
INDEPENDENT CASE STUDY

Hanover County, Virginia

A Data Center Case Study

Mountain Road, Tract, and the Search for Leverage

Companion to What Virginia Is Spending, What Virginia Is Getting (v5.3)

Hanover

Prepared by Tommy Turner

Williamsburg and Christiansburg, Virginia

September 11, 2026 · Version 3.0

DOI: 10.5281/zenodo.22729668 ORCID: 0009-0005-7422-9881

CASE STUDY: HANOVER COUNTY

Mountain Road, Tract, and the Search for Leverage

Series: Companion to What Virginia Is Spending, What Virginia Is Getting (v5.3)

Evidence snapshot: September 11, 2026

Prior snapshot: June 12, 2026 (v2.0)

Version: 3.0 (supersedes v2.0, June 2026)

Author: Tommy N. Turner

Location: Williamsburg and Christiansburg, Virginia

Contact: 757-784-0979 · tommy@gofast.pro · [linkedin.com/in/tommyturner](https://www.linkedin.com/in/tommyturner)

ORCID: 0009-0005-7422-9881

DOI (concept, all versions): 10.5281/zenodo.20672048

DOI (v2.0): 10.5281/zenodo.20672049

DOI (v3.0): 10.5281/zenodo.22729668

Published: June 2026 (v2.0) · Revised September 2026 (v3.0)

Companion case studies in this series:

Case Study: Henrico County — How Two Neighborhoods Forced Virginia's Second-Largest Data Center Jurisdiction to Change Course

Case Study: Orange County — Amazon, Wilderness Crossing, and the Prospective Bet

Case Study: Prince William County — Governance Capture, the Revolving Door, and the Democratic Correction

Case Study: Chesterfield County — Google, CFS, and the Industrial Corridor

Case Study: The Google-CFS Power Purchase Agreement

Version note: v3.0 supersedes v2.0 (June 2026). **The change is documentary rather than incremental.** v2.0 wrote the May 27 hearing, the vote, the proffer record and the water analysis from contemporaneous press coverage, marking seven claims as secondary. This version replaces that account with the county's own record: the adopted minutes of May 27 and June 24, the meeting recording, the May 15 staff report, the 619-page case background packet, the executed April 30 proffer instrument, the March 24 hydraulic memorandum, and both presentations made to the board. Where those documents and the press accounts differ, the documents govern and the difference is stated. The record is carried forward to September 11, 2026, which brings in the June 24 rate decision, the enactment of Va. Code § 15.2-2209.5, and the Tradeport case through its August 20 recommendation. Endnotes retain v2.0's numbering; notes added in this version carry letter suffixes at the point of first use. Research framework references follow the series role-label convention.

Disclosure: The author serves on the advisory board of the Alfred P. Sloan Foundation-funded Emory University study of data center expansion in Georgia, Tennessee, and Virginia, a seat accepted July 9, 2026 that carries a one-time honorarium. It is an advisory relationship, not a funding relationship. No part of this work was funded by the Sloan Foundation, by Emory University, or by any party named in it.

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ABSTRACT

On the night of May 27, 2026, the Hanover County Board of Supervisors refused Tract's Mountain Road Technology Park: 427 acres, 900 megawatts, and the most contested land-use decision the county had faced since it began courting the data center industry. It was not the largest: Hickory Hill, approved unanimously two years earlier, is 1,211 acres and 2.4 gigawatts. The refusal took six roll calls on the three applications. Three motions to approve failed 3-4; the county attorney advised that an alternate motion was required; the district supervisor who had carried the case for nine months declined to make it; and three motions to deny then carried 4-3.

The county refused an application it had no instrument to evaluate. Hanover's zoning ordinance contains no definition of a data center — the use is admitted under a category staff dated to 1979 and told the board admits "smaller-scale" data centers by right in many commercial districts and all industrial districts, without defining the term. There was no data center ordinance and no comprehensive plan policy; by August staff were projecting twelve to eighteen months to produce one. The end user was undisclosed and, as the board's chair observed, irrelevant as a matter of land use law; what mattered was that the impacts could not be stated. Every quantity describing the project — its demand, its emissions, its employment, its tax yield — came from the applicant.

That reading rests on the adopted minutes and the meeting recording rather than on press accounts, and it is clearest in what did not save the application. The proffered noise limits bound the project to 57 dBA by day and 52 at night on a site to be rezoned M-1, where the receiving limit is 77 day and night, and added dBC limits the ordinance does not contain — which county staff told the board would make it the first project in Hanover to set them. Noise appears in none of the four denial rationales. The applicant's engineer told the board the two-million-gallon peak could be reduced by subtracting a fire-flow allowance, while his own consultant's hydraulic memorandum treats that figure as the development's maximum day demand with fire modelled separately. County staff told the board the development would use roughly ninety percent of the Elmont pressure zone's available capacity if no improvements were made.

What followed is the finding's second half. Four weeks after the refusal the board adopted its existing \$0.45 equipment rate for one calendar year and referred the question to committee for an FY2028 recommendation. No ordinance was written. On August 20 the planning commission recommended approval of the next data center rezoning with two disclosures required by a new state statute still outstanding, having cut that application's water cap from 1,200,000 gallons a day to 350,000 on the floor of the hearing.

Hanover and Henrico are usually described as opposite poles of the regional decision space. They are better read as the same institutional gap found at different points in the sequence: Henrico after eight million square feet were entitled, Hanover with one campus approved and not yet energized. The evidence is organized for an interdisciplinary research audience, with findings mapped to five frameworks: distributional justice, institutional behavior, utility finance, energy and labor infrastructure, and energy geography.

PURPOSE, SCOPE, AND METHOD

This case study documents the arc of data center development in Hanover County, Virginia, from the county's initial economic development designations in 2013 through the Board of Supervisors' rejection of the Mountain Road Technology Park on May 27, 2026, and the post-rejection record through September 11, 2026. The companion Henrico County case study documents a regulatory reversal completed after the largest entitlements were granted. This case documents an earlier point in the same sequence: a county that said no before construction, with its leverage intact, and then did not use it.

The five research frameworks used throughout are those of an interdisciplinary team whose work spans ethnographic and institutional analysis, environmental and distributional justice, energy geography, utility finance, and energy labor studies. Following series convention, this document refers to them by type of work rather than by individual researcher.[1] The evidence connects directly to those frameworks: the distributional justice framework applies to the income profile of the Mountain Road corridor and to the county's earlier record at Brown Grove; the institutional behavior framework illuminates the framework-invitation paradox, the proffer escalation, and the politics of a 4-3 board absorbing the cost of a 900-megawatt no; the utility finance framework speaks to the depreciation arithmetic, the developer-commissioned tax projection, and the rate decision; the energy, labor, and infrastructure framework applies to the water system capacity question and the generator arithmetic; and the energy geography framework applies to the regional diffusion pattern that brought the proposals to Hanover in the first place. These connections are flagged inline, and Part Ten consolidates them into a reading guide organized by specialty. This document is written to serve as a reference as well as a public case study; the gaps-in-the-record section in Part Eleven identifies what remains unretrieved and how it could be obtained.

It is written for Virginia localities currently considering data center proposals. Hanover's record is the most complete available account of a county holding that leverage, and of what it did with it. It is also written for citizens and journalists seeking to understand the institutional dynamics of data center siting in a rural Virginia county.

A note on method. This study is built entirely from public sources: the adopted minutes and meeting recordings of the Board of Supervisors and Planning Commission, county staff reports and presentations, the executed proffer instrument and the case background packet, applicant filings and presentations, state regulatory filings, census data, and local news coverage, principally Richmond

BizSense, VPM News, WTVR, WRIC, WWBT, the Henrico Citizen, and The Center Square. No interviews were conducted.

Quotation practice, which changed between v2.0 and this version. Where a supervisor, official or resident is quoted directly, the source is either contemporaneous press reporting or the author's own transcription from a meeting recording, and the endnote says which. **The adopted minutes render deliberation in reported speech and are not a transcript; no quotation in this document is drawn from them.** Passages from the May 27 recording were transcribed and checked by ear against the audio. Part Eleven states what has been retrieved and what has not. The companion report, What Virginia Is Spending, What Virginia Is Getting (v5.3), covers the statewide fiscal picture, the ratepayer exposure, and the employment evidence.[2]

PART ONE: THE INFRASTRUCTURE POSITIONING

Hanover County, population approximately 115,300, occupies roughly 474 square miles north of Richmond.[3] Seventy-eight percent of its land sits outside the Suburban Service Area. The real estate tax rate has been \$0.81 per \$100 since 2007. Median household income is \$112,805. It is the kind of county where the comprehensive plan still uses the phrase “rural character” without irony, and where voters have historically rewarded supervisors who kept taxes flat and development controlled.

The data center proposals that arrived in 2023 through 2025 did not arrive by accident. They arrived at the end of a planning sequence that began with general economic development designations and progressively oriented toward large-scale industrial use, including data centers, starting around 2019.

The Economic Development Zone

In 2013, Hanover County designated the Route 33 corridor as an Economic Development Zone, signaling to site selectors that the county was open for large-scale industrial investment in an area that had historically been agricultural.[4] In FY2019, the county participated in the Virginia Business Ready Sites Program, submitting eleven sites totaling more than 1,300 acres for tier characterization.[5]

The county adopted the Strategic Zoning Initiative in January 2015, which reduced rezoning fees to a flat \$1,100, allowed developers to defer expensive studies from the rezoning stage to the site plan stage, and provided relief from rollback taxes associated with changing a property’s use from agricultural to industrial.[6] Properties rezoned under the SZI became eligible for entry into state and regional marketing databases, including the Virginia Business Ready Sites Program. A broadband master plan followed in 2020. The 2023 Envision Hanover comprehensive plan update designated the Route 33 corridor as an “Employment Center.”[4]

The Route 33 Gateway Small Area Plan

The culmination was the Route 33 Gateway Small Area Plan, adopted by the Board of Supervisors on August 27, 2025.[7] The plan covers approximately 950 acres and explicitly identifies data centers as “preferred business types” within the corridor. The designation is contingent on infrastructure readiness and compatibility with the corridor’s role as an entrance to the I-295 interchange. It was adopted one month before Tract filed its zoning application for Mountain Road.

The corridor designation began in 2013 for general industrial and economic development purposes. The progression toward data centers specifically is visible

from 2019 forward. By the time the first public hearing occurred, the planning framework was already in place. That framework was adopted through public processes with elected officials voting at each stage, but the practical effect was that data center proposals arrived in a corridor already designated to receive them. What no one tested until 2026 was whether the framework's invitation bound the board that issued it.

The Socioeconomic Profile of the Corridor

The Mountain Road corridor falls primarily within Census Tracts 3202 and 3210.02. [8] Census Tract 3202, which encompasses the area closest to the proposed site, has a population of 6,094, a median household income of approximately \$38,064, and a median age of 46.2. Its racial composition is 84.4% White and 11.2% Black. Census Tract 3210.02 reports a population of 7,476 and a median household income of approximately \$47,174. Both income figures sit well below the countywide median of \$112,805.

The income disparity is significant. The corridor where the county concentrated its data center planning has a median household income roughly one-third of the county average. The racial composition of Census Tract 3202 does not mirror the environmental justice pattern documented in the companion Henrico case study, where the county's most intensive industrial uses were concentrated in the Varina District, a majority-Black community with a median income of \$74,227. The Hanover corridor is predominantly White, and the distributional concern here is economic rather than racial: the infrastructure burden was planned for the county's lowest-income corridor while the fiscal benefit would flow to the county budget at large. For the distributional justice framework, the finding is that income-based siting patterns can produce the same structural inequity as race-based ones, even in demographically different communities.

The educational infrastructure reinforces this picture. John M. Gandy Elementary School, which serves the Winns Church Road portion of the corridor, reports 83% of students classified as economically disadvantaged.[9] In the companion Henrico case study, George F. Baker Elementary, the school nearest the proposed Varina data center, reported 93% economically disadvantaged. The parallel is not racial (Gandy's corridor is predominantly White; Baker's is 89% Black) but economic: in both counties, the schools closest to proposed data center sites serve the most economically vulnerable student populations.

A note on Census Tract 3210.02: the 2020 Census geographic vintage may have renumbered this tract. Census Reporter lists Tract 3210.04 for Hanover with a median household income of \$122,588, well above the county median. If Tract 3210.04 is the current designation for the area between the project site and the

Henrico line, the corridor is not uniformly low-income; it includes a low-income tract (3202 at \$38,064) adjacent to an above-median tract. Researchers should verify the current tract boundaries through the Hanover County GIS portal before treating either income figure as representative of the entire corridor.

The County's Distributional Record: Brown Grove

Hanover's 2026 rejection of Mountain Road was not the county's first contested siting decision, and the contrast with its prior record matters for any distributional reading. Brown Grove, a community near Ashland founded in the Reconstruction era by formerly enslaved people, fought the county's 2020 approval of a 1.1-million-square-foot Wegmans distribution center sited amid its homes, its church, unmarked graves residents attribute to the community's founders, and the wetlands feeding its wells.[10] The county approved that project over the community's objection; litigation and an appeal followed; the facility was built. The Brown Grove Rural Historic District subsequently received state recognition in 2022 and a national historic designation, recognition that arrived after the warehouse did.

The two episodes are separated by geography (Brown Grove sits roughly fifteen miles from the Mountain Road site), by land use, and by six years. They are not a controlled comparison, and this study does not treat them as one. But they are the county's two most visible siting fights in a decade, and they resolved in opposite directions: a historic Black community's opposition to a distribution center failed in 2020; a predominantly White rural corridor's opposition to a data center campus succeeded in 2026. Whether that difference reflects the intervening shift in regional politics around large-scale industrial land use, the difference in the projects' demands on county infrastructure, or the difference in whose objection the institution weighed, is precisely the kind of question the distributional justice framework exists to ask. The record needed to answer it is identified in Part Eleven.

PART TWO: THE BEAVERDAM APPROVAL

Tract purchased 1,211 acres in Beaverdam for \$32.7 million in May 2024, acquiring the parcels from Blenheim Associates, South Wales Farm LLC, and Tjitse Jozef De Wolff.[11] The property was rezoned from A-1 to M-1 with unanimous Board of Supervisors approval on March 27, 2024.[12] The Planning Commission had unanimously recommended approval in January 2024. The Board initially deferred its vote from February 28 to March 27 after hearing from residents.

The approved campus, designated Hickory Hill Technology Park, envisions 2.4 gigawatts of power capacity. According to Baxtel, an industry tracking site, the campus could include 30 to 46 buildings and up to 9 million square feet of data center space; no primary county filing has confirmed these figures.[13] The developer projects 800 or more permanent employees and \$1.78 billion in tax revenue over 20 years.[14] Neither the job projection nor the tax projection has been independently verified by any county or state institution.

The proffers include \$3.5 million for improvements to Hickory Hill Road and \$100,000 for Washington Lacy Park, totaling \$3.6 million in cash.[15] Energization is targeted for 2028. Construction is underway.

The site is zoned for by-right data center use, and that phrase carries more weight than v2.0 gave it. Hanover's zoning ordinance contains no definition of "data center." The use is admitted under a category headed *Data processing center, ISPs, search portals and related services*, which county staff dated for the board on May 27 to "as early as 1979," and which is permitted by right in the B-O, B-2, OS, BP and M-1 districts. Staff put it on a slide in those terms: smaller-scale data centers are "permitted by-right in many commercial zoning districts and all industrial districts," with at least one already operating near the airport.[15a] The slide does not define "smaller-scale," and what distinguishes a by-right facility from one requiring a rezoning is therefore unstated on the face of the record.

The consequence runs through everything after. A campus that needs a rezoning is a campus the board can refuse. A campus that lands on land already zoned M-1 files nothing, triggers no public hearing, and — after July 2026 — triggers none of the assessments § 15.2-2209.5 requires before a rezoning is approved.

Hickory Hill is the approval that frames everything after it. When the board rejected Mountain Road in May 2026, it was not rejecting the industry; it had already admitted the industry at nearly three times the acreage and more than two and a half times the power capacity. What it rejected was a second campus, in a different corridor, on terms the majority found inadequate. Every infrastructure question raised at Mountain Road, water, power, roads, ratepayer cost, compounds when

assessed against the campus already approved rather than in isolation. No document produced for either case performs that cumulative assessment. Scope: the Mountain Road staff report and background packet, the county's May 27 presentation, and the Dewberry hydraulic memorandum, which model this development in the Elmont pressure zone and not the two campuses together.

PART THREE: THE HUNTING HAWK DENIAL

HHHunt proposed a data center campus on approximately 468 acres near the Wyndham community in the South Anna District, with plans for 10 buildings totaling 3.9 million square feet.[16] The site had a complicated backstory. In 2019, the Virginia Supreme Court ruled in *Loch Levan Land v. Board of Supervisors* that Henrico County could abandon plans to extend Dominion Club Drive, finding that HHHunt did not have a vested right to the road's continuation and that no "public necessity" existed for it.[17] That ruling effectively blocked HHHunt's path to residential profitability in the corridor, providing context for the firm's pivot to data center development.

The proposal required a comprehensive plan amendment to reclassify the site from residential to industrial use, a higher procedural bar than a straight rezoning.

The Planning Commission voted unanimously to recommend denial on January 15, 2026, finding that the proposal failed to comply with the county's rural character standards.[16] HHHunt withdrew the application on January 28, 2026.[18]

The opposition was organized and sustained. Brandy Banton of Friends of Hanover, Beth Clarke of Neighbors for Change, and Amy Mendelson-Cheeley, a former planning commissioner, coordinated community turnout. Dan Ryker, general manager of the Dominion Club, organized residents in the adjacent Wyndham community. Supervisor Susan Dibble called the project "simply not a good project in the right place." [19]

The Hunting Hawk denial demonstrated that organized opposition could succeed in Hanover County, even against a politically connected regional developer. The opposition was also a cross-boundary phenomenon: Wyndham, the community that organized against the project, sits on the Henrico side of the line, and its residents are the same constituency whose resistance helped drive Henrico's 2025 regulatory reversal, documented in the companion case study. What Hunting Hawk did not test was the framework itself: the proposal sat outside the corridor the county had designated for data centers, and denying it cost the county nothing it had planned for. Mountain Road, inside the designated corridor, with the Small Area Plan's "preferred" label attached, was the test that counted.

PART FOUR: MOUNTAIN ROAD TECHNOLOGY PARK

The Project

The Mountain Road Technology Park was a proposed 427-acre data center campus at 13074 Mountain Road and 12517 Winns Church Road, in the western corner of the county near the Henrico line. The developer is Tract, a Denver-based data center land developer. Tract's CEO, Grant van Rooyen, founded Cologix in 2010 and led the company through recapitalizations valued at approximately \$1.4 billion (2017, Stonepeak Infrastructure Partners) and approximately \$4 billion (2022, equity recapitalization plus asset-backed securitizations) before founding Tract Capital Management.[20] Legal counsel is Jeffrey P. Geiger of Hirschler. Engineering is by Norris Design and Kimley Horn.

The application consisted of three linked cases: REZ2025-00023 (rezoning from A-1 to M-1), CUP2025-00016 (conditional use permit for substations), and a special exception for building heights.[21] The project proposed 900 megawatts of power capacity, six buildings at 150 megawatts each, and 2.6 million square feet across five building areas covering 131 acres. Building heights would have reached 62 feet in most areas, with a 35-foot limit within 350 feet of Winns Church Road. Construction was projected to begin around 2027, with full buildout by 2035 and energization in the fourth quarter of 2029. Tract's business model is to acquire land, secure entitlements, and build out utility connections before selling or leasing sites to end users; the operators of the buildings were never identified. Tract projected 300 to 350 people employed on a fully built campus.

Tract had already withdrawn a 744-acre data center proposal in Chesterfield County after the planning commission there recommended denial, citing water and noise concerns.[22] That withdrawal is relevant context for what followed in Hanover: the company has demonstrated willingness to walk away from jurisdictions where regulatory friction is high, and it chose to ride the Hanover application all the way to a board vote instead.

The Parcels and Ownership

The property was assembled from parcels owned by Marchetti Properties III LLC, Marchetti Properties II LLC, Staples Mill Square Holding LLC, G.M. Tribble Jr. and Brenda R. Tribble, and Tyson Farms Inc. (formerly known as Holly Farms Foods and Holly Farms Poultry Industries). The applicant entity is VALCO Hanover County Four, LLC (Tract). Jeffrey P. Geiger held power of attorney for all owners.[21]

The Tyson Foods Comparison

The former Tyson Foods chicken processing plant at 13264 Mountain Road closed on May 12, 2023, laying off 692 employees.[23] The facility operated under Holly Farms before Tyson acquired the company in 1989.[24] The plant was approximately 208,000 square feet on 53 acres. It held a water allocation of approximately 800,000 gallons per day. The property sold for \$5 million in August 2025 to Hanoverlovestheproperty LLC.[25]

Tract's own applicant response letter notes that the project's average water demand could be met by capacity "made available through the closure of a nearby facility, and the relinquishment of its 800,000 gallons/day allocation." [26]

Metric	Tyson Foods (closed)	Mountain Road Tech Park
Permanent employees	692	300-350 (developer est.)
Water (GPD)	800,000 (permitted allocation)	600,000 (projected avg)
Water (peak GPD)	N/A	2,000,000
Electricity demand	Industrial (modest)	900 MW
Acreage	~53 acres (plant site)	427 acres

The comparison is instructive but imperfect. The 800,000 GPD figure is Tyson's allocation, not its verified average daily use, which may have been lower. Tract's filing treated the full allocation as available capacity, and county staff repeated the framing, reporting to the board that Tract's water request was less than the allocation approved for the shuttered plant. The employment differential (692 versus 300-350) does not account for construction-phase employment, which could reach an estimated peak of 1,300 jobs during buildout per county tax projection documents; broadcast coverage of the final hearing reported the developer's claim of roughly 1,000 construction jobs. The JLARC December 2024 report confirmed that while permanent data center employment is limited (roughly 25 to 50 per building), the construction phase drives temporary local economic surges in retail and lodging. [27] The construction employment is temporary; the permanent employment differential is not.

The Proffers: Four Rounds

The proffer record for Mountain Road exists in four versions, and the differences among them document how scrutiny repriced the developer's commitments as approval grew less certain.

Round one. The February 19, 2026 Voluntary Proffer Statement, submitted for the first hearing, contained one revision from the original filing: the maximum building height in Building Areas 2A and 3A was reduced from 85 feet to 62 feet.[28]

Round two. After the Planning Commission voted unanimously to defer, directing Tract to increase buffers, clarify water usage, address construction traffic, and incorporate staff-recommended conditions, Tract submitted a substantially revised proffer statement dated March 5, 2026.[21] The March 5 proffers committed to the following:

Land use restrictions: Development limited to data processing, ISPs, data centers, data storage, and related services. Supporting uses (offices, substations, logistics, water treatment) require CUP or Special Exception approval from the Board.[21]

Natural perimeter buffers: 200 feet along Route 33, 300 feet along Winns Church Road (increased from 200 feet in the February version), 150 feet on the northwest, 200 feet along Grassy Swamp Creek and the Chickahominy River, and 50 feet along existing commercial boundaries, with vegetation inventory requirements, supplemental planting standards, and construction protection measures.

Screening: A double row of large evergreen trees behind the 300-foot Winns Church buffer (not present in the February version). Transmission infrastructure in weathering steel or similar earth tone.

Building setbacks: 250 feet from Route 33 right-of-way, 200 feet (changed from 300) from Winns Church Road right-of-way, 200 feet from southern and eastern boundaries, 50 feet from existing commercial.

Building design: Earthtone palettes, no high-gloss or white finishes, four architectural articulation elements per facade, rooftop mechanical equipment screened by parapets, accent materials limited to 20% of any facade.[28]

Noise attenuation: A post-operational noise study within 30 days of each building's ready-for-service date, conducted by a certified professional, with mitigation required within 60 days if the facility exceeds the Noise Ordinance. Physical sound attenuation (barriers, earthen berms, mechanical screening) required on equipment installed within 1,200 feet of adjacent residential use.[29] Hanover's Noise Ordinance (Section 16-10) sets property-line limits of 57 dBA during the day and 52 dBA at night at adjacent residential property lines, more restrictive than Louisa County's Technology Overlay District standards of 65/60 dBA.[30] The proffers committed to compliance, but enforcement would have occurred after each facility was operational, not before approval.

Generator restrictions: Testing limited to 8:00 AM to 4:00 PM, Monday through Friday (narrowed from 7:00 AM to 7:00 PM Monday through Saturday in the February version), Tier IV units only. Generator scale deserves specific attention. Backup generation is commonly sized at 1.5 to 2.0 MW per 1 MW of critical load, a ratio this study reports rather than sources, implying roughly 350 to 500 individual generators at approximately 3 MW each for a 900 MW campus — a figure that does not follow from those two numbers at the backup ratios the industry uses, and which Part Eleven lists as unresolved — each subject to an annual testing limit given in the record as 50 hours, a figure this study has not traced to a regulation.[31] Even with the proffered constraints, the aggregate scale of backup generation on a single campus remained a live consideration for noise, emissions, and fuel storage.

Water: Connection to county water and sewer, private wells prohibited, single-pass cooling prohibited, developer-funded on-site water storage.

Transportation: Maximum two entrances on Route 33, no construction or regular data center traffic on Winns Church Road, right turn lanes at primary and secondary entrances per VDOT standards, a construction management plan, a pavement damage bond covering Route 33 from I-295 to the northernmost entrance, and a 60-foot right-of-way dedication along Winns Church Road for future widening.

Trail: A public walking trail along the Chickahominy River and Grassy Swamp Creek with trailhead, parking, and phased construction tied to building occupancy.

Cash: A Trail Maintenance Contribution Fund of \$30,000 per building area (three areas), totaling \$90,000, plus a returnable \$50,000 construction road damage bond.

Round three. Between the commission’s April 16 recommendation and the board’s May 27 vote, the package grew again. In the course of negotiating the zoning case, Tract agreed to pay \$15 million to Hanover for the design and construction of a pump station and water storage tank at the project site. The company added limitations on when commercial vehicles could access the site, further road improvements, and an offer to pay the Hanover Sheriff’s Office to conduct traffic control during peak construction hours. After the planning commission’s vote, Tract added a proffered agreement allowing the county’s planning director to request additional noise studies at the owner’s expense up to once per year. The resulting instrument, a twenty-three-page Voluntary Proffer Statement dated April 30, 2026, was executed on May 5 by Jeffrey P. Geiger as attorney-in-fact for all six owners. It carried seventeen numbered conditions.[32]

Round four. Six days before the vote, the package changed again. The county’s own presentation to the board on May 27 carried a slide headed “Revisions Since Packet Distribution — Revised Proffers: May 21, 2026,” describing “more restrictive

proffers” and listing seven changes: the ecological restoration area clarified as undeveloped; the permitted nighttime sound level reduced from 52 dBA to 50; generators limited to emergency backup only; a new prohibition on on-site energy generation using gas turbines; wells clarified as strictly prohibited; language restricting the use of PFAS; and a cash contribution of \$6,000,000 for land conservation and parks. Tract’s own presentation for that meeting indexes **eighteen** proffers, one more than the executed April 30 instrument, the eighteenth being Land Preservation.[32a] The posted copy of that deck was created on June 1, five days after the hearing; whether it is identical to what was projected is not established.

The May 21 instrument itself is not in the county’s posted case file. Both presentations enumerate it; neither reproduces it. What follows describes the April 30 text where the instrument is the source, and says so where the only source is a slide.

The escalation tells its own story. The cash component of the package moved from \$90,000 in early March to roughly \$21 million by late May, a 234-fold increase in eleven weeks, almost all of it added after the proposal ran into organized opposition and a deferral. Proffers are voluntary in form but priced by resistance. The March version reflected what Tract believed approval cost when the commission was the obstacle; the May version reflected what it believed approval cost when four votes on the board were.

What Was Never Committed

What the final package did not contain is narrower than it first appears, and the distinctions matter.

It contained **no per-acre or absolute water cap** — none appears in the April 30 instrument, and neither presentation to the board lists one among the May 21 revisions. Every volume in Proffered Condition 16 sizes infrastructure rather than withdrawal: a 15 MGD booster pump station, two 1 MG storage tanks, an initial pumping capacity of 5 to 7.5 MGD. The 600,000 and 2,000,000 gallon figures appear only in the applicant’s April 2 letter and were never proffered.[33a]

It contained **no decommissioning obligation for the data centers** — none appears in the April 30 instrument, and none is among the seven changes the county listed for May 21. The only decommissioning language located in the case file is staff’s recommended Condition 7 on the conditional use permit, which requires written notice within sixty days of a substation permanently ceasing operation and dismantling within one hundred eighty days. It reaches the substations and not the campus they serve. Those conditions were recommended, never adopted; the CUP was denied.[33b]

And it contained **no cash contribution to the \$53 million Mountain Road widening** — none appears in the April 30 instrument, in either presentation to the board, or in the staff report’s proffer analysis.

It did contain pre-operational noise limits. Proffered Condition 13(a) of the April 30 instrument binds the project, from approval, to 57 dBA by day and 52 at night, and additionally to 73 dBC by day and 68 at night, measured at the exterior boundary lines; the May 21 revision tightened the nighttime figure to 50 dBA. County staff’s own analysis said the proffered dBA levels “align with standards set forth in the Hanover County Noise Ordinance” and noted that the ordinance “does not set maximum dBC levels, and (if approved) this would be the first known project to set maximum dBC levels.” What the package lacked was pre-operational **verification**: Condition 13(b) triggers the required study within thirty days *after* the ready-for-service date, which is to say after the building is built, energized and running.[33c]

The comparison across Virginia jurisdictions is therefore less unflattering than the March round alone suggests:

Jurisdiction	Buffer (max)	Noise limits	Water controls	Other
Hanover (Mtn Road, March)	300 ft	57/52 dBA, matching the residential ordinance	No single-pass	\$90K cash proffers
Hanover (Mtn Road, April 30)	300 ft	57/52 dBA and 73/68 dBC, against an M-1 receiving limit of 77/77	No single-pass; wells barred for cooling; no volumetric cap	\$15M water infrastructure
Hanover (Mtn Road, May 21)	300 ft	50 dBA at night; 73/68 dBC	Wells “strictly prohibited”; PFAS restricted	+ \$6M conservation
Chesterfield (Tract)	725 ft	75/65 dB day/night	2,000 GPD/acre	Conditional use req’d
Prince William (Tier 3)	1,320 ft	DEQ Tier 4	Runoff testing	Decommissioning escrow
Loudoun (post-2025)	500 ft	Phase 2 pending	Phase 2 pending	SPEX required

Sources: Chesterfield ZOMod (January 2026); PWC Sustainability Commission draft recommendations (March 2025); Loudoun ZOAM-2024-0001 (March 2025).[33] The Hanover rows are the proffered limits, not the ordinance’s. The site was to be rezoned M-1, where Chapter 16’s receiving limit is 77 dBA day and night; the proffer

bound the project twenty decibels tighter by day and twenty-five at night under the April 30 instrument, twenty-seven under the May 21 revision, and added a dBC limit the ordinance does not contain. Staff told the board the proffered dBC levels aligned with Prince William County's, which they said had recently adopted dBC standards; that comparison has not been checked against the Prince William ordinance.[33d]

The \$53 Million Road

The Mountain Road widening from two to four lanes, from the Henrico County line to Winns Church Road, is a county corridor project that appears in the CIP independently of the data center proposal.[34] On March 20, 2026, Hanover County received \$4 million from the Central Virginia Transportation Authority for engineering and planning.[35] The overall project is estimated at approximately \$53 million per Richmond BizSense reporting, with the CIP allocating \$31.5 million through FY2031; after the CIP allocation and the CVTA grant, approximately \$17.5 million remains unfunded.[36] No Tract cash contribution to the widening appears in the documents listed above. Jo Ann Hunter, Hanover's planning and community development director, told Richmond BizSense the area is "prime for economic development" with "great proximity to I-295." [36]

For scale: the replacement of Mechanicsville Elementary School is budgeted at \$50 million.[37]

The EY Tax Analysis

Tract contracted Ernst & Young to produce a tax generation analysis.[38] The 15-year revenue projection beginning in 2030 totaled \$901 million: \$445 million in real property taxes at the \$0.81 rate and \$456 million in business personal property taxes at the \$0.45 rate. This was a developer-commissioned analysis and was never independently verified. Broadcast coverage of the final hearing rounded the claim to about \$900 million over 20 years; the EY document itself uses a 15-year horizon from energization.[39]

Under Virginia Code § 58.1-3285, the commissioner of the revenue is required to reassess any rezoned parcel at fair market value, so the assessed value of land rezoned from agricultural to industrial rises substantially whether or not construction begins.[40] The projection's disclosed parameters (15-year horizon, the county's published depreciation schedule, 2% annual real property appreciation, fixtures classified as real property) allow partial structural evaluation; the personal property replacement-cycle and phasing assumptions remain undisclosed.[41] The \$456 million personal property component also assumed the \$0.45 equipment rate,

a number the board had put in question five weeks before it rejected the project that the projection was commissioned to support.

Key Numbers

	Mountain Road	Hickory Hill	Combined (if both)
Acreage	427	1,211	~1,638
Power	900 MW	2,400 MW	3,300 MW
Buildings	6	30-46	36-52
Sq footage	2.6M	~9M (reported)	~11.6M
Projected jobs	300-350	~800	~1,100
Water avg GPD	600,000	~700,000 (VPM)	~1,300,000
Cash proffers (final)	~\$21M offered	\$3,600,000	—
Tax est.	\$901M / 15 yr (EY)	\$1.78B / 20 yr (Tract)	Not comparable
Outcome	Rejected 4-3	Approved, building	—

PART FIVE: THE DECISION

The Hearings

February 19, 2026. First planning commission hearing. Over 2.5 hours of testimony; approximately 30 speakers in opposition and roughly 6 in favor, per WWBT and WRIC reporting.[42] Commissioner Larry Leadbetter moved deferral; the vote was unanimous. The commission directed Tract to increase buffers, clarify water usage, and address construction traffic.

March 9, 2026. Balloon test conducted at three locations on the property.

March 19, 2026. Second hearing. The applicant requested deferral and did not present. A community rally formed outside.[43]

April 16, 2026. The commission voted 6-1 to recommend approval. The lone dissent came from the Ashland district's commissioner, Alan Abbott: "Right now, I think the traffic is a problem. I think having too many data centers when we don't know the impact of it is problematic." [44] The recommendation moved the case to the Board of Supervisors with the staff analysis noting the project's general alignment with the comprehensive plan's vision for the site, which has called for business uses there since the late 1990s.[45]

May 27, 2026. The Board of Supervisors heard the case at a meeting that ran five hours and forty-four minutes, from 6:00 p.m. to adjournment at 11:44. Chair Davis structured the hearing in advance: two hours of public comment, an hour for Hanover residents in opposition followed by three non-residents, the same schedule for those in favor, and forty-five minutes for the applicant with time reserved for rebuttal. The adopted minutes list the speakers by name and district in three blocks — **twenty in opposition, eight in support, and eleven more under open comments, every one of the eleven recorded as opposition.** Two candidates for the First Congressional District testified, both recorded in opposition. The Economic Development Authority and the International Brotherhood of Electrical Workers both spoke for the project.[46a] Mid-hearing the board voted 7-0 to extend the meeting to 11:00 p.m.[46a]

Community Voices

The opposition's case was consistent across four months of hearings. Clint Robertson of Friends of Hanover told the commission in February: "Our voices are what matters. Not these corporations that want to take and ruin our health, our environment, our community, for profit." [47] Paul Talman called for a moratorium of at least one year. Chris Perdue of Greenwood Road raised concerns about noise and private well water impacts. Brandy Banton of Friends of Hanover said: "We

don't really know what the end game is." At the March hearing, one resident told the commission: "If we sell out our beautiful rural land and start throwing up data centers, you're selling out the county, you're selling out the people, and you're selling out our resources." [48] At the final hearing in May, Mindy Ruggiero of the Chickahominy District framed the demand procedurally. The planning commission had recommended approval, she told the board, but it "still has the responsibility to ask whether Hanover has enough information, standards, and infrastructure protection before approving a project of this scale." She was not arguing against business or growth: "I am asking for the right order, standards first, approval second." She then gave the board its own figures back — two million gallons per day at peak, and roughly ninety percent of the Elmont pressure zone if no improvements were made. [46b]

Supporters argued the project would be a major new source of tax revenue and would create jobs. Roughly six speakers at the February hearing spoke in favor; available broadcast and print coverage did not identify them by name, and their arguments are thinly reflected in the record this case study draws on. That asymmetry is a limitation of this study's retrieval rather than of the record: the hearing was recorded and the adopted minutes name every speaker. It is not a measure of the balance of opinion.

Before the final vote, Tract's director of entitlements, Erin Fosdick, addressed the board directly: "We've heard loud and clear that keeping Hanover rural is really important, and we think that this project is going to actually help you achieve that goal. And this is consistent with the county's plan." [46]

The Vote

The board denied the rezoning 4-3, and the sentence needs six roll calls behind it.

Three applications were heard together and voted separately: the rezoning, the conditional use permit for up to three substations, and the special exception for building and fence height. Dibble moved approval of the rezoning with a revision widening the western buffer to seventy-five feet; Stoneman seconded. **All three approval motions failed 3-4.** Davis, Stoneman, Floyd and Prichard voted no; Dibble, Herzberg and Hudson voted aye. Stoneman seconded the motion he then voted against.

County Attorney Dennis Walter then advised the board that the votes taken had been on motions to approve, that those motions had failed, and that two motions were in order — to deny or to defer — and recommended final action before adjournment. Davis, by district courtesy, put the question to Dibble first: would she like to make

any additional motions? **She declined.** Prichard moved denial on each case, Floyd seconded, and **all three carried 4-3** on the reverse of the first tally.[49]

The order matters. The board could not reach its outcome on the first motion, and the supervisor who had carried the case for nine months would not move the alternative. Cheers erupted in the chamber when the result was recorded. “We beat them, and it’s not going to be there because these people stood up and fought for what was right,” one opponent said.[46]

VPM described Davis as casting the deciding vote.[50] On a 4-3 roll call no single vote decides in the tie-breaking sense; the chair was polled last on the roll calls recorded that night.

The vote’s internal politics reward attention. Dibble represents South Anna, the district where the project would have been built, and she supported it: “I believe as proposed and revised tonight, the Mountain Road Technology Park project will be our first step in the implementation of the vision for the Route 33 corridor. Tract has worked extensively with the county and our regional stakeholders to deliver a project proposal that addresses constituent concerns.”[49] In most Virginia counties, the district supervisor’s position on a land-use case in their own district carries the board; the informal courtesy is strong even where it is not absolute. Here the majority overrode the district supervisor, the staff alignment, the comprehensive plan designation, the Small Area Plan’s “preferred” label, and a proffer package that had grown by eight figures since March.

What carried the majority was not water alone, and the adopted minutes make that plain.

Water appears in all four denial rationales and is plainly load-bearing. But read them for shape rather than subject and the same structure repeats: none of the four says Hanover lacks water; three of the four say in terms that they cannot tell whether the project works, and the fourth, Floyd, rests on proximity as well as usage. The adopted minutes render these remarks in reported speech, so what follows characterises rather than quotes. Prichard called the closed-loop cooling system a significant advance in data center technology but said she did not regard it as fully proven over the long term. Stoneman commended the applicant’s water investment and said he was uncertain whether it went far enough to meet the county’s needs, adding that he could not assess the cumulative impact on Hanover with Iron Horse also pending. Floyd raised water usage and the proximity of the buildings to residential homes. Davis doubted the improvements addressed long-term demand under various operational scenarios.[49c] Where this study quotes a supervisor directly, the source is either contemporaneous press reporting, cited as such, or the

author's own transcription from the meeting recording, cited as such. The minutes are not a transcript and no quotation is drawn from them.

Two of the four closed on the same point, and it was not water. Prichard ended her remarks on the absence of a standard to judge by: she and Mindy Ruggiero, she said, had never agreed about anything until that night, "and that is we don't have a policy for data." It had taken the county years to develop a policy for solar, "something I believe in wholeheartedly, but we have a solid policy when we consider data — I mean, when we consider solar — and here we are moving into something that is arguably much larger for this county, and we have no policy whatsoever." [49a] Floyd closed by saying data center policy was "something I think our county should look at." [46]

Davis, speaking last, named the mechanism. Tract was "in a speculative business — and that is not a disparagement, by the way — but what are the impacts at buildout?" A board could approve on the best information it believed it had and find that "if you don't know what the end user is — and by the way, the name of the end user is irrelevant to a land use case, it doesn't matter" — the use holds and the impacts do not. **"It doesn't matter the name of the builder, it doesn't matter the name of the tenant, but it's what is the use and what is the impact."** Minutes later he put it as a rule: "not knowing the impact of the end user means that you could be in a position where you approve a project as a general rezoning or conditional use permit or special exception... and find that what you rezone for holds, but the impacts are not necessarily what you planned on at the time." [49a]

He also told the room that revenue projections are not a determining factor in a land use case, and that the state tax incentives for data centers have no bearing on a local land use decision. [49b] Prichard separately acknowledged that the organized coalition played a role in the decision. [50]

Two different kinds of objection sit in those four rationales and it is worth separating them. Doubting whether a \$15 million pump station goes far enough is ordinary legislative scepticism about an applicant's numbers. Saying the county has no policy for data centers is a claim about the absence of a standard. They are not the same objection, and a reader could reasonably take the first as sufficient on its own.

What connects them is the chair's mechanism. The water doubt could not be resolved because there was nothing to resolve it against: no county standard specifying acceptable draw, no disclosed end user whose demand could be checked, and a figure the county's own three descriptions of it did not agree about. **The scepticism was reasonable and it was also unanswerable, and it was unanswerable for the reason Davis gave.** That is the claim this study makes, and it is a stronger claim than either half alone.

None of this is hostility to data centers. It is that the board was asked to make a permanent and specific decision about impacts nobody could yet state, with no county standard to test them against, no disclosed end user, and every figure describing the project supplied by the applicant.

The coalition itself was politically heterogeneous, and its organizers said so. “It just shows what you can do when people work together. It definitely brought a lot of different people out from different political positions,” one organizer told WTVR. “Every spectrum of people realize this just wasn’t really good for our community.”[46] The cross-demographic convergence that the companion Henrico case study documents across two neighborhoods appears in Hanover as a cross-partisan convergence within one corridor, and the institutional behavior framework should treat the two as variants of the same phenomenon: data center siting scrambles the usual coalitional lines because the perceived burdens (water, noise, landscape, rural identity) do not sort by party.

The Legal Predicate

The board’s discretion to deny was never seriously in doubt. Under Virginia land use law, a comprehensive plan provides guidance but is not legally binding on zoning decisions. The Supreme Court of Virginia established in *Board of Supervisors of Fairfax County v. Snell Construction Corp.* (1974) that the comprehensive plan is a guideline, not an ordinance, and that the governing body retains legislative discretion to approve or deny rezonings under the broader standard of reasonableness.[51] The Route 33 Gateway Small Area Plan’s “preferred” designation did not compel approval, and a denial creates legal exposure only if arbitrary or capricious. Tract may reapply, but not immediately: staff told the board that on denial the development could not move forward and a substantially similar application could not be considered by the board for one year.[51a] As of September 11, 2026, Tract had filed no successor application for the Mountain Road property and had not responded to press inquiries about its plans. Scope: the Hanover CivicClerk case record and the media sources this study reaches, neither of which is exhaustive.

A note on the record: VPM’s June 1 account describes the vote as occurring “Tuesday night.” The adopted minutes fix the meeting as **Wednesday, May 27, 2026**, called to order at 6:00 p.m. and adjourned at 11:44, and that is used throughout this study. v2.0 resolved this discrepancy by weighing press accounts against one another; the minutes settle it directly.[49c]

PART SIX: WATER AND POWER

Water

Water is the ground the majority returned to most often, and it is where the county's own documents diverge most from one another. The system deserves precision for that reason.

Hanover County's public water system, based on the most recent available data (FY2023), has a total capacity of 24.7 million gallons per day (MGD): the Doswell Water Treatment Plant at 4.0 MGD, a contract with the City of Richmond for 20.0 MGD, and a contract with Henrico County for 0.7 MGD.[52] Average daily production is 9.0 MGD. Peak-day production is 13.5 MGD. At average production, the theoretical surplus is approximately 15.7 MGD. At peak production, that surplus narrows to roughly 11 MGD.

Mountain Road's projected water demand was 600,000 gallons per day on average, against the 800,000 gallons per day the shuttered Tyson plant had been allocated. The peak figure was 2,000,000 gallons per day.[26] Hickory Hill's demand has been reported at up to 700,000 GPD.[53]

What that 2 million gallons consists of is contested on the face of the record, and the contest was never joined in the room. The county's presentation slide reads "Peak Demand (Peak Usage + Required Fire Flow): 2,000,000 gallons/day." Deputy Planning Director Andrew Pompei told the board the same thing, and when Supervisor Herzberg asked him directly what the line meant, he answered that the figure counted "all the water that's needed for the cooling of the facility plus the minimum requirements needed to ensure there's enough pressure to combat a fire in the Elmont pressure zone." Herzberg restated it back as a worst case and Pompei confirmed: "That's correct. It would be a worst case scenario of extreme heat plus a severe fire." [53a]

The hydraulic memorandum prepared for the application sets the project's demands out under a different set of categories. Dewberry Engineers, modelling for the applicant's own engineer in March 2026, lists the full build-out demands as four separate parameters: 0.6 MGD average day demand, **2.0 MGD maximum day demand**, a fire flow goal of 2,000 gallons per minute for two hours, and a minimum pressure of 40 psi during maximum day demand. Its scenarios are built in pairs, maximum day demand and maximum day demand plus fire, and the modelled fire is located at the Mountain Road and Winns Church Road intersection rather than at the campus, "because the data center development will have a storage tank on-site." [53b] On the memorandum, 2.0 MGD is the development's own maximum day demand and the fire allowance sits on top of it.

The applicant's engineer went further in the same direction. Asked about the figure, Wes Wightman told the board that "a fire flow takes about half a million gallons of water so if you were to take that off the 2 million you are at 1.5 million." Two thousand gallons a minute for two hours is 240,000 gallons.[53c] Both the subtraction and the volume subtracted run in the same direction, toward a smaller figure than the one the board had been shown. Whether the subtraction was available at all depends on the unresolved question above; the volume does not — 240,000 gallons is what the memorandum's own fire flow goal yields, whichever reading of the 2 million is correct. Packet pages 202–205, which carry the fire-flow scenario detail, have been imaged but not read line by line for any figure that would support a half-million-gallon event.

Three county documents describe the same figure three ways, and this study does not adjudicate between them. The written staff report ties its 90 percent to peak demand *factoring in required fire flow*. The slide attaches "Peak Usage + Required Fire Flow" to the 2,000,000 gallon figure itself. The memorandum lists 2.0 MGD as maximum day demand with fire flow as a separate parameter and models the two in separate scenarios. **A reading in which staff were describing the capacity the pressure zone must be able to deliver, rather than the development's own demand, has not been excluded**, and nothing in the case file reconciles the three. What can be said is that the board voted on the slide and the spoken answer, and that the three documents sort the quantity into different categories.

The direction matters and is stated as a conditional, not a finding. If 2.0 MGD is the development's cooling demand alone, then presenting it as already containing a fire allowance understates the campus's own draw, and the worst case for the zone is higher than the figure the board worked from. If staff were describing the capacity the zone must be able to deliver, then the presentation was accurate, 2 million is the correct planning figure, and the memorandum's separate parameters are inputs to it rather than a competing total. **Both readings are available on the documents in the case file, and the file does not settle which.**

Combined average demand from both campuses would consume roughly 8 percent of the surplus at average production, a manageable figure on paper. The risk sits in the peak numbers, and on the peak numbers the county's own staff were blunt. The staff report put the development at "90% of existing water supply capacity within the Elmont Pressure Zone **during peak demand, factoring in required fire flow,**" and added that "water capacity improvements would be required to support additional high-water users within the U.S. Route 33 Gateway Small Area Plan." The slide carried the same figure with a different qualifier — **"if no improvements are made"** — and without the fire-flow condition.[53d]

The engineering underneath is sharper still. In the fire-flow scenario on the existing system at full build-out, the Dewberry model has the county drawing approximately 0.4 MGD through the Route 33 interconnection with Henrico County against a contractual limit of 0.775 MGD, and that scenario “utilizes most (approximately 90%) of water supply capacity of the existing Elmont PZ,” leaving between 0.25 and 0.3 MGD of maximum day capacity. The recommended remedy, a Route 33 water storage tank with 6 MGD of firm pumping capacity, would itself exceed the Henrico limit and require a renegotiated agreement between the two counties.[53b]

Staff’s 90 percent figure describes this development in the Elmont zone absent improvements, not the two campuses combined. **No document in the case file models Hickory Hill and a Mountain Road-scale user together**, and none was produced for the board. Scope: the Mountain Road staff report, the background packet as indexed, the county’s May 27 presentation, and the March 24 hydraulic memorandum.

The political context made the arithmetic heavier. In January 2025 — a date the companion Chesterfield study gives as 2024 for the same event, with no primary source held by either — a power failure at a partner water treatment plant caused 24 to 36 hours of water outages in Hanover, a crisis that led to a proposed 6.5% rate increase to fund \$218 million in long-term water infrastructure resilience.[54] Sixteen months later, the board was asked to approve a rezoning adding significant new demand to that same system before the resilience investments were complete. Tract’s answer was the Tyson allocation argument (the shuttered plant’s relinquished 800,000 GPD exceeded the project’s average demand) plus, by May, \$15 million for a pump station and storage tank. County staff accepted the comparison; four supervisors did not find it sufficient. Stoneman’s formulation at the final hearing captured the majority’s position: the water infrastructure investment was a great part of the project, and it did not go far enough.

The utility finance and infrastructure frameworks should both note what the proffer could not buy. The \$15 million addressed conveyance and storage at the site. It did not address source capacity, peak-day exposure, or the absence of any cumulative analysis covering the campus the county had already approved.

The majority’s no was not a finding that the county lacked water. Part Five sets out what the four supervisors said; the water-specific elements bear restating here, characterised from the adopted minutes rather than quoted: Prichard that the closed-loop system was not, in her view, fully proven, Stoneman that he was uncertain whether the proposed improvements would fully address the county’s long-term water infrastructure needs, and Davis that he doubted they addressed long-term demand under various operational scenarios. Three of the four were

doubting a figure their own county's file describes in three incompatible ways. **Whether that doubt was well founded turns on a question the file does not answer**, and it was not answered in the room either.

Power and Grid

Mountain Road would have drawn 900 megawatts. Hickory Hill, already approved, is designed for 2,400. The combined 3.3 gigawatts would have arrived on a grid whose operator, PJM, projects Virginia's peak energy consumption will double by 2040.[55] Dominion Energy's 2024 Integrated Resource Plan identifies data centers as the primary driver of load growth, projecting 5.5% annual demand increases with data center load versus 0.47% without it. On January 23, 2025, Dominion's zone hit an all-time winter peak of 24,678 MW. To meet projected demand, the IRP proposes approximately 5,934 MW of new natural gas generation, 12.2 GW of solar, 1.8 GW of battery storage, and 1.3 GW of small modular nuclear reactors through the late 2030s.[56]

Dominion created a new rate class for data center customers in 2025-2026, designated GS-5 (Case No. PUR-2025-00058), effective January 1, 2027.[57] The SCC order establishes the class for customers demanding 25 MW or more and requires minimum payments of 85% of contracted distribution and transmission demand and 60% of generation demand. Secondary reporting describes 14-year Electric Service Agreements and a 75% load factor threshold, though those terms were not confirmed in the SCC's public order summary. Construction deposits for long-lead equipment are included; Costs running to hundreds of millions of dollars per substation are attributed to Tract in the county record, in wording this study could not trace to a source.[57a] The SCC approved an associated base rate increase of \$565.7 million in 2026 and \$209.9 million in 2027, resulting in a typical residential bill increase of \$11.24 per month in 2026.

JLARC found in December 2024 that data center-driven infrastructure expansion could still add \$14 to \$37 per month to a typical residential electric bill by 2040.[58] That finding predates GS-5, which addresses direct service costs. It does not fully insulate residential customers from the system-wide transmission and generation investment that flows into a rate base all customers share. The rejection of Mountain Road removed 900 MW from Hanover's local ledger; it did not remove Hanover ratepayers from the regional one.

PART SEVEN: THE FISCAL FRAMEWORK AND THE SEARCH FOR LEVERAGE

The Rate That Never Collected

Hanover County created a dedicated data center equipment tax rate of \$0.45 per \$100 of assessed value in the FY2024 budget.[59] The rate has generated almost no revenue: as of June 2026 the county had one small data center subject to the tax and none of the large approved projects operational.[59a] What the rate did generate was applications. Since 2023, developers have filed at least five zoning requests for data center projects in the county.[60]

The regional comparison explains why. Henrico created a separate data center equipment category at \$0.40 in fiscal 2017-18, carving that equipment out of the \$3.50 general business personal property rate, and raised the category more than sixfold to \$2.60 in 2025, in the budget the county's own release says its board adopted on April 8, after years of rapid growth and mounting community opposition.[61] Prince William charges \$4.50.[62] Chesterfield charges \$0.24.[60] Hanover's \$0.45 sat barely above the recruitment-era rate Henrico adopted and has since abandoned.

The Rate the Board Did Not Raise

The sequence here is easy to get wrong, and v2.0 got it wrong by following press accounts rather than the county's own record.

Hanover's data center equipment rate is set **annually, on a calendar-year basis**, not carried forward in a fiscal-year budget. County Attorney Dennis Walter explained the mechanism to the board on June 24: as of that date the board had not yet adopted a data center tangible personal property tax rate for calendar year 2026, it could adopt any rate up to the advertised maximum of \$3.00, and — the point that matters — **if it wished to keep the existing rate it would have to affirmatively move to adopt \$0.45.**[59b]

So the FY2027 budget adopted on **April 8, 2026** did not carry the \$0.45 rate, and that was not a repeal. On **April 22** the board authorized a public hearing on increasing the rate, advertised at a maximum of \$3.00 per \$100.[59b] The county's prepared statement framed the exercise as housekeeping: "The current rate was established prior to data center market conditions and growth. As with all policies and fees set by the Board of Supervisors, the Board believes it is appropriate to take a fresh look at those fees to ensure they reflect current conditions and service impacts to the locality." [60] Staff were directed to gather comparative rate data from other localities.

The timing was still not housekeeping. The hearing was authorized on April 22, **five weeks before** the board voted on Mountain Road, while the EY projection supporting the application still assumed \$0.45 for its \$456 million personal property component. A county collecting almost nothing from data centers had put a near-sevenfold increase on the table before letting the industry build, which inverts the sequence its neighbors followed. Henrico repriced after the entitlements were granted and is collecting \$2.60 only from facilities its old rules already admitted.

Then the board did not raise it. On June 24, 2026, after the advertised hearing, Supervisor Dibble moved to adopt a data center equipment tax rate of **\$0.45 for calendar year 2026**. Herzberg seconded. It carried **7-0**. A second motion referred the rate to the Finance Committee for further study; Dibble had initially moved a referral with a floor of at least one year of study, withdrew that, and substituted a referral with **no stated timeframe**, targeting a recommendation during the **FY2028** budget process. That carried 7-0 as well.[59b]

Dibble's stated reasoning is the part worth carrying. A comprehensive study should run in conjunction with the board's ongoing data center policy review, she said, and should benchmark Hanover's rate against neighbouring localities. Raising the rate first would be premature and could affect the county's ability to attract desirable business investment. And the construction timeline for Hickory Hill allows sufficient time to complete the study before the project becomes operational. Supervisor Prichard, supporting the referral, observed that it would not affect any proposed large-scale project because no such facilities were expected to be operational in the near term.[59b] Two residents spoke, both against increasing the rate.

Note what did not happen four weeks after the county refused the application on the ground that it could not evaluate the industry. It did not reprice the industry. It deferred the pricing question to the same policy review whose absence two supervisors had named as their reason for voting no, and it deferred it to a budget cycle two years out.

That is the search for leverage in the title, and the finding is narrower and stranger than v2.0's. A locality's pricing power does peak before construction. Hanover reached that point, advertised a rate nearly seven times its own, and left the rate where it was.

The depreciation arithmetic compounds whatever rate emerges. Hanover's schedule is aggressive: 66% of original cost in year one, 55% in year two, falling to 5% and then 1%.[63] At \$0.45, the effective year-one tax per \$100 of original equipment cost was \$0.297, roughly one-quarter of Henrico's \$1.30 and one-eighth of Prince William's \$2.25.[63a] At \$3.00, the arithmetic would have yielded \$1.98, above Henrico's \$1.30 and still below Prince William's \$2.25. The board adopted \$0.45, so

\$0.297 stands. Whether \$0.297 is the lowest *effective* rate in the region is not established here: the comparison requires each county's depreciation schedule, and Chesterfield's nominal \$0.24 is lower than Hanover's nominal \$0.45. The revenue picture over time depends on replacement cycles, and the two largest cloud operators have published their own. Microsoft extended the estimated useful lives of its server and network equipment from four years to six effective in fiscal 2023. Amazon extended servers from five years to six effective January 2024, then shortened a subset of servers and networking equipment back to five effective January 2025, giving the increased pace of technology development in artificial intelligence and machine learning as the reason. Each replacement re-enters the depreciation schedule at original cost.[64] Phased buildout staggers those waves across buildings. The non-IT infrastructure (power distribution, cooling, substations, generators) is classified under Virginia Code § 58.1-3295.3 as fixtures taxable as real property; The developer-commissioned tax projection hosted on the county's site treats fixtures as taxed at the \$0.81 real estate rate.[65] Computing hardware is generally put at 60 to 85 percent of total facility value, a range this study reports rather than establishes. The combined effect of replacement cycles, phasing, and classification likely smooths the revenue stream more than a single-asset reading of the equipment schedule implies, which is what makes the rate choice consequential: it is the multiplier on the only component the county controls.

The Statewide Fight

The state-level fiscal framework remained unresolved as this version went to evidence. The data center sales tax exemption cost the Commonwealth \$1,941,390,000 in forgone revenue in FY2025, per the Virginia Department of Taxation's biennial exemption report.[66] The General Assembly adjourned on March 14, 2026 without passing a budget, with the exemption as the central dispute; the April 23 special session recessed the same day it convened with no agreement. [67] As of June 12, 2026, Virginia had no budget for the fiscal year beginning July 1. The outcome after that date is not established in this study's sources and is listed as open in Part Eleven; nothing below depends on it. The Senate's version eliminates the exemption outright; the House's version conditions it on renewable energy certificate purchases, non-carbon-emitting backup generation, and efficiency commitments. The chambers were then more than \$1 billion apart, shutdown contingency planning had begun, and the industry had started voting with its capital: state finance officials told the Senate Finance and Appropriations Committee in May that Compass Datacenters cited "the current legislative and political environment" in redirecting further investment outside Virginia.[68] Reported from committee testimony via broadcast coverage; the committee materials are listed as unretrieved in Part Eleven.

The regulatory bills resolved more cleanly than the budget. Governor Spanberger signed HB 507 on April 8, 2026, requiring Tier IV generators (or the environmental equivalent) for any data center generator air permit after July 2026.[69] SB 553, requiring water utilities to disclose aggregate data center water volumes, was also signed; the regulation it produced took effect September 9, 2026, with the reporting duty beginning January 1, 2027.[69] SB 94 and HB 153, the siting bills requiring noise and water assessments before local approval, **passed**. They were approved on April 13, 2026 as Chapters 568 and 567, took effect July 1, 2026, and are codified at **Va. Code § 15.2-2209.5**. [69a]

That statute reached Hanover seven weeks after it took effect, and not in the Mountain Road case. When the Tradeport rezoning came before the planning commission on August 20, staff's outstanding issues included two items required by § 15.2-2209.5 and not yet supplied: **electricity-usage information from the energy provider, and a sound profile**. Both, staff wrote, "must be submitted prior to approval of a rezoning application by the Board of Supervisors." The commission recommended approval anyway, 5-2.[69b] The statute Mountain Road was decided without is the statute the next application was measured against, and found short of, twelve weeks later. On April 22, the governor returned amendments to SB 253 and HB 1393, the measures shifting certain capacity and infrastructure costs onto high-load customers.[69] For Hanover, the practical effect is that the state floor rose while the ceiling stayed local. Nothing Richmond enacted in 2026 would have required the county to decide Mountain Road differently — § 15.2-2209.5 took effect five weeks after the vote — and nothing prevented the county from charging \$3 on June 24. It charged \$0.45.

PART EIGHT: THE AFTERMATH AND THE LIVE PIPELINE

What the Denial Left Behind

Denial left the property zoned A-1, agricultural. The 60-foot right-of-way dedication proffered for Winns Church Road does not take effect. The \$53 million road widening proceeds or stalls on its own merits as a corridor project. The Route 33 Gateway Small Area Plan remains in force, still designating data centers as preferred business types in the corridor, which means the framework that produced Mountain Road is intact and will continue producing applications unless amended. The board rejected the application, not the invitation.

The Queue

The pipeline behind Mountain Road was already formed when the vote came down:

Hickory Hill (Tract). Approved 2024, under construction near Ashland, targeting 2028 energization. The rejection does not touch it. The rate its eventual tenants will pay is not settled: Hanover adopts the data center rate annually on a calendar-year basis, the board adopted \$0.45 for **calendar year 2026 only**, and it referred the question to its Finance Committee for a recommendation in the FY2028 budget process. Hickory Hill targets energization in 2028.[59b]

Tradeport, called Iron Horse in press accounts. REZ2025-00010 and SE2025-00009, Tradeport Hanover Land, L.L.C.: a rezoning of one parcel, GPIN 7880-70-4924, **77.62 acres** on the south line of East Patrick Henry Road at Woodside Lane, **from MX(c) to M-1(c)** — not from agricultural — in the **Beaverdam** Magisterial District, on land the General Land Use Plan designates Employment Center.[69b]

Three corrections to the way this case has been described. It is not a 78-acre greenfield rezoning but a change of an existing conditioned mixed-use entitlement. It is not in the Ashland district. And the figures that circulate for it — a 180-acre campus, nine buildings, 2.2 million square feet — describe the **two-jurisdiction East Ashland project**, the bulk of which was already entitled when the Town of Ashland rezoned its portion to M-1 data center use in October 2024 with conditional use permits for a substation and 110-foot buildings. The “predecessor voted down in 2024” is **REZ2022-00008**, denied by the board in December 2024.[70][70a]

The case was heard on 18 June 2026 and deferred; re-advertised for 16 July and deferred again, 7-0, on the applicant’s request. The county’s planning manager gave the reason in a memorandum: the applicant had not provided specific information regarding **anticipated water usage, wastewater discharge, and the projected energization date**. The deferral letter waived both statutory clocks — the hundred-

day recommendation deadline under Va. Code § 15.2-2285(B) and the one-year board deadline under § 15.2-2286(A)(7) — at a cost of a \$200 re-advertisement fee. [70b]

On **20 August 2026** the commission took it up. A motion to recommend denial, moved by Iverson and seconded by Abbott, **failed 2-5**. A second motion then carried **5-2**, Iverson and Abbott dissenting: *“VOTED TO RECOMMEND APPROVAL OF REZ2025-00010, TRADEPORT HANOVER LAND, L.L.C., WITH THE FOLLOWING AMENDMENTS TO THE PROFFERS: USE OF PRIVATE WELLS IS PROHIBITED, AND MAXIMUM WATER USAGE IS LIMITED TO 350,000 GALLONS PER DAY.”*[70c]

Two things about that motion. The applicant’s own proffers of 12 August had capped water at **1,200,000 gallons per day**, with wastewater capped at 250,000;[69b] the commission forwarded **350,000**, a reduction of roughly seventy-one percent. And **Iverson holds Beaverdam, the district the campus would sit in**. The host-district commissioner moved denial and was outvoted.

Staff issued **no recommendation** on this case. The staff report’s Draft Motions page offers four neutral options — approve, approve with amendments, deny, defer — and the phrase “in agreement with staff’s recommendations,” which appears for four other cases heard that night, is absent here. What staff did issue were three outstanding issues, two of them statutory: the applicant had supplied neither the **electricity-usage information from the energy provider** nor the **sound profile** that § 15.2-2209.5 requires before a board approves a rezoning.[69b]

LS Power — withdrawn. The roughly 200-acre proposal on Old Ridge Road south of Kings Dominion, filed in 2025, was withdrawn by attorney letter in May 2026 and reported that June. Case number, applicant detail and stated reason were not located.[70d]

Tract’s next move. The company has not responded to press inquiries about its plans following the denial, and as of 11 September 2026 no successor application for the Mountain Road property appeared in the county’s posted case record.[46] [70e] Staff told the board a substantially similar application could not be considered for one year; that account has not been checked against the county code.[51a] Its options include reapplication with a revised package, a Chesterfield-style exit, or concentration on the campus it already holds. Its conduct to date suggests the company prices jurisdictions continuously: it walked away from Chesterfield at the commission stage and rode Hanover to a board vote.

The Tradeport applicant, separately, had prepared a fallback. In August 2025 its counsel, Andrew M. Condlin, asked the county’s Senior Director of Planning for a

written zoning determination that the Hanover portion of East Ashland could be developed under the 2010 and 2013 mixed-use approvals **if the board denied the M-1 rezoning**. She refused it, according to the citizen position paper that is the only account of the letter held here.[70a] That request is what the search for leverage looks like from the applicant's side, and it is the clearest evidence in the record that both parties understood the rezoning as one route among several rather than as the only door.

The June 24 tax vote and the Tradeport hearings landed within three months of each other, and the experiment they made was cleaner than its design. A county that had just demonstrated it could say no declined to set a new price, then recommended approval of the next application while two statutory disclosures were outstanding — and tightened that application's water cap by seventy-one percent on the floor. **The board had refused an application it could not verify; the commission approved one it could not verify either, and wrote the verification instrument into the motion.**

The Five Cases Before Hanover

The county's record now contains one approval, three refusals or withdrawals, a rate left where it was, and a fifth case moving toward the board:

- **Hickory Hill**, 2024, approved unanimously at 1,211 acres and 2.4 gigawatts.
- **Hunting Hawk**, withdrawn January 2026 under a unanimous commission recommendation of denial.
- **Mountain Road**, denied 4-3 on May 27, 2026, after three approval motions failed 3-4.
- **Old Ridge Road (LS Power)**, withdrawn by attorney letter in May 2026.
- **Tradeport**, recommended for approval 5-2 on August 20, 2026, with a water cap cut to 350,000 gallons per day, and still before the board.

The pattern is sequencing, and the variable that moved was not the industry but the county's information: a water crisis, a neighbouring county's visible regrets, a statewide fiscal fight, an organised opposition that did not exist in March 2024, and — from July 1, 2026 — a state statute requiring disclosures the county had never been able to demand.

What did not move was the framework. The Route 33 designation stands, the 1979 by-right category stands, the equipment rate stands at \$0.45, and the data center ordinance staff projected at twelve to eighteen months in August 2026 was not before the board when Tradeport was recommended for approval. **Hanover refused**

one application, priced nothing, wrote no rule, and sent the next case forward with a cap written on the floor of the hearing room. That sentence describes the outcome, not the reasoning. The board's stated reason for deferring the rate was that a benchmarked study should precede a change and that Hickory Hill's construction timeline left room for one, which is a defensible governance choice rather than a failure of nerve. The finding here is about what the sequence produced, not about whether each step was well judged.

PART NINE: REGIONAL CONTEXT — TWO POLES

Across the Commonwealth, localities that welcomed data centers under permissive frameworks have tightened their rules after seeing the results.[71] Henrico, which carved data center equipment out of its general business personal property rate at \$0.40 in fiscal 2017-18 to recruit the industry, reversed itself in 2025 with a rate increase to \$2.60 and the elimination of by-right approval, driven by sustained community opposition in Varina and the West End. Loudoun eliminated by-right development in March 2025. Chesterfield adopted conditional use requirements effective January 1, 2026, under its Zoning Ordinance Modernization Project, and Tract withdrew its 744-acre application there after a denial recommendation. Prince William pairs a \$4.50 equipment rate with the most detailed standardized proffer framework in the state, including decommissioning escrow, after data center politics forced a supervisor's resignation and unseated a board chair. The Data Center Reform Coalition, coordinated by the Piedmont Environmental Council, is reported to count more than 50 member groups statewide, with Friends of Hanover and Neighbors for Change among them; the coalition's own membership document is not held.[72]

The regional pattern is usually described as two poles with Hanover and Henrico at either end, and the description is half right. The halves that are wrong are the interesting ones.

Henrico is said to demonstrate reform after the entitlements are granted: the county gets the reform's politics without its protections while a grandfathered eight-million-square-foot pipeline builds out in the district that organized the resistance. What that county lacked while it was granting them was the same thing Hanover lacked. Henrico admitted data centers by right, set a \$0.40 equipment rate in fiscal 2017-18 to recruit them, and had no data center standard of its own to apply when the applications arrived. It discovered the gap in 2025, under sustained opposition in Varina and the West End, and closed it by raising the rate to \$2.60 and eliminating by-right approval — for everything not already entitled. Hanover is said to demonstrate the opposite, a board absorbing the political cost of refusing a 900-megawatt project before construction, with its leverage intact.

The first half holds. The second does not survive the record. Hanover refused the application and then did not use the leverage the refusal preserved. It left the equipment rate at \$0.45 four weeks later, deferring the question to a budget cycle two years out. It wrote no ordinance; staff still projected twelve to eighteen months for one in August. It left the 1979 by-right category in place, and it left the Route 33 designation standing. Twelve weeks after the denial its planning commission

recommended approval of the next application with two statutory disclosures outstanding.

What the two counties share is more instructive than what separates them. Neither had a standard of its own to apply, and each discovered the gap from an application rather than from a policy process. The Henrico half of that equivalence is established in the companion case study and asserted here; it has not been re-verified against primary sources in this document, and a reader relying on the comparison should take it from the companion rather than from this paragraph. Henrico discovered that after eight million square feet were entitled; Hanover discovered it with one campus approved and not yet energised, and has still not closed the gap. **Same institutional gap, caught at different points in the sequence** — which makes Hanover legible to the rest of this series rather than exceptional within it. The companion Henrico report treats the later discovery; this report is the record of the earlier one.

The diffusion mechanics matter for the energy geography framework. Each jurisdiction that tightens pushes development pressure outward to whoever has not. Hanover's \$0.45 rate and its "preferred business types" designation attracted five applications in three years precisely because Henrico, Loudoun, and Chesterfield had raised their drawbridges. **One objection deserves answering before the comparison is pressed further.** If having no data center standard was the general condition of Virginia counties in 2026, it explains less about why this county refused this application. **On this study's own evidence the objection does not hold in its strong form.** Of the peers named above, Henrico raised its rate and eliminated by-right approval in 2025, Loudoun eliminated by-right development in March 2025, and Chesterfield's conditional use requirement took effect on 1 January 2026 — all of it before Hanover decided Mountain Road on 27 May.[71] Hanover was not keeping pace with a regional lag. It was behind its neighbours, and by more than a year.

What generalises is the mechanism, not the timing. Every one of those counties wrote its rules after an application forced the question rather than before, which is the shared gap described above. **The finding is not that Hanover was uniquely unprepared. It is what unpreparedness does to a county that has to decide anyway.**

Whether the May 27 rejection pushes that pressure outward is the open question, and Hanover's own record cuts against the simple version: the rate did not move, the framework did not change, and the next application was recommended for approval within three months. The counties usually named as the next ring — Louisa, Charles City, New Kent, Goochland — are where the framework is still permissive

and the opposition not yet organised, and Tract is already before Goochland with an 874-acre case at Tuckahoe.[72a] **A refusal that changes no rule relocates nothing by itself. What relocates is the applicant.**

PART TEN: READINGS BY RESEARCH SPECIALTY

This part consolidates the inline framework flags into a reading guide. Each subsection identifies what the Hanover record offers a given workstream, where the richest evidence sits, and what remains unobserved.

The Distributional Justice Reading

The Hanover record offers an income-based variant of the siting pattern the companion Henrico study documents in racial terms. The county concentrated its data center planning in its lowest-income corridor (Census Tract 3202, median household income \$38,064 against a county median of \$112,805), where the school serving the corridor reports 83% economically disadvantaged students. The corridor is predominantly White, which makes Hanover a test of whether distributional siting logic operates on income alone. The Brown Grove record adds a within-county comparison across episodes: a historic Black community's opposition to a 2020 distribution center failed; a predominantly White corridor's opposition to a 2026 data center succeeded. The episodes differ in era, land use, and procedure, and the record needed to distinguish institutional learning from differential responsiveness is identified in Part Eleven. The sharpest open question is who would have absorbed the burdens of an approved Mountain Road: no cumulative exposure analysis — noise, generator emissions, water draw, truck traffic — appears in the Mountain Road case file. Scope: the staff report, the 619-page background packet as indexed, and the county's presentation to the board.

The Institutional Behavior Reading

Hanover documents an institutional cycle that stops where Henrico's begins: recruitment posture (the 2013 EDZ, the 2015 SZI, the FY2024 rate, the 2025 Small Area Plan), proposal intake, escalating concession under leverage (the four proffer rounds, \$90,000 to roughly \$21 million in eleven weeks), and refusal before entitlement rather than reform after it. The most analytically valuable artifacts are four. First, the April 16 to May 27 gap between the planning commission's 6-1 recommendation and the board's 4-3 rejection, which isolates where in the institution the no formed. Second, the majority's override of the district supervisor, the staff analysis and the county's own plan designations. Third, that both decisions took two motions — the board running approve-first and failing, the commission running deny-first and failing twelve weeks later. Two cases in opposite directions is an observation, not a mechanism; a failed first motion on a closely divided vote is common. It is recorded because the procedural detail is invisible in press accounts, not because two instances establish a pattern. Fourth, the gap between the rate hearing advertised on April 22 and the rate adopted on June 24, which shows a board

repositioning fiscally before the land use decision and then declining to complete the reposition after it. The cross-partisan composition of the opposition coalition parallels the cross-demographic convergence in Henrico and supports the same hypothesis: data center burdens do not sort by the usual political cleavages, so they produce unusual coalitions. The finding the record supports is narrower than institutional learning and harder to dismiss: **the board refused an application it had no instrument to evaluate, and then did not build the instrument.** The timeline appendix orders the sequence for process-tracing work.

The Utility Finance Reading

Three mechanisms reward analysis. First, the pricing inversion that did not occur. Hanover advertised a rate of up to \$3 per \$100 before any facility operated — the reverse of Henrico’s after-the-fact correction, and the one moment at which a locality’s pricing power is unconstrained by existing entitlements. On June 24 it adopted \$0.45 and referred the question to committee. The depreciation arithmetic in Part Seven shows what was on the table: an effective year-one rate of \$0.297 against a possible \$1.98, a quarter of Henrico’s against a figure that would still have sat below Prince William’s. **The interesting object for utility finance is not a rate change but a rate change forgone at the point of maximum leverage, for stated reasons the board considered prudent.** Second, the proffer escalation as revealed pricing: the gap between the \$90,000 March package and the \$21 million May package measures what the developer believed four board votes cost, and the majority’s refusal prices what they would not sell. Third, the EY projection’s structure, with its disclosed parameters and undisclosed replacement-cycle assumptions, against the fixtures classification under § 58.1-3295.3, which routes to the real property rate whatever share of facility value is not computing hardware. The ratepayer dimension (GS-5’s minimum-payment architecture against JLARC’s \$14-to-\$37 system-wide exposure) is documented in the companion statewide report and surfaced here in Part Six.

The Energy, Labor, and Infrastructure Reading

The labor evidence centers on the Tyson comparison: 692 permanent jobs lost when the plant closed in 2023, against 300 to 350 projected for a campus eight times the site’s acreage, with a temporary construction peak near 1,300. The infrastructure evidence is the water system itself: 24.7 MGD total capacity, 13.5 MGD peak-day production, an outage crisis and a proposed \$218 million resilience programme, neither of them sourced here, and a proposal that staff told the board would use roughly ninety percent of the Elmont pressure zone’s available capacity absent improvements — evaluated with no consolidated study covering the already-approved 2.4 GW campus. The richest single artifact for this workstream is the

divergence in Part Six between what the hydraulic memorandum modelled and what the county's planner and the applicant's engineer told the board the model said. The generator arithmetic, which does not resolve on the figures the record supplies, and the 3.3 GW combined grid draw connect the local record to the regional transmission and generation buildout. What remains unobserved is any county-level accounting of cumulative infrastructure load across approved and pending projects.

The Energy Geography Reading

Hanover is the diffusion hypothesis observed at the moment of refusal. Development pressure rolled outward from Northern Virginia through Henrico to the next ring, arrived in a corridor pre-designated to receive it, and met a county that declined the flagship application while keeping the designation in place. The rural dimension is unusually explicit in the record: Stoneman's gateway language — he asked what message approving an industrial use would send at the county's gateway, and what kind of development would follow behind it — and the opposition's rural-character testimony document place-identity operating as a land-use criterion.[73a] The corridor itself is a study in layered rural land use: a closed poultry plant, agricultural parcels, a historic Black community fifteen miles away absorbing a distribution center, and a proposed conversion to digital infrastructure, all within one county's planning geography. Where the pressure goes after Hanover's no (Louisa, Charles City, New Kent, Goochland) is the framework's next observation point.

PART ELEVEN: GAPS IN THE RECORD AND DIRECTIONS FOR FURTHER RESEARCH

This case study is built entirely from public sources. This section records what has been retrieved since v2.0, what remains unretrieved, and how the outstanding items could be obtained. It is addressed to whoever takes the work further; it is not a research plan of the author's.

The evidence base changed character between v2.0 and v3.0 and the negatives in this document are keyed to that change. v2.0 marked seven claims with an asterisk to indicate reliance on secondary sources. Most of those are now primary. What follows states the position as of the September 11, 2026 snapshot.

Closed since v2.0

The May 27 board record. The adopted minutes are held, and the meeting recording has been reviewed. The vote breakdown, the two-motion structure, the duration, the speaker rosters and the date discrepancy are all settled from the county's own record. Passages transcribed from the recording by the author are identified as such where they appear.

Individual supervisor rationales. All five supervisors who spoke are in the adopted minutes, and Prichard's and Davis's closings are ear-verified from the recording. The minutes render deliberation in reported speech; no quotation in this document is drawn from them.

The June 24, 2026 tax rate vote. Adopted \$0.45 for calendar year 2026, 7-0, with referral to the Finance Committee targeting FY2028. Minutes held.

The Tradeport / Iron Horse review. Heard June 18 and deferred, deferred again July 16, recommended for approval 5-2 on August 20 with the water cap cut to 350,000 gallons per day. Draft minutes held. The board hearing has not occurred and its date is contested — the county's case page gives October 28, 2026; a community organisation's calendar gives September 23. Neither is confirmed.

SB 94 / HB 153 and SB 553. All enacted; chapter numbers, effective dates and the § 15.2-2209.5 codification are in Part Seven.

The April 30, 2026 proffer instrument. Obtained, twenty-three pages, seventeen numbered conditions, executed May 5.

Open, with the route to each

The May 21, 2026 revised proffers. The highest-value outstanding document. Two presentations enumerate seven changes it made; neither

reproduces it, and it is not in the county's posted case file. It is the instrument the board actually voted on. Route: the Planning Department case file for REZ2025-00023, or the county's eTRAKiT portal.

The Prince William dBC ordinance. County staff told the board the proffered dBC limits aligned with Prince William's. That comparison is unchecked and the ordinance is not held. Route: the Prince William County code.

The August 8, 2025 zoning determination letter. Jo Ann Hunter's denial of the applicant's requested determination on the East Ashland MX entitlement. Known only through a citizen's position paper filed into the record. Route: the Planning Department case file.

The state budget outcome. Unresolved as of June 12, 2026 and not established by this study's sources thereafter. Route: the Virginia LIS budget record.

The Dewberry fire-flow scenario detail. Packet pages 202-205 have been imaged but not read line by line for any figure supporting the applicant's engineer's "about half a million gallons." Route: the background packet already held.

The generator count. The stated 350 to 500 units does not follow from 900 MW at approximately 3 MW per unit with the backup ratios given, and **no published source for the redundancy ratio is held:** it was carried forward as an industry rule of thumb attributed to the Uptime Institute with no document named. The 50-hour annual testing limit is unsourced on the same footing. Route: the applicant's air-permit filing, if one was made, or the conceptual plan sheets; and, for the ratio, a named Uptime Institute publication or an equivalent.

Consolidated water analysis. Staff's own figure — this development at roughly ninety percent of the Elmont pressure zone absent improvements — is now in Part Six and replaces the extrapolation v2.0 carried. **But no document models Hickory Hill and a Mountain Road-scale user together.** Scope: the Mountain Road staff report, the background packet as indexed, the county's May 27 presentation, and the Dewberry memorandum. Route: Hanover DPU.

The 2019 consultant study. An excerpt is in the county's own background packet at pages 507-512 — the cover, contents and transmittal letter of *Hanover Data Center Search — Report & Mapbook*, Timmons Group, April 2019, prepared for the Director of Economic Development, with a Dominion Energy supplement. It reached the public record through a resident's February 2026 comment rather than through a records request, and its cover carries the legend "CONFIDENTIAL - NOT SUBJECT TO FOIA." **Whether it is the study residents have referenced cannot be determined: the site narratives and maps are not in the excerpt and no road name resolved.** Route: the full report from the Economic Development office.

The full hearing recordings. February 19, March 19, April 16 and May 27. The May 27 recording has been used for the passages identified in the text and the adopted minutes supply the speaker roster by name and district. **Speaker-level testimony from the public hearing is largely unexamined.** One passage, Ruggiero's, is transcribed and quoted in Part Five; the remaining thirty-eight speakers are known only as a roster of names and districts, and supporter testimony is the thinner half of that record.

The January 2025 water crisis. This study dates the treatment-plant failure to January 2025; the companion Chesterfield study calls the same event the 2024 Richmond water crisis. **No source of any kind is held for it,** and that reaches the outage duration, the proposed 6.5 percent rate increase and the \$218 million resilience program as well as the date. The event appears in Part Six as context and in Part Ten's reading guide; no conclusion in this study is derived from its figures. Route: the utility's own board materials and rate filings for the period, and contemporaneous Richmond-area coverage.

SE2025-00009. The special exception companion to the Tradeport rezoning appears in neither the August 20 agenda nor the September 17 packet. Its disposition is unestablished.

Hickory Hill figures. Building count and square footage rest on an industry tracker; water demand at 700,000 GPD rests on VPM. Route: county case file and DPU allocation records.

Tyson allocation and actual use. The 800,000 GPD figure is the permitted allocation per the applicant's filing. Actual historical consumption would calibrate the capacity-relinquishment argument staff accepted. Route: Hanover DPU.

Compass Datacenters investment redirection. Reported from Senate Finance and Appropriations Committee testimony via broadcast coverage. Route: committee meeting video and materials, May 2026.

The Henrico rate instruments. Neither adopting instrument is held: the fiscal 2017-18 ordinance creating the data center equipment category at forty cents, nor the action setting \$2.60. The county's own budget release places the increase in the FY2025-26 budget adopted April 8, 2025; the companion Henrico case study attributes it to the June 10, 2025 ordinance package and records the 2017 instrument as unretrieved in its own gaps list. Route: Henrico County Board of Supervisors minutes for April 8, 2025, and the county's fiscal 2017-18 rate ordinance.

Coalition membership. The Data Center Reform Coalition’s member count and the two named Hanover affiliations rest on coalition materials that are not held. Route: the Piedmont Environmental Council’s published member list.

The Chesterfield withdrawal. Tract’s withdrawal of a 744-acre application after a recommendation of denial is carried from v2.0 with neither source identified by date or headline, no case number held, and the date of the recommendation itself unestablished. Route: the Chesterfield County planning case file.

Census tract verification. Tract 3210.02 may have been renumbered 3210.04 in the 2020 vintage, with a median income of \$122,588 that would change the corridor’s distributional profile. Verify through the Hanover GIS portal and ACS table B19013 before drawing corridor-wide conclusions.

Brown Grove comparison record. The within-county comparison in Parts One and Ten requires the 2020 Wegmans approval record set against the 2026 Mountain Road record, plus the litigation file. Without it the contrast remains suggestive rather than established.

End-user identification. The applicant’s model leaves the eventual operators unidentified at entitlement. That is not a gap in this study’s retrieval; it is the condition the chair gave as his reason for voting no, and it is a finding rather than an absence.

Property value impact in rural markets. The only systematic Virginia study found homes closer to data centers in Northern Virginia sold for more, not less, with the lead author cautioning that regional housing undersupply may mask proximity effects.[73] No comparable study exists for a rural market. Open question.

Tract’s post-denial strategy. Reapplication, exit, or concentration on Hickory Hill. As of September 11, 2026 no successor application appears in the county’s posted record, and staff’s account of a one-year bar on a substantially similar application.

APPENDIX: TIMELINE OF TURNING POINTS, 2013-2026

Date	Event
2013	Route 33 corridor designated an Economic Development Zone
Jan. 2015	Strategic Zoning Initiative: flat \$1,100 rezoning fee, deferred studies, rollback tax relief
FY2019	Eleven Hanover sites (1,300+ acres) submitted to Virginia Business Ready Sites Program
2019	Loch Levan Land v. Board of Supervisors blocks HHHunt's residential path near Wyndham
2020	County approves Wegmans distribution center at Brown Grove over community objection
2023	Envision Hanover designates Route 33 corridor an "Employment Center"
FY2024 budget	County creates the \$0.45 data center equipment tax rate
May 12, 2023	Tyson Foods closes Mountain Road plant; 692 jobs lost; 800,000 GPD allocation eventually relinquished
Jan. 2024	Planning commission unanimously recommends Hickory Hill approval
Mar. 27, 2024	Board unanimously approves Hickory Hill rezoning: 1,211 acres, 2.4 GW, \$3.6M cash proffers
May 2024	Tract buys Hickory Hill land for \$32.7M
Jan. 2025	Partner treatment plant failure reported to cause 24-36 hour water outages; \$218M resilience program proposed. No source held; see Part Eleven
Aug. 27, 2025	Route 33 Gateway Small Area Plan adopted; data centers "preferred business types"
Aug. 2025	Former Tyson site sells for \$5M to Hanoverlovestheproperty LLC
Late 2025	Tract files Mountain Road Technology Park applications (REZ2025-00023); LS Power files Old Ridge Road proposal

The timeline continues below for 2026.

Date	Event
Jan. 15, 2026	Planning commission unanimously recommends denial of HHHunt's Hunting Hawk campus
Jan. 28, 2026	HHHunt withdraws Hunting Hawk application
Feb. 19, 2026	First Mountain Road hearing: ~30 opposed, ~6 in favor; unanimous deferral
Mar. 5, 2026	Revised proffer statement: larger buffers, narrowed generator testing, \$90K cash
Mar. 14, 2026	General Assembly adjourns without a budget; data center exemption the central dispute
Mar. 19, 2026	Second hearing: applicant defers; community rally outside
Mar. 20, 2026	CVTA grants \$4M toward \$53M Mountain Road widening
Apr. 8, 2026	Board adopts FY2027 budget, which does not carry the \$0.45 data center rate; Governor signs HB 507 (Tier IV generators)
Apr. 16, 2026	Planning commission recommends Mountain Road approval 6-1; Ashland's commissioner dissents on traffic and unknown cumulative impacts
Apr. 22, 2026	Board authorizes a public hearing on the data center equipment tax rate, advertised at a maximum of \$3.00 per \$100
Apr. 23, 2026	Special session convenes and recesses without a budget agreement
Apr. 30, 2026	Proffer round three, executed May 5: \$15M water infrastructure, sheriff-funded traffic control, annual noise study authority; seventeen numbered conditions
May 21, 2026	Proffer round four: \$6M conservation/parks, nighttime sound cut 52 to 50 dBA, gas turbines prohibited, PFAS restricted, wells strictly prohibited
May 27, 2026	Board denies Mountain Road. Motions to approve fail 3-4 on all three cases; county attorney advises an alternate motion; Dibble declines; Prichard moves denial, carried 4-3 on all three. Adjourned 11:44 p.m. after 5 hours 44 minutes
Jun. 18, 2026	Tradeport / Iron Horse (REZ2025-00010, 77.62 acres) heard by the planning commission and deferred
Jun. 24, 2026	After the advertised hearing, board adopts \$0.45 for calendar year 2026, 7-0, and refers the rate to the Finance Committee for an FY2028 recommendation
Jul. 16, 2026	Deferred again, 7-0, on the applicant's request; staff cite missing water, wastewater and energization figures
Aug. 20, 2026	Commission recommends approval 5-2 after a denial motion fails 2-5, cutting the water cap to 350,000 gallons per day

ENDNOTES

[1] The Alfred P. Sloan Foundation study, “Energy Implications of Data Center Growth in Georgia, Virginia, and Tennessee,” is led by a three-member principal investigator team with two project consultants, whose combined expertise spans anthropology and institutional analysis, environmental and distributional justice, geography and sustainability, utility finance, and energy and labor studies. The project launches in October 2026. Researcher-level attributions are maintained separately in project files.

[2] Tommy N. Turner, What Virginia Is Spending, What Virginia Is Getting: A Fiscal Analysis of the Commonwealth’s Data Center Tax Exemptions, **v5.3, August 2026**, 10.5281/zenodo.20679292. v2.0 of this case study cited v4.0, March 2026, which was current at its snapshot.

[3] Hanover County demographics: population ~115,300 (U.S. Census Bureau, July 2024 estimate); median household income \$112,805 (ACS 2020-2024 5-Year Estimates, Table S1901); real estate tax rate \$0.81 since 2007 (Hanover County FY2027 Proposed Budget). 78% of land outside the Suburban Service Area per the Envision Hanover Comprehensive Plan.

[4] Hanover County, Envision Hanover Comprehensive Plan, adopted 2023; Route 33 corridor designated an Employment Center. Economic Development Zone designation, 2013.

[5] Virginia Economic Development Partnership, Virginia Business Ready Sites Program, FY2019: eleven Hanover sites, 1,300+ acres.

[6] Hanover County, Strategic Zoning Initiative, January 2015: flat \$1,100 fee, deferred studies, rollback tax relief, VBRSP eligibility.

[7] Hanover County Board of Supervisors, CPA2025-00002, Route 33 Gateway Small Area Plan, adopted August 27, 2025.

[8] Census Tract 3202: population 6,094; median household income \$38,064; median age 46.2; 84.4% White, 11.2% Black (ACS 2023 5-Year, Table DP05). Census Tract 3210.02: population 7,476; median household income approximately \$47,174 (ACS 2019). Data Commons / Census Bureau. See the tract-renumbering caution in Parts One and Eleven.

[9] John M. Gandy Elementary School: 83% economically disadvantaged per U.S. News school profile. School assignment confirmed by address lookup for 12517 Winns Church Road.

[10] Washington Post Magazine, “The Community of Brown Grove vs. Wegmans,” August 4, 2021; VPM News, “Hanover Church Anchors Historic Black Community of Brown Grove,” February 24, 2022; Bay Journal, “Brown Grove Gets National Historic Nod, Support in Court,” May 2023; VPM News, “Hanover Historic Group Takes Wegmans Lawsuit to Appeal,” August 15, 2024. County approval of the 1.1M sq ft distribution center: 2020. Facility construction proceeded during litigation.

[11] Richmond BizSense, May 9, 2024: Hickory Hill land purchase, \$32.7M, sellers Blenheim Associates, South Wales Farm LLC, and Tjitse Jozef De Wolff.

[12] Hanover County Board of Supervisors, March 27, 2024: Hickory Hill rezoning (A-1 to M-1) approved unanimously, after deferral from February 28. Planning commission recommendation: January 2024, unanimous.

[13] Baxtel (industry tracking source, not a county filing): up to 2.4 GW, ~9M sq ft, 30-46 buildings.

[14] VPM News, March 28, 2024: developer projects 800+ employees and \$1.78B over 20 years. Not independently verified.

[15] Hickory Hill proffer statement, December 22, 2023: \$3.5M road improvements plus \$100K for Washington Lacy Park.

[15a] Hanover County, “Planning BD Presentation 5.27.2026,” slide “Data Centers + Zoning Ordinance”: “Smaller-scale data centers are permitted by-right in many commercial zoning districts and all industrial districts (at least one operating near airport): Use appears in zoning ordinance as early as 1979 in commercial and industrial districts as permitted use.” See also Entitlement_Route_Analysis, which reaches the same finding from the ordinance text.

[16] Hanover Planning Commission, January 15, 2026: Hunting Hawk, 468.14 acres, unanimous denial recommendation on rural character standards.

[17] *Loch Levan Land v. Board of Supervisors of Henrico County*, Virginia Supreme Court, 2019: no vested right to the Dominion Club Drive extension; no public necessity finding.

[18] VPM News, January 20, 2026; withdrawal January 28, 2026. Acreage reported as approximately 400 acres in Richmond BizSense’s withdrawal coverage (January 30, 2026) against 468.14 in the commission record; the county record controls.

[19] WTVR CBS 6, January 28, 2026: Supervisor Dibble quoted.

[20] Cologix founded 2010; Stonepeak recapitalization ~\$1.4B (2017); equity recapitalization plus securitizations ~\$4B (2022). Sources: Cologix press releases; Stonepeak announcement.

[21] Voluntary Proffer Statement, Mountain Road Technology Park, March 5, 2026 (received March 9), Hanover County Planning Department. Case numbers REZ2025-00023, CUP2025-00016, and special exception. Applicant: VALCO Hanover County Four, LLC; power of attorney held by Jeffrey P. Geiger for all owners.

[22] Carried forward from v2.0. **Neither source is identified by date or headline and no Chesterfield case number is held**, so the withdrawal is reported here rather than established. Route: the Chesterfield County planning case file and the companion Chesterfield case study.

[23] Richmond BizSense: Tyson closure May 12, 2023; 692 employees laid off.

[24] Tyson Foods corporate history: Holly Farms acquisition, 1989.

[25] Hanover County Clerk's Office land records: sale to Hanoverlovestheproperty LLC, August 2025, \$5M.

[26] Tract applicant letter of April 2, 2026, background packet p. 66 (an update to an earlier letter of March 9, 2026). Water capacity quote at page 3; demand figures of 600,000 GPD average and 2,000,000 GPD peak under a 20-year worst-case temperature and humidity scenario.

[27] JLARC, Data Centers in Virginia, December 2024: roughly 25 to 50 permanent jobs per building; construction-phase economic surges. Construction peak of ~1,300 jobs per the developer-commissioned tax projection at endnote 41.

[28] Voluntary Proffer Statement, February 19, 2026; Pompei memorandum confirms the single revision (height reduction from 85 to 62 feet in Building Areas 2A and 3A). Building design standards from Section 5.f.

[29] Mountain Road proffers, Section 12: post-operational noise study within 30 days of ready-for-service; 60-day mitigation; 1,200-foot attenuation trigger; certified professional requirement.

[30] Hanover County Noise Ordinance § 16-10: 57 dBA day (7 AM-10 PM), 52 dBA night (10 PM-7 AM) at adjacent residential property lines. Louisa TOD § 86-455: 65/60 dBA.

[31] Generator redundancy: industry standard 1.5-2.0 MW backup per 1 MW critical load; approximately 350-500 units at ~3 MW each for 900 MW **this does not follow from the stated assumptions; see Part Eleven**. EPA testing limit: 50 hours/year/unit; 40 CFR Part 1039 (Tier 4 Final). **The redundancy ratio and the resulting unit count are not sourced to a named publication**. They were carried forward from v2.0 as industry rules of thumb attributed to the Uptime

Institute, and no Uptime document supporting them is held. The arithmetic does not close in any event, and the count is listed as open in Part Eleven. The 50-hour annual testing limit is likewise unsourced here: it is a New Source Performance Standard figure and 40 CFR Part 1039 does not contain it.

[32] Richmond BizSense, “Hanover Supervisors Reject Data Center Project on Mountain Road,” May 28, 2026: \$15M pump station and water storage tank commitment; commercial vehicle access limitations; road improvements; Hanover Sheriff’s Office traffic control funding; post-commission additions of the planning-director noise study authority (up to once per year at owner expense) and the \$6M land conservation and parks payment. The executed April 30 instrument is held; the May 21 revision is not. See Part Eleven.

[32a] Hanover County, “Planning BD Presentation 5.27.2026,” slide “Revisions Since Packet Distribution — Revised Proffers: May 21, 2026”; Tract Capital Management, “Mountain Road Technology Park,” Board of Supervisors presentation, May 27, 2026, proffer index (eighteen items). Voluntary Proffer Statement, Mountain Road Technology Park Project, dated April 30, 2026, executed May 5, 2026 by Jeffrey P. Geiger, attorney-in-fact, background packet pp. 574-596 (seventeen numbered conditions). The May 21 instrument is not in the county’s posted case file; both presentations enumerate it and neither reproduces it.

[33] Proffer comparison sources: Chesterfield ZOMod (January 2026); Prince William County Sustainability Commission draft recommendations (March 2025); Loudoun ZOAM-2024-0001 and grandfathering resolution (March 2025).

[33a] Voluntary Proffer Statement, April 30, 2026, Proffered Condition 16, background packet p. 594. The 600,000 gpd average and 2,000,000 gpd peak appear in the applicant’s letter of April 2, 2026, background packet p. 66, and are not proffered.

[33b] Staff Report, REZ2025-00023 / CUP2025-00016 / SE2025-00023, May 15, 2026, pp. 42-44, “Conditional Use Permit (Substations): Staff’s Recommended Conditions,” Condition 7. Recommended, never adopted; the CUP was denied 4-3 on May 27, 2026.

[33c] Voluntary Proffer Statement, April 30, 2026, Proffered Condition 13(a) and 13(b), background packet pp. 591-592, read at 350 dpi; Staff Report, May 15, 2026, p. 40, for staff’s “align with” analysis and the first-known-dBC observation.

[33d] Hanover County staff, Board of Supervisors, May 27, 2026, at approximately 1:09:58; county name ear-verified by the author, surrounding wording from the auto-caption. The Prince William dBC standard does not appear in this project’s Virginia

noise-ordinance survey and has not been retrieved; staff's alignment claim is unverified.

[34] Hanover County CIP, FY2027: \$31.5M allocated through FY2031 for the Mountain Road widening.

[35] Central Virginia Transportation Authority: \$4M engineering and planning grant, March 20, 2026.

[36] Richmond BizSense, March 20, 2026: ~\$53M total project estimate; Jo Ann Hunter quoted.

[37] Mechanicsville Elementary School replacement: \$50M, Hanover CIP.

[38] Ernst & Young, Tax Generation Analysis, commissioned by Tract: \$901M over 15 years from 2030 (\$445M real property at \$0.81; \$456M business personal property at \$0.45). Developer-sourced; not independently verified.

[39] WTVR CBS 6, "Hanover Board of Supervisors Denies Controversial Mountain Road Data Center Development," May 28, 2026: developer claims of about \$900 million to the county over 20 years and around 1,000 construction jobs.

[40] Virginia Code § 58.1-3285: reassessment of rezoned parcels at fair market value.

[41] EY tax projection parameters from the county-hosted document, hanovercounty.gov/DocumentCenter/View/15177, dated March 4, 2026: 15-year horizon from energization (~2030); county depreciation schedule applied to personal property; real property at 2% annual appreciation; fixtures classified as real property at \$0.81.

[42] WWBT (NBC 12) and WRIC (ABC 8News), February 19, 2026: 2.5+ hours of testimony; ~30 in opposition, ~6 in favor; Commissioner Larry Leadbetter's deferral motion, unanimous.

[43] Hanover Planning Commission, March 19, 2026: applicant-requested deferral to April 16; rally outside.

[44] WTVR CBS 6 and WRIC, April 16-17, 2026: 6-1 vote; Ashland commissioner Alan Abbott's dissent quoted.

[45] Richmond BizSense, "Hanover Planning Commission Recommends Approval of 430-Acre Data Center Project," April 17, 2026; VPM News, "Hanover Planning Commission Recommends Approving Mountain Road Data Center," April 17, 2026. Staff alignment with the comprehensive plan per BizSense, May 28, 2026.

[46] WTVR CBS 6, May 28, 2026: decision just before midnight; Erin Fosdick quoted; Supervisor Floyd quoted; “We beat them” and “Standards first, approval second” quotations; organizer quotation on the cross-partisan coalition; Tract’s non-response to inquiries about next steps. Public hearing counts (30+ opposed, 8 in favor) per BizSense and WTVR.

[46a] Hanover County Board of Supervisors, adopted minutes, May 27, 2026: hearing structure; speaker rosters under the headings Opposition, Support and Open Comments; motion to extend the meeting to 11:00 p.m., carried 7-0.

[46b] Ms. Mindy Ruggiero, Chickahominy Magisterial District, Hanover County Board of Supervisors, May 27, 2026, at approximately 2:29:58; transcribed from the meeting recording by the author, September 8, 2026. Name and district per the adopted minutes.

[47] WRIC, February 19, 2026: Robertson, Talman, Perdue, and Banton quoted.

[48] WRIC, March 19, 2026: unnamed resident quoted.

[49] Richmond BizSense, May 28, 2026, for the reporting-sourced items only: vote breakdown (Prichard, Floyd, Davis, Stoneman to deny; Dibble, Herzberg, Hudson dissenting); Dibble and Stoneman quoted; site ownership (Marchetti Properties, Tyson Foods, G.M. and Brenda Tribble); 300-350 jobs at buildout; staff comparison of the water request to the Tyson allocation.

[49a] Supervisors Faye Prichard and Sean Davis, Hanover County Board of Supervisors, May 27, 2026, at approximately 5:20:41, 5:33:56 and 5:36:18; transcribed from the meeting recording by the author, September 8, 2026. The adopted minutes summarise deliberation in reported speech and do not permit direct quotation; these passages were verified against the recording. Prichard’s mid-sentence self-correction is reproduced as spoken.

[49b] Chair Sean Davis, Hanover County Board of Supervisors, May 27, 2026, at approximately 5:36:44. **Auto-caption text, not ear-verified.** Characterised rather than quoted for that reason. Whether the adopted minutes carry this passage was not checked.

[49c] Hanover County Board of Supervisors, adopted minutes, May 27, 2026: the deliberation remarks of the four supervisors who voted to deny, as summarised in the minutes; and the meeting date of Wednesday, May 27, 2026, called to order at 6:00 p.m. and adjourned at 11:44. **The minutes render deliberation in reported speech and are not a transcript.** The characterisations in the text follow their content and quote nothing from them. Cited here in place of press coverage because both passages rest on what the county’s own record says the supervisors said.

[50] VPM News, “Hanover Supervisors Nix Mountain Road Data Center Project,” June 1, 2026: nearly six hours of debate stretching to almost midnight; Davis, the board’s chair, casting the deciding vote; district attributions for all seven supervisors; Prichard on the coalition’s role; resident Jane Kirchner on rural character. VPM’s account dates the vote to “Tuesday night”; BizSense (published May 28, reporting “last night”) and WTVR both establish Wednesday, May 27, consistent with the board’s meeting calendar. The official minutes are the controlling source (Part Eleven).

[51] Board of Supervisors of Fairfax County v. Snell Construction Corp., 214 Va. 655 (1974); Virginia Code § 15.2-2223 (plan as general guidance); § 15.2-2232 (legal status).

[51a] Hanover County staff, Board of Supervisors, May 27, 2026, at approximately 1:16:59. **Auto-caption text, not ear-verified**, and characterised rather than quoted for that reason. The one-year bar on a substantially similar application is a general feature of Virginia rezoning practice and should be confirmed against the Hanover County Code before this sentence is relied on.

[52] Hanover County Department of Public Utilities, FY2023 water system data: Doswell WTP 4.0 MGD; City of Richmond contract 20.0 MGD; Henrico contract 0.7 MGD; average production 9.0 MGD; peak 13.5 MGD.

[53] VPM News, March 28, 2024: Hickory Hill water demand up to ~700,000 GPD. Secondary source.

[53a] Hanover County staff presentation, May 27, 2026, slide “Water Usage”; Hanover County Board of Supervisors meeting recording, May 27, 2026, at approximately 1:11:14 and 1:21:09-1:22:31. Quotations transcribed from the recording by the author, September 8, 2026.

[53b] Dewberry Engineers Inc., prepared for Kimley-Horn and Associates, Inc., “Route 33 Data Center Development Hydraulic Modeling,” March 24, 2026, background packet pp. 200-205.

[53c] Wes Wightman, P.E., Senior Civil Professional Engineer, Tract, at approximately 1:58:34; transcribed from the recording by the author. Author’s arithmetic: 2,000 gallons per minute for two hours is 240,000 gallons. A fire flow requirement is ordinarily a rate the system must be able to deliver rather than a volume a facility consumes; expressing it as a daily volume is the applicant’s framing, adopted here only to test the subtraction he performed.

[53d] Hanover County staff presentation, May 27, 2026, slide “Water Usage”; Staff Report, May 15, 2026, p. 41.

[54] **No source is held for this note and none of its four figures is established here.** The treatment-plant failure, the 24 to 36 hour outage duration, the proposed 6.5 percent rate increase and the \$218 million resilience program were all carried forward from v2.0 without citation, and the companion Chesterfield study dates the same event to 2024. The event appears in Part Six as context for the board's water posture and in Part Ten's reading guide as part of the infrastructure picture. **No conclusion in this study is derived from any of its four figures**, which are reported and not established. Listed as open in Part Eleven.

[55] PJM Interconnection, 2024 Load Forecast Report.

[56] Dominion Energy 2024 Integrated Resource Plan (PUR-2025-00184): 5.5% annual growth with data center load vs. 0.47% without; January 23, 2025 winter peak of 24,678 MW; planned additions of 5,934 MW gas, 12.2 GW solar, 1.8 GW battery storage, 1.3 GW SMR.

[57] Dominion GS-5 rate class (Case No. PUR-2025-00058), SCC order November 25, 2025, effective January 1, 2027: 25 MW threshold; 85% distribution/transmission and 60% generation minimum charges; base rate increases of \$565.7M (2026) and \$209.9M (2027); residential impact \$11.24/month (2026). The 14-year ESA term and 75% load factor figures are from secondary reporting (Citizen Portal / Bacon's Rebellion), not confirmed in the SCC public order summary.

[57a] Attributed to Tract in the county record. The wording is characterised rather than quoted: the phrase appears in neither the meeting recording as transcribed nor the documents held, and its original source has not been located.

[58] JLARC, December 2024: \$14-\$37/month potential residential bill increase by 2040.

[59] Dedicated data center equipment rate of \$0.45 per \$100, **adopted as part of the FY2024 budget** per Deputy County Administrator Jay Brown, Hanover County Board of Supervisors minutes, June 24, 2026. Hanover County FY2027 Proposed Budget.

[59a] Supervisor Faye Prichard, Hanover County Board of Supervisors minutes, June 24, 2026, recording her statement that the referral would not affect any proposed large-scale data center project because none was expected to be operational in the near term and the county then had only one small data center subject to the tax. Characterised; the minutes are not a transcript.

[59b] Hanover County Board of Supervisors, adopted minutes, June 24, 2026, agenda item XIII, "Public Hearing: 2026 Proposed Data Center Tax Rate," presented by Dr. Jay Brown, Deputy County Administrator. County Attorney Dennis Walter's

clarification of the calendar-year mechanism; Brown on the April 22, 2026 authorization of the public hearing and on the rate having been adopted as part of the FY2024 budget; Dibble's motion to adopt \$0.45 for calendar year 2026, seconded by Herzberg, carried 7-0; the substituted referral to the Finance Committee, seconded by Prichard, carried 7-0; Dibble's and Prichard's stated reasoning; public comment from Mr. Joseph (Mike) Flagg and Ms. Martha Wingfield, both of the Beaverdam District.

[60] Richmond BizSense, "Hanover Supervisors to Consider Raising Tax Rate on Data Center Equipment," April 27, 2026: rate removed from the FY2027 budget at its April 8 adoption; June 24 public hearing and vote on a rate of up to \$3 per \$100; county spokeswoman's prepared statement quoted; minimal revenue collected under the rate; at least five data center zoning requests filed since 2023; LS Power's ~200-acre Old Ridge Road proposal; Hickory Hill under construction; Chesterfield rate of \$0.24.

[61] Henrico County, "Henrico's proposed budget offers sweeping tax relief for homeowners, businesses," county news release, February 26, 2025, updated with the note that the Board of Supervisors adopted the FY2025-26 budget unanimously on April 8, 2025. The county states that it created the special data center taxing category at forty cents in fiscal 2017-18, estimated \$13.6 million in additional revenue from the increase to \$2.60, and gave the state average as \$3.09. **Correction to v2.0 and to earlier volumes in this series, which describe the 2017 action as a cut from \$3.50.** \$3.50 was Henrico's general business personal property rate, still \$3.50 in 2025 and reduced to \$3.35 in the same budget; the fiscal 2017-18 action carved data center equipment out of that rate rather than lowering a rate that had applied to data centers. **Neither adopting instrument is held.** The companion Henrico case study, v3.6, records the 2017 instrument as unretrieved in its own gaps list and attributes the increase to the June 10, 2025 ordinance package rather than to the April 8 budget; the county's own account places it in the budget. Route: the Henrico County Board of Supervisors minutes for April 8, 2025 and the fiscal 2017-18 rate ordinance.

[62] Prince William County: **\$4.50 per \$100**, "Computer equipment and peripherals used in a data center," Tax Rates 2026, pwcva.gov, retrieved September 7, 2026. The county publishes by tax year: \$3.70 in 2024, \$4.15 in 2025, \$4.50 in 2026. Formulation follows the Botetourt v1.1 companion, which carries the same correction.

[63] Depreciation schedules: Hanover County FY2027 budget and property assessment guide (66/55/35/24/5/1); Henrico Schedule 89; PWC Business Tangible Property Return 2025. Effective-rate calculations are the author's arithmetic.

[63a] **Author's arithmetic, and the Prince William year-one assessment ratio is assumed rather than verified.** $\$2.25 = \$4.50 \times 50\%$, the ratio implied by v2.0's own $\$1.85 = \$3.70 \times 50\%$ and consistent with Henrico's $\$1.30 = \$2.60 \times 50\%$. **Verify against the Prince William Business Tangible Property Return before deposit.**

[64] Microsoft Corporation, Form 10-K for the fiscal year ended June 30, 2023, Notes to Financial Statements, Note 1, Accounting Policies, under Change in Accounting Estimate: "In July 2022, we completed an assessment of the useful lives of our server and network equipment. Due to investments in software that increased efficiencies in how we operate our server and network equipment, as well as advances in technology, we determined we should increase the estimated useful lives of both server and network equipment from four years to six years. This change in accounting estimate was effective beginning fiscal year 2023." The filing states the fiscal 2023 effect as an increase in operating income of \$3.7 billion and net income of \$3.0 billion, "or \$0.40 per both basic and diluted share." Read September 12, 2026 in the Commission's rendering of the filing's own accounting-policies text, held at `hanover_primary/Microsoft_10K_FY2023_Note1_R29_SEC_rendering.txt`. **The two companies give different reasons for moving in opposite directions**, and both are quoted here rather than characterised. Amazon.com, Inc., Form 10-K for the fiscal year ended December 31, 2025, Note 1, Description of Business, Accounting Policies, and Supplemental Disclosures. Under Property and Equipment, Net the filing gives the estimated useful life of servers and networking equipment as "Five to six years," with the footnote: "Effective January 1, 2024, we changed our estimate of the useful lives for our servers from five to six years, and effective January 1, 2025, we changed our estimate of the useful lives of a subset of our servers and networking equipment from six to five years." Under Use of Estimates: "Effective January 1, 2025 we changed our estimate of the useful lives of a subset of our servers and networking equipment from six years to five years. The shorter useful lives are due to the increased pace of technology development, particularly in the area of artificial intelligence and machine learning." The filing states the 2025 effect as an increase in depreciation and amortization expense of \$1.4 billion and a reduction in net income of \$1.0 billion, \$0.10 per basic and per diluted share, "which primarily impacted our AWS segment." Read in the filing text, September 12, 2026; the filing is held at `hanover_primary/Amazon_10K_FY2025_amzn-20251231.htm`. **Correction to the note carried in earlier drafts of this version**, which said both companies "moved to 6-year useful-life accounting" and attributed a set of category replacement intervals to three industry research organisations without naming a publication. Both filings are now held and quoted above: Amazon moved and then partly moved back, and the category intervals are not sourced at all; this version does not rely on them.

[65] Virginia Code § 58.1-3295.3 (data center fixtures taxable as real property under the cost approach); Hanover’s classification of fixtures at the \$0.81 real property rate confirmed in the county-hosted tax projection document (endnote 41). The 60 to 85 percent range given in the text for computing hardware as a share of facility value rests on unnamed industry sources carried forward from v2.0 and is **not established here**; it is used only to show the direction of the split between fixtures and equipment, and no conclusion in this study turns on where inside that range the true figure falls.

[66] Virginia Department of Taxation / VEDP biennial RSUT exemption report, January 2, 2026: FY2025 forgone revenue of \$1,941,390,000.

[67] Cardinal News, March 14, 2026 (adjournment without a budget); Cardinal News, April 23, 2026 (“First Day of the Budget Special Session Ends Without an Agreement on Data Center Tax Exemptions”); Virginia Mercury, April 23, 2026 (special session recessed without a deal).

[68] WHRO, “Virginia’s Business Reputation at the Center of State Budget Impasse,” June 12, 2026; WHSV, May 26, 2026 (negotiations stalled, shutdown concerns); WJLA (June 2026): June 30 deadline coverage; Virginia Mercury, April 27 and 29, 2026 (Senate elimination vs. House conditions: renewable energy certificates, non-carbon backup generation, efficiency commitments). Compass Datacenters’ redirection of investment, citing “the current legislative and political environment,” reported from May 2026 Senate Finance & Appropriations Committee proceedings; primary-source verification flagged in Part Eleven.

[69] HB 507 (McAuliff): Tier IV or equivalent required for data center generator air permits after July 2026; signed April 8, 2026 (Governor’s April bill action releases; Cavalier Daily overview, April 2026). SB 553 (aggregate data center water volume disclosure): signed; the resulting State Water Control Board regulation, 9VAC25-200-40 B 3, took final action June 23, 2026, was approved July 10, published in the Virginia Register August 10, and took effect September 9, 2026, with the reporting duty beginning January 1, 2027. SB 94 / HB 153: **enacted as Chapters 568 and 567, approved April 13, 2026, effective July 1, 2026**, codified at Va. Code § 15.2-2209.5. See [69a]. HB 897 (carbon conditions on tax exemption): passed House, died in Senate. SB 253 / HB 1393 (high-load customer cost allocation): governor’s amendments announced April 22, 2026 (Clean Virginia). General coverage: Virginia Mercury, March 17, 2026; MultiState, March 30, 2026.

[69a] SB 94, Chapter 568, and HB 153, Chapter 567, 2026 Acts of Assembly, approved April 13, 2026, effective July 1, 2026, codified at Va. Code § 15.2-2209.5, “Data centers; site assessment, sound profile of the high energy use facility.”

[69b] Hanover County, Staff Report, REZ2025-00010, Tradeport Hanover Land, L.L.C., Planning Commission meeting date August 20, 2026, “Outstanding Issues,” p. 1; Hanover County Planning Commission draft minutes, August 20, 2026, in the September 17, 2026 agenda packet. Draft minutes, tabled for approval September 17.

[70] Richmond BizSense, “Latest Iron Horse Data Center Proposal Teed Up for Hanover Planning Commission Review,” May 14, 2026: 78 acres at 10171 E. Patrick Henry Road; predecessor proposal voted down by supervisors in 2024. WTVR (May 28, 2026) reports a 78-acre proposal reaching the commission in June.

[70a] Position paper of Bob Nelson, Ashland District, filed with the Hanover County Planning Department June 9, 2026, in support of the August 8, 2025 zoning determination letter of Jo Ann Hunter, Senior Director of Planning and Community Development, issued in response to a request by Andrew M. Condlin, counsel for the applicant. **The determination letter itself is not on disk.** Nelson’s paper is a citizen’s advocacy document and is the source for the account of what the letter held, including the statement that Ms. Hunter denied the requested determination. It also supplies the Town of Ashland’s October 2024 rezoning, the December 2024 Hanover denial of REZ2022-00008, and the Town-side building figures. Corroborated on the East Ashland MX point by the Tradeport staff report, August 20, 2026, p. 250.

[70b] Memorandum of Gretchen W. Biernot, AICP, Current Planning Manager, July 7, 2026, Hanover County Planning Commission agenda packet, July 16, 2026; Request to Defer Action on a Zoning Application, dated July 1, 2026, signed by Andrew M. Condlin as attorney-in-fact.

[70c] Hanover County Planning Commission, draft minutes, August 20, 2026, in the September 17, 2026 agenda packet, item IV.A. Draft minutes, tabled for approval September 17, 2026. The motion text is quoted as recorded.

[70d] Richmond BizSense, June 26, 2026. The withdrawal is reported; the attorney letter, case number and stated reason were not located in the county’s posted case file.

[70e] Hanover County CivicClerk case record and Planning Commission agendas through September 11, 2026. A negative bounded to the county’s posted record and to the media sources this study reaches; neither is exhaustive.

[71] Regional tightening: Henrico (June 10, 2025 ordinance; companion case study); Loudoun ZOAM-2024-0001 (March 2025); Chesterfield ZOMod (effective January 1, 2026); GovTech / Richmond Times-Dispatch, “Richmond, Va., Area Counties Split on Data Centers,” December 2025. Prince William: resignation, recall politics, and the

\$4.50 rate (tax year 2026) per the companion Prince William case study, which carries the same correction.

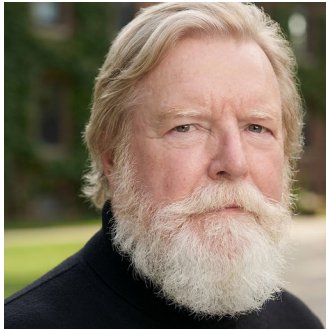
[72] Membership figures are attributed to coalition materials in v2.0 and **the underlying document is not held**; neither the count nor the two local affiliations is established here. Route: the Piedmont Environmental Council's published member list for the Data Center Reform Coalition.

[72a] CU-2026-00014, Tuckahoe Technology Park, VALCO2 Goochland County, LLC; developer Tract; approximately 874 acres adjacent to the Mosaic at West Creek subdivision, pending before Goochland County. Conditions are applicant-drafted; the county's cover sheet marks them not staff proposed.

[73] Terry Clower and Keith Waters, "Data Centers and 2023 Home Sales in Northern Virginia," George Mason University, Schar School of Policy and Government, Center for Regional Analysis, August 2025. Clower's caveat on housing undersupply: FXBG Advance, September 11, 2025.

[73a] Supervisor Jeff Stoneman, Hanover County Board of Supervisors, May 27, 2026, at approximately 5:25:15. Characterised, not quoted. The adopted minutes render the remark in reported speech and the passage was not ear-verified; v2.0 carried a direct quotation of it from press reporting.

About the Author



Tommy N. Turner is an independent researcher and writer who documents the local-government and energy dimensions of the data center build-out in Virginia. His series of jurisdiction-level case studies covers the counties and the fall-line corridor where Virginia's data center decisions have been made, refused, or contested, and the analytical volumes extend that work into the systems those decisions run on. Earlier volumes took the transmission network and the cost-allocation machinery, then generation, then water. This one takes a county that refused a 900-megawatt campus with its leverage intact, and the question of what it did with that leverage afterward.

Like the rest of the series, it is assembled from primary records: adopted minutes and meeting recordings of the Board of Supervisors and the Planning Commission, county staff reports and presentations, the executed proffer instrument and the 619-page case background packet, the applicant's hydraulic memorandum, State Corporation Commission dockets, the Code of Virginia, and the county's own published figures. He spent thirty years in corporate banking, banking technology and international consulting before this work, and holds an MBA from Emory. He writes opinion and analysis on Virginia public affairs for outlets including the Richmond Times-Dispatch, the Virginia Mercury, the Virginian-Pilot, the Roanoke Times, Cardinal News, and RTO Insider. The case studies and analytical volumes are published as open, citable living editions, revised as the record moves. He works from Williamsburg and Christiansburg, Virginia.

Contact tommy@gofast.pro · tommynturner.com · ORCID 0009-0005-7422-9881