

THE HIDDEN COSTS OF DATA CENTERS

January 27, 2024



AGENDA

- Data Center Overview
- Indiana Case Study
- Data Center Subsidies
- Virginia Case Study
- Q&A

INTRODUCTIONS

Kelly Hamman

Director of Development
Citizens Action Coalition
khamman@citact.org

Ben Inskeep

Program Director
Citizens Action Coalition
binskeep@citact.org

Kasia Tarczynska

Senior Research Analyst
Good Jobs First
kasia@goodjobsfirst.org

Savannah Wilson

Energy Policy Analyst
Clean Virginia
savannah@cleanvirginia.org

CITIZENS ACTION COALITION

- CAC is Indiana's oldest and largest consumer and environmental advocacy organization.
- Since our inception in 1974, we've helped to save Hoosiers **billions** in excess utility charges.
- CAC advocates on behalf of Hoosiers on issues regarding energy policy, utility reform, health care, pollution prevention, and family farms.

Grassroots organizing



Legislative advocacy



Regulatory advocacy



DATA CENTER OVERVIEW AND INDIANA CASE STUDY

DATA CENTERS

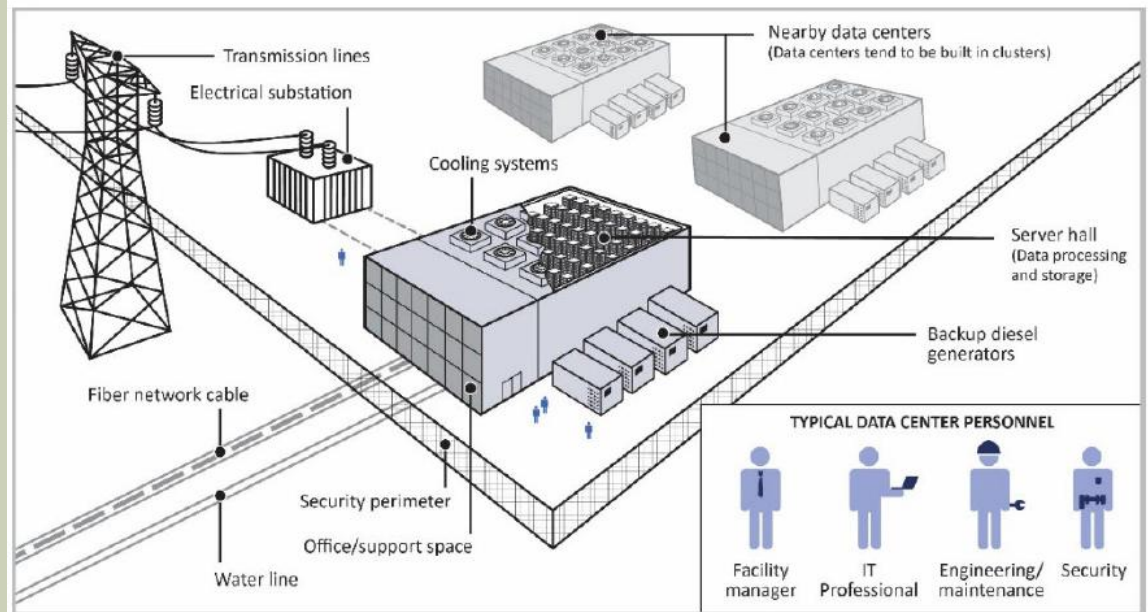
■ What are data centers?

- Warehouse containing computer systems, servers, storage devices, and networking equipment

■ What are hyperscaler data centers?

- A large-scale data center
- Support cloud computing and, increasingly, artificial intelligence (AI)
- Microsoft, Amazon, Google, or Meta

Common infrastructure, equipment, and personnel at a typical data center



SOURCE: JLARC staff.

NOTE: Illustrative example. Data centers may have different equipment, e.g., based on their cooling system.

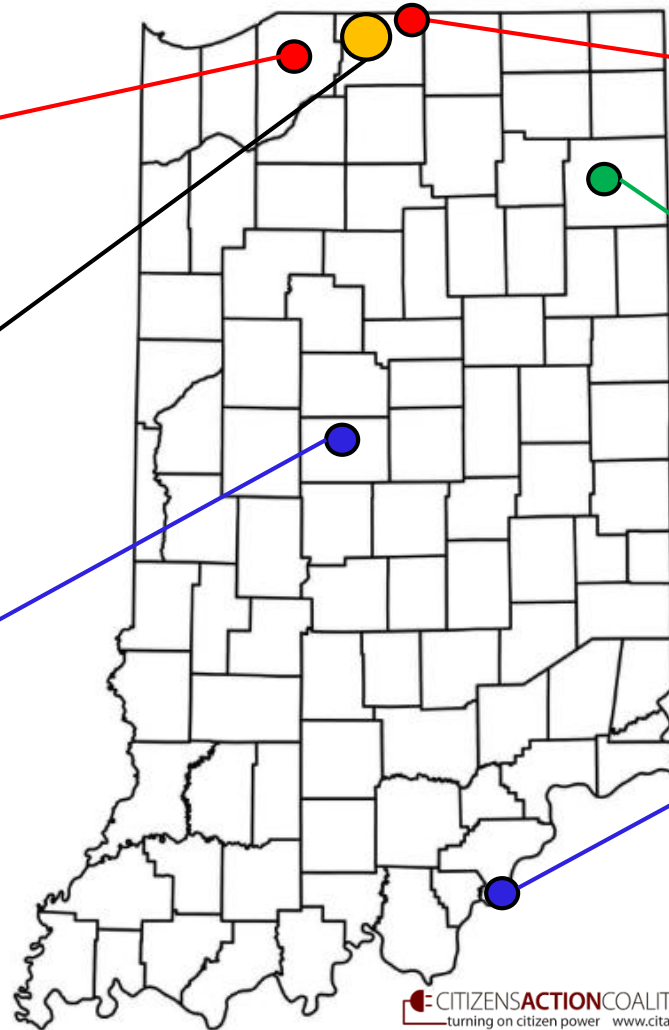
Source: JLARC, "Report to the Governor and the General Assembly of Virginia: Data Centers in Virginia: 2024," Draft, December 9, 2024

INDIANA HYPERSCALER DATA CENTERS

 Microsoft
LaPorte


New Carlisle

 Meta
Lebanon



 Microsoft
Granger


Fort Wayne

 Meta
Jeffersonville

WHY THEY ARE LOCATING IN INDIANA

■ Speed / Access:

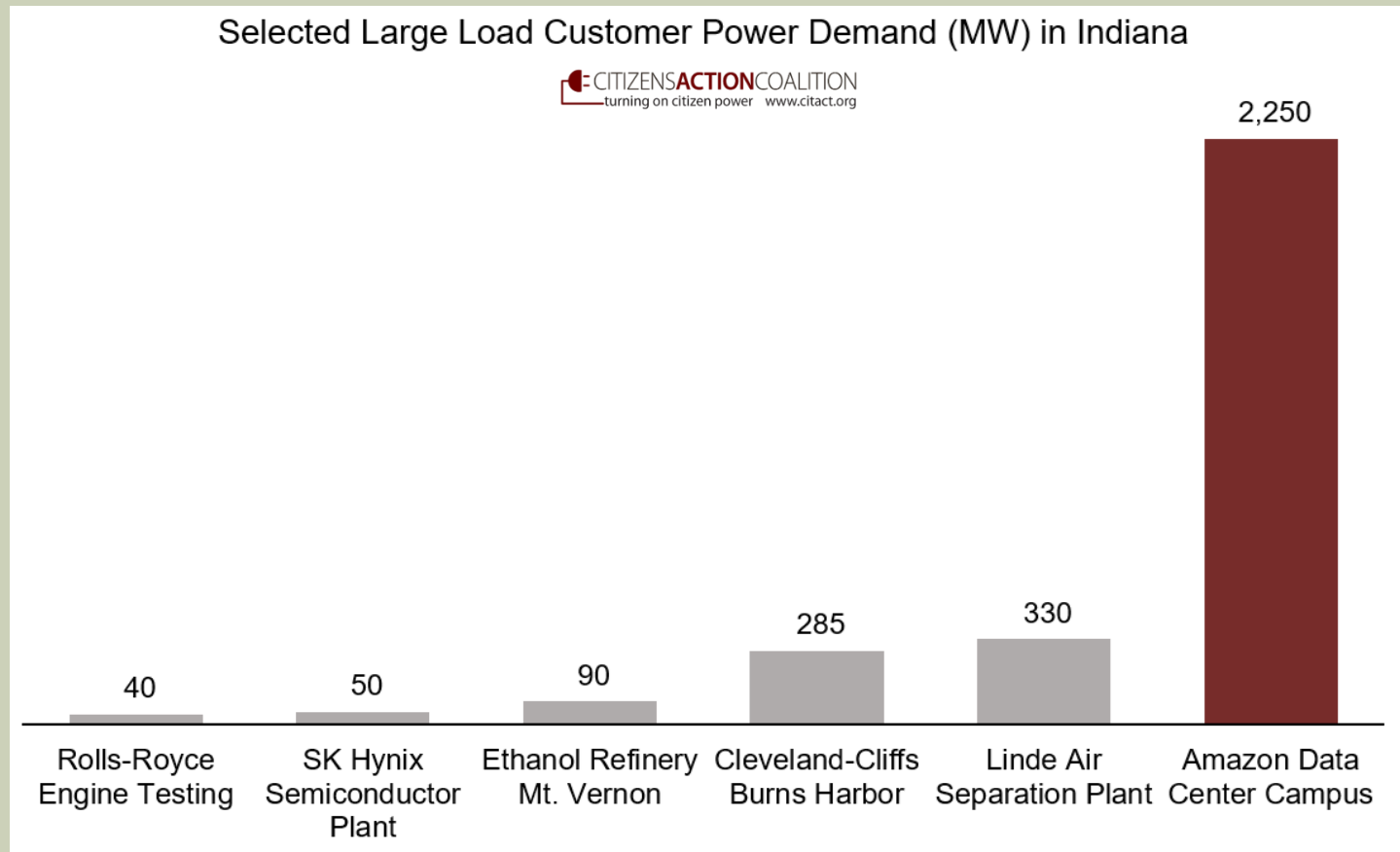
- ✓ **Transmission:** Available high-voltage capacity to quickly interconnect
- ✓ **Generation:** Indiana is part of both PJM and MISO markets
- ✓ **Infrastructure:** Fiber-optic networks, highways, railways

■ Other Key Factors:

- ✓ **Subsidies:** State sales tax exemption
- ✓ **Cost:** Ample lower-cost land, lower state business taxes
- ✓ **Proximity:** E.g., close to Chicago (latency)
- ✓ **Natural Disaster Risk:** Small

HYPERSCALER POWER DEMAND

- Hyperscalers can use **~10 times** more power than the next largest electric customer



Sources: MISO, "AC/BOD Discussion Additional Information," July 30, 2024; Media reports; Cause Nos. 46038 and 46097

SCALE OF HYPERSCALER LOAD GROWTH

■ Hyperscaler data centers are extreme electricity guzzlers

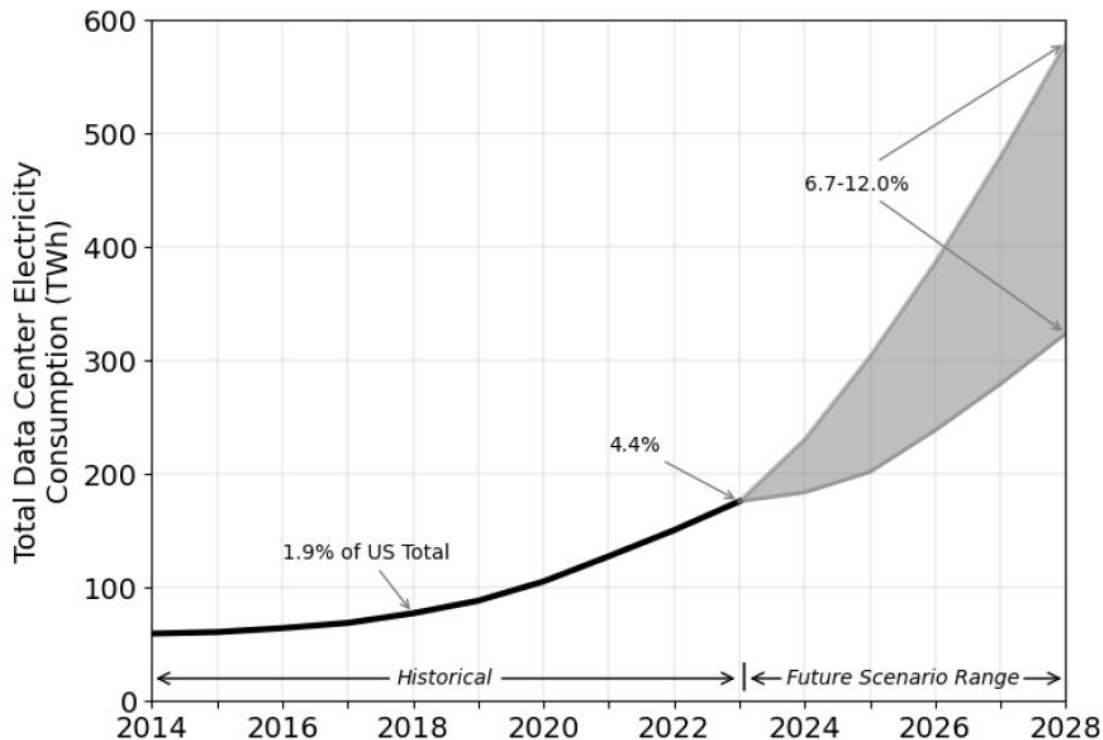
- Each can use as much power as a city.
- Scale of need is unprecedented and creates unique concerns



*Hyperscaler data centers planning to come to northern Indiana could **use more electricity than New York City and Long Island combined** by 2029.*

NATIONWIDE RAMIFICATIONS

Total U.S. Data Center Electricity Use



Source: LBNL, 2024 United States Data Center Energy Usage Report, December 2024

Context: Total retail electric sales in Indiana: ~100 TWh per year

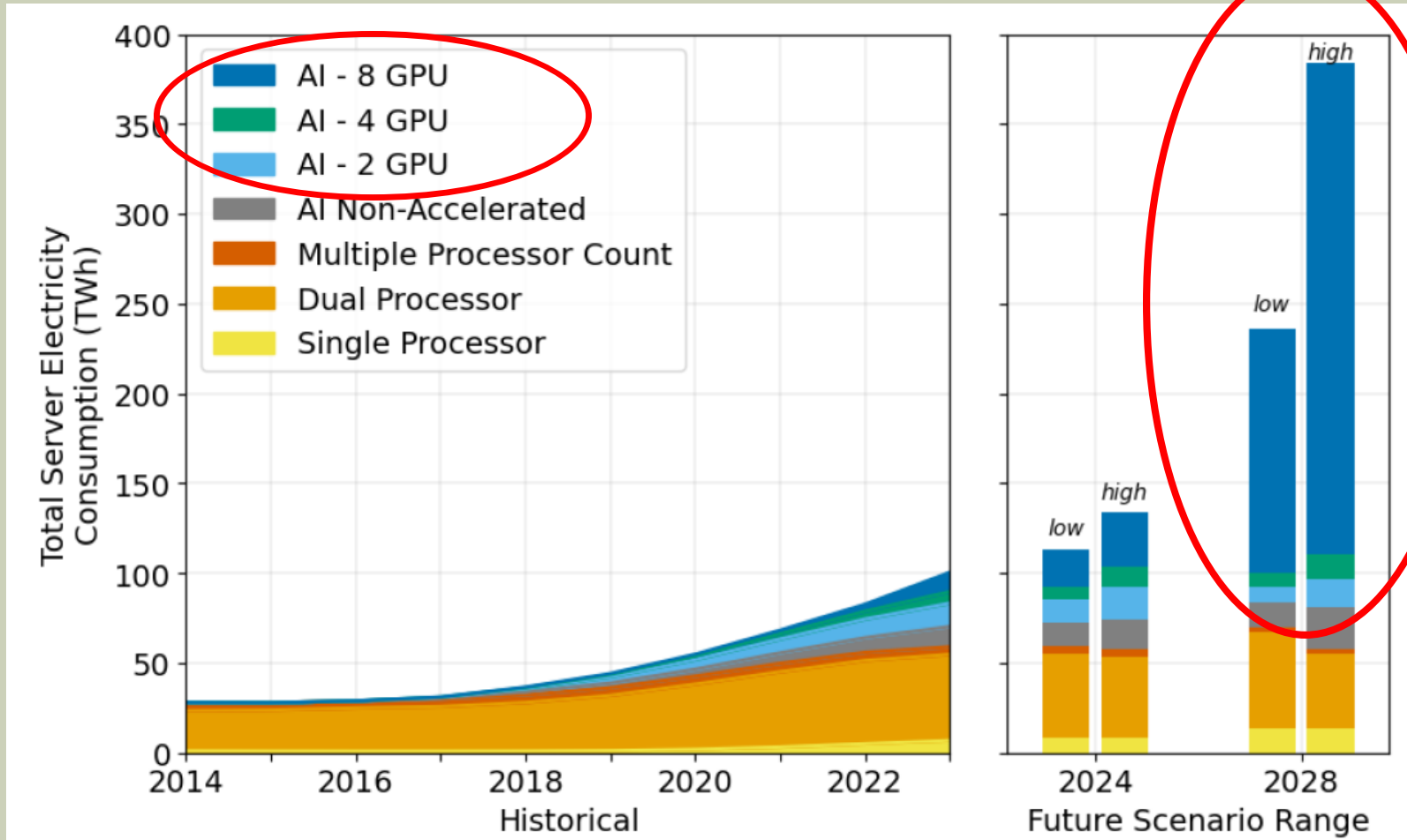
■ Soaring electricity consumption

- 2017: 76 TWh
- 2023: 176 TWh
- 2028: 325 – 580 TWh (est.)

■ As a % of total U.S. electricity consumption

- 2017: 1.9%
- 2023: 4.4%
- 2028: 6.7% - 12.0% (est.)

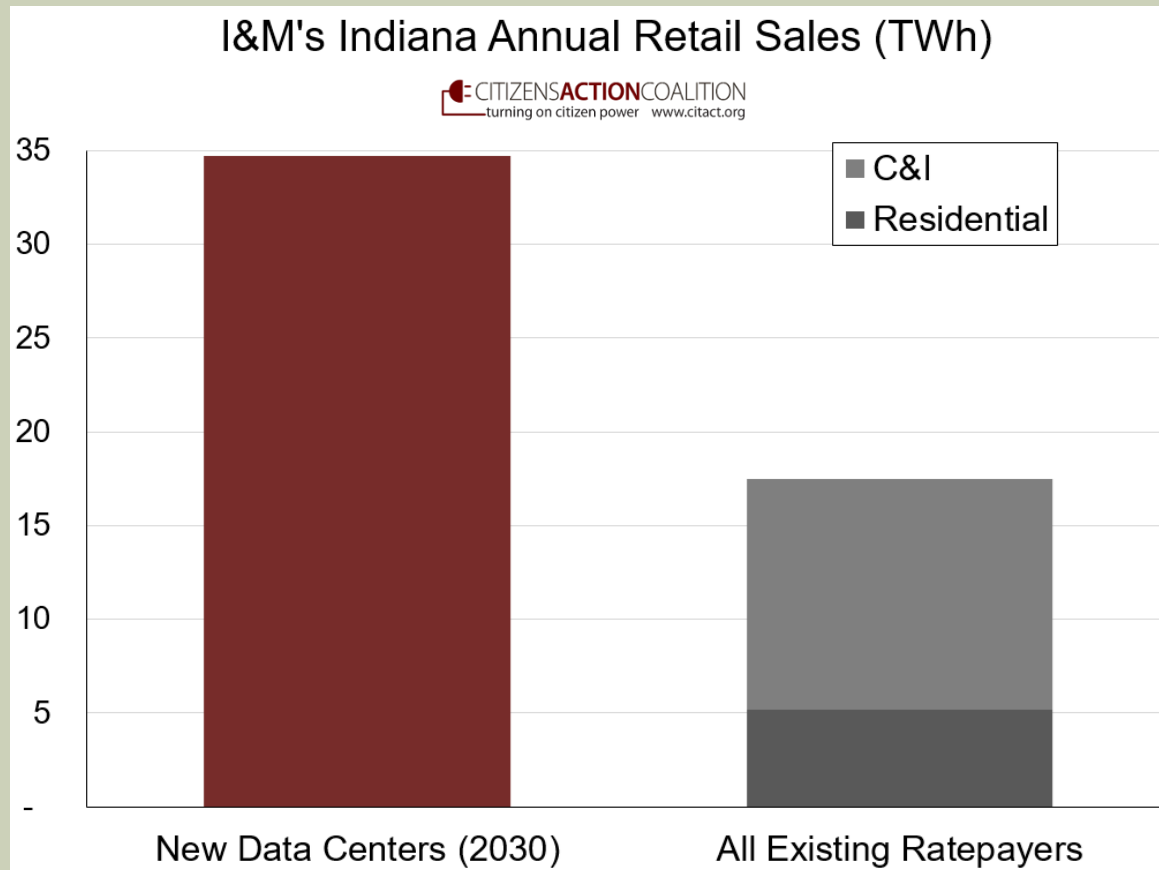
AI IS THE PRIMARY DRIVER



Source: LBNL, 2024 United States Data Center Energy Usage Report, December 2024


I&M DATA CENTER ELECTRICITY USE

- I&M expected to **triple** its electricity sales by 2030 from new hyperscalers (i.e., Amazon, Google, Microsoft)

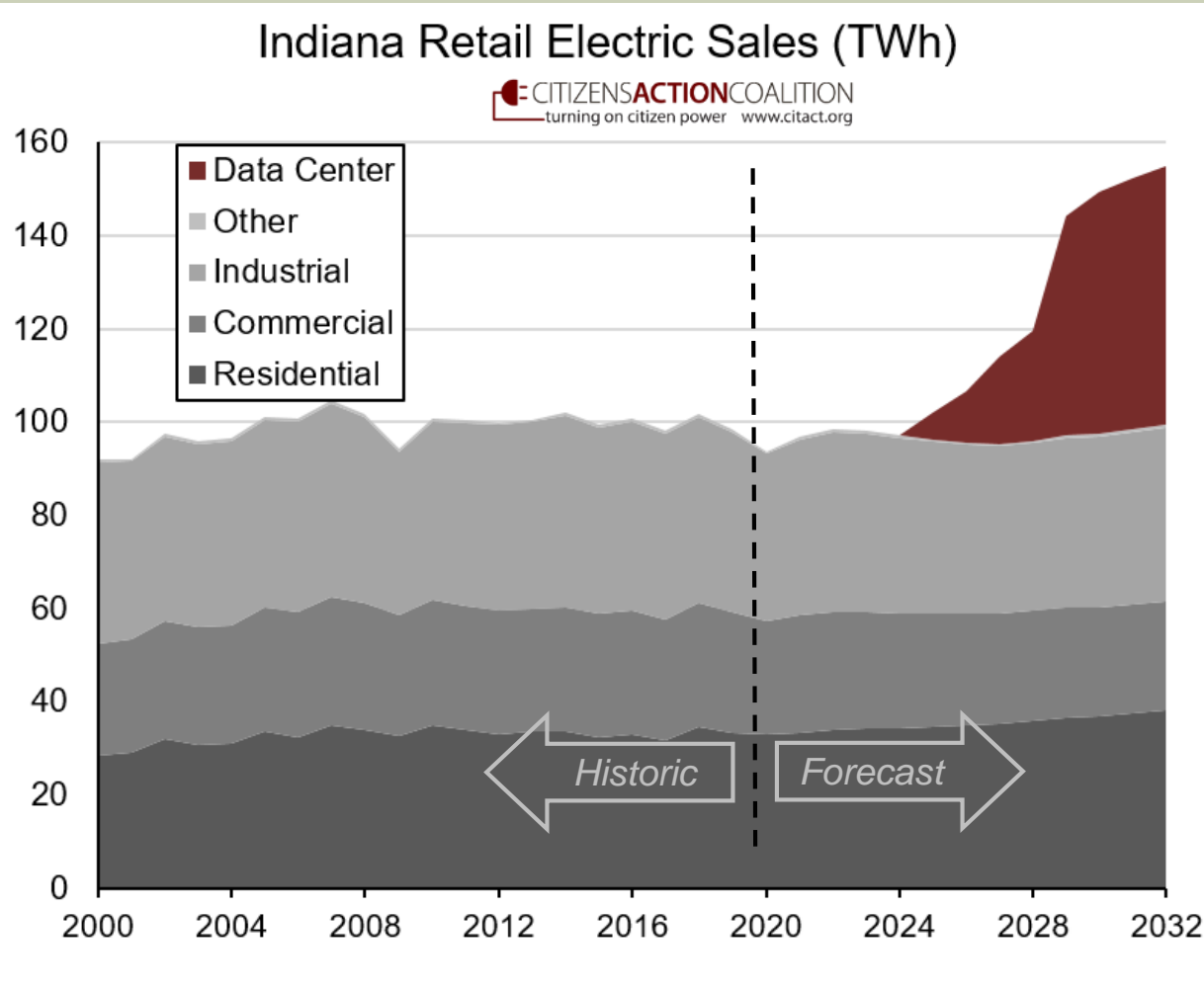


HOW MUCH IS COMING?

- Lack of transparency despite large impacts and risks
- No publicly available forecast of Indiana's electricity usage with hyperscaler data centers included
- CAC developed a plausible data center load scenario:

Utility	MW by 2032	Sources
I&M	4,400	Cause No. 46097; IRP slides
NIPSCO	2,000	IRP Base Load Forecast
All others	1,500	<i>Assumption: three hyperscalers of 500 MW each</i>
Total	7,900 MW by 2032	 CITIZENS ACTION COALITION turning on citizen power www.citact.org

INDIANA DATA CENTER ELECTRICITY USAGE UNDER CAC SCENARIO



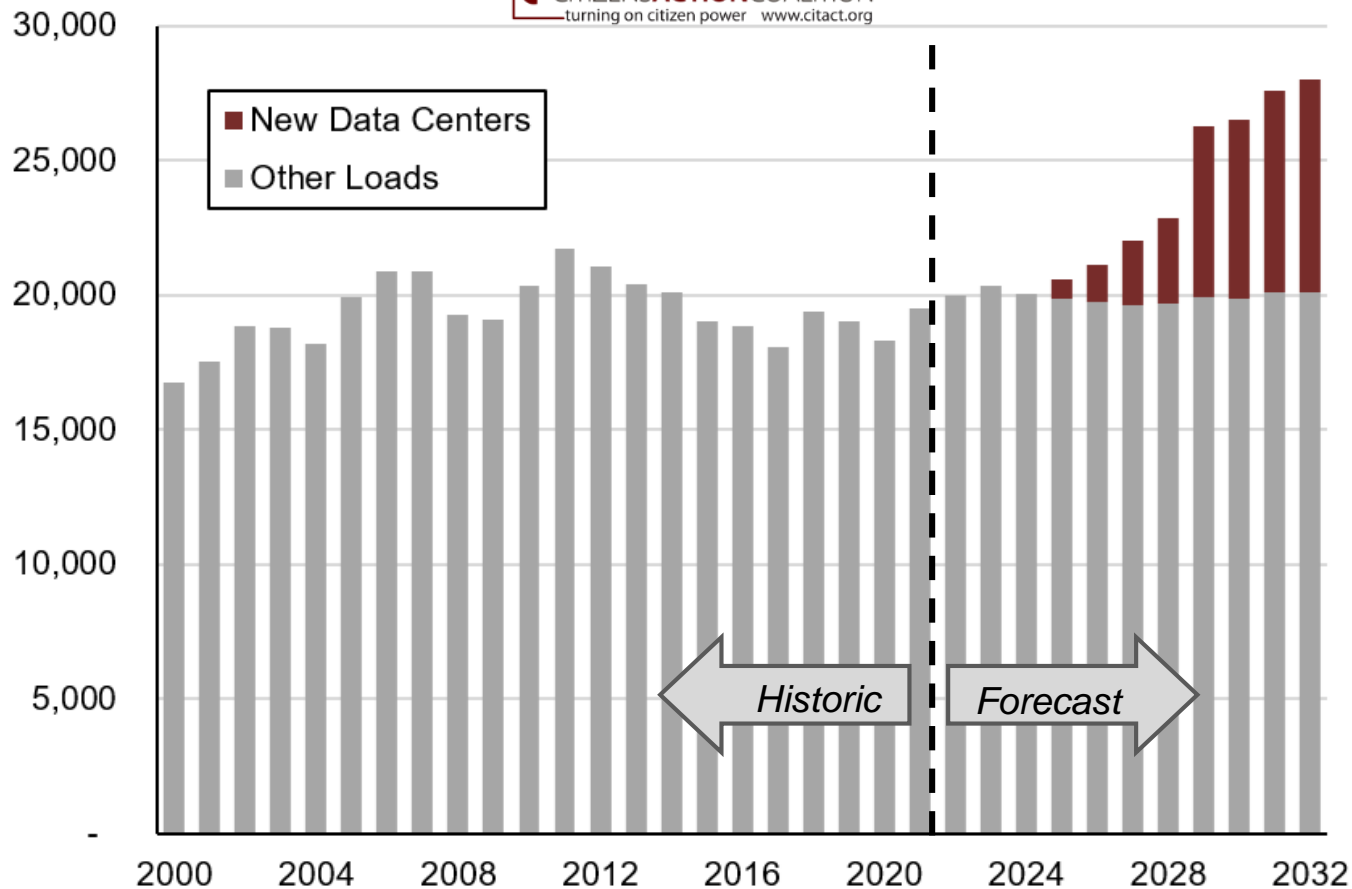
■ Data centers cause a **57%** increase in retail electric sales 2024-2032

■ Data centers are **36%** of total Indiana retail electric sales in 2032

DATA CENTERS WILL LEAD TO SOARING PEAK DEMAND IN INDIANA

Indiana Summer Peak Demand (MW)

 CITIZENS ACTION COALITION
turning on citizen power www.citact.org



■ Data centers cause a **39%** growth in peak load 2024-2032

■ Data centers are **28%** of total peak load in 2032

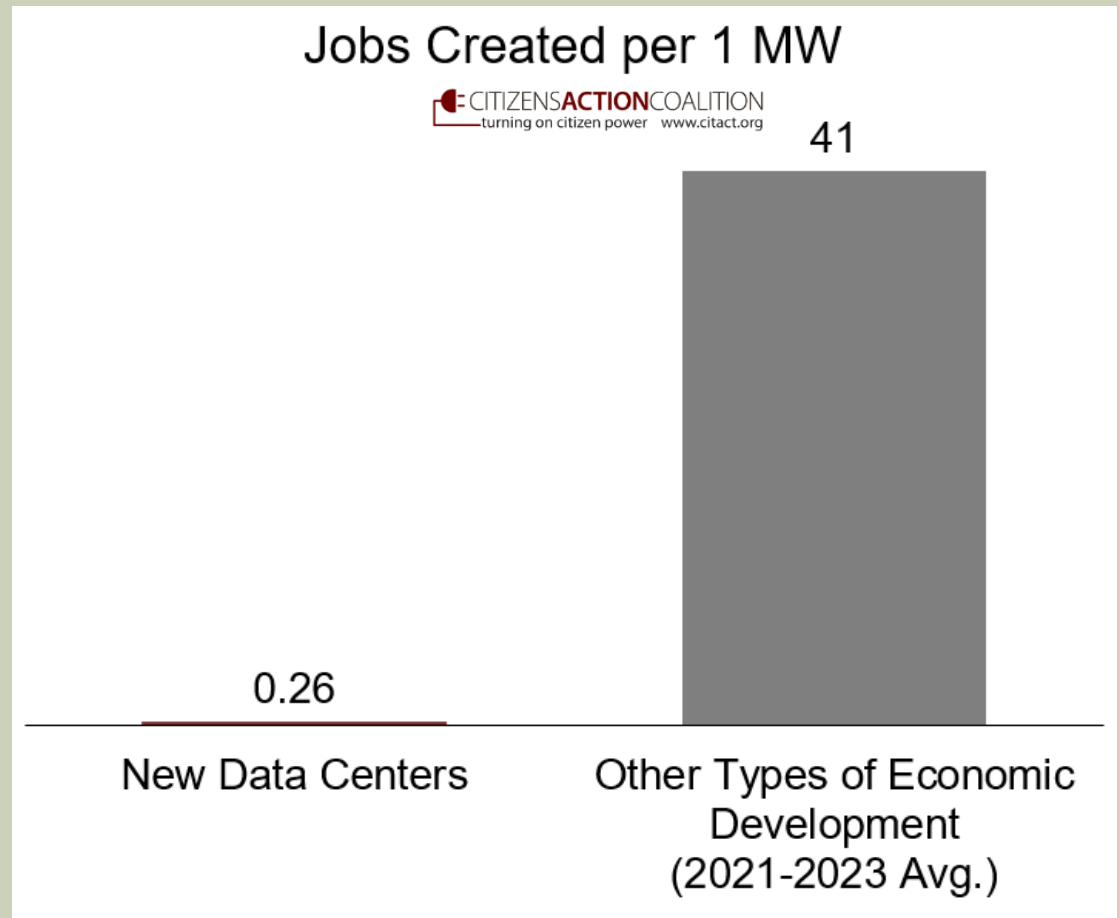
DATA CENTERS WILL CAUSE UTILITY BILL INCREASES

■ Data centers can lead to electric utility bill increases on all customers:

- Sudden, extreme growth in demand creates *upwards* pressure on price given supply constraints
- Don't pay their fair share of utility costs
- Push for expensive & risky small modular nuclear reactors (SMRs)
- Operate with extreme secrecy
- Use enormous resources and power to influence policymakers
- Shift stranded asset costs onto other customers

DATA CENTERS WILL CREATE VERY FEW PERMANENT JOBS

- Other economic development creates more than **100x more jobs** per MW than data centers
- Data provided by I&M



Source: IURC Cause No. 46097, I&M Response to Amazon Data Request 1-28(a)

DATA CENTERS CREATE BARRIERS TO FUTURE ECONOMIC DEVELOPMENT

- “The capacity needs of the large load customers require significant resources and this in turn impacts the opportunity for other new loads ...to be served without delay.... [I]n some cases, I&M has communicated **it could be 7-10 years before capacity may be available.**”
 - Steven Baker, President & COO of I&M

- “Duke Energy may not be able to currently serve any additional businesses at the RRCC [River Ridge Commerce Center, where a Meta data center located] with required **electric loads as low as 5MW** without a **delay of several years.**”
 - Josh Staten, Senior Director—Business Development and Real Estate for the River Ridge Development Authority

DATA CENTER SALES TAX EXEMPTION

■ Indiana enacted a data center sales tax exemption in 2019

- Up to 50 years
- Includes data center equipment *electricity used*

LEGISLATIVE SERVICES AGENCY OFFICE OF FISCAL AND MANAGEMENT ANALYSIS

200 W. Washington, Suite 301
Indianapolis, IN 46204
(317) 233-0696
iga.in.gov

FISCAL IMPACT STATEMENT

LS 7399

BILL NUMBER: HB 1405

SUBJECT: Taxation of Data Centers.

FIRST AUTHOR: Rep. Soliday

FIRST SPONSOR: Sen. Messmer

NOTE PREPARED: Apr 22, 2019

BILL AMENDED: Apr 18, 2019

BILL STATUS: Enrolled

In 2014, data centers in the U.S. consumed about 1.8% of total U.S. electricity. Indiana residents and businesses incurred about \$9.7 B in electricity consumption costs in CY 2017. Based on the available data and assuming data centers in Indiana consume 1.8% of total statewide electricity, it is estimated that data centers could pay up to \$174 M in electricity costs. The bill would result in exempting a small but growing portion of electricity consumption by data centers from state Sales Tax.

Source: LSA, Fiscal Impact Statement, HB 1405 (2019)

DATA CENTER SALES TAX EXEMPTION WILL COST HOOSIERS BILLIONS

■ Impact of one 1,000 MW hyperscaler data center:

- Annual electric bill: \$492.6 million
- Sales tax: 7%
- Foregone sales tax revenue: \$34.5 million per year

■ Statewide: (7,900 MW of data centers):

- \$272 million per year / **\$13.6 billion over 50 years**
- If rates increase by 2% per year: **\$23.0 billion over 50 years**

INDIANA'S CLIMATE PROGRESS

- Climate pollution from electricity generation in Indiana fell by **50%** from 2005 to 2023.
- How will hyperscaler data centers impact our hard-fought climate progress?



Photo: Coal-fired Gallagher Station, Floyd County, IN, retired in 2021. Credit: Duke Energy.

DATA CENTERS THREATEN CLIMATE PROGRESS

- **Indiana utilities planning natural gas expansion over next 10 years to meet hyperscaler load growth:**

Utility	Natural Gas Peaker Plants	Natural Gas Combined Cycle
I&M	Up to 4,000 MW	Up to 5,4000 MW
NIPSCO	1,000 MW	3,200 MW

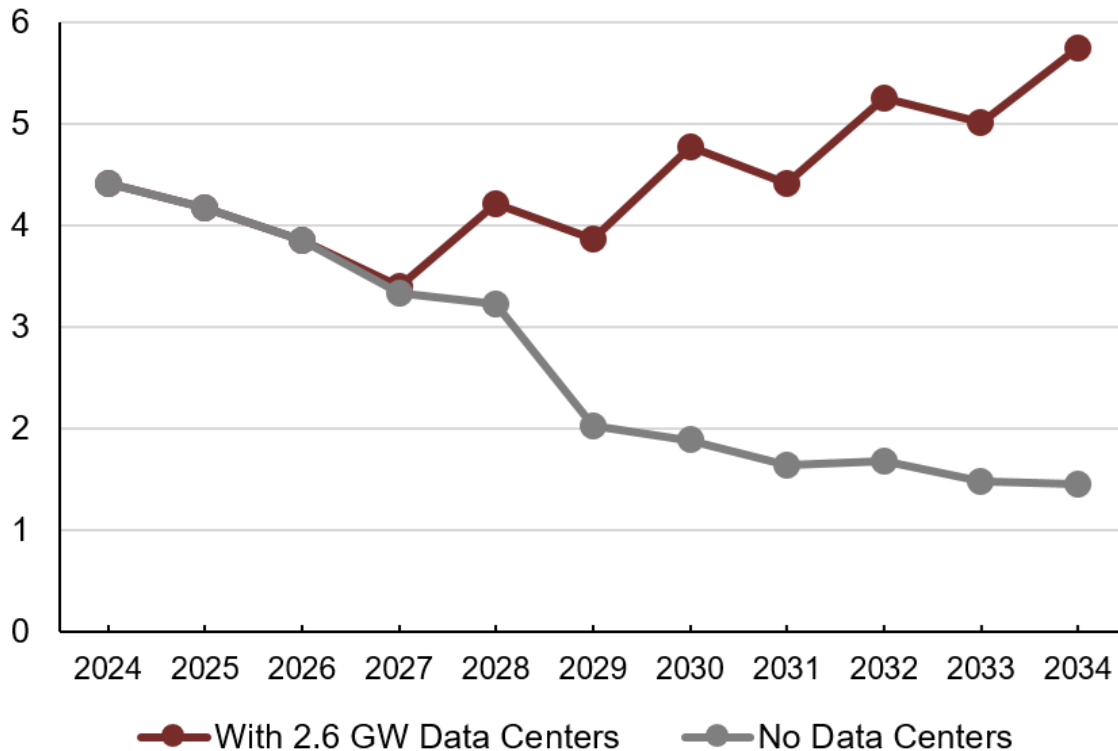
- **1,070-MW Merom coal plant could stay open for data center**
 - Hallador negotiating long-term contract to sell majority of output
 - Originally planned for retirement in 2023

Sources: EPRI, “Powering Data Centers,” 2024, Figure 17 and personal communication with authors; S&P Global, “Data Centers: More Gas Will Be Needed To Feed U.S. Growth, Oct. 22, 2024; Utility IRP materials; Hallador press release

NIPSCO'S EMISSIONS EXPECTED TO SOAR DUE TO DATA CENTERS

NIPSCO CO₂ Emissions (million tons)

 CITIZENS ACTION COALITION
turning on citizen power www.citact.org



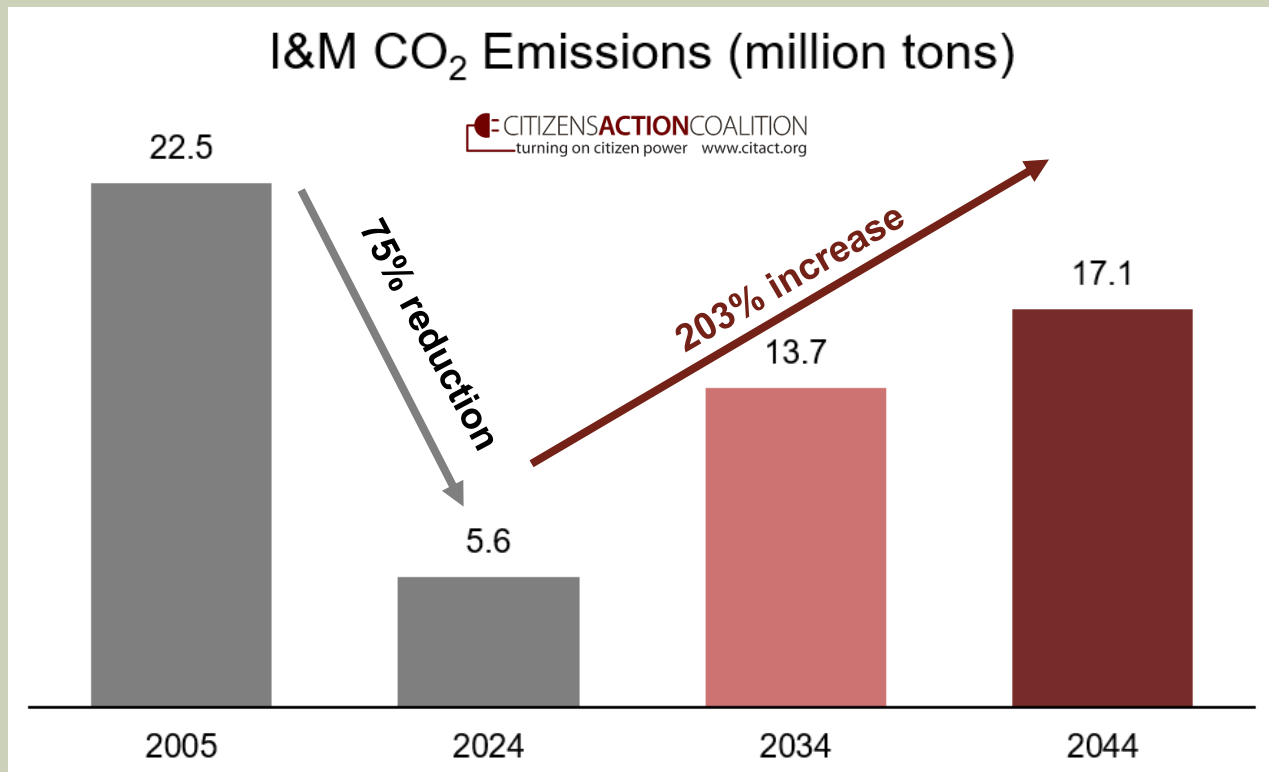
■ NIPSCO's projections for 2034 CO₂ emissions:

- **30% increase** if 2.6 GW of data centers are added
- **67% decrease** under "no data centers" scenario

I&M'S CLIMATE PROGRESS EVISCERATED BY HYPERSCALER DATA CENTERS

■ I&M's Base IRP Portfolio shows hyperscaler load growth leading to:

- **More than doubling** CO₂ emissions in next 10 years
- **Tripling** CO₂ emission over next 20 years



Sources: I&M 2024-2025 IRP Slides, Meeting 3a, Base Portfolio; Meeting Minutes; Calculations by CAC

OTHER DATA CENTER IMPACTS

■ Water consumption

- Millions of gallons per day

■ Local impacts

- Back-up diesel generators
- Noise pollution
- Light pollution

■ Grid Stability

- Bloomberg analysis: data centers are associated with degraded grid stability



Source: Meta, Jeffersonville Data Center

IMPACTS OF AI

AI boom could unleash global surge in electronic waste

October 29, 2024 | The Washington Post

BENJ EDWARDS, ARS TECHNICA BUSINESS OCT 30, 2024 8:00 AM

OpenAI's Transcription Tool Hallucinates. Hospitals Are Using It Anyway

In health care settings, it's important to be precise. That's why the widespread use of OpenAI's Whisper transcription tool among medical workers has experts alarmed.

AI-generated 'slop' is slowly killing the internet, so why is nobody trying to stop it?

Arwa Mahdawi

Texas parents sue after AI chatbot suggests self-harm to child

Another child was shown sexually explicit material by the app for years before their parents found out.

Microsoft's Hypocrisy on AI

Can artificial intelligence really enrich fossil-fuel companies and fight climate change at the same time? The tech giant says yes.

By Karen Hao

Meta scrambles to delete its own AI accounts after backlash intensifies

By Allison Morrow, CNN

5 minute read · Updated 5:42 PM EST, Fri January 3, 2025

Could reliance on AI harm critical thinking in young people? Researchers have their worries

More than 650 people took part in the research, with the results suggesting a link between usage and lower cognitive abilities

Lawsuit: A chatbot hinted a kid should kill his parents over screen time limits

DECEMBER 10, 2024 · 12:01 AM ET

[Submitted on 22 Jun 2023 (v1), last revised 26 Jun 2023 (this version, v2)]

AI could create a perfect storm of climate misinformation

Victor Galaz, Hannah Metzler, Stefan Daume, Andreas Olsson, Björn Lindström, Arvid Marklund

An AI chatbot told me to murder my bullies

Character AI gives Telegraph reporter posing as a teenager advice on how to kill another 'child' and dispose of his body

🔖 221 📄 Gift this article free 📌

Benedict Smith
27 December 2024 11:20am GMT

Ellison declares Oracle all-in on AI mass surveillance, says it'll keep everyone in line

Cops to citizens will be 'on their best behavior because we're constantly recording and reporting'

📍 Brandon Vigliarolo

Mon 16 Sep 2024 // 18:34 UTC

Nonconsensual deepfake porn puts AI in spotlight

By Donie O'Sullivan, CNN

4 minute read · Published 6:27 PM EST, Thu February 16, 2023

BUSINESS • TECHNOLOGY

Exclusive: OpenAI Used Kenyan Workers on Less Than \$2 Per Hour to Make ChatGPT Less Toxic

15 MINUTE READ

CAC'S LANDMARK SETTLEMENT

- **In October 2024, CAC reached a unanimous settlement agreement** with I&M, data centers, and the state's consumer advocate
- **Settlement will help protect existing electric ratepayers from risks associated with new data centers:**
 - ✓ Long-term contract commitments
 - ✓ Collateral requirements
 - ✓ Large minimum payments each month
 - ✓ \$1+ billion early termination fee
 - ✓ I&M reporting requirements on large load customers
- Hyperscaler data centers contributing \$7.5 million to support income-qualified programs

CAC CALLS FOR HYPERSCALER DATA CENTER MORATORIUM

Utility customer advocates call for data center moratorium

BY: LESLIE BONILLA MUÑIZ - OCTOBER 16, 2024 4:52 PM



Indiana Gov. Eric Holcomb, in blue, looks at an aerial overview of Google's data center project in Fort Wayne during an announcement and groundbreaking ceremony on April 26, 2024. (From Holcomb's official Flickr)

- The State of Indiana should study the fiscal, economic, environmental, energy, water, and utility bill impacts and risks of data centers
- Other states should consider similar studies
- Protections for ratepayers, taxpayers, and the environment

DATA CENTER SUBSIDIES

Kasia
Tarczynska
, Good Jobs
First

Who Is Good Jobs First?

- Transparency, accountability, and equity in business subsidies.
- Research and advocacy.
- Databases, reports, issues monitoring.



Violation Tracker
Corporate crime and
misconduct



Tax Break Tracker
Governmental tax
abatement disclosures



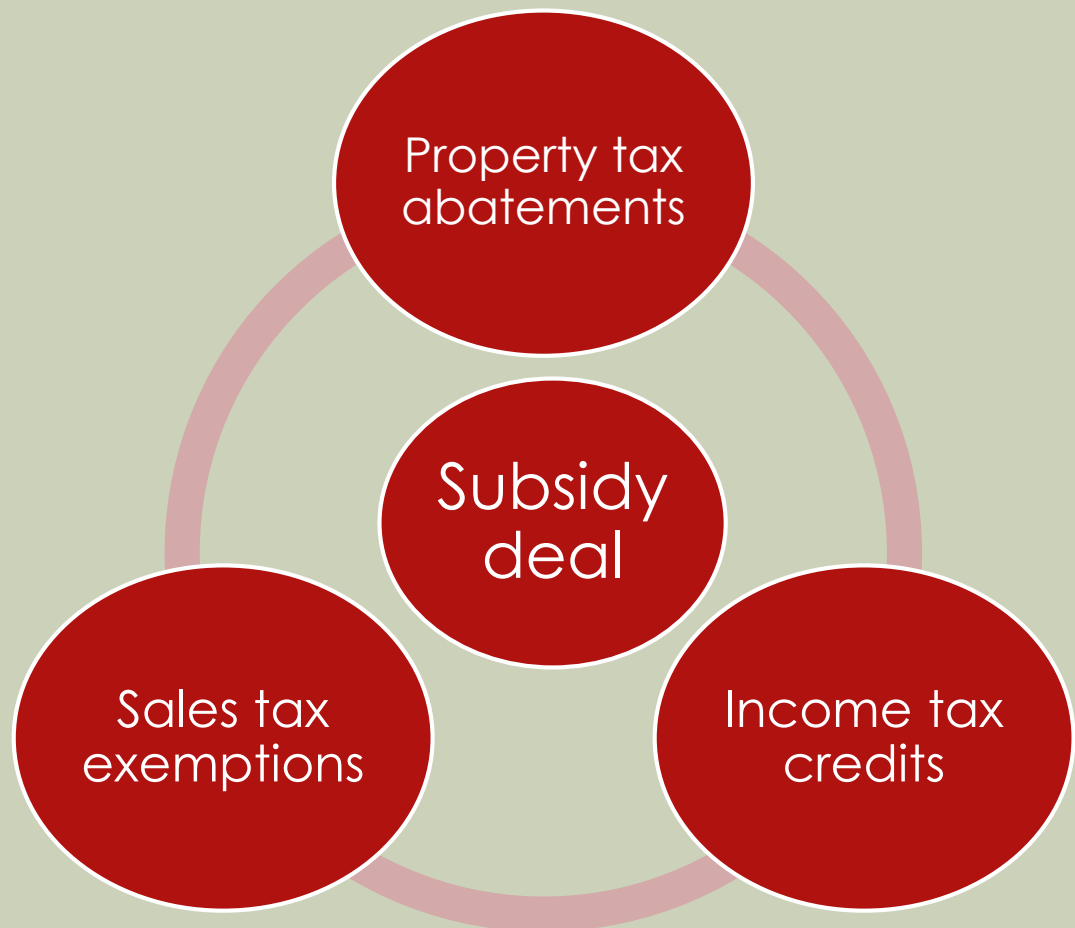
Subsidy Tracker
Government financial
assistance to business



Amazon Tracker
Subsidies awarded to the
corporate giant

What Are Subsidies?

- Public financial assistance to individual company.
- Most subsidies are tax breaks.
- Subsidies are layered on top of each other.

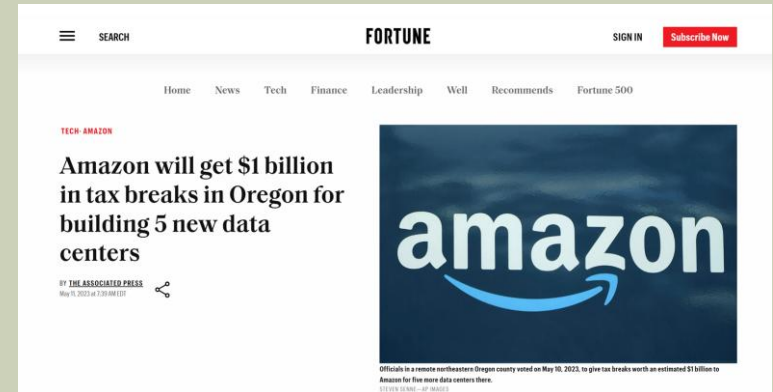


Data Center Subsidies

- Most profitable to data centers
- State and local sales tax exemptions (Indiana = for 50 years).
- Local property tax breaks.
- Discounts on water and electricity given by public utility companies.

Data Center Subsidies Are Getting Expensive

COMPANY	PARENT	LOCATION	SUBSIDY SOURCE	YEAR	SUBSIDY VALUE	LOAN/BAILOUT VALUE	TYPE OF SUBSIDY
Amazon Web Service	Amazon.com	Mississippi	multiple	2024	\$259,000,000		MEGADEAL
Amazon	Amazon.com	Virginia	state	2023	\$140,000,000		MEGADEAL
Worldwide LLC	Meta Platforms Inc.	Texas	multiple	2023	\$687,600,000		MEGADEAL
Apple	Apple Inc.	North Carolina	multiple	2021	\$890,800,000		MEGADEAL
Facebook	Meta Platforms Inc.	Georgia	local	2020	\$355,000,000		MEGADEAL

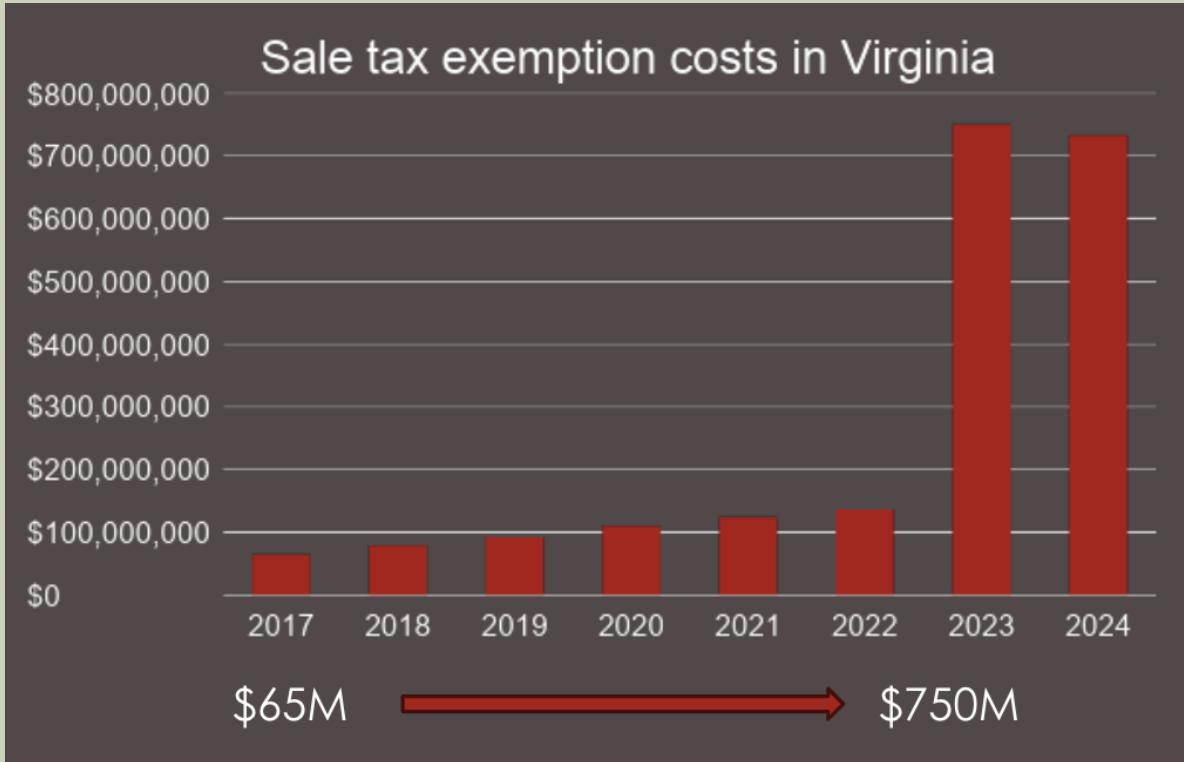


Amazon in St. Joseph County, IN:
 \$4.2 **billion** in local tax breaks
 \$98 million in state tax credits and grants
 Unknown amount in sales tax exemptions for 50 years

Local breaks estimated by South Bend Tribune, August 11, 2024
 State subsidies: Indiana Economic Development Corporation

Selected data center megadeals in GJF's Subsidy Tracker database: subsidytracker.goodjobsfirst.org

Real Life Consequences: State Budgets



Veterans Services:
\$230 million in 2024

Real Life Consequences: Schools Lose Tax Revenue

F. Tax Abatement Disclosures

The GASB issued Statement No. 77, Tax Abatement Disclosures in August, 2015. GASB 77 requires governments that enter into tax abatement agreements to disclose information about those agreements. GASB Statement No. 77 was effective for the District for fiscal year ending June 30, 2017. The District has no tax abatements that affect them directly at June 30, 2023. Tax abatements that affect the District indirectly are as follows:

Exemption Program	Project	Tax Abatement Amount
Morrow County School - Enterprise Zone	Columbia River Tech	\$ 288,921
Morrow County School - Enterprise Zone	Lamb Weston Inc LTR	643,395
Morrow County School - Enterprise Zone	Lamb Weston Inc.	13,852
Morrow County School - Enterprise Zone	Amazon Web Serv. (L&C)	603,114
Morrow County School - Enterprise Zone	Amazon Web Serv. (Rippee Rd)	1,596,413
Morrow County School - Enterprise Zone	Amazon Web Serv. LTR	6,706,897
Morrow County School - Enterprise Zone	Amazon Web Serv. LTR Olson Rd	5,013,949
Morrow County School - Enterprise Zone	Amazon Web Serv. LTR Gar Swanson	264,016
Morrow County School - Enterprise Zone	MCGG	25,551
Morrow County School - Enterprise Zone	WOW PNW Threemile Project	178,317
Morrow County School - Enterprise Zone	Boardman Sleep Inn	-
Morrow County School - Strategic Investment Program	Echo Project	24,049
Morrow County School - Strategic Investment Program	PGE Carly	1,554,473
Morrow County School - Strategic Investment Program	Orchard Wind Project	149,974
Morrow County School - Strategic Investment Program	Wheatridge Wind Project	1,988,867
		<u>\$19,051,788</u>

→ 200 Additional Teachers

Google in South Carolina

In Berkeley County, South Carolina, Google has operated a massive data center complex since 2007. The company has been benefiting from property tax abatements, though their terms and value to the company have never been disclosed to the public.^[13] While we do not know how much Google is getting, we do know that in **FY 2023 Berkeley County public school district lost \$88 million in revenue** to economic development tax abatements. Over the last five years, abatements have cost the district \$300 million.^[14] In Berkeley County, 45% of public-school students identify as a racial minority (27% as African American/Black, 17% as Latinx, and 1% as Asian).^[15]

→ 1,223 Additional Teachers

Sources: Morrow County, Oregon, School District, Annual Financial Report, 2023
 GJF research based on Berkeley County, South Carolina, School District Annual Audit Reports 2023
 U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD)

Subsidies Do Not Play a Role in Attracting Data Centers

“I can’t think of a site selection or placement decision that was decided on a set of tax incentives.”

Bo Williams, Microsoft executive
New York Times, December 25, 2024

Lack of Job Creation

The Atlanta Journal-Constitution

METRO ATLANTA

Fulton board approves controversial \$10M tax break for Elon Musk's X

DAFC board votes 6-2 despite all public comments opposing the property tax abatement for a "purveyor of hate speech"

By Zachary Hansen

Jan 23, 2024



"The project will not create any new jobs."

NBC4 INVESTIGATES

20 jobs, but \$54 million in tax breaks for Google center in Columbus

by: Jamie Ostroff

Posted: Aug 27, 2021 / 06:19 PM EDT

Updated: Aug 27, 2021 / 06:22 PM EDT



\$2.7 million for each job!

Lack of Transparency

The Journal Gazette

Fort Wayne City Council approves tax break for data center

Madelyn Kidd | The Journal Gazette Dec 22, 2023

The Fortune 100 company behind Project Zodiac will save more than \$55 million in property taxes over 10 years for its planned data center campus – but Fort Wayne taxpayers still don't know who that is.

Project Zodiac, DMI FW,
LLC, HatchWorks, LLC

=
Google

PROJECT ID: 424313
INCENTIVE ID: A229-4-DATA-1002

DATA CENTER TAX EXEMPTION AGREEMENT

(REV: 9/23)

This Agreement (the "Agreement") is between the **INDIANA ECONOMIC DEVELOPMENT CORPORATION** (the "IEDC") and **HATCHWORKS LLC** (the "Company"). The parties to the Agreement, in consideration of the mutual covenants, obligations, and stipulations set forth herein, witness and agree as follows:

1. PURPOSE OF AGREEMENT:

To fulfill the purposes and provisions provided in Indiana Code § 6-2.5-15-1 et. seq. (the, "Act") and

Key Takeaways

- A few, large global corporations benefit from billions in tax breaks and other public support.
- The public costs of subsidies to data centers are rapidly growing.
- A small number of jobs are created.
- Subsidies do not matter when it comes to site location.
- The subsidy deals are often done in secrecy and lack proper transparency.

Data Centers in Virginia

Savannah Wilson, Clean Virginia

Overview

- Overview of Virginia data center industry
- Energy impacts
- Cost impacts
- Framework for responsible data center growth

Overview of Virginia data center industry

Largest data center market in the world.

Leads U.S. in planned project demand.



Sources: [Data Centers in Virginia 2024](#), Joint Legislative Audit and Review Commission (JLARC, 2024), pg. 5; Cushman & Wakefield Data Center Advisory Group, [2024 Global Data Center Market Comparison](#) (Cushman & Wakefield, 2024), 15; Adam Wilson, [“Datacenter companies continue renewable buying spree, surpassing 40 GW in US,”](#) S&P Global, March 28, 2023

Overview of Virginia data center industry

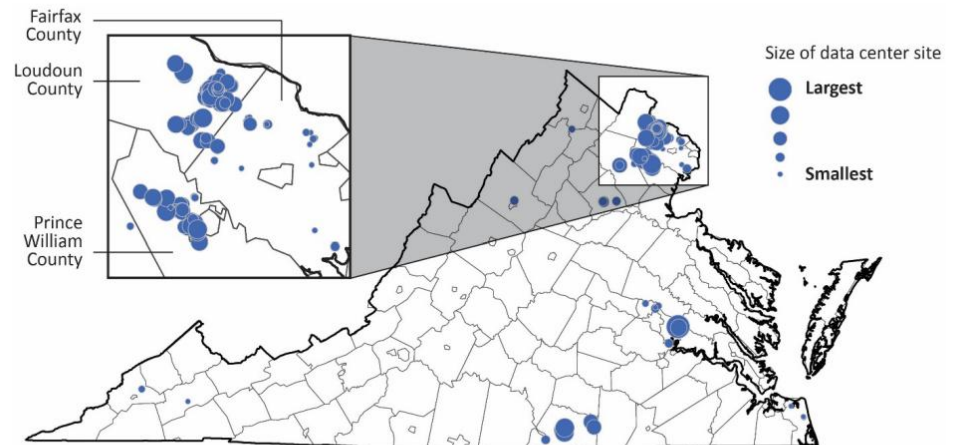
About 340 data center buildings on 150 different sites.

More than 63 million square feet of data center space (around 1,000 football fields).

Primarily in Northern Virginia, but expanding throughout the state.

FIGURE 1-2

Most of Virginia's data center industry is concentrated in Northern Virginia



SOURCE: JLARC analysis of Virginia Department of Environmental Quality data and county property real estate records.

NOTE: Map shows one dot per data center site, which may include multiple data center buildings. Size of each site represented by size of dot, as measured by the maximum capacity (in terms of megawatts) the site is permitted to backup via diesel generators. This capacity is larger than the current operational capacity because it (i) accounts for the site's full build-out potential, which many sites have not yet reached, and (ii) includes allowances for redundancy. Data center operators report 0 to 25 percent of backup capacity is typically for redundancy.

Virginia data center energy use

- Currently about 5 GW (= to 60% of Virginia households).
- According to PJM, Dominion Energy zone data center demand is/projected to be
 - About **5 GW** currently (20% of total demand)
 - **15 GW** by 2030 (45% of total demand)
 - **25 GW** by 2039 (55% of total demand)
- Dominion Energy has received 50 GW of capacity requests for data centers (largest single request is more than 6 MW)

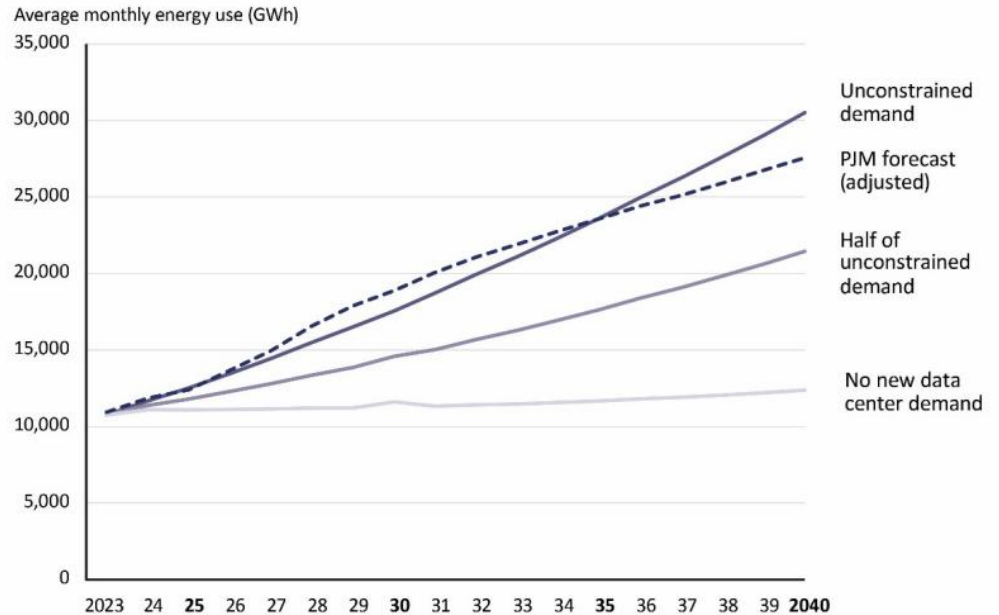
Sources: [Data Centers in Virginia 2024](#), Joint Legislative Audit and Review Commission (JLARC, 2024), pg. 5; PJM Resource Adequacy Planning Department, [PJM Load Forecast Report January 2024](#) (PJM, 2024), 36; PJM Resource Adequacy Planning Department, [2024 Load Forecast Supplement](#) (PJM, 2024), 24; Stan Blackwell (Data Center Frontier Trends Summit, Reston, Virginia, September 4, 2024)

Energy use: JLARC report

Data centers are projected to drive a close to 3x increase in Virginia electricity demand by 2040.

Source: *Data Centers in Virginia 2024*, Joint Legislative Audit and Review Commission (JLARC, 2024) pg. iii

Data center demand would drive immense increase in energy needs in Virginia, based on JLARC's independent forecast and other forecasts



SOURCE: JLARC staff consultant analysis.

NOTE: A detailed note is provided for this figure in Chapter 3.

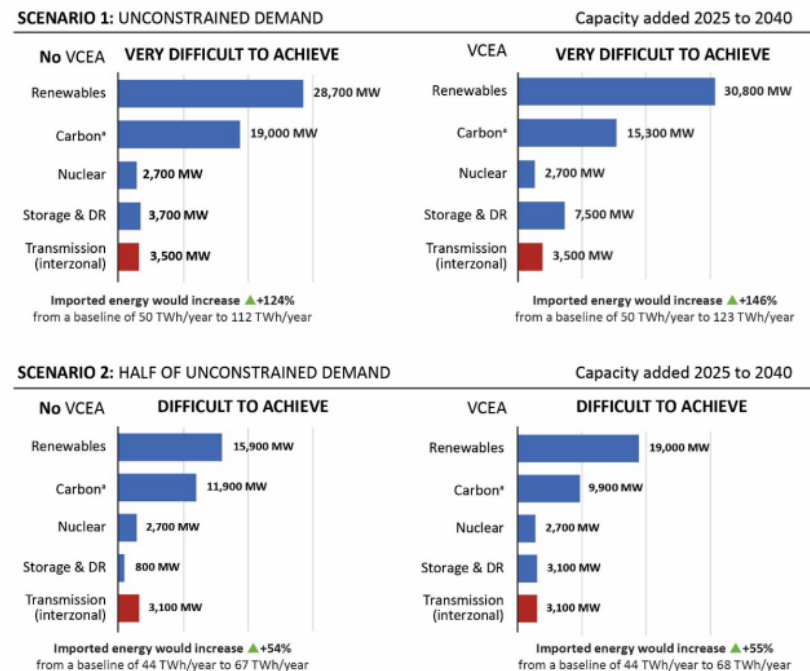
Energy demand: Impacts

It will be extremely difficult to meet the potential demand from data centers, even with huge amounts of added wind, solar, and gas.

Dominion Energy is already planning to add GWs more gas generation to meet data center demand.

Sources: [Data Centers in Virginia 2024](#), Joint Legislative Audit and Review Commission (JLARC, 2024), pg. iv; [Virginia Electric and Power Company's SCC Directed 2024 IRP Supplement](#), Commonwealth of Virginia, ex rel. State Corporation Commission, In re: Virginia Electric and Power Company's 2024 Integrated Resource Plan filing pursuant to Va. Code § 56-597 et seq., PUR-2024-00184 (Virginia SCC, November 15, 2024), pg. 5

Estimated generation mix needed to meet demand scenarios, with and without meeting VCEA requirements



SOURCE: E3 grid modeling analysis.

NOTE: A detailed note is provided for this figure in Chapter 3.

* Carbon includes natural gas, coal, and oil. Biomass facilities are counted as renewable resources, per the VCEA.

However, starting in 2045, E3's grid model assumes natural gas plants would be converted to hydrogen fuel in each scenario when VCEA requirements are met.

Cost impacts

Several ways data centers drive increased costs:

- Construction of new energy infrastructure (generation AND transmission costs)
 - Potentially including infrastructure that isn't needed
- Need to buy more energy from outside of the state
- Overall energy price increases because of limited supply

Cost impacts (Dominion Energy)

Solely from data center demand, the average residential bill is projected to go up by:

- \$23/month (\$276/year) by 2030
- \$37/month (\$444/year) by 2040

TABLE 4-2

Generation- and transmission-related costs for residential customers would increase by 2040 because of data center demand (Dominion example)

	Projected increase in generation & transmission charges (not including distribution charges & some transmission costs; 2024 constant dollars)	
	2030	2040
Typical monthly residential generation and transmission charges (2023)	\$90	\$90
Scenario 1: Unconstrained demand		
- VCEA (very difficult to achieve)	+\$23	+\$37
- No VCEA (very difficult to achieve)	+\$22	+\$33
Scenario 2: Half unconstrained demand		
VCEA (difficult to achieve)	+\$7	+\$14
No VCEA (difficult to achieve)	+\$6	+\$14

SOURCE: JLARC staff analysis of E3 model results and Dominion 2024 integrated resource plan.

NOTE: Typical monthly residential charges are the sum of the amount billed to Dominion residential customers assuming typical use of 1,000 kWh. Does not include potential increases in distribution and several other charges that customers typically pay for. Does not capture the cost of the many intrazonal transmission projects that would be needed or generation projects that are not attributable to data center demand.

Source: *Data Centers in Virginia 2024*, Joint Legislative Audit and Review Commission (JLARC, 2024), pg. 48

Framework for responsible data center development

Four Pillars of Responsible Data Center Growth

PROTECTING FAMILIES AND BUSINESSES

Preventing residents and businesses from subsidizing the costs associated with the data center industry's infrastructure energy needs.



INCREASING TRANSPARENCY

Promoting accountability and informed planning through robust reporting on energy use, water consumption and emissions.



RESPONSIBLY MANAGING RESOURCES

Ensuring responsible data center growth through statewide regulatory review.



INCENTIVIZING EFFICIENCY

Connecting state tax benefits to clean energy and efficiency standards to reduce costs and pollution.




Source: "Data Center Policy Press Briefing Slideshow - 1/14/25," Data Center Policy Press Briefing, Senate of Virginia, January 14, 2025. Slide 1

TAKE ACTION AND Q&A

WHAT CAN WE DO

Community rallies against county's data center expansion

By Jimmy Henderson / Fairfax County Times Jun 7, 2024 Updated Jun 9, 2024  2

Fighting back against data centers, one small town at a time

As the tech industry pushes to build more of the giant facilities, residents in some communities are trying to block the projects – and winning.

October 5, 2024

Application for \$1.3bn data center in Chesterton, Indiana, withdrawn

Scheme faced opposition from residents

June 14, 2024 By: Georgia Butler  Have your say

- Contact state policymakers
- Stay informed
- Organize to strengthen our voice
- Engage locally
- Join organizations like CAC
- Keep fighting!

QUESTIONS & ANSWERS

- **Please type your question into the Zoom chat.**
- **For more information, visit www.citact.org/data-centers**
 - Make a contribution to support our work
 - Sign up for emails and texts to stay in the loop
 - Download this presentation and find resources
 - Take action on consumer and environmental issues impacting Hoosiers