. Although these two uses are substantially different from a computing perspective, the characteristics that are relevant to zoning (size, water and septic needs, traffic and noise generated, etc.) may be similar enough that they can be considered the same use for zoning purposes.



PennFuture has developed a Model Ordinance for Data Centers that includes a helpful core definition as well as language addressing many of the important considerations set forth herein.

Power Generation

In crafting an ordinance, a municipality also must consider whether common secondary components of a data center like electrical substations, cooling towers, water towers, security buildings, wastewater treatment facilities, or on-site power generation facilities (whether gas, solar, wind, or nuclear) will be treated as a component of the data center or will be separately defined and regulated.

The most significant of these potential “secondary” components is power generation, which may not be

secondary at all. While data centers generally prefer to connect to and draw power from the grid, where this is not feasible, some may look to generate power on-site. Data centers require very large amounts of power, so the potential exists for sizeable power generation facilities if this is to be used as the data center’s main power source. Because Pennsylvania decision-makers are actively promoting and smoothing the way for developing gas-fired power plants, we’re primarily seeing this as the leading on-site power generation. Given that power generation facilities bring a separate set of land use concerns that may not fully align with the concerns related to a data center use, municipalities would be best served by drafting separate ordinance provisions governing these uses rather than treating them as simply accessories to a data center.

Location

There is no one-size-fits-all approach to deciding where to permit data centers—each municipality must take into consideration numerous factors such as available land, the character of different areas of their community, and environmental constraints.

In addition, municipalities would do well to take into consideration the fact that developers choose a location for a data center based upon access to power infrastructure. Data centers can use hundreds of megawatts of electricity, and they typically look for properties that will allow them to easily connect to high-voltage power lines to get that power.

It is unlikely that existing zoning districts are organized around electricity infrastructure, so sites with appropriate power access may be located in only a portion of a certain base district or scattered among several. An overlay district may be a useful tool to address this use.

An overlay district is a zoning district that layers on top of all or part of one or more of a municipality’s underlying zoning districts and imposes different zoning rules in the area it covers. The overlay district rules may replace some or all of the rules applicable in the underlying district, supplement those rules, or create an optional, alternative set of rules that a landowner may choose to develop under.

. . . Zoning, Water & Energy Usage, and PA Case Studies

By employing an overlay district, a municipality can target these sites with access to power—or the subset of them that also has additional suitable characteristics—for data center development without having to include inappropriate sites simply because they are in the same underlying zoning district. Overlay districts may also allow municipalities to keep data centers away from sensitive residential or environmental areas within their boundaries.

Type of Zoning Approval

Requiring conditional use or special exception approval, rather than allowing the use by right, is likely the best choice for data centers in most locations due to the use's potential for creating significant community and environmental impacts and the relative newness and unfamiliarity of the industry. By-right or permitted uses can be reviewed and approved by a municipality's zoning officer without the involvement of any other local body or the public. If a proposal complies with the zoning ordinance, the zoning officer must approve it as-is, without additional conditions.

Conditional uses and special exceptions require a public hearing to determine whether the proposed use complies with the zoning ordinance. At this hearing, the applicant must present evidence of compliance, and certain members of the public are entitled to question an applicant's witnesses and to introduce their own evidence with respect to the proposal. The decision-making body may impose additional conditions to approval that go beyond the requirements in the zoning ordinance if evidence presented at the hearing gives them reason to believe that such conditions are necessary to protect the public health, safety, and welfare.

Additional Standards

An effective data center ordinance will address the top-level concerns with most data centers including power usage, water consumption, and noise.

Power Usage

Data centers' power consumption and its effect on other customers' electricity rates is among most

Pennsylvanians' top concerns when it comes to data centers. However, this is a concern that municipalities have very little power to address, especially when the power is not generated on-site. Regulation of the electric grid and energy prices occurs at the state level or higher, and municipalities are prohibited from regulating when and where an electricity user is permitted to connect to the grid, how much energy it uses, or the cost of electricity.

Water Withdrawals

The main use of water in data centers is for cooling servers and other digital infrastructure to prevent overheating and loss of function. How much water any given data center uses will depend on the size of the facility, the type of equipment it houses (for example, AI processors generate more heat than non-AI processors), the type of cooling system employed, and climate. Water usage can range from amounts comparable to a small office building to many hundreds of thousands or even millions of gallons per day. It is worth noting that this is only considering the impacts from the data center cooling itself. On-site fracked gas power generation could more than double the impact.

Consequently, municipalities should consider ordinance provisions that require developers to demonstrate that these withdrawals will not adversely impact existing wells, surface waters, or groundwater resources. Where the data center will be served by a public water utility, this can likely be accomplished by requiring the developer to provide a "will-serve" letter from the utility verifying that it can supply enough water to meet the data center's requirements. Where a data center intends to use non-public water sources, municipalities should require that developers submit a study providing information about the anticipated water withdrawals, how that need will be met, and what impact, if any, the water withdrawals will have on nearby water resources.

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Municipalities should also be aware of state and other regulations relating to water withdrawals, and, in some cases, the lack thereof. Municipalities should be aware that DEP does not regulate private wells in the way one might think. Once a well is drilled, DEP does not issue permits, impose limits on how much water can be withdrawn, or monitor impacts on surrounding wells or surface waters. Therefore, municipalities cannot assume that issues with water withdrawals will be caught and remedied by DEP. Municipalities should also be aware that water withdrawals above a certain threshold may be regulated by an interstate river basin commission, preempting local regulation.

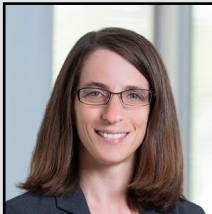
A Path Forward for Municipalities

Municipalities may not be able to stop data center development outright, but our local government has significant authority to regulate data centers to mitigate the impact of these facilities and accompanying gas-fired power plants on local residents, the character of the community, and the environment. Utilizing the considerations outlined above, we encourage municipalities to step up and chart their own path forward for the health of their local economy and community.



Donna Kohut -

As the Policy Manager for Sustainable Economics, Donna leads PennFuture's cross-cutting work related to connecting clean air, clean water, and climate progress with economic growth and community development. She engages across PennFuture's statewide campaigns, working with those teams on tactics, policies, content creation, and other tactics to advance sustainable development as a core environmental indicator in Pennsylvania.



Brigitte Meyer -

Brigitte is a Staff Attorney in PennFuture's Pocono Office. Brigitte's work focuses on water quality and watershed protection, special protection waters, and stormwater management. Prior to joining PennFuture, Brigitte was an Associate Attorney at Siana Law in Chester Springs, Pennsylvania, where her work focused on municipal and land use law. Brigitte currently also serves as Tobyhanna Township Supervisor in Monroe County.

River Basin Commissions and Data Centers: Planning for a Growing Industry with Intensive Water Demands

BY ANDREW DEHOFF, P.E, SRBC EXECUTIVE DIRECTOR, KRISTEN BOWMAN KAVANAGH, P.E. DRBC EXECUTIVE DIRECTOR AND MIKE NARDOLILLI, ICPRB EXECUTIVE DIRECTOR

For the Commonwealth’s regional water resource managers, the catchphrase of 2025 was “data centers.” While conversations from kitchen tables to Harrisburg have centered on large data centers’ robust power needs and 24/7 operating requirements, increasingly recognized is their need for sustainable water access, as water is critical to both the power and the cooling required to operate these large facilities.

As such, water is expected to be ever more in demand, and regional water resource managers in the Susquehanna, Delaware and Potomac river basins are focused on understanding this emerging industry to ensure its growth is responsibly managed among other shared water needs.

A new thirst for water

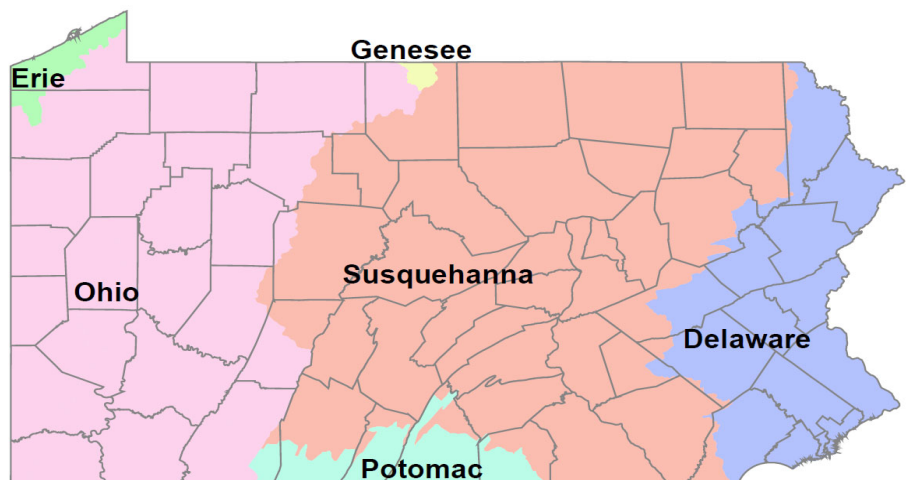
It has been estimated that a single, large data center facility can use up to 5 million gallons of water per day, and much of this water is used consumptively, meaning it is not returned to its system of origin. Importantly, the daily 5 million gallons does not include water required to generate the power needed to operate a data center, making its water demand even more intense. Another way to look at a data center’s water usage: According to University of California researchers, each AI-prompted email of 100 words uses the equivalent of a 16 oz. water bottle. Considering how many people now

use these tools daily, the thirst for water can seem unquenchable.

The Commonwealth of Pennsylvania has roughly 86,000 miles of rivers and streams. While that sounds like a lot of water, supporting all water resource needs in the future may be challenging. During droughts or other water shortages, water resource managers will need to consider how to prioritize water for data centers among the needs of domestic, commercial, industrial and agricultural uses, and water systems that sell water to data centers will need to consider whether their supplies will be capable of continuing uninterrupted.

Pennsylvania’s River Basin Commissions

The Susquehanna River Basin Commission (SRBC), the Delaware River Basin Commission (DRBC), and the



Major River Basins in Pennsylvania. Credit: Lebanon County Conservation District

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Interstate Commission on the Potomac River Basin (ICPRB) are government agencies working in their respective watersheds to manage water resources without regard to political boundaries.

While their authorities are slightly different, each are compact-founded agencies focused on sustainably managing water supply through regulation, monitoring and/or comprehensive planning programs. Each commission balances competing water needs to ensure long-term health and viability of its basin's water resources for residents, businesses and ecosystems. The work of these commissions is critical because their watersheds supply drinking water to more than 23.6 million people in seven states and the District of Columbia, including roughly 72% of the Commonwealth's total population.

The SRBC regulates certain water withdrawals and consumptive uses within its jurisdiction. Currently, the SRBC has issued a permit for one data center project in Luzerne County. However, more applications for data center projects are expected. In 2025, the SRBC expanded on an existing resolution to encourage data centers and other emerging facilities to consider the use of dry, hybrid or other water-saving technologies for cooling purposes. These technologies use ambient air to cool and condense steam, drastically reducing water consumption, and are currently employed by some power plants.

The DRBC regulates water withdrawals and discharges over certain thresholds. To date, the DRBC has not received any applications for large data center projects. There is an existing footprint of roughly 60 small- to medium-scale data centers currently operating in the basin, obtaining water from existing public water supply sources. Because these do not operate their own water systems, they did not need DRBC approval. DRBC staff are aware of several proposed hyperscale facilities. If these facilities require their own water systems to operate and exceed the Commission's thresholds for review, they will need to apply to the Commission for approval.

The ICPRB was formed to address water quality challenges in the Potomac and in the 1970s was also tasked with regional water resource and land use planning. Unlike the other commissions, the ICPRB does not issue regulations or permits. The Virginia portion of the Potomac River Basin has already seen a large increase in data center development. This "head start" has allowed ICPRB to conduct research on data centers' water use. The Commission evaluated implications for the reliability of regional water supply and long-term planning, and its findings provide insights that are helping decision-makers and stakeholders navigate the intersection of water, energy, technology, and infrastructure in support of regional resilience.

Future-focused, together

Looking ahead, the agencies will continue to work cooperatively with one another and with our partners to track proposed data centers and evaluate policies to reduce water impacts. The commissions also continue to coordinate with Pennsylvania Department of Environmental Protection on proposed projects and emerging policies. And, if a data center requires either SRBC or DRBC's approval, the relevant project review team will work to ensure the application meets all regulatory requirements.

The commissions continue to seek data centers' water use information wherever possible, to responsibly estimate and manage water demands. Collecting this data can be challenging, as water use information of data centers tied into public water supply is not always readily disclosed. Increased transparency will be key as regulators, businesses and communities wrap their arms around this growing industry. As more data centers are planned, especially large-scale data centers, ensuring the availability of information on water sources and projected water demands will be critical.

Considering water use, stormwater management and other water resource needs in the planning stages will identify gaps and potential issues early, helping ensure all local water resource needs are balanced and supported.

The commissions are talking with utilities, other agencies and potential permittees to ensure reliable access to water while managing and protecting the long-term health of surrounding watersheds and communities. The commissions can also be a resource for local governments, so please reach out with questions or guidance on our regulatory requirements. Organizations like the Pennsylvania Municipal League continue to be an excellent source of expertise and connection for our commissions to dialogue with local governments.

The commissions have a track record of responsibly managing water supplies for millions of Pennsylvanians, and that work will continue into the future, together.

More resources on River Basin Commissions and Data Centers:

SRBC: <https://www.srbc.gov/about/news/docs/srbc-data-centers-faq.pdf>

DRBC: <https://www.nj.gov/drbc/programs/supply/datacenters.html>

ICPRB: https://www.youtube.com/watch?v=6CJd4F_ezV0



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Uniformity vs. Authority: Data Center Preemption of Pennsylvania Municipalities

BY JOHN F. WALKO, ESQ. AND FINN L. SKOVDAL, ESQ. OF KILKENNY LAW, LLC.

Pennsylvania is standing at the center of a global AI gold rush. With potential multi-billion-dollar investments from tech giants, state lawmakers are racing to modernize the Commonwealth's regulatory landscape to prepare for a surge in data center development across Pennsylvania. In doing so, lawmakers are attempting to strike a balance between the immense economic advantages inherent in data centers and the significant demands data centers place on local infrastructure, the environment, and surrounding residents. To navigate these competing interests, several legislative bills are proposed that would "fast-track" data center development throughout the Commonwealth by preempting local municipal land use and zoning laws.

As expected, the prospect of Commonwealth preemption of local laws to benefit data center development has sparked significant pushback from municipal leaders throughout the Commonwealth. Some municipal leaders and residents argue that these "fast-track" laws prioritize corporate growth over community safety, taxpayer costs, and environmental protections. However, proponents of local preemption argue that state-level oversight is necessary to transform Pennsylvania into a global tech leader by removing the "regulatory patchwork" that commonly exists in and between local municipalities that delay or discourage multi-billion-dollar projects.

Municipal officials should be aware of the mechanics and potential results of these proposed data center preemption laws so, if such legislation is enacted, the municipality can avoid the need to amend or revise their conflicting and unenforceable code requirements, and better plan for permitted land development, noise control, and zoning regulations.

Artificial Intelligence and Data Center Act

The most apparent example of the Commonwealth's proposed preemption of local zoning laws is found in the Artificial Intelligence and Data Center Act, proposed under Senate Bill 939. This Act would preempt certain zoning regulations of "high impact data centers," defined as a data center with a "critical IT load of 50 megawatts or higher." Specifically, local zoning codes would be prohibited from establishing certain siting and dimensional standards, requirements, conditions, or limitations that are more stringent than "other industrial uses or other land development within the particular zoning district where the high impact data centers are situated within the local government." Such compelled uniformity mandates identical requirements of heights of structures, screening, fencing, lighting, and noise generation. As a result, if a municipality allows a warehouse to be 60 feet tall and requires 50 feet of natural screening from a residential property, it cannot limit a high impact data center to a height of 50 feet and/or require 100 feet of natural screening, even if believed that the data center would generate greater noise or light pollution. In such circumstances, local officials are forced to "level the playing field," effectively stripping them of the power to create data-center-specific protections.

In addition to the zoning preemption that would be established, the Artificial Intelligence and Data Center Act would also impose a strict "shot clock" on local permit reviews. Specifically, a municipality would have no more than 30 days to process a use permit and 120 days for a conditional use approval. If a municipality fails to act within these windows, the application is approved by default. This compels

local planning boards, zoning officials, and governing bodies to prioritize data center developers over other community business, and prevents ongoing negotiations and community feedback meetings that draw out the length of the application review and approval timeline.

In addition to proposed legislation, Pennsylvania Governor Josh Shapiro introduced the “Governor’s Responsible Infrastructure Development” (“GRID”) standards in his February 2026 budget proposal to establish a state-mandated “responsible” framework for data center development. While the Governor frames these as “guardrails” to protect residents, they also serve as a blueprint that municipalities are expected to follow. Notably, much like the zoning and shot-clock mandates in the Artificial Intelligence and Data Center Act, one guardrail is designed to promote speed and certainty in the permitting of data centers.

Data Center Siting and Permitting Act

Another bill that would result in preemption for limited properties, the Data Center Siting and Permitting Act, proposed under Senate Bill 991, aims to establish a streamlined process where the Department of Environmental Protection selects at least fifteen preapproved sites—such as decommissioned power plants—and provides an accelerated two-phase permitting process intended to bypass the typical local municipal land use review, permitting, and approval process for the construction of a data center, a power generation facility, and any transmission infrastructure associated with the data center. Although a data center applicant is required to submit a “zoning clearance or approval” with their application, which presumably would be issued from the local municipality, the DEP would oversee the land development approval, construction, and inspection process that is traditionally reserved for the governing body. Although limited in scope to the sites selected by the DEP, the land development process for a data center on a site selected under this Act would be dictated by the DEP and not the local municipality.

Reliable Energy Siting and Electric Transition Board

Finally, Pennsylvania House Bill 502 (2025–2026 session) aims to streamline the development of large-scale energy infrastructure by shifting certain land-use approval powers from local municipalities to a state-appointed board, referred to as the Pennsylvania Reliable Energy Siting and Electric Transition (RESET) Board. Although not specifically directed at data centers, House Bill 502 would permit an energy generation facility constructed with/for a data center to bypass local land development regulations. Namely, if a data center is built with its own on-site energy generation facility (25 MW or more), the data center can apply to the RESET Board for a Certificate of Reliable Energy Supply (CRES). The RESET Board would serve as the sole entity for approving major energy-related projects, thereby bypassing local approval and superseding local zoning and land-use restrictions for the energy-generation portion of a data center project.

In line with House Bill 502, one of Governor Shapiro’s GRID “guardrails” is designed to promote power self-sufficiency by requiring developers to pay for their own new power generation rather than passing those costs on to existing utility customers. As such, if House Bill 502 is enacted, this guardrail would effectively require that all data centers are built with their own on-site energy generation facility. In turn, such on-site energy generation facilities would be approved by the RESET Board and not the local municipality.

In addition to the preemption of energy generation facility development, House Bill 502 also includes a critical “look-back” provision that restricts the RESET Board from issuing a CRES for an energy generation facility proposed in an area zoned as residential since January 1, 2024. As such, any rezoning to residential since January 1, 2024 to block a RESET Board approved project would likely be deemed invalid, if challenged.

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Conclusion

Since the Pennsylvania Municipalities Planning Code requires a municipality to provide for all legitimate land uses within its borders, including data centers, a municipality likely cannot entirely ban data centers. Accordingly, the Commonwealth does not need to pass legislation to compel municipalities to permit data centers. Rather, any local ordinance that attempts to ban data center uses would likely be deemed unconstitutionally exclusionary, which could then permit the data center developer to build their project anywhere in the municipality, regardless of local preference.

To prepare for this potential preemption and the pervasiveness of data centers, it is recommended that municipalities ensure that their existing industrial zoning regulations and noise controls are robust enough to handle data center impacts before such laws may take effect. If a municipality's general industrial standards—such as maximum height, decibel limits, and setbacks—are already well-defined and defensible, the "compelled uniformity" from the Commonwealth

becomes less of a threat. By strengthening these standards now, local governments may be able to establish certain vested rights and a baseline of protection that may remain enforceable through the Commonwealth's "fast-track" approval process.

In addition, even though the possibility of preemption is looming, it is recommended that municipalities specifically address data center development in their zoning and land use codes to better regulate any data center applications that could be submitted. In this regard, Pennsylvania House Bill 2151 directed the Department of Community and Economic Development to create a model ordinance that local governments can use to set clear standards for data center development. Although this may be a useful tool, ultimately local governments should enact what works best for their community. In the race for AI infrastructure, the best defense for a local municipality is a proactive and modern land use and zoning code.



John Walko (top) and Finn Skovdal (bottom) are municipal and land use attorneys with the firm of Kilkenny Law, a municipal law firm that represents over 45 municipal entities throughout southeast Pennsylvania. In their practice, they serve as the appointed solicitor for several diverse municipalities, boards, authorities, and commissions throughout the region.

Data Centers and Municipal Responsibility: A Local Perspective from Lackawanna County

BY CHRISTOPHER PAONE, BLAKELY BOROUGH MANAGER

Data Centers, Data Center Campus, Date Center Hyper campus; these terms were foreign to many people across Northeastern Pennsylvania 12-18 months ago. Now, municipalities throughout NEPA are increasingly receiving proposals for data centers. These facilities are critical to the modern economy, cloud data storage, and artificial intelligence. Yet their scale, energy usage, and long-term impacts require thoughtful municipal oversight, particularly in smaller communities with an aging infrastructure that may be unable to handle this new and until recently never thought of rapid expansion.

In Lackawanna County, where boroughs balance progress with residential quality of life, data centers present a great opportunity and a significant challenge. While such projects may offer a large initial capital investment, the limited employment, and extraordinary demands on local utilities including electricity and water, land use planning, and local governance, are of great concern.

Blakely Borough's experience stresses the importance of proactive municipal planning. As a community served by a publicly owned electric utility, Blakely has a direct responsibility to ensure system reliability and cost stability for its residents and businesses. Data centers, which can consume power equivalent to that of 20 boroughs the size of Blakely, must be evaluated not only for economic benefit but for their impact on existing customers. Our

first obligation is to the residents and businesses who rely on that system every day. Any high-load facility

must be assessed carefully to ensure it does not compromise reliability or shift costs onto the community. Basically, when a municipality owns and operates its electric system, the stakes are much higher.

Recognizing these realities, Blakely Borough has adopted comprehensive zoning regulations which specifically address data centers and similar high intensity uses. These standards consider electrical demand, infrastructure capacity, site location, and compatibility with surrounding land uses. The goal is not to prohibit innovation, but to ensure that development proceeds in a manner consistent with the borough's long-term planning objectives. Zoning is one of the most important tools municipalities have to manage emerging technologies. Forward-looking regulations provide certainty for developers while protecting the character and resources of the community.

Regional grid planning, or lack thereof, have made it clear that unchecked data center growth can strain transmission systems and complicate energy planning. The Pennsylvania-Jersey-Maryland (PJM) Regional Transmission Organization has made it nearly impossible for new electric generators to get new facilities online. They



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have had backlogs, of three-four years in some instances, that have inevitably begun to put a huge strain on the existing generators and the grid itself. For municipalities, especially those with publicly owned utilities, coordination between land use regulation and utility planning is essential. Decisions made at the local level can have lasting implications for rates, infrastructure investment, and community trust.

Transparency is key during any discussion of large-scale data center projects. Blakely's approach is to have the public involved as early as possible. This ensures all information is available to stakeholders and the borough concurrently. Understandably, there has been significant public concern surrounding data center development. The opportunity to be well-informed is always of utmost benefit to all parties involved. Throughout this process, Blakely had a strong commitment to ensuring the public was able to access the necessary information to gain a better understanding of all aspects of the proposals.

As Pennsylvania municipalities navigate the next wave of infrastructure development, data centers offer a clear lesson, through comprehensive planning, thoughtful zoning, and stewardship of public utilities. Local governments must ensure that innovation strengthens, rather than burdens, the communities they serve.



Christopher R. Paone, CBO, CZO, ICMA-CM is an experienced local government executive serving as Borough Manager, Secretary, and Treasurer for the Borough of Blakely, Pennsylvania. He holds nationally recognized credentials in municipal management, including Credentialed Manager status from the International City/County Management Association (ICMA) and certifications as a Certified Borough Official (CBO) and Certified Zoning Officer (CZO), demonstrating his expertise in both administrative leadership and land-use regulation.

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Case Studies: Falls Township, Bucks County

BY JEFFRY DENCE, BOARD OF SUPERVISORS, FALLS TOWNSHIP

As township supervisors across Pennsylvania are increasingly asked to consider data center proposals, Falls Township in Bucks County recently went through that process and found that context and infrastructure matter as much as the project itself.

In our case, a data center was proposed at a former U.S. Steel property along the Delaware River, now owned by NorthPoint Development. The site sits next to an existing Waste Management landfill and has long been zoned and used for heavy industry. From the outset, this was not a greenfield project, but a repurpose of land that supported large-scale industrial operations for generations.

One of the factors that simplified our decision was Pennsylvania's position within the PJM regional power grid. (PJM stands for Pennsylvania, Jersey, Maryland). The Commonwealth generates more electricity for transmission organization than any other state, making it a practical location for energy-intensive uses where robust infrastructure already exists. Here, the former steel mill had high-capacity electrical systems in place, reducing the need for new substations and transmission lines through residential areas. The developer also entered into their own agreements with the power company to upgrade the infrastructure as needed, at no cost to the township.

Economic impact was another important consideration. Falls Township and much of the surrounding region owe their very existence to U.S. Steel's Fairless Works, making the mill's closure a defining economic blow to local employment and the tax base. While data centers are not labor-intensive in the traditional sense, many of their permanent positions prioritize industry certifications over four-year degrees,


reflecting the strong technical and skilled-trade workforce that has long characterized Falls Township. Additionally, the construction phase, long-term operations, and increased assessed value of the property were meaningful features for our community.

We also spent significant time addressing concerns about water usage and environmental impact, which we know are top of mind for residents and elected officials alike. Our examination found the site already had a separate industrial service water system that draws directly from the Delaware River. That system distributes water across the property, treats excess water on-site, and discharges it back into the river in compliance with environmental regulations. Importantly, it is completely independent from domestic water supplies, ensuring no interaction with local drinking water systems.

Our experience reinforces that data center proposals should be evaluated on a site-specific basis. When located on legacy industrial properties with existing power and water infrastructure, these projects can return underutilized land to productive use without placing new burdens on surrounding neighborhoods. Clear agreements, upfront infrastructure planning, and transparency with the community were essential to reaching a decision we believe best serves Falls Township.



With 17 years of service as a township supervisor, Jeffrey Dence's commitment to local government began on the Township Authority and the Zoning Hearing Board over 20 years ago.



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Case Studies: Hampden Township's Experience

BY KRISTI SMITH, PRESIDENT, BOARD OF COMMISSIONERS, HAMPDEN TOWNSHIP

It all started before I was elected as a commissioner. A developer approached a couple of sitting commissioners with an idea for his tract of land: a data center. Zoning ordinances would need to be changed, but the developer emphasized benefits to the township....jobs, revenue, etc. The commissioners bit. In short order, the commissioners held a public hearing to discuss a zoning ordinance change that would allow a data center in an area zoned for office park, rather than locating it in an industrial zone. A seven-page data center ordinance was suddenly proposed. The commissioners began the hearing by explaining that the township was exposed because it had no ordinances governing data centers in the Township's current zoning ordinance. They further explained that without rules, a data center could be located anywhere, and we would have no control over where it might be constructed. The commissioners told the standing-room-only crowd that they were trying to protect the township. They failed to mention that they had been approached with a specific location for a data center, and that the tract of land they had in mind would put a sprawling data center in the backyard of many township neighborhoods, in violation of current zoning. Fortunately, Township residents were not fooled! They did their homework, they were passionate, and they spoke up. The overwhelmingly negative responses were emotional and moving. The commissioners, four of whom were up for re-election in a few months, voted not to adopt the proposed ordinance.

With the election, I changed from a concerned citizen to a concerned President of the Board of Commissioners. It was now my job to address the data center risk. My quest to research the impacts of data centers, educate myself, and find a way to

protect Hampden Township was not a task I took on unaided. Commissioner John Matthew Smith was a partner on this project, and together we drew on the expertise of a wide range of experts. We felt that the original ordinance was designed to give developers the upper hand by building in maximum flexibility for data center owners without appropriate protections for residents and our environment. Our task was clear: we needed to draft a comprehensive ordinance that would ensure residents were protected from development that came too quickly and without enough thought for the long-term consequences data centers apparently hold.

We identified multiple areas of concern, including local climate implications, land use provisions, air quality impacts, power generation/grid requirements, water impacts, noise and light pollution, and decommissioning ramifications. The following information is offered as a blueprint for other communities facing similar data center challenges. Specifically, I will elaborate on the topics we considered most important and the parties we contacted to help establish an ordinance framework. Local climate implications. Our first advice came from a retired Penn State meteorology professor. He noted that Three Mile Island Unit 2 produced approximately 840 megawatts of power—less than the projected demand of some proposed single data centers—yet required two massive hyperbolic cooling towers to safely lift and disperse waste



Pennsylvania Data Centers . . .

heat. Even with that infrastructure, some scientists found that Pennsylvania has experienced localized “nuclear effect” snowfall events near large thermal facilities, in some cases producing one to two inches of snow due to heat and moisture interactions in the atmosphere. A one-gigawatt data center pulling such a massive continuous electrical load will generate a commensurate amount of waste heat. In the professor’s opinion, the operation of a large data center in Hampden Township, a narrow valley between mountain ranges, without cooling towers or equivalent heat-dispersion systems, raises serious unanswered questions about amplified heat-island effects, altered wind and inversion patterns, and the formation of high-level cirrus clouds that could affect regional temperature and precipitation. The professor emphasized that the atmospheric consequences of injecting this magnitude of heat into a topographically constrained area have not been adequately studied and that, unlike traditional power plants, data centers often proceed without rigorous meteorological modeling, underscoring the need for site-specific climate and weather impact analysis before approval.

Because there were a range of other environmental impacts to be considered – including impacts to the land, air, and water- we reached out to Hampden residents with specialized Environmental proficiency to review the proposed draft ordinance, and they provided valuable assistance. Many townships have Environmental Advisory Councils (EACs), which could provide similar expertise. These residents also connected us with Penn Future (a non-profit environmental advocacy organization based in Harrisburg), which provided additional environmental knowledge to craft and evaluate the proposed ordinance.

Air quality and power generation. Not all power is created equally. We saw news reports regarding a spectacularly dirty data center in Tennessee. This was particularly troubling for us because our area already suffers from air quality challenges. Therefore, we were concerned about the additional problems on-site power generation could cause.

A nearby municipality is served by a major high-voltage transmission line, making it an obvious candidate for large-scale data center development. I found through my research that Hampden Township currently lacks a grid interconnection of that magnitude, but it possesses a potentially more strategic asset: close proximity to the Mariner East Pipeline, which delivers abundant, relatively inexpensive natural gas from the Marcellus Shale to export terminals at Marcus Hook. That access creates a fundamentally different economic pathway—one centered on “bring-your-own-power” and behind-the-meter generation—where on-site electricity can be produced more reliably and, in some cases, more affordably than grid-supplied power. I felt it was important not to focus so narrowly on grid capacity that you missed how these behind-the-meter economics could reshape both development pressures and environmental risks.

I learned that in areas without natural gas or adequate grid connectivity, data centers rely on diesel- or natural-gas internal-combustion gensets because they are cheap and readily available, despite being highly emissions-intensive. Cleaner turbine-based systems are far more expensive and face multi-year waitlists, yet they still emit PM2.5 (particulate matter less than 2.5 micrometers) and other harmful pollutants. In response to these “dirty air” outcomes, Hampden’s then proposed ordinance was updated to strictly limit on-site generation: it is prohibited except for backup purposes, testing is restricted to normal business hours, and only clean, non-combustive technologies—such as natural-gas-powered fuel cells—are permitted, where the primary byproduct is carbon dioxide rather than criteria pollutants. The ordinance also includes a fail-safe tied to public health, requiring operations to be curtailed when the EPA Air Quality Index reaches 70 or higher, using two designated monitoring stations to ensure clear, enforceable accountability.

Water impacts. Public comments at the Board of Commissioners meeting and public hearing raised concerns about water use and its potential effects on the water table, including wells running dry and impacts on natural waterways such as creeks, runs,

. . . Zoning, Water & Energy Usage, and PA Case Studies

and rivers. For advice on how to handle this issue, we turned to Ginny Kerslake with Food & Water Watch. She provided insight and suggestions to added drought and water-table protection component that relies on warnings and thresholds issued by the Pennsylvania Department of Environmental Protection and the Susquehanna River Basin Commission to require curtailment of withdrawals from the water table. Additionally, we reviewed testimony from the public hearing indicating that local water tables are already running low and that area creeks are at historic lows. The ordinance includes provisions addressing private wells, requiring data center operators to pay for the redrilling or restoration of wells if their operations cause water loss to well-dependent homes.

Protecting the water table was not the only water-related issue. We learned that Data centers require huge volumes of water to cool their operations, and various systems are used to achieve this. While closed-loop systems pose minimal risk to groundwater, some facilities use open-loop systems that withdraw water from the aquifer and then reinject or discharge it. I conferred with Environmental attorney Jennifer Gates, with Pearl Legal Group in Portland, Oregon, who suggested requirements in the proposed ordinance to ensure these systems do not contaminate drinking water or degrade the aquifer. The ordinance requires testing and verification that any water returned to the ground is of equal or better quality than when it was withdrawn. These safeguards were added to protect local wells and groundwater resources from unintended contamination.

Noise and vibration. Based on comments from a Loudoun County, Virginia, resident at the prior Board of Commissioners public hearing and meeting, we learned this is a significant problem for residents near data centers, so we included strict noise and vibration limitations in the ordinance.

Decommissioning. While artificial intelligence and data centers are currently experiencing rapid growth—often compared to the dot-com boom

of the late 1990s—history shows that not every boom lasts forever. To protect the community in the event of abandonment caused by financial failure, mismanagement, or industry contraction, Gates suggested that the ordinance require a decommissioning bond. This ensures that funds are available to properly dismantle facilities and remediate sites if operations cease. Hampden Township has already experienced the long-term consequences of abandonment, including a former manufacturing facility that shuttered its operations, leaving deteriorating buildings and environmental contamination. This bond requirement is intended to ensure that such a burden never again falls on taxpayers or future generations.

Light pollution. During discussions at an environmental meeting, we learned that data centers are frequently over-illuminated and can generate significant light pollution. Unlike traditional industrial uses, these facilities often operate around the clock and rely on extensive exterior lighting for security and operations. Excessive nighttime lighting can disrupt migratory bird navigation, which depends on natural light cues, and can interfere with the sleep, health, and quality of life of nearby residents. In response, the proposed ordinance addresses lighting impacts to ensure that necessary illumination is carefully controlled, appropriately shielded, and designed to minimize off-site glare and environmental disruption while maintaining safety and operational needs.

Land use considerations. The proposed ordinance changed data centers from permitted use to conditional use in appropriate zoning districts. As a proposed Conditional use, I felt it ensured the Township would have tighter controls on what could be built and the specifications developers would have to meet.

Having what we thought was a fairly thorough ordinance drafted, we were able to develop a comprehensive, forward-looking ordinance which is now working its way through an official review with

Pennsylvania Data Centers . . .

Township Staff, Planning Commission, and County Planning Agency, and for public hearing and action by the Board of Commissioners.

Data center operations are evolving quickly, and, to some degree, this evolution is intended to mitigate negative impacts and risks. For that reason, ongoing monitoring of this issue is important. It is possible that data centers could be a net positive development for a community if these impacts and risks are well-managed, not just by local ordinances, but by technological changes. On the other hand, the size, scale, and number of data centers can cumulatively increase otherwise manageable individual impacts. Data centers perform better when grouped, so the proliferation of centers in one area is a major consideration. Another fact worth noting is that data center impacts extend beyond a township's authority to regulate. A collective effort is needed to ensure the Public Utility Commission and the state are effectively regulating data centers to avoid those impacts. For example, utility rates for residents could increase because the costs of new and improved electricity infrastructure solely to support data centers are

charged to all residents rather than just the data centers.

I will conclude with a few lessons we learned from this experience. First, remember that you represent your residents, so I encourage you to consider their thoughts and concerns. Next, don't try to act fast. Instead, take time to understand the potential effects and do it right. Finally, don't feel like you have to do it alone. I encourage you to reach out to experts for help. The long list of individuals and nonprofits included in this article is a sample of the resources available to help any township facing the daunting task of creating a data center ordinance.



Kristi Smith is President of the Board of Commissioners at Hampden Township

13 Questions to Ask When Considering a Data Center Proposal

BY SUSAN SCHRACK WOOD, DIRECTOR OF COMMUNICATIONS, THE LEAGUE

- 1. Where does the developer want to place the data center?**
- 2. How large is the proposed data center?**
- 3. Can the proposed site handle additional traffic and construction vehicles?**
- 4. What is the cooling system- closed loop, air cooling, or evaporative cooling?**
- 5. Can we handle the additional water consumption (depending on the cooling system)**
- 6. Can the existing electrical grid support the demand?**
- 7. What happens during emergencies or extreme weather- do data centers get priority?**
- 8. What will be the power source for this center?**
- 9. What are the emissions implications? Unless powered by renewable sources, data centers increase the carbon footprint.**
- 10. Is this facility consistent with our comprehensive plan?**
- 11. Does this facility advance our economic development goals?**
- 12. Will it help or hinder our community's evolution over the next 20-30 years?**
- 13. How do the residents feel about this proposal?**

Public Communication in Data Center Development: *How to discuss issues with your community?*

BY SUSAN SCHRACK WOOD, DIRECTOR OF COMMUNICATIONS, THE LEAGUE

In navigating the data center development process, a very important aspect is communication with your residents and your community. This can be a fairly intimidating aspect of development, particularly if your governing board has an uneasy relationship with your residents. Or your residents dislike change in general.

Community support or opposition can make the process much smoother or much more difficult. Some communities are more open to the idea of development, and others are more resistant. Development, by its very nature, means change and change can bring concerns about future impacts on standards of living, and fears of the unknown.

Regardless of how your community views change, NOT communicating plans and proposals is not a viable option. So here is some suggested messaging for communicating different aspects of the proposal and development process. These messages can be used on social medias, traditional media statements, and in meetings. As always, you should use these as a starting point and personalize them for your own unique communities and populations.

Suggested Messaging Templates:

Economic Benefits Messaging

"Strengthening Our Local Economy" Data centers represent a significant investment in our community's future. This facility will generate [X] construction jobs over [timeframe] and [X] permanent positions with competitive wages and benefits. Beyond direct employment, the project will create opportunities for local contractors, suppliers, and service providers. The facility is projected to contribute \$[X] million annually to our tax base, supporting essential services like schools, infrastructure, and public safety.



"Building for Tomorrow's Economy" As our economy becomes increasingly digital, data centers are critical infrastructure—much like highways and power plants were in previous generations. By attracting this investment, we're positioning our community as a hub for modern technology and ensuring our relevance in the 21st-century economy.

Infrastructure and Investment Messaging

"Smart Growth with Community Standards" This development will be subject to rigorous site plan review and must meet all local zoning, environmental, and safety requirements. We're working to ensure the facility integrates appropriately with surrounding land uses and maintains our community's character. The developer has committed to [specific commitments like buffering, architectural standards, traffic improvements].

"Infrastructure Improvements for Everyone" The data center project includes [road improvements, utility upgrades, stormwater management] that will benefit the broader community. These infrastructure enhancements, funded primarily by the developer, represent investments that would otherwise fall to taxpayers.

. . . Zoning, Water & Energy Usage, and PA Case Studies

Environmental and Utility Messaging

"Responsible Resource Management" We understand concerns about water and energy consumption. The facility will [specific commitments: use advanced cooling technology, implement water recycling systems, source renewable energy]. We're requiring detailed impact studies and ongoing monitoring to ensure municipal resources remain adequate for all residents. The developer has committed to [specific environmental measures].

"Addressing Climate Considerations" Modern data centers are increasingly focused on sustainability. This facility plans to [use renewable energy sources, achieve efficiency certifications, implement waste heat recovery]. While any industrial facility has environmental impacts, data centers are essential to the digital services we all depend on daily—from healthcare to banking to education.

Transparency and Engagement Messaging

"Your Voice Matters" We're committed to an open process. We'll be hosting [public hearings, community meetings, online forums] where you can ask questions, voice concerns, and learn more about the project. Your input will help shape the conditions and requirements we place on this development.

"Keeping You Informed" We'll provide regular updates throughout the review and construction process through [website, newsletter, social media, community meetings]. You can access project documents, impact studies, and meeting minutes at [location/website]. We're here to answer your questions at [contact information].

Addressing Concerns Directly

"We Hear Your Concerns About [Traffic/Noise/Visual Impact]" These are valid considerations. We're requiring the developer to [conduct traffic studies, implement noise mitigation, provide landscaping buffers]. The facility will operate under strict performance standards, and we'll have mechanisms to address any issues that arise.

"Balancing Growth and Community Character" We understand that change can be unsettling. Our job is to carefully evaluate whether this project serves our community's long-term interests while protecting what makes our area special. We're not approving anything that doesn't meet our standards or serve our residents' needs.

Call to Action Messaging

"Get Involved"

- Attend our public meeting on [date] at [location]
- Submit comments by [deadline] to [email/address]
- Visit [website] for project documents and updates
- Contact [office/official] with questions at [phone/email]

"Together We'll Make the Right Decision" This is an important decision for our community's future. We're committed to a thorough, transparent process that weighs all factors—economic, environmental, and social. Your participation helps ensure we make the choice that best serves our community's long-term interests.

Some key points to remember as you consider your communication:

- **Be honest about trade-offs:** Acknowledge that development involves balancing benefits and impacts
- **Avoid overpromising:** Use specific, verifiable commitments rather than vague assurances
- **Show you're listening:** Reference specific community concerns and explain how they're being addressed
- **Provide context:** Help residents understand how data centers fit into broader economic and technological trends
- **Emphasize process:** Demonstrate that decisions follow established procedures with multiple checkpoints
- **Stay accessible:** Use plain language and avoid technical jargon



2026

DISTRICT MEETINGS



Pennsylvania Municipal League



MARCH 11

Northcentral



Johnstown
Frank J Pasquerilla
Conference Center

MARCH 12

Southcentral



Camp Hill
Borough Office
Prosser Hall

APRIL 15

Southeast



Abington Township
Crestmont
Clubhouse

APRIL 17

Northeast



Carbondale
Anthracite Hotel

APRIL 28

Northwest



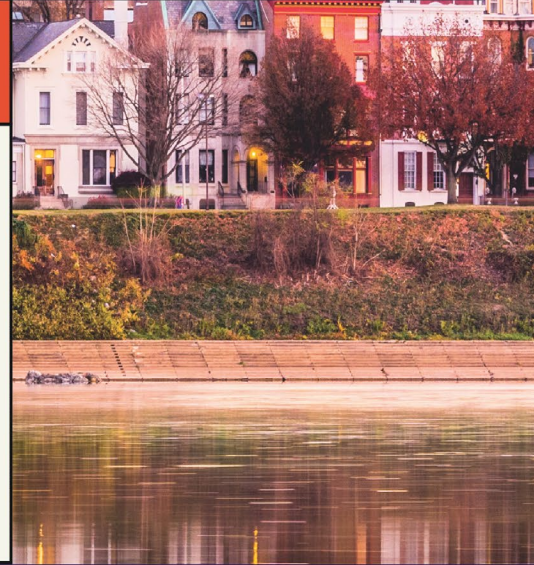
Warren
Conewango Club

APRIL 29

Southwest



South Fayette
Township
Municipal Center



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U•COMP Unemployment Compensation Trusts

SUBMITTED BY ELIZABETH HENRY, TRUSTS MEMBER SERVICES MANAGER

Would you be surprised if you were informed by Labor and Industry (L&I) that an unsatisfactory work performance discharge can render the claimant eligible for unemployment benefits? It is often viewed by L&I that appropriate training of the employee is the employer's responsibility.

Unsatisfactory work performance is not considered willful misconduct.

Discharge: Section 402(e) provides that an individual who is discharged from employment for reasons that are considered to be willful misconduct connected with his/her work, is not eligible to receive benefits. The employer must show that the employee's actions rose to the level of willful misconduct. "Willful misconduct" is considered an act of wanton or willful disregard of the employer's interests, the deliberate violation of rules, the disregard of standards of behavior that an employer can rightfully expect from an employee, or negligence that manifests culpability, wrongful intent, evil design, or intentional and substantial disregard of the employer's interests or of the employee's duties and obligations. While it is the employer's prerogative to discharge an employee, an employee is not ineligible for UC benefits unless the discharge is due to willful misconduct. Pennsylvania's courts have provided guidance in determining an individual's eligibility in specific situations involving a discharge for willful misconduct.

Unsatisfactory work performance is when the employee is working to the best of his/her ability, but not satisfactory to employer. If the claimant is performing at their best capacity and not satisfactorily to the employer, this should be clearly documented by the employer.

However, it is willful misconduct when an employee shows an intentional and substantial disregard of the employer's interests. This is where the employer shows that the claimant was capable of doing the work, but was not performing up to standards despite warnings and guidance.

While it is the employer's prerogative to discharge an employee, that individual is eligible for Unemployment Compensation benefits unless the discharge is due to willful misconduct. Any deliberate disregard for the employer's policies can be documented and presented in writing to the employee for signature, not necessarily for the employee's approval, as part of a case to be presented at an L&I unemployment hearing.

In order to create a case/file on the employee, be it poor performance or misconduct, follow the advice of L&I ... document, document, document!

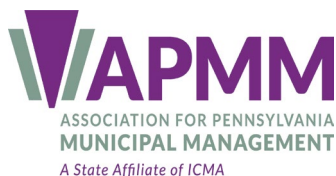
If you are a member of an unemployment program, such as U•COMP, you will have a representative in your corner interfacing with PA Labor and Industry.

Please contact Elizabeth Henry for a non-binding proposal at: ehenry@pml.org or by calling 1-800-922-8063 ext 250.

APMM President's Message



DAN SANTORO
MANAGER
CRANBERRY TOWNSHIP



APMM.net

Beyond Data Centers: Just Good Municipal Leadership

Few land use and economic development topics have generated as much interest and as much apprehension in recent years as data centers. Across Pennsylvania, communities are fielding questions about large footprints, energy demand, tax impacts, infrastructure strain, and long-term land use implications. Some municipalities see data centers as a significant opportunity; others view them as a poor fit for their community's character, capacity, or goals.

That tension is precisely why data centers serve as such a useful example for municipal managers and elected officials. The real lesson is not about data centers themselves, but about how we approach complex policy issues that can shape our communities for decades.

There is no universal answer on whether data centers are "good" or "bad." In some municipalities, they align well with existing industrial zoning, available infrastructure, and long-term economic strategies. In others, the tradeoffs like energy consumption, water use, or limited job creation relative to land use may outweigh the benefits. Both conclusions can be correct. What matters most is not the outcome, but the process used to reach it.

Municipal managers are uniquely positioned to lead that process. Our role is to ensure that policy discussions are grounded in thorough research, clear facts, and an honest presentation of multiple perspectives. That means understanding not only the potential upsides, but the downsides too. It means consulting the appropriate professionals, and it means learning from peer communities that have already navigated similar decisions, both successfully and unsuccessfully.

Equally important is how we frame these issues for our elected officials and residents. Complex policies deserve more than sound bites. Data centers, like many modern policy challenges, can be both an opportunity and a concern at the same time. Presenting only one side of the equation, whether overly optimistic or reflexively skeptical, does a disservice to decision-makers and erodes public trust.

Fairness and balance are not signs of indecision; they are hallmarks of good governance. Municipal managers should strive to present the benefits and the drawbacks of any policy consideration with equal clarity. Our credibility depends on being seen as honest brokers of information, not champions of a predetermined outcome.

Finally, data centers remind us that "fit" matters. Just because a policy, project, or development works well in one municipality does not mean it belongs in every municipality. Community values, infrastructure capacity, comprehensive plans, and long-term goals must all factor into the decision. Enabling those conversations in our communities is the job.

Data centers may be the issue of the moment, but they are far from the last complex policy challenge our communities will face. If we treat each issue with the same rigor, transparency, and respect for differing perspectives, we not only make better decisions, we strengthen the foundation of local government itself.

Some APMM business - by the time this hits your mailboxes, we will have completed our Winter Executive Development Workshop and will be gearing up for our Annual Conference in May. Please be sure to join us for the annual conference in Pittsburgh in May; it's going to be a good one!

Sincerely,

Dan Santoro

Dan Santoro

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PSATC President's Message



TODD K. MILLER
COMMISSIONER
CRESENT TOWNSHIP



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We live in a digital age underpinned by data centers. Whenever you check your email, message someone, visit a website, use social platforms, stream music or films, order a ride, interact with GenAI services, or shop online, your requests are routed through these specialized facilities that house information technology infrastructure.

Every type of digital interaction ultimately depends on a data center, even cloud computing, (which feels virtual) relies on enormous, hyperscale data centers for processing and interconnection.

Let's explore how data centers shape daily life and keep the digital world running smoothly.

- 1. Supporting Communities** - Many people don't realize just how vital data centers are to everyday living. They work behind the scenes across many essential sectors—banking, healthcare, emergency response, government, non-profits, utilities, transport, education, shopping, and entertainment all depend on them. If data is involved in a service, data centers play a part.
- 2. Powering Communication** - The majority of modern communication is digital, and data centers are the backbone. Without them, we wouldn't have reliable email, messaging, telecommunication, video conferencing, websites, or social media—they're responsible for processing, storing, and delivering our data.
- 3. Boosting the Economy** - Data centers are key drivers of local economies. By supporting businesses with the connectivity and applications they need, they help companies thrive. Colocation data centers, in particular, can attract new organizations and corporate branches to a region thanks to their cost-effectiveness, security, and efficient connectivity.

4. Empowering Remote Work - Remote and hybrid working has become the norm for many, enhancing work-life balance. The ability to work from home is possible because of data centers. Tools like video calls, collaboration software, SaaS, VPNs, and cloud services all run on servers inside these facilities. Colocation sites offer reliable, nearby connections, which benefit distributed teams.

5. Adding to Tax Revenues - Data centers make a significant financial contribution to local governments, providing millions in property tax revenue. According to PwC, the industry contributed \$162.7 billion to government revenues at different levels in 2023—a remarkable 146% increase over six years.

6. Enabling Innovation - Data centers are at the heart of technological progress, powering advanced technologies such as AI (Artificial Intelligence), ML (Machine Learning), development environments, quantum computing, and blockchain. Even widespread innovations like the cloud, IoT (Internet of Things), edge computing, and AAS (as a service) models rely on data

PSATC President's Message

centers. They are crucial for disruptive tools shaping the future—like AR/VR (Augmented Reality/Virtual Reality), self-driving cars, predictive analytics, cryptocurrency, and whatever comes next. Colocation centers are ideal for these demanding, intensive scenarios due to their high capacity and speed.

Colocation: Fueling the Modern World

For many organizations, colocation offers an optimal IT solution—making data centers more accessible, dependable, efficient, and sustainable. Because of these benefits, colocation is leading the evolution of data centers and remains tightly woven into our daily routines and communities.

Data centers have become an essential component of modern society and their significance is expected to increase. As with any emerging technology or innovation, it is critical for society to develop effective strategies for integrating these advancements into daily life. Municipalities will need to do the same.

Sincerely,

Todd K. Miller

Todd K. Miller

Legislative Status Report STATE



PREPARED BY AMY STURGES, LEAGUE DEPUTY EXECUTIVE DIRECTOR – ADVOCACY – asturges@pml.org
KAITLIN ERRICKSON, GOVERNMENTAL AFFAIRS MANAGER – kerrickson@pml.org

All legislation can be found on the General Assembly's website:

legis.state.pa.us

Legislative Update

Governor Shapiro's 2026/2027 Budget Includes Data Center Regulation

On February 3, Governor Josh Shapiro gave his fourth budget address to a joint session of the legislature. Data centers took center stage as the Governor announced GRID – the Governor's Responsible Infrastructure Development – which aims to hold data center developers accountable to strict standards.

Governor Shapiro's GRID standards ask for cooperation from data center developers up front to ensure quicker permitting and tax credit availability. In order to achieve this, the Governor laid out four policy proposals.

1. Developers must bring their own power generation or pay for new generation.

2. Developers must commit to strict transparency standards and direct community engagement.
3. Data center projects must hire and train local workers.
4. Developers must commit to the highest standards of environmental protection.

Of course, the General Assembly must introduce and pass such policies into law before any of the GRID standards can take effect.

Data Center Hearings

Hearing on House Bills 2150 and 2151

February 2, 2026

[Recording](#)

House Bill 2150 would establish annual energy and water reporting requirements for data center facilities. House Bill 2151 would direct DCED to develop a model ordinance to assist municipalities with regulating data centers.

Hearing on Energy Costs

January 20, 2026

[Recording](#)

This hearing, held in conjunction with the Consumer Protection, Technology, & Utilities Committee, tackles energy affordability in the Commonwealth, specifically why utility bills are rising, and what should the General Assembly do to reduce costs?

Hearing on Small Module Nuclear Reactors

November 17, 2025

[Recording](#)

This hearing provides information on small module nuclear reactors (SMRs), which can be used as a power source for data centers. House Bill 2017, which recently passed the House, would allow the Department of Environmental Protection to adjust the current fee structure to account for SMRs in the future, removing an obstacle to investment in SMR technology.

Hearing on House Bill 1834

October 22, 2025

[Recording 1](#) | [Recording 2](#)

House Bill 1834 would establish the regulatory framework for data centers in Pennsylvania by directing the PUC to establish regulations on data centers, including requirements for security deposits, grid infrastructure improvements, and load restrictions during emergency conditions.

Data Center Legislation

The Data Center Act

First Consideration in the House, February 2, 2026

[House Bill 1834 \(PN 2846\)](#), introduced by Representative Robert Matzie, would authorize the Public Utility Commission to promulgate temporary regulations for large load users. It would prohibit an electric distribution company from recovering costs from ratepayers, except from large load users for costs that are directly attributable to them. Each large load user, with at least 25 megawatts annual peak load, must contribute \$40,000 per megawatt for the first 25 megawatts and \$50,000 per additional megawatt to the Low-Income Home Energy Assistance Program Enhancement account. The bill would create a grant program to set up small-scale energy systems and establish a renewable energy requirement.

Data Centers and Prevailing Wage

House Finance Committee, December 3, 2025

[House Bill 2061 \(PN 2645\)](#), introduced by Representative Elizabeth Fiedler, would require all contractors and subcontractors that build a data center pay their workers no less than the prevailing minimum wage in order for the development to be eligible for certain tax exemptions.

Water Consumption of Data Centers

House Energy Committee, January 20, 2026

[House Bill 2150 \(PN 2777\)](#), introduced by Representative Kyle Mullins, would require all data centers to submit an annual report of their energy and water use to the Department of Environmental Protection. The report must include the total energy and water use, maximum day demand, energy and water sources, and any measures taken to increase efficiency and protect the environment. A data center that fails to submit a timely report faces a \$10,000 fine per day until the report is submitted. Fines would be placed into the low-income electric customer assistance program of the energy distribution company for the service areas in which the data center is located.

Data Center Model Ordinance

House Energy Committee, January 20, 2026

House Bill 2151 (PN 2778), introduced by Representative Kyle Donahue, would direct the Center for Local Government Services within DCED to develop a model zoning ordinance for data centers to be updated on an annual basis.

Artificial Intelligence and Data Center Act

Senate Communications and Technology Committee, July 14, 2025

Senate Bill 939 (PN 1424), introduced by Senator Greg Rothman, would create the Artificial Intelligence and Data Center Act to fast track the development of data centers in the Commonwealth.

Accelerated Data Center Permitting

Senate Environmental Resources and Energy Committee, September 5, 2025

Senate Bill 991 (PN 1142), introduced by Senator Camera Bartolotta, would allow the Department of Environmental Protection to select at least 15

preapproved sites for data center development. The department would receive funding through the SITES program. The bill would establish two phases of accelerated permits if located on a preapproved site.

Phase one includes an application submission for accelerated permits, including initial zoning clearances and submission of all environmental justice and brownfield requirements, as well as all NPDES and earthmoving permits. Phase two requires the submission of all final design and engineering plans along with an air quality permit. Lastly, in order to be eligible for the accelerated permitting application, a data center development must ensure all worker will be paid the prevailing minimum wage.

House and Senate Session Days 2026

House

March 23-25

April 13-15, 27-29

May 4-6

Senate

March 16-18, 23-25

April 20-22

May 4-6

*reminder - session dates are subject to change



AS AI SPREADS THROUGH CITY HALL, CHIEF AI OFFICERS EMERGE

AUTHORED BY CHRISTOPHER JORDAN, SENIOR SPECIALIST ON URBAN INNOVATION AT THE NATIONAL LEAGUE OF CITIES.



Artificial intelligence (AI) is popping up across local government in surprising ways. Customer service desks are testing translation tools, clerks' offices are using Large Language Models (LLMs) to summarize documents and planning and public works teams are using predictive analytics to conduct asset assessments. Together, these developments raise a basic organizational question for city governments: Who, if anyone, is responsible for overseeing AI as it cuts across departments, data systems and workforce practices?

In response to a growing need for coordination, a small but growing number of cities are creating dedicated AI leadership roles, sometimes called **Chief AI Officers**.

At the state and federal level, [chief AI officers have become more common in recent years](#). Locally,

adoption has been slower and more varied. Some cities have created formal executive positions while others have folded AI oversight into existing IT or data roles. Others have relied on temporary fellowships and working groups.

Designating an AI lead is one approach cities are adopting to improve the conditions for innovation in local government. In general, chief AI officers are tasked with assessing data architecture, setting governance frameworks and overseeing the deployment and evaluation of new pilot projects.

Early Examples from Seattle and Louisville

In late 2025, **Seattle** and **Louisville** became two of the first U.S. cities to appoint executive-level AI leaders.

Seattle, Wash. [appointed Lisa Qian as its first City AI Officer](#). The role sits within the city's Information

Technology Department and is tasked with overseeing AI governance, technical architecture, workforce training and coordination across departments. City leaders said the position will provide clearer standards, objectives and accountability as AI use expands across public services, rather than as a push for rapid deployment. Seattle has been a leader in the AI space as one of the first cities to [formalize a Generative AI Policy \(PDF\)](#) in 2023, and adopted a [comprehensive AI plan \(PDF\)](#).

Louisville, Ky. took a similar step in December 2025, [naming Pamela McKnight as its first Chief AI Officer](#) and establishing an enterprise-wide role to coordinate AI-related work across city departments in collaboration with existing IT leadership. Like Seattle, Louisville recruited from the private sector, seeking a candidate with experience leading large-scale AI upskilling and governance efforts. Shortly after appointing a Chief AI Officer, the city [announced its first AI pilot project](#), focused on the permitting and development review process. This project will test whether AI tools can help identify bottlenecks and reduce delays using the city's existing codes and data. City officials have described the effort as a limited, time-bound pilot, with findings expected to be shared publicly once the project concludes.

Considerations for City Leaders

Most cities have not appointed dedicated AI leads but remain focused on foundational work such as developing AI use policies, improving data governance and building basic AI literacy among staff.

Before appointing an AI lead, city leaders may find it helpful to consider:

- What problem is the city trying to solve by creating an AI leadership role? Coordination, governance, capacity or something else?
- How would an AI lead fit within the city's existing leadership structure and decision-making processes?
- What guardrails or policies are needed to ensure AI use aligns with the city's values, priorities and public trust obligations?

Next Steps for City Leaders

- Explore AI policies in the [City AI Governance Dashboard](#).
- Unpack AI applications, ethics and governance in the [NLC AI Toolkit](#).

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Public Finance

DIGITAL DEFENSE

CYBERTHREATS AND CHALLENGES FOR LOCAL GOVERNMENTS

BY KATIA FROCK, DIRECTOR, PFM ASSET MANAGEMENT, A DIVISION OF U.S. BANCORP ASSET MANAGEMENT, INC.

Over the last few years, PLGIT has developed articles about ransomware, a malicious, infiltrating software program designed to make a municipality's information and systems inaccessible until that municipality pays the requested "ransom" to restore them.

In terms of cybercrime, ransomware continues to be a leading challenge to local governments of all sizes, but ransomware is not the only type of digitally-deployed threat that can disrupt local government operations.

In this issue, PLGIT will give a brief description of several cyberthreats, as well as a few suggestions as to how to guard against them.

Six Common Cyberthreats: Terms to Know

Ransomware As we've cited in previous articles — including this one — ransomware remains one of the most damaging cyberthreats to local governments. These attacks frequently target local governments to take advantage

of outdated software and insufficient cybersecurity protocols to infiltrate and take over critical systems and information. In addition to "hijacking" these elements, modern ransomware groups will often threaten to leak information if they aren't paid to restore a Local government's systems¹. This can increase damage even further by combining operational shutdown with the potential for reputational harm.

Phishing and Social Engineering

Phishing attacks are among the most common and effective cyberthreats. These deceptive emails or messages mimic an authentic inquiry, and trick a municipality's employees into clicking malicious links or divulging sensitive credentials. Unlike more complex attacks, phishing targets human psychology and networks of trust. According to the 2024 Verizon Data Breach Investigations Report, 74% of all network breaches involve a human element, such as errors or phishing². Local governments are frequent targets because of

their public-facing nature and frequent lack of regular exposure to cyberthreats.

Social engineering goes beyond email, and can incorporate fake websites, voice calls (vishing), or texts (smishing) to create an even more convincing façade to encourage an individual to respond to requests for information, thereby opening up a local government's system to a cyberattack³.

Supply Chain and Third-Party Risk

Local governments increasingly rely on third-party vendors for essential services like billing, public safety, and infrastructure monitoring. This interconnectedness exposes them to supply chain attacks, where a breach at a vendor gives attackers access to its customers.

This is a regular type of threat to businesses, but local governments that use contractors for critical operations are equally vulnerable. Smaller municipalities may not have formal vendor-vetting procedures or contracts requiring cybersecurity standards. A 2023 Ponemon Institute study found that 53% of local governments

lacked a clear understanding of the cybersecurity measures of their third-party providers⁴.

Critical Infrastructure Attacks

Cyberattacks on physical infrastructure—such as water treatment plants, traffic signals, and emergency services—pose a grave threat. These operational technology (OT) systems, many of which are decades old, were not built with cybersecurity in mind but are now connected to the internet for remote access and monitoring. In a widely publicized 2021 incident, hackers remotely accessed a water treatment plant in Oldsmar, Florida, and attempted to raise sodium hydroxide levels to dangerous concentrations. Fortunately, the attack was caught and reversed by a worker in real time⁵.

Other examples include targeted attacks on energy grids and traffic systems. The FBI and Cybersecurity and Infrastructure Security Agency (CISA) have repeatedly warned of state-sponsored threat actors targeting critical infrastructure in the U.S., and have encouraged local governments to isolate OT systems from the internet, apply regular security patches, and collaborate with federal entities like CISA for threat intelligence⁶.

Data Breaches and Privacy

Violations Local governments collect enormous amounts of personal and sensitive data, including social security numbers, birth certificates, property records, and more. A breach of this data can result in lawsuits, regulatory penalties,

identity theft, and erosion of public trust.

In 2023, a ransomware group leaked juvenile court records and police data from Oakland, California, after the city refused to pay a ransom⁷. The exposed data included sensitive documents, social security numbers, and internal memos—creating both legal and ethical fallout. In response to incidents like this one, regulations like the California Consumer Privacy Act (CCPA) and Virginia's Consumer Data Protection Act (CDPA) expanded the responsibilities of local governments regarding data protection. Noncompliance or lax controls can lead to fines and reputational damage.

Malware Infiltration and

Persistence Beyond ransomware, other forms of malware pose significant threats to local governments. Malware can infiltrate systems silently, often through phishing emails, infected websites, or compromised software updates. Once embedded, it can steal credentials, export data, or provide persistent remote access to attackers. Examples of these types of malware include trojan horses, keystroke logging programs, and software that takes over control of an infected computer or system.

One of the most concerning aspects of malware is persistence. Advanced malware can embed itself in system memory or firmware, reactivating even after device reboots. Some strains also disable antivirus software or communicate with command-and-control servers to download additional payloads⁸.

How Can a Municipality Better Protect Itself?

Everyone in local government with internet access should understand the current cyber-risks that exist, and their role in helping to avoid potential breaches. The reality is that today, you may be as likely to benefit from your cybersafety training as you are from your fire safety or medical emergency training.

The fallout from a cyberattack can be at best, inconvenient, and at worst, crippling. The good news is that there are ways to help anticipate and prevent them:

Spam Filters Spam filters can stop almost all potentially malicious emails, especially emails containing suspicious attachments or links. Unfortunately, it only takes one email to get through to cause significant damage. Therefore, end-users must be vigilant as well, understanding the risks associated with clicking on unknown links and downloading attachments.

Antivirus Software Antivirus software plays an important role in protecting against ransomware, since it is a type of malware. While antivirus software may not prevent the next big breach, if kept up-to-date, it can be good way to help protect against more well-known forms of malware. To keep antivirus software and signatures current, we recommend that municipalities

regularly conduct scans of their individual computers and networks.

Vigilance As we've written in previous articles, vigilance might be the most important prevention measure when it comes to cyberthreats. Vigilance applies to both information technology processes and the people who use them. Each year, new software vulnerabilities are raised, and patches to fix them are issued, and some of the largest ransomware attacks take place after those weaknesses and solutions have already been identified.

Local governments should have a routine process for distributing and installing critical security patches, especially considering the increases in remote-work scenarios. They should also have trained security professionals who understand the vulnerabilities of their system and can take proactive steps to mitigate the risks.

Back-ups Since many cyberthreats are directly related to data, one of the chief ways to mitigate risk is to design a back-up system that is largely independent from a municipality's regular network.

This separation helps ensure that an attack that affects a primary system doesn't infect the back-up as well. Installing a back-up system will not prevent a cybersecurity threat, but it can make an attack less damaging, especially if a response is executed quickly.

Cyberattacks have reached new levels in the daily risk equation for local governments. While the most sophisticated attacks may

require equally sophisticated prevention measures, the majority can be avoided with widely available technology, a well-thought-out approach to network and data protection, and end-user vigilance and education.

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