# DATA CENTERS IN NORTH DAKOTA

## Current and Planned Projects, Power and Water Requirements, Political Issues, and Community Acceptance

*Status reviewed through July 15, 2026*

**Executive finding:** North Dakota has become a significant U.S. digital-infrastructure location, with operating cryptocurrency-hosting campuses, rapidly expanding AI/HPC facilities, and additional proposals under local review. The opportunity is substantial, but the governing issues are equally substantial: gigawatt-scale electricity demand, transmission and ratepayer protections, land-use authority, tax incentives, water and cooling disclosures, noise and lighting, emergency planning, and public trust.

Prepared as a public-policy and community-impact overview. Project figures are based on publicly available company releases, regulatory records, government information, and news reporting. Announced capacities are not necessarily the same as current operating load.


William F. Slater. III
Slater Technologies, Inc.
Chicago, Illinois, USA

# Contents

1. Executive Summary

2. Statewide Landscape

3. Project-by-Project Review

4. Power and Grid Impacts

5. Water Use and Cooling

6. Size, Land Use, and Infrastructure

7. State and Local Politics

8. Resident Acceptance and Opposition

9. Economic Benefits and Fiscal Risks

10. Environmental and Quality-of-Life Issues

11. Risk Matrix

12. Recommendations

13. Conclusion

Appendix A. Source Notes

# 1. Executive Summary

North Dakota is attractive to data-center developers because it offers abundant generation resources, comparatively low-cost electricity, a cold climate that can reduce mechanical cooling requirements, large tracts of developable land, fiber connectivity, and a state government that generally favors energy-intensive industrial development.

The state now contains a mix of older cryptocurrency-mining or hosting facilities and newer AI/high-performance-computing campuses. Applied Digital reported that its 106 MW Jamestown facility and 180 MW Ellendale facility were operating at full capacity as of late 2025 and continued to operate in 2026. At Ellendale, the company is also developing additional AI capacity under long-term leases. Near Harwood, north of Fargo, Applied Digital is constructing the 280 MW Polaris Forge 2 campus, with initial operations targeted in 2026 and full initial capacity in early 2027.

The most politically controversial proposal is a roughly 430 MW Applied Digital project in Oliver County near Center. Residents and local officials have debated zoning, a moratorium, local decision authority, agricultural land conversion, wildlife and hunting, noise, lighting, water, grid impacts, roads, taxes, and the adequacy of public information. The dispute has become a statewide example of the tension between state economic-development objectives and local land-use control.

North Dakota does not appear to have a reliable statewide public-opinion poll focused specifically on data centers. Public acceptance therefore cannot responsibly be stated as a percentage. Available evidence indicates that acceptance is generally stronger where projects are already operating and local benefits are visible, but becomes

mixed or negative when proposed facilities are extremely large, information is limited, or residents believe that local authority and ratepayer protections are insufficient.

| Issue | Key finding |
|---|---|
| Operating load | At least 286 MW from Applied Digital's Jamestown and Ellendale hosting facilities was reported operating at full capacity; Atlas Power adds a separate large Williston-area load, though public capacity figures vary by source. |
| New AI capacity | Ellendale is adding contracted AI/HPC buildings, and Harwood is being developed as a 280 MW campus. |
| Largest active controversy | The proposed 430 MW Oliver County project has produced the strongest organized local resistance and local-control debate. |
| Water | Applied Digital and Minnkota describe closed-loop cooling with very low direct water consumption, but project-specific enforceable water budgets remain important. |
| Politics | State policy is broadly pro-development; local permits, zoning, annexation, moratoria, utility approvals, and tax incentives are central. |
| Acceptance | Mixed statewide: favorable where benefits are visible; conditional or opposed where residents perceive secrecy, risk transfer, or loss of local authority. |

# 2. Statewide Landscape

North Dakota's data-center market is concentrated in several energy and transportation corridors: Jamestown, Ellendale, the Fargo-Harwood area, the Williston area, and the proposed Oliver County site near Center. Public databases count additional smaller or less-documented facilities, but the projects below are the most consequential because of their power requirements, investment, construction activity, or political visibility.

| Project | Location | Status | Public scale | Power | Cooling / water | Politics | Acceptance |
|---|---|---|---|---|---|---|---|
| Applied Digital hosting | Jamestown | Operating | 106 MW facility | 106 MW; reported full capacity | Direct water figures not publicly detailed | Generally supportive economic-development environment | Generally favorable / low visible opposition |
| Polaris Forge 1 / Applied Digital | Ellendale | Operating and expanding | 180 MW hosting facility plus AI buildings; campus designed for further expansion | 180 MW hosting full; 100 MW and 150 MW AI buildings contracted/developing | Closed-loop / radiator-like system; company and utility say very low direct water use | Strong local/state support; utility and community partnerships | Generally favorable, with continuing rate and infrastructure questions |
| Polaris Forge 2 / Applied Digital | Harwood, Cass County | Under construction | 280 MW campus; first buildings over 900,000 sq. ft. each in public reporting | 280 MW design; 200 MW critical IT lease disclosed for one hyperscaler | Closed-loop cooling; company has compared direct use to a few homes | Annexation, zoning, roads, power-line and local-control debate | Mixed: strong official support plus local governance concerns |
| Atlas Power | Williston area | Operating / phased development | Large crypto-computing campus; public size and power figures vary | Public sources range from about 100 MW access to roughly 240 MW consumption | Limited verified public water data | Initially welcomed; power-contract and transmission-cost experience raised policy concerns | Mixed / conditional, especially regarding utility costs |
| Applied Digital proposal | Oliver County near Center | Proposed / rezoning and local review | Approx. 430 MW proposal | Approx. 430 MW | Company promotes low-water closed-loop systems; | Moratorium, repeal efforts, zoning, township/county | Substantial organized opposition alongside |

| Project | Location | Status | Public scale | Power | Cooling / water | Politics | Acceptance |
|---|---|---|---|---|---|---|---|
| | | | | | binding site figures needed | authority, statewide debate | economic-development support |

# 3. Project-by-Project Review

## 3.1 Jamestown - Applied Digital hosting facility

Applied Digital's Jamestown facility is an operating 106 MW data center primarily associated with cryptocurrency hosting. The company reported it operating at full capacity as of November 30, 2025, and again in 2026 filings.

The facility represents the earlier generation of North Dakota data-center development: large electricity use, relatively modest permanent employment, and an economic model built around energized hosting rather than a conventional corporate cloud campus.

Its political profile is comparatively quiet because it is already operating and has not produced the same visible siting conflict seen in Oliver County. Nevertheless, it remains relevant to statewide discussions about how many permanent jobs are created per megawatt and whether tax incentives and utility arrangements deliver durable public value.

## 3.2 Ellendale - Polaris Forge 1 and hosting operations

Applied Digital reports a 180 MW hosting facility at Ellendale operating at full capacity. The company is also constructing AI/HPC capacity under long-term arrangements: a 100 MW building and a 150 MW building were publicly described, with the latter expected to become operational during 2026.

Applied Digital has described the broader Ellendale campus as engineered for substantial future expansion, potentially up to 1 GW over time. That figure is a long-term design potential, not current demand, and should not be treated as an approved or operating load.

Ellendale is frequently presented by developers and state officials as a positive example because the project has generated construction, community grants, housing activity, and local business demand. Critics still note that permanent employment remains small compared with the power consumed and that expansion should be matched with transparent utility-cost allocation.

## 3.3 Harwood - Polaris Forge 2

Polaris Forge 2 is a major AI data-center campus under construction south and east of Harwood, near Interstate 29. Applied Digital announced an initial 280 MW design and approximately $3 billion of investment. Public reporting described two buildings of slightly more than 900,000 square feet each, with initial operations planned during 2026 and full initial capacity in early 2027.

A 2025 filing disclosed a 200 MW critical-IT-load lease with an investment-grade hyperscaler. In March 2026, Applied Digital closed major financing for the campus. The company expects more than 200 full-time jobs, a larger permanent workforce than many crypto-hosting facilities but still modest relative to the campus footprint and power demand.

Power infrastructure is a major part of the project. Applied Digital is funding substantial substation and high-voltage line improvements, with Minnkota and local cooperatives involved. This developer-funded approach reduces, but does not eliminate, the need for regulators to examine cost allocation, reliability obligations, exit risk, and future expansion.

Local controversy has centered on annexation, jurisdiction, road and infrastructure responsibility, and the question of who should make siting decisions. Harwood illustrates that a project can have strong regional economic support while still generating disputes over municipal boundaries and local control.

### 3.4 Williston - Atlas Power

Atlas Power's Williston-area project was announced as a very large cryptocurrency-computing development. Public descriptions have varied significantly: some commercial databases list roughly 100 MW of available power, while other industry reporting has described consumption near 240 MW and original phased plans reaching substantially higher levels.

The most important policy lesson is not the exact capacity but the utility-cost experience. Federal Reserve Bank reporting highlighted transmission and grid-related charges connected with rapid load growth and the risk that contract structures can affect other customers. The case demonstrates why special-contract transparency, minimum-demand commitments, collateral, and stranded-asset protections matter.

Because public data are inconsistent, any official statewide inventory should require standardized reporting of operating megawatts, contracted megawatts, peak demand, curtailment rights, on-site generation, and closure obligations.

### 3.5 Oliver County near Center - proposed Applied Digital campus

Applied Digital has pursued a roughly 430 MW data-center project in Oliver County. The company submitted rezoning materials in 2026, while residents organized opposition and sought a moratorium or stronger local safeguards.

Concerns include agricultural land conversion, hunting and wildlife, noise, lighting, water, fire protection, emergency response, roads, backup generation, electric rates, tax terms, construction disruption, and the possibility that local governments may lack sufficient technical capacity to negotiate with a large developer.

Supporters emphasize investment, construction jobs, tax base, demand for local services, and the opportunity to pair computing with North Dakota energy resources. Opponents argue that approval should not proceed until complete power, water, noise, lighting, emergency, tax, and decommissioning information is publicly available.

The Oliver County debate is the clearest evidence that North Dakota residents are not uniformly supportive. It is also a governance test: whether local zoning and moratoria remain meaningful when projects align with statewide development priorities.

## 4. Power and Grid Impacts

Power is the defining constraint. The two operating Applied Digital hosting facilities alone total 286 MW. Adding Harwood's 280 MW design and Oliver County's proposed 430 MW produces a combined figure near 1 GW, before counting Atlas Power or further Ellendale expansion. This arithmetic is illustrative; not all announced capacity will necessarily operate simultaneously.

Large data centers can improve utility load factors and support investment in generation and transmission. They may also provide interruptible or flexible load under contract. However, constant high demand can require new substations, high-voltage lines, generation, reserve capacity, and fuel supply. These costs must be assigned explicitly.

North Dakota should require large-load tariffs or contracts that address minimum billing demand, ramp schedules, construction contributions, credit security, collateral, early termination, stranded assets, curtailment rights, backup generation, and responsibility for network upgrades.

The Williston experience demonstrates why residents and regulators should not rely solely on assurances that a project will pay its own way. Contract details, utility accounting, and regulatory review determine whether that promise is enforceable.

## 5. Water Use and Cooling

North Dakota's cold climate is a genuine advantage. Applied Digital and Minnkota describe closed-loop cooling systems that recirculate coolant and use outdoor air or radiator-like heat rejection. Minnkota has stated that direct water use can be comparable to an average residence for certain facilities.

Low direct cooling consumption does not mean zero water impact. Water may still be used for initial system fill, maintenance, humidification, sanitary service, landscaping, construction, cleaning, fire protection, and emergency operations. Electricity generation also has an indirect water footprint depending on the generation mix.

Every project should disclose the water source, maximum daily and annual withdrawal, peak summer demand, wastewater discharge, chemical treatment, emergency requirements, drought response, and whether cooling design could change after approval.

Claims such as "waterless," "closed loop," or "uses only household-scale water" should be incorporated into enforceable permit conditions rather than treated only as promotional descriptions.

## 6. Size, Land Use, and Infrastructure

Hyperscale AI campuses are industrial districts. Harwood's first two buildings were publicly described as more than 900,000 square feet each, plus substations, transmission lines, backup power, roads, security, stormwater controls, offices, warehouses, and construction laydown areas.

Large sites may convert farmland or change rural viewsheds. They can affect traffic, drainage, emergency-response routes, neighboring property use, wildlife movement, hunting access, and the future pattern of municipal annexation.

Counties and townships should require site plans that address setbacks, height, architectural screening, lighting, noise, road maintenance, dust, drainage, fire water, hazardous materials, battery systems, backup generators, and decommissioning.

## 7. State and Local Politics

North Dakota's statewide political posture is generally favorable to data-center development. State officials frame the industry as a way to diversify the economy, increase demand for North Dakota energy, and establish the state as an AI infrastructure center.

The state offers a qualified-data-center sales-tax exemption subject to statutory requirements. Policy debates now focus on whether exemptions produce sufficient jobs and tax revenue, whether they should be limited in duration, and whether clawbacks are strong enough if promised investment or employment does not materialize.

Local governments currently play a decisive role through zoning, conditional-use permits, annexation, road agreements, and moratoria. The Oliver County dispute has intensified debate over whether the Legislature should adopt statewide siting standards or preserve broad local discretion.

A balanced approach would establish statewide minimum standards for disclosure, utility protection, environmental controls, and decommissioning while allowing counties and townships to impose stricter land-use conditions appropriate to local circumstances.

## 8. Resident Acceptance and Opposition

No credible statewide poll was identified. The following ratings are qualitative assessments based on public meetings, official statements, project history, petitions, litigation or annexation disputes, and news coverage; they are not survey percentages.

| Area | Observed acceptance | Why residents support | Why residents object |
|---|---|---|---|
| Jamestown | Generally favorable / limited visible opposition | Existing investment, operating history, local spending | Low permanent jobs per MW; tax and power questions |
| Ellendale | Generally favorable | Construction, housing and community benefits, established relationship | Expansion scale, ratepayer protection, long-term employment |
| Harwood / Cass County | Mixed | $3B investment, construction, 200+ expected permanent jobs, developer-funded grid work | Annexation, local control, roads, scale, future expansion |
| Williston | Mixed / conditional | Investment and energy-sector alignment | Transmission charges, utility risk, volatile crypto economics |
| Oliver County | Significant opposition with some support | Potential tax base, construction, regional investment | Agriculture, wildlife, noise, light, water, grid, secrecy, local authority |

## 9. Economic Benefits and Fiscal Risks

Potential benefits include multibillion-dollar construction programs, skilled-trade work, permanent technical and facilities employment, property and sales-tax revenue, utility sales, new substations and transmission, local procurement, housing demand, and diversification beyond agriculture and fossil-fuel extraction.

Risks include overestimating permanent jobs, granting broad tax exemptions without enforceable performance requirements, public infrastructure costs, emergency-service burdens, electricity-rate impacts, volatile cryptocurrency economics, customer concentration, rapid technology obsolescence, and stranded facilities or grid assets.

Community-benefit agreements should specify local hiring and apprenticeship goals, road and emergency-service payments, tax treatment, workforce training, annual reporting, complaint procedures, and decommissioning security.

## 10. Environmental and Quality-of-Life Issues

Noise can arise from fans, chillers, pumps, transformers, substations, and backup generators. Permits should establish property-line limits for daytime, nighttime, low-frequency, and tonal noise, with independent testing before and after operation.

Lighting should use full cutoff fixtures, low color temperature, shielding, curfews where practical, and dark-sky-compatible design. Large illuminated campuses can materially alter rural character.

Backup generation and battery systems require air permitting, fuel-storage safeguards, fire-code review, thermal-runaway response planning, spill prevention, and coordination with local first responders.

Wildlife, wetlands, drainage, agricultural soils, and hunting access require site-specific review, particularly in rural counties. Construction traffic and heavy loads should be governed by road-use and repair agreements.

# 11. Risk Matrix

| Risk | Likelihood | Impact | Primary owner | Recommended control |
|---|---|---|---|---|
| Grid upgrade costs shifted to other customers | Medium | High | Utility / PSC | Large-load tariff, construction contribution, collateral and exit fees |
| Customer cancellation or insolvency | Medium | High | Developer / utility | Credit support, parent guarantee, minimum payments |
| Water use exceeds public claims | Low-Medium | Medium-High | Developer / county | Binding water budget and metering |
| Noise and light complaints | Medium | Medium | Developer / local government | Numeric limits, baseline study, complaint response |
| Insufficient permanent employment | Medium | Medium | Developer / state | Performance-based incentives and annual job reporting |
| Local-government capacity gap | High | High | County / township / state | Independent technical counsel funded by applicant |
| Emergency-service burden | Medium | High | Developer / county | Response plan, equipment, training and annual funding |
| Stranded site and equipment | Low-Medium | High | Developer | Decommissioning bond and restoration plan |
| Public distrust and litigation | Medium-High | High | Developer / government | Early disclosure, public meetings, accessible records |

# 12. Recommendations

**1. Adopt a statewide large-load disclosure standard.** Require project name, owner, customer category, site acreage, building area, operating and contracted MW, ramp schedule, cooling system, water budget, generators, batteries, jobs, tax incentives, and decommissioning plan.

**2. Protect electricity customers.** Use a dedicated large-load tariff or special contract with minimum demand, upgrade contributions, credit security, early-exit payments, curtailment rules, and transparent PSC findings.

**3. Make water claims enforceable.** Meter direct use; publish annual and peak data; prohibit material cooling-design changes without review; disclose indirect and emergency requirements separately.

**4. Preserve meaningful local authority.** Establish statewide minimums without preempting reasonable county and township zoning, setbacks, noise, lighting, road, and land-use protections.

**5. Fund independent review.** Require applicants to reimburse local governments for independent engineering, utility, legal, tax, environmental, and emergency-response experts.

**6. Use performance-based incentives.** Tie exemptions to verified capital investment, payroll, jobs, operating duration, and compliance. Include clawbacks and public annual reports.

**7. Require community-benefit agreements.** Address roads, fire and EMS, workforce training, local procurement, housing impacts, complaint handling, and grants without substituting voluntary donations for enforceable obligations.

**8. Plan for closure.** Require bonds or financial assurance sufficient to remove equipment, remediate fuel or battery hazards, restore the site, and address abandoned utility infrastructure.

**9. Create a public statewide inventory.** Maintain a current list of operating, under-construction, proposed, suspended, and canceled projects with standardized data and links to permits and utility proceedings.

# 13. Conclusion

North Dakota can derive substantial economic value from data centers, especially as computing shifts toward AI and high-performance workloads. The state's energy resources, climate, land, and business environment provide real competitive advantages. However, the scale of the new campuses means that ordinary industrial-development practices are not sufficient.

The central issue is not whether data centers are inherently good or bad. It is whether contracts, permits, utility rules, tax incentives, and local processes allocate benefits and risks fairly. Public acceptance is most likely where residents receive complete information, local governments retain meaningful authority, developers fund the infrastructure they require, and promises concerning water, jobs, noise, taxes, and decommissioning are legally enforceable.


William F. Slater. III
Slater Technologies, Inc.
Chicago, Illinois, USA

# Appendix A. Source Notes

• Applied Digital Fiscal Second Quarter 2026 Results: https://ir.applieddigital.com/news-events/press-releases/detail/142/applied-digital-reports-fiscal-second-quarter-2026-results

• Applied Digital additional 150 MW Ellendale lease: https://ir.applieddigital.com/news-events/press-releases/detail/128/applied-digital-finalizes-additional-150mw-lease-with

• Applied Digital Harwood groundbreaking announcement: https://ir.applieddigital.com/news-events/press-releases/detail/127/applied-digital-to-break-ground-on-3-billion-polaris-forge

• North Dakota Monitor: Harwood project announcement: https://northdakotamonitor.com/2025/08/18/company-announces-plan-for-data-center-north-of-fargo/

• North Dakota Monitor: power upgrades near Fargo: https://northdakotamonitor.com/2026/03/23/data-center-developer-looks-west-backs-power-upgrades-near-fargo/

• North Dakota Monitor: siting and local-control debate: https://northdakotamonitor.com/2026/05/11/data-center-dilemma-who-should-decide-where-they-go-in-north-dakota/

• KFYR: Oliver County rezoning application: https://www.kfyrtv.com/2026/05/05/applied-digital-submits-rezoning-application-data-center-oliver-county/

• Minnkota Data Center FAQs: https://www.minnkota.com/minnkota-website/our-press/data-center-faqs

• North Dakota Commerce: Applied Digital partnership: https://www.commerce.nd.gov/power-partnerships/applied-digital-advancing-digital-infrastructure-north-dakota

• North Dakota Legislative memorandum: qualified data center sales-tax exemption: https://ndlegis.gov/sites/default/files/resource/committee-memorandum/27.9096.01000.pdf

• Federal Reserve Bank of Minneapolis: data centers in the Ninth District: https://www.minneapolisfed.org/article/2025/massive-data-centers-lay-roots-in-the-ninth-district

• Governor of North Dakota: Atlas Power Williston announcement: https://www.governor.nd.gov/news/burgum-one-worlds-largest-data-centers-locate-williston-area-industry-targets-growth-nd

# Appendix B – Summary Diagram for North Dakota Data Center Projects





William F. Slater. III
Slater Technologies, Inc.
Chicago, Illinois, USA

William F. Slater. III
Slater Technologies, Inc.
Chicago, Illinois, USA