WHITE PAPER

A Framework for Data Center Engagement and Local Acceptance

Authors:
Evelyn Carpenter, PE
Donna Dormeus
Jami Wong
Michelle Nicholson

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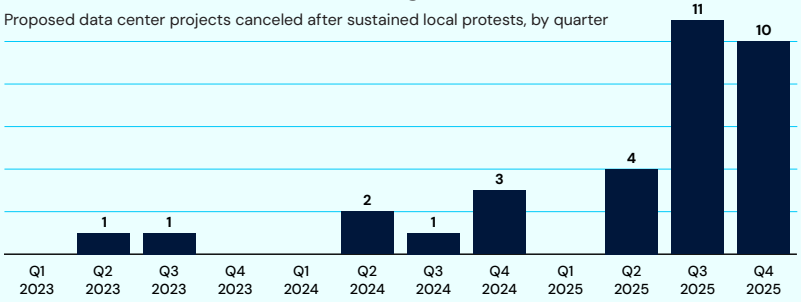
Executive Summary

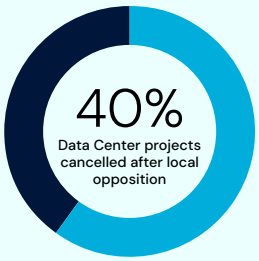
Data center development in the United States is accelerating at an unprecedented pace, driven by artificial intelligence and the rapid expansion of digital infrastructure.

However, recent national polling reveals weakening public opinion on data centers. One study from Heatmap[1] revealed that data center cancellations quadrupled in 2025, reflecting a growing wave of community resistance. The same report suggested that 40% of data center projects that face sustained local opposition are cancelled.

U.S. Data Center Cancellations Surged in 2025

Proposed data center projects canceled after sustained local protests, by quarter





Source: *Heatmap - Amid Rising Local Pushback, U.S. Data Center Cancellations Surged in 2025*

To better understand this shift, Invera Energy analyzed six data center projects across the United States that faced significant resistance, alongside wind and solar developments in the same regions. The research reveals a clear pattern: communities evaluate data centers differently than other energy infrastructure.

Across the data center projects analyzed, the following concerns consistently drive opposition:

- Strain on electricity infrastructure and rising costs
- Water consumption and local resource competition
- Unclear or limited long-term economic benefit
- Assumed association with AI
- Air quality and noise impacts

These concerns differ fundamentally from those associated with renewable energy projects, where opposition is more often tied to visual, environmental, and land-use impacts.

This distinction has important implications. It suggests that data center developers should focus their engagement on different types of impacts than renewable energy developers.

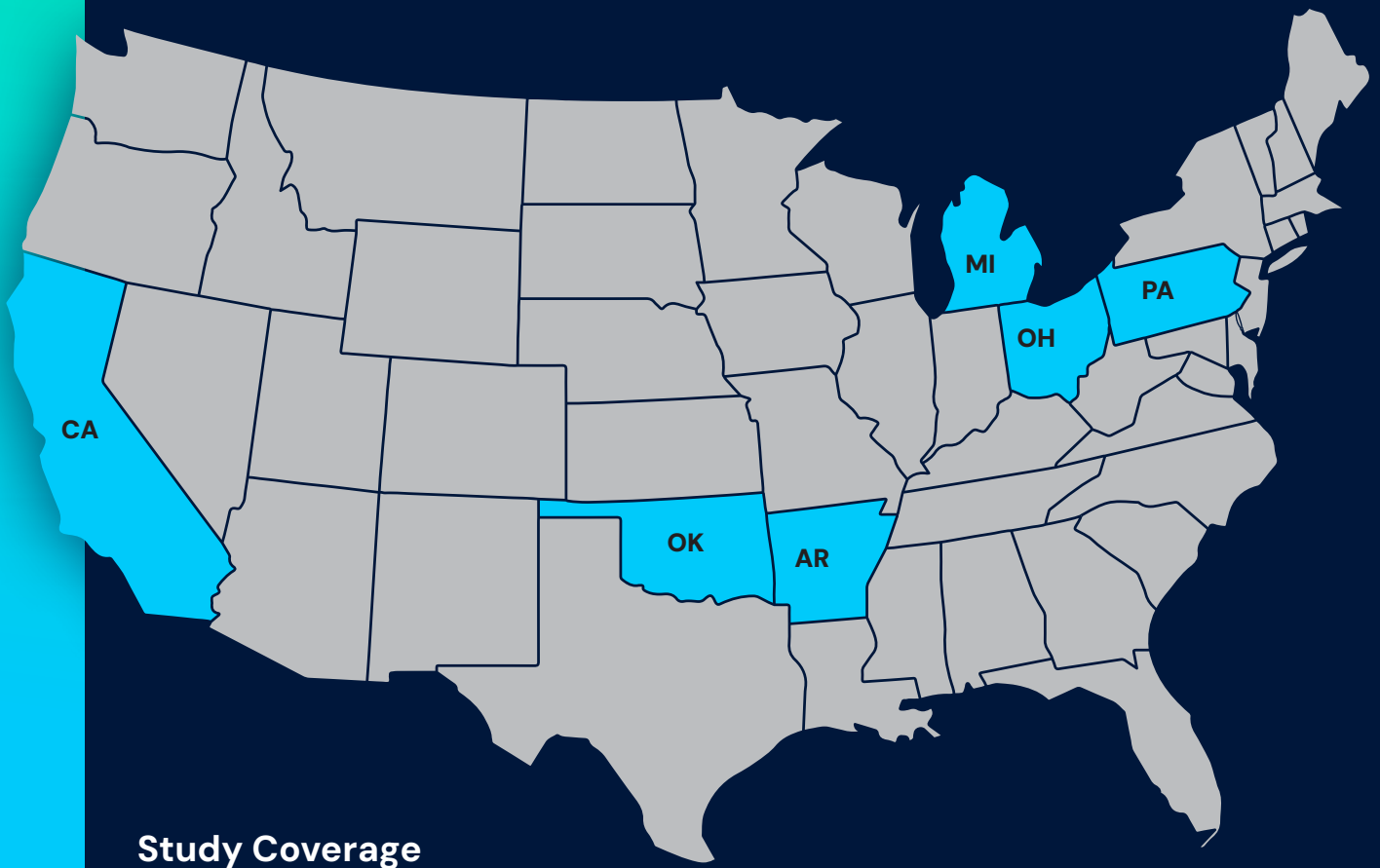
1 - https://heatmap.news/politics/data-center-cancellations-2025

Research Approach

Invera Energy conducted a qualitative analysis of six data center projects across the United States. The projects were selected to reflect geographic, economic, and political diversity, and were paired with renewable energy projects in the same jurisdictions to enable direct comparison.

Community sentiment was assessed through publicly available sources, including news coverage, public records, petitions, and social media. These inputs were analyzed using qualitative thematic coding and cross-case comparison to identify recurring patterns.

A central concept underpinning this analysis is social license to operate, the informal but essential level of trust and acceptance granted by a community. Unlike regulatory approval, social license cannot be secured through compliance alone. It must be earned through transparency, consistency, and proactive and collaborative engagement.



Study Coverage Across the United States

Six data center projects across AR, OK, PA, CA, MI, and OH.

Results:

1. Understanding Community Opposition

The findings from this analysis show that community opposition is rooted in how different technologies are perceived. Communities evaluate proposed infrastructure developments and react to what they perceive as the dominant local risk.

For data centers, that lens is overwhelmingly tied to resource consumption and system impact. Renewable energy projects are evaluated through visual, environmental, and land-use impacts. This distinction explains why many data center projects encounter resistance even when they follow traditional development and engagement approaches that have proven effective in other sectors.

How Communities Evaluate Projects

Technology	Primary Question	Main Concern
Data Centers	How will this overwhelm our community's resources?	Power, water, noise, infrastructure
Wind	How will this impact the ecosystem and landscape?	Natural environment, viewscape, noise, and light disturbances
Solar	How will this impact our land?	Agriculture, competing land use

Once a project is framed through a specific risk lens, community concerns tend to follow a consistent pattern.

Community Concerns by Technology

Across all projects, communities focus first on what they perceive as the most immediate risk, then build additional concerns around trust, economics, and quality of life. The table below compares the ranked concerns for data centers, wind, and solar projects, highlighting how each technology triggers a distinct pattern of opposition.

Ranked Community Concerns by Technology

Rank	Data Center	Wind	Solar
1	Energy demand & grid strain	Wildlife & ecosystem impact	Land use & loss of farmland
2	Water use & scarcity	Visual impact & landscape change	Visual impact & community character
3	Infrastructure strain	Property values & community character	Environmental & ecological impact
4	Environmental / emissions impact	Noise & quality of life	Property value concerns
5	Noise, light & quality of life	Corporate trust & governance	Economic skepticism
6	Lack of transparency	Environmental / material risks	Transparency & trust concerns
7	Limited economic benefit	Safety & mechanical risks	Construction & nuisance impacts
8	Corporate influence / governance	Infrastructure / technical interference	Waste & lifecycle concerns
9	Land use & community character	Water / geology concerns	Public health & safety concerns

This comparison highlights that community opposition is shaped by two fundamentally different types of perceived conflict:

Spatial conflict
Renewable opposition is driven by land use and community identity.

Resource conflict
Data center opposition is driven by capacity and resource anxiety.

This distinction is critical for developers. It means that applying renewable energy engagement strategies directly to data center development without adapting them will often fail to address the core concerns driving opposition.

Shared Drivers of Opposition

Despite these differences, the analysis identified several cross-cutting concerns that appear consistently across all technologies. These concerns are particularly important because they have the potential to amplify opposition and unify stakeholder groups.

1. Trust and Transparency Deficit

A lack of clear, accessible information consistently leads to stronger opposition. Communities frequently cite frustration with limited or non-existent engagement and perceived "backroom" decision-making.

2. Economic Benefit Skepticism

Across all project types, communities question whether the long-term local benefits justify the impacts—particularly when permanent job creation is limited.

3. Property Value Concerns

While more pronounced for wind and solar, concerns about property values are present across all technologies and are closely tied to perceived disruption.

CRITICAL INSIGHT

Opposition is the combination of impact + uncertainty + lack of trust that drives resistance.

Results:

2. Understanding Effective Engagement Strategies

Understanding community concerns is only part of the equation. The defining factor in project success is how developers engage with communities in response to those concerns. To evaluate this, engagement strategies across all six projects were analyzed using a structured framework that categorizes engagement into five levels—from basic communication to full participation.

Community Engagement Spectrum

Projects that relied primarily on **informing and consulting** experienced the highest levels of opposition. Projects that incorporated **collaboration and empowerment** demonstrated stronger community alignment and more successful outcomes.

Trust Signals and Red Flags

Beyond formal engagement strategies, the research identified specific behaviors that significantly influence community perception.

Trust Signals vs. Red Flags

Trust-Building Signals	Red Flags
• Acknowledging concerns • Providing clear and timely responses • Involving local leadership • Following through on commitments • Community first approach	• Engagement begins late • Over-reliance on press releases • Lack of response to concerns • Defensive or dismissive tone • Unclear or overly complicated messaging

Engagement effectiveness is not only defined by what is done—but how and when it is done.

Late-stage or surface-level engagement often reinforces opposition rather than reducing it, while early, transparent, and responsive engagement builds credibility and trust.

Building a Data Center Engagement Framework

The findings from this research point to a clear conclusion: successful data center development requires aligning **technical strategy**, **community benefit**, and **engagement practices** with how communities perceive risk. Drawing from both the research and lessons learned from decades of energy development, four guiding principles emerge to build a framework for stakeholder engagement best practices for data center development.

Four Guiding Principles

1

Provide a Low-Water, Resource-Aligned Energy Strategy

Data center opposition is primarily driven by concerns around electricity and water usage. Addressing these concerns requires integrating and communicating a clear resource and operational impact strategy during the earliest stages of project design.

Renewable energy solutions, with low water usage, offer a compelling path forward by reducing resource anxiety and perceived environmental impact, while also addressing concerns around grid strain. Developers should also be prepared to disclose how sound will be modeled, monitored, and addressed.

2

Develop a Strong Community Benefits Program

Communities increasingly evaluate projects based on whether local benefits outweigh local impacts. Successful projects provide clear, tangible benefits, including:

- Workforce development
- Community benefit agreements
- Local economic participation

Larger, integrated developments create greater opportunities to distribute these benefits across communities.

3

Ensure Transparency Throughout Development

Transparency is a critical determinant of project success.

Limited disclosure and late-stage engagement often lead to mistrust and opposition, while early and consistent communication builds credibility and reduces uncertainty.

4

Adopt High-Engagement, Trust-Building Strategies

Projects that move beyond basic consultation toward collaboration and empowerment consistently achieve stronger outcomes. This includes:

- Continuous engagement
- Incorporation of community feedback
- Visible trust-building behaviors

Conclusion

Data center development is entering a new phase where technical feasibility alone is no longer enough to ensure success. As communities increasingly evaluate projects through the lens of resource use, local impact, and long-term value, developers must adapt how projects are designed and communicated.

The findings of this research make the following clear:

Proactive and collaborative engagement is a must – not a nice-to-have for data center project development.

Projects that align with community priorities and engage early and transparently are far more likely to succeed.

About Invera Energy

Invera Energy provides consulting, due diligence, project management, and construction management services to address the power needs of complex infrastructure projects. Headquartered in Fort Collins, Colorado, Invera Energy is American-owned and guided by the principles of technical excellence, integrity, adaptability, and leadership in the energy transition.

Invera Energy provides expertise to move energy projects forward with confidence for clients. For more information, visit **www.inveraenergy.com** or follow us at **www.linkedin.com/company/invera-energy**.

Planning a data center project?

Let's talk about how to align your strategy with community expectations and accelerate your path to approval.

info@inveraenergy.com

www.inveraenergy.com

Contact Us to Learn More

430 N College Ave, Suite 429, Fort Collins, CO 80524
970.672.3090

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