PAID ADVERTISEMENT

DATA CENTER ANALYSIS · MAQUOKETA

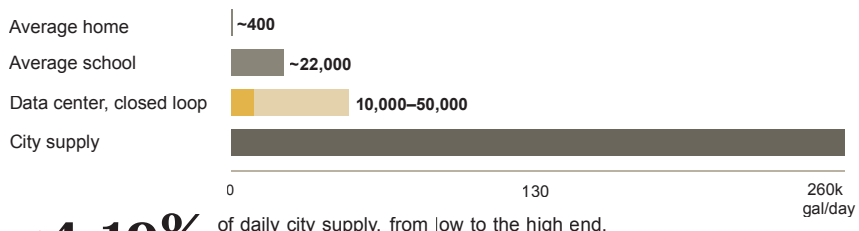
Four questions worth asking before the city decides.

A proposed data center for the Highway 61 Industrial Park raises four practical questions, about water, noise, electric bills, and tax revenue. Here is a factual look at each, drawn from city figures and independent sources, and what a proposal would require in writing. The goal is not to tell you what to think, but to make sure the numbers being discussed are the real ones.

01 · WATER

Will it drain our water?

Water use depends almost entirely on one design choice: how the building is cooled.



~4-19% of daily city supply, from low to the high end, utilizing a closed-loop system.

CLOSED-LOOP
Tens of thousands of gallons/day
Water recirculates in sealed pipes, like a car radiator — reused, not boiled off.

EVAPORATIVE COOLING
Millions of gallons/day
Water evaporates to shed heat and must be constantly replaced. Not the design proposed here.

The amount a data center uses isn't fixed, it depends almost entirely on how the building is cooled. Closed-loop cooling recirculates water through sealed pipes, like a car radiator, adding only small amounts for leaks and servicing. Evaporative cooling boils water off to shed heat, losing 70–80% for good and requiring constant replacement, the design behind the alarming headlines from other regions. The proposal specifies closed-loop, drawing from the deep Jordan Aquifer (2,000+ ft down), which is separate from the farm and private wells nearby. Because the term is sometimes misused, the task is to verify an air-cooled design on paper and lock it into the agreement.

WHAT AN AGREEMENT SHOULD INCLUDE
Air-cooled closed-loop cooling and a recorded daily water cap, in writing, with metering to verify it.

02 · NOISE

Will it be noisy?

Cooling equipment runs 24/7. What neighbors hear comes down to limits, distance, and what runs at night.

40–60 dB the target at the nearest property line for a well-managed facility

MANAGED
40–60 dB
Recorded day/night caps, real setbacks (500–1,500 ft), and walls or berms. Between a fridge hum and a quiet suburb.

UNMANAGED
up to 100 dB
Fans and transformers hum 60–80 dB around the clock; generators hit 80–100 dB on test days.

Two sources shape what a neighbor hears: cooling fans and transformers that hum continuously, and backup generators tested periodically. Distance is the most effective mitigation, because sound drops about 6 dB with every doubling of setback, and the nearest neighborhood to this site sits roughly 3,800 feet away. At that range, the continuous hum attenuates substantially before it reaches any residence, well below the levels measured at facilities sited close to homes. How the noise is measured also matters: standard tests use A-weighted decibels (dBA), which discount the low frequencies where a data center's hum lives, while C-weighted (dBC) readings capture them. When dBC exceeds dBA by more than about 20 dB, that gap flags a low-frequency problem, so an agreement should set recorded dBA limits *and* a dBC provision, day and night.

WHAT AN AGREEMENT SHOULD INCLUDE
Recorded day and night dBA and dBC limits at the property line, real setbacks, and a mitigation plan — before approval.

03 · ELECTRIC BILLS

Will it raise our bills?

A big new power user can push rates up — or hold them steady. It depends on the rate agreement secured.

1 The build-out
Every new line, substation, and upgrade charged to the developer — not spread across your bill.

2 The ongoing rate
A large-load agreement puts the facility on its own rate, with a minimum-payment floor. Now used in 24 states.

24 states now use large-load agreements to shield households — both protections, together

WITH AN AGREEMENT
Rates held steady
The facility pays its own connection and signs a long-term contract on its own rate. Because Maquoketa's electric utility (MMEU) is city-owned, these terms are set locally.

WITHOUT ONE
Costs get shared
New lines and rising demand spread across the system, so households help pay for infrastructure built for one user.

Whether a data center raises local bills isn't automatic. The same facility is rate-neutral or costly depending on how the connection is structured. A large customer creates two kinds of cost: the one-time build-out (new lines, substations, upgrades) and its ongoing demand on the system. When those costs are folded into the general rate base, every household helps pay for infrastructure built for one user, the mechanism behind sharp residential increases in some regions. Assigning the build-out to the developer solves the first cost, but only a large-load rate agreement, a dedicated rate class with a long-term contract and minimum-payment floor, handles the second. Both are needed; one without the other leaves a gap. Maquoketa's city-owned utility (MMEU) means these terms are set locally, giving officials direct control rather than leaving them to a distant investor-owned provider.

WHAT AN AGREEMENT SHOULD INCLUDE
Build-out costs assigned to the developer AND a large-load rate agreement, using the leverage of the city-owned utility.

04 · TAX REVENUE

Will it deliver revenue?

Fully taxed, it would be the area's largest taxpayer. The city's share could lower the tax rate or fund projects.

Today's largest taxpayer, **Family Dollar**, pays the city about **$441K a year**. Fully assessed, the data center would exceed that. Here's what each build size could mean:

Fully taxed	City rate cut	OR	City budget	County share	School share
$50M build	**~$1.40/$1,000**		~$405K/yr	**~$108K/yr**	**~$278K/yr**
$200M build	**~$3.69/$1,000**		~$1.62M/yr	**~$432K/yr**	**~$1.1M/yr**

City share is an either/or – a rate cut or budget support, not both. School share mostly relieves the school tax rate under Iowa's formula.

~$1.62M to the city per year at full assessment. A $200M build would become the City's largest taxpayer.

FULLY TAXED
The largest taxpayer
More than any current business. For comparison, Family Dollar pays the city ~$441K a year.

HEAVILY ABATED
Most can vanish
Breaks up to 75% for 10–20 years are common — and can hold revenue near today's level for years.

Fully assessed, the facility would be the area's largest taxpayer, and the city's share alone could go toward a lower tax rate or budget support. But, that depends entirely on the assessment terms. Abatements for data centers are common, reaching 75% for 10–20 years, and a large break can hold revenue near today's level for the life of the agreement. Because these facilities employ few people once built, the case rests largely on this revenue, which is why the terms matter so much. The school district's share, under Iowa's pupil-driven formula, mostly relieves the school tax rate rather than adding classroom spending, which is set by enrollment.

WHAT AN AGREEMENT SHOULD INCLUDE
Full assessment, or a capped abatement with a written community-benefit floor, so the revenue is real.

THE COMMON THREAD

Across all four questions, the answer is the same: the details that protect the public should be clear, capped, and in writing — before any agreement is signed. Growth can serve the community well; it just has to be structured to ensure it does.

Figures are early-stage estimates drawn from the City of Maquoketa Data Center Cheat Sheet (July 2026) and independent sources: EPA, EIA, EESI, NCSL, Good Jobs First, LSARS, Ramboll, and others cited in the full analysis. Water, tax, and rate figures depend on the final project size, cooling design, assessment, and agreement terms, none of which are yet final. Rate savings are per $1,000 of taxable valuation, not per household. Prepared as a factual public reference — not an endorsement or opposition.

Paid for by Robert and Jeannine Abbott