

Data Centers...

All You Never Wanted to Know and Then Some...



Protect South Hanover, Hummelstown & Hershey
Say No to Residential Data Center Development

What is a Data Center?

A specialized facility that houses computer servers, networking equipment, storage systems and the electrical and cooling infrastructure required to keep them operating continuously.

Designed to maintain continuous operation 24 hours a day, 365 days a year.

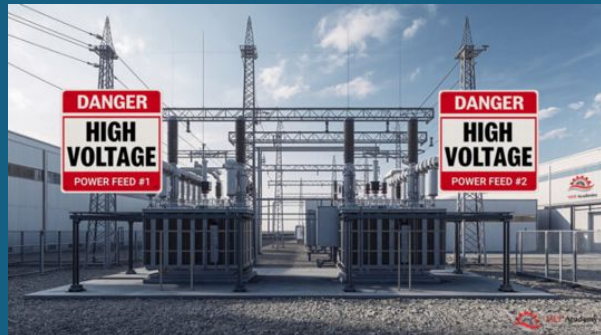


What types of data centers exist?

- **Enterprise Data Centers** — Facilities built and operated by companies for their own use. Typically located on company premises and serve internal business operations.
- **Colocation Data Centers** — Facilities where multiple organizations rent space to house their servers and computing equipment. The facility provides power, cooling, and physical security while clients maintain their own hardware.
- **Cloud / Hyperscale Data Centers** — Massive facilities operated by major cloud providers (e.g. Amazon, Google, Microsoft) that deliver computing resources over the internet. This is the largest type of data center, and facilities can span millions of square feet and contain tens of thousands of servers.
- **Edge Data Centers** — Smaller facilities located closer to end users to reduce latency and improve performance for applications requiring real-time processing.

Source: <https://mepacademy.com/how-data-centers-work-power-cooling-and-infrastructure-explained/>

A data center must provide **continuous electrical power, precise cooling, secure infrastructure, and reliable network connectivity.**



Needs: Grid Connection with new power lines and infrastructure build outs.

Result: Increased electric rates for residents on the same grid.

PA Residents have seen a 30% increase since 2020 and 20% in 2025 alone. Increases are attributed in part to demand on PJM grid which PPL is part of.



Back Up Power: Generators (Most often diesel)

Result: Air & Noise pollution



Continuous Cooling: HVAC with fans

Result: Noise pollution and increased thermal impact.

Water Based Cooling:

Open Loop →
Closed Loop →

Significant Water Usage
Less But Still Significant Water Use

Data Centers Across the US



Sterling, VA



Mount Pleasant, WI



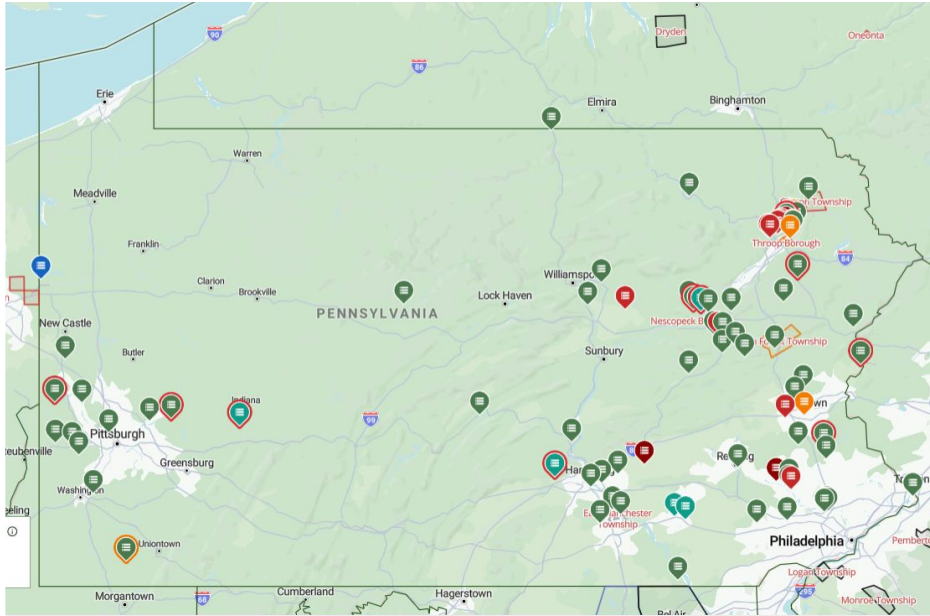
New Albany, Ohio



Mount Pleasant, WI



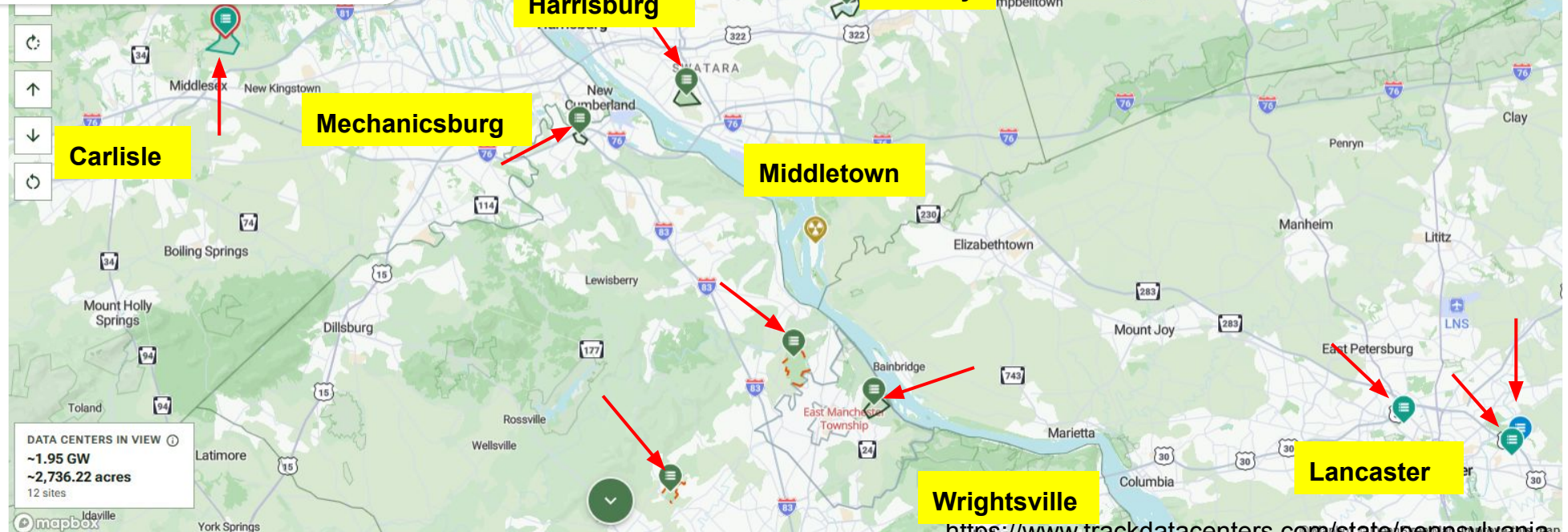
Stone Ridge, VA



156 Data Centers Proposed in PA



11 Data Centers Proposed or Under Construction
Between Mechanicsburg and Lancaster.
(Annville Data Center Withdrawn by Developer)



DATA CENTERS IN VIEW
~1.95 GW
~2,736.22 acres
12 sites

Wrightsville

Lancaster

<https://www.trackdatacenters.com/state/pennsylvania>

Where exactly are we talking about?



What has been happening in South Hanover?

Track 1: Data Center Ordinance

- An ordinance sets the “rules of the road” when it comes to zoning and development
- In PA, must account for all types of development—cannot exclude any types

Timeline

- **Spring 2025:** South Hanover Twp (SHT) Board of Supervisors (BoS) asks the SHT Planning Commission (PC) to craft a data center ordinance.
- **Fall 2025:** SHT PC begins work in earnest
- **Spring 2026:** Mounting public pressure helps improve the ordinance. Ordinance vote tabled twice
- **End of July 2026:** Ordinance has been tabled again and will be sent back to the Planning Commission: “The Township has temporarily paused the adoption of the Data Center Ordinance to allow additional input from citizens, the Planning Commission and any other interested party.”



What has been happening in South Hanover?



Track 2: Applications on Pennsy Quarry site

- **2024:** Hanover Company (HCI) submits warehouse plan to SHT
- **June 23, 2026:** HCI submits 2 applications to the SHT Zoning Hearing Board (ZHB): data center application and a validity challenge
- **In both cases, the township did not have an ordinance in place at the time of application so the only rules that needed to be followed were the zoning requirements for the industrial parcel**
- **July 31, 2026:** HCI requests and is granted a continuance on their ZHB application: “hereby indefinitely extend the time in which the Zoning Hearing Board must hold the first hearings on the challenge and special exception applications subject to Hanover’s right to revoke the indefinite extensions upon sixty (60) days advance written notice of Hanover’s intent to proceed with the hearings on the challenge and special exception application.”

Application #2



Validity Challenge – HCI is challenging the zoning as unconstitutional for excluding data centers and is requesting the Zoning Hearing Board to find a determination in HCI's favor.

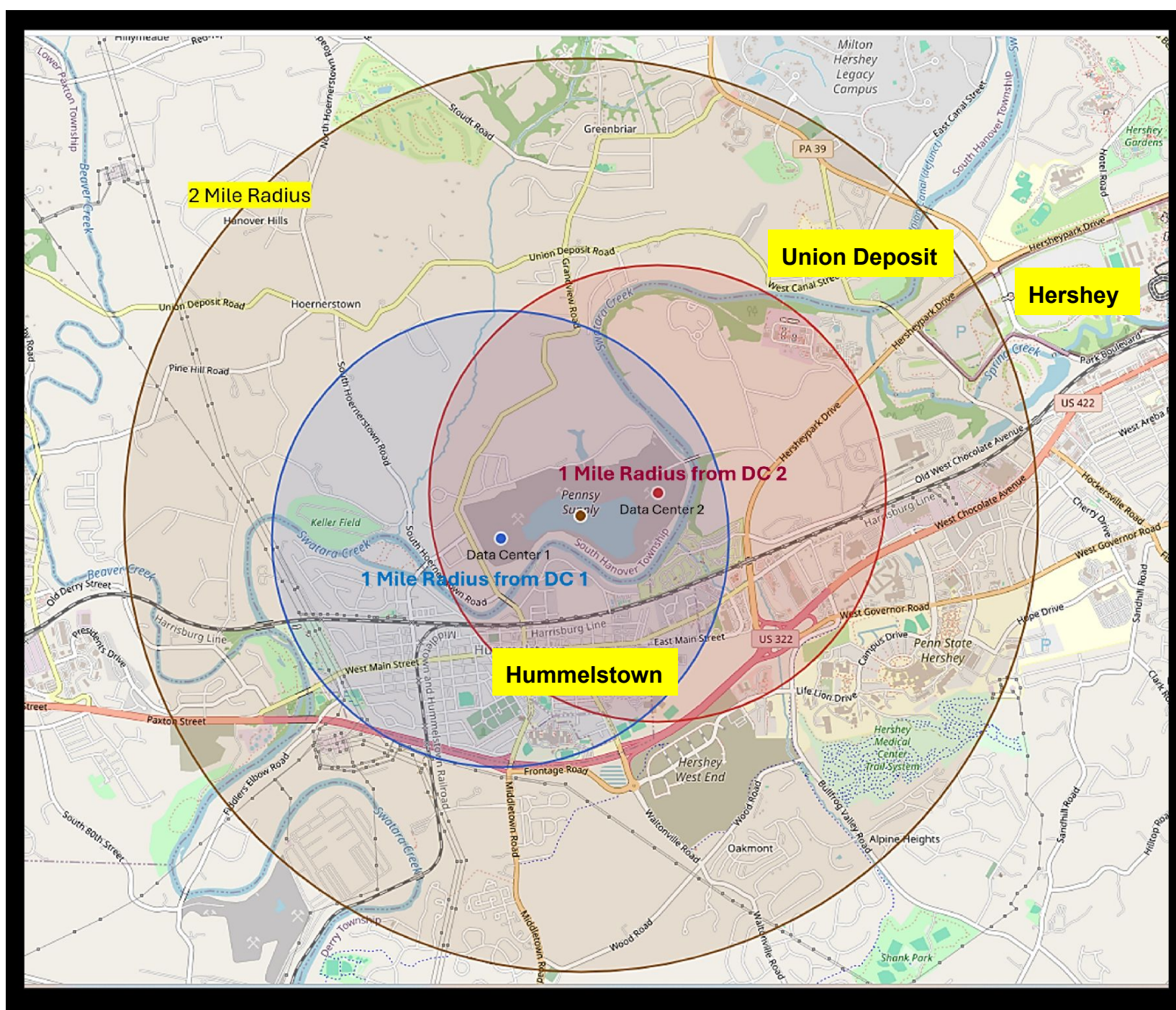
If allowed, an additional 250 acres of farmland and residentially zoned land will be added for data centers, increasing the size to nearly 500 acres.

The size of 380 football fields!

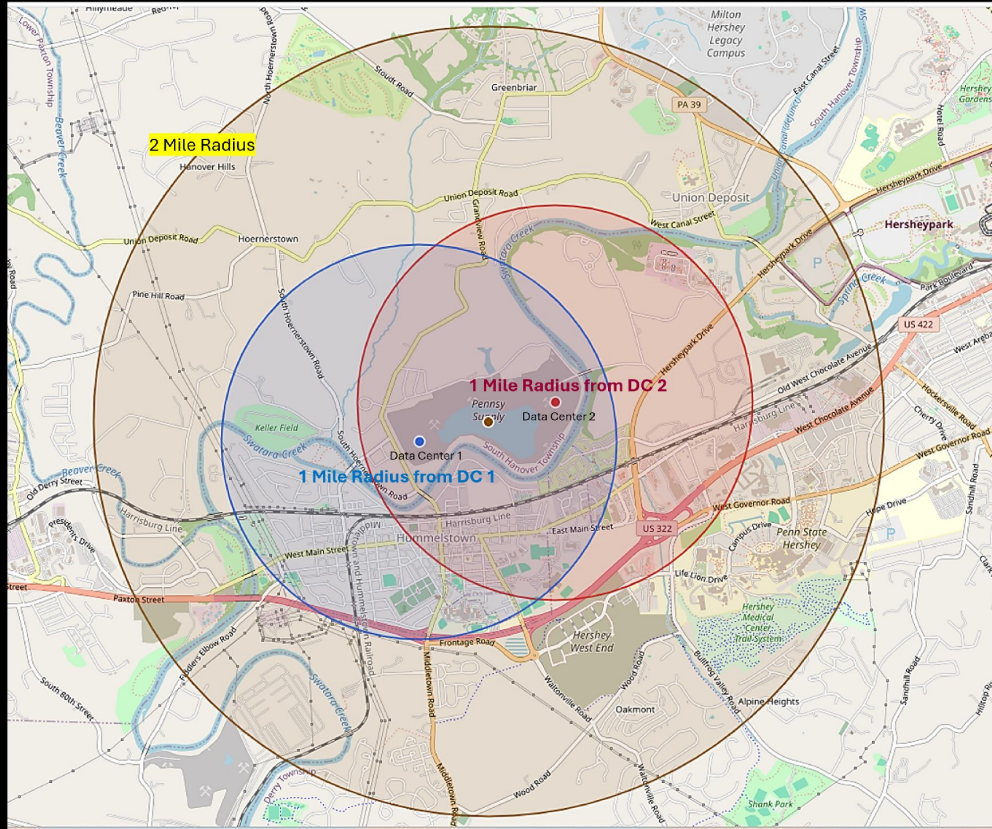
IMPACT ZONE

Impacts at 1 to 2 miles will affect:

- All of Hummelstown Borough
- South Hanover Township, East of Route 39
- Lower Dauphin High School
- Hershey West End
- Hershey Medical Center
- Hershey neighborhoods west of Hockersville Rd



IMPACT ZONE: 1-2 MILES



Impacts Are Cumulative
More Data Center Buildings = More Impact

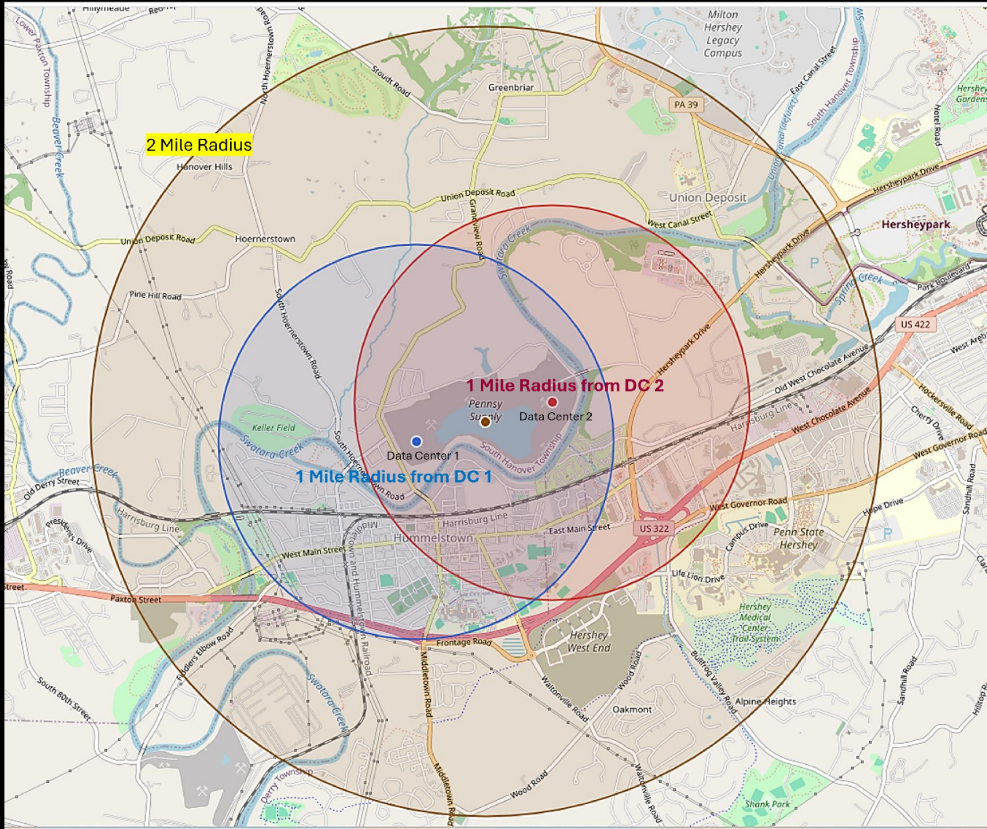
Noise:

- Continuous noise can travel up to **2.5 miles**, with the worst noise **within 3000 feet** of the facility. Long-term impacts include hearing loss, stress, insomnia, and decreased quality of life.
- Electrical equipment **tonal noise** can be particularly disruptive.
- Low-frequency noise from the cooling fans cannot be blocked using traditional sound barriers. It can penetrate homes with windows shut.

Air Quality:

- Diesel backup generators emit **hazardous pollutants** such as nitrogen oxides, fine particulate matter and ozone.
- These pollutants increase rates of asthma and other respiratory diseases and cardiovascular conditions and elevate cancer risks among nearby communities .
- Diesel exhaust is known to **harm health** - increased lung cancer risk, cardiovascular disease, worsened asthma symptoms, and premature mortality.
- In 2012, The International Agency for Research on Cancer (part of the World Health Organization) classified diesel engine exhaust as carcinogenic to humans.
- A recent model indicates that the U.S. data centers in 2030 could contribute to nearly 1300 deaths annually, resulting in a public health burden of more than \$20 billion.

IMPACT ZONE: 1-2 MILES



Water:

- Data centers use excessive amounts of water putting a strain on local groundwater and/or public water supplies. Many residents in the impact zone rely on well water.
- Even closed loop systems use millions of gallons a day and periodically flush water containing glycol, PFAS and other chemicals that municipal wastewater treatment plants are not designed to process.
- These can pose contamination risks to ground (wells) and surface (Swatara Creek) water.

Light Pollution:

- Disrupts sleep cycles, disturbs migration patterns and habitat development.

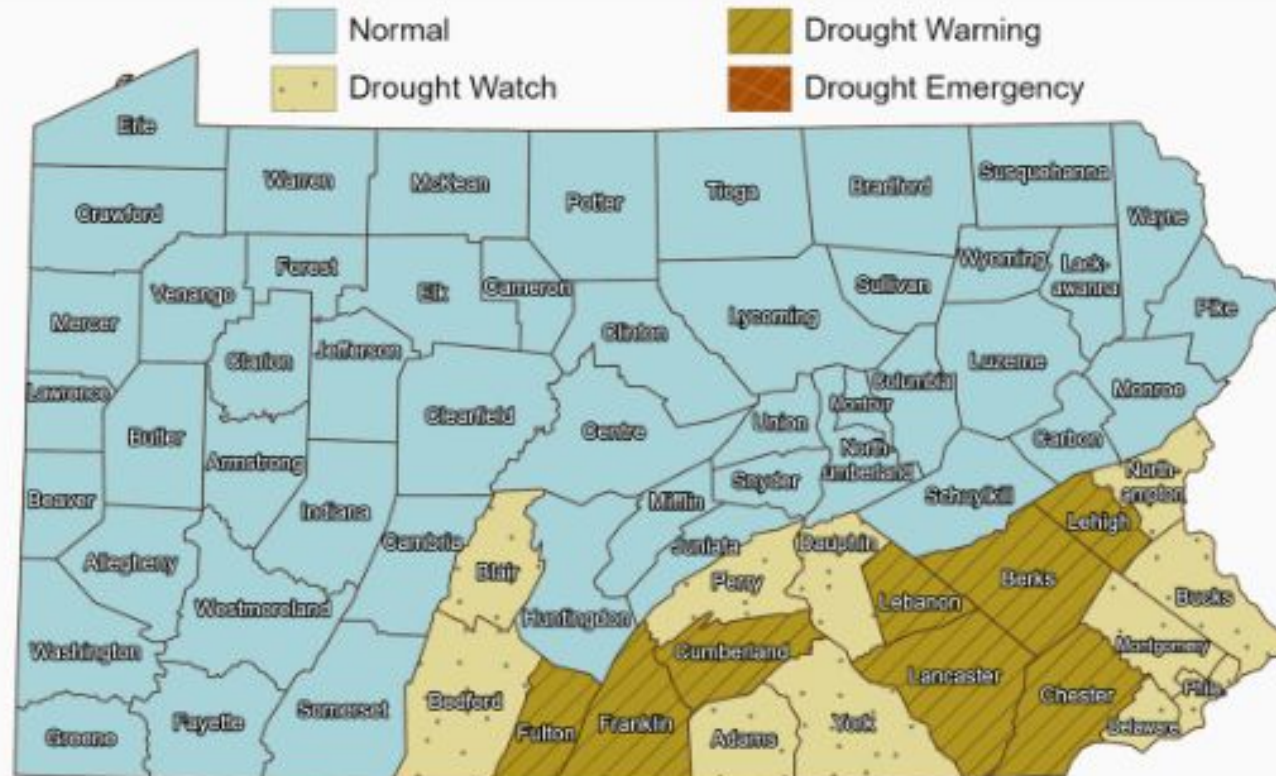
Decreasing Property Values:

- Housing prices drop an average of 5-20% near a data center.

Dauphin County Is in a Drought Watch

Neighboring Counties have a Drought Warning

Current Drought Declaration Status

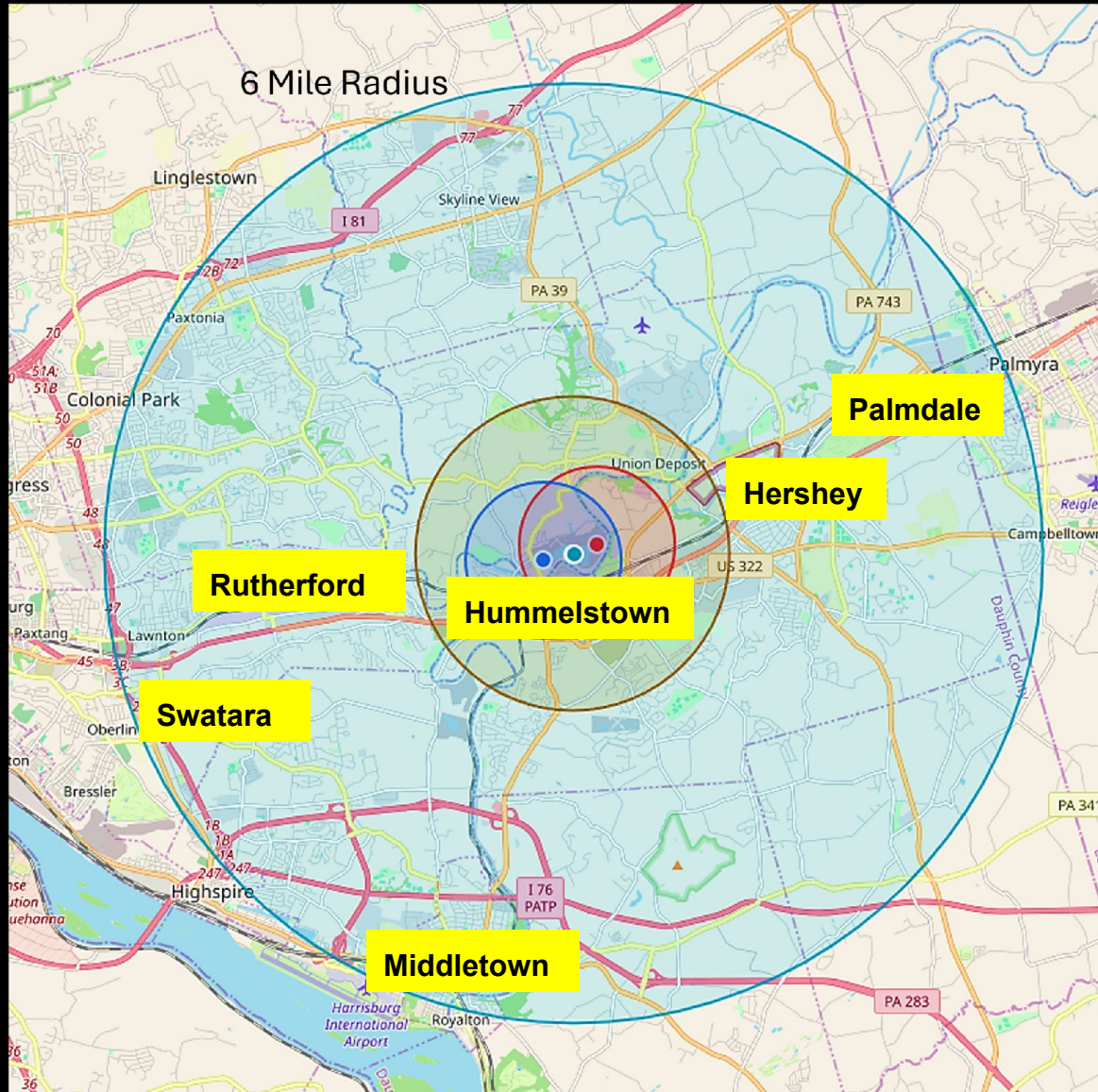


6/29/2026

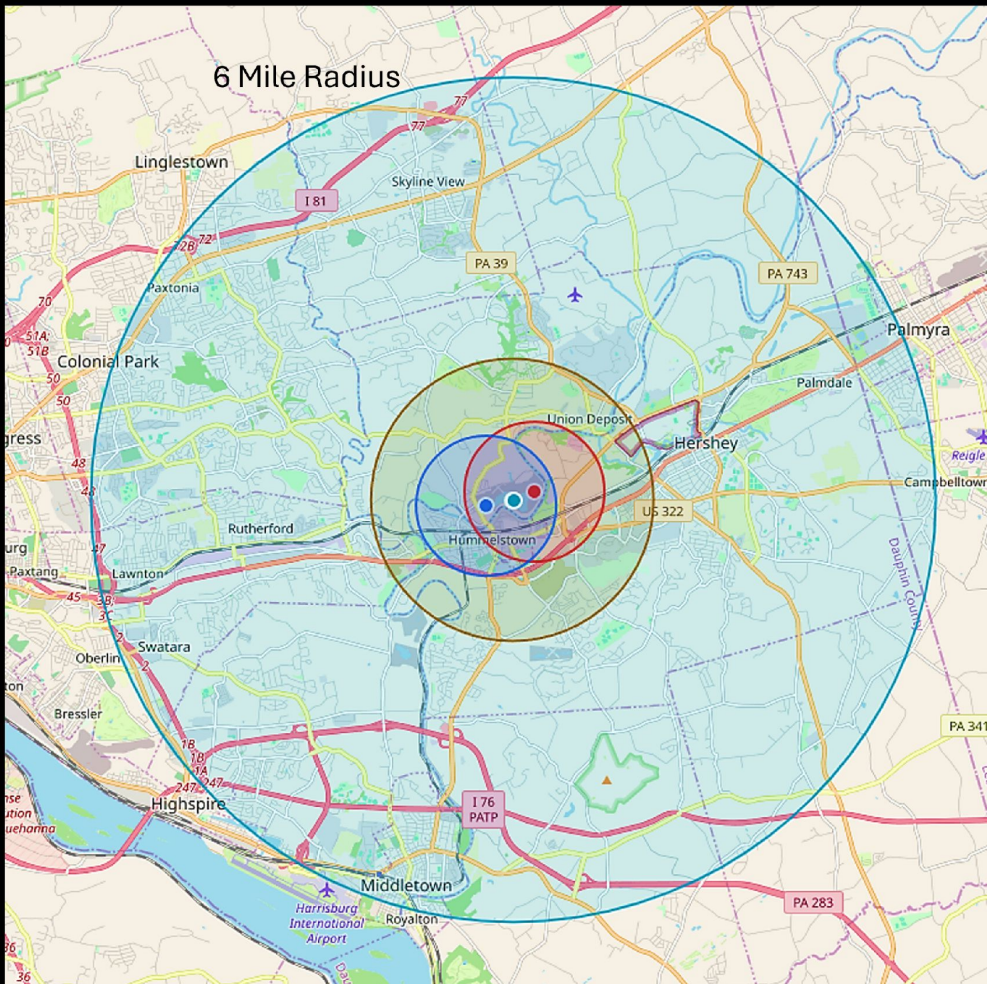
IMPACT ZONE

Impacts at 6+ miles will likely affect:

- Hummelstown Borough
- South Hanover Township
- Derry Township
- Middletown
- Palmdale
- Rutherford
- Paxtonia
- East Hanover Township
- West Hanover Township



IMPACT ZONE: 6+ Miles



Heat Island Effect:

- A Cambridge University professor found surface temperatures increased by an average of 3.6 degrees F after a data center started operations. In extreme cases, nearby temperatures increase by up to 16.4 degrees F. Temperature increases affected areas up to 6.2 miles away, the research found.

Chemical and Thermal Water Pollution:

- If inadequately treated, these discharges could affect downstream water quality and aquatic life.

Higher Electric Rates:

- Increased demand for electricity is causing a spike in rates and straining the already overburdened grid. **PA electric rates have increased by as much as 30% since 2020 and increased 20% just last year.**

Unknown Effects:

🚨 The full health and environmental impacts of data centers are largely unknown. 🚨

Track #2: Additional Impacts of Approval Without Protective Ordinance in Place

- 1. Only 100 feet required setback from adjoining residential property**
- 2. No restrictions on generator types or usage could result in significantly increased air pollution and noise**
 - 1. Older Tier 2 models which are less efficient could be utilized**
 - 2. Generators could be used for main power source rather than back up power**
 - 3. Even as back up power only, they could run continuously for days due to power outages**
- 3. No limits on using well water. Local wells were impacted by the quarry and would likely be negatively impacted by data center groundwater use.**
- 4. No limits on noise**
- 5. No decommissioning bond if the center ceases operation. Technology changes so rapidly that the sites may become non-competitive within years. Will the data centers be upgraded or abandoned? What then happens to the site?**

Track #1: Current Ordinance Draft

- Protections in current ordinance
 - Increased residential setbacks
 - Noise restrictions
 - Generator restrictions
 - Groundwater and surface water restrictions and limits
 - Decommissioning bond
- Is this ordinance perfect? No but it is a start

****This ordinance does NOT apply to the 2 submitted applications.
Once passed, it will only apply to future applications.****

Track #1: Ordinance Draft Improvements Needed

- Removal of ALL residential parcels from the overlay. The overlay should strictly apply to the Industrial Park.
- Site areas shall not be developed so as to establish direct or indirect access corridors passing through residential development.
- 40 ft height restriction
- Annual 3rd party sound studies to monitor noise



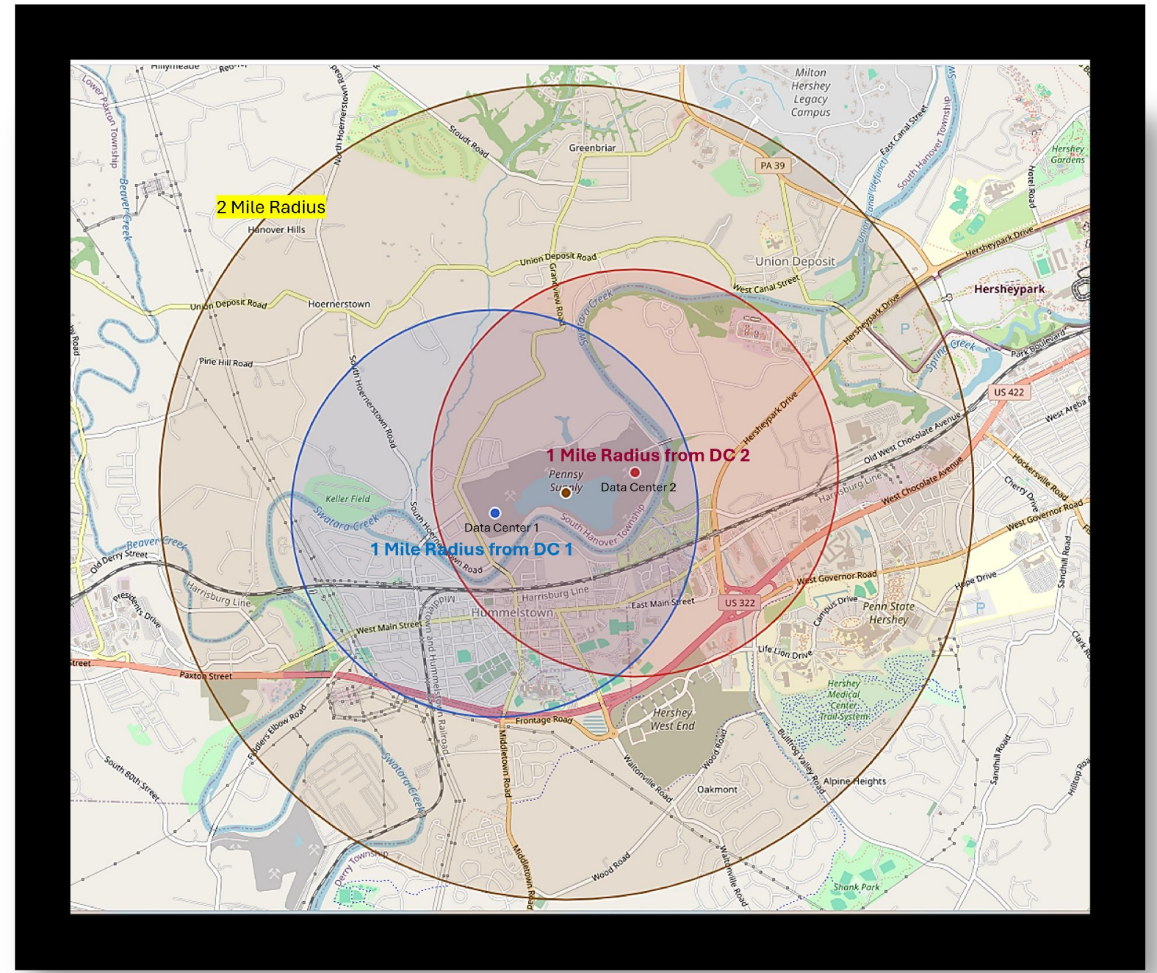
Neighboring Municipalities: Hummelstown Borough

- **June 2026:** Released a statement re: position on data center overlay: “We intend to continue to monitor the development of this process and where necessary and appropriate, advocate for the best interest of the Borough. Once an actual plan is submitted to South Hanover Township, and if there is an opportunity, the Borough will provide its comments in a manner designed to advance the interests of the residents.”
- **July 21, 2026:** Released a statement on HCI development of SHT properties bordering Hummelstown; “While the Borough is presently reserving its right to intervene as a party in the matters before the Township’s Zoning Hearing Board, the Borough is willing to support the Township in defeating HCI’s requests for zoning relief at the ZHB, with which it disagrees. Mayor, Borough Council, and/or staff will communicate with South Hanover’s litigation counsel to offer both testimony as well as technical assistance in its presentation to the ZHB.”



Neighboring Municipalities: Derry Township

- No official statement re: data center overlay or ZHB applications
- Residents are pushing DT to seek Party Status at the ZHB



CALLS TO ACTION

Donate to the community coalition's legal fund (via check or GoFundMe)

Join in our community coalition's efforts: any time and talents you may have to offer are welcome!

Attend municipal meetings

- **SHT: 2nd & 4th Tuesdays @ 6:30 PM**
- **Hummelstown: 2nd & 4th Thursdays @ 7 PM**
- **DT: 2nd & 4th Tuesdays @ 7 PM**

Advocate for increased protections in the data center ordinance—see our website for specific demands based on our analysis

Raise Awareness: tell your neighbors and friends!

www.ProtectSouthHanoverPA.org



YOU CAN'T DRINK DATA

Act NOW to protect our community!

Graphic designed by local artist

Website



www.ProtectSouthHanoverPA.org

Legal Fund

