

Google Data Center

Since the 1950s, when mainframe computers were first introduced, our society has become increasingly connected to technology and online services (Tozzi, 2024). We utilize mainstream and mobile technologies daily, to the point that modern businesses are entirely dependent on these systems. It's because of this dependency that data centers are the backbone of modern businesses. Almost every major industry relies on data centers to run efficiently and function securely. These industries include healthcare, financial services, retail, and many more.

Data centers are defined as physical locations that have “power subsystems, uninterruptible power supplies, ventilation cooling systems, fire suppression, backup generators, and network connections”(Data Center Coalition, 2023; Cisco, 2026). This definition is found across many platforms, including Cisco, the global leader in enterprise networking and cybersecurity. All of these are in place to support the hardware and software that are critical to supplying everyone with modern technology. The equipment stores, transmits, processes, and manages data, while also protecting the equipment that performs those functions. Overall, data centers promote tremendous economic growth because of the business are able to rely on the computing power provided instead of needing their own infrastructure (Assas, et al., 2025).

Data centers come with incredible benefits. They facilitate the instant communications and transactions that people are accustomed to today (CoreSite, 2026). Almost 174.5 million people in the United States spend five to six hours on smartphones daily, which is almost fifty percent of the population (CoreSite, 2026). Without data centers, the internet and cloud services simply could not keep up. The data center that is coming to Fort Wayne has listed multiple benefits for the community that will result from the data center, including boosting the economy, creating jobs, contributing over a million dollars to ACRES Land Trust, and more (“Fort Wayne

Data Center,” n.d.). Overall, data centers also promote tremendous economic growth because of the business are able to rely on the computing power provided instead of needing their own infrastructure (Assas, et al., 2025).

While data centers are critical to keep up with the digital services demand, they don’t run without significant drawbacks. The electricity needed to power and cool these multiple rows of servers and equipment is astronomical. The amount of electricity is the same as what is needed for 10,000 to 25,000 households, and that’s just for a conventional data center; the new AI-based data centers, such as the Google data center in Fort Wayne, can use as much as 100,000 homes or more (Wroth, 2026). Diesel exhaust is known to be a group one carcinogen; however, the Google data center was approved for 179 back-up diesel generators in September of 2025 (Sherrow & Rowley, 2025). Another major concern for our environment is our water supply. In 2023, Google reported using more than 5 billion gallons of water in its data centers. For reference on how much water that really is, Smartwater, a popular water bottle brand owned by The Coca-Cola Company, produces roughly 1 billion liters of water yearly, which is approximately 264 million U.S. gallons of water (Hassan, 2026). While the Google data center claims they will contribute 500 million gallons of groundwater annually (“Fort Wayne Data Center,” n.d.), technology and AI have advanced immensely since 2023, so the public has no way of knowing just how much water they will be using.

While I think there are positives and negatives to the addition of the data center, I think the data center is bad for our community. Even though businesses and keeping up with the increase of technology greatly benefit from the data center, I believe that the long-term effects on the environment outweigh the benefits of the center. I think the environment and the health of the people living in Fort Wayne are more important than continuing to advance our technology. For

①

me, it comes down to the question: are the advancements of our technological world worth it if, in the process, we create conditions that threaten the very people who are meant to benefit from it?

References:

Assas, D., Herrera, M., Madigan, C., Rueger, J. (2025, April 30). *The Importance of Data*

Centers to Today's Economy. Perkins Coie.

<https://perkinscoie.com/insights/article/importance-data-centers-todays-economy>

Cisco. (2026, June 3). *What is a data center?*

<https://www.cisco.com/site/us/en/learn/topics/computing/what-is-a-data-center.html>

CoreSite. (2026, January 8). *The Role of Data Centers in Powering "Digital Everything"*.

<https://www.coresite.com/blog/the-role-of-data-centers-in-powering-digital-everything>

Data Center Coalition (2030, July 20). *About the Data Center Industry*.

<https://www.datacentercoalition.org/data-center-industry>

Fort Wayne Data Center. (n.d.). Google. Retrieved June 13, 2026, from

<https://www.fortwaynedatacenter.com/>

Hassan, A. (2026, February 27). Bottled Water Industry Statistics. WifiTalents.

<https://wifitalents.com/bottled-water-industry-statistics/>

Sherrow, G., & Rowley, D. (2025, September 15). *Fort Wayne Google Data Center wants more*

diesel generators and fuel. Wane 15. [https://www.wane.com/top-stories/fort-wayne-](https://www.wane.com/top-stories/fort-wayne-google-data-center-wants-more-diesel-generators-and-fuel/)

[google-data-center-wants-more-diesel-generators-and-fuel/](https://www.wane.com/top-stories/fort-wayne-google-data-center-wants-more-diesel-generators-and-fuel/)

Tozzi, C. (2024, July 26). *Mainframe History: How Mainframe Computers Have Changed Over*

the Years. Precisely. <https://www.precisely.com/blog/mainframe/mainframe-history/>

Wroth, K. (2026, February 23). *Data drain: The land and water impacts of the ai boom*. Lincoln

Institute of Land Policy. [https://www.lincolninst.edu/publications/land-lines-](https://www.lincolninst.edu/publications/land-lines-magazine/articles/land-water-impacts-data-centers/)

[magazine/articles/land-water-impacts-data-centers/](https://www.lincolninst.edu/publications/land-lines-magazine/articles/land-water-impacts-data-centers/)