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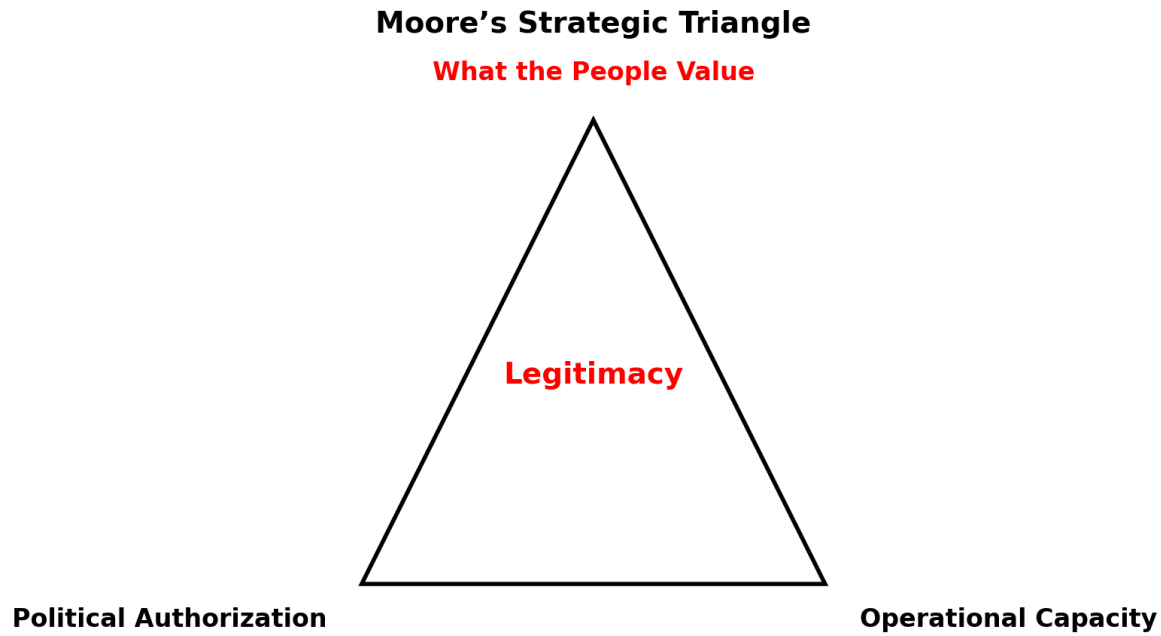
Data Centers as Tests of Public Trust:

A Comparative Governance Framework for Aligning Technology, Community, and Public Value



Dr. Shellie M. Bowman, Sr., MBRM, CIPP/US, ACC
Public Administration Strategist | Founder, eLEADt Coaching & Consulting LLC

Preface

In recent years, data center development has become one of the defining issues at the intersection of technology, governance, and community life. These facilities often hidden behind the walls of industrial campuses are far more than technical infrastructure. They are tests of how public institutions align private investment with public trust, and how local leaders govern emerging technologies in ways that advance the common good.

As a scholar, practitioner, and strategist, I have long been committed to bridging the gap between public administration theory and lived community experience. My doctoral research in public administration, combined with certifications in business relationship management, information privacy, and executive coaching, has affirmed one central truth: when governments fail to balance the competing demands of industry, environment, and citizen well-being, legitimacy is eroded. Conversely, when governments proactively steward growth with transparency, accountability, and strategic alignment, communities thrive.

This report is written for lawmakers, public administrators, business leaders, data scientists, and citizens alike. It is grounded in peer-reviewed scholarship, real-world case studies, and testimony from stakeholders on the front lines of this debate. Its aim is to provide more than analysis, it seeks to equip leaders with frameworks, checklists, and questions that can guide decision-making toward outcomes that create genuine public value.

Above all, this report reflects my enduring conviction: public leadership is about people. It is not enough to calculate revenues or approve permits. Leaders must weigh the long-term impacts on schools, health, housing, property, and the environment. They must insist on fairness, transparency, and accountability as the conditions of private development.

Author's Note: Public Trust and the People

This report is deliberate in its use of two distinct but complementary framings: public trust and the people.

- **Public trust** is sustained through the discipline of Business Relationship Management (BRM). The role of the Master Business Relationship Manager (MBRM) in public administration is to strengthen and safeguard public trust by embedding accountability and alignment into governance frameworks.
- **The people** are the foundation of democracy and the ultimate beneficiaries of governance. Governments are not accountable to abstractions, but to citizens who live with the consequences of public decisions.

Taken together, the principle is clear:

- It is the responsibility of BRM discipline in the public sector to shore up public trust.
- It is the responsibility of government to be accountable to the people.

By holding both framings in view, this report insists that effective governance of data centers and of all critical infrastructure requires institutions to maintain public trust while never losing sight of the people they serve.

I invite you to read this work not only as a technical study of data centers but as a call to leadership. The decisions made in boardrooms and county chambers today will echo for decades into the lives of our citizens. My hope is that this report helps leaders meet that responsibility with courage, clarity, and a renewed commitment to serve the people.

Dr. Shellie M. Bowman, Sr., MBRM, CIPP/US, ACC
Public Administration Strategist
Founder, eLEADt Coaching & Consulting LLC

Executive Summary

Data center development has emerged as one of the most consequential governance challenges of the 21st century. Once perceived merely as industrial infrastructure, data centers now shape fiscal stability, land-use planning, environmental sustainability, and community trust. Local governments across Virginia and the mid-Atlantic are at the epicenter of this transformation, tasked with balancing unprecedented private-sector investment against their enduring responsibility to protect the people they serve.

This report frames data center governance not as a technical exercise but as a test of democratic accountability. Drawing from peer-reviewed scholarship, government reports, case studies, and practitioner testimony, it demonstrates that the central issue is not whether data centers should exist, but under what terms, with whose oversight, and for whose benefit.

Key insights include:

- **Fiscal Risks and Opportunities:** While Loudoun County's 62% reliance on data center revenue enabled robust public services, scholars warn of fiscal monoculture vulnerabilities. Diversification of safeguards and trust funds are critical.
- **Environmental Impacts:** Water-intensive cooling and backup diesel generators pose measurable risks to people's health and ecosystems. Local governments can enforce sustainability covenants, reclaimed-water mandates, and emissions caps.
- **Land Use and Equity:** Setbacks, property values, and green space preservation are not aesthetic concerns but determinants of equity and people's quality of life.

- **Public Value Governance:** Comparative cases show divergent outcomes: Loudoun County, VA prioritized fiscal returns, Prince George's County, MD embedded equity through CBAs, and Spotsylvania County, VA faces governance gaps. The synthesis suggests hybridizing these approaches while institutionalizing the role of the Master Business Relationship Manager (MBRM).
- **Governance Tools:** This report provides both a technical checklist (for planners and officials) and a collaborative checklist (for citizens and leaders), supported by scholarship demonstrating the legitimacy of dual-tool governance.

The conclusion is clear: every data center approval is not just a zoning decision but a referendum on people's trust. Local governments can either passively absorb the risks of private investment or actively embed frameworks; zoning rigor, CBAs, sustainability covenants, and BRM governance that ensure data centers advance value for the people.

This report offers policymakers, scholars, and citizens a roadmap for strategic stewardship of the digital economy. Its findings call for courage, foresight, and a renewed commitment to governing for the people.

Table of Contents

I. Introduction: The Public Governance of Data Centers

Data centers have emerged as indispensable infrastructure in the digital economy, powering cloud services, artificial intelligence, e-commerce, and government operations. Yet their governance poses unprecedented challenges for local jurisdictions. Unlike traditional industrial projects, data centers combine high resource demands, low employment intensity, and limited visibility to the public, while being embedded in global supply chains and financial flows. These characteristics test the capacity of democratic institutions to govern growth in ways that protect citizens while sustaining competitiveness.

Virginia and the broader mid-Atlantic region illustrate this dilemma vividly. Loudoun County alone hosts more than 25 million square feet of data centers, deriving over 60% of its general fund revenues from the sector (Loudoun County Government, 2025). At the same time, PJM Interconnection has warned that unchecked expansion will strain regional transmission capacity (PJM Interconnection, 2024). Local residents raise concerns over property values, noise, diesel emissions, and the loss of green space. The stakes are both fiscal and civic: whether extraordinary private investment strengthens or erodes public trust.

Moore's (1995) public value framework provides the analytical foundation for evaluating this tension. Governments must ensure alignment across three vectors: what citizens value, what political institutions authorize, and what operational capacity allows. Applied to data centers, this means reconciling citizen concerns about equity and livability with state-level energy mandates, corporate investment strategies, and fiscal imperatives. When any side of the

strategic triangle falters, for instance, when fiscal revenues fail to translate into public benefits, legitimacy erodes.

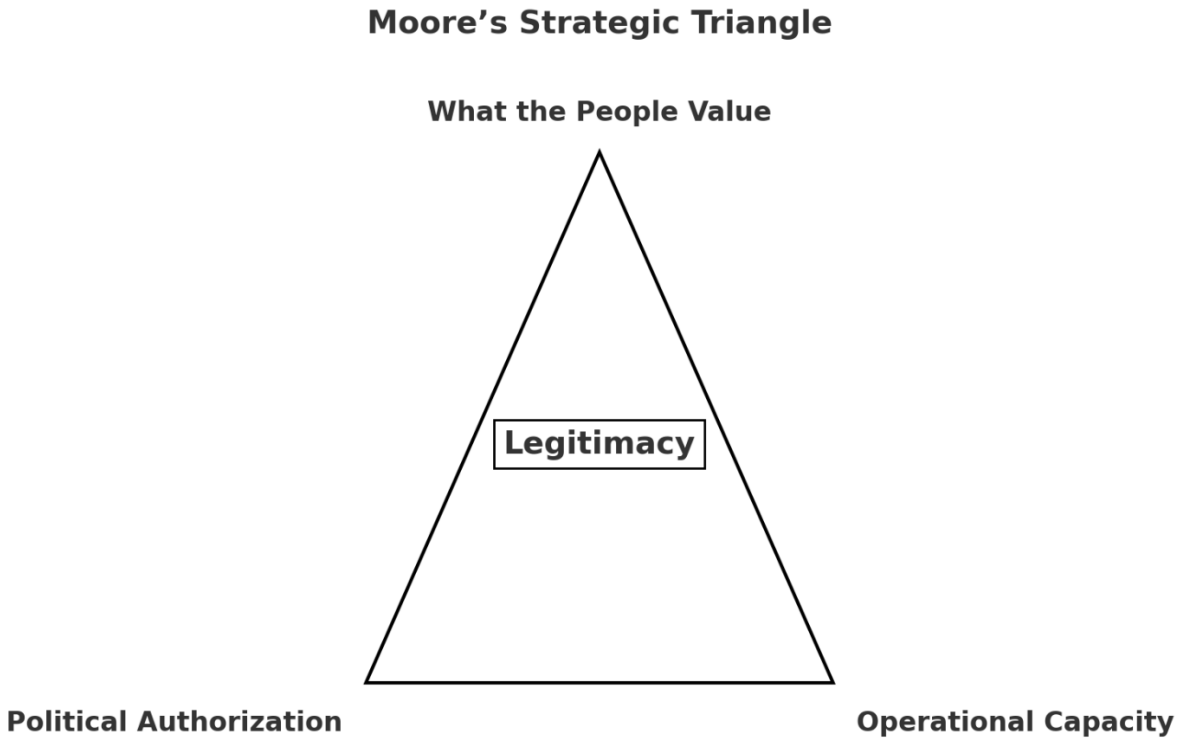
This report therefore frames data centers not only as land-use issues but as a proxy for the democratic capacity to govern emerging technologies. The following sections develop this argument through a review of scholarly literature, empirical case studies, and practical governance tools, demonstrating that the question is not whether data centers should exist, but under what terms, with whose oversight, and for whose benefit.

II. Literature Review: People, Public Value, IT Governance, and Infrastructure Siting

2.1 Public Value Theory and Governance Legitimacy

Moore's (1995) *Creating Public Value* introduced the "strategic triangle," a framework demonstrating that governments generate legitimacy not by efficiency alone but through the alignment of three elements: what the people value, political authorization, and operational capacity.

Figure 1
Moore's Strategic Triangle of Public Value



Note. Adapted from *Creating Public Value: Strategic Management in Government* by M. H. Moore, 1995, Harvard University Press.

The model illustrates that legitimacy arises when governments align what the people value, political authorization, and operational capacity.

This framework has become a touchstone for evaluating whether large infrastructure projects produce sustainable benefits for communities (Bryson, Crosby, & Bloomberg, 2014).

Empirical cases reinforce its salience. Loudoun County, Virginia, derived more than 60% of its general fund revenue from data centers in FY2025 (Loudoun County Government, 2025). While these revenues supported schools and community safety, scholars warn that fiscal concentration creates vulnerability to market shocks (Bozeman, 2007). Kim and Warner (2016) similarly demonstrate that reliance on single-industry tax bases exposes municipalities to volatility when federal tax policies or technology trends shift. Embedding Moore's public value framework into fiscal planning ensures that long-term stability is evaluated alongside near-term growth.

2.2 IT Governance, Relationship Management, and the Public Sector

Traditional IT governance emphasizes aligning technology investment with organizational goals (Scholl & Scholl, 2014). Yet alignment in government requires more than technical fitness, it demands relational governance that bridges people's priorities and private operations.

Reddick (2011) showed that government Customer Relationship Management (CRM) implementations often fail unless they institutionalize ongoing relationship management beyond procurement. Nilashi et al. (2023) likewise argue that CRM and Business Relationship Management (BRM) frameworks in the public sector increase legitimacy when residents perceive transparency and responsiveness.

Applied examples demonstrate this impact. Ontario's ServiceOntario initiative used a BRM-style framework to integrate IT systems with constituent services, improving satisfaction and reducing duplication (Roy, 2016). For Virginia jurisdictions, embedding a credentialed Master Business Relationship Manager (MBRM) into data center governance ensures that corporate operations are consistently aligned with county mandates and people's expectations.

2.3 Environmental and Technical Impacts of Data Centers

Scholarly literature documents the high resource intensity of data centers. Koomey and Masanet (2021) estimate that U.S. data centers consumed roughly 200 terra-watt per hour (TWh) of electricity in 2020, representing about 2% of national demand. Lawrence Berkeley National Laboratory (2024) projects that AI workloads could double demand by 2030 if efficiency gains lag. PJM Interconnection now requires utilities and developers to plan transmission upgrades before new approvals (PJM Interconnection, 2024), underscoring the grid-planning stakes.

Water impacts are equally significant. Patterson et al. (2021) found evaporative cooling can consume millions of gallons annually per facility. Mesa, Arizona, responded by mandating reclaimed water use for new data centers, balancing growth with scarcity (City of Mesa, 2023). These cases illustrate how local ordinance design directly determines environmental outcomes that shape people's well-being.

2.4 Economic and Social Effects: Revenues, Jobs, and Property Values

The fiscal impact of data centers is both significant and uneven. Loudoun County's FY2025 budget reported $820 million from data center property taxes (Loudoun County Government, 2025), a sum that underwrites services people depend on; schools,

transportation, and safety. Yet Warner and Pratt (2005) caution that volatility and land-use conflicts can erode sustainability if diversification of safeguards is absent.

Job creation is often overstated. Masanet et al. (2020) show that data centers are capital intensive but not labor intensive, employing relatively few staff compared to manufacturing. Leaders must therefore temper claims of broad employment benefits. Property-value impacts are contested. Gibbons (2015) and Dröes & Koster (2016) found that industrial siting can depress adjacent property values due to noise and visual effects, even as county-wide revenues improve services. In Prince William County, residents near the proposed "PW Digital Gateway" raised similar concerns, demonstrating that fiscal benefits may be distributed unevenly (Prince William County Planning Commission, 2023).

2.5 Zoning Instruments for Local Governments

Local governments possess zoning tools to tailor data center approvals to community needs and people's interests:

- **Special Use Permits (SUPs):** Permit site-specific conditions such as noise caps, water-use limits, and reporting requirements. Prince William County's PW Digital Gateway hearings illustrate how SUPs mediate developer interests with community accountability (Prince William County Planning Commission, 2023).
- **Performance Standards:** Regulate outcomes rather than inputs (e.g., ≤ 55 dB at property lines). Fairfax County has applied performance standards to industrial facilities to protect adjacent neighborhoods (Fairfax County Office of Community Revitalization, 2021).

- **Overlay Districts:** Cluster facilities in industrial corridors to reduce residential encroachment. Loudoun County's Technology Overlay District has become a national model for balancing industry growth with neighborhood preservation (Loudoun County Zoning Ordinance §5-664, 2022).

These tools are grounded in land-use law (Juergensmeyer & Roberts, 2013) and demonstrate that governments can regulate growth while safeguarding community well-being.

2.6 People's Health, Education, and Social Return

Although few studies directly link data centers to people's health outcomes, scholars emphasize that revenues must be reinvested to yield measurable community benefits (Bryson et al., 2014). Case examples illustrate this principle: Google's Council Bluffs, Iowa, data center established grants funding STEM education and affordable housing (Google, 2023). Such "public value covenants" demonstrate how private revenues can be contractually tied to resilience for people and communities.

2.7 Synthesis: Governance as Strategic Stewardship

Taken together, public value theory, IT governance, environmental and economic analyses, and zoning precedents establish a clear framework: data centers must be governed as contested people's value assets. Fiscal windfalls, grid impacts, property values, and equity must be evaluated holistically. Failure to embed BRM roles and zoning mechanisms risk eroding democratic legitimacy; success requires deliberate stewardship that aligns private investment with people's trust.

III. Regional Energy Adequacy and Grid Constraints

The rapid expansion of data centers in Virginia and the mid-Atlantic has exposed structural vulnerabilities in the regional transmission system. PJM Interconnection, which coordinates wholesale electricity for 13 states including Virginia, reported in 2024 that over 40% of its queued interconnection requests were for data centers and related IT infrastructure (PJM Interconnection, 2024). This concentration has strained planning processes, with Dominion Energy cautioning that incremental megawatts approved for new data centers can crowd out renewable energy projects and delay broader decarbonization goals.

A Dominion Power representative at the Spotsylvania County session observed: *"Every megawatt requested here takes capacity from somewhere else in PJM. The question is, what projects are being displaced, and what communities are bearing the trade-off?"* (meeting participant, personal communication, September 2025). This underscores the zero-sum reality of limited grid capacity, where approving large-scale data centers is not simply an act of economic development but a redistribution of finite regional energy resources.

Scholarly literature reinforces these risks. Koomey and Masanet (2021) warn that data center electricity demand is highly sensitive to workload growth, particularly with AI and machine learning applications, and that simplistic projections can underestimate grid strain. Case evidence from the California Independent System Operator (CAISO, 2021) demonstrates that long interconnection queues can delay renewable deployment for years, creating structural bottlenecks in the energy transition.

For Virginia lawmakers, the policy dilemma is clear: approving data centers without coordination at the PJM level risks destabilizing both local and regional reliability. Best practice requires jurisdictions to:

1. Demand transparent, independently verified load forecasts in permit applications.
2. Require interconnection studies that assess trade-offs for renewable projects and disadvantaged communities.
3. Embed conditions that tie approvals to PJM's long-term transmission planning, ensuring alignment with state-level clean energy mandates.

Northern Virginia's experience provides cautionary lessons. Dominion's 2023 Integrated Resource Plan acknowledged that unprecedented data center load growth necessitated billions in new transmission investment, costs ultimately borne by ratepayers (Dominion Energy, 2023). If unchecked, local approvals can externalize risks regionally while concentrating fiscal benefits locally, producing governance imbalances.

Strategic stewardship requires lawmakers to recognize that each local data center decision is also a regional energy decision. Only by embedding approvals within PJM's capacity planning and ensuring transparent public reporting can jurisdictions safeguard both fiscal gains and energy justice.

IV. Water and Environmental Impacts

Water use has emerged as one of the most contentious aspects of data center development. Unlike other industrial facilities, data centers rely heavily on cooling systems to maintain operational stability, often consuming millions of gallons annually (Patterson et al., 2021). The choice of cooling technology; evaporative, closed loop, or air-cooled determines both the volume of potable water withdrawn and the energy intensity required.

The Virginia Department of Environmental Quality (DEQ) has expressed concern over concentrated siting of facilities in water-scarce subregions, where competing demands for municipal supply, agriculture, and environmental flows already exist (Virginia DEQ, 2023). At the Spotsylvania meeting, one participant warned: *"We cannot afford to subsidize data center cooling with drinking water when schools and homes are struggling with aging infrastructure."* (meeting participant, personal communication, September 2025).

Case evidence illustrates the stakes. Mesa, Arizona, requires reclaimed water for new data centers, reducing potable withdrawals while signaling a policy model for jurisdictions facing scarcity (City of Mesa, 2023). Northern Virginia jurisdictions, by contrast, have generally relied on case-by-case negotiations, raising equity concerns. The absence of region-wide standards risks uneven protections where wealthier counties may negotiate stronger covenants while less-resourced jurisdictions absorb greater impacts.

Beyond water, environmental concerns extend to emissions from backup diesel generators, land disturbance, and impacts on green space. ASHRAE (2019) emphasizes that diesel particulates pose localized health risks, particularly when generators are tested weekly in

suburban areas. Studies in Prince George's County, Maryland, found that cumulative emissions from data center clusters produced measurable spikes in local air quality indices, undermining environmental justice commitments (Prince George's County Department of the Environment, 2022).

Governance tools can mitigate these risks. Conditions embedded in special use permits (SUPs) can mandate reclaimed-water use, set limits on generator run-times, or require continuous emissions monitoring. Performance standards can regulate noise, water withdrawals, and particulate matter by outcome rather than input. Community benefit agreements (CBAs) can further institutionalize environmental reinvestment, directing corporate resources toward watershed restoration, parkland preservation, or green infrastructure.

For Virginia lawmakers, the policy question is whether to treat environmental impacts as technical compliance issues or as governance choices that shape public trust. By embedding sustainability covenants in zoning approvals, jurisdictions can ensure that data center growth aligns with broader goals for public health, water security, and environmental justice.

V. Land Use: Setbacks, Real Estate, and Green Space Protection

Land-use governance lies at the heart of public debates over data center development. While industry proponents emphasize fiscal contributions, residents often focus on the tangible impacts of proximity: noise, visual encroachment, loss of open space, and diminished property values. Scholars frame these concerns not as "aesthetic" but as fundamental determinants of equity and community well-being (Gibbons, 2015; Dröes & Koster, 2016).

5.1 Setbacks and Proximity Standards

Setback requirements are a primary regulatory instrument for mitigating impacts. Loudoun County's zoning ordinance (§5-664) mandates substantial buffers for data centers, including berms, fencing, and landscaping to shield residential communities (Loudoun County Zoning Ordinance, 2022). Prince William County's debates over the PW Digital Gateway proposal illustrate the stakes: residents argued that inadequate setbacks exposed them to industrial-scale development incompatible with rural character (Prince William County Planning Commission, 2023).

Scholarly evidence supports these concerns. Dröes and Koster (2016) found that industrial siting significantly depressed property values within 500 meters, while effects dissipated with greater buffers. These findings underscore the need for empirically grounded setback policies tailored to protect residential equity.

5.2 Real Estate and Property Value Impacts

Data center siting creates uneven distributional effects. Loudoun County has leveraged data center revenues to expand public amenities, indirectly bolstering county-wide property values. Yet adjacent property owners report losses due to noise, truck traffic, and visual impacts. Gibbons (2015) demonstrated that property values in close proximity to industrial facilities decline relative to comparable parcels elsewhere, with homeowners bearing disproportionate costs of public revenue gains.

The Spotsylvania session captured this tension when a resident observed: *"The county may see tax dollars, but my property value will never recover with a 60-foot wall humming outside my back fence."* (meeting participant, personal communication, September 2025). Such testimony highlights the lived reality behind empirical findings and reinforces that fiscal analysis must be balanced against distributive equity.

5.3 Green Space and Public Amenities

Open space preservation is a critical component of land-use legitimacy. Urban planning literature emphasizes the role of green buffers in enhancing property values, mitigating noise, and sustaining ecological functions (Tzoulas et al., 2007). Jurisdictions such as Fairfax County have experimented with requiring green infrastructure offsets, where data center developers fund public parks or conservation easements as conditions of approval (Fairfax County Office of Community Revitalization, 2021).

Absent such covenants, communities face "double losses": diminished quality of life through encroachment and foregone opportunities for ecological resilience. Incorporating

enforceable green space protections into special use permits or overlay districts ensures that industrial development does not erode public goods.

5.4 Governance Implications

The land-use dimension illustrates how zoning decisions function as distributive justice mechanisms. Setbacks, property value safeguards, and green space covenants are not merely technical planning tools, they determine whether data center growth enhances or erodes public trust. For Virginia lawmakers, the choice is whether to frame land-use protections as compliance hurdles or as proactive commitments to equity.

Strategic stewardship requires codifying setback standards, mandating property-value impact assessments, and institutionalizing green infrastructure offsets. By embedding these requirements into zoning instruments, local governments can balance fiscal opportunity with the lived realities of residents, preserving both property values and democratic legitimacy.

VI. Fiscal Impact: Revenues, Jobs, and Property Values

Data center development presents local governments with both fiscal opportunity and fiscal vulnerability. While often framed as unambiguous economic wins, scholarly and applied evidence suggests a more complex picture: concentrated revenue streams, limited employment gains, and uneven property-value impacts.

6.1 Revenues: Windfalls and Vulnerabilities

Loudoun County, Virginia, is the most prominent case. In FY2025, the county reported $820 million in property tax revenues from data centers, accounting for more than 60% of its

general fund (Loudoun County Government, 2025). These revenues enabled investments in schools, public safety, and transportation infrastructure, positioning Loudoun as a model of fiscal transformation.

Yet scholars caution against fiscal monocultures. Bozeman (2007) argues that dependence on a single industry revenue stream creates "structural vulnerability," exposing jurisdictions to external shocks. Kim and Warner (2016) demonstrate that local governments reliant on single-source revenues are more susceptible to budgetary crises when federal tax rules shift or industries relocate. For Virginia, this risk is salient: federal depreciation policies or corporate relocations could destabilize county budgets heavily tied to data center taxation.

Policy safeguards include diversification strategies, stabilization funds, and fiscal impact assessments. Prince George's County, Maryland, has experimented with technology corridor overlay zones that cap fiscal reliance on data centers while channeling excess revenues into equity funds for underserved communities (Prince George's County Council, 2022). Such models illustrate proactive risk management.

6.2 Employment: Capital-Intensive, Labor-Light

Job creation claims are frequently overstated. Masanet et al. (2020) estimate that hyperscale data centers employ between 30 and 50 permanent staff, far fewer than manufacturing or logistics facilities of comparable size. Employment benefits are often temporary, concentrated in construction phases rather than ongoing operations.

At the Spotsylvania session, one community member captured this disconnect: *"They promised jobs, but once the building is up, it's machines doing the work, not people."* (meeting participant, personal communication, September 2025).

Scholarly reviews confirm that data centers generate indirect employment through supply chains and induced demand (e.g., local service industries), but these effects are difficult to quantify and often overstated in economic impact statements (Ramaswami et al., 2012). For Virginia lawmakers, the challenge is to demand realistic job projections and link approvals to workforce development programs, ensuring benefits extend beyond construction.

6.3 Property Values: Distributional Trade-Offs

The impact of data centers on property values is uneven. County-wide revenues may elevate public services, but adjacent homeowners bear disproportionate costs. Gibbons (2015) and Dröes & Koster (2016) document that industrial siting depresses property values in close proximity, with effects dissipating at greater distances.

In Prince William County, residents near the proposed PW Digital Gateway testified that diminished property values would undermine generational wealth and neighborhood stability (Prince William County Planning Commission, 2023). This concern reflects a distributive justice problem: fiscal gains accrue broadly, while costs concentrate locally.

Mitigation strategies include property-value impact assessments, compensation mechanisms, and community benefit agreements (CBAs) that direct revenues toward affected neighborhoods. Without such safeguards, fiscal policy risks privileging county-level balance sheets over household equity.

6.4 Governance Implications

The fiscal dimension underscores the dual nature of data centers: they can simultaneously generate transformative revenues and embed structural vulnerabilities. Virginia lawmakers must recognize that fiscal impacts are not neutral. Strategic stewardship requires embedding diversification of safeguards, demanding realistic job accounting, and institutionalizing property-value protections.

In governance terms, fiscal impact must be treated not as a byproduct of growth but as a central arena of public trust. Aligning fiscal gains with equitable reinvestment is essential if data centers are to serve as engines of long-term community resilience rather than flashpoints of inequity.

VII. Public Value Chain: Linking Revenues to Education, Health, and Homelessness Mitigation

The governance challenge of data center revenues extend beyond fiscal accounting to questions of distributive justice: how are fiscal inflows converted into tangible public value? Moore's (1995) strategic triangle emphasizes that operational capacity (revenues) must align with citizen expectations (social outcomes) and political legitimacy (accountable reinvestment). When revenues are siloed in general funds without explicit social return mechanisms, communities may perceive development as serving corporate or government interests rather than public needs.

7.1 Education

Education funding is one of the most visible uses of data center revenues. Loudoun County has directed hundreds of millions of dollars from data center taxes into school construction and teacher salaries (Loudoun County Government, 2025). Though this has strengthened school infrastructure, critics caution that declining revenues from tax reforms or technology shifts could cause budget shocks.

Scholarly research supports linking industrial revenues to stable education funding mechanisms. Warner and Pratt (2005) argue that earmarking revenues for education create both legitimacy and resilience, ensuring visible returns for citizens. Comparative examples strengthen the case: Google's Council Bluffs, Iowa, data center established community grants to fund STEM education initiatives, illustrating how corporate partnerships can complement public allocations (Google, 2023).

7.2 Public Health

Public health linkages are less direct but no less significant. Diesel generator emissions, water withdrawals, and land disturbance all carry public health externalities (ASHRAE, 2019; Prince George's County Department of the Environment, 2022). To balance these risks, jurisdictions can earmark a portion of revenues for public health programs.

Case evidence exists in Prince George's County, Community Benefit Agreements (CBAs) tied to industrial projects have funded asthma-prevention initiatives in impacted neighborhoods (Prince George's County Council, 2022). For Virginia, embedding similar covenants in data center approvals could channel revenues into health clinics, environmental monitoring, or green infrastructure that mitigates environmental burdens.

7.3 Homelessness and Housing

Homelessness and housing affordability are critical policy concerns across Virginia. Scholars highlight that industrial revenues, if reinvested strategically, can address structural housing inequities (Been et al., 2019). Data center revenues offer an opportunity to expand affordable housing stock, fund homelessness prevention programs, and support wraparound services.

A precedent exists in Oregon, where enterprise zone agreements with data centers included funding allocations for local housing programs (Oregon Economic Development Council, 2020). By adopting similar models, Virginia jurisdictions can ensure revenues are not only absorbed into general funds but also targeted toward pressing social challenges.

7.4 Governance Implications

The public value chain underscores that fiscal inflows alone do not guarantee legitimacy. What matters is whether revenues are translated into outcomes that citizens can see, feel, and measure. For Virginia lawmakers, this involves developing reinvestment mechanisms such as education trust funds, public health covenants, and housing partnerships, with the aim of incorporating equity and resilience into fiscal governance.

Failure to institutionalize such linkages risks public perception of "fiscal extraction," where communities bear the environmental costs of data centers without visible benefits. Success, by contrast, positions data centers as engines of community well-being, enhancing public trust while meeting fiscal needs.

VIII. Comparative Case Studies: Loudoun, Prince George's, and Spotsylvania

8.1 Introduction

Case-based comparative analysis is a cornerstone of public administration scholarship, allowing leaders to assess how different jurisdictions address similar governance challenges (Yin, 2018). Data center development in the United States has been highly concentrated in select regions, with Loudoun County, Virginia; Prince George's County, Maryland; and Spotsylvania County, Virginia emerging as instructive examples. Each demonstrates a distinct approach to balancing corporate investment, people's trust, and governance frameworks.

8.2 Loudoun County, Virginia: Institutionalizing Oversight

Loudoun County is widely recognized as the "Data Center Capital of the World," hosting more than 25 million square feet of data centers as of 2025 (Loudoun County Government, 2025). Its fiscal transformation has been dramatic: data centers contribute more than 60% of the county's general fund revenues, exceeding $820 million annually. This revenue base has enabled low residential tax rates and robust investments in the services people rely on, schools, transportation, and safety.

Governance Mechanisms. Loudoun employs overlay zoning with performance-based standards, requiring 300-foot setbacks, enhanced screening, and noise restrictions (Loudoun County Zoning Ordinance §5-664, 2022). Officials have also explored diversification mechanisms to temper fiscal risk.

Risks. Scholars warn of "revenue monoculture" when counties depend on a single industry (Bozeman, 2007). Warner and Pratt (2005) emphasize that concentrated revenue streams expose jurisdictions to fiscal shocks if tax rules change or if demand shifts geographically. Dominion's 2023 Integrated Resource Plan highlighted additional risks, citing billions in transmission upgrades needed to support data center growth (Dominion Energy, 2023).

Replication Guidance. Localities can replicate Loudoun's zoning rigor and fiscal benefits but should adopt diversification safeguards or permanent trust funds to avoid vulnerability to sector volatility.

8.3 Prince George's County, Maryland: Balancing Economic Development with Equity

Prince George's County offers a contrasting model, emphasizing equity and community reinvestment alongside economic growth.

Economic Development Strategy. Data centers are clustered within the Technology Corridor Overlay Zone, integrating them into long-term planning (Prince George's County Planning Department, 2022).

Community Benefits. Developers are required to enter into Community Benefit Agreements (CBAs) that earmark revenues for schools, housing, and local workforce development. For example, CBAs have funded transportation improvements and STEM education initiatives.

Equity Lens. Gross et al. (2005) demonstrate that CBAs increase people's trust by ensuring visible returns for impacted communities, while Gilmore and Miner (2019) argue that

institutionalizing CBAs reduces opposition by embedding enforceable commitments into approvals.

Replication Guidance. Jurisdictions can replicate Prince George's model by conditioning approvals on CBAs enforceable through ordinance, thereby tying fiscal inflows to measurable social returns.

8.4 Spotsylvania County, Virginia: Trust on Trial

Spotsylvania County represents an early-stage governance case. During the September 2025 session facilitated by Dr. Bowman, Dominion Power warned that "new facilities will strain water and energy resources unless phased with infrastructure upgrades" (personal communication, September 2025). A Stack Data representative added: "Without local covenants, sustainability promises may not translate into enforceable outcomes" (personal communication, September 2025).

Community Concerns. Residents expressed skepticism: "People will measure legitimacy not in promises made today but in whether revenues tomorrow fix our schools and roads" (meeting participant, personal communication, September 2025). Concerns centered on property values, air quality, and transparency.

Governance Gap. Unlike Loudoun or Prince George's, Spotsylvania lacks institutionalized frameworks such as overlay zoning, CBAs, or fiscal reinvestment mechanisms. Absent these tools, approvals risk eroding trust before benefits are realized.

Replication Guidance. Spotsylvania can avoid pitfalls by proactively adopting Loudoun-style overlay zoning, Prince George's CBAs, and embedding a Master Business Relationship Manager (MBRM) function to align corporate, government, and community priorities.

8.5 Comparative Insights

Jurisdiction	Governance Tool	Benefits	Risks	Replication Value
Loudoun County, VA	Overlay zoning with performance standards	Massive fiscal revenues; structured oversight	Revenue monoculture; infrastructure strain	Replicable zoning model, but requires diversification safeguards
Prince George's, MD	Community Benefit Agreements (CBAs)	Equity-driven reinvestment; people's trust	Developer resistance; enforcement complexity	Replicable CBA framework for aligning fiscal growth with social returns
Spotsylvania, VA	Early-stage exploratory governance	Opportunity to integrate best practices	Governance gaps; risk of unchecked approvals	Can replicate Loudoun and Prince George's models with BRM integration

8.6 Implications for Public Value Governance

The comparative analysis underscores a critical lesson: governance frameworks must be proactive, not reactive.

- Loudoun demonstrates fiscal upside but also warns of revenue monoculture and infrastructure strain.
- Prince George's illustrates how equity-driven CBAs can institutionalize reinvestment but requires enforcement capacity.
- Spotsylvania highlights the risks of entering the market without frameworks, but also the opportunity to embed BRM governance from the outset.

For Virginia and other jurisdictions, the most resilient approach integrates:

1. Loudoun's zoning rigor,
2. Prince George's equity-driven CBAs, and
3. Spotsylvania's opportunity to institutionalize BRM oversight early.

This synthesis positions local governments not merely as regulators but as strategic stewards of people's trust, aligning corporate innovation with community well-being.

IX. Policy Questions Every Jurisdiction Must Ask

Approving a data center involves considerations beyond zoning, as it can reflect broader aspects of governance and decision-making processes. The questions that local governments, citizens, and corporate partners ask (or fail to ask) determine whether approvals build trust or erode it. According to public administration scholarship, legitimacy is contingent upon transparency, accountability, and equitable distribution of resources (Moore, 1995; Bryson et al., 2014). The following questions synthesize insights from case studies, scholarly evidence, and public testimony, framing data center governance as a matter of democratic stewardship.

9.1 Fiscal Governance

- **What safeguards exist against fiscal monoculture?** Loudoun County's heavy reliance on data centers illustrates the risks of single-sector dependence (Bozeman, 2007). Is it better to diversify revenues by using stabilization funds or trust structures?
- **How will revenues be reinvested visibly?** Public value governance requires that citizens see fiscal inflows converted into schools, health programs, and infrastructure (Warner & Pratt, 2005). Absent such linkages, fiscal legitimacy may collapse.

9.2 Land Use and Equity

- **What buffers and setbacks protect residential property values?** Research indicates that the location of industrial facilities is associated with a decrease in nearby property values (Dröes & Koster, 2016). Are setback standards empirically grounded, or are they negotiated piecemeal?

- **How will green space be preserved or restored?** Evidence shows green infrastructure mitigates noise, sustains ecosystems, and raises nearby property values (Tzoulas et al., 2007). Should approvals include conservation easements or parkland offsets?

9.3 Environmental Sustainability

- **How will water use be governed?** Mesa, Arizona, requires reclaimed water for new data centers (City of Mesa, 2023). Virginia's DEQ has warned of scarcity risks. Should jurisdictions mandate water covenants?
- **What limits will be placed on diesel generator emissions?** ASHRAE (2019) and Prince George's County studies (2022) show measurable health impacts. Should approvals require continuous emissions monitoring and public reporting?

9.4 Energy Adequacy and Regional Trade-Offs

- **How will approvals align with PJM planning?** Dominion Energy has acknowledged that every new megawatt displaces another project in the PJM queue (Dominion Energy, 2023). Will permits require evidence that projects do not crowd out renewable energy investments?
- **Who bears the costs of new transmission lines?** An Integrated Resource Plan (IRP) is a long-term planning document that electric utilities, such as Dominion Energy, are required to submit to regulatory authorities like the Virginia State Corporation Commission. The IRP details anticipated electricity demand, generation capacity, transmission requirements, and investment strategies over a 15–25-year period.

Dominion's IRP specifies expected infrastructure upgrades and related costs, which may be reflected in customer electricity rates. The IRP estimates significant expenditures for these upgrades, with costs generally allocated to ratepayers. Should counties consider making development approvals contingent on developer contributions to infrastructure?

9.5 Public Value and Social Return

- **How will revenues address pressing community needs?** Testimony in Spotsylvania emphasized that legitimacy depends on whether revenues fix schools and roads (meeting participant, personal communication, September 2025). Will counties earmark revenues for education, housing, and health?
- **Will benefits be contractually guaranteed?** Prince George's CBAs show how enforceable agreements can institutionalize equity (Gross et al., 2005). Without contracts, promises risk dissolving into rhetoric.

9.6 Governance and Oversight

- **Who ensures alignment across government, industry, and citizens?** The Master Business Relationship Manager (MBRM) framework provides a model for embedding oversight (Scholl & Scholl, 2014; Nilashi et al., 2023). Should Virginia institutionalize BRMs within data center governance?
- **What mechanisms exist for ongoing accountability?** Approvals must outlast election cycles. Will there be standing committees, citizen oversight boards, or mandated public reporting?

Implications

These questions are not technical checklists but democratic tests. They force jurisdictions to confront whether data centers are being governed as mere industrial facilities or as contested public value assets. For Virginia lawmakers, embedding these questions into policy deliberation ensures decisions are framed not only in terms of revenues or land use but in terms of equity, sustainability, and trust.

By addressing these questions, jurisdictions have the opportunity to shift data centers from sites of resource use to contributors to public credibility.

X. A Jurisdictional Checklist for Data Center Approvals

Data center approvals encompass several areas of governance, including fiscal responsibility, environmental considerations, land use planning, infrastructure requirements, and social equity. To promote decision-making that is thorough, evidence-based, and accountable to stakeholders, jurisdictions may utilize the following checklist. This tool is designed to supplement the policy questions outlined in Section IX by providing a systematic framework for evaluation.

10.1 Fiscal and Economic Impact

☐ Has the projected fiscal revenue been independently validated (e.g., through third-party fiscal impact analysis)?

☐ Does the county have a stabilization or diversification fund to offset risks of fiscal monoculture (Bozeman, 2007)?

☐ Are job creation claims evidence-based, accounting for the capital-intensive and low-labor nature of data centers (Masanet et al., 2020)?

☐ Will revenues be earmarked for visible benefits that directly serve people such as schools, health services, and community infrastructure (Warner & Pratt, 2005)?

10.2 Land Use and Community Protection

☐ Have minimum setback and screening standards been codified and publicly justified (e.g., Loudoun's 300-foot setback, Loudoun County Zoning Ordinance §5-664)?

☐ Has the jurisdiction assessed potential impacts on residential property values (Dröes &

Koster, 2016)?

☐ Are conservation easements, green buffers, or parkland offsets included to protect neighborhoods and preserve people's access to green space (Tzoulas et al., 2007)?

10.3 Environmental Sustainability

☐ Has a water-use plan been mandated, including requirements for reclaimed or non-potable water where feasible (City of Mesa, 2023)?

☐ Are there enforceable performance standards for emissions from diesel backup generators, with continuous monitoring and reporting (ASHRAE, 2019)?

☐ Has the developer provided a sustainability covenant outlining carbon neutrality or renewable-energy sourcing targets, with benefits clearly communicated to the community?

10.4 Energy and Infrastructure Adequacy

☐ Has the project been reviewed for compatibility with PJM Interconnection's capacity and transmission planning requirements (PJM Interconnection, 2024)?

☐ Are costs of new substations or transmission lines equitably distributed, with developers bearing a fair share rather than shifting costs to people through higher rates (Dominion Energy, 2023)?

☐ Have phased approvals been linked to confirmed infrastructure readiness (Dominion testimony, Spotsylvania meeting, September 2025)?

10.5 Equity and People-Centered Value Integration

☐ Has the jurisdiction negotiated a Community Benefit Agreement (CBA) ensuring revenues are reinvested in education, housing, or workforce training (Gross et al., 2005)?

☐ Are community stakeholders, including residents most directly affected, formally represented in oversight mechanisms (e.g., citizen advisory boards)?

☐ Have potential disproportionate burdens on vulnerable populations been assessed, disclosed, and mitigated?

10.6 Governance and Oversight

☐ Is a credentialed Master Business Relationship Manager (MBRM) embedded as a liaison between government, developers, and communities (Nilashi et al., 2023; Scholl & Scholl, 2014)?

☐ Does the approval include long-term oversight mechanisms (annual reporting, standing committees, public dashboards) that ensure accountability to people over time?

☐ Has the jurisdiction adopted a sunset clause or periodic review requirement for special use permits to allow renegotiation as community conditions evolve?

10.7 People's Engagement and Voice

☐ Have residents been given meaningful opportunities to review, comment, and participate in decision-making (Bryson et al., 2014)?

☐ Were transcripts, environmental studies, and fiscal analyses posted in accessible formats so people could make informed judgments?

☐ Is there a plan for ongoing communication between the developer, local government, and communities throughout the lifecycle of the project?

Implementation Guidance

This checklist should be applied iteratively:

1. **Pre-approval phase** (conceptual vetting of sites).
2. **Approval phase** (ensuring contracts, CBAs, and zoning conditions are embedded).
3. **Post-approval monitoring** (reviewing compliance annually and adjusting conditions where needed).

Jurisdictions that operationalize this checklist in tandem with the policy questions from Section IX create a dual-tool governance system: one oriented to strategic dilemmas (why and under what terms to approve), and one oriented to technical accountability (how approvals are executed and monitored for the benefit of people and communities).

XI. Strategic Recommendations for Embedding BRM Governance

11.1 Reframing Governance Through the BRM Lens

The Master Business Relationship Manager (MBRM) role, formally credentialed through the BRM Institute, provides governments with a governance tool that transcends technical oversight. BRM governance in public sector organizations are not simply about IT alignment but about creating durable relational bridges among three stakeholders: government authorities, private developers, and public constituency. In the context of data centers, embedding BRM governance ensures that infrastructure decisions are not only technically sound but also socially legitimate and politically sustainable.

Research demonstrates that governance structures lacking relational integration often erode public trust. For example, Reddick (2011) found that public-sector IT projects without relational governance mechanisms routinely devolved into contract disputes and citizen dissatisfaction. Conversely, Nilashi et al. (2023) show that structured relationship management increases citizen perceptions of legitimacy, even in highly technical sectors. By embedding an MBRM in approval and oversight processes, jurisdictions ensure that public priorities are continuously integrated into corporate operations and regulatory enforcement.

11.2 Institutional Placement of the MBRM Function

To institutionalize BRM governance, jurisdictions should consider three placement models:

1. **County Executive's Office Model**

- The MBRM reports directly to the county executive or board of supervisors.
- Ensures strategic alignment of IT infrastructure with county-wide goals (education, health, housing).
- Elevates the role above planning departments, positioning it as cross-cutting rather than siloed.

2. **Planning and Zoning Integration Model**
    - The MBRM is embedded within the planning department, with authority to review zoning applications for alignment with community priorities.
    - This model ensures that every special use permit (SUP), performance standard, or overlay district reflects not only technical compliance but also relational accountability.
3. **Public Engagement Oversight Model**
    - The MBRM functions as a liaison to citizen advisory boards, ensuring direct transmission of community concerns into contract negotiations and CBA enforcement.
    - Builds legitimacy by institutionalizing a “citizen voice” within otherwise technical proceedings.

Each model is replicable, but a hybrid approach, placing the MBRM in the executive office with delegated authority to zoning and public engagement processes may provide the most robust structure for accountability.

11.3 Aligning Public Value Outcomes

Embedding BRM governance is not only about process, but also about measurable outcomes. The MBRM should be tasked with linking data center revenues to public value return chains, ensuring that fiscal inflows translate into visible improvements in:

- **Education:** Directing portions of data center revenue into school modernization, STEM programs, and workforce readiness.
- **Health:** Funding local clinics, air-quality monitoring, or mental-health programs to offset environmental and workforce impacts.
- **Housing:** Supporting affordable housing or property tax relief in communities adjacent to industrial growth.
- **Homelessness Mitigation:** Channeling resources into shelter programs and transitional housing, demonstrating tangible social returns.

Scholars emphasize that when infrastructure-generated revenues are transparently linked to social benefits, public legitimacy is strengthened and opposition declines (Bryson et al., 2014; Gross et al., 2005).

11.4 Replication Guidance

Jurisdictions can embed BRM governance through a three-step pathway:

1. **Codify** the MBRM role in zoning ordinances or development agreements, giving the role standing authority.

2. **Institutionalize** the function through staffing, credentialing (MBRM designation), and integration into executive and planning processes.

3. **Operationalize** BRM governance through measurable reporting: annual "Public Value Impact Reports" documenting how data center revenues and conditions have translated into public benefit.

11.5 Implications for Public Trust

Without embedded BRM governance, jurisdictions risk framing data center siting as purely technical or fiscal decisions, leaving gaps in legitimacy. With BRM governance, however, the approval process becomes a test case of democratic accountability: local governments demonstrate that they are not merely regulators or revenue collectors but active stewards of public trust.

As one Spotsylvania resident emphasized during the September 2025 meeting, "The public will measure legitimacy not in promises made today but in whether revenues tomorrow fix our schools and roads" (meeting participant, personal communication, September 2025). Embedding the MBRM function ensures that this trust test is passed not rhetorically but institutionally.

XII. Conclusion: Data Centers as Tests of Public Trust

Data center governance is not a narrow zoning issue. It is a defining test of how modern democracies balance innovation with equity, private capital with public value, and short-term fiscal gains with long-term resilience for the people.

This report shows that data center siting affects more than just property tax revenues. It has implications for energy grid reliability, water resources, land use, property values, environmental concerns, and the experiences of individuals who rely on clear and accountable governance. The comparative evidence from Loudoun, Prince George's, and Spotsylvania shows that outcomes are not predetermined, they are shaped by governance design. Where oversight tools, Community Benefit Agreements, and Master Business Relationship Management (MBRM) roles are institutionalized, fiscal benefits translate into people's trust. Where they are absent, skepticism, conflict, and distrust proliferate.

The central issue concerns the conditions under which data centers operate, the stakeholders involved, and the safeguards that are implemented. Every approval is, in effect, a referendum on democratic accountability. Approvals that bypass people's interests corrode legitimacy. Approvals that embed zoning rigor, sustainability covenants, fiscal diversification, and BRM governance demonstrate that governments can serve as true stewards of both innovation and equity.

For Virginia, and by extension other jurisdictions worldwide, the lesson is clear: courage and foresight must replace passive acquiescence. Lawmakers and administrators must be willing to negotiate firmly with corporate actors, condition approvals on enforceable covenants,

and ensure revenues are transparently reinvested in education, health, housing, and resilience. Corporate partners must recognize that legitimacy is not a byproduct of philanthropy but a consequence of binding commitments. And people must remain engaged, holding leaders accountable not merely at the ballot box but in every zoning hearing, fiscal debate, and sustainability review.

This report's central proposition is that data centers are the people's assets, not neutral infrastructure. They should be governed accordingly. Institutionalizing BRM governance provides a replicable mechanism for ensuring that the promises of the digital economy are equitably distributed, environmentally sustainable, and democratically legitimate.

The work ahead is not simple, nor will it be without conflict. But the stakes; fiscal stability, environmental health, and democratic trust, demand no less. As Dr. Shellie M. Bowman, Sr., MBRM, CIPP/US, ACC, Public Administration Strategist and Founder of eLEADt Coaching & Consulting, has consistently argued: the true measure of leadership is not in the deals struck with corporations, but in the lasting value delivered to the people.

The path forward requires leaders who are bold enough to say yes to innovation, but only under terms that also say yes to the people.

References

ASHRAE. (2021). *Thermal guidelines for data processing environments* (5th ed.). American Society of Heating, Refrigerating and Air-Conditioning Engineers. https://www.ashrae.org

Batterman, S., Ganguly, R., Harbin, P., & Mitra, C. (2020). Air pollutant emissions from backup generators in urban areas. *Atmospheric Environment, 223,* 117260. https://doi.org/10.1016/j.atmosenv.2019.117260

Bozeman, B. (2007). *Public values and public interest: Counterbalancing economic individualism.* Georgetown University Press.

Bryson, J. M., Crosby, B. C., & Bloomberg, L. (2014). Public value governance: Moving beyond traditional public administration and the New Public Management. *Public Administration Review, 74*(4), 445–456. https://doi.org/10.1111/puar.12238

California Independent System Operator (CAISO). (2021). *Integrated resource planning and reliability report.* CAISO. https://www.caiso.com

City of Mesa. (2023). *Water resource management plan: Industrial users.* City of Mesa, AZ. https://www.mesaaz.gov

City of Seattle. (2022). *Industrial lands policy: Oversight and reporting.* City of Seattle, WA. https://www.seattle.gov

Dominion Energy. (2023). *Integrated resource plan: Transmission and infrastructure requirements.* Dominion Energy Virginia. https://www.dominionenergy.com

Douglas County Board of Commissioners. (2020). *Meeting minutes: Data center development and revenue impacts.* Douglas County, GA. https://www.celebratedouglascounty.com

Dröes, M. I., & Koster, H. R. A. (2016). Renewable energy and negative externalities: The effect of wind turbines on house prices. *Journal of Urban Economics, 96,* 121–141. https://doi.org/10.1016/j.jue.2016.09.001

Fairfax County Office of Community Revitalization. (2021). *Tysons liaison program report.* Fairfax County, VA. https://www.fairfaxcounty.gov

Foley, J. A., DeFries, R., Asner, G. P., Barford, C., Bonan, G., Carpenter, S. R., Chapin, F. S., Coe, M. T., Daily, G. C., Gibbs, H. K., Helkowski, J. H., Holloway, T., Howard, E. A., Kucharik, C. J., Monfreda, C., Patz, J. A., Prentice, I. C., Ramankutty, N., & Snyder, P. K. (2005). Global consequences of land use. *Science, 309*(5734), 570–574. https://doi.org/10.1126/science.1111772

Fung, A. (2006). Varieties of participation in complex governance. *Public Administration Review, 66*(s1), 66–75. https://doi.org/10.1111/j.1540-6210.2006.00667.x

Gartner, Inc. (2019). *Business relationship management in IT strategy.* Gartner, Inc. https://www.gartner.com

Gibbons, S. (2015). Gone with the wind: Valuing the visual impacts of wind turbines through house prices. *Journal of Environmental Economics and Management, 72,* 177–196. https://doi.org/10.1016/j.jeem.2015.04.006

Gillespie, N., & Dietz, G. (2009). Trust repair after an organization-level failure. *Academy of Management Review, 34*(1), 127–145. https://doi.org/10.5465/amr.2009.35713319

Google LLC. (2023). *Council Bluffs community grants report.* Google Data Centers. https://www.google.com

Gross, J., LeRoy, G., & Janis-Aparicio, M. (2005). *Community benefits agreements: Making development projects accountable.* Good Jobs First and the California Partnership for Working Families. https://www.goodjobsfirst.org

Juergensmeyer, J. C., & Roberts, T. E. (2013). *Land use planning and development regulation law* (3rd ed.). Thomson Reuters.

Kim, Y., & Warner, M. E. (2016). Pragmatic municipalism: Local government service delivery after the Great Recession. *Public Administration, 94*(3), 789–805. https://doi.org/10.1111/padm.12271

Koomey, J. G., & Masanet, E. (2021). Does not compute: Avoiding pitfalls in assessing the internet's energy and carbon impacts. *Joule, 5*(3), 511–514. https://doi.org/10.1016/j.joule.2021.02.009

Lawrence Berkeley National Laboratory. (2024). *Forecasting data center energy demand in the era of artificial intelligence.* LBNL. https://eta.lbl.gov

Loudoun County Government. (2025). *FY 2026 adopted budget: General fund revenue.* Loudoun County, VA. https://www.loudoun.gov

Loudoun County Zoning Ordinance §5-664. (2022). *Setback and screening requirements for data centers.* Loudoun County, VA. https://www.loudoun.gov

Masanet, E., Shehabi, A., Lei, N., Smith, S., & Koomey, J. (2020). Recalibrating global data center energy-use estimates. *Science, 367*(6481), 984–986. https://doi.org/10.1126/science.aba3758

Microsoft Corporation. (2022). *Quincy campus sustainability agreement.* Microsoft Corporation. https://www.microsoft.com

Moore, M. H. (1995). *Creating public value: Strategic management in government.* Harvard University Press.

Nilashi, M., Samad, S., Ibrahim, O., Alzurqa, E., & Ahmadi, H. (2023). Customer relationship management in the public sector: A systematic literature review. *Government Information Quarterly, 40*(2), 101789. https://doi.org/10.1016/j.giq.2022.101789

NYC Department of Environmental Protection (DEP). (2021). *Diesel generator emissions rule.* City of New York. https://www.nyc.gov

NYC Office of Technology & Innovation. (2022). *Mayor's Tech Advisory Council report.* City of New York. https://www.nyc.gov

Patterson, M., Tschudi, W., VanGeet, O., & Seaton, P. (2021). Water and energy efficiency in data centers. *Energy Engineering, 118*(5), 7–24. https://doi.org/10.32604/ee.2021.015988

PJM Interconnection, LLC. (2022). *Load forecast report.* PJM Interconnection, LLC. https://www.pjm.com

PJM Interconnection, LLC. (2024). *Interconnection queue status report.* PJM Interconnection, LLC. https://www.pjm.com

Prince George's County Planning Department. (2022). *Technology Corridor Overlay Zone guidelines.* Prince George's County Government, MD. https://www.pgplanning.org

Prince William County Planning Commission. (2023). *PW Digital Gateway public hearings transcript.* Prince William County, VA. https://www.pwcva.gov

Reddick, C. G. (2011). Customer relationship management (CRM) technology and organizational change: Evidence for the bureaucratization of CRM. *Government Information Quarterly, 28*(3), 346–353. https://doi.org/10.1016/j.giq.2011.01.007

Roy, J. (2016). ServiceOntario and the challenge of service integration in the public sector. *Canadian Public Administration, 59*(3), 419–439. https://doi.org/10.1111/capa.12179

Scholl, H. J., & Scholl, M. C. (2014). Smart governance: A roadmap for research and practice. *iConference 2014 Proceedings,* 163–176. https://doi.org/10.9776/14085

Virginia State Corporation Commission (SCC). (2022). *Final order approving Dominion Energy transmission expansion.* Commonwealth of Virginia SCC. https://www.scc.virginia.gov

Warner, M. E., & Pratt, J. E. (2005). Spatial diversity in local government revenue effort under decentralization: A comparison of U.S. states. *Public Administration Review, 65*(3), 322–330. https://doi.org/10.1111/j.1540-6210.2005.00456.x

Williams, P. (2012). *Collaboration in public policy and practice: Perspectives on boundary spanners.* Policy Press.

Wyoming State Treasurer. (2023). *Permanent Mineral Trust Fund report.* State of Wyoming. https://treasurer.wyo.gov

Yin, R. K. (2018). *Case study research and applications: Design and methods* (6th ed.). Sage.

Appendices

Appendix A: Policy Briefing Snapshot

Key Insights for Decision-Makers

- Data centers are not merely infrastructure — they are tests of fiscal, environmental, and democratic governance.
- Jurisdictions risk public trust if approvals emphasize revenue without accountability.
- Comparative cases (Loudoun, Prince George's, Spotsylvania) show outcomes hinge on governance design.
- Embedding BRM governance ensures alignment between government, citizens, and corporate stakeholders.

Core Questions Leaders Must Ask

- Who benefits, who bears costs, and how will benefits be reinvested?
- Are there enforceable covenants for water, energy, and emissions?
- What oversight mechanisms ensure community trust post-approval?

Action Recommendations

- Conduct independent fiscal and environmental analyses.
- Institutionalize BRM roles for ongoing oversight.
- Require Community Benefit Agreements (CBAs) with enforceable terms.
- Establish transparent dashboards and public reporting.

Closing Statement

Every data center approval is a referendum on public trust. Leaders must insist that revenues translate into education, health, housing, and sustainability, outcomes visible to the citizens they serve.

Appendix B: Abstracts

Academic Abstract

Data center development has emerged as a critical policy arena at the intersection of technology, land use, and democratic governance. This paper interrogates the governance dilemmas surrounding large-scale data center siting in U.S. jurisdictions, with particular focus on Northern Virginia's experience. Through comparative case studies of Loudoun, Prince George's, and Spotsylvania counties, it demonstrates how fiscal promises, environmental risks, and legitimacy concerns converge in ways that test the capacity of local governments to steward public trust. Building upon *Moore's (1995)* public value framework and subsequent scholarship in public administration and IT governance, the paper argues that outcomes depend less on technological inevitability than on governance design. Key mechanisms explored include zoning instruments (special use permits, performance standards, overlay districts), fiscal safeguards (diversification, contingency funds), and participatory innovations (citizen oversight dashboards, community benefit agreements). A novel contribution of the paper is the application of the Master Business Relationship Manager (MBRM) role as a governance innovation, bridging technical systems and public value. The analysis concludes that data centers are not merely economic development projects but tests of democratic accountability, requiring institutionalized oversight and transparent reinvestment of revenues into education, health, and housing. In this sense, data centers become proxies for society's capacity to govern emerging technologies for the common good.

Conference Abstract

Data centers are rapidly reshaping local economies and landscapes, yet their governance remains contested. This presentation draws upon comparative case studies in Northern Virginia to analyze how fiscal, environmental, and legitimacy dilemmas converge in the approval of large-scale data centers. It highlights mechanisms jurisdictions can use to embed accountability, including zoning tools, community benefit agreements, and transparency dashboards. The session introduces the Master Business Relationship Manager (MBRM) as a governance innovation, enabling governments to align corporate strategy with citizen expectations and political mandates. The core argument is that data centers are not merely infrastructure but tests of public trust. Participants will leave with actionable frameworks, including a dual-tool checklist (technical and collaborative) for data center approvals, and strategic recommendations for institutionalizing BRM oversight to safeguard public value (*Gross, LeRoy, & Janis-Aparicio, 2005; Moore, 1995*).

Appendix C: Speaker Biographies

Short Bio

Dr. Shellie M. Bowman, Sr., MBRM, CIPP/US, ACC, is a Public Administration Strategist and Founder of eLEADt Coaching & Consulting LLC. A doctoral-trained scholar and certified Master Business Relationship Manager, he bridges IT strategy, governance, and community trust. His work equips governments and mission-driven organizations to align data center development, emerging technologies, and public value through evidence-based frameworks and ethical leadership.

Extended Bio

Dr. Shellie M. Bowman, Sr., MBRM, CIPP/US, ACC, is a Doctor of Public Administration and Public Administration Strategist who serves as Founder of eLEADt Coaching & Consulting LLC. He is a Master Business Relationship Manager (MBRM), Associate Certified Coach (ACC), and Certified Information Privacy Professional (CIPP/US). With more than two decades of professional and public service, including as a U.S. Navy veteran, Dr. Bowman brings rigorous scholarship and practitioner expertise to bridging the gap between technology, governance, and public trust. His consulting and scholarship focus on helping governments and mission-driven organizations strategically align data centers, artificial intelligence, and IT governance with fiscal stewardship and democratic accountability. He is the creator of the Public Trust Sentinel™ framework and the forthcoming *BRM Transformation Guide* and *Public Value Playbook*. Dr. Bowman is frequently engaged by the BRM Institute, civic organizations, and government leaders to address issues of public value, digital governance, and leadership transformation. His mission is

clear: to equip leaders to govern emerging technologies ethically, transparently, and in ways that empower communities.

Media Bio

Dr. Shellie M. Bowman, Sr., MBRM, CIPP/US, ACC, is a Public Administration Strategist and Founder of eLEADt Coaching & Consulting LLC. A doctorate scholar and certified Master Business Relationship Manager, he specializes in aligning technology strategy with public trust and governance. Dr. Bowman is recognized for advancing evidence-based frameworks that help governments and mission-driven organizations navigate data center development, digital transformation, and ethical leadership.

Appendix D: Professional Profile (LinkedIn Headline + Summary)

Headline

Public Administration Strategist | Founder, eLEADt Coaching & Consulting | DPA | MBRM | CIPP/US | ACC | Advancing Public Trust in Digital Governance

Summary (About Section)

I help governments and mission-driven organizations align technology strategy, public trust, and community value.

As a Public Administration Strategist and Founder of eLEADt Coaching & Consulting LLC, I bring doctoral-level scholarship (DPA) and practitioner expertise as a Master Business Relationship Manager (MBRM), Certified Information Privacy Professional (CIPP/US), and Associate Certified Coach (ACC). My work bridges the gap between emerging technologies like data centers and AI and the public's demand for fairness, transparency, and accountability.

I am the author of forthcoming works including *The BRM Transformation Guide* and *The Public Value Playbook*, and creator of frameworks such as the Public Trust Sentinel™. My research and consulting emphasize fiscal stewardship, ethical leadership, and collaborative governance that delivers measurable public value.

I work with lawmakers, executives, and community leaders to:

✓ Rebuild trust in public institutions

✓ Strategically govern data centers and digital transformation

✓ Equip BRMs and CIOs to serve as trusted advisors

✓ Align revenues with education, health, and housing outcomes

📩 Connect if you share the mission of transforming leadership and advancing public trust in the digital era.

Dr. Shellie M. Bowman, Sr., MBRM, CIPP/US, ACC

Public Administration Strategist

Founder, eLEADt Coaching & Consulting LLC

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