

# Putting Data Center Development in its Place: A Community Toolkit

PennFuture recently released a **Model Ordinance for Data Center Development**.<sup>1</sup> This model ordinance is designed to help municipalities encourage sustainable development practices and mitigate the environmental impacts of the data center industry, *before* the industry comes to town.

**We need your help getting this resource to the desks of municipal leaders and encouraging them to take action.**

That’s why we developed this complementary Community Toolkit, which provides an overview of the model ordinance, information on the basic components of the municipal ordinance amendment process, and tips for encouraging municipal leaders to pass the model ordinance.

## STEP 1: UNDERSTANDING THE MODEL ORDINANCE

***Understand how PennFuture’s model ordinance addresses the data center industry and key advocacy points.***

### What is a model ordinance?

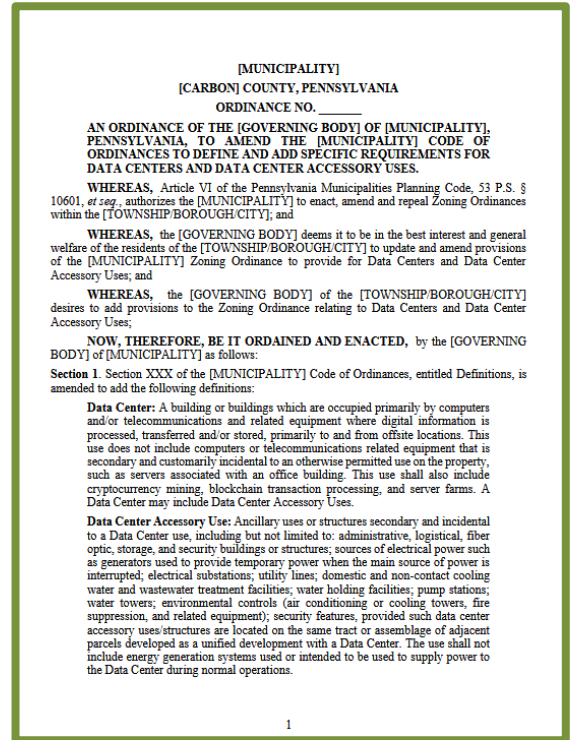
A model ordinance is a proposed ordinance that can be adopted by a municipality, either in full or in part. Model ordinances are typically written by agencies, non-profits, or other entities who have expertise in a specific area as a way to give municipalities a starting point on drafting new ordinances - or local regulations - saving municipalities time and resources.

### What does PennFuture’s model ordinance do?

PennFuture’s model ordinance addresses the fact that many municipalities in Pennsylvania do not have zoning ordinances that sufficiently define and address modern data center facilities.

Zoning ordinances allow a municipality to regulate how land is used within the municipality, by generally addressing uses of land and the impact of those uses on the surrounding property. It is how municipalities ensure that growth is orderly and reasonable and comports with the values and vision of the community. With its “community-wide framework,” zoning exists not for the furtherance of purely private interests, but for the benefit of the public. But, municipalities cannot

<sup>1</sup> Available at <https://pennfuture.org/Report/Data-Center-Model-Ordinance>. Hard copies available upon request to [info@pennfuture.org](mailto:info@pennfuture.org).



wait until a development is proposed and attempt to impose restrictions that have no basis in the zoning ordinance. By then, it is too late.

The problem: The rise in Artificial Intelligence (AI) in recent years has significantly increased the demand for data centers across Pennsylvania. With a growing market of AI tools like Chat GPT, Gemini, and Claude, aiming to increase efficiency for everyday tasks, problem solving and consumer access to information resulting in a growing reliance on information and analysis from these computer learning systems. This has led to the large-scale development of data centers that are needed to house servers, data storage systems, and network equipment. These data centers are expected to be massive, with campuses of more than 1,000 acres in some places, requiring an abundance of water, energy, and land. The result will be the type of land use that demands a new standard of regulation.

For the most part, municipalities have been caught unprepared for the onslaught of the data center industry and are scrambling to revise their ordinances to balance the economic development opportunities these facilities can bring with the health, safety, and welfare of the community. Appropriately addressing modern data center uses means not only revising zoning ordinances to accurately capture and reflect this new development landscape, but also revisiting zoning maps to ensure that these modern data center facilities are appropriately sited for the community as it exists now, not 10, 20, or even 50 years ago.

As a response, PennFuture’s model ordinance sets forth suggested requirements for the zoning of data center facilities, including placement, restrictions, and impact analysis, and mitigation.

### **What does PennFuture’s model ordinance not do?**

PennFuture’s model ordinance does not ban data center facilities or otherwise prevent them from being built within a municipality. The model ordinance cannot do that for one simple but critical reason: it would be unconstitutional to do so.

### **What makes PennFuture’s model ordinance so special?**

Key features of PennFuture’s model ordinance include:

- Definitions of data centers and related terms
- Noise and vibration standards
- Standards for water withdrawal and monitoring
- A procedure for remedying adverse impacts on surrounding water resources
- Landscape buffers and equipment screening

Readers may notice that one major concern is NOT addressed in the model ordinance—data centers’ power consumption. This is not an oversight. Local governments have little to no power to regulate what power source a land use must use, who is allowed to connect to the power grid, where energy infrastructure is located, or how much energy costs. These are all addressed at the state, interstate, and federal level and cannot be controlled by local ordinances.

## STEP 2: UNDERSTANDING THE MUNICIPAL PROCESS

**A brief overview of the municipal decision-making process as it relates to zoning ordinance amendments.**

Before we dig into the zoning ordinance amendment process, let's go over some **quick basics about zoning.**

**Municipalities have control over the use of the land through zoning ordinances:**

- **What is a land "use"?**
  - In this context, a use is a category of activity or structure to which land may be dedicated. Single-family dwellings, retail stores, and distribution centers are all examples of uses. Land uses do not necessarily require structures. For example, agriculture, parks and quarries are also land uses.
  - Land uses have different classifications such as "permitted", "conditional use", "special exception", or "not permitted." These classifications are based on the zone rather than the use itself; for example, a restaurant can be a permitted use in a commercial district, but a conditional use in a residential district.

### *What are the differences between permitted, conditional use, and special exception?*

*Permitted Use. (aka: use permitted "by right" or "as of right") A permitted use is a use that is permitted in a zoning district without review or approval from the governing body or zoning hearing board. A zoning permit from the municipal zoning officer is the only approval required to use the land for that purpose.*

*Permitted uses are typically uses that are common, well-understood, and not expected to cause significant impacts on surrounding properties. Common examples are individual single-family homes or small retail businesses.*

*Conditional Use. A conditional exception use is a use that is permitted in a zoning district only if the landowner or developer demonstrates at a public hearing that that certain specific, objective criteria set forth in the zoning ordinance are met. Applications for conditional use approval are decided by governing body of the municipality.*

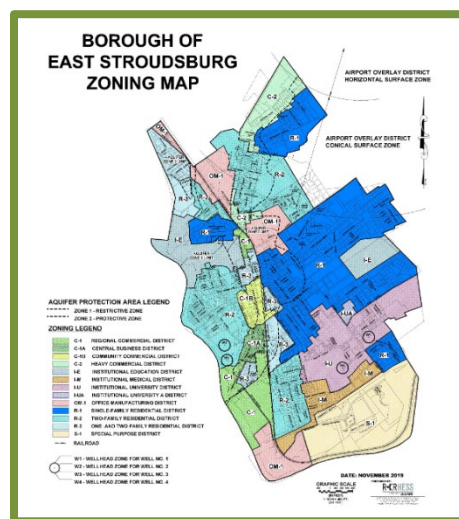
*Special Exception Use. A special exception use is the same as a conditional use, but applications are decided by the municipality's zoning hearing board, not the governing body.*

- **How does a zoning ordinance work?**
  - Typically, a zoning ordinance divides a municipality into a number of zoning districts or (sometimes called just "districts" or "zones"). These are shown on zoning maps, which are available online or through your local municipal office.

- Each zoning district has a unique set of restrictions that apply to the land within that district. These restrictions are set forth in the text of the zoning ordinance and may include things like which uses are permitted in the zoning district, the minimum lot size that is required for each use, how large structures may be, and how far back from neighboring property lines structures must be (“setbacks”).
- In general, the regulations in each zoning district are designed to create or maintain a certain “character” in that zoning district.
- Zoning ordinances can also control how land uses impact the natural environment by directing development away from sensitive environmental resources like steep slopes and flood plains and limiting how much of a property can be covered by impervious surface.

### *Examples of Zoning Districts*

*For example, an agricultural zoning district may allow only agricultural uses and single-family residences on very large lots to create a rural character. A medium-density residential district may allow a variety of housing types on smaller lots to create a more dense, “town”-like character. A commercial district may allow retail stores and other types of businesses. An industrial district may allow uses like factories, distribution centers, or quarries.*



Example of Zoning Map with Districts

### **How do zoning ordinances get adopted or amended?**

This process of drafting a zoning ordinance amendment often begins with the planning commission. There are several ways this process may be triggered. The governing body, zoning officer, or members of the public may alert the planning commission to the need for amendments, or the planning commission may decide on its own that amendments are necessary.

If the planning commission may work with the municipality’s staff, solicitor, zoning officer, engineer, outside consultants, county-level planners, landowners, and/or members of the public to draft a proposed ordinance. The planning commission may discuss a proposed ordinance at one or more public meetings, at which the public may comment.

Ordinance amendments can vary in scope. Some amendments add or change only a few words in the existing ordinance. Others add, delete, or replace entire sections of the existing zoning ordinance. When this is the case, the process of writing an ordinance may take many months, and the ordinance may go through several drafts. To help with this, a planning commission may

consider model ordinances created by outside organizations, such the PennFuture's model data center ordinance!

Like other model ordinances, PennFuture's model data center ordinance is designed to help speed up the process of drafting an ordinance amendment. A municipality can adopt the whole model ordinance, word for word, directly into their existing zoning ordinance, or it can adopt sections of it - like the definitions, or the water withdrawal provisions - while keeping the rest of their existing ordinance the same. The model ordinance gives planning commissions and governing bodies a jumping off point for an amendment that best fits their community's needs so they do not have to start "from scratch."

Once the planning commission has completed a proposed ordinance or amendment, it will submit it to the governing body for its consideration. It is also possible for the governing body to draft the ordinance itself, or with the help of staff or consultants, instead of having the planning commission do it. In any case, the governing body may hold a public work session or sessions to work through additional drafting issues. This too may take several meetings over a period of time. If the governing body does not feel there need to be changes to an ordinance proposed by the planning commission, it may skip this step.

When the governing body believes the ordinance amendment is finalized and ready to be adopted, it will publish notice of a public meeting to formally adopt it in a newspaper of general circulation. If the planning commission did not prepare the proposed amendment, the governing body will submit it to the planning commission at least 30 days before this meeting so that the planning commission has an opportunity to make recommendations. The governing body also must submit the ordinance to the county planning commission for its recommendations within the same timeframe.

At the public meeting, the public will have the opportunity to comment on the proposed ordinance or amendment before it is adopted. After hearing public comment, the governing body may vote to adopt the ordinance, or it may make changes based on the public comment and postpone the vote to another meeting. If the changes are significant, the governing body must re-advertise the meeting. You should know that by the time the governing body advertises an ordinance for adoption, it has likely spent considerable time drafting and reviewing it and is unlikely to make major changes at that late stage. The governing body and planning commission are much more likely to be receptive to suggested changes earlier in the process.

It is also important to remember that, even though it is often individual land developments that reveal the need for zoning ordinance amendments, amending the zoning ordinance is not a decision about a specific land development proposal and does not have the ability to change the process or outcome of any land development proposal that has already been submitted. Amendments apply **only** to land use proposals that are submitted **after** the ordinance is formally adopted by a vote of the governing body.

## **Getting to know your local officials and governmental bodies.**

There are a few key governing bodies that you should be aware of in your municipality as you advocate for adoption of PennFuture’s model ordinance

### Governing Body

The governing body is the group of elected officials that is primarily responsible for governing the municipality. What the governing body is called depends on the type of municipality. In cities, the governing body is called the city council. In boroughs, it is called the borough council. In townships, the governing body is called the board of supervisors or board of commissioners

The governing body has many responsibilities, one of which is passing and amending ordinances.

### Planning Commission

The planning commission is a body of volunteer residents of the municipality who are appointed by the governing body to provide advice on matters relating to land use and development. Some larger municipalities have a planning department with full-time paid planning staff instead of a planning commission. Most counties also have a planning commission, which performs a similar role as a municipal planning commission at the county level.

The planning commission usually does the first-round review of any zoning ordinance amendment. It will gather information, listen to comments, “work out the kinks,” and create a relatively polished proposed ordinance to present to the governing body. Except in the rare cases where a governing body has given it the authority to do so, the planning commission does not make final decisions on any matter, including whether to adopt or amend a zoning ordinance. Its only role is to collect and review information and make recommendations to the governing body so that the governing body can make informed decisions.

### Environmental Advisory Committee

An environmental advisory council (EAC) is an advisory body similar to a planning commission. Like the planning commission, the EAC exists to advise the governing body and other local governmental agencies on matters dealing with protection, conservation, management, promotion and use of natural resources, including air, land and water. Not all municipalities have EACs, but where they do, this group can be a valuable resource when considering ordinance amendments.

## **STEP 3: GET INVOLVED**

***Connect with your local elected officials, planning commission members, and environmental action committee members (EAC).***

Now that we know what PennFuture’s model ordinance can do for our communities and how the process to get the ordinance passed works, here are some tips on how you can advocate for these changes in your municipality. It’s important to note that all municipalities and communities are different, so these are just general advocacy points.



**Remember: if you wait until a data center facility development is proposed in your municipality, it is too late for PennFuture's model ordinance to help with that part project.**

## Collaborate & Educate

- Get to know your local zoning ordinance
  - What, if anything, does it say about “data centers”? Does it define “data centers”?
  - In which zoning districts are these uses allowed? Are they permitted as of right or as conditional uses or special exceptions?
- Talk to community members and other environmental or community groups in the area
  - If not yet formed, create a coalition or community group who can come together to promote the model ordinance to your municipality
  - Consider collaboration with different types of partners based on common concerns - impacts can include air, water, noise, light, as well as local housing and tax implications
- Host roundtables, workshops, and other gatherings to help educate yourself and other community members on both the threat of potential incoming data center facilities and the response (passing PennFuture's model ordinance)
  - We've included sample talking points as *Appendix A*.
  - PennFuture's informational video series about data centers and information about our model ordinance can be found on our website at: <https://pennfuture.org/Data-Centers>

## Build Momentum

- Publish a Letter to the Editor
  - Letters to the editor are usually written in direct response to an article, editorial, op-ed, or column that the target paper has printed. They can also be a reaction to or notification of a newsworthy event.
  - Letters to the Editor are a great way to:
    - Highlight emerging threats and offer solutions; and
    - Elevate voices of underrepresented interests and communities.
  - We've included a Letter to the Editor writing guide, drafted by our team for your reference, as *Appendix B*.
- Petitions or Sign-on Letters
  - Educate neighbors and get signatures in support of adopting PennFuture's model ordinance.
  - We've provided a sample petition and letter as *Appendix C*.

## Engage in Local Processes

- Attend municipal meetings
  - Know what's coming down the pike. Don't be afraid to ask questions at public meetings!

- Learn who your local decision-makers are (Planning Commission, EACs, Boards of Supervisors/Commissioners) and gauge their appetite for the model ordinance
- Attend regular meetings - in person or via Zoom (if available).
  - At most meetings, there is time at the very beginning for the public to offer comments. This is the appropriate time to introduce yourself, the ordinance and other resources, and explain why they should consider reviewing and adopting this ordinance.
  - You may have to go to multiple meetings to keep up the pressure on the municipality to adopt the model ordinance.
- Educate and advocate to your municipality
  - *This* is a critical part of the process - do not be afraid of this opportunity!
  - Invite your municipal officials to watch the recording of our Data Center Series webinar where PennFuture discusses the model ordinance and community impact.<sup>2</sup>
  - Be specific about your community, the impacts, and your concerns:
    - Each municipality has different issues. You are the expert on *your* community.
    - Be prepared with a written statement or talking points if you speak at public meetings. Use the Talking Points provided in *Appendix A* to get the conversation started.
  - Email or write a letter to your municipal leaders regarding your concerns about development and share the model ordinance and guidebook.
    - You can find your municipal officials through the Pennsylvania Dept. of Community and Economic Development's "Municipal Statistics" website.<sup>3</sup>
    - We've also provided a sample municipal letter in *Appendix C*.
  - Check your municipality's website or call or visit the office to find out when the planning commission, EAC and governing body meet.

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<sup>2</sup> Available at <https://pennfuture.org/Data-Centers>

<sup>3</sup> Accessible through this link: [https://apps.dced.pa.gov/munstats-public/ReportInformation2.aspx?report=LocalOfficial\\_Excel](https://apps.dced.pa.gov/munstats-public/ReportInformation2.aspx?report=LocalOfficial_Excel). Fill in your County and Municipality.

## Appendix A

### Talking Points in Support of PennFuture's Model Ordinance

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**In order to help us get the word out to your municipalities, we created this set of Talking Points to help you get the conversation started.**

*More information and details can be found in the Model Ordinance and related resources. Please reach out to Natalie Davidson, PennFuture's Civic Engagement Coordinator for Allegheny County, at [davidson@pennfuture.org](mailto:davidson@pennfuture.org) with any questions.*

#### **What is it?**

- This model ordinance is a tool to help control the impacts that modern data center and hyper-scale data center campuses have on local communities and the environment.

#### **What is data center?**

- Buildings that house IT equipment like servers, data storage drives, and network equipment that store and process digital data for companies or individuals.
- Data centers have existed for cloud storage for many years, but increased demand, mostly driven by the development of artificial intelligence (AI), has caused a dramatic uptick in development.
- Today's data center facilities come in all sizes, from shipping container-sized micro data centers to multi-building "hyperscale" facilities that cover hundreds or even thousands of acres.

#### **What's the Problem?**

- There are several major concerns with data centers from an environmental perspective, including power usage, water usage, impervious coverage, and noise.
- These facilities also use enormous amounts of electricity, putting strain on our electric grid and driving demand for more power, often generated from harmful fossil fuels like fracked gas. Some are even proposing to construct massive, fracked gas power plants on site. They also include up to hundreds of backup fossil fuel powered generators.
- The facility will often use water-based cooling systems that can consume hundreds of thousands of gallons of water per day, potentially depleting aquifers and surface waters.
- These facilities can convert vast swaths of land from farmland, woodland, and wetlands to impervious surface (buildings and pavement).
  - With hyperscale and multi-building campuses becoming more common, the conversion of large areas of forest or other natural ground cover to building and pavement risks dramatically altering wildlife habitat, stormwater runoff, and ecosystems.

- Increased impervious surface leads to:
  - Increased volume and velocity of stormwater runoff, which can cause increased flooding and other impacts.
  - Higher water temperatures due to stormwater runoff warmed by impervious surfaces and the removal of trees, which offer shade that cools both land and water.
- The equipment needed to run data centers can be very noisy and can generate a type of noise (low frequency hum) that is not adequately addressed by many existing ordinances. This can cause annoyance and even health problems for nearby residents.

**This ordinance offers:**

- Simplified and effective definitions.
- Suggested requirements to mitigate the environmental impact of data center facilities such as limitations on noise and vibration, requirements for landscape buffer and equipment screening, and consideration of water usage.
- Suggested language regarding the type of approval process for data centers (e.g., conditional use/special exception vs. as of right).
- Municipalities can change/tailor to their needs by using this model ordinance as a template, ultimately customizing the final ordinance to the needs of their community and considerations of residents.

**Additional PennFuture resources include:**

In support of our model ordinance, PennFuture created a series of short, informational videos by PennFuture experts explaining what data centers are, their potential impacts, and how municipalities can plan and prepare for them.

- Video 1: [What is a Data Center?](#)
- Video 2: [Inside a Data Center](#)
- Video 3: [Data Center water usage](#)
- Video 4: [Economic impacts of Data Centers](#)
- Video 5: [Data Center power usage](#)
- Video 6: [Data Center impact on your power grid](#)
- Video 7: [What can municipalities do to prepare for Data Centers](#)
- Video 8: [Local air impacts from data centers](#)

*Our Data Center webpage will be updated periodically with new and additional information, so please be sure to check it often.*

## Appendix B

### Letter to the Editor Writing Guide

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**The Letters to the Editor (LTE) section is one of the most read sections of the newspaper. LTEs allow us to educate the public on the issues that matter most to us and influence decision makers in the process. A letter from a local resident, business owner, volunteer, or organization makes a big impact.**

**This guide provides resources to help you through the process of writing an LTE, specifically geared towards data center facilities and PennFuture’s model ordinance.**

*You can reach out to PennFuture’s Civic Engagement Coordinator for Allegheny County, Natalie Davidson, at [davidson@pennfuture.org](mailto:davidson@pennfuture.org) with any questions.*

#### Tips for writing a Letter to the Editor (LTE)

1. **Be Concise:** Your letter should be under 200-250 words and is more likely to be printed if shorter.
2. **Focus on one clear point:** Pick one fact, aspect of the issue, or story for the letter.
3. **Make it personal:** The best letters are compelling and relatable, rather than purely reasserting the facts.
4. **Reference/Respond to a recent article/letter/event:** Newspapers are more likely to print letters that show relevance and timeliness to issues the paper is already covering. Look through the paper for a story about the issue you are writing on or some other way to “hook” a connection if possible. You can also link it to current events or anniversaries to make it timely & relevant. You can even relate it to your own personal or recent experience.
5. **Follow-up:** After you’ve sent your letter, call the editor to ensure they received it and ask when they’re going to print it. They get hundreds or thousands of letters a week, this helps ensure they read yours.
6. **Sign your letter:** with your name, town you live in, and phone number for them to call you with any questions.
7. **Keep an eye out:** Make sure to be on the lookout for your letter in the coming weeks once submitted!
8. **Send to your municipality:** Once published, ensure that your local decision makers see your LTE by sending them a copy or link.

### How to Submit an LTE:

- Identify newspapers that cover your municipality, especially ones that are published in both print and online.
- There are two ways to submit an LTE - via email or via an online form. The newspaper will determine which method they prefer in their LTE section.
- Once you've submitted your letter, be aware that someone from the newspaper may call you simply to verify your identity. They typically ask for your name, the topic of your LTE, and sometimes the township or borough that you live in. This is normal practice - they're simply doing their due diligence.

### Sample LTE:

I have lived in this area for the past 20 years and enjoy the quiet community, dark night skies, and vibrant open space and recreational opportunities the Poconos offers. However, data centers are threatening the very essence of what our community holds dear. But thanks to a new model zoning ordinance by PennFuture, we can respond quickly and appropriately to protect our community and our health.

These data center facilities are massive buildings or complexes of buildings that can exceed 1 million square feet and hundreds of acres. They operate 24/7, with immense noise, light, and air and water pollution at levels. Data centers can use millions of gallons of water per day for cooling and most are powered by fossil fuels, either for main power or backup generation. If not properly zoned and regulated, these facilities can harm the healthy environment of our community and disproportionately impact nearby families and sensitive populations.

PennFuture's model ordinance addresses these concerns. And it helps to protect the authority of our local elected officials to say where data centers should be placed in our community.

But the real problem is that once a facility is proposed, it is too late to protect us from these harms. We must revise our zoning ordinances *before* they come knocking on our doors.

I call upon our local elected officials to immediately adopt PennFuture's model data center zoning ordinance to protect our community from the harmful impacts of the data center industry before it's too late.

## Appendix C

### Sample Petition & Letter to Municipality

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#### Petition to Municipality in Support of Model Ordinance

**A petition is a great way to show a large amount of support for one clear, concise message to a decision maker or decision-making body.**

A petition is just one tool to advocate for changes. It should be used in conjunction with letters, in-person attendance at meetings, letters to editors, and continued engagement with local decision makers.

#### Sample Petition:

Data center development can be a threat to the health of [NAME OF MUNICIPALITY]'s environment and our community health, safety, and well-being. But thanks to a new model zoning ordinance, we can respond quickly and appropriately!

These data centers are massive facilities or complexes of buildings and can take up hundreds of acres of land. Data centers bring with them enormous energy demand, consume hundreds of thousands of gallons of water per day, and threaten our health. In many cases, they operate 24/7, with noise, light, and air and water pollution at levels never before experienced in [NAME OF MUNICIPALITY]. If not properly zoned and regulated, these facilities can harm open space, water quality, biodiversity, and other environmental resources and protections, as well as disproportionately impact nearby families, sensitive populations, and environmental justice communities in [MUNICIPALITY].

Moreover, not having appropriate zoning ordinances in place before a data center project is proposed threatens the authority of [NAME OF MUNICIPALITY] to say where data centers should be placed in our community and limits [NAME OF MUNICIPALITY] to mitigate any harm.

PennFuture's model ordinance addresses many of our concerns. It was written after careful review of numerous ordinances from municipalities around PA and neighboring states and consultation with technical and regulatory experts. We need you, our elected officials, to use this new tool to protect the health and safety of [NAME OF MUNICIPALITY], while still allowing for thoughtful economic growth.

The residents of [MUNICIPALITY or NEIGHBORHOOD] below support the immediate adoption of

PennFuture’s model data center ordinance. We cannot wait until these facilities are proposed; we must make changes now to protect our community and our environment from the harmful impacts of the data center industry.

The model data center ordinance may be found at <https://pennfuture.org/Data-Centers> [or A copy of the model data center ordinance is attached to this petition].

Respectfully submitted,  
[INCLUDE ALL NAMES AND ADDRESSES]

Letter to Municipality in Support of Model Ordinance

**A letter in support of PennFuture’s Model Ordinance can also be sent to your local government decision makers. A letter, as opposed to a petition, can include more details and information in support of why the municipality should consider adopting a data center ordinance, and can include specific issues or concerns relevant to your particular municipality.**

*Note: The sample letter below is written from the perspective of a local community member whose municipality does NOT already have a data center facility but can be modified to be sent on behalf of community groups, business leaders, or other formal organizations or entities.*

*Note: if you can’t find the email address of members of your Board, you can send the letter “care of” (c/o) the Township administrator, secretary, or manager; or you can always just send it via US Mail.*

Sample Letter:

[MUNICIPALITY BOARD OF SUPERVISORS/BOARD OF COMMISSIONERS/BOROUGH COUNCIL/CITY COUNCIL]  
[ADDRESS]

Sent via [EMAIL or US MAIL]: [EMAIL ADDRESS]

[DATE]

**Re: Zoning Ordinance Amendment to Address Data Center Uses in [MUNICIPALITY]**

Dear Members of the Board:

I write to urge [MUNICIPALITY BOARD OF SUPERVISORS/COMMISSIONERS] to consider adopting PennFuture’s Model Data Center Ordinance ([ATTACHED AND/OR] available at <https://pennfuture.org/Data-Centers>) to regulate data center uses in this municipality and to protect the municipality, our community, and our environment.

[BRIEFLY DESCRIBE YOURSELF OR COMMUNITY ORGANIZATION; EXPLAIN WHY YOU CARE].

Large-scale data center uses are poised to make an enormous impact on our region, and municipalities like [NAME OF MUNICIPALITY] must be ready to shepherd this growth in a way that balances its potential economic benefits with the health, safety, and welfare of our communities and the environment. This is PennFuture drafted its model data center ordinance and why I’m sharing it with you.

### What is a Data Center?

A data center is a building or group of buildings that houses digital infrastructure such as computer servers and telecommunications equipment, primarily for off-site users. Data centers are designed to provide space, climate control, physical and digital safety, and power supply for this equipment that cannot be easily provided at the user’s location. They can range from the size of a tractor-trailer to so-called hyperscale facilities that cover hundreds or even thousands of acres.

### Why Here? Why Now?

Data centers power our digital lives. They store and process the data necessary for individuals and businesses to conduct financial transactions, store and access healthcare information, stream video, upload content to the cloud, use social media, and much more. As the amount of data people and businesses produce increases, so does the demand for data centers. In addition, the recent rise of generative artificial intelligence (AI) has supercharged the demand for data centers even beyond what was previously anticipated. Some estimate that data center growth could rise at an annual rate of 19 to 22 percent over the next five years.

Many locations across Pennsylvania are attractive to data center developers: land, water, electric and fiber optic infrastructure, a cool, moist climate, and proximity to population centers. Therefore, as demand for data centers rises, we can expect (and have already seen) developers arriving in our region seeking to build them here.

### Why Should [NAME OF MUNICIPALITY] Update Our Zoning Ordinance to Address Data Centers?

There are two reasons why [NAME OF MUNICIPALITY] should update our zoning ordinance to address potential data center development as soon as possible. The first is because the type of

large-scale data centers being proposed in the area, while potentially an economic boon, also have the potential to create extraordinary impacts to public health, safety, and welfare and the environment. Like warehouses and distribution centers and other large-scale land uses, data centers may convert large areas of undeveloped land into impervious surface and create stormwater management, wildlife habitat, and aesthetic concerns. As shown by recently proposed projects, the scale of these projects may outstrip even the largest warehouses/distribution centers.

Data centers also bring unique impacts. In some regards, data centers are less impactful than other uses. For example, they do not generate substantial traffic. In other ways, they are more impactful. Many data centers use evaporative cooling systems that require tens or even hundreds of thousands of gallons of water per day. If not properly controlled, water withdrawals at this scale can harm ground and surface water supplies. Data centers also typically include diesel generators and HVAC equipment that can create an unpleasant level of noise if not managed effectively. Finally, due to their massive energy needs, data centers nearly always include significant utility infrastructure and, in some cases, on-site electric power generation. Municipalities must be ready to address the specific impacts created by these uses and associated ancillary uses.

The second reason why municipalities should update their zoning ordinances to address data centers is to avoid curative amendment/substantive validity challenges that may result in the municipality losing control over the siting of these highly impactful uses. When a zoning ordinance does not allow for the development of a legitimate land use like a data center anywhere in a municipality (or group of municipalities participating in a multi-municipal plan), a person who wishes to develop land for that use may challenge the ordinance as being unconstitutionally exclusionary. If the challenger succeeds, the municipality must allow them to develop the proposed use at the chosen site. Municipalities whose ordinances do not currently provide for data centers are vulnerable to such challenges.

### Why This Model Ordinance?

PennFuture knows that municipal officials are busy and may not have the time, resources, or expertise to research and develop ordinance amendments on short timeframes. Therefore, they have created the [ATTACHED] model data center ordinance to help municipalities start the conversation. PennFuture took the time and did the work on this, including undertaking careful review of numerous ordinances from municipalities around PA and neighboring states and consulting with technical and regulatory experts. As with any model ordinance, municipal officials should tailor this model as appropriate to the concerns of their own municipality.

For example, because every municipality is different, the model ordinance does not contain proposed language with respect to where data centers should be located. Each individual municipality must make this decision for itself. In doing so, PennFuture encourages municipalities to consider the primary factor that drives data center location: proximity to high-

voltage electric transmission lines. Selecting sites or zoning districts close to these power lines will reduce the need for additional power infrastructure to be built. Municipalities should also aim to minimize the impact on sensitive water resources and residential areas.

I hope you find this explanation of the impacts and potential zoning solutions for data centers, as well as the [ATTACHED] model ordinance, useful.

Well-crafted zoning ordinances are essential to mitigate the impacts of these new land uses and to provide a predictable development environment for both developers and the public. Having an ordinance on the books *before* a data center is proposed also protects the municipality against substantive validity challenges and retains the authority to dictate where development occurs with you—our local elected officials.

In conclusion, I strongly urge [MUNICIPALITY] to adopt PennFuture’s Model Data Center Ordinance to address the impacts of the data center industry on our environment and community.

Sincerely,  
[SIGNATURE]  
[NAME, ADDRESS, CONTACT INFORMATION]

CC: Township Manager  
Township Planning Commission  
Township EAC [if applicable]