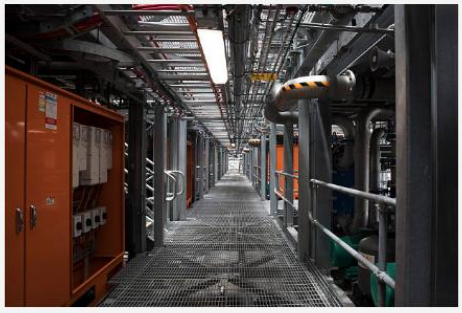
DATA CENTER PLANNING AND GUIDANCE DOCUMENT

(A PRACTICAL GUIDE FOR DATA CENTER QUESTIONS, CONCERNS, AND FACTS)

Version 3.0 (June 26, 2026)

PREPARED BY: THE MIFFLIN COUNTY PLANNING AND DEVELOPMENT DEPARTMENT



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Purpose and Intent

The purpose of this "guidance document" is to provide practical information based on numerous webinars provided by various entities within the Commonwealth; in person meetings with experts from Penn State Extension, and internet research all of which will be documented within the endnotes herein. It does not serve as a legal document and it is encouraged each municipality having zoning and/or subdivision and land development ordinances is encouraged to consult with their solicitor for legal advice. It also does not serve as a sole source of infallible information for data centers, because this is an ever changing and developing type of use. This document may be updated as new and advancing technologies and legislation emerges.

It is also not the intent to support or reject the siting of data centers, but to provide as accurate as possible pertinent information based on an understanding gleaned over the last 12 +/- months regarding data center development. This guide will also discuss the potential impacts resulting from data center development, various types of data centers, and common questions and concerns that may arise from public officials and citizens within municipalities that may be affected by this type of development. The target audience for this document is for elected and appointed officials and the lay public, who have a genuine interest for their communities and have a basic understanding of the roles and responsibilities of counties, townships, and boroughs.

History of Data Centers in the United States and Pennsylvania

1. Loudoun County, Virginia, more precisely eastern Loudoun County, is today considered the "data center capital of the world". Loudoun County is approximately 30 square miles and home to about 200 data centers. A recent independent analysis by consultant Kimley-Horn indicates there are another 117 data centers in Loudoun County's development pipeline. By every metric, the rate of data center growth in Loudoun County over the past 20 years has been among the highest of any community in the world, and that rate has accelerated exponentially since 2022.

To the best of our knowledge there is not a legislative source or designated agency for tracking data centers within Pennsylvania. There are private citizen groups that have created websites and have purportedly tracked potential and actual data centers in locations throughout the State. However, the validity of this data has not been legitimized. It may be possible to research any of the State's 67 counties to determine if either counties or municipalities have ordinances evolving or in place to regulate and guide this type of development.

2. Data centers are physical buildings that organizations use to store their computing machines and related hardware. This can include information technology (IT) systems, infrastructure like servers, data storage drives, and network equipment. There are five (5) different types of data centers that will be discussed further in this document. Data centers can also have accessory uses such as utilities, external mechanical equipment, water towers, and security facilities that may be located on the same site.

It can be argued that artificial intelligence (AI) and data centers can be considered the "next industrial revolution". Why are data centers on the forefront of the state legislatures, counties, and municipalities in Pennsylvania and elsewhere? The number one reason is each of us consume, want, and need vast amounts of data every day. Examples include on-line banking services, cellular phone usage, telehealth medicine, Google Maps, online shopping such as Amazon, etc.

3. Also, the unprecedented expansion of (AI) has driven data center development at higher than expected rates. AI is permanently increasing power density requirements, computer intensity, and facility scale.

4. Governor Shapiro earlier in 2025 introduced his "Lightening Plan" which addresses the state's energy and infrastructure needs. Its results are the Reliable Energy and Electric Transition Board (RESET) meant to streamline permitting and provide tax incentives for those contributing electricity to the grid.

14 The Governor's Responsible Infrastructure Development (GRID) Standards establish best practices that data centers must comply with to receive support from the Commonwealth. These Standards represent metrics of success to use in evaluating whether proposed data center projects would provide real value to the local community, are mitigating or offsetting their impacts, and are being developed in a responsible manner. Additionally, the Department of Community and Economic Development issued the "Data Center Toolkit May 2026 and can accessed at https://dced.pa.gov/business-assistance/data-center-resources/planning-toolkit

Data centers are coming to communities within Pennsylvania due to the availability of energy, water needs, the proximity to customers to improve data center processing, and transmission speeds. They also ~~are~~ noted that large portions of Pennsylvania are relatively low risk to natural and man-made hazards, such as earthquakes, hurricanes, tornadoes, and tsunamis.

Are all data centers alike? What are the various types of data centers and their unique characteristics?

All data centers have a main purpose which is to store and transmit data, typically on servers that are housed within a principal building, accessory building(s), or on a campus-like setting having multiple buildings. Each have their own unique qualifiers. In essence, all data centers are not alike. They vary in acreage, number of servers or central processing units (CPUs), gross square footage of buildings, energy demand, water usage, sound levels, and fiber optic needs.

The five (5) major elements that data centers consider prior to committing to making such an investment are: *1. Land availability. 2. Water availability. 3. Competitive and reliable renewable energy. 4. Fiber optic internet availability. 5. Proximity to customer base.*

Typically, data centers involve two entities: the first being a speculative land developer who is looking for an ideal site for sale, the second being the actual data center developers, such as Amazon or Microsoft. For example, the role of the speculative developer assembles land and in instances, may cut down trees, making as close to a shovel-ready site as possible, then markets the site to data centers that will construct the building(s) and infrastructure.

5. The five (5) varying types of data centers are Cryptocurrency Mining Centers, Edge or Micro Data Centers, Enterprise or Regional Centers, Cloud Data Centers, and Hyperscale Centers. Their unique characteristics are outlined next.

Cryptocurrency Mining Centers typically consist of:

- Usually small and localized.
- Dedicated to blockchain transaction validation only.
- Typically use high-density Application-Specific Integrated Circuits (ASIC) or Graphic Processing Units (GPU) hardware.
- Reference scale:
    a. Modular, containerized, or warehouse-based.
    b. <5 acres of land.
    c. 10-100 Megawatts.
    d. 100 server racks.
    e. Little to no water needs.

Edge or Micro Data Centers typically consist of:

- Small and localized.
- Designed for super-low latency and real-time service.
- Reference scale:
    a. <10,000 square feet of buildings.
    b. <1 acre of land.
    c. < 1 megawatt
    d. <100 server racks.
    e. Little to no water needs.

Enterprise or Regional Centers typically consist of:

- Serving specific organizations, institutions, or agencies.
- Reference scale:
    a. 10,000-50,000 square feet of building(s).
    b. 5-15 + acres.
    c. 1-10 Megawatts.
    d. 100-1,000+ servers
    e. 100's-1,000 + gallons of water per day.

Cloud Data Centers : typically consist of:

- Large facilities.
- National or regional cloud and enterprise services.
- Reference scale:
    a. 50,00-200,000 square feet of building(s).
    b. 10-40 + acres
    c. 10-99 Megawatts
    d. 1,000 servers
    e. 1,000 + gallons per day.

Hyperscale Centers typically consist of:

- Extremely large facilities-usually a campus of multiple buildings.
- Supporting global-scale cloud, AI, and data services.
- Reference scale:
    a. 100,000 + square feet of building(s).
    b. 100-1,000 + acres
    c. 100 + Megawatts
    d. 10,000 + servers.
    e. 10,000-5,000,000+ gallons of water/per day.

Land Use, Zoning, Comprehensive Plans, and Projected Life Expectancy

There are over 2,500 units of local government within Pennsylvania. There are 67 counties that exist within the state. Of those counties, there are approximately 1,454 townships and 954 boroughs. Each county may have multiple townships and boroughs within their jurisdictional boundaries. Counties, townships, and boroughs have the legal authority to enact zoning and/or subdivision and land development ordinances. These rights were established through various landmarks.

The first is the 10th Amendment to the Constitution of the United States, a significant U. S. Supreme Court case, and the Pennsylvania Municipalities Planning Codes Act of 1968 P.L. 805 No. 247 as re-enacted and amended.

The 10th amendment to the United States Constitution states: *"The powers not delegated to the United States by the Constitution, nor prohibited by it to the States, are reserved to the States respectively, or to the people".* The 10th amendment is one of the true foundational amendments of our Constitution. It reserves for the states all rights not granted to the national government by the Constitution, guaranteeing a federalist type of administration.

The landmark *Village of Euclid v. Ambler Realty Co. (1926)* U.S. Supreme Court case established the constitutionality and legitimacy of zoning ordinances. It affirmed that local governments can use their "police powers" to regulate land use without being required to pay financial compensation to property owners. The purpose of zoning was, and is, to protect the public's life, health, safety, morals, and general welfare.

The Pennsylvania Municipalities Planning Codes Act (PA-MPC) of 1968 P.L. 805 No. 247, as re-enacted and amended, created the state's enabling legislation to regulate land uses through zoning and subdivision and land use controls. This was developed with an array of competing interests which included but are not limited to builders, school districts, special interest groups, lawyers, and environmental groups. Municipalities in Pennsylvania are not bound and mandated to create zoning and subdivision or land development controls. However, if a municipality exercises those rights, it is mandated to follow the provisions of the PA-MPC.

In Mifflin County there are sixteen (16) municipalities which consist of ten (10) townships and six (6) boroughs. Of the sixteen, Brown, Derry, Granville and Union Townships, the Boroughs of Burnham, McVeytown, Lewistown and Kistler, have zoning. Armagh, Decatur, Menno and Oliver Townships have their own subdivision and land development ordinances (SALDO) but do not have zoning. Juniata Terrace, and Newton Hamilton, Boroughs; in addition to Bratton and Wayne Townships, do not have zoning and are governed under the Mifflin County Subdivision and Land Development Ordinance (MC-SALDO). Although McVeytown and Kistler Boroughs have zoning they are governed under the (MC-SALDO).

The role of the Mifflin County Planning Commission is to approve, approve with conditions or deny a subdivision or land development plan which is under the jurisdiction of the county, and are referenced above. All appeals to the Mifflin County Planning Commission actions must be appealed to the court of common pleas of the judicial district wherein the land is situated in accordance with the PA-MPC.

All other subdivision, land development plans, and zoning ordinance amendments that are not under the jurisdiction of the County Planning Commission must be submitted to the County Planning Department for review and comment only, in accordance with the PA-MPC. Municipalities that have their own zoning and subdivision and land development and/or zoning ordinance have final decision making authority.

The County Commissioners do not have approval or denial authority for any subdivision or land development activity in the entire county. The authority they have relative to the Mifflin County Planning Commission is to appoint members to the Mifflin County Planning Commission.

The Mifflin County Planning and Development Department has created a "draft" amendment to the MC-SALDO by establishing a "draft" Data Center Ordinance. Data center proposals within those municipalities governed under the county's SALDO will be regulated under this legislation when adopted. The Mifflin County Planning Commission is required to take action to make a recommendation to Mifflin County Board of Commissioners for formal adoption.

6. Zoning remains the best tool counties, townships, and boroughs have for setting "reasonable limits" on data center developments. Zoning ordinances may not unreasonably restrict forestry, agriculture, religious, and other designated uses as enumerated in the PA-MPC. It also prohibits "exclusionary zoning" that is an attempt to disallow a use within a zoning district of a county or municipality.

A county, township, or borough cannot "zone out" a particular use. If zoning exists, all legal uses must be allowed "by right" by "conditional use" or by "special exception". Special exceptions are granted by the zoning hearing board, while conditional uses are granted by the governing body of the municipality.

It is encouraged that municipalities with zoning ordinances allow data centers by conditional use or special exception, not as a "permitted use". Allowing data centers as a permitted use limits the municipalities' ability to adequately guide this type of use. The most compatible locations for data centers are typically in areas zoned industrial or areas not developed residentially.

When amending or creating an existing zoning ordinance or SALDO to allow data centers, there are many provisions that should be addressed. These should include but are not limited to:

a. Established criteria for building placement and orientation
b. Maximum building height
c. Setbacks, minimum lot size
d. Lot coverage
e. Parking regulations
f. Off street loading and parking
g. Noise/vibration
h. Building construction
i. Power
j. Perimeter fencing security
k. Closed or open loop cooling systems
l. On-site power generation

m. Buffer yards
n. County or municipal comprehensive plans
o. Water, wastewater, and sewage
p. Environmental and National Pollutant Discharge and Elimination System (NPDES) Permits.
q. Decommissioning, administration, and enforcement
r. Community benefits agreements

Based upon the type of data center identified earlier in this document, these zoning and SALDO ordinance provisions will vary based on community character and need. So, one size does not fit all and municipal officials and solicitors will need to tailor their unique identifiable zoning and SALDO regulations.

There are numerous examples of both county and municipal zoning ordinances and/or SALDOS available on the internet. Counties and municipalities are also prohibited from creating "de-facto exclusionary ordinances" which include prohibitive or unreasonable restrictions such as excessive acres of land required, setbacks, buffer yards, height restrictions, floor area ratio, minimum lot coverage, noise, and particulate air acceptability levels.

If a municipality that has instituted zoning does not have regulations for data centers currently in their ordinance, what tools are available to it to amend their zoning ordinance? The PA-MPC allows procedures identified as "curative amendments" for municipalities that have determined that their zoning ordinance or any portion thereof is substantially invalid.

These procedures can allow a municipality to "pause" development of data centers for up to 180 days. In essence, this allows it to prepare a curative amendment to validate or reaffirm the validity of its zoning ordinance.

However, if a zoning ordinance mentions something similar to the following language, the municipality may be unable or have difficulty using the "curative amendment" provisions. For example, if a municipalities zoning ordinance state something like:

"If a particular use is not provided for within any existing zoning districts within the jurisdictional boundaries of the municipality and the proposed use is not substantially similar to any defined use, the zoning officer shall refuse to act. The zoning officer shall refer the application to the zoning hearing board which is authorized to permit or deny the proposed use as a special exception within a district most compatible with said proposed use, provided all other regulations of said district and with the imposition of any reasonable additional conditions and safeguards as may be imposed".

In accordance with the PA-MPC Article VI Zoning, Section 609 2. Procedures for Municipal Curative Amendments, if a municipality determines that its zoning ordinance or any portion thereof is substantially invalid, it shall take the following actions:

(1) A municipality shall declare by formal action, its zoning ordinance or portions thereof substantially invalid and proposes a curative amendment to overcome such invalidity, within 30 days following such declaration and proposal the governing body of the municipality shall:

(a) By resolution make specific uses which are either not permitted or not permitted in sufficient quantity;
(b) Reference to a class or use or uses which require revision; or
(c) Reference to the entire ordinance which requires revisions.

(2) Within 180 days from the date of the declaration and proposal, the municipality shall enact a curative amendment to validate, or reaffirm the validity of its zoning ordinance pursuant to the provisions required by Section 609 in order to cure the declared invalidity of the zoning ordinance.

(3) Upon the initiation of the procedures, as set forth in clause (1), the governing body shall not be required to entertain or consider a landowner's curative amendment filed under Section 609.1 nor shall the zoning hearing board be required to give a report requested under Section 909.1 or 916.1 subsequent to the declaration and proposal based upon the grounds identical to or substantially similar to those specific in the resolution required by clause (1)(a). Upon completion of the procedures as set forth in clauses (1) and (2), no rights to a cure pursuant to the provisions of section 609.1 and 916.1 shall, from the date of declaration and proposal, accrue to any landowner on the basis of the substantive invalidity of the unamended zoning ordinance for which there has been a curative amendment pursuant to this section.

(4) A municipality having utilized the procedures as set forth in clauses (1) and (2) may not again utilize said procedure for a 36-month period following the date of the enactment of a curative amendment, or reaffirmation of the validity of its zoning ordinance, pursuant to clause (2); provided, however, if after the date of declaration and proposal there is a substantially new duty or obligation imposed upon the municipality by virtue of a change in statue or by virtue of a Pennsylvanian Appellate Court decision, the municipality may utilize the provisions of this section to prepare a curative amendment to its ordinance to fulfill said duty or obligation.

The PA-MPC requires counties to prepare and adopt a comprehensive plan in accordance with the requirements of section 301. Municipal comprehensive plans which are adopted shall be generally consistent with the adopted county comprehensive plan.

Mifflin County adopted its most recent comprehensive plan in December 2025. The plan is named "Mifflin County 2035: A Decade of Progress." The vision statement is "Mifflin County will be a place known for its preserved history and rural character, its outdoor recreation, healthy communities, and vibrant economy achieved through collaboration". There is a portion of the plan named "future character area definitions and maps" for each of the county's 16 municipalities. Each character area designation is defined by existing land uses, infrastructure, growth potential, housing, economic development, transportation, and design.

If a data center is proposed in any of our municipalities and the future land use designation is incongruent or not consistent with the existing designation, then an argument can be made that a data center is not consistent with this element of the Comprehensive Plan. This can serve as basis for reconsideration of the siting of a data center to another compatible location. However, this is not legislative in nature.

The typical lifespan for a data center is approximately 20-30 years, while the typical lifespan of the servers or central processing units within the buildings are approximately 5 years. That is why it is prudent to have decommissioning standards within an ordinance, because this use has projected lifespans.

What are the potential economic benefits and potential negative externalities of data centers regarding traffic, energy, water demands, wastewater, noise levels lighting and air pollution?

Data centers generally don't produce a significant (although significant is relative) amount of on-site jobs. However, jobs are created for those involved with constructing these facilities and there can be temporary economic investments in the restaurant, lodging, and retail businesses of the local economy. These workers will rely on local businesses to meet their daily needs as they construct these facilities. Employment growth in a community is also directly related to the scale of each data center.
In today's economic climate, there are supply shortages for central processing units (CPUs) which are part of the equation for the development and timing of data center construction.

Tax revenue generation from data centers can be significant based again on the size of the data center. As data centers are constructed, the Mifflin County Tax Assessment Office would tax both the land and structures as commercial property. Those revenues cannot be determined until an actual project exists unless utilizing AI software technology such as nPlan, which can generate anticipated tax revenue by inputting data metrics. Governor Shapiro and the legislature passed legislation allowing the purchasing of CPUs to be tax exempt as an incentive to spur data center development.

7. Data centers compared to other uses generate relatively little traffic given the number of employees and low delivery needs. However, construction related traffic can last longer than that of other land developments, given that some large-scale data centers are built in phases to get buildings up and functioning as quickly as possible. Construction can be a 24-hour operation generating traffic at all hours of the day and night contingent on what the municipal codes allow.

Another means to protect the community from potential adverse effects of data centers which will be covered next, may be mitigated through "Community Benefits Agreements" (CBA). This is a binding legal document or contract between the municipality and the developer, to address and assign responsibility for environmental and operations performance standards relative to the zoning ordinance provisions listed on pages 7 and 8 of this document. This tool may be used to ensure protection of the built environment and the public's health, safety, welfare, and morals. CBA's are not mentioned within the PA-MPC and therefore are not legally required. It is encouraged that discussions between the residents, municipality, and the developer regarding CBA's begin early on in the process.

It appears the greatest potential negative externality concerns, as a result of this type of development, are copious amounts of energy and water which are necessary for the efficient operation of data centers. The others are noise levels and lighting.

7. Hyperscale or large-scale data centers are among the most energy-intensive land uses, with individual facilities often demanding 50 to 100 megawatts of electricity or more comparable to the consumption of a small city. Unlike most industrial and commercial facilities, data centers operate continuously, requiring uninterrupted power for servers and cooling systems. Their year round-the-clock demands can necessitate new substations, high voltage interconnections with transmission infrastructure, and other costly improvements.

There is a possibility of increased utility bills due to the continuous electricity and water demands for this use. The energy provider may not have the capacity to fulfill the energy needs of some data centers. In instances when the energy provider can't meet these demands for energy, the municipality may require within their zoning ordinance, under performance standards, that a certain percentage of electricity be provided by the data center on site. This is known as "artificially constraining electricity use" which requires energy be provided on site either through small modular reactors, tier IV diesel fueled generators, hydrogen fuel cells, solar strips, natural gas, or geo-thermal energy. Solar and wind generation are not reliable sources of energy to meet the demands of energy required for data centers. These sources play a limited role in power generation since they are not consistent or totally reliable.

Water usage will vary depending on the type and scale of data centers which can range from little to more than 100 gallons of water per day up to and exceeding 5,000,000 gallons per day. The Mifflin County Municipal Authority is the provider for public water for approximately 11,703 customers. The source of the water is from the Laurel Creek Reservoir and wells. The remaining households, businesses, and farms typically rely on private wells or off-site water sources, such as a spring. Based on current information from the Municipal Authority, its treatment plant is permitted by the PA Department of Environmental Protection and the Susquehanna River Basin Commission to produce 6 million gallons of water per day. Of the 6 million gallons per day, the Authority is authorized by PA-DEP to withdraw 3.2 million gallons per day from the Laurel Creek Reservoir, while 2.5 million gallons can be used from the Authority's private wells.

Currently, the Authority produces on average 2.8 million gallons per day. The Authority most likely would not have the capacity to sell more than 3 million gallons per day to any potential individual customer, which would deplete much of their 3.7 million gallons per day in available/reserve capacity. If the use will be served by a public water or sewer source, it is best practice to require the applicant to submit documentation from the public authority certifying they have the capacity to supply the water and sewer needs for the data center.

Another proactive provision that can be placed in an ordinance is to require the applicant to provide proof of review and approval from the Susquehanna River Basin (SRB) when water withdrawals of 100,000 gallons per day are projected. The alternative water source can be on-or off-site wells. Regardless of the source, any Data Center that anticipates using 20,000 gallon of water per day must apply and receive a permit from the SRB.

Noise levels generated by data centers vary depending on the time of day and whether backup generators are running in the event of a power outage. There are varying types of noise in our everyday lives. Some are ambient noises or audible sound, measured through decibel levels db (a) weighted. Another noise is low frequency or vibration noise, measured as decibel level db (c) weighted. Both these noises can be generated by data centers. It is important to consider requiring noise studies during the construction of the data center, during its operation, and when all construction activity has ceased. These studies can be conducted by the Institute for Noise Control Engineering of the USA or the National Council of Acoustical Consultants. Typically these noise levels are measured at the boundary line of the site(s). Sound levels of 55 db(a) is an acceptable standard that humans can tolerate without hearing impairment. Levels of 80 or above require hearing protection and may cause hearing impairment if not mitigated.

A loud concert or an ambulance can generate between 100 db(a)-120 db(a) and prolonged unprotected exposure most likely will cause hearing impairment.

12. It is also important not to overlook the potential of the release of fine particulate matter. Fine particulate matter is estimated to drive nearly 90% of the health impacts from air pollution and is often not captured in traditional energy or climate assessments or incorporated into infrastructure planning decisions. However, people can't solve a problem that has not been measured. Currently permitting decisions for data centers are being made without clear accounting of public health costs-and that gap means health damages are systematically left out of these important decisions. Independent science-based health impact analysis is part of how close that gap is to bring these costs into decision making.

8. Data Centers must be able to control the temperature from the energy produced by the CPUs. There are two methods that are typically used to cool the servers: open or closed looped systems. Most traditional data center cooling systems work by blowing chilled air through server rooms known as open loop cooling. At the same time, intake vents placed in locations where warmest air might pool, suck up hot air and move it to the chiller so it can be cooled down and piped back into the space. This approach is called an open loop system because it circulates air through an open space. It is very similar to a central air conditioning system in a home or workplace using duct work to transfer the cold air. However, this system produces waste water that must be eliminated externally through a waste water treatment facility similar to sewage treatment. See Figure 1. below

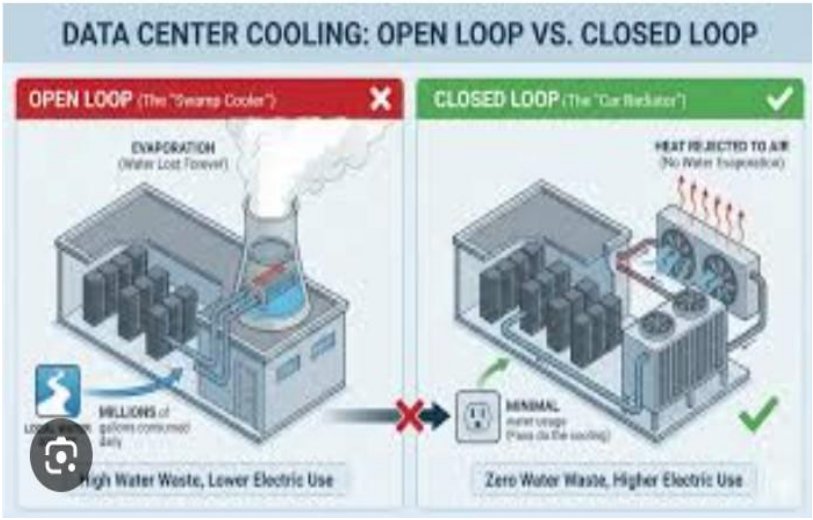
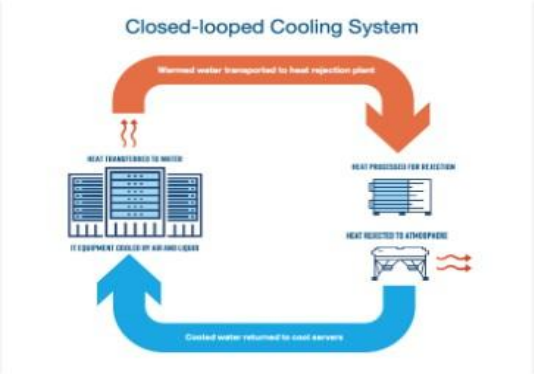


Figure 1. (source AI generated)

An alternative approach known as a closed loop system injects chilled air into small targeted areas, typically individual server racks. So, instead of blowing air into the server room as a whole, closed loop systems focus on IT equipment. The "loop" is closed in the same sense that it is restricted to a small area. From both a cooling efficiency and energy efficiency perspective, closed loop cooling is considered better because supplying cold air only where it matters does not waste energy cooling spaces, like the aisles between the server racks that do not require cooling.

The challenges of closed-loop systems are higher installation costs, high server room temperatures, and less efficiency than alternative cooling. Typically, these systems do not generate wastewater quantities like open looped systems. See figure 2. below



9. Lighting may cause interference with spillage onto adjacent properties particularly to residential properties. A photometric plan should be provided to confirm that all exterior data center lighting is designed to produce no more than 0.25 foot-candles at any lot boundary. Exterior lighting should not be mounted higher than 35 feet, and it should be fully shielded to prevent spillage to adjoining properties while providing adequate safety and security within property boundaries

Public Participation, Non-Disclosure Agreements and the Pennsylvania Environmental Rights Amendment

Full disclosure is achieved through advocating public participation, engaging and informing the public by allowing formal and informal discourse. This also can be achieved by gauging the public's perception through public surveys regarding community development goals and objectives and projects that may have a regional impact, and may expand beyond the boundaries of a county or municipality. This is often used during the creation of a comprehensive plan or when creating an official map. Official maps are authorized within the PA-MPC and are used by governing bodies to plan for the purpose of the use of public land and facilities. It can involve public streets, watercourses, public recreation areas, pedestrian ways and easements, stormwater management, etc. It is an essential component for building trust with the public, and at times, consensus.

10. A nondisclosure agreement (NDA) is defined as follows: It is a legal contract, or part of a contract, between at least two parties. It outlines confidential material, knowledge, or information that the parties wish to share with one another for specific purposes while restricting access to third parties. The public may view NDA's as the antithesis of public participation, because it restricts a party or parties from disclosing public information that may or may not be proprietary, or valuable to the interests of the public.

Section 127 of the Constitution of Pennsylvania (§ 27. Natural resources and the public estate) states "The people have a right to clean air, pure water, and to the preservation of the natural, scenic, historic and esthetic values of the environment. Pennsylvania's public natural resources are the common property of all the people, including generations to come. As trustee of these resources, the Commonwealth shall conserve and maintain them for the benefits of the people. (Amy 18, 1971, P.L. 769, J.R.3)

11. The PA Supreme Court ruling states that the obligations imposed by Article 1, Section, 27 of the PA Constitution at the state level are also imposed at the local level. The Commonwealth is the trustee of the natural resources included in the Environmental Rights Amendment (ERA), which means that local governments are included among the trustees with constitutional responsibilities. The implication is that local planning and land use regulations, in addition to other considerations, are also responsible for carrying out the mandate of the ERA.

National Pollutant Discharge Elimination System

13 The Environmental Protection Agency through the Clean Water Act is authorized and administers the National Pollutant Discharge Elimination System (NPDES) permitting process. All projects that will disturb one acre of land or more which discharges into a non-municipal sewer system or from a point source into the waters of Pennsylvania requires an NPDES permit from the applicant.

NPDES permits are issued by states that have obtained EPA approval to issue permits or by EPA Regions in states without such approval. The permit will contain limits on what an applicant can discharge, monitoring and reporting requirements, and other provisions to ensure that the discharge does not hurt water quality or people's health.

Emergency Services

7. Data Centers present unique challenges for emergency management. Issues may include data security and the threat of cyberattacks; a large amount of heat generating electrified equipment and the risk of fire; buildings of great length and or height, and hazardous materials such as refrigerants and batteries. Local emergency service providers may be unfamiliar with data center operations and the potential hazards involved and should receive training in advance of the data center becoming operational. An emergency response plan should be required as part of County SALDO ordinance or through zoning by a conditional use or special exception use.

7. The plan should include but not limited to the following:

1. Evaluation of the impacts, both positive and negative of the proposed data center upon emergency services and fire protection.
2. Be reviewed by and acceptable to the local fire departments and emergency services as part of the conditional or special exception use process.
3. Include detailed procedures for fire suppression, containment ventilation and evacuation.

One additional provision should include:

1. The municipal permitting agency provide a copy of the building plans to emergency response teams and local fire departments depicting the ingress and egress of doors, loading areas, combustible material locations, locations of backup generators, and posting in a conspicuous location a name and contact person in the event of an emergency.

Additionally the Federal government may consider data centers as "critical infrastructure". If a municipal or county solicitor can substantiate, that data centers are included as Federal "critical infrastructure", then an ordinance may include provisions that a third party independent inspection agency provide a risk assessment analysis as part of the land development application process.

END NOTES:

1 *Loudoun County, Virginia: Data Center Capital of the World "A strategy for a changing paradigm" By Asburn Supervisor, Mike Turner Loudoun County, VA Board of Supervisors October 20,2025 (Original Edition: July 1, 2024.*

2 *Cumberland County Planning Department, Planning for Data Centers.*

3 *The Unprecedented Expansion of Data Centers, How AI-Era Data Center Trends Shape Site Selection Strategy,, Site Selection Group's Guide to Identifying Viable, Scalable, Infrastructure-Ready Data Center Locations.*

4 *A Planning Guide pertaining to data centers in Lancaster County, PA.*

5 *NE RCRD Data Centers: Assisting Communities in Understanding the Challenges and Opportunities February 24, 2026 webinar.*

6 *Pennsylvania Township News-May 2026-Dealing with Data Centers by Chris Brady, Assistant Editor.*

7 *Data Center Ordinance Guide version 1.0 prepared by Chester and Montgomery County Planning Commissions.*

8 *Data Center Knowledge-Christopher Tozzi, Technology Analysist October 21, 2024.*

9 *A Planning Guide Pertaining to Data Centers in Lancaster County PA-Lancaster County Planning.*

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