As technology advances everyday, it shapes nearly every aspect of daily life. The internet provides many services that have become essential for communication, education, entertainment, business, and healthcare. From online shopping and sending emails to the growing use of artificial intelligence and the technologies yet to come, people rely on technology more than ever before. Behind many of these everyday services are data centers that store, process, and manage vast amounts of digital information that allow these facilities to function. Google recently in 2024 announced plans to build a data center in Fort Wayne, Indiana, bringing a significant technology investment to the area. Construction is currently underway, with the project continuing to progress. While many community members view the data center as an opportunity for economic growth, there have also been raised concerns about its environmental impact. Being able to understand both the benefits and the drawbacks of the project is important to understand long-term effects and looking ahead for the region. Although the data center provides some potential benefits, I personally believe its environmental costs, reduction in human-based jobs, and limited long-term benefits outweigh the positive impact for the Fort Wayne Community.

A data center is a large facility that houses information technology (IT) infrastructure used to build, run, and deliver digital applications and services (IBM, n.d.). Data centers are used daily for activities such as navigating with maps, streaming entertainment, participating in online education and meetings, storing digital media, conducting information searches, ordering necessities, and connecting with family and friends (City of Fort Wayne, n.d.). According to the Fort Wayne Data Center website, the Google facility is being designed to provide the computing infrastructure needed to support Google's products and cloud-based services while helping meet the growing demand for digital technologies (Fort Wayne Data Center, n.d.). Society has become

7

significantly dependent on technology, and has opened doors for data centers to expand and grow in different parts of the country. As the demand for digital services continues to grow, companies such as Google are expanding their data center networks to meet these needs, leading to projects like the one currently under construction in Fort Wayne (Fort Wayne Data Center, n.d.).

Building a data center within a community can provide several economic and technological benefits. Beginning with the building process, the construction aspect provides hundreds of jobs, workers to be employed temporarily, which increases local community businesses like restaurants, hotels, suppliers, and contractors. The project is expected to support approximately 1,000 temporary jobs through local companies, with around 200 permanent, high-wage positions remaining after the construction is complete (City of Fort Wayne, n.d.). Google has invested in workforce development through the Skilled Trades and Readiness (STAR) program, which provides paid training opportunities for individuals entering skilled trades. With the data center, Google plans to support local nonprofit organizations and community initiatives through $500,000 in grants and Connected Neighborhoods Initiative, which awards $1 million to four neighborhoods in 2025 and 2027 (City of Fort Wayne, n.d.). Overall, these investments are intended to promote economic growth, create workforce opportunities, and encourage population growth and development throughout the Fort Wayne community.

Despite these potential benefits, there are several concerns associated with the data center that play a major threat. I believe building a data center in the Fort Wayne community is going to hurt it rather than help it. A big concern is the limited number of long-term employment opportunities created by data centers. Although during the building process, hundreds of temporary jobs are created, relatively few permanent employees are needed once the facility is

fully operational. Many tasks like monitoring equipment and managing servers and operations are completed by advanced technology and automation (City of Fort Wayne, n.d.). Another concern is the loss of productive farmland that is being used to construct the data center. The land that is being used could be able to be used as farmland for agriculture, wildlife habitat, or future community development aspects that allow for engagement and participation among individuals. In addition to the loss of farmland, some wetlands on the project site will also be impacted. Although Google is taking impacts to regulate and mitigate under state and federal laws, portions of the wetlands will be permanently altered as part of the development. Now that the land is gone and has been converted, it will be extremely difficult or even impossible to restore the land as it once was. In a region like northeast Indiana, we prioritize agriculture, as it plays such an important role in the local economy, identity, and history of the state. One final concern that should not be left out, the amount of electricity and water required to keep the data center running and operating 24 hours a day, seven days a week. Because data centers contain thousands of servers that must remain operational at all times, they rely on extensive power and cooling systems to prevent equipment from overheating (IBM, n.d.).

In conclusion, data centers have become a more prominent and significant part in today's technology advances by supporting many of the services and facilities that people rely on. The Google data center in Fort Wayne is anticipated to bring economic growth, increase workforce development programs, community investments, and expand the population overall. However, after considering both of the potential benefits and drawbacks, I believe the data center to have a negative overall impact on the Fort Wayne community. The limited number of permanent jobs created, loss of farmlands, impact to wetlands, and the significant demand for electricity raise important concerns about the project's sustainability. Although technology always continues to

evolve and grow, it is important for communities to think about the long-term effects and sustainability with large developments like a data center. Being able to preserve future generations and provide positive impacts can be beneficial for a community, rather than just having the technological advances in a community. Being able to strike a balance between these will be essential for communities to grow and develop overall.

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