COMMONWEALTH of VIRGINIA

Department of Taxation

January 25, 2024

To: The Honorable L. Louise Lucas
Chair, Senate Finance and Appropriations Committee

The Honorable Luke E. Torian
Chair, House Appropriations Committee

The Honorable Vivian E. Watts
Chair, House Finance Committee

From: Craig M. Burns
Tax Commissioner

Pursuant to 2021 House Bill 2273 and Senate Bill 1423 (Chapters 367 and 368 of the 2021 *Acts of Assembly*, Special Session I), the Department of Taxation ("the Department"), in collaboration with the Virginia Economic Development Partnership Authority ("VEDP"), is required to publish a biennial report on the Retail Sales and Use Tax exemption for data centers under *Va. Code* § 58.1-609.3 (18).

This report is required to include aggregate information on qualifying expenses claimed under this exemption, the total value of the tax benefit, a return on investment analysis that includes direct and indirect jobs created by data center investment, state and local tax revenues generated, and any other information the Department and VEDP deem appropriate to demonstrate the costs and benefits of the exemption. In addition, VEDP is authorized to publish on its website and distribute annual information indicating the job creation and ranges of capital investments made by a data center operator and, if applicable, its participating tenants, in a format to be developed in consultation with data center operators.

The enclosed document presents the report for Fiscal Years 2022 and 2023. Please contact me if you have any questions.

Enclosure

C: The Honorable Stephen E. Cummings, Secretary of Finance
Jason El Koubi, President and CEO, Virginia Economic Development Partnership

Data Center Exemption

Virginia Code § 58.1-609.3 (18) provides an exemption for data center operators and their tenants from the Virginia Retail Sales and Use Tax for computer equipment or enabling software purchased or leased for the processing, storage, retrieval, or communication of data, including but not limited to servers, routers, connections, and other enabling hardware, including chillers and backup generators used or to be used in the operation of such exempt equipment, provided that such computer equipment or enabling software is purchased or leased for use in a data center that is located in a Virginia locality, and the data center operator has entered into a memorandum of understanding with the Virginia Economic Development Partnership Authority ("VEDP") setting forth minimum capital investment and new job creation requirements associated with the operation or maintenance of the data center.

This exemption also applies to any such computer equipment or enabling software purchased or leased to upgrade, supplement, or replace computer equipment or enabling software purchased or leased in the initial investment. The exemption does not apply to any computer software, otherwise taxable under Chapter 6 of Title 58.1 of the *Va. Code*, sold separately from the computer equipment, nor does it apply to general building improvements or fixtures.

Biennial Data Center Reporting Requirement

Pursuant to 2021 House Bill 2273 and Senate Bill 1423 (Chapters 367 and 368 of the 2021 *Acts of Assembly*, Special Session I), all data centers claiming this exemption must report certain information to VEDP annually. Such information includes employment levels, capital investments, average annual wages, qualifying expenses, and tax benefit, and such other information as VEDP determines is relevant. Data center operators must submit the annual report to VEDP regardless of when such operators located a new data center in the Commonwealth. Accordingly, VEDP received annual reports from 32 data center operators during 2022 and 39 data center operators during 2023.

Based on this information reported by the data center operators, the Department, in collaboration with VEDP, is required to publish a biennial report on the exemption. Such report must include the following:

- Aggregate information on qualifying expenses claimed under this exemption,
- The total value of the tax benefit,
- A return on investment analysis that includes direct and indirect jobs created by data center investment, state and local tax revenues generated, and
- Any other information the Department and VEDP deem appropriate to demonstrate the costs and benefits of the exemption.

The report cannot include, and the Department and VEDP cannot publish or disclose, any such information if it is unaggregated or if such report or publication could be used to identify a business or individual. The Department is required to publish the report and submit it to the Chairmen of the Senate Committee on Finance and Appropriations and the House Committees on Appropriations and Finance.

Jobs, Investment, and Tax Benefit Information Reported by Data Center Operators

During Fiscal Year 2022, data center operators reported to VEDP 1,350 net new jobs and investment of approximately $13.8 billion, of which approximately $9.4 billion was equipment or software that was exempt from the sales tax. For Fiscal Year 2023, data center operators reported to VEDP 792 net new jobs and investment of approximately $23 billion, of which approximately $15.6 billion was equipment or software that was exempt from sales tax.

Data center operators reported to VEDP an aggregate exempt equipment and software investment of approximately $9.4 billion in Fiscal Year 2022, for an aggregate reported tax benefit of approximately $674 million. For Fiscal Year 2023, data center operators reported to VEDP an aggregate exempt equipment and software investment of approximately $15.6 billion in Fiscal Year 2023, for an aggregate reported tax benefit of approximately $904 million. The estimated tax benefit reported by data center operators reflects the total tax savings to the data center operators and the corresponding negative revenue impact to the Commonwealth, including the General Fund, non-General Fund, and local revenue impact.

It should be noted that this data was self-reported to VEDP by data center operators and cannot be independently validated. In addition, these figures do not include the potential impact from four companies that did not complete the report as required by *Va. Code* § 58.1-609.3 (18).

The table below provides the information reported by data center operators regarding the jobs created, investment made, exempt purchases, and tax benefit of the data center exemption during Fiscal Years 2022 and 2023.

Table 1: Summary of Reported Jobs, Investment, and Tax Benefit

	FY 2022	FY 2023
Data Center Operators Reporting Tax Benefit	30	35
Existing Jobs	4,639	5,971
Added Jobs	1,350	792
Total Jobs	**5,989**	**6,763**
Land/Building Acquisition	$1,025,192,717	$1,667,222,134
Site Improvements	$63,514,221	$507,319,582
Real Property / Building Improvements	$1,686,311,955	$4,409,940,790
Taxable Tangible Property	$1,403,449,709	$629,796,246
Exempt Equipment or Software	$9,422,882,997	$15,594,408,356
Other Investment	$211,364,223	$371,896,012
Total Investment	**$13,812,715,822**	**$23,180,583,120**
Reported Tax Benefit	**$673,479,918**	**$903,473,497**

Return on Incentive Analysis

Virginia Code § 58.1-609.3 specifies that biennial reporting shall include a return on investment ("ROI") analysis which includes direct and additional jobs created by data center investment and state and local tax revenues generated. To satisfy this requirement, VEDP developed an ROI model based on existing models used to estimate state and local tax revenues from economic development projects. The model was reviewed by external academic experts in 2022.

In any given year, the state and local revenues generated from companies participating in the Data Center Retail Sales and Use Tax ("DCRSUT") exemption program are derived from investments made and jobs created over the past several years. At the state level, income and sales taxes from the direct and additional workers produce the most revenue. For localities, real estate and business property taxes are the major sources of revenue. To provide the clearest estimate of the revenues generated on investments made and jobs created in FY22 and FY23, VEDP has opted to run a five-year ROI analysis for each year (that is two overlapping five-year periods). The five-year timeframe aligns with the average refresh cycle of data center equipment.

For purposes of the ROI analysis conducted by VEDP, the value of the DCRSUT exemption for all reporting data center operators is the incentive or cost. The state and local tax revenue generated by the investments and associated employment are the benefit. The summary table on the following page shows that the estimated cumulative tax revenues generated by the companies over five years (two overlapping five-year periods covering 2022-2027) are greater than the value of the sales tax exemption by $1.4 billion, with an average annual return on incentive of 14 percent and a revenue to cost ratio of 1.9.

Table 2: FY 2022-2023 DCRSUT Exemption Usage and Return-on-Incentive Summary

Program totals:

	FY 2022	FY 2023	FY 2022 & 2023
Eligible companies	37	43	37
Participating companies [1]	30	35	30
Non-qualifying data center investment	$4,389,833,000	$7,586,175,000	$11,976,008,000
Qualifying data center investment	9,422,883,000	15,594,408,000	25,017,291,000
DCRSUT benefit reported	*673,480,000*	*903,473,000*	*1,576,953,000*
Total data center investment	**13,812,716,000**	**23,180,583,000**	**36,993,299,000**
Direct jobs created by data center investment	1,350	792	2,142
Direct jobs maintained by data center investment [2]	4,639	5,971	5,971
Total direct jobs	**5,989**	**6,763**	**-**
Additional jobs supported by data center investment [2]	18,474	20,879	20,879
Total direct + additional jobs	**24,463**	**27,642**	**28,992**

5-year return on incentive analysis:

	FY 2022	FY 2023	FY 2022 & 2023

	(2022 – 2026)	(2023 – 2027)	(2022 – 2027)
State tax revenue estimate	$493,785,000	$598,400,000	$1,092,185,000
Local tax revenue estimate	772,620,000	1,133,615,000	1,906,235,000
Total tax revenue estimate *(A)*	**1,266,405,000**	**1,732,015,000**	**2,998,420,000**
DCRSUT benefit reported *(B)*	673,480,000	903,473,000	1,576,953,000
Net tax revenue estimate *(A - B)*	**592,925,000**	**828,542,000**	**1,421,467,000**
Average Annual Return on Incentive	13%	14%	14%
Revenue to Cost Ratio	1.9	1.9	1.9

[1] Not all eligible companies with an agreement reported exempt purchases in 2022 or 2023.
[2] Jobs data for maintained and supported jobs do not sum up because FY 2022's jobs become FY 2023's maintained jobs, some data center operators reported maintained jobs in one year but not the other, and other data center operators reported lower employment levels in FY 2023.

The Joint Legislative Audit and Review Commission (JLARC) found in its 2019 review of the DCRSUT exemption that it "has a sizable influence on data center behavior...because interstate competition to attract data centers has increased over the past decade." Specifically, JLARC estimated that 90 percent of the data center investment made by the companies that benefit from the DCRSUT exemption would not have occurred in Virginia without the exemption (known as the "but for" percentage).

Another way to state the impact of the DCRSUT exemption is to consider the counterfactual and estimate the revenue that could have been lost had the exemption not been in place. This can be done by retaining just 10 percent of the revenue and cost estimates (the portion of the investment and revenues that would have happened without the incentive). Applying the 90% reduction to the revenue and cost estimates, Virginia and its localities could have lost out on nearly $1.3 billion in net tax revenues from investments made in FY22 – FY23 (through 2027) without the DCRSUT exemption as total revenues go from $2.9 billion to $299 million and the DCRSUT exemption benefit goes from nearly $1.6 billion to $157 million.

Table 3: FY 2022-2023 Estimated Tax Revenue Loss Without DCRSUT Exemption

	FY 2022 (2022 – 2026)	**FY 2023** (2023 – 2027)	**FY 2022 & 2023** (2022 – 2027)
Counterfactual: Absence of DCRSUT:			
Adjusted total tax revenue estimate (10%)	$126,640,500	$173,201,500	$299,842,000
Adjusted DCRSUT benefit (10%)	(67,348,000)	(90,347,300)	(157,695,300)
Adjusted net tax revenue estimate *(A)*	**59,292,500**	**82,854,200**	**142,146,700**
ROI (actual):			
Total tax revenue estimate	$1,266,405,000	$1,732,015,000	$2,998,420,000
DCRSUT benefit reported	(673,480,000)	(903,473,000)	(1,576,953,000)
Net tax revenue estimate *(B)*	**592,925,000**	**828,542,000**	**1,421,467,000**
Difference in net tax revenue without DCRSUT *(A - B)*	**(533,632,500)**	**(745,687,800)**	**(1,279,320,300)**

Methodology

VEDP combined its Virginia and local Excel-based Return on Incentive (ROI) models into one model to produce the data needed to address the identified items. VEDP's Virginia model has been in use for over twenty years and twice has been reviewed by outside experts. The local model has been in use for over ten years. VEDP maintains two different models because of Virginia's tax structure. Differences in taxation authority include income tax at the state level, property taxes at the local level, and sales tax at both levels but for different rates. Combining the models involved adding tabs from the local model to the Virginia model so both sets of calculations could be driven by the same inputs. A new results tab and a data summary tab also were created. The data summary allows necessary data points to be collected from each company and compiled into the aggregate results. The combined model was reviewed by a qualified external expert from the Weldon Cooper Center at the University of Virginia.

Using the data VEDP collected through the annual reporting from the companies taking advantage of the data DCRSUT exemption, ROIs were run for each company. The reported data go into the model's entry form to drive separate calculations for the state and local estimates. The local sales tax estimates included any applicable regional sales taxes and local option sales taxes. The results of the estimates are combined into a summary. The summary data are compiled into a separate tab to produce aggregate analysis of all the companies.

Assumptions

- The analysis is run for five years to account for the typical "refresh cycle" of data center equipment; VEDP's research determined a five-year replacement cycle is still an industry rule of thumb, although more companies are moving to a longer refresh cycle.
- Tax estimates for the first year of employment are reduced by half because the employment figure is for the end of the year and the new workers probably did not work a full year.
- When existing jobs are reported, they are entered in the model's Saved Jobs field because it is assumed that the data center could become obsolete and close without the equipment replacement incentivized by the program. The assumption is that even existing jobs would be at some risk without the equipment replacement and that the program aids in retaining these jobs.

- Any local discretionary incentives that were offered to companies are not included because they are not part of the reporting process or readily available.
- The model does distinguish between the general tangible personal property rates and data center rates for each locality when a locality uses this type of tax policy.
- Additional construction jobs (ones supported elsewhere in the economy due to data center construction jobs created during the construction phase) are estimated using the multiplier for Commercial and Institutional Building Construction.

Limitations

- Most, but not all, participating companies have submitted required reporting to date:
  - In FY 2022, five companies failed to respond for an 86 percent response rate or 14 percent failure rate.
  - In FY 2023, four companies failed to respond for a 91 percent response rate or 9 percent failure rate.
- Data have only been collected in the current format for two years.
  - The full picture of the five-year replacement cycle is not captured.
  - The variation of investment activity could be different than what is currently seen.
- The five-year time frame for the analysis may be too short because the expense of constructing a data center encourages the continued use of the building.
- The cooling equipment, or chillers, for the servers is tax exempt but may have been included in the construction cost category on the reporting template; some companies claimed an exemption larger than would be assumed based solely on the investment reported under the qualifying equipment category, possibly because this issue.
- The analysis does not include any local incentives that may have been granted because they are not readily available.
- The effective cost of the program would exclude the foregone revenue from the cost total for the data centers which would not have come to Virginia without the exemption.
- The ROI model used covers the primary tax revenue streams at state and local level; however, there are some smaller revenue streams that are not captured in the current analysis due to lack of requisite data. This includes electric utility consumption tax, recordation taxes, etc.
- The Local ROI model uses two-digit NAICS codes, to reduce the possibility of a zero multiplier when an industry does not exist in a locality, but the Virginia ROI model uses more specific multipliers.
  - The Local model uses NAICS 51 – Information for data centers, grouping it with the publishing and communications industries.
  - The additional employment multiplier in the Virginia model is for data centers: NAICS 518210.

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Dear Senator Lucas, Delegate Torian, and Delegate Watts,

In 2021, the General Assembly amended Virginia Code § 58.1-609.3 to expand reporting requirements for companies participating in Virginia's data center retail sales and use tax (DCSUT) exemption program and to require the Virginia Department Taxation (TAX) and the Virginia Economic Development Partnership (VEDP) to submit biennial reporting on this information. Pursuant to these changes, new reporting requirements for all participating companies were put in place by VEDP in January 2022.

VEDP is now in a position to collect data on the ongoing investment, employment, and wages from all participating companies, as opposed to only those in the initial performance period. This is important because data centers undergo frequent equipment reinvestments to maintain or increase operational capacity and the value of these investments previously remained unknown. As the Joint Legislative Audit and Review Commission (JLARC) has pointed out in the past, the limited information available has made evaluations of the full impacts of the program and industry challenging.

For the first time, TAX and VEDP are pleased to publish aggregate statistics on total capital investment, employment and wages for participating companies, qualifying expenses claimed under the DCSUT exemption, and the total value of the tax benefit. VEDP has also produced a return-on-incentives analysis drawing on this information. This inaugural report covers Fiscal Years (FY) 2022 and 2023.

Overall, the participating companies invested approximately $37 billion during this two-year period, reporting a tax benefit of nearly $1.6 billion under DCSUT. Participating companies also reported over 2,100 net new direct jobs during this period with an average salary of over $120,000, bringing total direct employment by these companies to over 6,700 in FY23. Estimated cumulative state and local tax revenues generated by investments made in FY22 and FY23 over five years – aligning with the average refresh cycle of data center equipment – totaled over $1.2 and $1.7 billion for investment made in each of those years respectively. VEDP also estimated that the absence of the DCSUT exemption could result in the loss of almost $1.3 billion in tax revenues to Virginia and its localities over five years based on the investments and employment reported in FY22 and FY23.

While this new data gives us unprecedented insight into the impacts of this critical program, it represents only two years of complete data. VEDP expects that data may vary significantly from year to year as it is dependent on the individual investment and expansion decisions of data center operators across the Commonwealth who qualify for the program. In future years, TAX and VEDP will be in a position to provide more robust trend and other types of analysis as part of on-going reporting. Readers should thus be cautious about extrapolating trends seen in this initial report.

Given the salience of this topic and in the spirit of a recommendation made by JLARC in 2019, VEDP also recently commissioned a group of Virginia higher education institutions to conduct an independent study exploring the impacts of the data center industry, assessing Virginia's competitive position relative to other states, and evaluating the importance of the DCSUT exemption along with other location decision drivers. This valuable work is intended to support VEDP and other stakeholders in pursuing statewide economic development opportunities in the data center industry.

The report notably concluded that the DCSUT exemption is essential for maintaining Virginia's lead in data center development given the wide adoption of this sort of incentive by competitor states. These findings are in line with conclusions made by JLARC in 2019, which estimated that 90% of data center investment would not have taken place *but for* the DCSUT exemption. Moreover, the report found that the current sunset date, though not due until 2035, is already emerging as a major risk factor for data center developers and operators who plan investments on a timeframe of 20 years or more.

The study also highlights the significant impact of the data center industry in Virginia. Major data center suppliers include utilities (electric power, water, telecommunications), equipment and related parts and components, software, professional services and construction trades and materials. The industry also generates over a billion dollars in state and local tax revenues per annum, although this estimate is likely understated given the new data now available to us. These findings were recently echoed by an impact study of the data center industry conducted on behalf of the Data Center Coalition.

It is critical that the Commonwealth continue to sharpen its competitive advantages as the competitive landscape becomes more crowded. This starts with maintaining incentive programs adapted to future industry trends and on par with competitor markets. This also means providing regulatory predictability to an industry with investment horizons of 20 years or more. Virginia must also work closely with industry partners to ensure that we are able to: provide reliable, affordable, and clean energy; continue to invest in critical infrastructure; and grow the pipeline of skilled construction, technician and tech talent, especially in regions across the Commonwealth with growing data center interest and investment. Doing this requires a whole-of-government approach that also includes robust, participatory processes at the local level to ensure development remains in harmony with diverse local contexts.

With growing competition, Virginia risks surrendering the significant growth potential that this industry and its supplier ecosystem are forecasted to see – and the significant tax revenues that come with it – to competitor states.

Jason El Koubi

President & CEO