



RESPONSIBLE DATA CENTER DEVELOPMENT: AN ISSUE BRIEF

How Innovation and Investment Are
Shaping a More Responsible
Approach to Data Center
Development

Summary

Data centers are in the spotlight, and at the center of the conversation around these warehouses for the Cloud are concerns about how the development of Data Centers will affect our communities. The environmental and economical concerns are a constant background noise in the discussion about Data Centers. However, technology companies building Data Centers are not dragging down communities so that their Data Centers can succeed. Rather, these companies have invested unimaginable time and effort into guaranteeing they are limiting any negative effect they may otherwise have on surrounding communities. Whether investing in innovation to minimize water usage for system cooling, working with local utilities to ensure that community members will not pay for data center development, needs, and services, or directly investing company money in community improvement programs, the tech companies building Data Centers are invested in ensuring their facilities are developed responsibly and with no negative effect on surrounding community members.

Background

The concerns commonly voiced around Data Centers may have once been valid when first-generation Data Centers were operating, but innovation has quickly made a drastic difference in Data Center development and operations. In the past several years, this innovation has jump started grid modernization, new clean energy production, and widely accessible, increasingly reliable infrastructure.

Beyond improved technology, Data Centers also bring great economic benefits to local communities. Each facility creates hundreds if not thousands of jobs in construction and operation, not to mention increased economic opportunities for businesses in the Data Center supply chain and other supporting small local business that get an economic boost.

The economic benefits do not just exist in the direct jobs Data Centers create, but also through the significant increase to the local tax base that Data Center development brings. This considerable tax revenue can then be used to directly fund community improvement, whether it be through investing in the local schools, public safety, infrastructure improvements, or other community services— which can all be accomplished without requiring any additional tax burden on local residents.

Background Cont.

To take these benefits even further, many tech companies developing Data Centers are also electing to directly invest in the communities in which they are developing, dedicating millions to local improvement programs such as community grants. STEM education, workforce development, and other local nonprofit organizations.

Overall, the benefits of modern-day Data Centers reach far beyond job creation, tax relief, and community investments, striving to positively impact local communities, so generations of residents can call their home competitive, connected, and prepared for the future. Each new Data Center is strengthening its local economy, while proving that economic growth can increase with affordability.

Responsible Economic Development:

The key to successful economic development is equally prioritizing community benefit, economic growth, and long-term sustainability. Like other critical infrastructure, Data Centers create quality jobs, substantial tax revenue, support local businesses, and create a platform for significant participation in the digital economy. While all these effects of Data Center development are positive for local economic growth, it is still equally important for communities to ensure such investments provide concrete public value. The companies developing Data Centers have consistently done this through investing in community benefits that will improve quality of life for locals, including funding educational partnerships, workforce development programs, and infrastructure improvements.

Another consideration in economic development that is just as important is carefully researching and planning to mitigate potential impacts before projects are approved and underway. Appropriate locations can be identified by communities based on careful assessment of access to power, transportation networks, infrastructure capacity, as well as the compatibility with surrounding land uses.

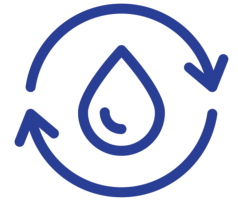
Other design requirements may be determined for a potential Data Center site, such as predictable permitting processes, sound reduction, clear zoning standards, and buffering from residential zones.

Another key priority of responsible economic development is ensuring economic growth and environmental stewardship grow together. Investing in renewable energy, grid modernization, and recycled water systems, as well as other innovations in sustainability has become common practice for data center operators. When communities establish clear development guidelines, they can set the tone for projects to prioritize reducing environmental impacts, while increasing investment in clean energy infrastructure, ultimately strengthening community and regional resilience. For that reason, the economic development strategies that prove the most successful are those that prioritize investment equally with growth that is beneficial economically, environmentally, and planned for the benefit of both local residents and businesses, so that long-term community needs can be met.



Responsible Innovation in Water Conservation:

One of the most common concerns regarding Data Centers is the amount of water required for system cooling. Data Center operators, however, have heard these concerns and their investment in innovation has solved the water-consumption issues of first-generation Data Centers.



It is a historical fact that first-generation Data Centers consumed massive amounts of water through evaporative cooling, but modern-day Data Centers are now designed with advanced cooling technologies, such as closed-loop cooling systems, or direct- to chip liquid cooling. Such systems continuously circulate cooling liquid for cooling systems, instead of relying on the historical practices of mass-water consumption. In fact, some newer Data Centers, such as Microsoft's newest Data Centers, are even designed to use zero-water cooling. For example, Oracle's most recent Data Center design includes closed-loop and non-evaporative cooling systems to avoid continuous water consumption. Regardless of the system being used, the truth is that Data Centers today have made great strides in minimizing water consumption, while they continue to work on innovation that will allow for efficient operation and cooling completely independent of water.

With such drastic improvements in water consumption in just a few short years, Data Centers are emerging as leaders in water conservation, as they have catapulted their designs from the historical practices of mass-water consumption into today's designs which require minimal water, if any water at all. As Data Centers continue to invest in innovations that will allow consistent, water-free operation, they are also adopting other practices to conserve water. Companies developing Data Centers have invested in recycling water, harvesting rainwater, and even improving infrastructure, ultimately protecting local water supply. Such innovation and constant upgrading to more water-conscious designs clearly show that Data Centers are focused on sustainability. Most importantly, modern-day Data Center operations show that companies and communities can invest in tomorrow's digital economy, while innovations in water preservations continue to improve and strengthen the environment.

Responsible Facility Development, Protecting Resident Utility Bills:

Data Centers are forming the habit of ensuring development does not adversely affect the community, not only environmentally, but also economically. Many facilities under development have agreed to “pay their own way” for any electricity they will consume, and any infrastructure upgrades required to serve their needs. These promises have been made even stronger by state regulators, as the Public Service Commission of Wisconsin (PSC) has approved Data Center tariffs designed with the sole intention of preventing costs from being shifted onto the backs of local businesses and residents.

In fact, these tariffs **guarantee** that Wisconsinites are protected from an increase in utility bills, as data centers are now required to pay the full cost of the electricity they consume. Residents are now completely shielded from utility companies requiring them as existing customers to pay for new or updated infrastructure, as these tariffs force the entire cost of energy transmission, generation, and delivery resources onto the shoulders of the ones requiring the services—the data centers themselves.

These tariffs were then further strengthened in 2026, as the PSC required very large customers, such as data centers, to commit to long-term service agreements, while also eradicating all provisions that could have enabled data centers to pay anything less than the full-share of infrastructure costs. The PSC went even further to ensure residents and local businesses were protected, specifically stating that 100 percent of costs associated with data center needs must be paid for by the data centers. Additionally, the Commission directed utility companies to address any potential cost-shifting to ensure data centers pay for everything they require.

The goal of the PSC tariffs was simple: ensure residents and local businesses are completely shielded from any financial burden from new development through ensuring the developing data centers “pay their own way”. Now locals no longer need to wonder if data center companies will keep their word in funding their own development, as the Public Service Commission of Wisconsin has solidified those promises as state-wide demands.

Responsible Facility Development, Protecting Resident Utility Bills:

When you look at data center development from all aspects, whether job creation, community investment, water-use, or accepting full responsibility for the cost of electrical services, it's beyond clear that data center development can be described in only one way: responsible. The companies developing data centers are not just interested in their facilities but rather investing in economic growth and community improvement in the regions in which they are developing, while also relying on constant innovations to minimize water use and protect the local environment, and promising that data center development will **not be paid for by residents and local businesses**, but rather the companies incurring these costs themselves. The concerns about data center development belong with data centers of the past, as it is abundantly clear that these new-generation data centers are developing responsibility—equally prioritizing:

