



A Guide for Our Neighbors

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Introduction

We know that bringing a data center to the neighborhood comes with questions, and we want to ensure our neighbors have the most accurate information about our facilities. Data centers are often misunderstood, but they are essential to the modern technology we all use every day.

We've compiled the following guide to answer your questions directly – addressing everything from energy and water usage to local tax benefits – so you can see exactly how we are working to strengthen local infrastructure and help revitalize communities while remaining a quiet, low-impact neighbor.



Who is Aligned Data Centers?

Aligned Data Centers is a developer, owner, and operator of highly efficient, sustainable data centers that support the digital technologies that you use every day. We pride ourselves on

building hyper-efficient facilities that protect local resources and act as a quiet, long-term economic engine for our communities.

~51

data center campuses
across the United States
and Latin America.

13

years of leadership in
sustainable data center
development.



Privately held
owner operator
headquartered
in Plano, TX.

Data Center 101

1 WHAT IS A DATA CENTER?

Data centers are buildings that house the internet. They are the foundation of the digital infrastructure on which our modern society and economy are built. Anything that takes place “in the cloud” is powered by a data center.

Data centers connect us to each other and to a world of possibility. They enable services for everything from online shopping, to storing and accessing electronic health records, to real-time communication for police and fire departments, to online education or work, and more.

2 WHAT'S INSIDE A DATA CENTER?

Data center facilities house servers, storage drives, and networking gear. To ensure they never lose power, data centers have large-scale electrical setups, including redundant connections to the public grid, UPS (Uninterruptible Power Supply) batteries for instant backup, and generators to keep them running if the municipal grid fails.

Data centers use HVAC systems, closed loop systems, and air or liquid cooling to keep the server equipment at an optimal temperature. They feature biometric scanners, mantrap doors, 24/7 security teams, and security cameras.

3 ARE THERE DIFFERENT KINDS OF DATA CENTERS?

Data centers generally fall into a few main categories based on who owns them and what they do:

- **Enterprise:** Built, owned, and operated by a single company for their own exclusive use (e.g., a major bank running its own private data center).
- **Colocation (“Colo”):** A facility where a provider rents out space, power, and cooling to multiple different businesses.
- **Hyperscale:** Large-scale facilities built to support the computing needs of global technology companies.
- **Edge:** Smaller data centers located closer to the end-users.

4 HOW DOES A DATA CENTER ATTRACT NEW BUSINESS TO AN AREA?

Data centers can act as powerful economic catalysts for growing regions. By anchoring critical infrastructure upgrades – like expanding high-speed broadband and strengthening the local power grid – these facilities can pave the way for broader community development.

This foundational investment creates a ripple effect, helping to attract new businesses, grocery stores, and enhanced local services that benefit everyday residents.

5 WHAT KIND OF JOBS DO DATA CENTERS CREATE AND HOW CAN I GET ONE AT ALIGNED?

Long before a facility opens, the development phase creates hundreds to thousands of high-paying construction and skilled trade jobs, including vital roles for commercial electricians, pipefitters, HVAC technicians, and heavy equipment operators.

Once operational, the campus requires a dedicated workforce of critical facility engineers, mechanical technicians, and physical security professionals to maintain the building's infrastructure around the clock.

Furthermore, running facilities of this scale consistently drives demand for essential ancillary services, creating steady local jobs in landscaping, janitorial services, waste management, and specialized preventative maintenance. The continuous presence of contractors, technicians, and visiting customers also provides a reliable, year-round boost to the local hospitality sector, including nearby restaurants and hotels.



If you'd like to learn more about the career opportunities at Aligned, visit aligneddc.com/careers or email us at careers@aligneddc.com.



6 HOW LONG DOES A DATA CENTER TAKE TO BUILD?

While construction timelines vary based on scale, facility type, and use case, a standard data center typically takes 12 to 18 months to build.

By leveraging modular construction, Aligned is able to deliver mission-critical capacity at exceptional speed.

How Do Data Centers Work With Local Utilities to Protect Community Power Rates?

Aligned works with utilities to cover the full expense of electricity used to power its data centers so that the cost never falls on local families. It also covers the expense of building its own on-site power generation.

A recent study by the Lawrence Berkeley National Laboratory (LBNL) and The Brattle Group confirms that when significant load, such as large data centers, is added to the grid, these facilities become a robust anchor customer base that helps distribute the burden of fixed costs across a wider footprint.

As data centers add their load to the grid, every kilowatt-hour consumed bears a portion of these costs. This process – under the right conditions – allows the additional load to mitigate upward price pressure for all other customers.



Load growth at the state level has tended to depress retail electricity prices in recent years, by spreading fixed costs over greater load.

Lawrence Berkeley National Laboratory (LBNL) and The Brattle Group



Are Data Centers the Sole Reason Local Energy Demand Is Growing?

No. For two decades, U.S. utilities saw growth that was slow and predictable, stemming mostly from steady population shifts and gradual electrification. Then, the way the world uses computers fundamentally shifted – we, the global population, moved beyond simple connected devices and began deploying technologies like cloud computing and AI at scale.

This created a hockey stick inflection point in demand that our utilities and our industry hadn't witnessed in 20 years. While data centers are an important part of our modern infrastructure, we are currently experiencing a nationwide shift toward "electrification" across all sectors. The rising demand on the utility grid is heavily driven by the

widespread adoption of Electric Vehicles (EVs), the transition to electric heating and cooling in homes (like heat pumps), and the push to electrify heavy manufacturing.

While data centers are just one piece of a much larger, economy-wide transition toward a digitized and electrified future, they are also one of its most powerful catalysts.

Today, the data center industry serves as one of the largest contributors to funding grid modernization and accelerating the deployment of new renewable energy onto the power grid.

The Utility Perspective – Straight from the Source

Georgia Power

Large energy users like data centers pay upfront for the local infrastructure they need and commit to long-term contracts with collateral requirements, minimum bills, and termination payments, which ensure that large load customers cover the full cost of service.

This structure helps keep base rates stable, and protects residential and small business customers from subsidizing large users.

Data centers pay rates designed to cover the full cost of service, including infrastructure, operations, and long-term risk. This ensures everyday customers are not subsidizing large users like data centers.

Infrastructure built for data centers strengthens the grid for entire regions.



Residential customers **are not subsidizing** data center growth.

Incremental revenue from large energy users such as data centers will provide benefits equivalent to approximately **\$102 per year in savings** for the typical residential customer using 1,000 kilowatt-hours per month.

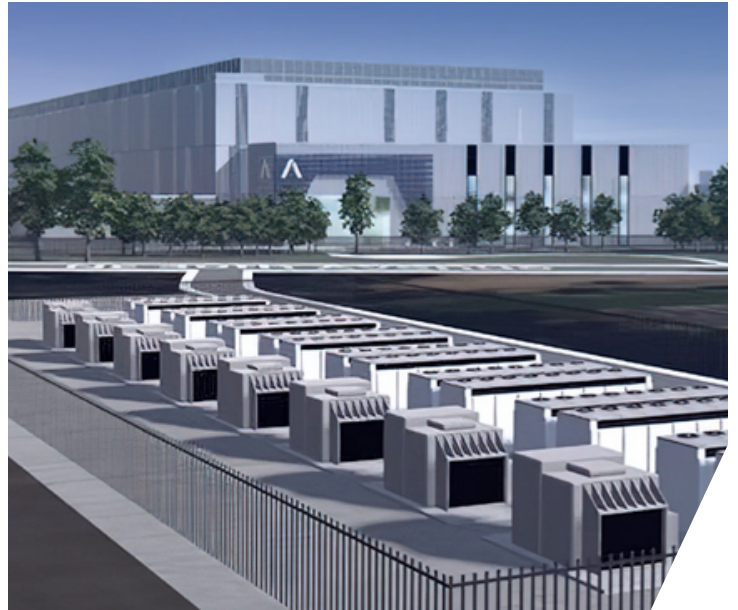
Georgia Power



During a Power Outage, Will the Utility Company Prioritize Restoring Power to the Data Center Over Local Residents?

No. In the event of a severe grid outage, utility companies always prioritize critical public safety infrastructure (like hospitals, 911 dispatch, and fire stations) followed by residential neighborhoods. In fact, data centers are designed to be self-sufficient when the grid fails, so they do not need priority grid restoration.

During grid emergencies, data centers utilize backup power generation equipment and uninterrupted power systems to keep facilities running independently. **Data centers can also act as a “safety valve” for the grid, switching to on-site backup systems during power emergencies to leave more electricity on the grid.**



Are Data Centers Powered Primarily by Diesel Generators?

BACK UP POWER GENERATION

No. Our facilities are powered directly by the local utility grid, occasionally supported by additional on-site power generation. The generators on our campus are not a daily power source; they act solely as backup power generation in case of emergencies such as severe grid outages.

Do Generators at a Data Center Run 24/7?

No. Much like hospitals or 911 dispatch centers, we are required to test our emergency backup equipment to ensure it works during an emergency. We test our generators just four times a year. This means that – barring a severe utility outage – **our generators sit completely idle for more than 99% of the year.** Aligned also schedules routine testing during normal daytime business hours.

Generators on our campus are not a daily power source; they act solely as backup power generation in case of emergencies.

Will Aligned's Data Centers Create Excessive Noise?

No. Advanced sound barriers, shielded lighting, and very low daily traffic make our data centers **extremely quiet and low-impact neighbors.**

In order to operate, data centers must adhere to all local noise ordinances. Modern cooling systems are also engineered for minimal acoustic impact, operating at sound levels comparable to a normal conversation – and often quieter than a standard residential air conditioning unit. Modern-day chillers and backup power generation equipment utilize critical-grade silencing technology and backup power generation equipment is housed in acoustically treated enclosures to trap sound at the source.

Backup equipment use is limited only to essential maintenance and rare emergencies. Many data centers also incorporate wide site setbacks and defined 'quiet hours' for construction so their work does not disrupt the daily lives of nearby residents.

Data centers must adhere to all local noise ordinances.

Do Data Centers Produce Infrasound?

Any building with mechanical equipment (including your residence) generates low-frequency sound (usually less than 20hz and below human hearing capability). Bathroom exhaust fans, air handling units, fans, and generators in a standard residential home all produce these same low-frequency vibrations. These equipment types are also found within a data center.

Any low-frequency contribution from the data center will typically dissipate below the existing ambient noise floor created by wind, local traffic, and regional infrastructure. **Our data centers' acoustic footprint is expected to be indistinguishable from the natural environment** and safe for local residents, wildlife, and the surrounding ecosystem.

Will Aligned's Data Centers Create Light Pollution?

No. Aligned's Data Centers use low-impact, discrete and non-intrusive lighting designs, featuring downward-facing, fully shielded fixtures and strategically placed landscaping to ensure minimal light spillage and preserve the community's nighttime environment.

How Will the Data Center Impact Our Local Economy and Tax Base?

Data centers provide predictable, long-term tax revenue without imposing significant strain on municipal resources. Data center campuses generate millions in tax revenue for communities. These funds go directly to community resources like emergency services and public parks. Local school districts are also a major beneficiary of the tax revenue generated by Aligned's campuses.

To put this into perspective:

In Loudoun County, for example, data centers now provide nearly half of all property tax revenue, supporting public services at a scale few other industries can match and helping the county anticipate between **\$800 million and \$1 billion in data center tax revenue**. Officials have cited the industry's impact on keeping residential tax rates lower and funding school construction and renovation without imposing new burdens on homeowners.

Prince William County reports data center-related revenue in the hundreds of millions of dollars, much of it flowing into the general fund that pays for education and core services. Across the United States, the broader data center industry contributed an estimated \$162.7 billion in tax revenues to local, state, and federal governments in 2023, reflecting a 146 percent increase since 2017.

Data center campuses generate millions in tax revenue for communities.

Why is a Data Center a Good Corporate Neighbor for a Community?

Data centers are the ideal corporate neighbor because **they generate massive, long-term tax revenue and high-paying careers with virtually no strain on local resources**. They fund public schools and municipal services without bringing heavy traffic, overcrowded classrooms, or daily disruptions to the surrounding community.

What Makes a Data Center the Ideal Use for Industrially Zoned Land?

Unlike traditional industrial developments like factories or distribution warehouses, data centers do not generate constant 18-wheeler truck traffic, daily industrial emissions, or heavy noise. They are **quiet, clean, and highly secure neighbors** that generate significantly more tax revenue for local schools and services without causing the wear-and-tear associated with heavy industry.

Will the Presence of a Data Center Lower My Residential Property Value?

Actually, the data from established data center hubs suggests the opposite. For example, in Loudoun County – the most concentrated data center market in the world – residential values increased by roughly 68% from 2015 to 2025 based on the FHFA House Price Index. The largest gains occurred during the pandemic-era housing boom, with particularly strong appreciation in 2021 and 2022. While growth moderated after 2022, residential values continued to increase from 2023 through 2025.

Does Aligned Require Partner Communities to Sign Non-Disclosure Agreements (NDAs)?

TRANSPARENCY

No, Aligned does not use NDAs with our partner communities. We are committed to maintaining an open, transparent dialogue throughout the entire development process. Rather than restricting information, our standard practice is to make it highly accessible. We routinely launch project-specific websites, provide comprehensive FAQs to address operational and design questions, and host open community information sessions to share updates and gather resident feedback directly.



Do Data Centers Create Opportunities for Local Skilled Trades?

Yes. Data centers sustain the local economy by keeping thousands of tradespeople steadily employed for numerous years and providing long-term stability for families. Because this work

pipeline is so sustained, local contractors and unions are able to invest in their future – bringing on new apprentices, funding training centers, and strengthening health and retirement benefits.

Do Data Centers Create Permanent, Full-Time Jobs?

Yes. These facilities require specialized, ongoing work throughout their entire lifecycle, creating permanent careers in HVAC, electrical maintenance, logistics, and repair. The operational phase of a data center creates **a diverse ecosystem of highly skilled, well-paying, and permanent careers**. Operating a data center requires a highly coordinated blend of mechanical, electrical, security, and administrative expertise. This is often a shared effort, bringing together Aligned's staff and our customers' own dedicated onsite teams, as well as an ongoing ecosystem of local

vendors and maintenance roles required to support the facility. Because our data centers are 24/7/365 operations, we have dedicated Operations and Security teams working onsite in continuous shifts alongside a rotation of trusted contractors and suppliers who help maintain the site – so having our staff be local and live close to the campus is highly preferred. Facilities & critical infrastructure roles to keep the mission-critical facilities operating 24/7/365.



Beyond the Initial Construction and Operations, What Types of Jobs Do Aligned's Data Center Create?

Each direct data center job can support, on average, more than six additional jobs in the local economy. Beyond our core technology and facility management teams, our day-to-day operations require a large network of local support spanning the construction, maintenance, and service sectors. This generates ongoing contracts for community vendors, facility maintenance providers, and specialized equipment operators. Furthermore, the daily presence of our workforce drives secondary job growth in local hospitality, food service, and retail – injecting sustained revenue into the broader local economy.

To put this into perspective:

Aligned's supply chain acts as a powerful catalyst for broader economic growth. Recently, the production demands for our infrastructure directly fueled the expansion of one of our key equipment providers, allowing them to open a new operational footprint in Ohio.

Do Aligned's Data Centers Create High-Paying Jobs?

Yes. Our facilities create significant, well-paying employment opportunities throughout both the construction and operational phases, directly benefiting the local workforce.

Building a state-of-the-art data center requires many skilled trade professionals. Once open, our data centers require highly skilled, full-time professionals to run the facility 24/7. Beyond direct employment, our day-to-day operations consistently support indirect local jobs by contracting with local landscaping, maintenance, and service providers.

To put this into perspective:

On average, our full-time data center operations roles offer six-figure salaries, accompanied by comprehensive benefits.

Data centers sustain the local economy by keeping thousands of tradespeople steadily employed for numerous years and providing long-term stability for families.

Does Aligned Provide Data Center Education and Career Pathways?

Yes. We are partnering with local school districts, vocational schools, colleges, and universities on the Aligned Academy initiative to provide students with career presentations, hands-on technical training, internships, and direct career pathways into the industry.

We've hosted local students for hard-hat tours during our construction phase, invited them to attend groundbreaking events, supported formal grant letters, donated computer equipment, and even partnered with a school to create a custom art installation for one of our campuses to honor the site's legacy. We look forward to expanding these educational partnerships with schools in the years to come.



Do Aligned's Data Centers Consume Millions of Gallons of Water per Year?

No. The idea that data centers consume a lot of water is rooted in an older generation of facilities that relied on evaporative cooling. These systems used a significant amount of water.

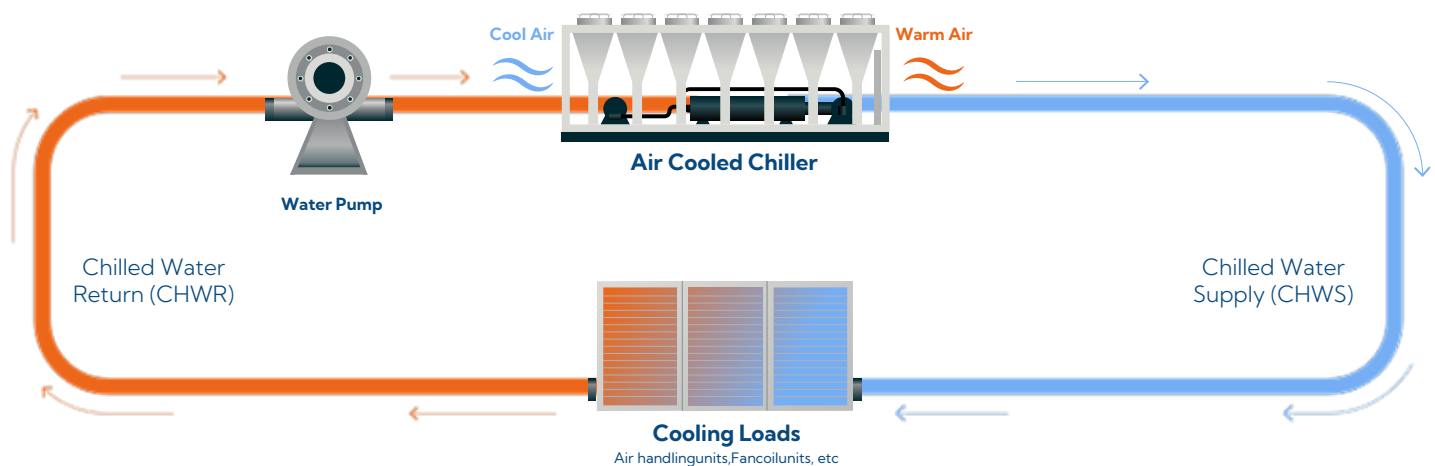
Advanced technology allows Aligned's data centers to use less daily water than a typical neighborhood car wash or laundromat.

Does Aligned Use Evaporative Cooling?

No. Aligned uses a closed-loop system with air-cooled chillers, reducing the water required to cool our loads to near zero. The system recycles pure deionized (DI) water repeatedly in a sealed environment. All DI water utilized for this process is either securely transported to our facilities or produced directly on-site.

The design requires water only for the initial fill of the closed-loop cooling system and for limited maintenance activities. As a result, water consumption is generally limited to essential nonindustrial uses, such as restrooms.

CLOSED-LOOP COOLING SYSTEM



What Is Used to Fill Aligned's Closed-loop Cooling System?

Deionized (DI) water. All DI water utilized for this process is either securely transported to the facility or produced directly on-site.

Do Aligned's Closed Loop Systems Require Periodic Blowdown?

No. When a new data center is built, its closed-loop system is initially filled and flushed to prepare the pipes. During this one-time initial setup, absolutely no water is discharged into the local sewer system. Instead, the water is safely collected and transported offsite by certified environmental professionals for proper disposal. Once the system is filled, it is sealed.

We utilize an advanced water quality program to continuously balance the chemistry inside the loop, meaning the system never requires another flush or "blowdown." Moving forward, the facility only uses a very small, negligible amount of standard municipal water to replace minor natural evaporation.

How Much DI Water is Added to the Closed Loop System During Its Initial Fill?

The closed loop system requires a one-time water volume roughly equal to the monthly usage of 30 average American households. Once this water is sealed inside our system, it is recycled indefinitely. This ensures we are not constantly drawing from the municipal supply; our only ongoing requirements are fractional amounts to offset maintenance and standard facility needs for our employees (such as kitchen sinks and restrooms).

To put this into perspective:

A single acre of corn can use up to 4,000 gallons of water per day in the peak of summer. Aligned's entire system fill is equivalent to what a 60-acre cornfield uses in just one day.



Does the Data Center Constantly Consume Water to Keep the Servers Cool?

No. Aligned's designs require water only for the initial closed-loop cooling system fill and minimal subsequent maintenance. Following this, **water consumption is limited only to essential nonindustrial uses**, such as restrooms and general amenities. So, the water these facilities draw is primarily for domestic, everyday use by their onsite employees – just like any other commercial office building.

To put this in perspective:

The Mayor of Northlake, IL, where Aligned operates some of its data centers, recently shared that during the exact same time period, a single local laundromat consumed over two and a half times more water than Aligned's entire two-building campus in Northlake.

Approximate daily
water usage in gallons
(300-acre site)



Residential Use

120,000 GPD
(peak water use for 1 unit/acre
density, not including emergency
water use)

Industrial Use

700,000 GPD
(peak water use for heavy
manufacturing industrial use, not
including emergency water use)

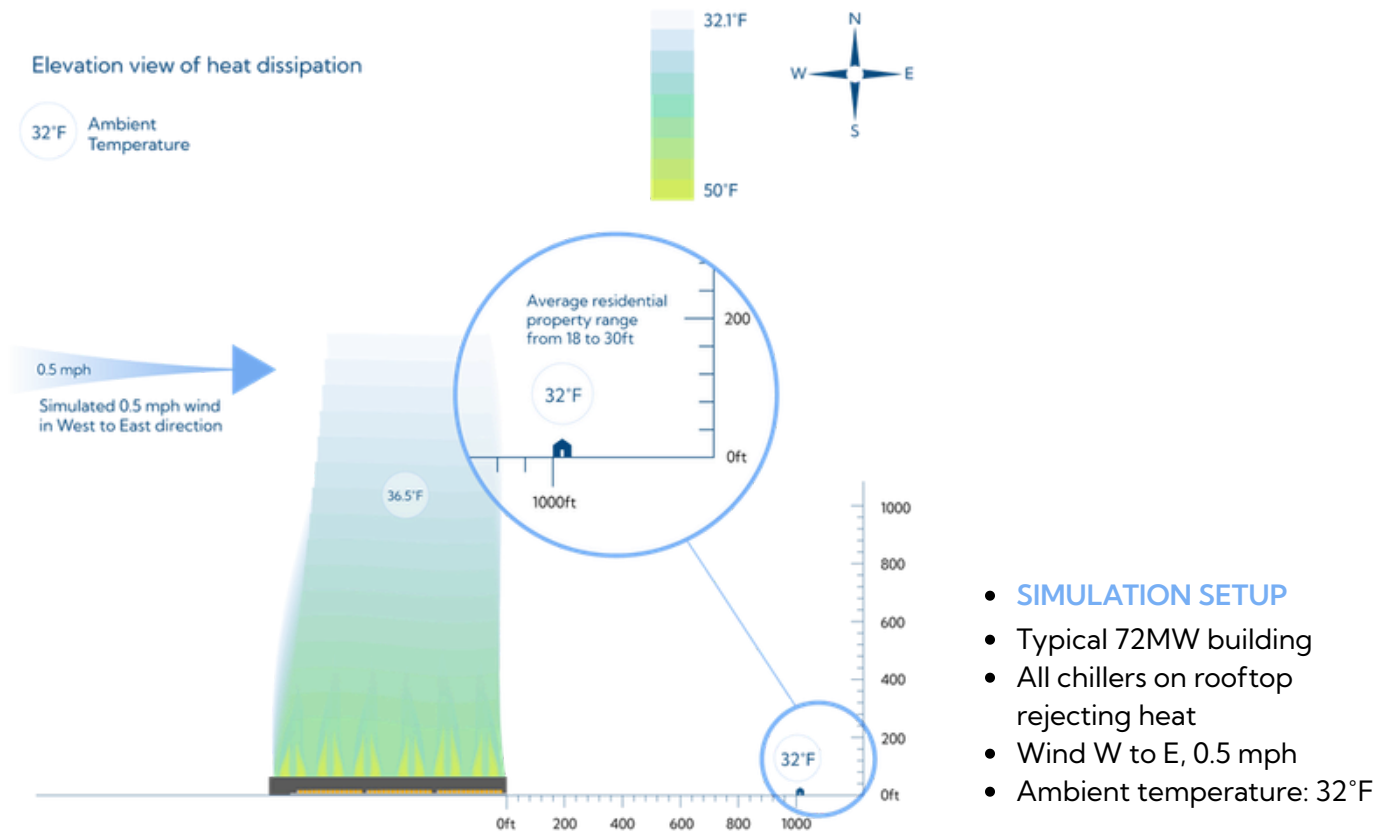
Can Building a Data Center Actually Reduce a Site's Overall Water Consumption?

Yes. In many of our brownfield revitalization locations, we're actually seeing a reduction in water use by developing a data center campus there than the sites' former industrial use. In Perkins Township, OH, for example, we're projecting a 99% reduction in water use and discharge compared

to the previous industrial tenant. In Glendale, AZ, we anticipate a 73% annual water reduction from its previous life as a rose farm. We also successfully decommissioned a 1M GPD well on this site to protect the local aquifer for the community's future as we did not need it.

Will the Data Center Create a “Heat Island” in Our Neighborhood?

No. While computing equipment does generate heat, modern facilities like Aligned’s are specifically engineered to prevent that heat from impacting the surrounding community.



To put this into perspective:

A typical Aligned 72 MW facility operating at maximum capacity has no measurable heat impact on the neighborhood. In fact, just 1,000 feet away, the temperature variance is 0°F.

Aligned’s infrastructure is engineered to blend seamlessly into the local environment, maintaining the existing thermal comfort of the neighborhood.

Does Aligned Only Build on Undeveloped Land?

No. In fact, when selecting new sites, Aligned prioritizes redeveloping former industrial sites rather than taking up undeveloped greenfield space. We help remediate the sites and turn them into tax-revenue and job-generating assets for local communities that – in many cases – also drastically lower the property’s historical water consumption.

Do Data Centers Permanently Congest Local Roads with Heavy Daily Traffic?

No. After the initial construction phase, data centers generate far less traffic than typical commercial businesses.

While there is temporary traffic during the construction phase, a fully operational data center actually generates very little daily traffic. Unlike retail stores, schools, or traditional office buildings, data centers have no public access and are highly automated. On an average day, traffic is extremely light, limited to specialized security and operations personnel arriving for their shifts, along with occasional routine deliveries.

On an average day, traffic is extremely light.

How Does Aligned Minimize Potential Disruptions During Construction?

To minimize potential disruption, we work with our General Contractor partners on site plan details to ensure the teams are in coordination and alignment on our shared goals for development.

This includes detailed logistics planning, such as mapping out traffic patterns, haul routes and designated workforce parking, material staging and storage, additional traffic controls, employee

housing solutions, assessing local public works for opportunities to modernize regional infrastructure, etc. We then overlay these site plans directly against local community patterns, ensuring that heavy machinery and daily operations do not interfere with things like peak local traffic, school zones, or public bus stops.

Does Aligned Keep Communities Notified of Construction Milestones and Maintenance Activities?

Yes. We align our communication touchpoints with key construction milestones and maintenance schedules to keep local leaders and residents updated regarding project phases, expected duration, and potential impacts and related mitigation plans.