COMMONWEALTH DATA CENTER REFERENCE

What Virginia Is Spending, What Virginia Is Getting

THE COMPREHENSIVE VIRGINIA VOLUME

Fiscal Analysis · Policy Record · Statewide Inventory

Prepared by Tommy N. Turner

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The Commonwealth Data Center Reference: Fiscal Analysis, Policy Record, and Statewide Inventory

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A NOTE ON THIS EDITION

This is the comprehensive Virginia volume, current through July 25, 2026. It is the anchor volume for the county case studies in this series, which it summarizes and points to rather than duplicates.

As of July 25, 2026, several matters remained open: the consumption tax sunsets June 30, 2028 and legislators who sought repeal have pledged to revisit the exemption as early as 2027; the State Corporation Commission owes implementation guidance on the new tax; a state study on retrofitting existing data centers in the Eastern Groundwater Management Area is due in October 2026; the General Assembly had yet to respond to the twelve recommendations of DEQ's SJ 25 groundwater study, covered in Section 14A; and Hanover's Finance Committee is studying its equipment-tax rate. Everything else reflects enacted law and the documented record as of that date.

EXECUTIVE SUMMARY

The bottom line: Virginia's data center sales tax exemption was worth approximately $1.9 billion in state and local tax to the industry in fiscal year 2025, by the operators' own reports, subsidizes an industry that would substantially invest in the state without the incentive, and exposes residential ratepayers to infrastructure costs that Dominion Energy's own filings project will raise monthly residential bills by 60 to 94 percent by 2035.[1a][70] The exemption should be ended or sharply narrowed, and the state should require that the infrastructure costs driven by data center load growth be borne by the industry rather than by residential customers and taxpayers.

On water, the state's own scientists have now closed a door. The Department of Environmental Quality's July 2026 report under Senate Joint Resolution 25 concludes that the coastal plain aquifer system east of I-95 has virtually no capacity for new significant withdrawals. DEQ simulated a hyperscale data center's groundwater demand at nine locations across the region. All nine failed the permitting test.[102] The finding does not mean data centers are draining Virginia's aquifers today; most draw from surface-water-fed public systems. It means the region's groundwater cannot serve as anyone's fallback, and DEQ has asked the General Assembly to write that reality into land-use law. Section 14A covers the report and its twelve recommendations.

Data centers already consume approximately 25 percent of Virginia's electricity, a figure that belongs to the Electric Power Research Institute and is corroborated on a single-utility basis by Dominion's own audited filings.[65] The commonwealth's own Joint Legislative Audit and Review Commission has supplied the rest. Unconstrained demand would double within ten years, even lower-growth scenarios will require difficult new generation and transmission buildout, and the resulting infrastructure costs could add $14 to $37 per month to a typical residential electric bill by 2040.[2][66][69] Dominion's own integrated resource planning projects monthly bills rising from $159 to as high as $308 by 2035.[70] JLARC found permanent operational employment at a typical facility of approximately 50 workers, about half contractors. Construction employment is substantial but temporary. The industry generated $2.1 billion in total tax revenue across fiscal years 2024 and 2025 according to the state's biennial report, but that data is self-reported, not independently validated, and the return-on-investment analysis does not account for the public costs the industry generates.[16][17][18]

Virginia does not have a state-commissioned econometric model equivalent to the one Georgia produced in December 2025. The available evidence, from JLARC's survey data, from UVA economist Terry Rephann's publicly stated assessment, from Georgia's Carl Vinson Institute, and from the broader incentives literature, consistently indicates that a substantial share of Virginia's data center investment would occur without the exemption. The precise figure remains uncertain. The direction does not.[19][77][78][82]

The report also assembles the documentary record behind those conclusions. The statewide inventory in the appendices catalogs 286 facility records across at least 24 counties and cities, separating roughly 190 operating sites from a pipeline whose disclosed capacity alone exceeds the operating fleet by a factor of seven. The policy record assembles, for the first time in one place, the enacted exemption and its history, the jurisdiction-by-jurisdiction equipment-tax rate landscape, the fifteen-odd data center bills that survived the 2026 session, the new GS-5 utility rate class, and the FY2027 budget that held the commonwealth's spending plan hostage to a single tax question from March until June.

That budget resolved on June 30, 2026, and the outcome sharpens rather than settles the argument of this report. The General Assembly kept the sales tax exemption and instead enacted a first-in-the-nation tax on data center electricity consumption, $0.011 per kilowatt-hour, capped near $600 million a year and scheduled to sunset June 30, 2028.[98] Virginia thus chose to price the industry's power draw at the back end while leaving the front-end subsidy intact, a compromise that raises revenue without addressing the but-for question at the

exemption's core. Legislators who sought repeal have pledged to return to it as early as 2027.

Virginia is not acting in isolation. More than 300 data-center-related bills were filed across more than 30 states in the 2026 sessions, and at least eight states moved to shift data center costs away from residential ratepayers or to condition the industry's tax treatment.[68] The national trend is toward reform. This report recommends that Virginia join it: end or sharply narrow the exemption, commission a Virginia-specific but-for study, continue tightening rate design so residential customers do not underwrite large-load infrastructure, strengthen local authority over noise and viewshed, require earlier disclosure of off-site utility consequences, and condition any remaining favorable treatment on stronger public-interest safeguards. The evidence supports each measure. The cost of inaction is documented in the commonwealth's own regulatory filings and in the findings of its own legislative oversight body.

INTRODUCTION

This report addresses two audiences because the data center question operates at two levels of government, and the costs of the current policy framework reach both.

At the state level, data centers are no longer one economic development program among many. JLARC found that the industry is the main driver behind the forecast surge in electricity demand, and that even moderate growth scenarios will require difficult infrastructure buildout. Once a single sector is shaping utility planning at that scale, it is reconfiguring major parts of the public systems landscape. The sales tax exemption is a state-level decision. The ratepayer exposure is a state-level consequence. The transmission buildout crosses jurisdictions far from the facilities it was built to serve. A legislator representing a district with no data centers can still face constituents whose electric bills are rising and whose property sits in the path of a 765-kV corridor driven by load growth concentrated in Northern Virginia. That is why this is a commonwealth question, not a local tax calculation.[6][8]

At the local level, county boards and planning commissions are the institutions that approve rezonings, special-use permits, and development conditions. They are also the bodies that hear from residents when the burdens stop being theoretical. JLARC found that too many local processes still treat data centers as ordinary commercial projects with unusually attractive tax numbers. They are not. They are utility-intensive, capital-heavy facilities with major off-site implications that standard local review tools have often proven too weak to handle. The permanent job count is small. The sound can be chronic. The water-system consequences are

larger than expected. The transmission route appears across counties far from the original hearing room.[7][9]

The pattern of late surprise recurs across the evidence this report examines. Communities hear about tax base and investment early in the approval process. The harder truths arrive afterward, often after the project is approved or already operating and practical leverage has diminished. JLARC's recommendations on noise modeling, viewshed analysis, and utility-impact disclosure all address aspects of this problem. The pattern is not incidental to the current model. It is a structural feature of how these projects have been sold and approved, and it is itself a reason for the policy changes this report recommends.[10]

Part One is the fiscal and ratepayer analysis. Parts Two through Four assemble the complete state policy record, the proposed and prospective policy now on the table, and a synthesis of what the county case studies in this series have found when the statewide pattern is examined one jurisdiction at a time. The appendices fold in the statewide facility inventory and the study library.

PART ONE — THE FISCAL AND RATEPAYER ANALYSIS

SECTION 1: WHAT JLARC FOUND

In December 2024, the Joint Legislative Audit and Review Commission published the most comprehensive assessment any state legislature has conducted of the data center industry's costs and benefits. The findings covered employment, electricity demand, infrastructure requirements, ratepayer exposure, water use, noise, scenic and historic impacts, diesel backup fleets, and the fiscal performance of the sales tax exemption. Taken together, they describe an industry whose scale has outgrown the assumptions on which Virginia's policy framework was built.[2][6][7]

JLARC is the General Assembly's own investigative arm. Its researchers operate independently of the executive branch, and its reports are prepared for the legislature's use in oversight and policymaking. When JLARC finds that the data center industry is driving an immense increase in energy demand and that even lower-growth scenarios will require difficult new generation and transmission buildout, that is not a critic's claim. It is a finding from the institution the General Assembly itself created to give it reliable information.[2][8]

The core findings deserve to be laid out plainly, because the rest of this report builds on them.

On employment, JLARC found that a typical 250,000-square-foot data center may have approximately 50 full-time workers once operational, about half of them contractors. The construction phase supports a much larger but temporary workforce. This finding is consistent with the broader literature on data center labor economics and with what other states have found when they have examined the question independently.[2]

The electricity demand picture is where JLARC's findings become most consequential. Unconstrained demand in Virginia would double within ten years, with data centers as the main driver. The industry already consumes approximately 25 percent of Virginia's electricity, a share measured by EPRI rather than by JLARC and corroborated by Dominion's own filings. No other state comes close to that concentration. JLARC's own independent forecast showed demand essentially flat from 2006 to 2020 before data center growth changed the trajectory. Without data center demand, JLARC's own forecast has Virginia's energy use increasing by only about 15 percent by 2040 rather than the roughly 183 percent projected with data centers included.[25][65][66]

JLARC found that a typical Dominion residential customer could experience generation- and transmission-related cost increases of $14 to $37 per month in constant dollars by 2040, independent of inflation. At the upper end, that is $444 per year in added costs for an ordinary household, not because that household is using more electricity, but because the system is being rebuilt around one industry's load growth.[69]

At the local level, JLARC found that some localities face water constraints when data center demand exceeds permit or infrastructure thresholds, that chronic low-frequency mechanical noise is a recurring problem the current review process handles poorly, that scenic and historic resources are often underexamined before projects are approved, and that backup diesel generators present unresolved local air-quality questions around dense concentrations. JLARC recommended that the General Assembly consider authorizing localities to require sound modeling studies and adopt enforceable maximum sound levels, including alternative low-frequency metrics. It recommended Phase I historic-resource studies and viewshed analyses, and suggested the state could tie tax-exemption eligibility to such studies.[9][36][37][39][43][46]

JLARC's 2024 report describes a sector whose policy footprint has grown far beyond what the original incentive framework contemplated. Data centers had avoided approximately $2.7 billion in state sales and use taxes from FY2015 through FY2024, more than half of all economic development tax incentives the state deployed over that period. JLARC identified ratepayer risk from infrastructure investment outpacing actual demand, and warned that there is some risk of overbuilding transmission and other infrastructure because Virginia's market is concentrated in a relatively small number of major companies.[12][13][20][32]

These findings are not in dispute. The data center industry has not produced an alternative analysis that contradicts JLARC's employment figures, its electricity demand projections, its ratepayer cost estimates, or its infrastructure risk warnings. What the industry has argued is that the economic benefits of its presence outweigh the costs JLARC documented. That argument is addressed in Section 7. The purpose of this section is to establish what the commonwealth's own investigative body found when it examined the question with the rigor the General Assembly's mandate requires.

SECTION 2: THE FISCAL PICTURE

The arithmetic of Virginia's data center tax exemption is large, and it is growing faster than anyone projected. This section presents the numbers as they exist in

the public record, notes where they come from, and identifies what they do and do not measure.

The starting point is the scale of the exemption itself. The Virginia Department of Taxation, with the Virginia Economic Development Partnership, reported the FY2025 tax benefit of the data center retail sales and use tax exemption at $1,941,390,000, a figure that counts state and local revenue together and rests on the operators' own reports, which the state did not independently validate.[1a] The Associated Press, reporting the budget fight in March 2026, described the break as roughly $1.6 billion annually, and budget analyses through the spring cited a range of $1.6 billion to $1.9 billion depending on the fiscal year and the method.[1] The figures converge on the same order of magnitude: a subsidy approaching $2 billion a year, state and local combined. The exemption covers sales and use taxes on equipment and enabling software for qualifying projects that invest at least $150 million and create at least 50 new jobs. Virginia is home to the largest concentration of data centers in the world.[11]

Virginia's sales and use tax rate is approximately 5.3 percent in most jurisdictions, consisting of a 4.3 percent state portion and a 1 percent local portion. Applied to the approximately $1.9 billion in FY2025 exempted taxes, the local share alone would be on the order of $360 million. That revenue would otherwise flow to localities across the commonwealth, including counties that host no data centers and receive no property tax benefit from the industry's presence. Localities outside the Loudoun–Prince William corridor see none of the property tax upside but share in the forgone local sales tax, the ratepayer costs, and the grid and transmission consequences.[21]

At the state level, the 2026 biennial report from the Department of Taxation and the Virginia Economic Development Partnership estimated that the data center industry generated $2.1 billion in total tax revenue across fiscal years 2024 and 2025, and concluded that cumulative tax revenues exceeded the value of the sales tax exemption by $2.1 billion over two overlapping five-year periods.[16]

These figures require careful handling, for three reasons.

First, the revenue data is self-reported by the industry and not independently validated. VPM News reported this explicitly in its March 2026 budget coverage. Self-reported figures from the direct beneficiary of a subsidy are not the same as independently audited fiscal data.[17]

Second, the return-on-investment analysis counts the revenue without accounting for the public costs the industry generates. It does not subtract the ratepayer cost increases driven by data center load growth. It does not subtract the transmission

buildout being socialized across the grid. It does not subtract the water capacity consumed or the capital investments localities must make to serve concentrated demand. It does not price the noise burden, the scenic and historic losses, or the local air-quality uncertainties around clustered diesel generators. A return calculation that ignores the cost side of the ledger measures something, but it does not measure what a legislature needs to know when deciding whether to continue the program.[18]

Third, a significant share of the investment the exemption claims credit for would have come to Virginia regardless. That question, which economists call the but-for question, is the subject of the next section.

SECTION 3: HOW MUCH OF THE INVESTMENT WOULD COME ANYWAY

This is the most important question in the policy debate, and it is the one where Virginia's evidence is weakest. Unlike Georgia, which in December 2025 produced a state-commissioned econometric model estimating how much of its data center activity was attributable to the tax incentive, Virginia has not conducted an equivalent analysis using Virginia-specific utilization data. What exists is a range of estimates drawn from different methodologies, different states, and different levels of rigor. The honest approach is to lay them out and be direct about what each one can and cannot tell us.

The JLARC survey finding: 90 percent. JLARC reported that 90 percent of data center companies said they would not have built in Virginia without the exemption. This figure came from company surveys, a methodology in which the direct beneficiaries of a subsidy are asked whether the subsidy influenced their decisions. The predictable limitation is that companies have a financial incentive to overstate the role of the incentive, because doing so supports the policy that benefits them. The figure represents what companies said, not what an econometric model estimated from observed behavior.[19]

The Rephann assessment: approximately 50 percent. UVA regional economist Terry Rephann, who partnered with JLARC to produce the annual Economic Development Incentives report series through the Weldon Cooper Center for Public Service, has publicly stated that the share of Virginia investment attributable to the exemption has dropped to roughly 50 percent and is declining. VPM News reported this in March 2026. The directional assessment aligns with Georgia's more rigorous finding: as a state's data center market matures and structural advantages deepen, the marginal role of the tax incentive shrinks. This

assessment has not been published as a standalone study, and the methodology behind the 50 percent figure has not been independently reviewed.[78]

The Carl Vinson finding: 30 percent (Georgia). In December 2025, the Carl Vinson Institute of Government at the University of Georgia published the strongest but-for analysis any state has produced from its own commissioned research. Using actual Georgia Department of Revenue filing data on 34 qualifying facilities, calibrated against a national dataset from Aterio covering all 50 states, and employing a fixed-effects econometric model that controlled for electricity rates, labor availability, wages, interstate competition, and unobservable state characteristics, the Institute found that only 30 percent of Georgia's data center activity could be attributed to the exemption. The remaining 70 percent would have occurred without it.[77]

Georgia's finding is not directly transferable to Virginia. The two states have different market structures, competitive positions, and histories with the industry. Virginia's ecosystem is older, deeper, and more concentrated, which could cut either way: the exemption might matter less because the structural advantages are so strong, or it might have played a larger role in building the ecosystem that now sustains itself. What the Georgia finding demonstrates is that when a state replaces company surveys with actual utilization data and econometric modeling, the estimated role of the incentive drops substantially.

The Bartik benchmark: approximately 25 percent (national). Timothy Bartik of the W.E. Upjohn Institute, whose cost-sensitivity methodology JLARC itself used in its 2019 Virginia data center assessment, has found that roughly three-quarters of all business tax incentives fail to change any firm's location decision. Bartik has stated that the data center industry is "vastly overstating" the fiscal benefits of these subsidies. His research represents the broadest empirical base in the literature on incentive effectiveness, though it covers all industries rather than data centers specifically.[82]

What the range tells us. The available estimates span from 90 percent (JLARC's survey-based figure) to roughly 50 percent (Rephann), to 30 percent (Georgia's model), to about 25 percent (Bartik's broader literature). The survey-based estimate sits at the top. Every estimate based on observed behavior or econometric modeling sits below it, in most cases well below.

Virginia does not yet have the data to place a precise number on the share of investment that would occur without the exemption. What it has is a consistent directional finding across multiple methodologies and multiple states: the role of the tax incentive shrinks as markets mature. Virginia's data center market is the most mature in the world. The inferential distance between the available evidence

and the conclusion that a substantial share of Virginia's investment would occur without the exemption is not large. This report will not claim a precision the evidence does not support. The case for reform does not require a precise but-for number. It requires only the recognition, supported by every available data point, that the commonwealth is paying close to $2 billion a year in forgone revenue to subsidize an industry whose investment decisions are driven primarily by factors the state does not have to pay for: geography, fiber connectivity, proximity to federal facilities and major internet exchange points, a deep cluster of skilled labor and vendor networks, and decades of compounding infrastructure investment.[14]

SECTION 4: THE EMPLOYMENT PICTURE

The standard justification for any tax incentive is jobs. The data center industry presents a version of this argument that is unusual in its structure: large capital investment, substantial temporary employment during construction, and a permanent workforce so small that it challenges the conventional logic of economic development subsidies.

JLARC found that a typical 250,000-square-foot data center may have approximately 50 full-time workers once operational, about half of them contractors. The construction phase supports a much larger but temporary workforce.[2] This is consistent with what other states have documented. Georgia's Carl Vinson Institute reported 1,873 permanent data center employees statewide across all facilities, and noted that data centers are highly automated, allowing a small number of workers, almost always fewer than 100 and more often fewer than 50, to operate a facility spanning tens of thousands of square feet.[22]

The construction picture is different, and the industry is right to emphasize it. IBEW locals in Northern Virginia report that data center construction has doubled their members' work hours in recent years, with journeyman electricians earning roughly $60 an hour with benefits. These are skilled trades positions: master electricians, HVAC technicians, heavy equipment operators, structural engineers. The work is real, well-compensated, and often performed by union labor. None of that is in dispute, and this report does not minimize the value of that work.[22]

The industry makes a further argument about the sustained nature of construction employment that has merit at the aggregate level. Hyperscale campuses are built in phases over a decade or more, and as long as new projects keep entering the pipeline, the construction workforce in the aggregate is not temporary the way a single building project is. The industry argues that this pipeline constitutes a permanent construction ecosystem that trains workers and develops supply chains with benefits extending to other sectors.

Two qualifications apply. First, construction employment at any individual facility is temporary by definition. A data center building takes roughly two to three years to complete. Once operational, the workforce drops to the roughly 50 permanent employees JLARC documented. The sustained aggregate employment depends entirely on the continued flow of new projects, which depends in turn on market demand, power availability, local approvals, and Virginia's competitive position.[23]

Second, the transition from construction to operations involves a steep drop, and that drop is the structural reality of the industry's labor model. Officials who cite job-creation figures that blur the distinction between temporary construction employment and permanent operational staffing are presenting an incomplete picture. JLARC's findings make the distinction unavoidable.[24]

An econometric study of Texas data center openings by Ball State University's Center for Business and Economic Research found that the net effect of data center presence on county-level employment was effectively zero across related industries. The apparent job creation largely reflected reclassification of existing workers rather than new hiring.[79]

Data center construction in Virginia is driven by the same structural advantages that drive the industry's presence. If those advantages hold, as this report argues they do, the construction work remains regardless of the exemption's status. The exemption subsidizes equipment purchases, not building contracts.[24]

SECTION 5: THE RATEPAYER EXPOSURE

The tax exemption is the cost Virginia chose. The ratepayer exposure is the cost that arrives through the monthly utility bill, governed by the State Corporation Commission rather than the General Assembly, and driven by a regulated monopoly's capital program that will take decades to pay off. This section maps that exposure using the utility's own filings and the independent analyses of JLARC and the SCC.

The demand picture. Data centers already consume approximately 25 percent of all electricity generated or delivered in Virginia, according to EPRI. Dominion's own 2023 annual report put data centers at 24 percent of Virginia Power's electricity sales, up from 21 percent in 2022. No other state comes close; the next highest, North Dakota, is at roughly 15 percent.[65]

That share is rising. EPRI's updated February 2026 analysis projects that data centers could consume between 39 and 57 percent of Virginia's electricity by 2030, depending on how many pipeline projects reach operation. PJM's 2025 Long-Term

Load Forecast projects 32 gigawatts of peak load growth between 2024 and 2030, with data centers responsible for 94 percent of the increase. Data centers are not merely the main driver of demand growth in Virginia. They are effectively the only driver. Every other sector's demand has been essentially flat since 2006.[66]

Without new data center demand, JLARC's own forecast has Virginia's energy use increasing by only about 15 percent by 2040 rather than the roughly 183 percent projected with data centers included. JLARC found that even lower-growth scenarios would still require difficult and substantial buildout.[25][26][27]

The bill projections. JLARC's independent analysis found that a typical Dominion residential customer could experience generation- and transmission-related cost increases of $14 to $37 per month in constant dollars by 2040. At the upper end, that is $444 per year for an ordinary household.[69]

Dominion's own 2025 IRP Update, filed with the SCC, projects larger increases. Under Dominion's methodology, the average monthly residential bill would rise from $159 today to $255 by 2035 and $268 by 2045. Under the SCC-directed methodology, the same bill reaches $308 by 2035 and $381 by 2045. A Dominion spokesperson has noted that these are projections, not guarantees, and that cost allocations are updated every two years. The direction is not in dispute. The only question is magnitude.[70]

The IRP filing also discloses the capital cost of the transmission buildout alone at $28.3 billion. Total capital expense across all generation scenarios ranges from $91.8 billion to $270 billion. For context, Virginia's entire state operating budget was $83.3 billion in 2024.[71]

The capital plan. Dominion's capital spending plan has grown sharply and repeatedly. In February 2025, the company raised its five-year capital expenditure plan to $50.1 billion, up 16 percent from a prior $43.2 billion. Reuters reported the increase was driven by accelerating data center demand. By the company's Q4 2025 investor presentation, the five-year plan had grown again to $64.7 billion for the 2026–2030 period.[72]

Dominion has told the SCC that it holds 16,913 megawatts of data center demand under firm contract and is studying a further 30,132 megawatts at the earlier ELOA stage, 47,045 megawatts in total, of which only about a third is contracted. Since the December 2024 IRP, it increased its data center demand forecast by 17 percent, adding approximately 7 gigawatts. Dominion CEO Robert Blue told investors in February 2025 that data center growth in Virginia is accelerating, not slowing.[73]

The physical constraints. Dominion has already hit physical limits. In mid-2022, the company told data center customers in eastern Loudoun County that it could no longer guarantee delivery of contracted power via overhead transmission lines, and it temporarily paused new connections. By August 2024, Bloomberg reported that Dominion expected wait times for large data center connections to stretch to as long as seven years. The constraint was not generation. It was the inability to move power through a transmission system that had not kept pace with demand the company had already contracted.[74]

The regulatory response. The SCC has not simply accepted Dominion's plans. It found the 2024 IRP legally sufficient but stated that acceptance does not express approval of the magnitude or specifics of future spending, the costs of which will significantly impact millions of customers. The SCC directed Dominion to incorporate at least one scenario in which fossil plants retire in accordance with the Virginia Clean Economy Act.[75]

In November 2025, the SCC approved a new rate class for the largest users of electricity, including data centers, designated GS-5. That is not routine housekeeping. It is a regulator acknowledging that the old rate structure was not built for this scale of concentrated load growth. The GS-5 proceeding and the cost-allocation legislation that the 2026 General Assembly passed to reinforce it are detailed in Part Two.[48]

The combined picture: the utility whose growth the state is subsidizing has told investors that its five-year capital plan has grown to $64.7 billion, has told regulators that it holds 16,913 megawatts under firm contract with a further 30,132 megawatts under study and that residential bills are projected to rise 60 to 94 percent by 2035, and has warned that connection wait times for large new loads may stretch to seven years. The SCC has created a new rate class to address the problem. The legislature has spent a budget cycle debating whether the industry should keep its tax break. Subsidizing an industry's growth at the front end while scrambling to contain the downstream costs that growth imposes on ordinary customers is an incoherence now visible in the commonwealth's own regulatory proceedings.[49][50]

A note on the demand projections underlying these numbers. The growth trajectory that drives both the ratepayer exposure and the grid strain described in the next section rests substantially on projected demand from generative AI workloads. Those projections may prove accurate, or they may not. Serious analysts disagree about whether the current pace of AI-driven construction will sustain itself or whether the market will consolidate, slow, or shift to architectures that require less physical compute. This uncertainty does not weaken the case for

reform. It sharpens it. If AI demand materializes as projected, residential customers face the full cost of serving it. If it does not, they face the cost of stranded infrastructure built on forecasts that did not hold. Either direction exposes the residential ratepayer. The question is not which demand scenario is more likely. The question is who bears the risk, and under the current framework the answer is the customer who had no role in creating it.

SECTION 6: POWER DEMAND, GRID STRAIN, AND TRANSMISSION

The ratepayer exposure has a physical counterpart. The electricity system that serves data centers is not abstract. It requires generation capacity, transmission corridors, substations, and distribution infrastructure, all of which occupy real land, cross real communities, and impose real costs on residents who may live far from the facilities the infrastructure serves. This section addresses the grid reliability question and the transmission conflict that has become one of the clearest physical consequences of the boom.

The NERC incident. On July 10, 2024, a failed surge protector on a 230-kilovolt transmission line near Fairfax triggered an event that federal regulators now treat as a warning. Sixty data centers in Northern Virginia simultaneously disconnected from the grid and switched to backup generators, an automated safety response to voltage fluctuation. The result was an instantaneous loss of approximately 1,500 megawatts of demand, roughly equivalent to a large power plant disappearing in milliseconds. Grid operator PJM and Dominion had to scramble to scale back output fast enough to prevent a cascading surplus from damaging infrastructure or triggering regional blackouts.[67]

The North American Electric Reliability Corporation investigated and created a task force specifically to study the vulnerability. NERC's incident report stated that the grid has not historically experienced simultaneous load losses of this magnitude in response to a fault. NERC's director of reliability assessment stated that the grid is not designed to withstand the loss of 1,500-megawatt data centers. [67]

That event happened under current conditions. The contracted pipeline is many times larger than what is operating today. If 60 data centers disconnecting simultaneously can threaten regional stability now, the risk grows as Dominion connects more capacity to a grid it already acknowledges is strained. This is not a theoretical projection. It is an event that already occurred, documented by the federal agency responsible for grid reliability.

The transmission question. The transmission issue deserves sustained treatment because it is one of the clearest examples of how communities discover the full burden of data center growth after the key decisions have been set in motion. By the time a major transmission route appears on a map, the public often feels the conflict has arrived suddenly. It has not. The conditions producing it have been building for years through load growth, planning assumptions, and the cumulative approval of very large users.[28]

Virginia's regulatory structure illustrates how consequential these projects are. The SCC states that transmission lines and facilities above 115 kV usually require a Certificate of Public Convenience and Necessity. Once a project is in that process, the public is dealing with a formal state proceeding that can make opposition feel technical, uphill, and late.[29]

The proposed Joshua Falls–Yeat project is the clearest current example. The Piedmont Environmental Council describes it as a 115-mile, 765-kV line crossing as many as nine counties, the largest transmission line ever proposed in Dominion's territory, advanced as part of the wave of infrastructure proposals serving data center demand. Cardinal News reported that the line would extend 765-kV supply from Joshua Falls to the planned Yeat substation in Culpeper, connecting to Dominion lines supplying Northern Virginia.[30]

A line of that scale is not merely infrastructure. It is a corridor of cleared land, access routes, tower footprints, altered views, and permanent industrial intrusion. It changes what a place looks like and, in many cases, what that place can become. For residents in its path, the most tangible consequence of the digital economy may not be the technology. It may be the steel crossing their horizon.[31]

Virginia law gives public-service corporations substantial authority to acquire the land interests necessary for facilities, including rights-of-way and easements. Even when eminent domain is not ultimately exercised, its existence shapes the negotiating landscape. Residents do not experience these projects as abstract exercises in reliability planning. They experience them as large institutions imposing permanent burdens on communities that did not ask for them.[33][34]

JLARC explicitly warned that there is some risk of overbuilding infrastructure because Virginia's market is concentrated in a small number of major companies, and that transmission is especially vulnerable to being oversized if expected demand does not materialize. If growth slows, consolidates, or changes form, the public does not get to roll back transmission routes or siting decisions. The infrastructure, once built, is permanent.[32]

A government that continues subsidizing the load growth producing these conflicts cannot treat the resulting property-rights tensions and community disruptions as someone else's problem. They are part of the subsidy bargain.[35]

SECTION 7: THE INDUSTRY'S CASE

A policy report that presents only the costs of an incentive program without acknowledging its benefits is an advocacy document. The data center industry has a case for the exemption, and several of its arguments have genuine force. They should be stated in their strongest form and then evaluated against the available evidence.

The local revenue argument. The most compelling element of the industry's case is the fiscal impact at the local level. In Loudoun County the numbers are large by any measure. Loudoun's own budget data show computer equipment tax revenue growing from roughly $60 million in FY2013 to over $800 million in FY2026, and data centers now generate close to half of the county's total property tax revenue. Loudoun reports that for every dollar in services the county provides to data centers, it receives $26 in tax revenue. That revenue has allowed the county to cut its real property tax rate from $1.285 per $100 of assessed value in 2008 to $0.805 in 2025.[15]

This is substantial revenue, and the industry is correct that data centers are unusually efficient contributors to local tax digests. They add no students to school systems. They generate minimal traffic. They produce little waste. The property tax revenue flows largely to the bottom line of county budgets.

The counterweight is that the property tax benefit accrues locally while the sales tax cost is borne statewide. The roughly $360 million in local sales tax forgone under the exemption falls on every locality's share of the sales tax base, including those that host no data centers.[21] And the local property tax gains rest on a structural vulnerability that defenders rarely acknowledge: the outsized revenue depends on equipment refresh cycles. Operators typically replace computer equipment every five to seven years, which resets the assessed value and sustains the personal property tax stream. Those refresh decisions are entirely controlled by the private owner. If the market slows, if AI demand projections prove overstated, or if technology shifts reduce the need for the current scale of physical compute, refresh cycles slow or stop. The county has built its budget around a revenue stream it does not control.[20]

JLARC explicitly warned about the risk of overbuilding because Virginia's market is concentrated in a small number of major companies. There is precedent: the dot-

com bust of 2000 killed the first generation of purpose-built data centers, and the market did not recover for seven years.[20]

The state-level revenue argument. At the state level, the 2026 biennial report estimated $2.1 billion in total tax revenue across FY2024 and FY2025 and concluded that cumulative revenues exceeded the value of the exemption by $2.1 billion over two overlapping five-year periods.[16] These are the numbers the industry's defenders cite most frequently. They carry the limitations documented in Section 2: the data is self-reported, not independently validated, and the return calculation does not account for the public costs the industry generates.[17][18]

The construction employment argument. The industry argues, with justification, that critics understate the employment impact by focusing on the small permanent workforce while ignoring the construction phase. The construction work is real, well-compensated, and often performed by skilled union labor, and because hyperscale campuses are built in phases over a decade or more, the employment is a sustained pipeline rather than a one-time event.[22] This is strongest at the aggregate level. The qualification, as in Section 4, is that sustained aggregate construction employment depends on the continued flow of new projects. At the individual facility level, construction employment is temporary by definition.[22][23]

The ecosystem and connectivity argument. The strongest version of the industry's case goes beyond individual project decisions to the dynamics of the ecosystem. Virginia became the global center of gravity for data centers because of geography, fiber connectivity, proximity to federal facilities and major internet exchange points, an existing cluster of skilled labor and vendor networks, and decades of compounding infrastructure investment. The Equinix campus in Ashburn became what VEDP has described as the web's busiest meeting place, creating a network effect that continues to attract investment. Ashburn's rise was rooted in the dense cluster of internet exchange points seeded in the 1990s, beginning with MAE-East.[14]

The industry argues that the exemption did not merely attract individual facilities; it helped build an ecosystem whose value compounds. If that is true, then the investment arriving anyway in 2026 may be arriving precisely because the first wave of incentive-driven projects created the conditions that made Virginia attractive. The exemption, in this reading, worked so well that it made itself look unnecessary. This is a genuine interpretive question. VEDP has noted that the exemption was significantly expanded in 2010 after the state lost a major Apple project to North Carolina, indicating the subsidy was a response to a specific competitive moment rather than a permanent structural requirement.[14] Whether

a subsidy that may have seeded an ecosystem should continue indefinitely on the grounds that ecosystem momentum requires policy continuity, or whether the evidence that the ecosystem now sustains itself is the signal that the exemption has done its work, is the question policymakers must answer.

The regional competition argument. Virginia does not set incentive policy in isolation. Georgia, Texas, North Carolina, South Carolina, and Tennessee all offer data center tax exemptions of varying scope, and the industry warns that ending Virginia's exemption would push investment elsewhere. In an industry where site selection is driven by capital efficiency and power costs, even a modest tax disadvantage can shift a project across a state line.[14]

The competitive concern is factually grounded. The counterargument is that the landscape is shifting nationally. At least eight states introduced legislation in 2026 to shift data center costs away from residential ratepayers or to condition the industry's tax treatment, and more than 300 data-center-related bills were filed across more than 30 states.[68] Georgia's Senate passed a bill repealing the exemption for new projects. Illinois's governor proposed suspending data center incentives outright. The list of jurisdictions offering unconditional tax treatment is getting shorter, not longer. And the relocation threat runs up against the structural advantages that made Virginia dominant. Texas or Georgia can offer tax breaks. They cannot replicate Ashburn's network density. The exemption may once have helped tip early decisions. The question is whether it is what holds the cluster together now, and the evidence suggests it is not.[14]

The industry's case, taken as a whole. The data center industry generates substantial local property tax revenue, sustains a skilled construction workforce, and provides the digital infrastructure modern commerce depends on. Each claim has evidentiary support. What the industry's case does not address is whether the sales tax exemption is necessary to capture those benefits, and whether the public costs the exemption generates are justified by the incremental activity it produces. The available evidence, from JLARC, from Rephann, from Georgia's Carl Vinson Institute, and from the broader incentives literature, consistently suggests that a substantial share of Virginia's investment would occur without the exemption. The exemption's costs are borne statewide. Its benefits are concentrated locally. The construction employment is real but temporary. The ratepayer exposure is projected to persist for decades. The regional competition argument is weakening as other states move toward reform. Virginia's policymakers are not deciding whether data centers are valuable. They are deciding whether the exemption is necessary to retain the industry, and whether the public costs it generates are justified by the incremental activity it produces. The evidence points toward no on both counts.

SECTION 8: LOCAL IMPACTS

The state-level fiscal and ratepayer arguments play out in regulatory filings and budget projections. At the local level the data center question is concrete. It is about water systems under concentrated demand, chronic mechanical noise in adjacent neighborhoods, scenic and historic resources altered by industrial-scale facilities, and a pattern of governance in which communities too often discover the full scope of the bargain only after their practical leverage has diminished. The local picture is not simple, and it includes benefits as well as burdens. But the burdens are real, and several have been systematically underweighted in the approval processes meant to protect the public interest.[10]

Water. JLARC did not conclude that Virginia is running out of water statewide because of data centers. It found that some localities are more constrained than others, especially those without large surface-water sources or those in groundwater-management areas, and that when local demand exceeds permit or infrastructure thresholds, utilities may need to make significant investments to serve it.[36]

DEQ's July 2026 SJ 25 groundwater study sharpened the constraint into a number: east of I-95, the maximum new groundwater withdrawal that would pass permitting anywhere is 360,000 gallons per day, and at two western test points near the I-95 corridor, in Henrico and Sussex counties, it falls below 30,000. See Section 14A.[102]

JLARC's building-level data reinforces the point. While many data center buildings used about the same amount of water as a large office building or less, 11 buildings in 2023 each used more than 50 million gallons, and one used 243 million gallons, approximately 10 percent of the industry's total reviewed use. Once concentrated demand of that size enters a local utility system, it can shape capital priorities in ways residents never voted on and may not notice until later.[37]

For counties and local utility authorities, a data center approval can become a water-planning decision. It can determine what future capacity is left for homes, schools, hospitals, or other employers, what upgrades must be financed, and whether long-term infrastructure planning begins orienting around a handful of large users. The companion case studies in this series document the mechanism in detail, from Louisa's water agreements to the Western Virginia Water Authority's role in the Google Botetourt commitment.[38]

Noise. Noise deserves sustained treatment because it exposes how the approval system can fail ordinary residents on a burden that is both intimate and chronic. JLARC explicitly recommended that the General Assembly consider authorizing

localities to require sound modeling studies and adopt enforceable maximum sound levels, including alternative low-frequency metrics. That recommendation exists because the current system has not been protecting people adequately.[39]

Low-frequency mechanical noise is the kind of burden officials underrate until residents begin living with it. It does not always announce itself as dramatic noise during a hearing-room discussion. It becomes a chronic condition: a hum, a droning mechanical presence that changes sleep, outdoor use, and the basic experience of being at home. Standard review processes often do not require the predictive modeling that would make those consequences visible early enough to influence the approval decision. By the time residents learn the reality, the project is approved or already operating, and practical leverage is weaker.[40][41]

The trust problem is real. A board that told the public a project would be compatible with neighboring uses can find itself facing residents who believe, often with justification, that the process never took their daily reality seriously. Once that trust breaks, it does not easily return. A narrow sound issue becomes a wider legitimacy problem for the institutions that approved the project.[42]

Scenic, historic, and community character. Virginia is a commonwealth of landscapes, historic corridors, ridgelines, farm views, town edges, and place identities that matter socially, civically, and economically. JLARC's recommendation that localities and the state consider Phase I historic-resource studies and viewshed analyses acknowledges that these losses are real and often underexamined. JLARC even suggested the state could tie tax-exemption eligibility to such studies. That signal from the commonwealth's own legislative oversight body is significant: it says the state has been subsidizing growth without requiring even basic diligence about whether the growth damages assets Virginia otherwise claims to value.[43][44]

A large industrial facility, substation, or transmission corridor does not simply occupy land. It changes how a place is experienced. It alters roads, horizons, and edges. These are not imaginary losses because they do not fit a tax spreadsheet. They are part of the public realm, and once approved they are often functionally irreversible.[44][45]

Diesel backup generators. The diesel-generator question should be handled carefully because exaggeration weakens a sound case. JLARC found that backup generators are a relatively small contributor to regional air pollution, and that existing regulation largely limits those broader impacts. But JLARC also found that local impacts are harder to assess because the clustered and intermittent nature of generator use complicates modeling. The Virginia Department of Environmental Quality has continued studying whether harmful local effects emerge around dense

concentrations. That is not a clean bill of health. It is a statement that uncertainty remains around a development model using emergency power infrastructure at unusual scale. The 2026 General Assembly addressed the generator question directly, requiring Tier 4 emission standards for new permits beginning July 1, 2026, as detailed in Part Two.[46][47]

The governance trap. The revenue data centers generate for localities is real, and in some jurisdictions substantial enough to reshape local budgets. But dependence on a narrow, concentrated revenue stream changes how a locality governs. Skepticism weakens. Enforcement softens. The next project becomes harder to challenge. Officials begin rationalizing obvious burdens as the price of fiscal strength. A budget becomes a political discipline mechanism. The locality is no longer just collecting revenue from the sector. It is increasingly constrained by concern over what happens if the sector slows, depreciates, or leaves.[51]

Loudoun County illustrates the pattern. For over a decade, data centers developed by-right in Loudoun with no discretionary review by the Board of Supervisors or Planning Commission. The county's comprehensive plan was not updated to reflect the industry until 2019, and its zoning ordinance was not amended to address data centers specifically until 2023. During the intervening years, data centers exercised their by-right options without meaningful public oversight. The National Association of Counties described this plan-ordinance misalignment as having seriously limited the Board's ability to manage growth as envisioned in its own comprehensive plan.[80]

The turning point came only after a Dominion overhead transmission line cutting across active farmlands, wetlands, and a historic village galvanized opposition in 2023. That opposition drove the Board, in 2024, to deny a major data center application for the first time in the county's history. In March 2025, the Board approved comprehensive plan and zoning amendments eliminating by-right data center development entirely, requiring special exception approval with public hearings for all future projects.[81]

Loudoun's trajectory is the governance trap in real time: a decade of permissive approvals driven by revenue, followed by a reversal under political pressure, followed by an ongoing struggle to contain commitments already made. Other Virginia localities watching the same revenue numbers should understand that Loudoun's experience is not an outlier. It is a preview. Part Four traces how that preview is playing out across the commonwealth.[52]

SECTION 9: VIRGINIA IN THE NATIONAL CONTEXT

Virginia is not alone in discovering that its data center tax exemptions cost more than projected, create fewer permanent jobs than promised, and expose ratepayers to infrastructure costs that may outlast the industry's presence. The pattern is national, and 2026 is the year it became impossible to ignore.

At least eight states introduced legislation in their 2026 sessions to shift data center grid and capacity costs away from residential ratepayers or to impose new conditions on the industry's tax treatment. Georgia's Senate Bill 34 would prohibit utilities from passing fuel, generation, or transmission costs of data centers to other customers. Colorado introduced a bill requiring large operators to build or purchase enough renewable energy to cover their annual usage by 2031 and to sign 15-year contracts covering grid upgrade costs. Maryland's utility regulator is weighing a new rate structure for large-load users. Oklahoma advanced legislation ensuring data centers pay for their own infrastructure. Illinois, Kentucky, Ohio, Tennessee, and others are pursuing similar measures.[68]

More than 300 data-center-related bills were filed across more than 30 states in the opening weeks of the 2026 sessions. These are not coordinated campaigns. They are independent responses to the same set of pressures: grid strain, ratepayer exposure, water consumption, land-use disruption, and the growing awareness that the tax breaks cost more than anyone projected.

Georgia provides the closest structural comparison. The two states offer similar exemptions, have experienced similar growth, and face the same core question: whether a tax incentive that may have made sense when the industry was nascent still makes sense when the industry is arriving whether you pay it to or not. Georgia's Carl Vinson Institute found that 70 percent of data center activity would have occurred without the exemption, and the Georgia Senate voted to repeal the exemption for new projects in March 2026.[77]

Virginia's exemption is among the largest in the country, and the industry's share of Virginia's electricity, at 25 percent and rising, is without parallel nationally. If the industry's defenders are right that data centers will relocate to jurisdictions offering better terms, the list of such jurisdictions is getting shorter. The question is not whether Virginia will be out front in reforming these programs. It is whether Virginia will be the last state still paying close to $2 billion a year for the privilege of hosting an industry that other states are already requiring to pay its own way.[63][76]

PART TWO — THE COMPLETE STATE POLICY RECORD

Part One established what the evidence shows. Part Two assembles the law and the record that govern the question, in one place for the first time. Virginia's data center policy lives in four documents that rarely sit on the same desk: a sales-tax statute administered in Richmond, a patchwork of local equipment-tax ordinances set county by county, a stack of utility-rate and resource-planning orders at the State Corporation Commission, and a biennial budget enacted only on June 30, 2026, after a months-long impasse. Read together they describe a policy framework that grew by accretion and is now being renegotiated under pressure from every direction at once.

SECTION 10: THE SALES AND USE TAX EXEMPTION

The data center retail sales and use tax exemption is codified at Code of Virginia § 58.1-609.3(18). It exempts from the state and local retail sales and use tax the computer equipment and enabling software purchased or leased for use in a data center, where the data center operator or its tenants make a qualifying capital investment and create a qualifying number of jobs. The threshold for the standard exemption is an investment of at least $150 million and the creation of at least 50 new jobs paying at or above the prevailing average wage, with reduced thresholds available in distressed localities and enterprise zones.[83]

The exemption's history is a record of expansion. Virginia first enacted a data center sales-tax preference in 2009 and significantly broadened it in 2010, after the state lost a major Apple project to North Carolina. VEDP's own institutional history frames the 2010 expansion as a response to a specific competitive moment rather than a permanent structural requirement.[14] The General Assembly subsequently extended the exemption's sunset date repeatedly. As enacted under current law, the exemption runs through June 30, 2035.[84]

The cost has grown with the industry. JLARC found that data centers avoided approximately $2.7 billion in state sales and use taxes from FY2015 through FY2024, more than half of all economic-development tax incentives the state deployed over that period.[13] For a single year, the Department of Taxation reported the FY2025 cost of the exemption at $1,941,390,000.[1a] That figure is the most precise public number available and is the one this report treats as canonical for FY2025; the $1.6 billion figure that circulated in the March 2026 budget coverage is a lower, rounder estimate tied to a different fiscal frame, and the two should not be averaged.[1] Either way, the exemption is now the single

largest economic-development expenditure in the Virginia budget, and it is the line item over which the FY2027 budget stalled.

What the exemption does not do is condition the benefit on any of the public-interest safeguards JLARC identified. There is no requirement of a noise study, a viewshed analysis, a historic-resource review, or an off-site utility-impact disclosure as a condition of the tax benefit. JLARC explicitly raised the option of tying eligibility to such studies. The statute as written ties eligibility only to investment and job thresholds, both of which the industry clears easily and neither of which measures the public cost the facility imposes.[43]

SECTION 11: LOCAL EQUIPMENT-TAX AUTHORITY AND THE RATE LANDSCAPE

The counterpart to the state sales-tax exemption is the local tangible personal property tax on computer equipment. Where the state forgoes revenue, localities collect it, and the rate they collect at is the single most important fiscal variable a host county controls. Virginia law authorizes localities to set a separate rate of tax for computer equipment and peripherals used in a data center by classifying that property as a distinct class of tangible personal property. The classification authority sits in Title 58.1, Chapter 35; the assessment of data center fixtures as real or personal property turns on the fixtures classification at § 58.1-3295.3, which governs how the value of data center improvements and equipment is determined for taxation.[85]

The result is a rate landscape that varies by more than an order of magnitude across the commonwealth. The spread is itself a finding: it shows that host localities are not passive recipients of a fixed deal but active setters of the most consequential term, and that the rate a county chooses tracks closely with whether it is still recruiting the industry or already managing it. The following figures are reconciled against the primary-source rate histories developed in the county case studies in this series, including the Prince William reconciliation that settled several stale figures still in circulation.[86]

Jurisdiction	DC computer-equipment rate (per $100)	Status / note
Chesterfield	$0.24	Lowest in Virginia; adopted 2019 as a recruitment rate; county actively recruiting
Virginia Beach	$0.40	Adopted Dec. 2017; Corporate Landing focus

Jurisdiction	DC computer-equipment rate (per $100)	Status / note
Hanover	$0.45	On June 24, 2026 the Board, which had advertised a rate of up to $3.00, adopted $0.45 for calendar year 2026, 7-0, and referred the rate to its Finance Committee for study
Botetourt	$2.40 (contractual cap)	No ordinance; cap set in the Project Raspberry option agreement
Henrico	$2.60	Effective FY2026; raised from $0.40, the rate through spring 2025
Loudoun	$4.15	Unchanged through TY2027
Prince William	$4.50 (TY2026)	TY2024 $3.70 → TY2025 $4.15 → TY2026 $4.50, adopted 5–3 on Tuesday, April 21, 2026

Three reconciliation notes belong with this table, because older versions of these figures are still in circulation. Henrico's data center equipment rate is $2.60, effective FY2026; any reference to a $0.40 Henrico rate is current only through spring 2025 and should not be restated. Prince William's rate reached $4.50 for tax year 2026; the $3.70 figure is the TY2024 rate and is now two cycles stale. Loudoun's rate is $4.15 through TY2027; a $4.25 Loudoun figure in circulation is incorrect.[86]

The Loudoun comparison is the one that frames the policy stakes. Loudoun collects over $800 million a year in computer equipment tax at $4.15 per $100, on the largest data center base in the world. A county recruiting at Chesterfield's $0.24 is forgoing roughly 94 percent of the rate Loudoun charges in order to attract facilities that, on the evidence in Part One, would substantially locate in Virginia regardless. The rate spread is the local mirror of the statewide but-for question: the jurisdictions with the strongest bargaining position charge the most, and the jurisdictions still trying to attract the industry give away the most, even though the structural advantages that draw the industry to Virginia do not depend on any single county's rate.

SECTION 12: THE 2026 LEGISLATIVE SESSION

The 2026 General Assembly session was the most consequential for data center policy in Virginia's history. Lawmakers filed dozens of bills directly aimed at the industry. About fifteen survived. The exemption itself was not among the bills resolved during the regular session; it became the budget fight described in

Section 14. What follows is the status of the principal enacted and failed measures, with the still-contingent items marked.[87]

Enacted.

HB 507 — Tier 4 backup generators (Chapter 397, signed April 8, 2026). Beginning July 1, 2026, the Department of Environmental Quality is prohibited from issuing an air permit for a data center unless the facility's engine-generator sets meet Tier 4 (or equivalent or better) emission standards. The bill responds directly to the clustered-generator air-quality uncertainty JLARC flagged, by raising the emissions floor for new backup fleets.[88]

SB 553 — water-use disclosure (Chapter 896, signed 2026 session). Certain water suppliers must report monthly data on the volume of potable and reclaimed water they provide, with specific reporting for data centers that hold air permits. The measure begins to close the disclosure vacuum on water consumption that has frustrated local planning and that the inventory methods note in Appendix A documents at the facility level.[89]

SB 94 / HB 153 — siting assessments (Chapters 567 and 568, signed April 13, 2026). Identical twin acts require applicants proposing new high-energy-use facilities to submit a site assessment before local approval, focused on noise impacts on homes and schools within a defined buffer, with localities authorized to require evaluation of environmental and land-use effects including water, agriculture, parks, historic sites, and forests. The industrial-zoning mandate that appeared in earlier drafts was dropped in conference. Existing approved facilities are exempt where expansions stay under 100 megawatts. These acts move several of JLARC's recommended diligence requirements from option to obligation.[90]

SB 253 / HB 1393 — cost allocation (passed; amended by the Governor in the April reconvened session). Sponsored by Sen. Louise Lucas and Del. Destiny LeVere Bolling, the twin bills shift certain grid and capacity costs onto high-load users in the new GS-5 rate class and extend weatherization and bill-assistance programs for low-income customers. The SCC estimated that, as passed, the measures could have raised residential costs by at least $1.4 billion; the Governor's reconvened-session amendments reversed that trajectory, and critics, including the bills' supporters and Dominion, argued the amendments weakened the cost-shift. The enacted version is narrower than the bills as passed, and the cost-allocation question it was meant to settle remains partly open at the SCC.[91]

Failed.

HB 897 — carbon conditions (died). The bill would have conditioned favorable treatment on carbon-related commitments. It did not survive the session.[92]

The session's net effect is a meaningful tightening of siting, disclosure, and emissions requirements, paired with a cost-allocation measure that was passed and then softened, and an exemption that the regular session left untouched and handed to the budget negotiators. The largest fiscal measure of all did not come through an ordinary bill at all. It arrived three months later in the budget itself: the data center electricity consumption tax, enacted June 30 and detailed in Section 14. The pattern matters for the reform argument. The General Assembly proved willing in 2026 to regulate the industry's externalities and, in the end, to tax its power draw, while still leaving the central subsidy in place.

SECTION 13: THE REGULATORY RECORD — SCC AND THE INTEGRATED RESOURCE PLAN

The State Corporation Commission is the second venue where data center policy is being made, and in some respects the more consequential one, because the SCC controls the rate design that determines who pays for the load growth the exemption helps attract.

The GS-5 rate class. On November 25, 2025, the SCC approved a new rate class for the largest electricity users, including data centers, designated GS-5. The class exists to separate very-large-load customers from the general service rate base so that the costs of serving concentrated load growth can be assigned to the customers who drive them rather than socialized across residential and small-business ratepayers. The GS-5 proceeding originated in a Dominion filing submitted in September 2025 and is the regulatory anchor for the cost-allocation legislation in Section 12. Its docket is SCC Case No. PUR-2025-00058.[48][93]

The integrated resource planning record. Two SCC dockets are frequently conflated and should be kept distinct. Dominion's 2024 Integrated Resource Plan, which the SCC found legally sufficient while withholding approval of the magnitude of future spending, is Case No. PUR-2024-00184. The 2025 IRP Update, which carries the residential-bill projections cited in Section 5 ($255 to $308 by 2035 depending on methodology) and the 47,045 MW of data center capacity under contract or study, is Case No. PUR-2025-00184. The one-digit difference between the two dockets has produced citation errors in secondary coverage; this report cites each to its own number.[75][94]

The regulatory record cuts against the subsidy. The same commission that the General Assembly relies on to keep rates just and reasonable has told the legislature, in the plainest institutional language available to it, that the magnitude of data-center-driven capital spending will significantly impact millions of customers, that the old rate structure was inadequate to the task, and that a new

class of customer had to be created to contain the damage. A state that subsidizes the load growth at the front end and then asks its utility regulator to protect ratepayers from the consequences at the back end is working against itself in two venues at once.

SECTION 14: THE BUDGET OUTCOME AND THE CONSUMPTION TAX

The data center sales tax exemption was the central dispute in Virginia's FY2027 budget, and it held the commonwealth's entire spending plan hostage from March until the end of June. The fight was over the roughly $2 billion-a-year subsidy itself, not a regulation at the margin, and it split the two chambers and the Governor along a single fault line: the Senate had voted in the regular session to end the exemption, while the House of Delegates and Governor Abigail Spanberger preferred to keep it. Lawmakers left Richmond in the spring without a budget, and the impasse ran within days of the July 1 start of the fiscal year.[95]

The compromise that broke it is the most consequential single development in Virginia data center policy since the exemption was created. On Tuesday, June 30, 2026, Governor Spanberger signed the roughly $205 billion biennial budget into law. It preserved the sales and use tax exemption, handing the House and the Governor the outcome they had sought. In exchange, and this is the part that matters nationally, it created a new tax on the electricity data centers consume.[98]

The consumption tax is a levy of $0.011 per kilowatt-hour on all electricity used by data centers, effective July 1, 2026. It reaches power from every source: utility-supplied electricity, competitive retail providers, and self-generated or behind-the-meter power, which closes the loophole a facility could otherwise open by generating its own electricity on site. Legislative estimates put the revenue near $600 million a year for the general fund, and the tax carries an annual cap at roughly that figure, with refunds to payers if collections run over. It is scheduled to expire at the end of fiscal year 2028, on June 30, 2028, a two-year measure rather than a permanent feature, and the first payments come due in September 2026. The State Corporation Commission was directed to issue implementation guidance within sixty days.[99] Virginia is, by all available accounts, the first state in the country to tax data center electricity consumption directly.

The budget carried two further data center provisions worth recording. It directed the General Assembly's Joint Subcommittee on Tax Policy to study data center impacts during the 2026 interim, reviewing the recommendations and options in the 2024 JLARC report, which is the study-and-recommend function the House had

earlier floated as a standalone accountability commission, folded into an existing legislative body rather than a new one. And it imposed a water-and-cooling mandate: the Department of Environmental Quality must set criteria for cooling-water scarcity areas by July 1, 2027; data centers in those areas must show, before July 1, 2032, that they have minimized the water they use for cooling, and new data centers in the Eastern Groundwater Management Area must do the same if they apply for an air permit after January 1, 2027; and a state study on retrofitting existing facilities in that area to air cooling, recycled water or stormwater, or closed-loop systems is due October 15, 2026.[100]

The outcome is consistent with the framing of this report, and it leaves the question at the report's center unresolved. Virginia chose to price the industry's load growth at the back end, through a consumption tax paid on power drawn, while leaving the front-end subsidy on equipment purchases untouched. That is a coherent revenue move and a genuine first, and the roughly $600 million a year it raises is real money for the general fund. What it does not do is answer the but-for question of Section 3, because it never touches the exemption whose necessity that question probes. It layers a new cost on top of a surviving subsidy, and the two instruments point in opposite directions: one forgoes revenue to attract and retain the industry, the other collects revenue from the same industry's operations, and the state now does both at once. The consumption tax expires in 2028 while the exemption runs to 2035, so the back-end charge is temporary where the front-end subsidy is not. Legislators who sought repeal have said they will return to the exemption as early as 2027, and the tax's own 2028 expiration will force the question regardless. The exemption is now a recurring line item in the commonwealth's central fiscal fight rather than the settled premise it was in every prior year. As of July 25, 2026, the 2027 exemption revisit, the SCC's implementation guidance, and the October 2026 Eastern Groundwater Management Area retrofit study were still ahead.

SECTION 14A: THE GROUNDWATER VERDICT — DEQ'S SJ 25 REPORT

KEY DEVELOPMENT — JULY 2026

DEQ to the General Assembly: the aquifer is spoken for. The SJ 25 groundwater study is the first state document to test, with numbers, whether a data center could ever self-supply from groundwater east of I-95. The answer is no. The best location in the entire coastal plain could support 360,000 gallons per day, roughly one 100 MW campus, and it sits near Reedville on the Northern Neck, far from any development corridor. At the western test points

near the I-95 corridor, where the facilities actually are, permittable capacity falls to 60,000 gallons per day in Caroline County and below 30,000 in Henrico and Sussex. In Henrico, the test location failed at any withdrawal volume.[102] DEQ's legislative ask includes a provision that would require county comprehensive plans in groundwater management areas to limit planned growth to what the water can support.[103] That is a new lever, and it belongs in the reform debate alongside the tax questions this report has tracked from the start.

In July 2026 the Department of Environmental Quality delivered the study the 2024 General Assembly requested under Senate Joint Resolution 25: a full accounting of groundwater supply east of Interstate 95, the region overlying the Virginia Coastal Plain aquifer system. The resolution named data centers explicitly as a reason for asking, and the report was due the first day of the 2026 session; it surfaced only in late July, after a change of administration and a public letter from environmental organizations urging its release.[104] The answer DEQ returned is the most consequential water finding in the state record since JLARC's 2024 review, and it cuts in two directions at once.

The first direction deflates the broadest version of the water alarm. DEQ repeats JLARC's finding that 83 percent of Virginia data center buildings use about as much water as a large office building, around 6.7 million gallons a year. Most existing and planned capacity sits inside public water systems that draw from surface water; groundwater supplied only about 7 percent of reported public water supply withdrawals statewide in 2024, and DEQ reports no data center in either groundwater management area holding a permit to cool servers with groundwater.[105]

The second direction is the one that matters for the next decade. DEQ commissioned technical evaluations of a hypothetical withdrawal of 3 million gallons per day, the published upper end for a hyperscale campus on evaporative cooling, at nine locations spanning the coastal plain. Every location failed. The evaluations then asked what the largest withdrawal that would pass permitting would be. The best result anywhere was 360,000 gallons per day, at Surprise Hill in Northumberland County, near Reedville at the Chesapeake Bay end of the Northern Neck, a volume that supports roughly one 100 MW campus in a location nowhere near existing fiber, transmission, or development. Western portions of the coastal plain, along the I-95 corridor through the Richmond and Fredericksburg growth areas, tested lowest: 60,000 gallons per day at the Caroline County point and below 30,000 at the Henrico and Sussex points. Two test locations, in Henrico

County and Sussex County, sat in cells where any new withdrawal at all would violate the regulatory drawdown criterion.[102] The report's own summary is quotable: under current conditions, "it appears unlikely that a data center with evaporative cooling technology (or any comparable water user) would find a reliable, sufficient groundwater supply anywhere in the VCP."[106] The timing compounds the finding: the Potomac aquifer spent a decade stabilized on the rebound from the Franklin paper mill's 2010 closure, and DEQ now expects region-wide declines to resume within five to ten years as that rebound is consumed.[106]

What turns a hydrogeology study into a policy document is the recommendations chapter: eight problem areas, twelve recommendations, drafted and costed for the 2027 session. Recommendation 1 would codify DEQ's authority to deny any permit that would draw a confined aquifer below the 80 percent drawdown line. Recommendation 2 would let DEQ deny or shrink a groundwater permit whenever surface water or reuse is reasonably available, which for a data center inside a public service area is nearly always. Recommendation 5 reaches furthest into local land use: it asks the General Assembly to amend Title 15.2 so that comprehensive plans in groundwater management areas must limit planned growth to groundwater availability where no other supply is feasible.[103] A comprehensive-plan constraint operates upstream of rezoning and the special use permit, ahead of every discretionary moment this report and its county companions have documented. Recommendation 11 sets preconditions for any groundwater trading scheme rather than endorsing one, and the package carries a modest price: $1,020,000 in FY 2027, $720,000 in FY 2028, five positions, plus a proposal to raise the $9,000 statutory cap on permit fees, which in FY 2025 covered 9.5 percent of a roughly $4 million program.[107]

For the localities east of the fall line, the practical rule is now explicit. Any data center proposing to self-supply 300,000 gallons or more in a month needs a DEQ permit, and the state's own modeling says that permit will not issue anywhere near the development corridors. The 2026 budget had already pointed the same direction, requiring new data centers in the Eastern Groundwater Management Area that apply for an air permit after January 1, 2027 to show they have minimized the water they use for cooling;[100] SJ 25 supplies the hydrogeological case under that mandate. Water for new capacity in eastern Virginia will come from surface-water systems and municipal capital budgets, or it will not come, which concentrates the water question exactly where this report has argued the leverage lives: in the county approval, the utility agreement, and, if Recommendation 5 is enacted, the comprehensive plan itself. The full reading of the report, the nine-site capacity table, all twelve recommendations, the release chronology, and the county-by-county implications, is the subject of a dedicated

companion volume in this series, The Aquifer Says No: DEQ’s SJ 25 Groundwater Study and the Data Center Question East of I-95 (concept DOI 10.5281/zenodo.21556435).[108]

PART THREE — PROPOSED AND PROSPECTIVE POLICY

Part Two recorded the law as enacted. Part Three turns to what is on the table but not yet settled: the competing futures for the exemption that the budget fight will resolve one way for now, and the local-option reforms spreading county by county that the state has not yet codified but increasingly cannot ignore. These are the policy questions still open.

SECTION 15: THE COMPETING EXEMPTION FUTURES

Three futures for the exemption were in contention through the 2026 budget fight, and the budget chose among them only provisionally. The enacted compromise of June 30 landed on the third of them, preservation, paired with the new consumption tax of Section 14 as a revenue substitute for structural reform. The losing side has already promised to reopen the question in 2027. The three futures therefore remain live, and they are the terms on which the next round will be fought.

The first is repeal for new projects, the Senate's position and Georgia's enacted model. Under this approach the state stops issuing new exemption certificates while grandfathering existing holders, and closes the qualifying pathways simultaneously to prevent migration from one provision to another. This is the option the evidence in Part One supports, and it is the one Recommendation 1 endorses. Its political ceiling is set by the Governor's stated unwillingness to break signed contracts, which repeal-with-grandfathering respects.

The second is conditioning rather than ending, the direction the House favored. Under this approach the exemption survives but acquires strings: a study, disclosure requirements, or eligibility tied to the public-interest safeguards JLARC identified. The House's June proposal to study data center development in lieu of repeal was the clearest expression of this future, and a version of it was enacted, as a charge to the Joint Subcommittee on Tax Policy rather than the standalone commission first floated. Its weakness is that it defers the central fiscal question to a body whose recommendations the General Assembly is free to ignore, while the roughly $2 billion annual cost continues to accrue during the study period.

The third is preservation, the industry's preferred outcome and the one the June 30 budget delivered. The case for preservation is the regional-competition and ecosystem-momentum argument tested in Section 7. The evidence does not support it as a fiscal proposition. It prevailed anyway, in part because it was the path of least resistance once the consumption tax gave both sides something to

claim: the Senate a new half-billion-dollar revenue stream from the industry, the House and Governor the survival of the exemption.

The choice among these futures was neither binary nor final. Preserving the exemption in 2026 did not foreclose repeal in 2027, and the Joint Subcommittee study can become either a genuine reform vehicle or a delay mechanism depending on its mandate and how the General Assembly treats its findings. The consumption tax bought two years, its own sunset, and a promise to revisit. The structural pressures pushing toward reform, documented in Part One and Section 9, did not relent because a single budget preserved the status quo. They compound.

SECTION 16: LOCAL-OPTION REFORM AND ITS DIFFUSION

While the state debates the exemption, Virginia's counties have been writing the more inventive policy. Denied by the General Assembly the tools to address data center externalities directly for most of the boom, localities improvised, and the improvisations have begun to diffuse from county to county in a recognizable lineage. The county case studies in this series document the mechanisms in detail; this section synthesizes them to the state level.

Three reform instruments have emerged. The first is the overlay district, which confines data center development to a defined geography and subjects projects outside it to denial or heightened review. Prince William's Data Center Opportunity Zone Overlay is the prototype, and its contested boundaries, the Digital Gateway sits at the edge of the fight, show both the instrument's power and its vulnerability to litigation. The second is the removal of by-right development, the Loudoun reform of March 2025, which converted data centers from a permitted use to one requiring special exception with public hearings. Fairfax followed with a comprehensive ordinance in September 2024 imposing enclosure requirements, 200-foot setbacks, and a one-mile Metro buffer. Stafford adopted a 750-foot setback in October 2025. The third is the conditional-use and overlay-zoning regime adopted at the rural frontier, where counties with no operating data centers write the rules before the first facility arrives rather than after.

That third instrument has a traceable lineage. Louisa adopted a Technology Overlay District codified at County Code §§ 86-330 through 86-334, setting noise limits and buffers as a condition of entry. Goochland developed a technology-corridor approach that channels data center development into a defined area. New Kent has moved toward the same model. The Louisa-to-Goochland-to-New Kent progression is the clearest example of policy learning in the Virginia data center story: each county studied its neighbor's ordinance, adopted the parts that survived challenge, and tightened the parts that did not. The lineage runs ahead of

the state. By the time the General Assembly authorized siting assessments in SB 94 and HB 153, several rural counties had already built more demanding regimes by ordinance.

The diffusion carries a lesson the state has not fully absorbed. The localities that fared best in the case studies are the ones that wrote their rules before the first application, not after. Pre-entitlement reform, setting the terms while the county still has leverage, consistently outperformed reform-after, where a county changes its ordinance only once a project has galvanized opposition. The contrast between Louisa's advance overlay and Loudoun's decade of by-right development is the contrast between the two approaches, and it is the organizing insight of Part Four. The state could accelerate the better pattern by making the rural counties' best instruments available, and in some cases mandatory, statewide. The 2026 siting-assessment acts are a first step. They are not yet the whole staircase.

PART FOUR — THE REGIONAL SYNTHESIS

The county case studies in this series each answer a local question. Read together they answer a statewide one: what determines whether a Virginia community captures the benefits of data center development while containing its costs, or fails to. The answer is not geography, and it is not the size of the project. It is the institutional posture the community adopted, and when it adopted it. This part maps the portfolio onto the commonwealth along three axes: the institutional spectrum, the diffusion geography, and the two-poles framing extended across every jurisdiction studied.

SECTION 17: THE INSTITUTIONAL SPECTRUM

The case studies sort onto a spectrum defined by one variable: the relationship between the timing of reform and the arrival of the industry. Five postures recur.

Reform-after. The community permits data centers under rules written for ordinary commercial development, accumulates approvals and commitments, and reforms only once the burdens materialize and opposition organizes. Loudoun is the archetype: a decade of by-right development, a galvanizing transmission fight, a first-ever denial, and a belated ordinance overhaul. Henrico's mid-stream ordinance tightening belongs here too. Reform-after works, eventually, but it works on commitments already made, with leverage already spent.

Refusal-before. The community confronts a large project, finds the terms unacceptable, and refuses it outright, often before any reform ordinance is in place. Pittsylvania's 6-1 defeat of the Balico mega-campus and Hanover's May 27, 2026 rejection of the Tract Mountain Road project are examples. The most striking recent instances come from Prince William, the second-largest data center market in the state: within a single week in July 2026 its board watched the Digital Gateway die in court and then voted 8–0 to deny the 2,000-acre Dulles Cloud South rezoning.[101] A jurisdiction that spent a decade near the governance-capture end of the spectrum can move toward refusal when the projects grow large enough and the politics turn. Refusal-before preserves leverage by exercising it, but it is reactive and case-by-case, and it leaves the next applicant to be fought again from the same starting line.

Contract-lock. The community grants entitlements or rate commitments embedded in private agreements that bind future boards. Botetourt's $2.40 contractual rate cap, set in the Project Raspberry option agreement rather than by ordinance, is the clearest instance: a fiscal term fixed in a contract eight weeks before the zoning vote, insulating the operator from the rate-setting authority the county otherwise holds. Contract-lock trades away the most valuable instrument a host county has,

the ability to reset the rate at the next refresh cycle, in exchange for a one-time commitment.

Governance-capture. The community becomes fiscally dependent on data center revenue to the point that the dependence disciplines its politics, softening enforcement and raising the cost of saying no to the next project. This is the governance trap of Section 8, and it is a risk rather than a fixed category; Loudoun and Prince William show its fiscal preconditions, and the case studies trace how proximity to capture shapes board behavior even where formal capture has not occurred.

Pre-entitlement-by-ordinance. The community writes demanding rules, noise limits, buffers, overlay boundaries, disclosure requirements, before the first application, and makes entry conditional on meeting them. Louisa, Goochland, and the counties following their lineage occupy this end of the spectrum. It is the posture that consistently produced the best outcomes in the portfolio, because it sets the terms while the county still holds all of its leverage.

The spectrum is not a ranking of virtue. It is a map of leverage over time. The communities at the pre-entitlement end did not care more than the others. They acted earlier, when caring could still be converted into terms.

SECTION 18: THE DIFFUSION GEOGRAPHY

The industry has spread across Virginia in a discernible wave, and the geography of that wave explains much of the institutional variation in Section 17.

The origin is the Northern Virginia core: Loudoun, Prince William, Fairfax. This is the most mature data center market in the world, the place where the by-right model ran longest and the reform-after pattern is most fully developed. The core's defining feature is saturation, of land, of power, and of transmission capacity, which is what pushed the industry outward.

The first ring outward is the I-95 corridor and the Richmond crescent: Stafford, Spotsylvania, Caroline along the interstate, and Henrico, Chesterfield, Hanover, Goochland around the capital. These are the counties absorbing the overflow from a saturated core, and they are where the policy learning is most active, because they had time to watch Loudoun before their own applications arrived.

The second ring is the Piedmont and the rural frontier: Louisa, Orange, Culpeper, Fauquier, and the Fredericksburg-area counties. Here the pre-entitlement-by-ordinance posture predominates, because these counties wrote their rules with the Northern Virginia experience already visible and the first applications still

pending. The transmission conflict concentrates here too, because the Piedmont is the corridor through which Northern Virginia's power must travel.

The far edge is Southside and the Valley: Mecklenburg, Pittsylvania, Botetourt, and the southwestern counties. This is the frontier of the frontier, where individual very large projects, a Microsoft campus, a Google commitment, a defeated Balico mega-campus, arrive one at a time into communities with little prior exposure and high fiscal stakes. The institutional outcomes here are the most variable in the portfolio, ranging from outright refusal to contract-lock, because each community is meeting the industry for the first time and improvising its posture in real time.

The wave is not finished. The pipeline documented in the appendices is concentrated in the rings and the frontier, not the saturated core. The next decade of Virginia data center policy will be written largely in counties that had no operating facility in 2024.

SECTION 19: TWO POLES, AND WHAT LIES BETWEEN

The portfolio resolves, finally, into two poles and a contested middle.

At one pole is Loudoun: maximum development, maximum revenue, maximum dependence, and reform that arrived only after the leverage was gone. Loudoun is what the unmanaged model produces at scale, a county that collects over $800 million a year and spent a decade unable to say no, now working to contain commitments it can no longer easily unwind.

At the other pole is the refusal exemplified by Pittsylvania's defeat of Balico: a community that looked at the largest project offered it and declined, preserving its leverage by exercising it, accepting the forgone revenue as the price of control.

Between the poles lies the middle where most of Virginia now sits, and where the case studies concentrate. It is the space of the pre-entitlement ordinance, the overlay district, the contractual rate cap, the conditional-use regime, the negotiated buffer. It is where counties try to capture the benefits without the dependence, to admit the industry on terms rather than refuse it outright or accept it unconditionally. The instruments are imperfect and the outcomes uneven. But the middle is where the policy learning is happening, and it is where the statewide reforms of Part Two will land hardest.

The two-poles framing carries a warning for the state. Virginia's policy has, until now, effectively forced its localities toward the Loudoun pole, by offering a generous state subsidy, withholding the local tools to manage the consequences, and leaving each county to negotiate alone against a sophisticated industry. The 2026 siting-assessment acts begin to redistribute the tools. The exemption fight

will determine whether the subsidy that tilts the field survives. The reform agenda in Part Five is, in the end, an argument for making the managed middle the default rather than the exception, by ending the subsidy that pushes counties toward maximum development and arming them with the instruments the best-managed counties had to invent for themselves.

PART FIVE — RECOMMENDATIONS

The evidence supporting the recommendations that follow has only accumulated, and the policy record assembled in Parts Two through Four strengthens each.

1. End or sharply narrow the data center sales tax exemption. The 2026 budget did not do this. It preserved the exemption and added a consumption tax instead, so this recommendation stands unfinished and the 2027 session that repeal advocates have promised is the next opportunity to take it up. The projected cost is too large and the industry too mature to justify continued unconditional tax treatment. The commonwealth is no longer trying to attract a speculative new market; it is managing an entrenched one. Georgia's enacted repeal provides a workable transition mechanism: repeal the exemption for new projects while grandfathering existing certificate holders, and close both qualifying statutory pathways simultaneously to prevent migration from one provision to the other. Projects that made investment decisions in reliance on the existing exemption keep their benefit. What ends is the issuance of new certificates going forward. The Governor's stated unwillingness to break signed contracts is consistent with this design.[1][53][96]

2. Commission a Virginia-specific econometric study of the exemption's role in investment decisions. Section 3 documents the evidentiary gap: Virginia has no state-commissioned analysis, built on Virginia-specific utilization data, measuring how much of the industry's investment is actually attributable to the incentive. The General Assembly should direct JLARC or the Weldon Cooper Center to conduct a rigorous but-for analysis using Department of Taxation filing data, following the methodology the Carl Vinson Institute employed in Georgia. If the data center accountability commission contemplated in the House budget is created, this study should be its first charge. Until Virginia has its own number, the debate will continue to rest on borrowed estimates and industry assertions.[19][77][78]

3. Continue tightening rate design and cost allocation, and make the new consumption tax durable and cost-based. Ordinary households and small businesses should not be left underwriting infrastructure required by very-large-load users. The SCC's creation of the GS-5 rate class is a recognition that the old structure was inadequate. The June 2026 consumption tax is a genuine step in this direction, the first state levy in the country on data center electricity use, and it raises revenue the industry can bear. But it is a blunt instrument and a temporary one: it charges a flat rate per kilowatt-hour rather than allocating specific generation and transmission costs to the customers who drive them, and it sunsets in 2028. The legislature should let it become permanent, refine it toward true cost

causation, and still revisit the cost-allocation provisions of SB 253 and HB 1393 that the reconvened session narrowed, so that the costs of data-center-driven buildout fall on the load that requires them rather than on the rate base at large.[48][91][99]

4. Strengthen local authority over noise conditions. JLARC recommended authorizing localities to require sound modeling studies and adopt enforceable maximum sound levels, including alternative low-frequency metrics. SB 94 and HB 153 took a first step by mandating noise-focused siting assessments. The state should complete the work by authorizing enforceable local sound standards, not merely pre-approval studies.[39][90]

5. Condition any remaining favorable treatment on stronger public-interest safeguards. If the exemption continues in any form, eligibility should be tied to historic-resource review, viewshed analysis where appropriate, and earlier disclosure of likely off-site utility and transmission consequences. JLARC itself suggested linking the exemption to such studies. The state should not subsidize growth while leaving the most controversial burdens to localities without requiring the diligence that would make those burdens visible before approvals are granted.[43]

6. Require earlier public disclosure of off-site consequences. Communities should not first discover the scale of the infrastructure consequences when a major transmission route appears years after the local sales pitch began. The Joshua Falls–Yeat project, a 115-mile, 765-kV line crossing as many as nine counties, illustrates how far the physical footprint of data-center-driven demand can extend from the facilities themselves. Disclosure requirements should ensure that the utility, transmission, and resource implications of data center approvals are visible to affected communities early in the process, not after the decisions that created them are locked in.[30]

7. Require local governments to adopt stronger land-use review, and give them the tools to do it. Local governments should require applicants to state clearly how many permanent on-site jobs will remain after construction, demand detailed utility-impact disclosures, require serious sound modeling before approval, insist on scenic and historic review where projects may affect valued landscapes, and stop treating each approval as a standalone parcel decision. The pre-entitlement-by-ordinance counties, Louisa, Goochland, and their successors, have shown what this looks like in practice. The state should make their best instruments available, and in some cases mandatory, statewide, so that managing the industry on terms becomes the default rather than an achievement each county

must reinvent alone. Loudoun's decade of by-right development followed by an abrupt reversal is a warning, not a model.[58][59][60][61][62][64][80][81]

APPENDICES

APPENDIX A: METHODS NOTE ON THE STATEWIDE INVENTORY

The inventory in Appendices B through E is drawn from the project's master facility database, compiled from local planning records, utility filings, company announcements, regulatory dockets, and press coverage, and current to March 2026 with the updates noted below. It catalogs 286 facility records across at least 24 Virginia counties and independent cities, classified by status into operating, pipeline (under construction, approved, announced, proposed, and related pre-operational categories), and a separate register of canceled, rejected, and withdrawn projects.

Two methodological points govern how the inventory should be read.

First, the blank cells are findings, not omissions. Of the 286 facility records, 191 carry no disclosed power figure, 258 carry no disclosed water-usage figure, and 254 carry no disclosed investment figure. These gaps are not the result of incomplete research. They are the result of a disclosure vacuum: Virginia does not require operators to publish facility-level power, water, or investment data, and most do not. The county case studies in this series treat the same vacuum the same way, as a structural feature of the policy environment rather than a defect in the record. The consequence for the statewide aggregates is that every capacity and investment total in this inventory is a floor. The true figures are higher, by an unknown margin, and the margin is itself the point: a state cannot manage what its policy framework does not require anyone to disclose. SB 553's water-reporting mandate, enacted in 2026, is the first statutory step toward closing the water portion of this gap.

Second, the aggregate capacity figures must be read with the disclosure vacuum in view. Among records reporting a power figure, the operating fleet totals on the order of 3,100 megawatts and the disclosed pipeline, under construction, announced, and proposed, totals on the order of 21,700 megawatts, roughly seven times the operating base. Because 191 records report no power figure at all, both numbers understate, and the operating figure, drawn disproportionately from older facilities that predate the current disclosure norms, understates more severely than the pipeline figure. The safe statement is directional: Virginia's disclosed data center pipeline is several times larger than its operating fleet, and the gap is large enough that the precise multiple is less important than its order of magnitude.

Updates applied since the March 2026 compilation, and reflected in the narrative parts of this report, include the following. The Tract Mountain Road project in Hanover (a 427-acre proposal distinct from the 1,200-acre Tract campus near Ashland) was rejected by the Hanover Board of Supervisors on May 27, 2026, and is carried in the canceled-rejected register. The EdgeCore Louisa campus (announced, roughly 1.1 gigawatts) and the Google Botetourt project (proposed, 312 acres, roughly $3 billion) are confirmed and carried in the pipeline. The Chesterfield footprint (Google, the CFS/Google power-purchase arrangement, and Chirisa at Meadowville) and the Goochland technology-corridor approval are reflected in the regional synthesis. The Prince William Digital Gateway is now dead. A circuit court voided the rezoning in August 2025 for failed public notice, a unanimous Court of Appeals panel affirmed on March 31, 2026, the County and Compass withdrew from the appeal in April, and on July 2, 2026 QTS filed notice withdrawing its remaining petition to the Supreme Court of Virginia, ending the largest proposed data center campus in the world. The project moves from legal limbo to canceled. Prince William delivered a second rejection days later: on July 8, 2026 the Board of Supervisors voted 8–0 to deny the roughly 2,000-acre Dulles Cloud South rezoning from agricultural to industrial use, over watershed, energy, and diesel-generator objections. Culpeper cut the other way in the same window, approving the 69.19-acre Keyser Road data center on a 4–3 vote on July 2, 2026, rezoning farmland from rural to light industrial.[101] Tract's withdrawals in Chesterfield and the Mountain Road rejection in Hanover are both reflected in the canceled-rejected register.

The companion interactive map (Virginia_Data_Centers_Interactive_Map.html) and the source spreadsheet (Virginia_Data_Centers_COMPLETE_v3_March_2026.xlsx) were both built to the March 2026 data and do not reflect the updates above.

APPENDIX B: SUMMARY BY COUNTY AND REGION

Counts below are as compiled March 2026 and carry the disclosure caveats of Appendix A. "Total Known" includes operating, pipeline, and, where noted, large multi-building campuses counted as single entries.

County / City	Region	Operating	Under Construction	Proposed	Withdrawn /Rejected	Total Known
Loudoun	Northern Virginia	350+	66+	Dozens	0	450+
Fairfax	Northern Virginia	50+	Several	Limited	0	65+
Prince William	Northern Virginia	90+	Several	Digital Gateway +	2	120+

County / City	Region	Operating	Under Construction	Proposed	Withdrawn /Rejected	Total Known
				1,930 ac		
Stafford	I-95 Corridor	0	3 (7M+ SF)	18 in pipeline	0	18+
Spotsylvania	I-95 Corridor	0	1 (PH 95, 800 MW)	Several (AWS)	0	Several
Caroline	I-95 Corridor	0	2 (CleanArc, AWS)	1 (AVAIO)	0	3+
Culpeper	Piedmont	2	0	1+ (CloudHQ)	0	3+
Fauquier	Piedmont	0	0	1 (GI Partners)	3	4
Orange	Piedmont	0	0	1	0	1
Louisa	Piedmont	0	0	2 (EdgeCore 1.1 GW; SMR)	1 (AWS)	3
Goochland	Central VA	0	0	Zoning approved	0	TBD
Henrico	Richmond Metro	16+	2+ (QTS, Iron Mtn)	1 (DC BLOX)	2	20+
Chesterfield	Richmond Metro	0–1	2 (Google, Chirisa)	3+	1 (Tract)	6+
Hanover	Richmond Metro	2	0	1 (Tract 2.4 GW)	2	5
Mecklenburg	Southern VA	1 (MSFT, 1.1M SF)	2+	1 (LYH03)	0	4+
Pittsylvania	Southside	0	0	1 (Anchorstone)	1 (Balico)	2
Appomattox	Southside	0	0	1 (AVAIO)	0	1
Virginia Beach	Hampton Roads	2 (Globalinx, Telxius)	1 (CLS expansion)	3	0	6
Charles City	East of Richmond	0	0	0	1 (withdrawn)	0
King George	Fredericksburg	0	0	Proposed	0	TBD
Surry	Southside	0	0	Proposed	0	TBD
Wise	Southwest VA	1 (Mineral Gap)	0	0	0	1
Scott	Southwest VA	1 (OnePartner)	0	0	0	1

County / City	Region	Operating	Under Construction	Proposed	Withdrawn /Rejected	Total Known
Botetourt	Roanoke area	0	0	1 (Google $3B)	0	1

The Loudoun line is the one to hold against the statewide totals. A single county accounts for 350-plus operating facilities and a "450+" total known, more than the rest of the commonwealth combined, which is why the Loudoun rate and the Loudoun governance trajectory carry as much weight in this report as they do. The Loudoun 450+ figure is consistent across the county's own budget materials and this inventory and is restated here on that basis.

APPENDIX C: MASTER FACILITY INVENTORY

The complete facility-level inventory follows. It carries the disclosure caveats of Appendix A: blank power, water, and investment fields denote undisclosed data, not zero or absent facilities. In the Word edition this table is rendered in a landscape section with a repeating header row.

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
1	Equinix DC1	Loudoun	OPERATING	Equinix (EQIX)	Retail Colocation	43,346		Pre-2010	
2	Equinix DC2	Loudoun	OPERATING	Equinix	Retail Colocation				
3	Equinix DC3	Loudoun	OPERATING	Equinix	Retail Colocation				
4	Equinix DC4	Loudoun	OPERATING	Equinix	Retail Colocation	99,969	6		
5	Equinix DC5	Loudoun	OPERATING	Equinix	Retail Colocation				
6	Equinix DC6	Loudoun	OPERATING	Equinix	Retail Colocation				
7	Equinix DC10	Loudoun	OPERATING	Equinix	Enterprise Colocation				
8	Equinix DC11	Loudoun	OPERATING	Equinix	Retail Colocation				
9	Equinix DC12	Loudoun	OPERATING	Equinix	Retail Colocation	57,800		2017	
10	Equinix DC13 (DA13)	Loudoun	OPERATING	Equinix	Wholesale				
11	Equinix DC15	Loudoun	OPERATING	Equinix	Wholesale				
12	Equinix DC16	Loudoun	OPERATING	Equinix	Wholesale				
13	Equinix DC21	Loudoun	OPERATING	Equinix	Hyperscale				
14	Equinix DC22	Loudoun	OPERATING	Equinix	Hyperscale				
15	Digital Realty ACC4	Loudoun	OPERATING	Digital Realty (DLR)	Wholesale	1,057,000	10		
16	Digital Realty ACC5	Loudoun	OPERATING	Digital Realty	Wholesale	348,000	36.4		
17	Digital Realty ACC6	Loudoun	OPERATING	Digital Realty	Wholesale	222,300	26		
18	Digital Realty ACC7	Loudoun	OPERATING	Digital Realty	Wholesale	446,000	41.6		
19	Digital Realty ACC9	Loudoun	OPERATING	Digital Realty	Wholesale				
20	Digital Realty Digital Dulles	Loudoun	UNDER CONSTRUCTION	Digital Realty	Hyperscale	7,500,000			
21	CloudHQ LC1-LC3 Campus	Loudoun	OPERATING	CloudHQ	Hyperscale	2,400,000+	320+		
22	CloudHQ LC4	Loudoun	UNDER CONSTRUCTION	CloudHQ	Hyperscale	1,580,560	180	Expected 2024-25	

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
23	CyrusOne ABX-1	Loudoun	OPERATING	CyrusOne (KKR/GIP)	Wholesale	265,000			$154.1M acquisition
24	CyrusOne NVA9	Loudoun	OPERATING	CyrusOne	Wholesale	700,000	135		
25	CyrusOne NVA1/NVA2/NVA3	Loudoun	OPERATING	CyrusOne	Enterprise Colocation	420,000	48		
26	DataBank Ashburn	Loudoun	UNDER CONSTRUCTION	DataBank	Retail Colocation		20	Expected 2026	
27	Yondr Arcola	Loudoun	UNDER CONSTRUCTION	Yondr Group	Hyperscale		48		
28	Compass Leesburg	Loudoun	UNDER CONSTRUCTION	Compass Datacenters	Hyperscale				
29	STACK Ashburn Hyperscale	Loudoun	PROPOSED	STACK Infrastructure	Hyperscale	1,310,000	144	Construction 2026	
30	STACK Leesburg (NVA-06)	Loudoun	UNDER CONSTRUCTION	STACK Infrastructure	Hyperscale		72		
31	PowerHouse Beaumeade/AOL HQ	Loudoun	UNDER CONSTRUCTION	PowerHouse DC (AREP/Harrison Street)	Hyperscale	1,200,000			$1B plan (6 DCs)
32	CoreSite VA1	Fairfax	OPERATING	CoreSite (AIC)	Retail Colocation				
33	CoreSite VA2	Fairfax	OPERATING	CoreSite	Retail Colocation				
34	CoreSite VA3	Fairfax	UNDER CONSTRUCTION	CoreSite	Retail Colocation				
35	Equinix (former MAE-East)	Fairfax	OPERATING	Equinix	Internet Exchange			1990s	
36	Equinix DC14	Prince William	OPERATING	Equinix	Wholesale				
37	Iron Mountain Manassas	Prince William	OPERATING	Iron Mountain (IRM)	Wholesale				
38	Google Prince William DC	Prince William	OPERATING	Google	Hyperscale				$9B total VA
39	Corscale Gainesville Crossing	Prince William	UNDER CONSTRUCTION	Corscale	Hyperscale		325 (campus)		
40	PW Digital Gateway	Prince William	CANCELED (July 2026)	Compass/QTS	Hyperscale	22,000,000+			$400-500M/yr tax
41	Gainesville 1,930-acre	Prince William	PROPOSED	Undisclosed	Industrial/DC				

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
	Proposal								
42	PWC 40-acre DC (denied)	Prince William	REJECTED	Undisclosed	Data Center				
43	Vantage Stafford Campus	Stafford	UNDER CONSTRUCTION	Vantage Data Centers	Hyperscale	929,000		First bldg 2027	$2.2B
44	STACK Stafford Technology Campus	Stafford	PROPOSED	STACK Infrastructure	Hyperscale		1,800	First phase 2027	$302.3M land
45	Stafford Pipeline (15+ addtl)	Stafford	PROPOSED	Various	Various				
46	PowerHouse 95 (PH 95)	Spotsylvania	UNDER CONSTRUCTION	PowerHouse DC (AREP/Harrison Street)	Hyperscale	3,500,000	800	150 MW by Oct 2025	
47	CleanArc VA1	Caroline	UNDER CONSTRUCTION	CleanArc Data Centers	Hyperscale		900	Phase 1: 1Q 2027	$3B+ ($8.8B completion)
48	AVAIO Ladysmith Campus	Caroline	PROPOSED	AVAIO Capital	Hyperscale				
49	AWS Spotsylvania/Caroline/Stafford	Caroline/ Spotsylvania/ Stafford	UNDER CONSTRUCTION	Amazon (AWS)	Hyperscale				$6B (of $35B)
50	King George Proposals	King George	PROPOSED	Various					
51	Equinix (former Terremark)	Culpeper	OPERATING	Equinix	Colocation				
52	Swift Data Center	Culpeper	OPERATING	Swift	Enterprise				
53	CloudHQ Culpeper	Culpeper	PROPOSED	CloudHQ	Hyperscale				
54	Gigaland Campus	Fauquier	WITHDRAWN	Gigaland LLC	Hyperscale/Colo		800		$4M land (Oct 2023)
55	Headwaters Catlett Station	Fauquier	WITHDRAWN	Headwaters Site Development	Data Center				$400M
56	Amazon Warrenton Campus	Fauquier	APPROVED	Amazon (AWS)	Hyperscale	220,000			$39M land
57	GI Partners Vint Hill	Fauquier	UNVERIFIED	GI Partners	Data Center				
58	Wilderness Crossing DC	Orange	PROPOSED	TBD	Data Center				
59	EdgeCore Louisa Campus	Louisa	ANNOUNCED	EdgeCore Digital Infrastructure	Hyperscale	3,900,000	1,100		$42M

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
60	AWS Louisa County	Louisa	WITHDRAWN	Amazon (AWS)	Hyperscale	1,700,000			
61	AWS/Dominion SMR (North Anna)	Louisa	PROPOSED	AWS/Dominion Energy	Nuclear-powered DC				
62	Goochland Tech Overlay District	Goochland	APPROVED ZONING	Various potential	Various				
63	QTS Richmond 1 (NAP)	Henrico	OPERATING	QTS (Blackstone)	Mega/ Hyperscale	1,400,000+		2010	
64	QTS Richmond Expansion	Henrico	UNDER CONSTRUCTION	QTS (Blackstone)	Hyperscale				
65	Meta Henrico Data Center	Henrico	OPERATING	Meta Platforms (META)	Hyperscale	2,500,000		~2021	$1B+
66	Iron Mountain RCH-1 to RCH-4	Henrico	UNDER CONSTRUCTION	Iron Mountain (IRM)	Wholesale		200 (campus)		
67	DC BLOX Henrico (revised)	Henrico	PROPOSED	DC BLOX Inc.	Colocation	65,000			
68	DE-CIX Richmond (Henrico x2)	Henrico	OPERATING	DE-CIX	Internet Exchange				
69	Google Chesterfield (Project Peanut)	Chesterfield	UNDER CONSTRUCTION	Google (GOOGL)	Hyperscale			18-24 months	$9B total VA
70	Google Watkins Centre South	Chesterfield	PROPOSED	Google	Hyperscale				
71	Google Upper Magnolia Green	Chesterfield	LAND ACQUIRED	Google	Hyperscale				
72	Chirisa Digital Drive DC1	Chesterfield	APPROVED	Chirisa/AREP (CoreWeave)	Hyperscale	380,000	1,000 (campus)		$2B
73	Chirisa Digital Drive DC2	Chesterfield	APPROVED	Chirisa/AREP (CoreWeave)	Hyperscale	380,000			
74	Tract Chesterfield (744 acres)	Chesterfield	WITHDRAWN	Tract (Denver)	Hyperscale				
75	Pixel Factory Data Center	Hanover	OPERATING	Pixel Factory (Scott Brown)	Colocation/ Enterprise				
76	DE-CIX Richmond (Hanover)	Hanover	OPERATING	DE-CIX	Internet Exchange				
77	WestDulles Tech Park	Hanover	REJECTED	WestDulles Properties	Tech Park/DC				

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
78	HHHunt Hanover Campus	Hanover	WITHDRAWN	HHHunt	Hyperscale	3,300,000			
79	Tract Hanover Technology Park	Hanover	PROPOSED	Tract	Hyperscale		2,400		
80	Microsoft BN Campus (Boydton)	Mecklenburg	OPERATING	Microsoft (MSFT)	Hyperscale/ Cloud	1,100,000	250+	2010	$2B+
81	Microsoft Ridge/Prison/Hillcrest	Mecklenburg	UNDER DEVELOPMENT	Microsoft	Hyperscale				
82	Microsoft LYH03 (Bailey)	Mecklenburg	PROPOSED	Microsoft	Hyperscale				
83	Anchorstone Advisors DC	Pittsylvania	APPROVED	Anchorstone Advisors LLC	Hyperscale				
84	Balico MegaCampus	Pittsylvania	DEFEATED	Balico LLC (NoVA)	84 DCs + Gas Plant		3,500 (gas plant)		
85	AVAIO Appomattox Campus	Appomattox	PROPOSED	AVAIO Capital	Hyperscale				
86	Globalinx Data Center & CLS	Virginia Beach	OPERATING	Globalinx Data Centers	Cable Landing/Carrier-Neutral Colo	10,750		~2019	$39M expansion
87	Telxius Cable Landing Station	Virginia Beach	OPERATING	Telxius (Telefonica)	Cable Landing Station	20,000			
88	ACA International DC	Virginia Beach	PROPOSED	ACA International	Colocation/ Cable Landing	130,000			
89	PointOne Virginia Beach	Virginia Beach	PROPOSED	PointOne	Computing DC/Cable Landing	62,000			$80M
90	Surry County Proposals	Surry	PROPOSED	Various					
91	Charles City County DC	Charles City	WITHDRAWN	Kansas-based (unnamed)	Data Center				
92	Prince George/Petersburg	Prince George	PROPOSED	Various	Various				
93	Fredericksburg Area Projects	Fredericksburg City	REJECTED	Various	Various				
94	Commonwealth Technical Svc	Richmond City	OPERATING	Commonwealth Technical Services	Colocation				
95	Equinix Federal/Classified	Various	OPERATING	Equinix Federal	Government/ Classified				

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
96	AWS IAD1	Fairfax	OPERATING	Amazon (AWS)	Hyperscale/ Cloud		5	2006	
97	AWS IAD9	Fairfax	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
98	AWS IAD22	Fairfax	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
99	AWS IAD10	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud	126,869			
100	AWS IAD12	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
101	AWS IAD15	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
102	AWS IAD23	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
103	AWS IAD50	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
104	AWS IAD60	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud	109,997			
105	AWS IAD71	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
106	AWS IAD11	Prince William	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
107	AWS IAD24	Prince William	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
108	AWS IAD55	Prince William	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
109	AWS IAD59	Prince William	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
110	AWS IAD73	Prince William	OPERATING	Amazon (AWS)	Hyperscale/ Cloud	146,962			
111	AWS IAD100 Tanner Way	Prince William	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
112	AWS IAD-104	Prince William	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
113	AWS IAD-105	Prince William	OPERATING	Amazon (AWS)	Hyperscale/ Cloud		50		
114	AWS IAD-106	Prince William	OPERATING	Amazon (AWS)	Hyperscale/ Cloud		50		
115	AWS 11200 Thomasson Barn	Prince William	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
116	AWS 45305 Sterling	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
117	AWS 20945 Loudoun County	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
	Pkwy								
118	AWS 20935 Loudoun County Pkwy	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
119	AWS 25410 Sutton Bay	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
120	AWS Fadeley II	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud	180,000	32		
121	AWS 13600 EDS Drive	Fairfax	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
122	AWS 22420 Kipper	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
123	AWS Erin's Run Campus	Loudoun	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
124	AWS Vulcan Lane Campus	Prince William	UNDER CONSTRUCTIO N	Amazon (AWS)	Hyperscale/ Cloud				$152M land
125	AWS IAD7	Prince William	OPERATING	Amazon (AWS)	Hyperscale/ Cloud				
126	AWS Cosner Tech Campus	Stafford	UNDER CONSTRUCTIO N	Amazon (AWS)	Hyperscale/ Cloud		60		
127	AWS King George Campus	King George	PROPOSED	Amazon (AWS)	Hyperscale/ Cloud	7,250,000			
128	Digital Realty IAD24	Loudoun	OPERATING	Digital Realty	Wholesale				
129	Digital Realty IAD35	Loudoun	OPERATING	Digital Realty	Wholesale	392,800			
130	Digital Realty IAD36	Loudoun	OPERATING	Digital Realty	Wholesale				
131	Digital Realty IAD37	Loudoun	OPERATING	Digital Realty	Wholesale	392,711	44		
132	Digital Realty IAD38	Loudoun	OPERATING	Digital Realty	Wholesale				
133	Digital Realty IAD40	Loudoun	OPERATING	Digital Realty	Wholesale	223,200			
134	Digital Realty IAD44	Loudoun	OPERATING	Digital Realty	Wholesale	794,000	96		
135	Digital Realty IAD56	Loudoun	UNDER CONSTRUCTIO N	Digital Realty	Hyperscale		20		
136	Digital Realty VA3	Fairfax	OPERATING	Digital Realty	Wholesale	256,000			
137	Digital Realty Sterling	Loudoun	UNDER CONSTRUCTIO	Digital Realty	Hyperscale		20		

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
			N						
138	Digital Realty Manassas	Prince William	PROPOSED	Digital Realty	Hyperscale				
139	NTT/ RagingWire VA1	Loudoun	OPERATING	NTT Global Data Centers	Wholesale/ Colocation		12.6		
140	NTT/ RagingWire VA2	Loudoun	OPERATING	NTT Global Data Centers	Wholesale/ Colocation		16		
141	NTT/ RagingWire VA3	Loudoun	OPERATING	NTT Global Data Centers	Wholesale/ Colocation	245,000	16		
142	NTT/ RagingWire VA4	Loudoun	OPERATING	NTT Global Data Centers	Wholesale/ Colocation				
143	Vantage VA1 Ashburn I Campus	Loudoun	OPERATING	Vantage Data Centers	Hyperscale	720,000	146		
144	Vantage VA2 Ashburn II Campus	Loudoun	OPERATING	Vantage Data Centers	Hyperscale	800,000 (planned)			$380M+
145	Vantage VA3 Ashburn III Campus	Loudoun	UNDER CONSTRUCTIO N	Vantage Data Centers	Hyperscale				
146	Centersquare DC2 (ex-Cyxtera)	Loudoun	OPERATING	Centersquare (Brookfield)	Colocation				
147	Centersquare DC3 (ex-Cyxtera)	Loudoun	OPERATING	Centersquare (Brookfield)	Colocation				
148	Centersquare DC4 (ex-Cyxtera)	Loudoun	OPERATING	Centersquare (Brookfield)	Colocation				
149	Centersquare DC7 (ex-Cyxtera)	Loudoun	OPERATING	Centersquare (Brookfield)	Colocation				
150	Centersquare (ex-Evoque/AT&T) Reston	Fairfax	OPERATING	Centersquare (Brookfield)	Colocation				
151	Google Prince William Campus	Prince William	OPERATING	Google (GOOGL)	Hyperscale				
152	Google Arcola Campus	Loudoun	OPERATING	Google (GOOGL)	Hyperscale				
153	Google Leesburg	Loudoun	UNDER CONSTRUCTIO N	Google (GOOGL)	Hyperscale				$9B total VA
154	Microsoft Leesburg (IAD01)	Loudoun	OPERATING	Microsoft (MSFT)	Hyperscale/ Cloud	245,000+			

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
155	Microsoft Manassas (MNZ01/02)	Prince William	UNDER CONSTRUCTIO N	Microsoft (MSFT)	Hyperscale/ Cloud	623,360			
156	QTS Ashburn-Broderick	Loudoun	OPERATING	QTS (Blackstone)	Wholesale/ Colocation				
157	Starwood Herndon (AWS tenant)	Fairfax	UNDER CONSTRUCTIO N	Starwood Capital	Hyperscale				
158	Aligned Ashburn	Loudoun	OPERATING	Aligned Data Centers	Hyperscale				
159	Cologix Ashburn	Loudoun	UNDER CONSTRUCTIO N	Cologix	Colocation				
160	BlackChamber/ AWS Arcola	Loudoun	PROPOSED	BlackChamber Group (AWS tenant)	Hyperscale	1,700,000			
161	AWS Ashton Ave (3 bldgs, shelved)	Prince William	DELAYED	Amazon (AWS)	Hyperscale				
162	Centra (Henrico)	Henrico	PROPOSED	Centra	Data Center				
163	Iron Mountain VA-1	Prince William	OPERATING	Iron Mountain (IRM)	Wholesale	165,230	400+ (campus)		
164	Iron Mountain VA-2	Prince William	OPERATING	Iron Mountain	Wholesale	211,000	36		
165	Iron Mountain VA-3	Prince William	OPERATING	Iron Mountain	Wholesale	304,654			
166	Iron Mountain VA-4	Prince William	OPERATING	Iron Mountain	Wholesale	182,032			
167	Iron Mountain VA-5	Prince William	OPERATING	Iron Mountain	Wholesale	220,134			
168	Iron Mountain VA-6	Prince William	OPERATING	Iron Mountain	Wholesale	213,000			
169	Iron Mountain VA-7	Prince William	OPERATING	Iron Mountain	Wholesale	290,307			
170	DataBank IAD1	Loudoun	OPERATING	DataBank	Colocation	85,330	9.9		
171	DataBank IAD3	Loudoun	OPERATING	DataBank	Colocation	200,000	40		
172	DataBank IAD4	Loudoun	OPERATING	DataBank	Colocation	70,000	20		
173	NTT/ RagingWire VA5	Loudoun	OPERATING	NTT Global Data Centers	Wholesale/ Colocation				
174	NTT/ RagingWire VA6	Loudoun	OPERATING	NTT Global Data Centers	Wholesale/ Colocation				

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
175	NTT/ RagingWire VA7	Loudoun	OPERATING	NTT Global Data Centers	Wholesale/ Colocation	125,000	36		
176	NTT/ RagingWire VA8	Loudoun	OPERATING	NTT Global Data Centers	Wholesale/ Colocation				
177	Digital Realty IAD12	Loudoun	OPERATING	Digital Realty	Wholesale	180,000			
178	Digital Realty IAD13	Loudoun	OPERATING	Digital Realty	Wholesale				
179	Digital Realty IAD14	Loudoun	OPERATING	Digital Realty	Wholesale	135,000			
180	Digital Realty IAD18	Loudoun	OPERATING	Digital Realty	Wholesale				
181	Digital Realty IAD39	Loudoun	OPERATING	Digital Realty	Wholesale	1,057,000	500 (campus)		
182	Digital Realty IAD41	Loudoun	OPERATING	Digital Realty	Wholesale				
183	Digital Realty IAD42	Loudoun	OPERATING	Digital Realty	Wholesale				
184	Stack NVA02 Campus	Prince William	OPERATING	STACK Infrastructure	Hyperscale		420		
185	QTS Manassas DC1-DC6	Prince William	OPERATING	QTS (Blackstone)	Wholesale/ Colocation		190		
186	Aligned IAD 02	Loudoun	OPERATING	Aligned Data Centers	Hyperscale		120		
187	Sabey SDC Ashburn	Loudoun	OPERATING	Sabey Data Centers	Colocation				
188	AWS IAD76	Loudoun	OPERATING	Amazon (AWS)	Hyperscale				
189	AWS IAD58	Loudoun	OPERATING	Amazon (AWS)	Hyperscale				
190	AWS IAD150	Loudoun	OPERATING	Amazon (AWS)	Hyperscale				
191	AWS IAD6	Loudoun	OPERATING	Amazon (AWS)	Hyperscale				
192	AWS IAD13	Loudoun	OPERATING	Amazon (AWS)	Hyperscale				
193	AWS IAD63	Fairfax	OPERATING	Amazon (AWS)	Hyperscale				
194	AWS IAD74	Prince William	OPERATING	Amazon (AWS)	Hyperscale				
195	AWS MNZ01	Prince William	OPERATING	Amazon (AWS)	Hyperscale				
196	AWS Bethlehem Tech Park DC18	Prince William	OPERATING	Amazon (AWS)	Hyperscale				
197	AWS 10281 Tanner Way	Prince William	OPERATING	Amazon (AWS)	Hyperscale				
198	AWS DCA-51	Fauquier	OPERATING	Amazon (AWS)	Hyperscale		50-100		

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
199	1501 Moran Rd Data Center	Loudoun	OPERATING	Private	Private		50-100		
200	1571 Beaumeade Circle DC	Loudoun	OPERATING	Private	Private		25-50		
201	22810-22860 International Dr	Loudoun	OPERATING	Private	Private		10-25		
202	22995 Wilder Court DC	Loudoun	OPERATING	Private	Private		<10		
203	Aerospace Data Facility - East	Fairfax	OPERATING	NRO/US Government	Government/ Classified		50-100		
204	11:11 Systems Reston	Fairfax	OPERATING	11:11 Systems	Colocation				
205	Serverfarm Vienna DC2	Fairfax	OPERATING	Serverfarm	Colocation				
206	DataBank McLean IAD2	Fairfax	OPERATING	DataBank	Colocation	40,690	3		
207	QTS Richmond 2 (DC6)	Henrico	OPERATING	QTS (Blackstone)	Wholesale		12.86		
208	EdgeConneX RIC01	Henrico	OPERATING	EdgeConneX	Edge/Colocation		11		
209	GFH Capital 1751 Meadowville	Chesterfield	OPERATING	GFH Capital	Private		<10		
210	TECfusions Boydton	Mecklenburg	OPERATING	TECfusions	Colocation		80		
211	Microsoft Boydton Expansion (1-11 Bldgs)	Mecklenburg	OPERATING	Microsoft	Hyperscale	316,300			
212	Mineral Gap DC	Wise	OPERATING	DP Facilities	Enterprise		3.4		
213	OnePartner ATAC	Scott	OPERATING	OnePartner	Enterprise				
214	Microsoft Gainesville DC	Prince William	PROPOSED	Microsoft (MSFT)	Hyperscale		2,982		
215	AWS North Creek Tech Campus	Louisa	PROPOSED	Amazon (AWS)	Hyperscale		2,700		
216	Garrett Dev GW Village DC	Stafford	PROPOSED	Garrett Development	Hyperscale		2,100		
217	Active Infra Spring Valley Tech	Loudoun	PROPOSED	Active Infrastructure	Hyperscale		1,300		
218	Amazon	Orange	PROPOSED	Amazon (AWS)	Hyperscale		1,500	2027	

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
	Wilderness Crossing								
219	Google Botetourt	Botetourt	PROPOSED	Google (GOOGL)	Hyperscale				$3B
220	DataBank Culpeper Campus (IAD5-6)	Culpeper	PROPOSED	DataBank	Colocation	613,152	192		
221	Penzance/AWS Chantilly	Fairfax	PROPOSED	Penzance (AWS tenant)	Hyperscale	240,000	45	2027	
222	Amazon IAD-350 Stafford	Stafford	PROPOSED	Amazon (AWS)	Hyperscale		100-250		
223	Amazon Cosner Tech Campus	Spotsylvania	UNDER CONSTRUCTION	Amazon (AWS)	Hyperscale		250+		
224	Amazon Bristow	Prince William	UNDER CONSTRUCTION	Amazon (AWS)	Hyperscale				
225	Microsoft Prison Road Campus	Mecklenburg	UNDER CONSTRUCTION	Microsoft	Hyperscale				
226	Microsoft Hillcrest Campus	Mecklenburg	UNDER CONSTRUCTION	Microsoft	Hyperscale		336	2025	
227	Iron Mountain RCH-1 (Henrico)	Henrico	UNDER CONSTRUCTION	Iron Mountain (IRM)	Wholesale	364,860	48	2027	
228	AWS Nokes Blvd Demolitions	Loudoun	DECOMMISSIONED	Amazon (AWS)	Redevelopment				$30.8M purchase
229	AWS Sterling Office Demolitions	Loudoun	DECOMMISSIONED	Amazon (AWS)	Redevelopment	900,000 (new capacity)			
230	Hornbaker Road DC	Prince William	REJECTED	Private	Data Center				
231	DC BLOX Richmond	Richmond City	WITHDRAWN	DC BLOX	Colocation				$500M
232	Centra Logistics Henrico	Henrico	WITHDRAWN	Centra	Data Center				
233	Amazon Louisa (cancelled)	Louisa	CANCELLED	Amazon (AWS)	Hyperscale				
234	AWS IAD78	Loudoun	OPERATING	Amazon (AWS)	Hyperscale			2021	
235	AWS IAD90	Loudoun	OPERATING	Amazon (AWS)	Hyperscale			2022	
236	AWS IAD91	Loudoun	OPERATING	Amazon (AWS)	Hyperscale			2022	

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
237	AWS IAD92	Loudoun	OPERATING	Amazon (AWS)	Hyperscale			2023	
238	AWS IAD114	Loudoun	OPERATING	Amazon (AWS)	Hyperscale			2019	
239	AWS IAD115	Loudoun	OPERATING	Amazon (AWS)	Hyperscale			2020	
240	AWS IAD134	Fairfax	OPERATING	Amazon (AWS)	Hyperscale			2021	
241	AWS IAD135	Fairfax	OPERATING	Amazon (AWS)	Hyperscale			2021	
242	AWS IAD136	Fairfax	OPERATING	Amazon (AWS)	Hyperscale			2022	
243	AWS IAD144	Loudoun	OPERATING	Amazon (AWS)	Hyperscale			2021	
244	AWS IAD145	Loudoun	OPERATING	Amazon (AWS)	Hyperscale			2022	
245	AWS IAD169	Loudoun	OPERATING	Amazon (AWS)	Hyperscale			2023	
246	AWS IAD179	Loudoun	OPERATING	Amazon (AWS)	Hyperscale			2024	
247	AWS IAD215	Loudoun	OPERATING	Amazon (AWS)	Hyperscale			2024	
248	AWS IAD52	Prince William	OPERATING	Amazon (AWS)	Hyperscale			2018	
249	AWS IAD101	Prince William	OPERATING	Amazon (AWS)	Hyperscale	150,000	35	2019	
250	AWS IAD104 (Mason King)	Prince William	OPERATING	Amazon (AWS)	Hyperscale			2020	
251	AWS IAD105 (Mason King)	Prince William	OPERATING	Amazon (AWS)	Hyperscale			2021	
252	AWS IAD106 (Mason King)	Prince William	OPERATING	Amazon (AWS)	Hyperscale			2021	
253	Equinix DC7	Fairfax	OPERATING	Equinix (EQIX)	Retail Colocation			2005	
254	Equinix DC8	Fairfax	OPERATING	Equinix	Retail Colocation			2007	
255	Equinix DC9	Fairfax	OPERATING	Equinix	Retail Colocation			2015	
256	Equinix DC17	Loudoun	OPERATING	Equinix	Retail Colocation				
257	Equinix CU1	Culpeper	OPERATING	Equinix	Retail Colocation	50,000 (est)	10	2008	$100M
258	Equinix CU2	Culpeper	OPERATING	Equinix	Retail Colocation	50,000 (est)	10	2009	
259	Equinix CU3	Culpeper	OPERATING	Equinix	Retail Colocation	50,000 (est)	10	2010	
260	Equinix CU4	Culpeper	OPERATING	Equinix	Retail Colocation	50,000 (est)	10	2012	
261	DataBank IAD5	Culpeper	UNDER CONSTRUCTIO N	DataBank	Wholesale Colocation	700,000	72	2026	$500M

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
262	DataBank IAD6	Culpeper	UNDER CONSTRUCTION	DataBank	Wholesale Colocation	700,000	120	2027	$800M
263	NTT VA10	Loudoun	UNDER CONSTRUCTION	NTT Global Data Centers	Wholesale Colocation		130	2026	
264	QTS Ashburn 3 DC1	Loudoun	OPERATING	QTS (Blackstone)	Wholesale Colocation	150,000	80	2021	
265	QTS Manassas DC1	Prince William	OPERATING	QTS (Blackstone)	Wholesale Colocation	123,200	24	2020	
266	QTS Manassas DC2	Prince William	OPERATING	QTS (Blackstone)	Wholesale Colocation	150,000	30	2021	
267	STACK NVA01	Loudoun	OPERATING	STACK Infrastructure	Wholesale Colocation	140,000	17	2019	
268	STACK NVA13	Prince William	OPERATING	STACK Infrastructure	Wholesale Colocation		30	2023	
269	Digital Realty IAD43	Loudoun	UNDER CONSTRUCTION	Digital Realty	Wholesale Colocation			2026	
270	Microsoft Boydton-1	Mecklenburg	OPERATING	Microsoft (MSFT)	Hyperscale	110,000	24	2010	$200M
271	Microsoft Boydton-5	Mecklenburg	OPERATING	Microsoft	Hyperscale	120,000	28	2014	$220M
272	Microsoft Boydton-11	Mecklenburg	OPERATING	Microsoft	Hyperscale	140,000	35	2020	$300M
273	Microsoft Timber Campus	Mecklenburg	OPERATING	Microsoft	Hyperscale		45	2023	
274	Microsoft AVC Campus	Mecklenburg	OPERATING	Microsoft	Hyperscale		45	2024	
275	Vint Hill Data Center	Fauquier	OPERATING	AWS (Sublease from OVH)	Hyperscale			2017	
276	Yondr Loudoun 2	Loudoun	UNDER CONSTRUCTION	Yondr Group	Hyperscale		48	2026	
277	Centersquare IAD4-B	Loudoun	OPERATING	Centersquare (Brookfield)	Retail Colocation			2014	
278	Sabey ASH1	Loudoun	OPERATING	Sabey Data Centers	Wholesale Colocation		20	2017	
279	CoreSite VA1	Fairfax	OPERATING	CoreSite	Wholesale Colocation			2013	
280	CoreSite VA2	Fairfax	OPERATING	CoreSite	Wholesale Colocation			2016	
281	Google ARA1	Loudoun	OPERATING	Google (GOOGL)	Hyperscale	200,000	40	2022	

#	Facility	County	Status	Owner/ Operator	Type	Size (SF)	Power (MW)	Yr	Investment ($)
282	Compass Leesburg (address)	Loudoun	UNDER CONSTRUCTIO N	Compass Datacenters	Hyperscale			2026	
283	Iron Mountain RCH-1 (address)	Henrico	UNDER CONSTRUCTIO N	Iron Mountain (IRM)	Wholesale	364,860	48	2026	
284	Microsoft MNZ01 (Manassas)	Prince William	OPERATING	Microsoft (MSFT)	Hyperscale	250,000	50	2022	$500M+
285	Chirisa Richmond (operating)	Chesterfield	OPERATING	Chirisa	Wholesale Colocation	150,000	30	2023	$200M
286	AWS Birchwood	King George	PROPOSED	Amazon (AWS)	Hyperscale		2,175	2028	

APPENDIX D: CANCELED, REJECTED, AND WITHDRAWN PROJECTS

The register of defeated and withdrawn projects is as much a part of the statewide picture as the operating fleet. It records where communities exercised leverage, and how.

Project	County	Developer	Size/ Capacity	Date	Outcome	Reason
PW Digital Gateway	Prince William	Compass/ QTS	22M+ SF, 37 DCs, 2,100 ac	Dec 2023 / Aug 2025	Dead (July 2026)	Rezoning void; failed public notice (Va. Code § 15.2-2204). COA affirmed Mar 31, 2026; QTS withdrew SCV appeal July 2, 2026 — project ended
Dulles Cloud South	Prince William	Undisclosed	~2,000 ac (ag→industrial)	July 8, 2026	Rejected	Board denied rezoning 8–0; watershed, energy, and diesel-generator objections
Gigaland Remington	Fauquier	Gigaland LLC	800 MW	Withdrawn Sept 2025	Withdrawn	Planning commission denied; community opposition
Headwaters Catlett	Fauquier	Headwaters Site Dev.	—	July 2024	Withdrawn	Pulled before hearing
Amazon Warrenton	Fauquier	Amazon (AWS)	220K SF	SUP Feb 14-15, 2023; site plan Apr 18, 2024	Approved	~300-500 attended; two suits and one administrati

Project	County	Developer	Size/ Capacity	Date	Outcome	Reason
						ve appeal
AWS Louisa County	Louisa	Amazon (AWS)	1.7M SF	Filed Sept 2023	Withdrawn	Community resistance
Tract Chesterfield	Chesterfield	Tract (Denver)	—	2025	Withdrawn	Planning Commission unanimously against
Tract Mountain Road	Hanover	Tract (Denver)	427 ac	May 27, 2026	Rejected	Board of Supervisors denied 4-3
WestDulles Tech Park	Hanover	WestDulles Properties	—	Dec 2024	Rejected	Hanover denied
HHHunt Hanover	Hanover	HHHunt	3.3M SF, 10 bldgs	Jan 2026	Withdrawn	Community concerns
Charles City DC	Charles City	Kansas-based	—	Aug 2025	Withdrawn	Neighbor opposition
Balico MegaCampus	Pittsylvania	Balico LLC	84 DCs + 3,500 MW gas	Defeated 2025	Defeated	2nd-largest gas plant in US; denied 6-1
DC BLOX (original)	Henrico	DC BLOX	Larger plan	2024	Revised	Opposition
Henrico Mountain Rd	Henrico	Undisclosed	—	2024–25	Blocked	Henrico ordinance
PWC 40-acre DC	Prince William	Undisclosed	40 ac	Nov 2025	Rejected	Zoning denied
Fredericksburg Area	Fredericksburg	Various	—	2024–25	Rejected	Zoning challenges
Hornbaker Road DC	Prince William	Private	—	2024–25	Rejected	Outside Opportunity Overlay District
DC BLOX Richmond	Richmond City	DC BLOX	—	2024–25	Withdrawn	Community opposition
Centra Logistics	Henrico	Centra	—	2025	Withdrawn	Retroactive zoning rules

Heatmap Research counted more than 25 Virginia data center cancellations in 2025, roughly four times the 2024 rate, with 21 in the second half of the year. Data Center Watch tracked tens of billions of dollars in projects blocked or delayed nationally over 2024–25, with Virginia carrying a disproportionate share. The register is growing faster than the operating fleet, which is itself a measure of how the politics have turned.[97]

APPENDIX E: KEY OPERATORS

Operator	Ownership	Virginia footprint (selected)	Notes
Equinix	NASDAQ: EQIX	19+ (Ashburn, Manassas, Culpeper)	Ashburn campus the "web's busiest meeting place"
Digital Realty	NYSE: DLR	32+ locations (NoVA)	
QTS Data Centers	Blackstone (private)	Richmond NAP, Sterling, Ashburn	Withdrew Digital Gateway petition July 2, 2026; project ended
CyrusOne	KKR/GIP (private)	15+ (Sterling, Ashburn)	$15B acquisition
CloudHQ	Private	Ashburn, Manassas, Culpeper	2,000+ MW planned
Amazon (AWS)	NASDAQ: AMZN	Dozens (US-East-1)	$35B through 2040
Microsoft	NASDAQ: MSFT	Boydton (14 bldgs), NoVA	$2B+ Boydton
Google	NASDAQ: GOOGL	Loudoun, PWC, Chesterfield, Botetourt	$9B through 2026
Meta Platforms	NASDAQ: META	Henrico (2.5M SF)	$1B+ Henrico
STACK Infrastructure	Private	Ashburn, Leesburg, Stafford	$302.3M Stafford land
Iron Mountain	NYSE: IRM	Henrico, Manassas	
PowerHouse DC	AREP/Harrison Street	Loudoun, Spotsylvania (PH 95)	800 MW PH 95
Vantage Data Centers	Private	Stafford (929K SF)	$2.2B
CleanArc	Private	Caroline (VA1)	$3B+
EdgeCore	Private	Louisa (announced)	1,100 MW (1.1 GW)
Chirisa Technology Parks	AREP	Chesterfield (Meadowville)	$2B

APPENDIX F: THE STATE STUDY LIBRARY

The evidentiary base for this report rests on a small number of primary studies, which this appendix records so that readers can return to the sources rather than the secondary coverage of them.

The anchor is JLARC, *Data Centers in Virginia* (RD206), published December 9, 2024, the most comprehensive legislative assessment of the industry any state has produced. Its findings on employment, demand, ratepayer cost, water, noise, and infrastructure risk run through every section of Part One and should be cited to the primary report rather than to the press accounts of it.

The Northern Virginia Technology Council studies provide the industry's own longitudinal account of its economic contribution: the 2022 study (*Impact of Data*

Centers in Virginia), the 2024 NVTC Data Center Report, and the 2026 NVTC Data Center Report. These are useful for the industry's framing and for facility and investment counts, and they should be read as advocacy-adjacent documents, valuable but not disinterested.

The Carl Vinson Institute of Government's December 2025 evaluation of Georgia's data center sales and use tax exemption is the methodological model for Recommendation 2 and the source of the 30 percent but-for finding. The *Data Center Economic Contribution Study 2025* supplies additional economic-impact estimates. Together with Bartik's incentives literature and the Ball State employment study, these constitute the comparative evidence base that Virginia's own missing econometric study would replace.

APPENDIX G: COMPANION COUNTY VOLUMES

This statewide report is the umbrella volume for the county case studies in the series. Each county volume develops, with primary-source depth, the local record this report synthesizes. The companion list below gives each volume's registered version DOI, verified against each record's own publication page. Because this is the umbrella volume, companion works should point their relation identifiers at this report's concept DOI (…292), which always resolves to the latest version.

Volume	Version	DOI
Henrico County	v3.6	10.5281/zenodo.20671032
Hanover County	v2.0	10.5281/zenodo.20672049
Chesterfield County	v3.0	10.5281/zenodo.20672437
Orange County	v3.0	10.5281/zenodo.20672497
Prince William County	v2.0	10.5281/zenodo.20673499
Goochland County	v1.0	10.5281/zenodo.20673468
Louisa County	v1.0	10.5281/zenodo.20673456
Botetourt County	v1.0	10.5281/zenodo.20673513
Mecklenburg County	v1.0	10.5281/zenodo.20673485
Culpeper County	v1.0	10.5281/zenodo.20673530
Fredericksburg Ring	v1.0	10.5281/zenodo.20673543
VA Research & Industry Directory	v3.0	10.5281/zenodo.20673583
The Aquifer Says No (SJ 25 groundwater analysis)	v1.0	10.5281/zenodo.21556436

This statewide volume (all versions): **concept DOI 10.5281/zenodo.20679292**; this version, 10.5281/zenodo.23905627.

ENDNOTES

Endnotes are numbered by first appearance. An asterisk on a note flags a claim resting on a secondary source.

[1a] *Virginia Department of Taxation, in collaboration with the Virginia Economic Development Partnership Authority, Biennial Data Center Retail Sales and Use Tax Exemption Report (RD40), January 2, 2026, p. 3 and Table 1: FY2025 reported tax benefit $1,941,390,000, "including the General Fund, non-General Fund, and local revenue impact"; "this data was self-reported by data center operators and was not independently validated by VEDP or the Department." This is the FY2025 figure used in this report. The $1.6 billion figure in contemporaneous press coverage (see [1]) is a lower estimate tied to a different fiscal frame; the two should not be averaged.*

[1] *Associated Press, "Virginia has a data center boon. Officials debate whether it's time to scrap its tax breaks," published March 11, 2026. AP reported that Virginia is home to the world's largest data-center hub and that senators voted to end a projected \$1.6 billion annual tax break.*

[2] *JLARC, Data Centers in Virginia (Dec. 9, 2024). JLARC reported that a typical 250,000-square-foot data center may have approximately 50 full-time workers, about half contractors, and that unconstrained electricity demand in Virginia would double within 10 years with the data-center industry as the main driver.*

[3] *AP on the live tax-break fight, combined with JLARC's findings on employment and infrastructure burden.*

[4] *Piedmont Environmental Council, "An Electric Super-Highway Through the Piedmont," Feb. 23, 2026; JLARC recommendations on local authority for sound modeling and low-frequency noise rules.*

[5] *AP for the live subsidy debate and JLARC for jobs and infrastructure findings.*

[6] *Associated Press, March 11, 2026.*

[7] *JLARC, Data Centers in Virginia landing page and report summary.*

[8] *JLARC presentation, Dec. 9, 2024, on demand growth and infrastructure requirements. SCC order creating a new rate class for the largest electricity users, including data centers, illustrating statewide utility-system consequences.*

[9] *JLARC report and recommendations on sound modeling, viewshed analysis, and historic-resource review.*

[10] *PEC on the widening transmission consequences tied to rising data-center demand; JLARC on local burdens that are often difficult to address once facilities are built; JLARC recommendations on pre-construction sound modeling and mitigation measures needed before approval.*

[11] *Associated Press, March 11, 2026.*

[12] *JLARC landing page and report on the sector's scale and consequences.*

[13] *Associated Press, March 11, 2026.*

[14] *The structural factors behind Virginia's data-center dominance are extensively documented. Broadband Breakfast, "Dateline Ashburn: The Interplay Between IXPs and Data Centers," Jan. 7, 2026, describes Ashburn's rise as rooted in the unusually dense cluster of internet exchange points seeded in the 1990s, beginning with MAE-East. The Virginia Economic Development Partnership, "The Dawn of Data," explains that network connectivity in Northern Virginia traces its roots to U.S. government experiments in wide-area fiber optic networking in the 1960s, and that the Equinix campus became the web's busiest meeting place, creating a powerful network effect. VEDP also notes that Virginia's data-center tax exemption was significantly expanded in 2010 after the state lost a major Apple project to North Carolina, indicating the subsidy was a response to a competitive moment, not a permanent structural requirement. JLARC report on the scale of Virginia's current market; AP on the subsidy debate.*

[15] *Loudoun County FY 2026 Proposed Budget and Loudoun County FAQ on data center tax revenues. Loudoun reports computer equipment tax revenue growing from \$60 million in FY 2013 to over \$800 million in FY 2026. The county states that for every \$1 in services provided to data centers, it receives \$26 in tax revenue, and that the real property tax rate has dropped from \$1.285 per \$100 in 2008 to \$0.805 in 2025. Data Center Frontier, "The Future of Property Values and Power in Virginia's Loudoun County," reporting that data centers represent approximately 73% of Loudoun's commercial real property portfolio and nearly half of total property tax revenue.*

[16] *2026 Biennial Data Center Retail Sales and Use Tax Exemption Report, Virginia Department of Taxation and VEDP (published via Reports to the General Assembly). The report estimated \$2.1 billion in total tax revenue in FY 2024 and FY 2025, and concluded that cumulative revenues exceeded the value of the exemption by \$2.1 billion over two overlapping five-year periods.*

[17] *VPM News, "\$2B data center tax break fight pushes Virginia budget negotiations," March 12, 2026, noting that the Virginia Tax-VEDP reports "rely on*

the industry to self-report" and that the data is "not independently validated by VEDP or the Department."

[18] *JLARC report on energy demand, ratepayer costs, water impacts, noise, diesel generators, and scenic/historic impacts; SCC rate-class redesign. The VEDP return-on-investment analysis addresses none of these cost categories.*

[19] *JLARC, Data Centers in Virginia, reporting that 90 percent of data center companies said they would not have built in Virginia without the exemption. VPM News, March 12, 2026, reporting that UVA economist Terry Rephann's subsequent analysis found the figure has dropped to roughly 50 percent and is declining, and that a University of Georgia assessment found only 30 percent of Georgia's data centers were attributable to the state's tax incentive.*

[20] *JLARC report warning that transmission and other infrastructure are at risk of being overbuilt if expected customer demand does not materialize. On equipment refresh cycles: the Loudoun County Revenue and Tax Policy Study and the Loudoun County Commissioner of the Revenue assessment methodology describe computer equipment depreciation to a minimum of 10 percent of original cost and typical refresh cycles of five to seven years. On the dot-com precedent: VEDP, "The Dawn of Data," and multiple Ashburn data center histories note that after the dot-com bust in 2000, purpose-built internet data centers did not return to the Virginia market until 2007.*

[21] *Virginia's sales and use tax rate is 5.3 percent in most jurisdictions, consisting of a 4.3 percent state portion and a 1 percent local portion. Applied to the approximately \$1.9 billion in FY 2025 exempted taxes reported in the VEDP biennial report, the local share would be approximately \$360 million. JLARC, Data Centers in Virginia, on the concentration of industry in a small number of Northern Virginia localities and the uneven distribution of benefits and burdens.*

[22] *JLARC landing page and report employment figures.*

[23] *JLARC, Data Centers in Virginia.*

[24] *JLARC employment findings.*

[25] *JLARC presentation, Dec. 9, 2024.*

[26] *JLARC report summary on lower-growth scenarios still requiring major buildout.*

[27] *JLARC report and presentation on demand growth and infrastructure needs.*

[28] *JLARC report on demand growth and transmission implications.*

[29] *Virginia State Corporation Commission, "Transmission Line Projects," stating that construction and operation of transmission lines and/or facilities above 115 kV in Virginia usually require a CPCN.*

[30] *Piedmont Environmental Council, "An Electric Super-Highway Through the Piedmont," Feb. 23, 2026; Cardinal News, "Massive power transmission line planned for Campbell to Culpeper," March 12, 2026. PEC described Joshua Falls-Yeat as a 115-mile, 765-kV line crossing as many as nine counties and tied to skyrocketing data-center demand; Cardinal News described the route and connection to Northern Virginia supply.*

[31] *PEC, Feb. 23, 2026, on scale and route of Joshua Falls-Yeat.*

[32] *JLARC report warning that transmission is especially at risk of being overbuilt if expected customer demand does not materialize.*

[33] *Code of Virginia § 56-49 on the powers of public-service corporations to acquire lands, rights-of-way, easements, and other interests by eminent domain when necessary; SCC on CPCN process.*

[34] *PEC on the scale, route, and purpose of Joshua Falls-Yeat in the context of rising data-center demand.*

[35] *Associated Press on the subsidy debate, combined with the public transmission consequences described by PEC.*

[36] *JLARC report on water availability, local constraints, and utility investments.*

[37] *JLARC report on 2023 building-level water use, including 11 buildings above 50 million gallons and one at 243 million gallons.*

[38] *JLARC report on local system implications of data-center water demand.*

[39] *JLARC report and legislative recommendations on sound modeling, enforceable noise limits, and alternative low-frequency metrics.*

[40] *JLARC on low-frequency noise and the difficulty of resolving post-operation impacts.*

[41] *JLARC report on pre-construction sound modeling and the difficulty of addressing noise after facilities become operational.*

[42] *JLARC recommendations and summary materials on local authority and low-frequency noise rules.*

[43] *JLARC recommendations and policy options on Phase I historic-resource studies, viewshed analyses, and linking public-interest safeguards to the sales-tax exemption.*

[44] *JLARC recommendations on viewshed and historic-resource review, combined with PEC's description of major transmission-line impacts.*

[45] *JLARC recommendations and policy options.*

[46] *JLARC report on backup generators being a relatively small contributor to regional air pollution but with harder-to-assess local impacts.*

[47] *JLARC report on unresolved local-impact uncertainty around clustered backup generators.*

[48] *Virginia SCC, Nov. 25, 2025, creating a new rate class for the biggest users of electricity, including data centers.*

[49] *AP on the 2026 legislative debate over the tax break, together with SCC evidence of large-user rate redesign.*

[50] *AP and SCC sources as above.*

[51] *JLARC report on local revenue shares from data centers in mature markets, including Loudoun at 31 percent and Prince William at 7 percent; JLARC local-revenue findings and their implications for local fiscal dependence.*

[52] *JLARC report on revenue concentrations in mature data-center localities.*

[53] *Associated Press, March 11, 2026.*

[54] *Virginia SCC, Nov. 25, 2025, on the large-user rate class.*

[55] *JLARC recommendations on sound modeling and low-frequency noise metrics.*

[56] *JLARC recommendations and policy options on public-interest safeguards tied to the exemption.*

[57] *PEC on the public timeline and scale of Joshua Falls-Yeat and the way large transmission consequences emerge in practice.*

[58] *JLARC employment figures for a typical 250,000-square-foot data center.*

[59] *JLARC report on utility and infrastructure implications of data-center growth.*

[60] *JLARC recommendations on sound modeling and enforceable local standards.*

[61] *JLARC recommendations on viewshed and historic-resource review.*

[62] *JLARC report on cumulative consequences and local review challenges; PEC on the regional infrastructure pattern tied to rising data-center demand; Associated Press on the continuing political fight over favorable treatment for the sector.*

[63] *Associated Press; JLARC; SCC; and PEC together establish the subsidy fight, load-growth findings, utility redesign, and transmission pipeline. Dominion Energy IRP filings on residential bill projections (see endnote [70]); multi-state legislative activity (see endnote [68]).*

[64] *AP and JLARC for the core fact pattern of subsidy scale, temporary jobs, and permanent infrastructure burden.*

[65] Electric Power Research Institute, "Powering Intelligence: Analyzing Artificial Intelligence and Data Center Energy Consumption," May 2024. Table 2 at 13: Virginia 33,851,122 MWh/y, 25.59 percent of total state electricity consumed, 2023; Table A1 at 29: North Dakota 15.42 percent, the next-highest state. Corroborated on a single-utility basis by Dominion Energy, Inc. and Virginia Electric and Power Company, Form 10-K for fiscal year 2023, Item 1 (data centers 24 percent of Virginia Power's electricity sales for 2023 and 21 percent for 2022), and Form 10-K for fiscal year 2025, same item (28 percent for 2025, 26 percent for 2024). JLARC's December 2024 report publishes no percentage share of state electricity; the figure should not be attributed to it.

[66] Electric Power Research Institute, "Powering Intelligence 2026: Updated Scenarios of U.S. Data Center Electricity Use and Power Strategies," Feb. 26, 2026. EPRI projects Virginia data center electricity share increasing to between 39 and 57 percent by 2030. PJM 2025 Long-Term Load Forecast projecting 32 GW of peak load growth with data centers responsible for 94 percent. PEC, "Data Centers & Energy Demand," citing Dominion's 2023 IRP, noting data centers represent the only growing sector of electricity demand in Virginia. JLARC independent forecast showing demand essentially flat from 2006 to 2020 before data center growth changed the trajectory. JLARC, Data Centers in Virginia (RD206), Dec. 9, 2024, Figure 3-3 at 28 (average monthly energy use, 2023 base year to 2040: approximately 183 percent growth under unconstrained demand against approximately 15 percent with no new data center load; both percentages derived from the figure, which JLARC does not state in text).

[67] *North American Electric Reliability Corporation, incident report, January 2025, documenting the simultaneous loss of 1,500 MW of data center load across*

60 sites and 25 substations following a 230 kV transmission line fault on July 10, 2024. Reuters investigation, published March 2025, identified the fault on Dominion's Ox-Possum 230-kilovolt line near Fairfax, Virginia. Confirmed by Data Center Dynamics, Feb. 11, 2026; Bisnow, March 20, 2025; and Grid Status, April 18, 2025. NERC director John Moura quoted from Reuters, March 2025.

[68] *Georgia SB 34 (Sen. Chuck Hufstetler, R-Rome), prohibiting utilities from passing data center fuel, generation, or transmission costs to other customers. Colorado bill requiring large data center operators to build or purchase renewable energy by 2031 and mandating 15-year utility contracts covering grid upgrade costs. Maryland utility regulator weighing new rate structures. Oklahoma legislation requiring data centers to fund their own infrastructure. Additional states pursuing similar measures. As compiled in Introl analysis of Virginia SB 253, Feb. 2026, and American Action Forum overview of state-level data center regulation, Jan. 2026.*

[69] *JLARC, Data Centers in Virginia (Dec. 9, 2024), finding that a typical Dominion residential customer could experience generation- and transmission-related cost increases of \$14 to \$37 monthly in constant dollars by 2040. Confirmed by VPM News, Dec. 10, 2024; WHRO, Dec. 9, 2024; and WRIC, Dec. 26, 2024.*

[70] *Dominion Energy 2025 IRP Update, SCC Case No. PUR-2025-00184, October 15, 2025, Figure 4.2.1.1: typical residential bill at 1,000 kWh of $159.57 on October 1, 2025, rising by year-end 2035 to $255.79 under the Company Methodology and $308.77 under the Directed Methodology. Monthly residential bill projections reported by Virginia Mercury, Oct. 22, 2025, and confirmed by WHRO, Oct. 23, 2025. Dominion spokesman Aaron Ruby noted these are projections and that cost allocations change every two years.*

[71] *Dominion Energy 2025 IRP filing, as cited by PEC, Nov. 14, 2025: \$28.3 billion in transmission capital expense; \$91.8 billion to \$270 billion in total capital expense across generation scenarios. Virginia state operating budget of \$83.3 billion from Virginia state budget data, FY 2024.*

[72] *Reuters, Feb. 12, 2025, reporting Dominion raised five-year capital expenditure plan to \$50.1 billion for 2025-2029. Confirmed by Dominion Energy SEC 10-K filing for year ended Dec. 31, 2024. Updated \$64.7 billion figure from Dominion Q4 2025 investor slides, reported by Investing.com, Feb. 2026.*

[73] *Dominion 2025 IRP filing: 16,913 MW under firm contract and 30,132 MW under study at the ELOA stage as of July 31, 2025, totalling 47,045 MW (2025 IRP Update, p. 18); the circulating "47.2 GW contracted" figure, as reported by PEC,*

Nov. 14, 2025, collapses a three-tier structure in which only 36 percent is contracted. The 17 percent (7 GW) increase since December 2024 IRP from same source. Dominion CEO Robert Blue quoted from Q4 2024 earnings call, Feb. 2025, as reported by Data Center Dynamics and Power Technology.

[74] *Data Center Dynamics, July 29, 2022, reporting Dominion could no longer guarantee power delivery in eastern Loudoun County. Bloomberg, Aug. 29, 2024, reporting Dominion expects connection wait times for large data centers to reach as long as seven years.*

[75] *SCC acceptance of Dominion 2024 IRP as reported by Clean Virginia, July 15, 2025, and Virginia Mercury, July 17, 2025. SCC directed VCEA-compliant scenario modeling, as reported by Southern Environmental Law Center, Oct. 29, 2025.*

[76] *See endnote [68] above on multi-state legislative activity in 2026 sessions.*

[77] *University of Georgia, Carl Vinson Institute of Government, "Tax Incentive Evaluation: Georgia Data Center Sales & Use Tax Exemption," December 2025, published via Georgia Department of Audits and Accounts. The 2022 study estimated 90 percent attributability; the 2025 study, using Georgia Department of Revenue data and the Aterio database, found 30 percent attributability through an econometric model. Researchers noted the prior study lacked sufficient data for accurate analysis.*

[78] *VPM News, "\$2B data center tax break fight pushes Virginia budget negotiations," March 12, 2026, quoting Terry Rephann, regional economist at the Weldon Cooper Center for Public Service, University of Virginia. Rephann's assessment has not been published as a standalone study. The Weldon Cooper Center partnered with JLARC to produce the annual Economic Development Incentives report series.*

[79] *Michael J. Hicks, "Data Centers and Local Job Creation," Center for Business and Economic Research, Ball State University (published via Substack), November 10, 2025. Uses Quarterly Workforce Indicators and a staggered difference-in-difference model applied to Texas data center openings. Found net employment effects across related industry categories effectively zero.*

[80] *National Association of Counties, "Counties try to keep data center development in bounds," August 26, 2025. Describes Loudoun's plan-ordinance misalignment and the Board's limited ability to manage growth during the by-right era.*

[81] *Holland & Knight, "Loudoun County, Virginia, Eliminates By-Right Data Center Development," April 2025, confirming March 18, 2025 Board approval.*

PEC, "Loudoun Proposes Changes to Get a Handle on Data Center Development," March 14, 2025. NACo report on the 2024 first-ever denial of a major data center application.

[82] *Timothy J. Bartik, "Who Benefits from State and Local Economic Development Policies?" and Making Sense of Incentives: Taming Business Incentives to Promote Prosperity (Upjohn Press, 2019). Bartik's finding that approximately 75 percent of tax incentives do not tip location decisions is summarized in the latter volume and in City Observatory, "Bartik: The Verdict on Business Tax Incentives," October 2019. JLARC's 2019 Data Center and Manufacturing Incentives briefing (June 2019) identified Bartik as "a leading researcher of incentives" and used his cost-sensitivity methodology in its Virginia data center assessment. Bartik's statement on the data center industry overstating fiscal benefits from TIME, "Why Tax Breaks for AI Data Centers Could Backfire on States," April 25, 2025.*

[83] *Code of Virginia § 58.1-609.3(18), data center retail sales and use tax exemption; qualifying thresholds of $150 million investment and 50 new jobs at or above prevailing average wage, with reduced thresholds in distressed localities and enterprise zones.*

[84] *Current law sets the exemption's sunset at June 30, 2035. The General Assembly has extended the sunset repeatedly since first enacting a data center sales-tax preference in 2009 and expanding it in 2010. VEDP institutional history on the 2010 expansion following the loss of an Apple project to North Carolina; see also [14].*

[85] *Code of Virginia, Title 58.1, Chapter 35, authorizing localities to classify data center computer equipment as a separate class of tangible personal property for rate-setting; § 58.1-3295.3 on the classification and assessment of data center fixtures.*

[86] *Rate figures reconciled against the primary-source rate histories in the county case studies in this series, including the Prince William reconciliation settling the TY2024 $3.70 → TY2025 $4.15 → TY2026 $4.50 progression (adopted 5–3, Tuesday, April 21, 2026), Loudoun at $4.15 through TY2027, Henrico at $2.60 effective FY2026, Chesterfield at $0.24 (2019), Virginia Beach at $0.40 (December 2017), Botetourt's $2.40 contractual cap, and Hanover's $0.45 rate, adopted for calendar year 2026 on Wednesday, June 24, 2026, 7-0, after the board had advertised a rate of up to $3.00, with the rate referred to the Finance Committee for further study (Hanover County Board of Supervisors, minutes, June 24, 2026, item XIII; Richmond BizSense and WRIC, June 25–26, 2026).*

[87] *Williams Mullen, "General Assembly 'Hot Topic' Bills as of the End of the 2026 Virginia Legislative Session"; Virginia Mercury, "Data center bills dominated this year's General Assembly. Here's what passed," March 17, 2026; MultiState, "Virginia Lawmakers Pass 15 Data Center Bills as Tax Exemption Fight Looms," March 30, 2026.*

[88] *HB 507 (Del. McAuliff), Chapter 397, signed April 8, 2026. Beginning July 1, 2026, DEQ may not issue an air permit for a data center unless its engine-generator sets meet Tier 4 (equivalent or better) emission standards.*

[89] *SB 553 (Sen. Srinivasan), Chapter 896. Requires certain water suppliers to report monthly potable and reclaimed water volumes, with specific reporting for data centers holding air permits.*

[90] *SB 94 (Sen. Roem) and HB 153 (companion), identical twin acts, Chapters 567 and 568, signed April 13, 2026. Require a pre-approval site assessment focused on noise to homes and schools within a defined buffer; localities may require evaluation of environmental and land-use effects. Industrial-zoning mandate dropped in conference. Existing approved facilities exempt where expansions stay under 100 MW.*

[91] *SB 253 (Sen. Lucas) and HB 1393 (Del. LeVere Bolling), shifting certain grid and capacity costs onto GS-5 high-load users and extending low-income weatherization and bill-assistance programs. Passed the General Assembly; amended by Governor Spanberger in the April reconvened session. SCC estimated the bills as passed could raise residential costs by at least $1.4 billion; the Governor's amendments reversed that trajectory and, supporters and Dominion argued, weakened the cost-shift. Virginia Mercury, "Governor amends bills that shift costs onto data centers," April 16, 2026; Clean Virginia, April 22, 2026.*

[92] *HB 897, conditioning favorable treatment on carbon-related commitments, died in the 2026 session.*

[93] *Virginia State Corporation Commission, new large-load rate class (GS-5), approved November 25, 2025, originating in a Dominion filing of September 2025. SCC Case No. PUR-2025-00058.*

[94] *Dominion 2024 Integrated Resource Plan, SCC Case No. PUR-2024-00184 (found legally sufficient without approval of spending magnitude). 2025 IRP Update, SCC Case No. PUR-2025-00184 (source of the residential-bill projections in Section 5 and the 47,045 MW of data center capacity under contract or study; the $64.7 billion capital plan is from Dominion's Q4 2025 investor materials, see [72]). The two dockets differ by one digit and are frequently conflated in secondary coverage; each is cited to its own number here.*

[95] *Virginia FY2027 budget impasse and resolution. The data center exemption was the central dispute from March through June 2026; the House released a plan on June 12 preserving the exemption, and the two chambers reconciled only at the end of June. Cardinal News and Virginia Mercury, June 22, 2026 (≈$205 billion budget advanced with the consumption tax); WHRO, June 22, 2026. Resolution detail in endnotes [98]–[100].*

[96] *Governor Abigail Spanberger, statement of May 28, 2026, that she would not break a signed contract, signaling protection for existing exemption certificate holders; consistent with her June 30, 2026 signature on a budget preserving the exemption. VPM News, June 2026.*

[97] *Heatmap Research on 2025 Virginia data center cancellations (25+, roughly 4× the 2024 rate, 21 in H2 2025); Data Center Watch on projects blocked or delayed nationally over 2024–25 with Virginia carrying a disproportionate share. Both as compiled in the project regulatory-context record.*

[98] *Virginia FY2026–2028 biennial budget, signed by Governor Abigail Spanberger on Tuesday, June 30, 2026 (≈$205 billion). The budget preserved the data center sales and use tax exemption and created a new tax on data center electricity consumption. Cardinal News, June 22, 2026; Virginia Mercury, "Virginia has a new two-year budget. Here's what lawmakers now require of data centers," June 30, 2026; Williams Mullen, "Virginia Budget Creates New Electricity Consumption Tax for Data Centers"; Kiplinger, "Virginia Approves First-of-Its-Kind Data Center Power Consumption Tax."*

[99] *Data center electricity consumption tax: $0.011 per kWh on electricity consumed by data centers, effective July 1, 2026, applied to utility-supplied, competitive-retail, and self-generated (behind-the-meter) power. Estimated ≈$600 million per year to the general fund, with an annual cap at that level and refunds if collections exceed it. Scheduled to sunset June 30, 2028. First payments due September 2026; the State Corporation Commission directed to issue implementation guidance within sixty days. Described as the first state-level tax on data center electricity use in the country. Greenberg Traurig, BDO, Hunton, and Williams Mullen client alerts, June 2026; Data Center Knowledge, "Virginia Approves First-Ever Data Center Power Tax."*

[100] *Additional budget provisions: the General Assembly directed its Joint Subcommittee on Tax Policy to study data center impacts during the 2026 interim, reviewing the recommendations and options in the 2024 JLARC report; and the budget (2026 Appropriation Act, Item 366, paragraph M) requires a data center in a Cooling Water Scarcity Area, before July 1, 2032, and a new data center in the Eastern Virginia Groundwater Management Area that submits a complete*

application for a DEQ air permit after January 1, 2027, to demonstrate that it has minimized the use of water for cooling; DEQ must set scarcity-area criteria by July 1, 2027 and, by October 15, 2026, deliver a study and plan on retrofitting existing data centers in the Eastern Virginia Groundwater Management Area to air cooling, 100 percent recycled water or stormwater, or closed-loop systems. Budget conference report item on the Joint Subcommittee on Tax Policy data center study; Virginia Mercury, June 30, 2026.

[101] *Prince William and Culpeper, July 2026. QTS filed notice on Thursday, July 2, 2026 withdrawing its Supreme Court of Virginia petition, ending the Prince William Digital Gateway (2,100 acres, up to 37 buildings, 22M+ sq ft) after a circuit court voided the rezoning in August 2025 and the Court of Appeals affirmed on March 31, 2026 for failed public notice. Virginia Business, "Prince William Digital Gateway data center project officially dies"; Virginia Lawyers Weekly and FOX 5 DC, July 2026. On Wednesday, July 8, 2026 the Prince William Board of Supervisors voted 8–0 to deny the roughly 2,000-acre Dulles Cloud South rezoning. Virginia Mercury and WJLA, July 8–9, 2026. Culpeper's Board of Supervisors approved the 69.19-acre Keyser Road data center 4–3 on Thursday, July 2, 2026, rezoning farmland from rural to light industrial. Data Center Dynamics, July 2026.*

[102] *Virginia Department of Environmental Quality, Groundwater Supply East of Interstate 95 (SJ 25 Report), July 2026, Sections 2.5.3–2.5.4 and Table 10. Nine simulated withdrawals of 3 Mgal/day (the published upper end for evaporative-cooled hyperscale demand); all failed the technical-evaluation criteria for permitting. Maximum passing volumes: 360,000 gal/day at Surprise Hill (Northumberland County); 180,000 at the Northern Neck, Middle Peninsula, and Eastern Shore centroids; 120,000 at the York-James and Southeast Virginia centroids; 60,000 at the Northwest Coastal Plain centroid (Caroline County); below 30,000, the lower limit of analysis, at the Middle James (Henrico County) and Chowan (Sussex County) centroids, both located in cells already critical under the baseline simulation.*

[103] *SJ 25 Report, Section 4.2, Recommendations 1, 2, and 5; 9 Va. Admin. Code § 25-610-340 (the 80 percent drawdown criterion); Va. Code Ann. §§ 15.2-2210, 15.2-2223 (current comprehensive-plan authority, which permits but does not require groundwater-availability planning).*

[104] *Senate Joint Resolution No. 25 (2024) (Sen. Richard H. Stuart), reprinted in SJ 25 Report, Section 1.1; report due the first day of the 2026 Regular Session. Release history: Lauren Hines-Acosta, “Average water levels dropping in Virginia’s Potomac Aquifer,” Bay Journal, April 28, 2026 (findings briefed, recommendations withheld pending the Governor’s review); Friends of the Rappahannock, press*

release and letter to Gov. Spanberger, July 20, 2026 (publication six months overdue); report published, dated July 2026, within days of the letter.

[105] *SJ 25 Report, Section 2.5.2, citing JLARC, Data Centers in Virginia, Report 598 (2024) (83 percent of facilities at approximately 6.7 Mgal/year; building-level range under 0.5 to over 100 Mgal/year); groundwater approximately 7 percent of reported public water supply withdrawals in 2024; Bay Journal, April 28, 2026 (DEQ: no data center groundwater-cooling permits in the management areas). A typical 100 MW hyperscale campus is estimated at roughly 300,000 gal/day across about 3.2 million square feet; 3 Mgal/day corresponds to roughly 1,000 MW of IT load.*

[106] *SJ 25 Report, Section 2.6 (quoted synthesis; ligature in original) and Key Points 5 and 7 (Franklin Mill closure rebound consumed; Potomac aquifer declines expected to resume within five to ten years under current conditions).*

[107] *SJ 25 Report, Section 4.2 and Executive Summary recommendations: appropriations of $1,020,000 (FY 2027) and $720,000 (FY 2028) for five FTEs, monitoring equipment, and an aquifer-recharge siting study; Recommendation 11 preconditions for groundwater trading; Recommendation 12 and Va. Code Ann. § 62.1-44.15:6 B3 ($9,000 groundwater permit fee cap; FY 2025 fee revenue of $381,000 against an approximately $4 million program).*

[108] *Tommy N. Turner, The Aquifer Says No: DEQ's SJ 25 Groundwater Study and the Data Center Question East of I-95, v1.0 (July 2026), concept DOI 10.5281/zenodo.21556435 (cite-all-versions; v1.0 = 10.5281/zenodo.21556436). Published in the same series and communities as this volume.*