

MICHIGAN PLANNER



Michigan Chapter
American Planning Association

DATA CENTERS *and AI*

INSIDE

2 CONNECT | **4** Zoning for Data Centers | **7** Moratoriums to Master Plans | **9** How Planners Use AI for Good | **10** When the Cloud Drops | **12** An Argument for Sensible AI

When you think of MAP, you probably consider the excellent training and workshops we deliver to planning and zoning officials; the *Michigan Planner* magazine, covering current topics (like this issue, devoted to Data Centers and AI); our extraordinary annual Planning Michigan Conference that attracts more than 500 professional planners, planning and zoning officials, zoning administrators, and more; and opportunities to network and learn at our Transportation Bonanza, Spring Institute, or metro Detroit Planner's Night Out events. You may contemplate a section you belong to, like the Emerging Professional Planners (EPP), the Metro Detroit Planners (MDP), or the MI Black Professional Planners (MBPP).

What may not be as apparent are the various grants MAP secures each year to develop and deliver Toolkits, Best Practice Guides, and publications to help you improve your skills. In the past 2 years alone, MAP has secured grant funding and administered at least 6 different grants, each with the goal of equipping our members and partners with tools and resources to tackle complex problems.

While the Zoning Reform Toolkit and the companion Stories and Studies were completed in 2022 and 2023 respectively, MAP's partnership with MSHDA – funder of both – spans decades and together MAP's expertise in housing solutions, and access to planners and officials, when paired with MSHDA investment has yielded significant local reforms to expand housing supply. In 2025, MAP partnered with the Michigan Disability Network, and MSHDA funded development of an Inclusive Design Toolkit which introduces a wide variety of planning and zoning interventions to create policies that will result in more accessible communities. Finally, MSHDA counts on MAP to provide technical assistance and support to the Regional Housing Partnerships (RHPs) to help implement their plans.

MAP's relationship with the Michigan Department of Transportation (MDOT) and its Safe Routes to School (SRTS) program has been ongoing for almost twenty years. What started as an FAQ to encourage municipalities to implement active school access through participation in SRTS programs evolved into an annual, multidisciplinary event, Transportation Bonanza, that attracts nearly 300 planners, engineers, and health professionals to learn together about best practices for transportation planning.

And EGLE's Coastal Management Program (CMP) has provided direct grants to MAP to develop and implement various tools and resources to coastal communities to help them manage and protect Michigan's shorelines, dunes, and bluffs. Planning, coupled with zoning interventions, is one of many important ways to preserve our greatest natural assets.

MEDC, through its RRC program, has also been a long-term funder and supporter of MAP. Most recently they were a major contributor to the National Zoning Atlas (along with Kent County ARPA and the Taubman College of Architecture and Urban Planning funds), to pilot a zoning atlas in Kent, Muskegon and Ottawa Counties. The initial MEDC investment enabled MAP to launch its own improved Zoning Atlas, now called the Michigan Zoning MAP. The platform is nearly built, and we are ready to launch interactive zoning maps in Wayne, Oakland and Macomb Counties, with many other counties in the queue. Additionally, MEDC funded MAP to develop a Child Care Best Practice Guide and we worked together with McKenna to develop a toolkit that is gaining national attention.

These partnerships and investments allow MAP to stretch YOUR membership dues further. Our ability to develop and launch an array of tools and resources to improve planning and zoning practices wouldn't be possible without our partners and their investment in MAP.

On behalf of the entire organization, we owe a huge debt to our partners, we acknowledge their commitment to quality planning, and we look forward to identifying and advancing important projects that will create a better Michigan for many years to come.

Board Members

Christina Anderson, AICP (President) (2026)
City of Kalamazoo
andersonc@kalamazoocity.org

Scott Kree (Vice President) (2028)
Oakland County
krees@oakgov.com

Keith Baker, AICP (Secretary | Treasurer) (2026)
City of Coldwater
kbaker@coldwater.org

Shari Williams (Past President) (2026)
Detroit Future City
swilliams@detroitfuturecity.com

Jill Bahm, AICP (Professional Development Officer) (2027)
Giffels Webster
jbahm@giffelswebster.com

Christopher Germain, AICP (2026)
Lake Superior Community Partnership
christophergermain@gmail.com

Kristen Gundersen, AICP, CFM (2028)
City of Buchanan
kgundersen@cityofbuchanan.com

Pablo Majano, AICP (2028)
Michigan Economic Development Corporation
majanop@michigan.org

Megan Masson-Minock, AICP (2028)
Carlisle | Wortman Associates, Inc.
mmasson-minock@cwaplan.com

Ex-Officio Members

Kami Pothukuchi, PhD (Faculty)
Wayne State University
k.pothukuchi@wayne.edu

Kevin Martin (Elected Official)
Van Buren Township
martinkevin34@yahoo.com

Student Board Representatives

Chloe Martin
Grand Valley State University
martichl@mail.gvsu.edu

Angelina Vitale
Grand Valley State University
vitalang@mail.gvsu.edu

Staff

Andrea Brown, FAICP, Executive Director
abrown@planningmi.org

Leah DuMouchel, AICP
Director of Programs and Communication
ldumouchel@planningmi.org

Rachel Goldstein, Director of Operations
rgoldstein@planningmi.org

Andy Larsen
Research and Programs Specialist
alarsen@planningmi.org

Amy Miller Jordan, Deputy Director
ajordan@planningmi.org

Philip Rentschler
Research and Data Specialist
prentschler@planningmi.org

Amy M. Vansen, AICP
Director of Information and Programs
avansen@planningmi.org



Data Centers and Artificial Intelligence

The editorial calendar for the *Michigan Planner* magazine is typically programmed about a year in advance. Except when things change swiftly and radically. The 2020 *MI Planner* editorial calendar was planned. Until it wasn't. The Planning in a Pandemic Edition, July/August 2020 was certainly not conceived until April 2020. And MAP had to postpone its publishing until July August because we were finalizing a Planning for Tourism grant that culminated in an edition of magazine. The May/June 2020 *MI Planner* was Planning for Tourism (which looked good in 2019, but by spring 2020 seemed pretty ironic indeed).

Likewise, while AI and technology have been discussed as a possible topic for the *MI Planner* since 2022, it wasn't until 2025 that artificial intelligence and data centers became a force. So many meetings, webinars, convenings in person and virtually, where planners, engineers, lawyers, and energy experts all grapple with what should and what can a community do.

While tiny data centers (server rooms as they used to be called) are not new, and the idea of “the cloud” is also not new, the scale of proposed data centers is new. As are the worries that this new and somewhat mysterious use cause around water, energy, and noise. Municipal officials and employees don't generally look at water or energy use. These resources are mostly managed by entities other than a local unit of government and are mostly abundant here. There is real worry (whether founded or not) that our leaders charged with protecting these resources for everyone's use will continue to do so in a way that is fair for everyone.

Noise, not just what is audible, but infrasound and associated health problems are factors not fully known at this time. The July *MI Planner E-dition* will have links to many resources, including health studies.

Some experts have opined that the data center technology is changing so rapidly that today's data centers will be obsolete very soon, so decommissioning is another issue to plan for and save for now.

This issue delves into this quickly changing technology –what it means as a profession in the office *and* in the community. The articles are by members who may have been thinking about AI before most of us or have been on the front line of data center proposals. MAP will continue to be at the table with experts in this space and to curate and disseminate resources to our members.



Zoning for Data Centers

Challenge Accepted

Data centers have become the next major land use issue for Michigan communities. Not long ago, cell towers were one of the most complicated – and controversial – technology-related uses appearing before planning commissions. Today, data centers represent a new generation of digital infrastructure. Most people may never think about where their emails, financial records, streaming services, cloud files, artificial intelligence tools, or local government records are stored. However, all of this digital activity depends on physical computing equipment that is located somewhere, and now, data centers are becoming more prominent in Michigan.

Data centers pose complex land use challenges for planners and the communities they serve. They combine industrial building design, utility-scale infrastructure, backup power, mechanical equipment, and security needs, all with the potential for significant land use and environmental impacts. The demand for new data center development is growing. A study by the Lawrence Berkeley National Laboratory reported that data centers consumed approximately 4.4% of total U.S. electricity in 2023, and could consume 6.7% to 12% by 2028.

A Brief History

Data centers are not new. For decades, businesses, universities, hospitals, telecommunication providers, and government agencies maintained server rooms or small technology spaces inside existing buildings. These rooms were usually accessory to the main use of the property and rarely created separate zoning concerns. As more daily activity moved online, data storage and processing became a much larger industry, with much larger physical needs. Cloud computing, streaming platforms, online banking, digital medical records, public safety systems, and artificial intelligence have increased demand for larger and more

MAP's Scholarship Program Needs You!

The Michigan Association of Planning established its Memorial Scholarship fund several decades ago to assist student members who are pursuing degrees in urban and regional planning at Michigan colleges or universities.

To keep the scholarship fund going, we are requesting tax deductible donations from you! Companies, organizations, and individuals will be acknowledged on MAP's website!

You can donate by going to www.planningmi.org or by scanning the QR code. Thank you in advance for your generosity.



specialized facilities, often called “hyper-scale” data centers. Hyperscale data centers house thousands of servers and range from ten thousand to millions of square feet in floor area.

Michigan has become an emerging market for data center development due, in part, to state tax incentives. The State's Enterprise Data Center Sales and Use Tax Exemption took effect in 2025 and eliminated Michigan's 6% sales and use tax on eligible data center construction and equipment purchases for qualified projects. To qualify, an enterprise data center must include at least \$250 million in capital investment and create at least 30 qualified new jobs meeting wage requirements, along with other statutory and environmental conditions. These incentives have increased data center developers' interest in Michigan sites, making it important for local governments to consider whether their zoning ordinances are prepared before applications arrive.

Key Planning Implications

Planning for data centers is unique in several ways. First, they challenge traditional land use categories. Many zoning ordinances classify uses based on visible activity, employment, traffic generation, or building form. Data centers do not fit neatly into those categories. They may generate fewer employees and truck trips than a warehouse, but can require significantly more electricity, cooling capacity, backup generation, utility coordination, and security infrastructure.

If an ordinance does not define data centers, a community may be forced to evaluate a data center under standards that were not designed for its actual impacts.

Second, data centers raise infrastructure capacity questions that extend beyond the boundaries of their sites. Large facilities may require electric substations, transmission upgrades, redundant power feeds, water service improvements, stormwater infrastructure, and emergency access enhancements. Local governments do not regulate utility rates or electric generation, but they do have a legitimate planning interest in understanding whether a proposed site can support a data center, and whether off-site infrastructure impacts may affect neighboring properties, public facilities, or future development patterns.

Third, data centers can create land use compatibility concerns. Noise from climate control and cooling equipment, transformers, and backup generators may affect nearby properties. Large buildings, mechanical yards, security fencing, lighting, and imposing building façades can affect community character, particularly where industrial districts are located near residential neighborhoods, schools, parks, or public facilities. These impacts may be manageable, but they are different from the impacts typically associated with conventional warehousing or light industrial development.

Finally, data centers raise long-term planning questions. These facilities may involve significant private investment, but

they can also create specialized buildings and infrastructure that may be difficult to reuse if the facility becomes obsolete. Communities should consider not only how a data center functions when constructed, but also how the site could be adapted, reused, or restored in the future.

Zoning for Data Centers

Because of these implications, communities should consider adopting zoning standards that treat data centers as a distinct land use. Beginning with clear definitions, communities may distinguish between large-scale data centers, small-scale data centers, and accessory data centers. This allows a community to regulate a large hyperscale facility differently than a small server room accessory to a hospital, university, or institutional use.

The ordinance should also identify appropriate zoning districts and approval procedures. Rather than allowing data centers broadly by right, communities may wish to regulate them as a special land use in industrial, business, technology, research, or planned development districts. This allows a community to evaluate site-specific conditions, infrastructure capacity, adjacent land uses, master plan consistency, and mitigation measures before approval.

Technical submittal requirements are especially important. A complete application should include an infrastructure impact statement identifying anticipated electric demand in megawatts, projected water use in gallons per day, cooling meth-

odology, backup generation capacity, fuel type, utility service needs, and confirmation from applicable electric, transmission, water, and sewer providers regarding service adequacy.

Design and performance standards can help manage physical and operational impacts. These may include minimum lot area, setbacks, lot coverage, building height, screening of mechanical equipment, noise limits at property lines, restrictions on generator testing hours, lighting controls, façade design, durable materials, landscaping, and security fencing. Emergency access, fire suppression, hazardous materials, generator emissions, and annual coordination with first responders should also be addressed.

Finally, zoning ordinances should establish a process for regular facility monitoring and eventual decommissioning. Annual reporting may include generator runtime logs, water consumption, energy efficiency performance, permit compliance, and sound monitor-

ing where warranted. A decommissioning and site restoration plan should identify abandonment triggers, removal standards, equipment disposal, hazardous materials handling, site stabilization, and financial assurance.

Data centers may be an important part of Michigan's economic and technological future, but they should not be treated as an ordinary use. Communities that adopt clear definitions, appropriate location limits, technical submittal requirements, measurable performance standards, as well as monitoring and decommissioning provisions will be better positioned to evaluate data center proposals consistently, transparently, and in alignment with their master plans. In short, communities should not wait to react to data centers; they should plan for where and how these facilities belong.

Benjamin R. Carlisle, LEED, AICP has more than 20 years of experience working as a professional planner, including experience

in zoning, land use and comprehensive planning, site planning, tax increment financing, and economic development. With Carlisle|Wortman Associates, Inc., Ben serves as principal planner to the cities of Troy, Wixom, and Saline, and to the townships of Pittsfield, Ypsilanti, and Superior. Ben often presents at Michigan Association of Planning, Michigan Municipal League, and Michigan Township Association events.

Mike Auerbach, AICP is a Senior Associate with Carlisle|Wortman Associates, Inc. with a professional background of working with southeast Michigan local governments and nonprofit agencies. His planning experience includes site plan review, zoning administration, facilitating public engagement, and assisting local officials in drafting new ordinance provisions and policies. Mike also has a versatile technical skillset for analyzing, evaluating, and mapping land use and socioeconomic data.



Carlisle | Wortman
ASSOCIATES, INC.



Planning Michigan Conference

Sept. 30 - Oct. 2, 2026
Radisson Hotel Kalamazoo

Keynote Presenters: Samia Byrd, Donald Elliott, and Dan Kildee

Sessions customized for land use leaders.

MSU Extension Citizen Planner Program.

MAP member discounts for full conference registration and single day rates.

www.planningmi.org

From Moratoriums to Master Plans

Local Strategies for Data Center Development

Almost overnight, data centers have become the most discussed and most controversial topic of planning and zoning in Michigan and across the country. Residents and public officials alike have raised many concerns about the potential harms data centers can bring to a community. And at the same time, higher levels of government and private industry have been very motivated to construct and operate data centers. This tension has led to challenging public meetings, tough conversations, and perhaps above all else, increased pressure on municipal planners to draft regulations which effectively protect their communities.

Although many are likely familiar with the general concept of data centers from recent headlines, a brief background helps set the stage for discussion. At their most basic, a data center is a warehouse or series of warehouses which contain computer systems and associated technology (mostly networking equipment and power banks). These computer systems serve as the “backbone” of the internet, storing all of the information that we use every day to access the internet. In other words, “The Cloud” is a real, physical place.

There are several kinds of data centers, many of which have been around for decades with relatively little fanfare: a data center could be just a room inside a larger office building. But the newest and most newsworthy type are so-called “hyperscale” data centers, which are massive complexes designed to hold thousands of computers. The recent rise in hyperscale data centers is partly a result of the AI Boom. In order for AI chatbots like ChatGPT or Google Gemini to train themselves and process the hundreds of thousands of user inputs they receive, they need servers with substantial capacity. The easiest way to get that capacity is to construct a data center.

The recent push for hyperscale data centers also comes from the highest levels of government. In December 2025, President Donald Trump issued an executive order to establish the United States as a “dominant” force in the AI industry. His order called on regulators to “remove barriers to and encourage adoption of AI,” establish a “minimally burdensome national standard,” and allow AI companies to “innovate without cumbersome regulation.” Michigan’s government has done the same through legislation: Public Acts 181 and 207 of 2024 eliminate sales and use tax on eligible data center construction and equipment purchases and provide other incentives to data centers which invest a set amount of money and create jobs within Michigan. These combined factors have contributed to the recent growth in hyperscale data center construction.

Knowing that the installation of hyperscale data centers is on the rise, there are several key steps to take to ensure your community is ready for a potential data center. First, and most importantly, you should review your current ordinances and identify any uses which could be construed to include a data center. Remember, your ordinance does not need to use the words “data center” specifically. Many ordinances, especially in industrial districts, use very broad terminology such as “warehouses” or “industrial processing,” which could very easily be interpreted to include a data center. If your ordinance currently contains any permitted or special land uses which could be read to include a data center, you should consider amendments to provide more specific regulations or exclude data centers from those general definitions.

Second, you should consider whether your community needs to adopt mora-

toriums to properly consider and enact regulations on data centers. This would be especially important if your ordinances currently allow data centers in some capacity, because those regulations are likely outdated or not comprehensive enough for hyperscale data centers. Check the sidebar for more information on moratoriums.

Third, you should consider what kinds of regulations your community needs for data centers. Some communities have considered banning them entirely, but this may not be lawful. The Michigan Zoning Enabling Act, MCL 125.3207, states that a zoning ordinance cannot completely prohibit a land use in the presence of a “demonstrated need,” unless a location does not exist within the municipality where the use may be appropriately located. Regarding “demonstrated need,” courts are likely to look to the directives of President Trump and the Michigan Legislature, which very strongly encourage and promote the necessity of data centers for industry, economy, national security, and other purposes. Regarding whether there is a suitable location, this will naturally vary from community to community. But the existence of any commercial or industrial districts will likely provide a suitable location for at least some form of data center. These factors likely make a total prohibition unlawful.

There are several important facets of hyperscale data centers that should be included in any ordinance updates:

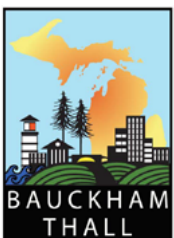
1. **Site Selection.** Evaluate your community’s current master plan and zoning ordinance to determine if there is an appropriate area within your municipality where a data center could be located, keeping in mind the rules of exclusionary zoning. A substantial amount of pushback on hyper-

scale data centers is associated with their location near residential areas or on prime farmland; your ordinance should take those locations into account.

2. **Energy Consumption.** Data centers consume large amounts of energy, which creates concerns about grid capacity, energy prices, and carbon emissions. Local authority to regulate most aspects of energy usage can be limited, but not entirely nonexistent. Planners should consult with municipal legal counsel on any regulations concerning electrical usage.
3. **Water Consumption.** Some data centers consume significant amounts of water to cool the computers, which can add strain to local systems. This is not the case for all data centers, however, and many utilize air for cooling. Your ordinance should consider both as a possibility and should require review by your local water and sewer authority.
4. **Noise.** Several components of data centers generate noise that can reach far beyond the property boundaries. Air-cooled facilities rely on air conditioners and large fans which need to run nearly 24/7. Further, because of the serious monetary loss associated with any downtime, most data centers are built with large diesel generator power backups. These generators run not only during total power loss, but also run occasionally to test their operation, or to make up for partial loss of capacity in the grid.
5. **Screening and Security.** Data centers hold extremely valuable data that companies pay a great deal of money to protect. Many data centers are constructed with walls or fences to limit access, 24/7 security, and high-power outdoor lighting. These screening and security features can impact neighboring properties and should be considered in any regulations.

This article touches on some of the most important aspects of data centers, but by no means captures all of the nuances associated with these new and rapidly evolving facilities. Planners can gain valuable insight by reviewing and conferring with other municipalities in Michigan and in other states who are currently processing applications for data centers.

Michael W. Bila is a municipal attorney at the law firm



Bauckham, Thall, Seeber, Kaufman & Koches, P.C. His work covers a wide range of municipal law issues, including planning and zoning for emerging technologies. He has recently developed and presented webinars for MAP including Nonconformities and Blight: Be Gone!.

Moratoriums

Because of the sudden rise in the popularity of hyperscale data centers, and many zoning ordinances' lack of adequate provision for this new and somewhat unanticipated use, public officials have quickly sought to enact moratoriums on data centers while they grapple with new regulations. Moratoriums are an effective tool for updating ordinances, but only when adopted properly. Importantly, a moratorium is not a tool to delay or prohibit a use, but to allow time for meaningful review and new regulations.

A moratorium on data centers in your community very likely requires the adoption of both zoning and police power ordinances. A moratorium by resolution or motion alone is usually insufficient. A zoning moratorium must be adopted in the same manner as amendments to your zoning ordinance. Both the zoning and policy power ordinance moratoriums should specifically explain the reasons for the moratorium in your community, with reference to local concerns and inadequacies in your current ordinances.

Moratoriums must also be time limited. A typical moratorium ordinance will last anywhere from three to six months. During that time the municipality must actively research and update their regulations.

For any questions regarding moratoriums, including the drafting of ordinances and required language, it is strongly recommended that you consult with your municipal attorney. Moratoriums can be complicated, and failure to include certain elements can result in the moratorium being ruled invalid.

How Planners Can Use AI for Good

Planners have reached a point in their field where they must decide whether to incorporate generative AI into their careers and, if so, how. For a profession guided by ethics, how can this evolving technology support planners in an ethical and meaningful way, benefiting both them and the communities they serve?

There are a few key considerations to keep in mind. The most important one is that AI is best used as a resource or tool, not as a final product. This maintains accuracy, transparency, and trust between planners and their communities.

One of the greatest concerns about using generative AI, regardless of the field, is the possibility of biases and inaccuracies. An AI program is only as good as the information it was trained on, and it still has a long way to go. When asking AI questions, sources will typically be cited to explain how it reached its conclusion. It is important to check these sources, as they may contain incorrect or false information. It may even produce an “AI hallucination,” a confident response that is incorrect and has no factual basis.

Many programs continue to learn from the data they are fed, raising potential privacy concerns. It is typically recommended to avoid using sensitive information unless the program being used does not store it. Adopting an office or department policy or philosophy on when it is appropriate to use AI can help maintain accuracy, transparency, and trust.

Here are some ways to use AI in your work:

Grammar and tone. One of the simplest tools at the planner's disposal is **Grammarly**. They can suggest corrections to spelling, grammar, and adjust tone.

Transcription and translation. Serving a wide variety of people and projects requires planners to adapt quickly and keep track of a lot of information. AI transcription services such as **Otter.ai** can join online meetings, take notes, and provide full transcripts. On the translation side, **Google Translate** has introduced generative AI features that provide more accurate, context-aware alternatives to word-for-word translation, making it useful for multilingual communities and communicating complex planning and zoning jargon.

Understanding ordinances and complicated text. Planners regularly navigate dense ordinance language. Chatbots such as ChatGPT typically lack enough local information to provide consistently accurate answers. Platforms like **Claude.ai** and **NotebookLM** draw only on data directly fed into them and do not use that data for training. They are helpful tools for handling sensitive information, simplifying language, comparing documents, breaking down processes into plain English for applicants, and can function as enhanced search tools within a zoning ordinance or PDF document to

continued on page 14

Note from MI Planner Editor:

To break up some of the text in this issue, I placed the contents of this article in an AI program and asked: “create an image that illustrates this article”. What started as a quick image generator turned into a bit of a journey. The top image was generated by ChatGPT. Obviously, this was not what the article was about. So I turned to Notebook LM, loaded the article and asked: “create an image that illustrates this article”. I was surprised to see “architect” appear in the image since that word does not appear in the article. I then asked Notebook LM to correct the image: “Please revise image to say Ethical Planner. Not Ethical Architect”. And the third image was created.

First Try



Second Try



Third Try

When The Cloud Drops

Planning for Data Centers

Data centers are structures that house information technology infrastructure and equipment for building, running and delivering applications as well as storage of digital data—they are also an integrated land and water policy problem.

Data centers raise a complex set of interconnected land use and water challenges, as their actual community impacts vary and depend on numerous environmental, technological and policy factors. Communities in Michigan (and the Great Lakes region) are in the infancy stage of creating regulations that not only protect their residents and stakeholders, but also allow for well-regulated investment from larger corporations that own and/or operate such systems.

Data centers lack consistent definitions, classifications and operational standards across jurisdictions and industries. In general, policies and regulations are playing catch up with technology. Fewer regulations can lead to some communities appearing more “attractive” than others for the development of these centers.

Local planning commissions often consider site plan characteristics like parking, landscaping, and setbacks, not how much water and energy a use will need. Yet water and energy are very much the topics being discussed locally around potential data centers.

Unfortunately, there is limited public disclosure of energy use, water consumption, emissions and supply chains from the data center applicants. Data center applicants should be more forthcoming and open about the infrastructure needs; this allows for greater understanding of the entirety of the development project, an increase in community awareness, meaningful participation, and informed public decision-making.



Data Center in Virginia

Air or Water

Air-cooled centers utilize a ‘near zero’ state of operational water usage, relying on systems such as mother nature (depending geographical location) and machine-cooled equipment. The trade-off with air-cooled systems is their higher electricity demand, which can place added strain on aging electrical infrastructure because of the heavy load they draw from transmission lines.

Evaporative / cooling tower systems, which are common in data center development, can use between one to five million gallons of water per day (MGD) for a 100 MW facility. This equates to approximately two to five gallons per kilowatt hour (kWh). This water usage is highly climate-dependent; areas with lower average daily temperatures may utilize less than those regions with higher average daily temperatures.

A third type of cooling is classified as ‘closed loop’, in which the system is sealed (closed), recirculating water coolant to remove heat from equipment, without exposing the fluid to the atmosphere. This type of system has increased in attractiveness from local communities, who worry

that a daily local draw of millions of gallons of water would have a significant impact on their local source of drinking water. To mitigate potential impact on the local water supply, some communities have required that data centers use closed-looped systems.

It is important to note that each data center and its demand for water may be different from another. The type of equipment, the size of the facility, and its proposed location all impact the water demand.

Strategies to Consider

There are hundreds of legislative bodies across the United States that have taken action on data centers, most notably in the form of moratoriums at the local level (*see sidebar on page 8*). But what else should communities know as they seek to develop regulations pertaining to data centers?

Communities must be able to conduct analyses to address the local energy and water availability. These are two of the more critical infrastructure needs for data centers, and two of the most common concerns raised by members of the

community, but they are areas that are often outside of local government control. If there is a demand for a significant amount of water or electric usage, how will this be managed? Can a local unit of government establish provisions that protect other system users from cost increases or system disruptions caused by data centers? Furthermore, how could a community tie system upgrades to a data center project?

With data centers potentially accounting for a significant amount of global electrical energy, communities may benefit from stipulating the use of renewable sources and energy efficiency in construction and operation. Federal agencies like FERC (Federal Energy Regulatory Commission) are increasingly involved in oversight as data centers connect directly to power generation. Strongly encouraging data centers to provide letters of preliminary approval from the energy provider may increase transparency on consumption and any needed infrastructure upgrades. Further, aligning municipal zoning with environmental goals of the local, county and state governments and regional grid capacity prior to approving projects may be crucial. These efforts can be further supported by mandatory, standardized reporting of energy and water usage of the data center to the local authority.

Data centers are changing quickly as emerging land uses often do, with laws

and policies needing to catch up. Taking a breath to plan for and assess what makes sense for your community before the developer is in the room with you is always a best practice. Determining what makes sense will require knowing the facts about data centers and available regulatory tools and communicating all of that to the public. As this industry continues to develop, look for laws and policies to also change.

Kyle Mucha, AICP, is a Principal Planner with McKenna. Kyle partners with suburban and rural communities across the Great Lakes Region to aid in the development of modern zoning ordinances, sustainable site development, advocacy for residents and community stakeholders, and the creation of place based on community input. Kyle serves on the APA's Water Planning Network Steering Committee, collaborating with members regarding the protection, management and use of water resources and utilities.

Manohar "Manny" Patole, LLM, MUP, is a place-based urban livability advocate working at the intersection of Community, Policy, and Technology. Currently he is Industry Assistant Professor with NYU's Center for Urban Science and Progress, Senior Fellow with NYU Alliance for Public Interest Technology, Co-Cities Fellow and on the NYU Climate Initiative.

With Special Contributions

Mary Ann Dickinson, Policy Director, Land & Water, Lincoln Institute of Land Policy. Mary Ann was the Founder and President/CEO for 15 years for the Alliance for Water Efficiency, a non-profit organization dedicated to promoting the efficient and sustainable use of water in the United States and Canada. She now works for the Lincoln Institute of Land Policy and also serves as the Co-Chair of the American Planning Association's Water and Planning Network.

Brett Gracely, PE, Water Planning Practice Lead with Plummer. Brett's project expertise includes groundwater and surface water hydrology & hydraulics, water supply development, water rights engineering, environmental permitting, planning, and assessment as well as integrated resource planning and modeling.

Authors of this article are members of the American Planning Association's Water and Planning Network (WPN). WPN's mission is to provide a professional forum to connect members to the best planning practices that reflect current research, science, policy and technology regarding the protection, management and use of water resources and utilities.

*The MAP Board extends its gratitude to **Ankita Shukla** and **Eli Fikkema** for their valuable contributions as Michigan State University student representatives during the 2025-26 fiscal year. Best wishes as you move forward with your planning careers!*

It's MAP Membership Renewal Time

Have you renewed?

Check with your clerk or planner or you can call MAP's office at (734) 913-2000. MAP can get you renewed and update your address, email, and phone number, too!

An Argument for Sensible AI

“Once men turned their thinking over to machines in the hope that this would set them free. But that only permitted other men with machines to enslave them.”

- Frank Herbert, *Dune*

That quote has been sitting with me since I was first asked to write this article. Herbert was really writing about power, not machines, but either way, it's reckless to become comfortable outsourcing the labor of thinking. The moment people trade judgment for convenience, they create a vacuum that gets filled by whoever controls the machine, the system, or the physical and institutional infrastructure behind it.

Artificial intelligence or AI is relatively new territory for the planning profession. Depending on your level of exposure, your role, and when you entered the industry, much of what follows may feel either painfully obvious or entirely unfamiliar. The technology around AI is moving faster than our collective understanding of how to use it well. The purpose of this article is to make a practical argument for where the technology adds value and where it creates risk.

AI can be garbage much of the time (see Figure 1).

And when used incorrectly, it can be more than that: it can be dangerous. When asked point-blank open-ended questions, most AI programs will present outdated information, incomplete analysis, reference a post made by someone on Reddit as though it were peer-reviewed literature, and in some cases simply fabricate facts altogether. That should make anyone cautious, yet as the new thing, many flock to it.

A wise professor once said, *“If all you have is a hammer, everything looks like a nail.”* I remember him saying this after he introduced a new watershed modeling function that a student immediately tried to use

to identify a food desert in a low-income neighborhood. Just because a tool exists does not mean it is the right tool for the job. AI is being sold as a solution to nearly every problem we face as planners: writing, research, customer service, decision-making, and even human relationships. That is concerning. One of the quickest ways to undermine your own credibility is to accept AI-generated output without grounding it in real-world context. AI is exceptionally good at producing structured, polished, confident language. What it is not good at is understanding whether that language is correct, current, appropriate, or legally defensible.

AI should be treated like a very smart, but very green intern, not a final authority, and most certainly not a source for raw data. Like any new member of your staff, it can save you time or cost you time, depending on how closely you manage it. It can review drafts, organize information, and help you think through problems. But you would never sign your name to an intern's work without providing some serious direction, reviewing the initial draft, checking the final product, and having a few conversations in between.

Just like a calculator, email, or a capable intern, AI can reduce friction and accelerate professional work.

But used passively, it can create avoidable mistakes, and at the end of the day, those mistakes are your fault. AI doesn't take responsibility for the final product, you do. When AI is used well, you usually can't tell AI was involved at all. The writing sounds like a person who understands the situation, knows the audience, and is making specific, intentional points. The AI helped with the structure, the first draft, or the editing, but the human provided the judgment, the context, and the voice. Its use should not be the starting point or end point. It should be somewhere in the middle, but can be a starting “push” if you lack inspiration.

The goal of using AI for professional writing should not be to have AI write professionally for you, but to help you sound like a more organized version of yourself. AI should sharpen your voice, not replace it. The tools we have are particularly effective at the structural side of professional writing in the planning industry. AI can help with building outlines, organizing scattered thoughts, tightening language,

There is some lazy use of AI out there

Figure 1

You have without a doubt—and honestly, very on-brand for you, seen writing that was very obviously copied and pasted directly from AI with very little thought by the user! You can usually tell because it looks something like this:

- ★ Cleanly stated emoji-bullets
-  Reaffirming language that will tell you how special and smart you are
- 👉 A very authoritative tone, even when uncertain 🚀
-  Phrasing that is smooth and neutral when discussing controversy
-  Some other fifth thing, because everything comes in five takeaways

This type of work is a very public way to show your peers that you are putting very little effort into the beginning, middle, and end to your professional process—and you know what's the best part? It's incredibly public—and honestly, most of your peers can tell.

and reframing communication for different audiences. But that only works if you workshop the writing, push back on language you disagree with, and stress test your own ideas. For AI to serve you well, you need to set clear parameters for how it responds. Tell it not to guess. Tell it not to “hallucinate.” Tell it to acknowledge when it does not know something, identify gaps in its knowledge, and cite its sources whenever possible.

As planners, whether we are working on something as technically mundane as sign heights or as inspiring as a complete rewrite of the Master Plan, our work should be hard fought. It is to be ruminated over, scrutinized and evaluated by you, personally. The implementation of tech in your writing should pressure test your ideas, ask for holes in your thought process after you feel you’ve already exhausted them, and have it argue the other side for the sake of debate. It’s not replacing you and your abilities; it is augmenting your work.

AI without oversight is not a shortcut; it is a liability. AI can be confidently wrong and often is. Worse, it can be wrong in ways that sound polished, persuasive, and entirely believable to someone moving too fast to verify it. It does not understand your community, your politics, your board, your residents, or the history behind why something was written the way it was ten years ago. It only knows patterns. And in planning, patterns without context is problematic.

I saw this firsthand at a public meeting where an ordinance interpretation was being discussed. In the middle of the debate, an elected official entered the question into an AI program and confidently presented the response as if it were settled fact. The room, for a moment, accepted it. It sounded clean. It sounded authoritative. It sounded right.

When I asked where exactly in the ordinance that conclusion came from, the answer quickly unraveled. The software could not cite the provision because the

provision did not exist. What followed was a quiet pivot away from the topic and an uncomfortable realization amongst the elected officials. They had nearly allowed a machine-generated guess to shape a real policy discussion.

Where government functions on a lean budget, can we afford to not use AI? Staff are often expected to wear multiple hats, manage growing workloads, and respond to increasingly complex issues without corresponding increases in personnel. Time has become one of government’s most limited resources. Hours spent digging through ordinances, combing through state statutes, reviewing case law, or drafting first-pass documents are hours pulled away from enforcement, planning, resident engagement, and project implementation. AI can compress that administrative workload significantly by scanning large documents, surfacing relevant information, summarizing technical material, and generating workable draft language for professional review. That does not replace expertise; it reallocates it.

AI’s value comes from pooled knowledge. In the private sector, that raises legitimate concerns about proprietary information, trade secrets, and competitive advantage. But in municipal government, that dynamic looks very different. Most of what planners do is public information. We live in a world of pooled knowledge that should always be available to the public. And planners often share information—swapping ordinance language, staff reports, and policy ideas to solve similar problems. Local governments have borrowed ideas from each other for decades—we call it collaboration. In a public setting, AI accelerates that exchange of institutional knowledge. It can synthesize lessons from thousands of readily available government documents in seconds, giving small communities access to insights and frameworks they may otherwise never have the time or budget to develop independently.

But even when used purposefully and responsibly, we still represent the government, where process matters just as much as outcome.

Because of that, the rise of AI raises legal and ethical questions we do not yet have clear answers to. Like many professionals, I have found value in using AI as a starting point for drafting ordinance language, organizing ideas, or helping build structure where there is none. Used correctly, it can create momentum. It can help overcome the blank page and accelerate the early stages of technical writing.

One of the largest unresolved questions is how AI-assisted work fits into public records law. If a government employee uses AI to help draft a staff memo, ordinance amendment, report, or public communication, what exactly becomes the public record? Is it only the final adopted document? Or is it the process that led there? Are prompts to an AI system part of the deliberative process subject to disclosure, or are they no different than handwritten notes on a legal pad or a crumpled draft thrown in the trash two months ago? The distinction matters. Unlike private notes, AI conversations often exist on third-party servers, are stored digitally, and may materially shape public decisions in ways traditional drafts once did.

That uncertainty becomes even more complicated when government employees use personal AI accounts or personal devices for public business. If something is related to government business, it belongs in a government system where it can be retained, searched, and produced if necessary. The same logic should apply to AI. If a public employee is using a personal AI account to generate government work, who owns those records? Who retains them if that employee leaves? Who searches them in litigation? Who certifies that all responsive records have been produced? These are operational and legal questions that municipalities will inevitably have to confront.

Recent legal developments suggest these concerns may not remain theoretical for long. In early 2026, a federal court signaled that materials generated or shared through a consumer AI platform may not receive the same attorney-client privilege or work-product protections when confidential information is disclosed through a third-party system. While that case did not address public records law directly, it sends a strong signal that courts may begin treating AI-generated or AI-assisted materials under traditional disclosure and discovery principles rather than carving out entirely new protections.

Technology always moves faster than the policies designed to govern it. The reality is that many local government employees are already using AI in some capacity, formally or informally, whether their organizations have acknowledged it or not. Yet many municipalities have no clear policy on acceptable use, data entry restrictions, records retention, disclosure expectations, or security standards. Government depends

on process, accountability, and transparency. AI is changing all three at a pace the law has not yet caught up with. The real challenge for government is not resisting AI, but building the policies, safeguards, and professional discipline necessary to use it responsibly while preserving public and personal trust.

AI is not the future of planning.

Planning is still the future of planning. Judgment, experience, political awareness, legal defensibility, and understanding the communities we serve will remain the foundation of this profession long after the current AI hype cycle settles. What AI offers is not replacement, but reinforcement: a tool to move faster through the administrative drag so we can spend more time doing the work that requires professional judgment, public engagement, and policy awareness.

Use it to organize your thoughts. Use it to examine your ideas in a deeper way than you had once thought possible. Use it to

sharpen your writing. But do not outsource your judgment to it and relinquish your power in a way that Frank Herbert had warned us about so many years ago. In government especially, where public trust is increasingly fragile and accountability is not optional, our responsibility is not to chase technology for its own sake. It is to use every tool available, carefully and sensibly, in service of better public outcomes.

Jeffrey Polkowski, AICP serves as the Director of Development for Waterford Township, where he oversees Planning, Zoning, Building, Engineering, and Code Enforcement. An Oakland County 40 Under 40, Jeff continues to advance practical land use planning with a focus on redevelopment and water resources. Jeff has no authority to comment on AI other than as a user and still enjoys his iPod Classic from 2008.



continued from page 9

locate answers, such as requirements for the Site Plan Review process or a specific permitted use. However, this should not replace decision-making, especially given potential legal implications down the line.

Community engagement. Similar to how a planner might use Pinterest or a magazine for inspiration, generative AI can help generate ideas for marketing materials, branding, or flyers; however, it should not serve as the final product. While elements of images and flyers may benefit from generative AI, using these tools in public-facing materials could harm a community's reputation. Images that are clearly AI-generated or inaccurately represent the community can erode public trust.

Analyzing large quantities of data.

Community feedback can come in significant volumes, whether through public comment periods, community surveys, or public meetings. In their own ways, AI tools such as **NotebookLM**, **Qualtrics**, and **SurveyMonkey** can help planners process and synthesize large volumes of this input in a fraction of the time it would take to do manually. For example, if a municipality receives hundreds of survey responses, AI platforms can help identify recurring themes, summarize sentiment, and flag outliers. This is most useful when conducting a first pass or a gut check. Planners should still review, as it remains essential to ensure accuracy and context are not lost in the process.

Using generative AI in planning is not a requirement. Platforms today can provide a quick first pass or a springboard of ideas. Like any tool, it must be used wisely. Planners are ultimately responsible for their work so review and scrutiny is always necessary.

Maria Garcia Reyna, AICP is an Associate Planner at McKenna. She specializes in land use planning, bilingual community engagement, and data analysis, supporting a wide range of planning processes, including comprehensive plans, zoning ordinances, and other strategic planning efforts. Driven by curiosity and empathy, Maria is at the forefront of integrating AI into planning practice, using her research to promote thoughtful, data-driven decision-making.



Have you browsed the MAP Bookstore?

MAP publishes dozens of different guidebooks, manuals, and webinars covering a variety of topics. *MAP staff are continually expanding and updating the selections!* Remember: MAP members always receive a member discount!

Scan the QR code to access the MAP Bookstore:



CALLING CARDS

Firms listed provide a sponsorship contribution for this service, which helps defray the cost of publication. This does not constitute an endorsement of any firm by the Michigan Association of Planning.

RESERVE YOUR SPACE TODAY
in the Michigan Planner and E-dition!

Support MAP publications with a 2026 calling card and keep your firm in sight of over 4,000 MAP members every month.

FULL COLOR - \$625.00/year
email avansen@planningmi.org



ROWE
www.rowespac.com

SERVICES

- Planning
- Civil Engineering
- Landscape Architecture
- Aerial Imagery/Mapping
- Surveying

(800) 837-9131
Follow Us   

LOCATIONS

- Flint • Lapeer • Mt. Pleasant • Kentwood
- Grayling • Farmington Hills • Myrtle Beach



Carlisle | Wortman Associates

Helping the leaders of Michigan communities define and realize their futures.



Municipal Planning & Building Services
cwaplan.com – 734-662-2200



Planning | Civil Engineering | Surveying
Landscape Architecture | Traffic Engineering | GIS

YOUR NEXT PROJECT STARTS HERE!



Dedicated to Making Communities Better! giffelswebster.com



TOOLE DESIGN

STREETS THAT WORK FOR **EVERYONE.**

tooledesign.com



williams&works
engineers | surveyors | planners



Grand Rapids, MI
(616) 224-1500 | williams-works.com



MCKENNA

Communities for real life.

MICHIGAN
Northville
Detroit
Grand Rapids
Kalamazoo

OHIO
Columbus

MCKA.COM



B R I
Beckett&Raeder

Landscape Architecture
Planning, Engineering & Environmental Services

734.663.2622
www.bria2.com
info@bria2.com

Ann Arbor
Potoskey
Traverse City
Grand Rapids



Non-Profit
U.S. Postage
PAID
Permit #388
Detroit, MI

CALENDAR OF EVENTS

Check www.planningmi.org for event details.

Planning Ethics: Ethic
Cases of the Year
June 2, 2026
Virtual

Planning Michigan
Conference
**September 30 –
October 2**
Kalamazoo

Michigan
Transportation
Planning Association
Conference
July 28-31, 2026
Port Huron



Safe Routes to School
Training
Multiple Dates and
Locations

Transportation
Bonanza
February 10, 2027
East Lansing

This magazine is available in accessible formats upon request.
Contact MAP at info@planningmi.org or 734.913.2000.

CHANGE OF ADDRESS

SEND REQUEST TO:

Michigan Chapter **ONLY** members

MAP
1919 West Stadium Boulevard, Suite 4
Ann Arbor, MI 48103
734.913.2000

For APA members

American Planning Association
Member Records Department
200 E Randolph St, Ste. 6900
Chicago, IL 60601-6909

Transforming Places.
Empowering Communities.



616.361.2664
info@weareprogressive.com
weareprogressive.com



PLANNING STRONGER COMMUNITIES

800.482.2864
www.wadetrिम.com

WADE TRIM

SHAPING COMMUNITIES FOR 70 YEARS

SPALDING DeDECKER 800.598.1600
www.sda-eng.com

Safe Routes to School

Providing support to communities to create safe walking and biking routes for students.

MICHIGAN FITNESS FOUNDATION **Safe Routes to School** 1.800.434.8642
saferoutesmichigan.org

SAFEbuilt.
SAFEbuilt.com

PLANNING FOR THE FUTURE

Planning & Zoning
Municipal Planning
Comprehensive Planning
Land Development Codes
Urban Development

Brian Borden, AICP 248.506.0505
Planning Manager bborden@SAFEbuilt.com

EIGHTY YEARS **Spicer group**

989.754.4717 | spicergroup.com

STRONGER. SAFER. SMARTER. SPICER.

Fahey Schultz Burzych Rhodes

EXPERT COUNSEL REAL SOLUTIONS

T 517.381.0100 + FSBRLAW.COM