Data Center Trip

New Albany

Sunday June 1, 2025
9 -11 pm

First Data Center

While recording at this location near the side security gate, we observed passing vehicles contributing to fluctuating noise levels. As cars drove by, the sound levels increased to between 54 dBA and 65 dBA, then dropped back to around 44 dBA once the traffic passed. Notably, this area lacks any landscaping berms or sound buffers, which could otherwise help mitigate the noise impact on nearby surroundings.

At the same location, we recorded from just outside the security fence. This vantage point provided a clear perspective on the facility's exterior noise levels.

As we were leaving the first data center site, we noticed that a residential neighborhood had been developed directly adjacent to the facility. Curious about what it might be like to live so close to a data center, we took the opportunity to speak with a local resident.

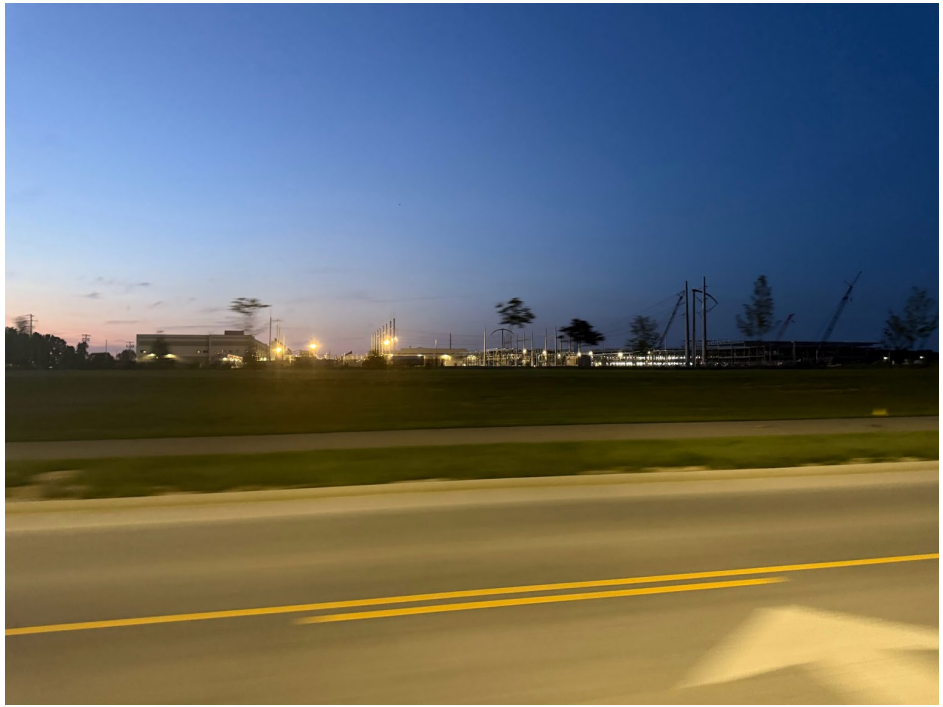
This area of New Albany was intentionally designed with data centers integrated alongside residential neighborhoods, small business plazas, walking paths, and community spaces. The area had a very clean, organized, small-town atmosphere, with uniform white fencing and thoughtfully planned development throughout the community.

Mr. Foley, a retired chemical engineer who has lived next door to the data center for the past three years, kindly agreed to speak with us on the record. He answered several important questions and provided valuable insight based on his firsthand experience living near the facility. Mr. Foley also offered to make himself available for any future follow-up questions and shared his contact information, which we are authorized to provide to Council if requested.

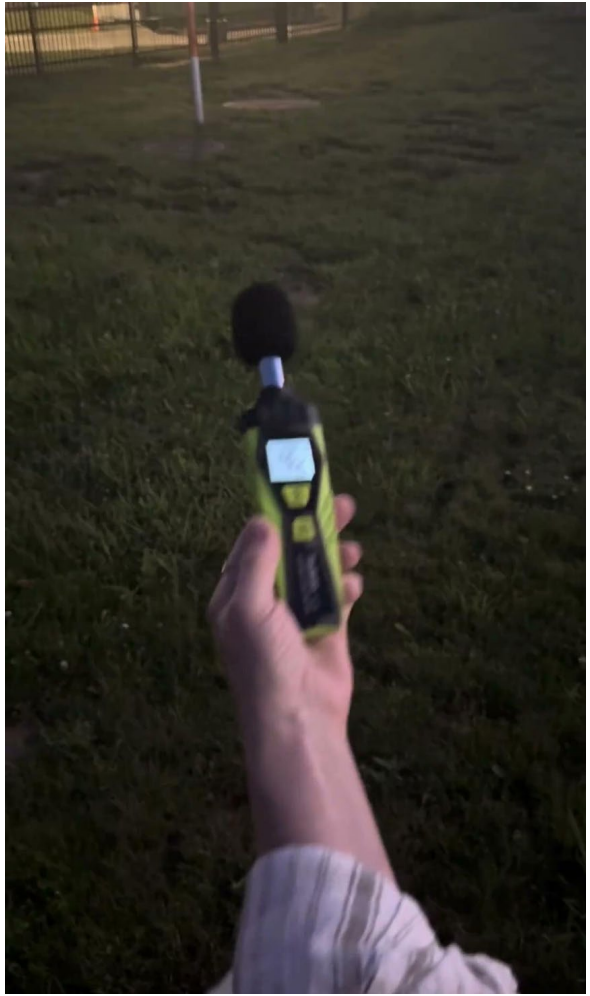
This area was part of the industrial data center district and included existing data center facilities, a large power substation, active construction for an additional data center campus, and a stormwater retention pond designed to support site drainage and water management infrastructure.

Data Center Power Lines

Power Substation / Example of the Max Height (under construction no landscaping)



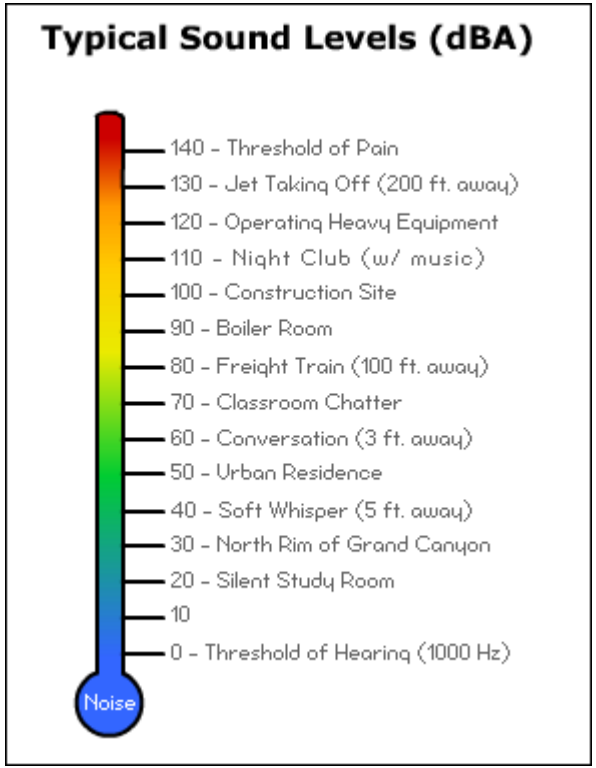
This footage shows the rear side of another data center, specifically the area housing the large air return fan systems. As the video progresses, you can clearly see both the scale and quantity of these industrial fans, which play a critical role in cooling the facility.



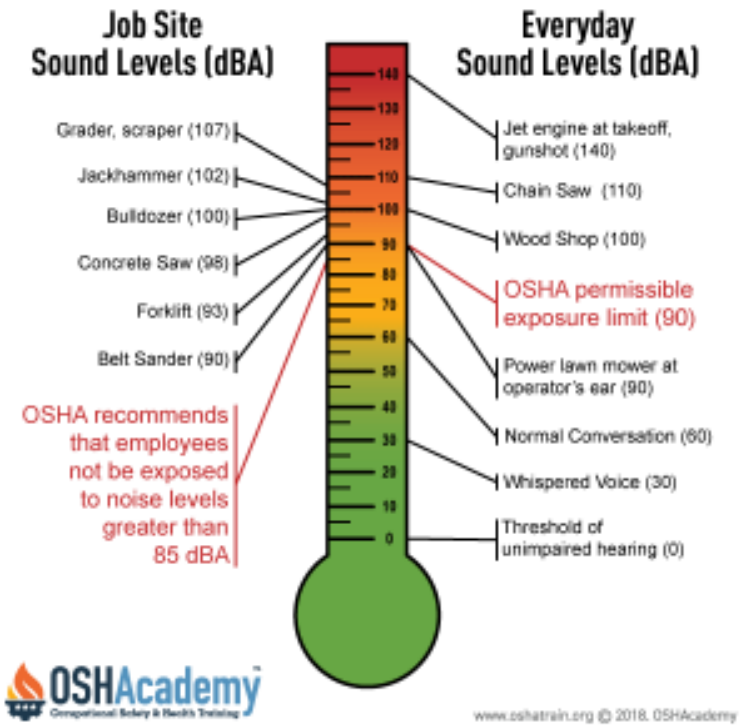
As part of our assessment, we made a brief stop at a nearby pharmaceutical plant to record ambient sound levels for comparison. This provides a useful reference point when evaluating the sound output of data centers in similar settings.

The Meg Data Center utilizes an advanced cooling system known as ThermalWorks.

What is other dBA levels…..



OSHA Technical Manual (OTM)



Know Your Noise

PEAK SOUND PRESSURE
140 dB (A) ELV
137 dB (A) Upper EAV
135 dB (A) Lower EAV

130 dB (A) Threshold of pain

EXPOSURE VALUES
87 dB (A) ELV
85 dB (A) Upper EAV
80 dB (A) Lower EAV

Key:
EAV= Exposure Action Value
ELV= Exposure Limit Value
dB(A)= 'A' weighted deciveis
(to replicate human hearing)
dB(C)- 'C' peak weighted decibels
for peak sound pressure

180	Rocket Launch
170	
160	Shotgun blast
150	Fighter jet launch
140	Fireworks
130	Live Rock Band
120	Jack Hammer
110	Riveter
100	Chain saw
90	Handheld drill
80	Sander
70	Welder
60	Heavy Traffic/ Noisy restaurant
50	Toilet flushing/ Vacuum cleaner
40	Normal conversation
30	Quiet Office
20	Light rain
10	Whisper
0	Rusting Leaves
	Healthy normal hearing threshold

Decibel levels dB (A)

Table 2. Economic Impacts of a Typical Large Data center to Local Communities

CONSTRUCTION PHASE 18-24 MONTHS	OPERATION PHASE ANNUALLY
1,688 Local Jobs	157 Local Jobs
$77.7 million wages	$7.8 million wages
$243.5 million local economic activities	$32.5 million local andeconomic activities
$9.9 million state & local taxes	$1.1 million state & local taxes

U.S. Chamber of Commerce Data Centers Nationwide

Construction Phase (18-24 Months)
Construction and Operational Economic Impacts

Large data centers bring in millions of dollars in initial investment directly to local communities that create ripple effects throughout the surrounding areas. The initial investment directly creates construction jobs to build the data center itself and public infrastructure, including roads, water, sewer, network/fiber, and electrical infrastructure. After being built, data centers operate around the clock, directly creating 24 x 7 x 365 security, operations, and IT jobs. During the construction and operation phases, data centers purchase goods and services from local suppliers and pay wages to their employees, contractors, and vendors. With their earnings, workers spend on housing, food, clothes, education, entertainment, and other daily goods and services. State and local governments generate tax revenues from workers' personal incomes, sales taxes from business activities, and property taxes from individuals and data centers.

U.S. Chamber of Commerce Data Centers Nationwide

SPILLOVER BENEFITS TO LOCAL COMMUNITIES

Data centers create positive long-lasting effects on local communities. Building new data centers creates more demand for expanding and upgrading local roads, power, water, and sewage systems. Data centers also spend their own resources to train local workers. These assets remain in the community and benefit other local businesses and residents. With these improvements, data centers attract other data centers and businesses to communities. Like other industries, data centers tend to group together geographically and follow others as seen in Colorado Springs, Raleigh, Des Moines, and other places across the country. In 2017 alone, both Apple and Google have purchased land to build or expand data centers in Nevada. Furthermore, data centers make charitable contributions, partner with local educational institutions, and support local organizations to build stronger communities.

CONTINUOUS ECONOMIC DEVELOPMENT: The development of large data centers tends to happen in stages with ongoing investment in construction to increase capacity. As a result, local economies have additional inflow investments and pipeline projects that promote economic growth. For example, Google in 2016 acquired another 74 acres in Dalles, Oregon, to expand its first corporate data center that was built a decade earlier. The new expansion is estimated to be approximately $600 million, bringing its total investment on data centers in the area to $1.8 billion. Similarly, the Apple and Facebook data centers in Prineville, Oregon, have brought over $1 billion in new investments, which helped the county's economy transition from its dependence on the wood products industry. These projects have created thousands of construction jobs that helped Prineville to reduce unemployment from 20% during the Great Recession to 8%. The diversification of businesses helps lessen local economies' dependence on a particular sector.

ADDING POOL OF TALENTED AND SKILLED WORKERS TO ATTRACT ADDITIONAL BUSINESSES: The availability of related skilled labor such as engineers and construction workers is crucial for high-end and large-scale data centers. The pool of skilled workers in the data center industry, such as building architects and engineers, IT engineers and technicians, and computer system designers, creates advantages for local communities to attract other data centers and other industries as seen in Ohio, Central Washington, and Virginia. Workers trained by Apple and Facebook in Prineville, Oregon, by Google in Dalles, and Dell, Intuit, Microsoft, and Yahoo in Central Washington are valuable assets for these regions.

IMPROVING AND UPGRADING INFRASTRUCTURE: Many data center developments are located in rural areas where public infrastructure is limited. The building of data centers in underdeveloped areas creates a high demand for expansion and the upgrade of public roads, power, water, and sewer systems. In some cases, data centers directly collaborate with local companies to find innovative solutions. These public infrastructure improvements are long lasting and benefit all local businesses and residents.

COMMUNITY IMPACT: Data centers contribute to local communities in different ways, including cash donations, local sponsorships, community grants, STEM education, computer donations, and community assistance. In addition to monetary donations, corporate employees are active volunteers who provide assistance to communities. For example, Google each year works with local organizations to sponsor community events such as Storm the Citadel to promote STEM

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education, Googlefest to help local teachers, nonprofit leaders, and small business owners use the Internet more effectively, and other seminars to help business owners set up and run successful websites. Google has awarded $1.9 million in grants to South Carolina nonprofits and schools.[19] Similarly, Facebook awarded more than $2 million to schools and qualified nonprofits to support STEM education and technological and economic development in communities in which operate data centers,[20] entered into a partnership with Isothermal Community College in North Carolina to develop the curriculum for its Datacenter Institute,[21] and launched a pilot program with the Town of Forest City, North Carolina and Rutherford County Schools to provide free Wi-Fi access to 75–100 students' homes.[22]

INNOVATION: Power is the largest component of data center operating expenditures. Companies are constantly evaluating the source and the cost of power for data centers. Over the past decades, data center owners have been actively involved in clean and renewable energy development by working with local utility and renewable energy companies to develop and purchase power from local wind, solar, and micro-hydro resources. For example, Apple employs an innovative cooling system that reuses water 35 times, resulting in a 20% reduction in overall water consumption in its data center. The data center also uses a rainwater-supplied system for on-site landscape irrigation, further reducing overall water consumption.[23] The Apple campus in Maiden, North Carolina, is supported by renewable energy from two separate 100-acre solar arrays that each produce 42 million kilowatt-hours (kWh) of energy annually.[24] Google contracted many agreements to purchase renewable energy, including the agreement to purchase 407 megawatts of wind-sourced power from MidAmerican Energy Company to supply its data center in Council Bluffs, Iowa. Google sets its goal of powering all its operations with 100% renewable energy. In addition to powering its last seven data centers with renewable energy, Facebook has also begun working with local energy utilities to help create renewable energy tariffs to cover 100% of the anticipated energy consumption for new data centers in Los Lunas, New Mexico, and Papillion, Nebraska. These tariffs are accessible to all companies and Yahoo recently announced the tariff would enable its Nebraska facility to go 100% renewable, as well. Inspired by the model of open source software, the Open Compute Project was launched in 2011 with a mission to share the innovations of IT hardware designs. Since then, the Open Compute Project has become a collaborative community of hundreds of IT and non-IT companies to share specifications and best practices for creating the most energy efficient and economical data centers.

dBA in Perry

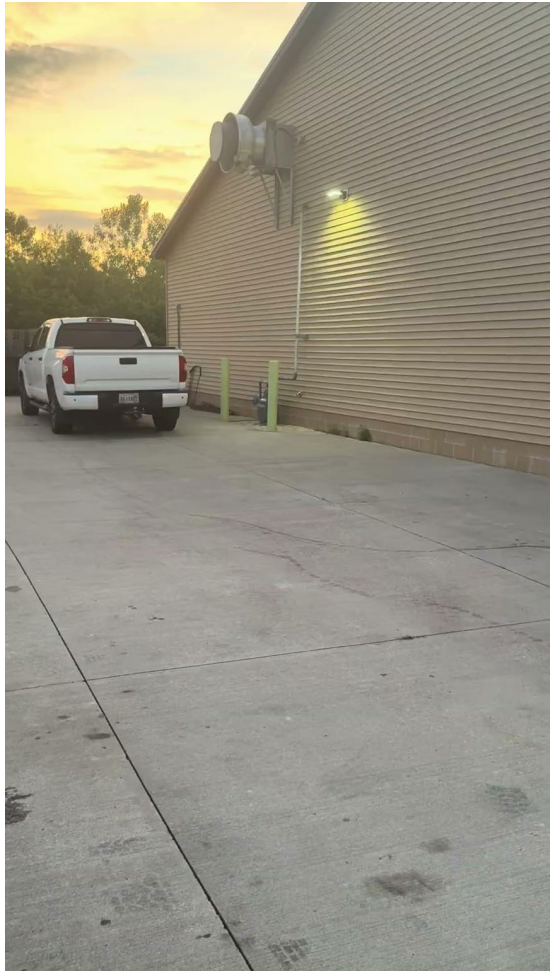
Understanding dBA levels in Perry Village is important when discussing any future development because it provides context for the types of sounds and background noise that already exist within our community. Everyday sources such as traffic along Route 20, industrial operations, the nearby nuclear power plant infrastructure, emergency vehicles, lawn equipment, trains, weather events, and other community activities all contribute to the existing ambient sound environment residents currently experience.

When evaluating potential projects, it is important to compare proposed sound levels against real-world conditions already present in the community, rather than discussing noise in isolation. Understanding baseline dBA levels helps provide a more factual and balanced discussion about sound impacts, mitigation measures, zoning requirements, and how operational standards would be regulated and monitored over time.

Recorded June 2025

Evening Rain

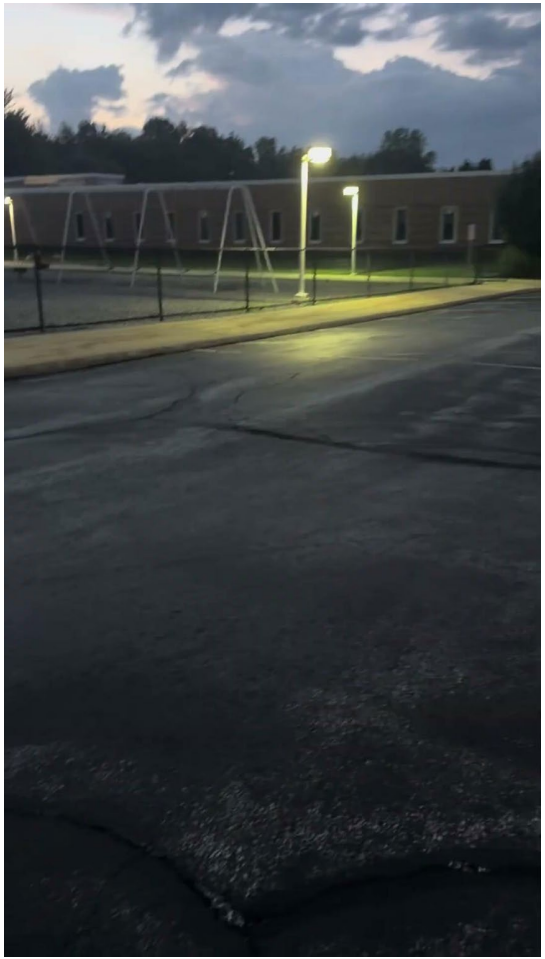
Near Village Market



Behind Village Plaza on Center

Perry High School

Perry Elementary School



Perry Board of Education

Perry Middle School