

November 5, 2024

*Via Electronic Mail Only*

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Email address: [jpugh@sheppardmullin.com](mailto:jpugh@sheppardmullin.com)

Re: Letter dated November 5, 2024

Dear Mr. Pugh:

As you are aware, I serve as City Attorney for the City of Monterey Park. I write in response to your letter dated November 5, 2024 (the "Letter"). Thank you for your correspondence.

A review of the Letter shows that it is premised on a fallacy: that the draft zoning regulations on the November 6<sup>th</sup> City Council meeting agenda target your client's data center project (the "Project"). As you well know, they do not. Indeed, the City has expended a tremendous amount of effort to ensure that the Project will be objectively considered when it is legally before the City Council for consideration. By any reasonable standard, the Project will stand on its own merits.

The Letter, however, continues its misleading narrative by asserting that the recommended environmental review is deficient. Contrary to the assertions in the Letter, the zoning regulations do not introduce something "new." Rather, they clarify existing regulations and specifically implement the voter's intent set forth in Measure JJ. As you are very aware, Measure JJ received its own, separate, environmental review which was certified as a Final Environmental Impact Report ("FEIR"; State Clearing House No. 2001-01-1074). That FEIR and the environmental findings set forth in the draft ordinances meet the requirements of the California Environmental Quality Act ("CEQA").

Sheppard Mullin  
November 5, 2024  
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Similarly disingenuous is the Letter's statement that "[o]n April 12, 2024, the City confirmed in writing to the Applicant that the Project was an expressly permitted use in the O-P voter enacted zone for Saturn Park." The "writing" was an electronic mail transmission from an Assistant Planner. As a preliminary matter, the City Planner – not an Assistant Planner – interprets the land uses identified in the Monterey Park Municipal Code ("MPMC"; MPMC § 21.02.090). Ultimately, however, any such interpretation lies solely with the City Council.<sup>1</sup>

While you are aware of the law, the tone of the Letter compels me to remind you: there is a vested right to develop property only when a permittee (1) obtained a valid building permit; (2) completed a substantial amount of work; and (3) incurred substantial liability in good faith reliance on the permit. Generally, the vested rights doctrine is applied only in extraordinary instances "where the injustice is great and the precedent set by the estoppel is narrow." Here, the Project has zero land use approvals and must comply with any change to the law.

In support of the Project's contribution to the City's revenue sources, the Letter provides data from the state of Virginia. It is unclear what relevance that has to the City of Monterey Park. Sources of tax revenue for commercial land uses within the City of Monterey Park generally consist of property tax; sales tax; business license tax; and user utility tax ("UUT"). There are no data supporting the notion that the Project will be a significant source of tax revenue for the City. But, the Project is not on the City Council agenda for November 6, 2024. Rather, the City Council is considering zoning regulations for "data centers"; it is not specific as to the Project. The Letter's protestations regarding the Project's contribution to the economic health of the City, therefore, are misplaced.

The balance of the letter further implies that the November 6<sup>th</sup> City Council meeting will consider the Project. That is incorrect. As you are aware, the Project contemplates activating the Business Recovery Development Agreement Zone ("BRDZ") at 1977 Saturn as authorized by MPMC Chapter 21.45. It seems that your client's best option would be to propose significant public benefits to the City Council through that process.

I look forward to working with you to process the Project so that it will be ready for City Council consideration in the near future.

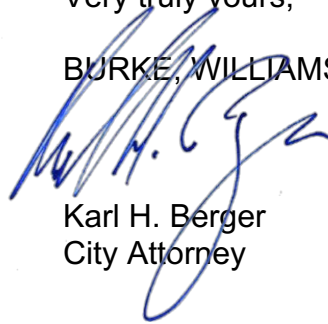
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<sup>1</sup> See, e.g., *Yamaha Corp. of Am. v. State Bd. of Equalization* (1998) 19 Cal.4th 1 and *State Farm Mutual Auto Ins. Co. v Quackenbush* (1999) 77 Cal.App.4th 65.

Sheppard Mullin  
November 5, 2024  
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Very truly yours,

BURKE, WILLIAMS & SORENSEN, LLP



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November 5 2024

File Number: 89AF-371175

**VIA E-MAIL**

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Re: Proposed Data Center Regulations – Agenda Item 4-A

Dear Honorable City Council,

We represent SDCF Monterey Park, LLC (“Applicant”) regarding its data center project (“Project”) located at 1977 Saturn Street (“Site”) in the City of Monterey Park (“City”). We understand that the City Council will consider a Zoning Ordinance Text Amendment (ZCA-24-02) on November 6, 2024 for the Saturn Park area. This ordinance is primarily aimed at the Project – as the only data center proposed in the City. Accordingly, we must present this letter to protect the Applicant’s rights and preserve certain issues for the record. In addition, it is necessary for us to clarify information in the staff report, and the recitals of the proposed ordinances, that inaccurately portray data centers.

Most importantly, we reaffirm the Applicant’s commitment to building the Project and providing the City with an environmentally-conscious development that infuses substantial revenue into the City’s budget while also providing community benefits. We must emphasize, however, that the City’s trend of waffling on important zoning and legal issues concerns us. We highlight some of those issues in this letter. We trust that the City’s actions are not intended to effectuate a regulatory taking by making the Project infeasible. Thus, our points below are in the spirit of collaboration and creating a regulatory structure that is reasonable for the City and allows the Project to become a reality.

**I. Clarifying Assertions in the Staff Report**

A. There is No Legal or Factual Basis to Adopt an Urgency Ordinance.

The staff report recommends adopting an Urgency Ordinance to amend the voter-enacted provisions in Monterey Park Municipal Code (“MPMC”) Chapter 12.14 (“Urgency Ordinance”) to govern data centers. Neither the law nor evidence justifies an urgency ordinance. Our June 17, 2024 letter to the City Council, regarding the now-expired data center moratorium, demonstrated that there was no current and immediate threat to the public health, safety or welfare from data center development. That same rationale applies to the Urgency Ordinance.

On October 31, 2024, the City published a Mitigated Negative Declaration (“MND”) for the Project pursuant to the California Environmental Quality Act (“CEQA”). The MND provides over 150 pages of comprehensive environmental analysis and is supported by over 5,000 pages of evidence in 15 technical reports. The MND analyzed a wide range of environmental topics including aesthetics, air quality, energy, greenhouse gas emissions, water, land use, noise, public services, transportation, utilities, and many more. The MND concluded that the Project would not have a significant impact on the environment or community. In other words, the record proves that there is no current and immediate threat to the public health, safety or welfare from data center development. The recitals for the Urgency Ordinance are not supported by evidence and are not sufficient findings to justify making the Urgency Ordinance effective immediately. **Therefore, we request that the City Council not adopt the Urgency Ordinance at this time.**

B. The City’s Legislative Actions are Not Exempt from CEQA.

The staff report erroneously claims that revising the zoning code is exempt from CEQA. The law is clear that CEQA “**shall apply to** discretionary projects proposed to be carried out or approved by public agencies, including but not limited to, the enhancement and **amendment of zoning ordinances**” per CEQA Guidelines 21080(a). Also, CEQA Guidelines 21065 provides that a project means “an activity directly **undertaken by any public agency**” which “may cause either a direct physical change in the environment, or a **reasonably foreseeable indirect physical change** in the environment.” Here, ZCA-24-02 modifies long-standing voter-enacted zoning, introduces a new Saturn Park Innovation/Technology Zone, and implements design regulations that will collectively change the types and characteristics of projects in Saturn Park. That equals a zoning amendment action that will result in reasonably foreseeable physical changes in Saturn Park. Also, the exemptions listed in the staff report do not apply and there is no evidence in the record to support the position. Therefore, CEQA applies to the proposed zoning amendments and the City should do more thorough environmental review. We preserve this issue for the record, if needed.

C. The Data Center Project is an Expressly Permitted Use.

On April 12, 2024, the City confirmed in writing to the Applicant that the Project was an expressly permitted use in the O-P voter enacted zone for Saturn Park. The Applicant relied on the City’s position to pursue entitlements for the Site. The City stated that “[y]es, data centers would fall under ‘data processing facility.’ Since data processing facilities are considered a principal use in the Office Professional Zone (Voter-Enacted), data centers would indeed be considered a permitted use in this zoning.” See Exhibit A: City Confirmation of Data Center Permitted Use. The staff report now waffles about whether “data center” and “data processing facility” can be considered synonymous for planning purposes, which is exactly the issue we confirmed with the City previously. Therefore, it is disingenuous for the staff report, and ordinance recitals, to reverse the City’s prior position and claim that a data center land use is not part of the current zoning regulation.

Nonetheless, we can appreciate the City’s desire to update certain MPMC definitions, and are not opposed to a clearer definition of permitted data centers. Therefore, we request that the

City make it abundantly clear that data centers are expressly permitted uses in both the existing O-P zone in Saturn Park (if it is not completely replaced) and the proposed S-P – Saturn Park Innovation/Technology Zone. Precisely, the City should add “data centers” to the list of principal permitted uses in Section 21.14.050 of the updated ordinance. That is in addition to the new data center provisions in Section 21.14.210, and that is important so the resulting regulations are not vague regarding permitted uses (per Section 21.14.050) and prohibited uses (per 21.14.040).

#### D. Data Centers Can Provide Substantial Tax Revenue and Community Benefits.

With no evidence, the staff report claims that data centers are not a significant source of tax revenue. That statement is false and could mislead the decisionmakers and the community. There is strong empirical evidence that data centers generate substantial tax revenues. See Exhibit B: The Impact of Data Centers on the State and Local Economies of Virginia, March 2022; See also, Data Center Tax Dollars Invest in Local Communities, November 2023. The report, and article, are based on financial information provided by several economic development departments, and found that, “[d]ata centers generate a large amount of property tax revenue for local governments without placing many demands on local government services. Additionally, the industry places downward pressure on overall tax rates, thereby improving the locality’s business climate and economic attractiveness.” The report also notes that more than 30 states have some type of incentive program to attract data centers to their states. Therefore, it is clear that data centers provide a significant source of tax revenue and can spur economic activity for accepting cities and counties.

Also, please note that the Applicant is preparing a tax report that will estimate the beneficial tax revenues the Project could provide to the City, if approved. Similarly, as you know, the Applicant is negotiating a development agreement with the City that would provide additional community benefits. It is unquestionable that the Project would improve the City budget and stimulate economic activity, while not creating significant environmental impacts. Hence, we urge the City to use a more balanced narrative in its reports and discussions of data centers so the public has an accurate unbiased understanding of the environmental and economic effects of data centers.

#### II. **The Project Should Be Exempt from the Urgency Ordinance and Regular Ordinance.**

The City Council previously exempted the Project from Urgency Ordinance 2246, which prohibited all land use entitlements in Saturn Park. As a reminder, Section 4.B of that ordinance stated that the City Council could “. . . accept, process and approve development applications that: (1) were filed with the City before April 15, 2024; (2) include or are amended to include a development agreement per Chapter 21.44 of the Monterey Park Municipal Code; and (3) obtain City Council approval of the development agreement before, or concurrent with, approval of the project entitlements proposed in the timely-filed application.” There is no reason to now subject the Project to new data center regulations in the Urgency Ordinance. That is unnecessary for at least two reasons.

First, the Project entitlements include a development agreement. And, as stated in the MND, the City intends to activate the Business Recovery Development Agreement Zone (“BRDZ”)

to control the land use and development standards on the Site. It follows, that the provisions of the Urgency Ordinance and Regular Ordinance are superfluous to the land use control the City already has on development of the Project. Furthermore, the City released the proposed data center regulations on the evening of November 1, 2024, which thereby provided only two business days for the Applicant to consider the effects of the regulations on the Project. We believe that type of haste is not necessary because the entitlements already include a development agreement and BRDZ activation. **Therefore, we respectfully request that the City Council provide the same exemption language (as referenced above) in the Urgency and Regular Ordinances if adopting either ordinance occurs on November 6, 2024.**

Second, the Project complies with the existing regulations applicable to Saturn Park and the entitlements permissible in the MPMC. Accordingly, even without the Urgency or Regular Ordinances, the City can find the Project consistent with existing zoning and land use designations to approve the Project. At this stage of administrative review, to us, it appears that imposing further design requirements on the Project is simply counterproductive because the City can accomplish the exact same objectives via the development agreement and BRDZ, which are incorporated into the entitlements.

### **III. Improving the Regular Ordinance and Design Guidelines for Data Centers**

The Urgency Ordinance and the Regular Ordinance are largely the same. As we discussed above, there is no legitimate basis for the City to adopt the Urgency Ordinance. In fact, we believe that rushing to judgment on an important regulation is not in the City's best interest. Here, our comments focus on the proposed Regular Ordinance, which we understand would be the permanent regulations.

We believe that the City could improve the Regular Ordinance given additional time to consider the proposed regulations, especially Section 21.14.240 regarding data centers. The November 6, 2024 City Council meeting is the first time the City, the Applicant, and the public have had an opportunity to consider the proposed data center regulations. Our opinion is that the City should be more conscientious and take a reasonable amount of time to create data center regulations that are mindful of the environment and also feasible for data centers to implement. There is simply not enough time to do that before November 6<sup>th</sup>. **Therefore, we request that the City Council continue its consideration of the Regular Ordinance for 60 days and direct staff to work with the Applicant to craft improved data center regulations.**

In the alternative, we have slightly revised the Regular Ordinance and Design Guidelines to provide flexibility so the regulations do not (intentionally or unintentionally) preclude smart data center development in Saturn Park. See Exhibit C: Revised Regular Ordinance and Design Guidelines. We have conferred with the Applicant and its architect regarding the Regular Ordinance and the Design Standards. Given more time, we would also confer with the project engineers to vet the ordinances and the Leadership in Energy and Environmental Design ("LEED"), or Green Building Initiative ("GBI"), requirements to determine how those can apply to the Project and data centers generally. That is valuable information for the City. However, a rushed vote on the regulations prevent its implementation. **Therefore, if the City Council decides to adopt either the Urgency Ordinance or the Regular Ordinance, we respectfully**

**request that the City incorporate our edits to provide a basic level of regulatory flexibility for compliance.**

#### **IV. Providing Balanced Data Center Research and Technical Truths for the Project**

Context and perspective matter. The staff report contains several articles regarding data center development in Virginia and Texas, which are two of the largest data center markets in the World with hundreds of data centers. By comparison, the City has zero data centers currently and one proposed. Please keep that fact in mind and resist an alarmist reaction.

The reality for the City is that the Project is a relatively small, efficient, quiet and water-saving data center that does not have significant environmental impacts and provides substantial tax revenue and community benefits. Below are truths about the Project and how it compares to the topics raised in the data center materials provided in the staff report.

##### **A. Energy**

In the staff report, the County of Fairfax Virginia Report (“Virginia Report”) states that a data center with a Power Utilization Efficiency (“PUE”) metric of 1.1 to 1.3 or less is an efficient facility. The City’s MND explains that the Project has a 1.2 PUE, which is highly efficient. The Virginia Report also states that, based on meetings with the local power agency, “data center growth does not pose a risk in terms of reliability to residential and other customers.” Similarly, here, Southern California Edison (“SCE”) prepared a Method of Service (“MOS”) study for the Project, which determined that SCE has sufficient power available to service the Project without stressing the City’s energy grid.

In the staff report, the Bisnow power article from Texas (“Texas Article”), which was drafted by two reporters from Houston and Boston, focuses on power needs and references the Dallas data center power inventory as “[a]t the end of the second quarter there were 966 megawatts (“MW”) of total inventory, with 339 MW under construction, and 3,091 MW planned in DFW.” For comparison, the Project in the City would use a maximum of 49.9 MW only. The Texas Article also provides perspective for its reporting saying “[w]e’re not talking about 50-MW data centers anymore . . . we’re talking about 500 MW or gigawatt-scale data centers.” That is the scale of data center and energy demand in Texas, which is wholly inapplicable here. In Monterey Park, we are talking about a 50 MW data center . . . and that context is materially different than the concerns raised in the Texas Article.

Therefore, on balance, we urge the City Council to be accurately informed about the energy efficiency of the Project, and the relatively minimal energy load, compared to the materials contained in the staff report.

##### **B. Water**

The water demand for the Project is only marginally more than the existing office building on the Site. The Virginia Report concluded that no zoning amendments related to water demand were needed based on recommendations from the local water district. Similarly, here, Section

4.19 of the MND analyzed water demand quantitatively and concluded that there is sufficient water supply for the Project. Moreover, Appendix M-2: Water Efficiency Memorandum, in the MND, explains how the Project design utilizes air cooled chillers with a free-cooling heat-exchanger technology that requires minimal water. Therefore, we urge the City Council to be fact-based about the water usage of the Project when considering approvals or the proposed regulations.

## C. Noise

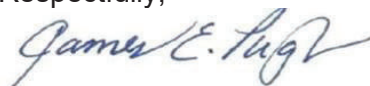
The Project complies with the City's noise ordinance. The Virginia Report opined that noise studies submitted for data centers indicated that measures were needed to reduce potential noise to comply with applicable noise ordinances. That is exactly what the Applicant and City did here. The MND contains detailed noise modeling in Appendix J: Noise and Vibration Analysis Memorandum, and the Project incorporates noise-attenuating project design features that ensure noise levels are within the noise ordinance limits. For example, the Project design includes screening elements for rooftop equipment, and precast screen walls around generators, to minimize noise impacts. Accordingly, the MND concluded that even when all noises sources were analyzed together (i.e., composite noise modeling) the Project would not exceed the applicable noise standards.

Overall, we appreciate the City's desire for informed decision making about data centers and the evolving digital infrastructure market. Nonetheless, please be grounded in truths about the Project while exercising your discretion on the proposed data center ordinances, and ultimately the Project.

## V. **Conclusion**

In closing, we thank the City for the opportunity to comment on, and hopefully improve, the proposed data center regulations. Likewise, the Applicant appreciates the City's willingness to continue advancing the Project. We particularly thank the City staff, and its environmental consultants, for producing a comprehensive MND that demonstrates the Project does not have significant impacts on the environment or community. As you know, the Applicant is committed to improving the Site with a modern data center and thereby helping the City reactivate Saturn Park in a manner that delivers jobs, community benefits, and recurring tax revenues. We hope that any City actions on the proposed data center regulations do not jeopardize the good progress made by all on the Project.

Respectfully,



James E. Pugh  
for SHEPPARD, MULLIN, RICHTER & HAMPTON LLP

# SheppardMullin

November 5 2024  
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SMRH:4890-6474-8275.2

# **EXHIBIT A**

**From:** Tan, Kevin <[KTan@MontereyPark.ca.gov](mailto:KTan@MontereyPark.ca.gov)>  
**Sent:** Wednesday, April 12, 2023 5:58 PM  
**To:** James Pugh <[JPugh@sheppardmullin.com](mailto:JPugh@sheppardmullin.com)>  
**Cc:** Serrano, Jessica <[jserrano@MontereyPark.ca.gov](mailto:jserrano@MontereyPark.ca.gov)>; [scott@rynderscorp.com](mailto:scott@rynderscorp.com)  
**Subject:** RE: 1977 Saturn - Permitted Uses in O-P Zone

Good evening James,

Yes, data centers would fall under “data processing facility.” Since data processing facilities are considered a principal use in the Office Professional Zone (Voter Enacted), data centers would indeed be considered a permitted use in this zoning.

Let me know if you need anything else. Have a great rest of your night.

Sincerely,



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**From:** James Pugh <[JPugh@sheppardmullin.com](mailto:JPugh@sheppardmullin.com)>  
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**To:** Serrano, Jessica <[jserrano@MontereyPark.ca.gov](mailto:jserrano@MontereyPark.ca.gov)>  
**Cc:** Scott Rynders <[scott@rynderscorp.com](mailto:scott@rynderscorp.com)>  
**Subject:** 1977 Saturn - Permitted Uses in O-P Zone

[EXTERNAL EMAIL]

CAUTION: This email originated from outside your organization. Exercise caution when opening attachments or clicking links, especially from unknown senders.

Hi Jessica,

Thank you for meeting with the StratCap team yesterday. As a follow up, we need to confirm the zoning issue we discussed. Our initial diligence concluded that data centers are a permitted use in the O-P (voter enacted) zone.

Specifically, Section 21.14.040 of the Monterey Park Municipal Code includes “data processing facility” as a permitted principal use in the O-P zone. As we described yesterday, StratCap intends to develop a data center on the site if they complete property acquisition. We view a data processing facility and data center as synonymous for zoning compliance purposes. At this early stage of diligence, and before buying the land, StratCap needs certainty that the City agrees that data centers are permitted uses within the O-P zone. Thus, please respond to this email indicating whether the City agrees that data centers are in fact a permitted use in the O-P zone.

A phase of our diligence period ends this week, so please respond at your earliest opportunity.

Thanks,

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# **EXHIBIT B**



# THE IMPACT OF DATA CENTERS ON THE STATE AND LOCAL ECONOMIES OF VIRGINIA

March 2022



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# About Mangum Economics, LLC



Mangum Economics, LLC is a Glen Allen, Virginia based firm that specializes in producing objective economic, quantitative, and qualitative analysis in support of strategic decision making. Much of our recent work relates to IT and Telecom Infrastructure (data centers, terrestrial and subsea fiber),

Renewable Energy, and Economic Development.

Examples of typical studies include:

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Identify the intended and, more importantly, unintended consequences of proposed legislation and other policy initiatives.

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- **Workforce Analysis**

Project the demand for, and supply of, qualified workers.

- **Cluster Analysis**

Use occupation and industry clusters to illuminate regional workforce and industry strengths and identify connections between the two.

## The Project Team

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*Founder and CEO*

Martina Arel, M.B.A.

*Director, Economic Development and Renewable Energy Research*

## Acknowledgments

This report was made possible in part by the unique data supplied by the Loudoun County Department of Economic Development (especially, Alex Gonski and Buddy Rizer) and the Prince William County Department of Economic Development (especially Allisha Abraham, Thomas Flynn, and Jim Gahres). Fairfax County Economic Development Authority (especially Catherine Riley and Stephen Tarditi) also provided important information for the report.



## About the Northern Virginia Technology Council

The Northern Virginia Technology Council (NVTC) is the trade association representing the National Capital Region's technology community. As one of the nation's largest technology councils, NVTC serves companies from all sectors of the industry, from small business and startups to Fortune 100 technology companies, as well as service providers, academic institutions, and nonprofit organizations. Nearly 500 entities make up the NVTC membership and look to the organization as a resource for networking and educational opportunities, peer-to-peer communities, policy advocacy, industry promotion, fostering of strategic relationships, and branding of the region as a major technology center.

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**If you are interested in joining NVTC, please contact Steve Upton, NVTC Chief Growth Officer at [supton@nvtc.org](mailto:supton@nvtc.org).**

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# Executive Summary

Data centers are the major drivers of investment in Virginia. According to information from the Virginia Economic Development Partnership (VEDP), in 2021, 62% (\$6.8 billion) of all the new investment announced by VEDP was from new and expanding data centers.

The investment in data centers in Virginia is also driving investment in businesses in the data center supply chain. Some specific examples of new investment in Virginia associated with data centers include:

- Aggreko establishing its North American data center headquarters in Loudoun County
- Anord Mardix adding a second manufacturing plant in Henrico County
- Hanley Energy establishing its U.S. headquarters and manufacturing plant in Ashburn
- Munters Group investing \$36 million in a new manufacturing facility in Botetourt County.<sup>1</sup>

The concentration of data centers in Virginia spurred the construction of the subsea cable landing in Virginia Beach that serves the MAREA, BRUSA and Dunant cables. Confluence Networks also plans the construction of Confluence-1, a festoon cable connecting Virginia Beach to New Jersey, South Carolina and Florida.

Virginia now has data centers located throughout the state, from Wise County and Harrisonburg in the Valley and Western Virginia, to Mecklenburg County in Southern Virginia, to Henrico County and Virginia Beach in Central and Coastal Virginia, to Loudoun County in Northern Virginia, and other localities.

Northern Virginia has the largest data center market in the United States. As of 2021, the data center inventory in Northern Virginia exceeds that of the next 5 largest markets combined. The compound annual rate of growth in data centers in Northern Virginia from 2014 to 2021 was 25%. In comparison, Dallas-Fort Worth, the next fastest growing area, had compound annual growth rate of 10%. From 2018 to 2021, the total data center capacity in Northern Virginia more than doubled.

Between 2001 and 2020, the average private sector employee of a Virginia data center saw their gross income go up 70% faster than the average private sector employee in Virginia. We estimate that in 2021, data center employed 5,550 Virginians, not counting construction workers building data centers in the state. Approximately 88% (4,920) were working in Northern Virginia, while six percent (330) worked in Southern Virginia, five percent (250) worked in Central and Coastal Virginia, and one percent (50) worked in the Valley and Western Virginia. The accumulated capital investment in data centers across the state amounts to \$126 billion in 2021 dollars. Virginia data centers spent \$5.4 billion in 2021 for operational expenses, the majority of which goes for staffing and power.

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<sup>1</sup><https://roanoke.org/2021/03/25/munters-group-ab-to-invest-36-million-in-botetourt-county/>

In 2021, the data centers in Virginia directly provided approximately:

- 5,550 operational jobs and 10,230 construction and manufacturing jobs
- \$1.6 billion in associated employee pay and benefits
- \$7.5 billion in economic output

Taking into account the economic ripple effects generated by that direct impact, the total impact on Virginia from data centers in 2021 was approximately:

- 45,460 supported jobs
- \$3.6 billion in associated employee pay and benefits
- \$15.3 billion in economic output

For every job inside a Virginia data center, there are 4.1 additional jobs that are supported in the rest of the Virginia economy.

We estimate that in 2021, data centers were directly and indirectly responsible for generating \$174 million in state revenue and \$1 billion local tax revenue in Virginia.

In 2020, the local benefit to cost ratios associated with the industry were:

- Loudoun County - for every \$1.00 in county expenditures that data centers were responsible for generating, it provided approximately \$13.20 in tax revenue
- Prince William County - for every \$1.00 in county expenditures that data centers were responsible for generating, it provided approximately \$13.50 in tax revenue

Because of the way that the state of Virginia subsidizes local education budgets, without data centers in Loudoun and Prince William counties, the State of Virginia would have to reallocate \$90.5 million in State education funding away from other Virginia localities to provide \$73 million in additional funding to Loudoun County, and \$17.5 million in additional funding to Prince William County.

In 2019, The Joint Legislative Audit and Review Commission (JLARC) published an evaluation of Virginia's data center and manufacturing incentive programs. JLARC found:

- 90% of the data center investment made by the companies that received the sales and use tax exemption would not have occurred in the state of Virginia without the incentive
- In 2017, the State took in \$1.09 in state tax revenue from data center related activity for every \$1 of potential state tax revenue that was exempted from qualifying data centers
- In 2016, the data center incentive was revenue neutral - it generated \$1 in additional state tax revenue for every \$1 of potential state tax revenue that it exempted
- From 2013 through 2017, on average, the State recovered 75 cents in state tax revenue for every one dollar of potential tax revenue exempted from qualifying data centers

Over 30 states have some type of incentive to attract data centers to their states. In the last couple of years, Arizona, Connecticut, Idaho, Maryland, North Dakota, Pennsylvania, and Utah have all enacted or expanded sales and use tax incentives targeting data centers for economic development.

# Data Centers Drive Investment in Virginia

Data centers are the major drivers of investment in Virginia. Investment in the state comes in the form of the construction and operation of the data centers themselves, plus investments in Virginia made by businesses that supply and support data centers in the state.

According to information from the Virginia Economic Development Partnership (VEDP),<sup>2</sup> in 2021, 62% (\$6.8 billion) of all of the new investment announced by VEDP was from new and expanding data centers. In 2020, data centers accounted for 81% (\$7.9 billion) of all of the new investment that VEDP announced. As explained below, we estimate that the accumulated capital investment of data centers in Virginia amounts to \$126 billion in 2021 dollars employing 5,550 operational workers.

The investment in data centers in Virginia is also driving investment in businesses in the data center supply chain. Some specific examples of new investment in Virginia associated with data centers include the \$36 million investment by Munters Group in a new manufacturing facility in Botetourt County for 200 employees.<sup>3</sup> Munters is a global manufacturer of air treatment and climate control equipment, including data center cooling systems. A significant portion of the cost of building a data center goes to the equipment needed for cooling. Michael Gantert, the president of Data Centers at Munters, stated that, "A move to the Roanoke region will allow for the expansion that is needed for the Data Centers business in the U.S."<sup>4</sup>

Another example of recent data center supply chain investment in Virginia is Hanley Energy establishing its U.S. headquarters and manufacturing plant in Ashburn.<sup>5</sup> The Irish company provides energy-monitoring products and services for data centers. The new plant and headquarters will employ 170 new workers by the end of 2022. Additionally, Aggreko established its North American data center headquarters in Loudoun County. The British company produces temporary power generation and energy storage equipment for data centers. Mike Clemson, the head of Aggreko's North American Data Center Division, stated, "The choice to establish a presence in Loudoun was a natural one, as virtually all of our data center customers are present in the Data Center Alley. The opportunity for us to grow our data center business in Loudoun County is tremendous."<sup>6</sup>

In Henrico County in 2019, Anord Mardix, a global power distribution and management manufacturer, spent almost a million dollars and added 51 new jobs for a second manufacturing plant. The power switchgear produced in the company's two manufacturing facilities is used in data centers and other critical infrastructure businesses. Chairman of the Henrico County Board of Supervisors, Tyrone Nelson, said, "Anord Mardix's success supports Henrico's growing data center cluster as they supply critical power infrastructure to data centers and mission-critical facilities across the globe."<sup>7</sup>

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<sup>2</sup> <https://announcements.vedp.org/Announcements/>

<sup>3</sup> <https://roanoke.org/2021/03/25/munters-group-ab-to-invest-36-million-in-botetourt-county/>

<sup>4</sup> <https://www.munters.com/en-us/media/news/global-news/2021/munters-relocates-in-the-us-to-expand-data-center-business/>

<sup>5</sup> Dan Swinhoe, "Hanley Energy expands in Virginia, will base US headquarters in Loudoun County," May 25, 2021.

<sup>6</sup> LoudounNow, "Aggreko to Establish Data Center Division Headquarters in Loudoun," July 10, 2021.

<sup>7</sup> <https://www.governor.virginia.gov/newsroom/all-releases/2019/january/headline-837867-en.html>

The concentration of data centers in Virginia spurred the construction of the subsea cable landing in Virginia Beach that serves the MAREA cable going to Spain, the BRUSA cable going to Puerto Rico and Brazil, and Google's Dunant cable going to France. Confluence Networks also plans the construction of Confluence-1, a festoon cable connecting Virginia Beach to New Jersey, South Carolina, and Florida. These subsea cables enable very high-speed connections which businesses will increasingly need for the deployment of "Industry 4.0" technologies. The Globalinx and Telxius data centers in Virginia Beach offer collocated connections to the MAREA and BRUSA cables. The DP Facilities data center in Wise County takes advantage of the MidAtlantic Broadband Communities Corporation fiber connections to the MAREA subsea cable. The data centers in Northern Virginia and the cable landing station in Virginia Beach attracted Facebook to invest in its large data center in Henrico County, midway between the two locations. Additionally, QTS has connected its large data center and network access point in Henrico County to the subsea cables in Virginia Beach, offering very low latency connections to Europe and Brazil.

The technology companies that own and operate data centers have made commitments to use renewable energy for their operations. In general, they prefer to have the renewable energy that they purchase generated close to their facilities. That has created a strong demand for investments in renewable energy in Virginia. Dominion Energy is spending over nine billion dollars to build a wind farm off Virginia Beach which will create thousands of jobs in Hampton Roads. And the Solar Energy Industries Association reports that 3,444 megawatts (MW) of solar generation capacity has been installed in Virginia.<sup>8</sup> Using general industry averages of one million dollars of investment per MW, the data centers in Virginia have helped to create demand for \$3.4 billion of investment in solar energy projects in the state.

Virginia's data center tax incentive programs are investments in not only in data centers, but also in the manufacturing, energy, and service businesses that are associated with them. The incentive sends a clear signal to potential investors worldwide that the business climate in Virginia is friendly to the high-tech industry.

This report quantifies the significant contribution that data centers make to the state of Virginia and its localities, and it puts Virginia's data center incentive program into the national context of the competition to attract data centers.

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<sup>8</sup> <https://www.seia.org/state-solar-policy/virginia-solar>

# Economic Profile of Data Centers in Virginia

Virginia now has data centers located throughout the state, from Wise County and Harrisonburg in the Valley and Western Virginia, to Mecklenburg County in Southern Virginia, to Henrico County and Virginia Beach in Central and Coastal Virginia, to Loudoun County in Northern Virginia, and other localities. This report shows how data centers in every part of the state make an important economic contribution to employment and taxes in every region and to the state as a whole. We begin with an update on the remarkable data center market in Northern Virginia.

## The Northern Virginia Data Center Market in 2021

Northern Virginia has the largest data center market in the United States. As of 2021, by our calculations based on data from CBRE<sup>9</sup> and JLL<sup>10</sup>, the data center inventory in Northern Virginia exceeds that of the next 5 largest markets (Chicago, Dallas-Fort Worth, Silicon Valley, New York/Tri-State Area, and Phoenix) combined.

Northern Virginia's place at the top of the data center market is a relatively recent development. In 2016, Northern Virginia had just supplanted the New York market as the largest data center market in the United States. In 2017, the New York/Tri-State area had fallen to become the sixth largest data center market. A 2011 report on the data center market in the United States contains only one mention of Virginia in four pages, "Reston, VA has excess supply and new construction will be minimal for a few years."<sup>11</sup> The locations that were highlighted as important in the industry were Chicago, Silicon Valley, Southern California, Phoenix, New York, St. Louis, Washington State, Boston, Minneapolis, Denver, and Charlotte. Regarding what has become the second largest data center market, the report says, "Dallas has excess capacity and growth remains slow."

This illustrates the fluid nature of the data center market and the speed with which market conditions can change in the industry. Once-hot markets can cool off rapidly. In 2017, the data center market in Phoenix had enormous growth, but between the second half of 2018 and the first half of 2019, Phoenix saw net outflows of 26.5 MW worth of tenants, which is almost the same amount that Northern Virginia added in the same period.<sup>12</sup> The computer equipment in data centers is replaced on average every three to five years. Should circumstances warrant it, data center tenants can move from one location to another and leave significant vacancies in colocation data centers.

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<sup>9</sup> CBRE, Digital Infrastructure in 2021: The Search for Land, Space, Power and Connectivity, North America Data Center Trends Report, H1 2021.

<sup>10</sup> JLL, H1 2021 Data Center Outlook.

<sup>11</sup> ESD (Environmental Systems Design, Inc.), 2011 Data Center Technical Market Report. February 2011.

<sup>12</sup> CBRE, Large Supply Pipeline Sets Stage for Market Growth in 2019 North American Data Center Report H1 2019.

Figure 1: Relative Sizes of Largest Data Center Markets (megawatts of power capacity) - 2021 <sup>13</sup>

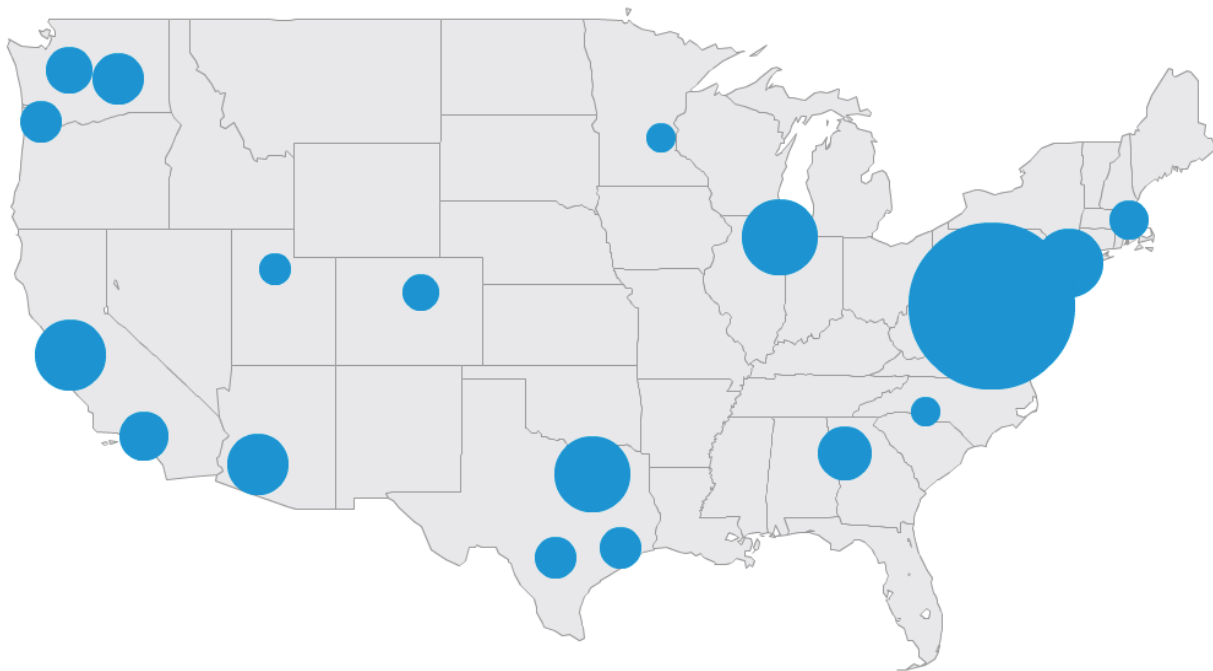


Figure 1 shows the 18 largest data center markets in the United States, as identified by CBRE and JLL. The area of each circle indicates the relative amount of power capacity in each market.

As large as the data center market in Northern Virginia is, the growth of data centers in Northern Virginia is even more impressive. We estimate that the compound annual rate of growth in data centers in Northern Virginia from 2014 to 2021 was 25%. <sup>14</sup> In comparison, Dallas-Fort Worth, a fast growing area, had a compound annual growth rate of 10%. <sup>15</sup> From 2018 to 2021, the total data center capacity in Northern Virginia more than doubled.

### Rapidly Rising Wages in Virginia Data Centers

One of the key characteristics of data centers is that they are extremely capital intensive. In other words, data centers employ a relatively small number of highly skilled and highly paid people to operate and maintain a large amount of expensive equipment. Therefore, it is useful to also look at trends in private sector average annual wages in the industry.

Between 2001 and 2020 the average annual private sector wage in the data processing and hosting industry in Virginia grew from \$61,117 to \$134,308 – a 120% increase. <sup>16</sup>

<sup>13</sup> Mangum Economics estimates based on 2021 data from CBRE and JLL.

<sup>14</sup> Mangum Economics estimates based on data from CBRE and JLL.

<sup>15</sup> Mangum Economics estimates based on data from CBRE and JLL.

<sup>16</sup> Data Source: U.S. Bureau of Labor Statistics.

In comparison, over the same period average private wages across all industries in Virginia went from \$36,525 to \$62,250 – an increase of 70%.<sup>17</sup> In other words, over the 19-year period, the average private sector employee of a Virginia data center saw their gross income go up 70% faster than the average private sector employee in Virginia.

This combination of growing investment and rapidly rising wages make data centers one of Virginia's highest performing industries and an important (and growing) contributor to a strong and robust state economy. Moreover, in a state such as Virginia where roughly two-thirds of state revenue comes from personal income tax, high growth/high wage industries such as data centers also play a disproportionate role in ensuring the health of the State's budget.

## **The Regional Distribution of Data Center Investment in Virginia**

As impressive as the data center market in Northern Virginia is, in this section, we describe how data center investment is distributed across the state. In this report the method that we use to identify data center investment is different than we have used for previous editions of this report for NVTC. This time we use detailed information on the specific identity, exact location, and size of data centers in Virginia. Using a proprietary data center cost model that we built and validated based on information from various industry sources, we translate data center size information into estimates of employment, local capital investment, and operating costs. We have used this model in projects across the United States.

For the purpose of this report, we have divided the state of Virginia into four regions: Northern Virginia, Central and Coastal Virginia, The Valley and Western Virginia, and Southern Virginia. Figure 2 shows the way we have defined these regions by locality. To identify these four regions, we started with the eight regions identified by the Weldon Cooper Center Demographics Research Group that are based on "communities' shared demographic, social, economic, and geographic characteristics."<sup>18</sup> We then grouped the eight demographic regions into four regions of data center investment that have different catalysts for data center development. Data center development in Northern Virginia is motivated by the existing bulk of data center development in the area, as well as proximity to the federal government and tech companies in the area. Development in Central and Coastal Virginia is significantly due to proximity to the subsea cable landing station in Virginia Beach and to the major terrestrial fiber route running from Northern Virginia south to Raleigh, North Carolina. Data center development in Southern Virginia has the security advantages provided by distance from major population centers while still being centrally located on the East Coast of the United States. For the Valley and Western Virginia, data center development can continue to occur fostered by a robust fiber network and access to geothermally-cooled water.<sup>19</sup>

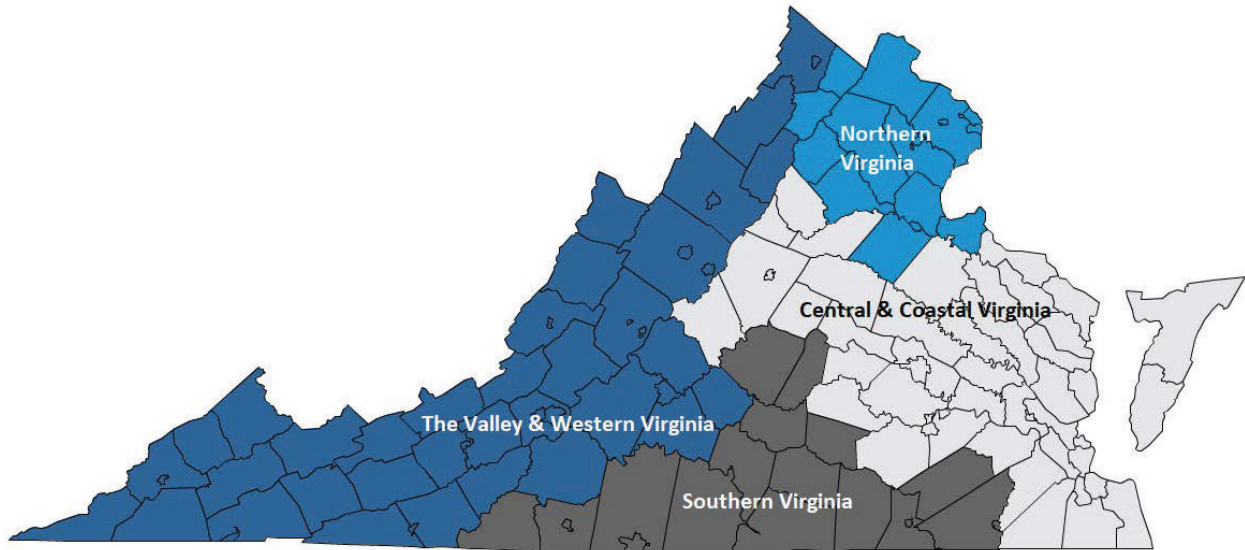
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<sup>17</sup> Data Source: U.S. Bureau of Labor Statistics.

<sup>18</sup> <https://demographics.coopercenter.org/virginia-regions>

<sup>19</sup> <https://www.investswva.org/project-oasis>

Figure 2: Four Sub-State Regions



We estimate that in 2021, 5,550 Virginians were employed in data centers, not counting construction workers building data centers in the state. Approximately 88% (4,920) worked in Northern Virginia, while six percent (330) worked in Southern Virginia, five percent (250) worked in Central and Coastal Virginia, and one per (50) worked in the Valley and Western Virginia. A review of job listings posted online by data center operators shows active job openings in all four regions of the state. Data center employment should continue to increase throughout the state into the future.

Additionally, we estimate that the accumulated capital investment in data centers across the state amounts to \$126 billion in 2021 dollars. We estimate that Virginia data centers spent \$5.4 billion in 2021 for operational expenses, the majority of which was spent for staffing and power.

# The Impact of Data Centers on Virginia State and Local Economies

The construction and ongoing operation of data centers in Virginia have large, broad effects across the state economy. In this section, we estimate the statewide economic impact that data centers have on Virginia, as well as in each of the four sub-state regions detailed earlier. To empirically evaluate the statewide and regional economic impact attributable to data centers, we employ a commonly used regional economic impact model called IMPLAN.<sup>20</sup>

Regional economic impact modeling measures the ripple effects that an expenditure generates as it makes its way through the economy. Spending by data centers in Virginia has a direct economic impact on the state and regional economy in terms of people hired as data center employees, employee pay and benefits, and economic activity in the region for utilities, construction, and equipment. That direct spending by the data centers creates the first ripple of economic activity.

As data center employees and businesses (like construction contractors for data centers, power companies that supply data centers, and data center equipment suppliers) spend the money that they were paid by data center companies, they create another indirect ripple of economic activity that is part of the second-round effects of data center activity.

In addition to the economic effects in the Virginia state and local economies of the data center-to-other business transactions, there are also the second-round economic effects associated with data center employee-to-business transactions that ripple through local economies. These effects occur when data center employees buy groceries; pay rent; go out for dinner, entertainment, or other recreation; pay for schooling in Virginia; or make other local purchases. Additionally, there are the second-round economic effects of business-to-business transactions between the direct vendors to data centers and their suppliers.

The total impact is simply the sum of the first round direct and second round impacts. These categories of impact are then further defined in terms of employment (the jobs that are created), labor income (the pay and benefits associated with those jobs), and economic output (the total amount of economic activity that is created in the economy).

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<sup>20</sup> IMPLAN is produced by IMPLAN Group, LLC.

There are many Virginia businesses that are part of the data center supply chain. To illustrate some of the types of companies located in Virginia that benefit from data centers in Virginia and that, in turn, generate economic activity in the state, in Table 1 we list a few different types of businesses in the Virginia data center supply chain. The list of businesses in Table 1 is not an endorsement, promotion, or commendation of them, and it is far from a complete list of companies. We only provide it to illustrate some of the types of businesses that are part of the second ripple effect of economic activity related to spending by data centers.

Table 1: Some Businesses Serving Virginia Data Centers

Company	Line of Business	Location
Aggreko North America	temporary power generation and storage products	Loudoun
Anord Mardix	power distribution and management products and services	Henrico
Compu Dynamics	design, construction, optimization, and maintenance	Sterling
Fulcrum Collaborations	facilities management cloud-based platform	Glen Allen
Hanley Energy	energy management services	Ashburn
Interglobix	data center and fiber interconnectivity consulting and marketing	Herndon
Metro Fiber Networks	carrier-neutral fiber connecting Virginia Beach to Henrico data centers	Yorktown
Munters	cooling and air treatment	Buena Vista (expanding to Daleville)
Power Distribution Incorporated	power transformation, distribution, and monitoring	Richmond
Rosendin Electric	design and construction services	Sterling
Submer	IT hardware immersion cooling	Ashburn
Technoguard	materials, cleaning, decontamination, and disaster recovery	Sterling
Timmons Group	site certification and development	Richmond
Windward Consulting	management consulting	Herndon

## Virginia Statewide

We estimate that in 2021 data centers in Virginia directly provided approximately:

- 5,550 operational jobs and 10,230 construction and manufacturing jobs
- \$1.6 billion in associated employee pay and benefits
- \$7.5 billion in economic output

Taking into account the economic ripple effects generated by that direct impact, we estimate that the total impact on Virginia from data centers in 2021 was approximately:

- 45,460 supported jobs
- \$3.6 billion in associated employee pay and benefits
- \$15.3 billion in economic output.

**For every job inside a Virginia data center, there are 4.1 additional jobs that are supported in the rest of the Virginia economy, not counting construction jobs.**

Table 2: Economic Impact of Data Centers in Virginia in 2021

Direct Effects	Jobs	Pay & Benefits	Economic Output
<b>Data Center Construction</b>	10,230	\$760,500,000	\$2,021,100,000
<b>Data Center Operation</b>	5,550	\$862,200,000	\$5,528,700,000
Supported Effects			
<b>Data Center Construction Supported</b>	6,680	\$411,300,000	\$1,314,600,000
<b>Data Center Operation Supported</b>	23,000	\$1,603,300,000	\$6,412,900,000
Total Impact			
<b>Construction Subtotal</b>	<b>16,910</b>	<b>\$1,171,800,000</b>	<b>\$3,335,700,000</b>
<b>Operation Subtotal</b>	<b>28,550</b>	<b>\$2,465,500,000</b>	<b>\$11,941,600,000</b>
<b>Total Economic Impact in Virginia</b>	<b>45,460</b>	<b>\$3,637,300,000</b>	<b>\$15,277,300,000</b>

Because of the large amount of data center development in Virginia over the last several years, parts of the data center construction and operations supply chains (illustrated in Table 1) have developed in the state. This is why data center development in one part of the state creates impacts in other parts of the state. In the following sections covering the four regions of the state, we show the local impacts of direct investment in a region from the construction and operation of data centers. We also show the impacts in each region caused by data center development in other regions.

So, for example, the 9,680 construction jobs building data centers in Northern Virginia supported 5,330 jobs in other industries in Northern Virginia, as well as supporting 380 jobs in Central and Coastal Virginia, 30 jobs in Southern Virginia, and 540 jobs in the Valley and Western Virginia. Likewise, the 4,920 operational jobs in Northern Virginia data centers supported 19,140 jobs in other industries in Northern Virginia, as well as supporting 1,030 in Central and Coastal Virginia, 20 jobs in Southern Virginia, and 60 jobs in the Valley and Western Virginia.

## Central and Coastal Virginia

We estimate that in 2021, data centers in Central and Coastal Virginia directly provided approximately:

- 250 operational jobs and 290 construction jobs
- \$41 million in associated employee pay and benefits
- \$289 million in economic output

Taking into account the economic ripple effects generated by that direct impact, we estimate that the total impact on Central and Coastal Virginia from data centers in 2021 was approximately:

- 3,640 supported jobs (including 1,650 supported data centers in other parts of the state)
- \$244 million in associated employee pay and benefits
- \$1.1 billion in economic output.

Table 3: Economic Impact of Data Centers on Central and Coastal Virginia in 2021

Direct Effects in Central & Coastal Virginia	Jobs	Pay & Benefits	Economic Output
<b>Data Center Construction</b>	290	\$18,100,000	\$53,400,000
<b>Data Center Operation</b>	250	\$23,000,000	\$236,000,000
<b>Construction-Supported Effects from Data Centers in...</b>			
<b>Central &amp; Coastal Virginia</b>	210	\$11,500,000	\$38,700,000
<b>Northern Virginia</b>	380	\$24,900,000	\$87,600,000
<b>Valley &amp; Western Virginia</b>	20	\$1,400,000	\$4,600,000
<b>Operation-Supported Effects from Data Centers in...</b>			
<b>Central &amp; Coastal Virginia</b>	1,240	\$76,700,000	\$339,200,000
<b>Northern Virginia</b>	1,030	\$75,800,000	\$291,000,000
<b>Southern Virginia</b>	200	\$11,600,000	\$44,000,000
<b>Valley &amp; Western Virginia</b>	20	\$1,000,000	\$4,000,000
<b>Central &amp; Coastal Virginia Impact</b>			
<b>Construction Subtotal</b>	<b>900</b>	<b>\$55,900,000</b>	<b>\$184,300,000</b>
<b>Operation Subtotal</b>	<b>2,740</b>	<b>\$188,100,000</b>	<b>\$914,200,000</b>
<b>Total Impact of Data Centers in Central &amp; Coastal Virginia</b>	<b>3,640</b>	<b>\$244,000,000</b>	<b>\$1,098,500,000</b>

### Investment Highlight - Community Action Grants

Meta (formerly dba Facebook) has a Community Action Grants program to fund non-profit projects that meet community needs by deploying technology to benefit the community, build stronger online and offline connections among people, and improve local science, technology, engineering, and mathematics education. In 2021, the program provided funding for eight projects including buying laptop computers for local 10th graders, funding Henrico County Public Library's WiFi lending program, buying video equipment for children with illnesses, and supporting a telehealth program for underserved students and families.

## Northern Virginia

We estimate that in 2021, data centers in Northern Virginia directly provided approximately:

- 4,920 operational jobs and 9,680 construction jobs
- \$1.5 billion in associated employee pay and benefits
- \$7 billion in economic output

Taking into account the economic ripple effects generated by that direct impact, we estimate that the total impact on Northern Virginia from data centers in 2021 was approximately:

- 39,230 supported jobs (including 160 supported data centers in other parts of the state)
- \$3.3 billion in associated employee pay and benefits
- \$13.5 billion in economic output

Table 4: Economic Impact of Data Centers on Northern Virginia in 2021

Direct Effects in Northern Virginia	Jobs	Pay & Benefits	Economic Output
<b>Data Center Construction</b>	9,680	\$733,800,000	\$1,931,700,000
<b>Data Center Operation</b>	4,920	\$802,000,000	\$5,066,700,000
<b>Construction-Supported Effects from Data Centers in...</b>			
<b>Northern Virginia</b>	5,330	\$340,800,000	\$1,063,100,000
<b>Central &amp; Coastal Virginia</b>	10	\$500,000	\$1,600,000
<b>Southern Virginia</b>	10	\$600,000	\$1,400,000
<b>Operation-Supported Effects from Data Centers in...</b>			
<b>Northern Virginia</b>	19,140	\$1,373,200,000	\$5,429,900,000
<b>Central &amp; Coastal Virginia</b>	40	\$3,300,000	\$8,500,000
<b>Southern Virginia</b>	80	\$5,400,000	\$16,900,000
<b>Valley &amp; Western Virginia</b>	20	\$1,500,000	\$4,200,000
<b>Northern Virginia Impact</b>			
Construction Subtotal	15,030	\$1,075,700,000	\$2,997,800,000
Operation Subtotal	24,200	\$2,185,400,000	\$10,526,200,000
<b>Total Impact of Data Centers in Northern Virginia</b>	<b>39,230</b>	<b>\$3,261,100,000</b>	<b>\$13,524,000,000</b>

### **Investment Highlight - The Northern Virginia Community College Programs**

Northern Virginia Community College (NOVA) has developed programs to help address the challenges that data centers in the Northern Virginia area have meeting their staffing needs. Amazon Web Services (AWS) has a paid apprenticeship program at the NOVA.<sup>21</sup> In December 2018, the program graduated its first students into full-time Associate Cloud Consultant jobs with AWS.

NOVA also has a 2-year Associate of Applied Science program to train Datacenter Operations Technicians.<sup>22</sup> The program includes lab training at a training data center that the State of Virginia built on the NOVA Loudoun Campus. The program started with 19 students in its very first year, and enrollment has increased significantly since then. Graduates quickly find jobs in Northern Virginia data centers and the companies that work for them.

### **Investment Highlight - New Data Center Expansions in Fairfax County**

Data center investment in Fairfax County has increased significantly in the past two years. Data centers in Fairfax County currently occupy 2.4 million square feet in 28 facilities. As of February 2022, the pipeline of new data center development includes 1.9 million square feet, with 375,000 square feet already under construction. Fairfax County has development opportunities available in both greenfield areas near Dulles International Airport and infill locations in Tysons Corner.



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<sup>21</sup> NOVA, "Amazon and Northern Virginia Community College Announce Graduation of the First Veteran Technical Apprenticeship Cohort on the East Coast," December 12, 2018.

<sup>22</sup> NOVA 2019-2020 Catalog, Engineering Technology: Data Center Operations Specialization, A.A.

## Southern Virginia

We estimate that in 2021, data centers in Southern Virginia directly provided approximately:

- 330 operational jobs and 260 construction jobs
- \$39 million in associated employee pay and benefits
- \$215 million in economic output

Taking into account the economic ripple effects generated by that direct impact, we estimate that the total impact on Southern Virginia from data centers in 2021 was approximately:

- 1,400 supported jobs (including 60 supported by data centers in other parts of the state)
- \$73 million in associated employee pay and benefits
- \$402 million in economic output

Table 5: Economic Impact of Data Centers on Southern Virginia in 2021

Direct Effects in Southern Virginia	Jobs	Pay & Benefits	Economic Output
<b>Data Center Construction</b>	260	\$8,600,000	\$36,000,000
<b>Data Center Operation</b>	330	\$30,400,000	\$178,900,000
<b>Construction-Supported Effects from Data Centers in...</b>			
<b>Southern Virginia</b>	110	\$4,400,000	\$17,000,000
<b>Central &amp; Coastal Virginia</b>	-	\$100,000	\$800,000
<b>Northern Virginia</b>	30	\$1,600,000	\$7,200,000
<b>Operation-Supported Effects from Data Centers in...</b>			
<b>Southern Virginia</b>	640	\$26,600,000	\$155,700,000
<b>Central &amp; Coastal Virginia</b>	10	\$300,000	\$1,800,000
<b>Northern Virginia</b>	20	\$800,000	\$4,200,000
<b>Valley &amp; Western Virginia</b>	-	\$100,000	\$500,000
<b>Southern Virginia Impact</b>			
Construction Subtotal	400	\$14,700,000	\$61,000,000
Operation Subtotal	1,000	\$58,200,000	\$341,100,000
<b>Total Impact of Data Centers in Southern Virginia</b>	<b>1,400</b>	<b>\$72,900,000</b>	<b>\$402,100,000</b>

### Investment Highlight - SOVA Innovation Hub

Mid-Atlantic Broadband Communities Corporation and Microsoft TechSpark are investing in Southern Virginia, in part, by jointly creating the SOVA Innovation Hub in South Boston to offer programs to inspire entrepreneurship and the pursuit of digital careers. The new building houses coworking, meeting, and training space. Training programs are offered for job seekers, educators, families, and businesses. The Hub has assisted a broad range of businesses, from the arts, to driver training, marketing, and organic horticulture.

Microsoft's Southern Virginia TechSpark is a civic program created to foster job creation and economic development in the area. In addition to the innovation hub, TechSpark has helped to create technology education and literacy programs in every high school in the region, "Girls Who Code" clubs in Halifax and Mecklenburg Counties, and the deployment of free public WiFi networks Boydton and Clarksville.<sup>23</sup>



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<sup>23</sup> Miranda Baines, "[Microsoft TechSpark Celebrates Third Anniversary](#)," Gazette-Virginian, December 1, 2020.

## Valley and Western Virginia

We estimate that in 2021, data centers in the Valley and Western Virginia directly provided approximately:

- 50 operational jobs
- \$7 million in associated employee pay and benefits
- \$47 million in economic output

Taking into account the economic ripple effects generated by that direct impact, we estimate that the total impact on the Valley and Western Virginia from data centers in 2021 was approximately:

- 1,190 supported jobs (including 950 supported by data centers in other parts of the state)
- \$59 million in associated employee pay and benefits
- \$253 million in economic output

Table 6: Economic Impact of Data Centers on the Valley and Western Virginia in 2021

Direct Effects in the Valley & Western Virginia	Jobs	Pay & Benefits	Economic Output
<b>Data Center Operation</b>	50	\$6,800,000	\$47,100,000
<b>Construction-Supported Effects from Data Centers in...</b>			
<b>Central Virginia</b>	20	\$600,000	\$1,900,000
<b>Northern Virginia</b>	540	\$23,900,000	\$87,100,000
<b>Southern Virginia</b>	20	\$1,000,000	\$3,600,000
<b>Operation-Supported Effects from Data Centers in...</b>			
<b>Valley &amp; Western Virginia</b>	190	\$8,700,000	\$40,000,000
<b>Central Virginia</b>	10	\$500,000	\$2,000,000
<b>Northern Virginia</b>	300	\$14,300,000	\$58,200,000
<b>Southern Virginia</b>	60	\$3,500,000	\$12,800,000
<b>Valley &amp; Western Virginia Impact</b>			
<b>Construction Subtotal</b>	<b>580</b>	<b>\$25,500,000</b>	<b>\$92,600,000</b>
<b>Operation Subtotal</b>	<b>610</b>	<b>\$33,800,000</b>	<b>\$160,100,000</b>
<b>Total Impact of Data Centers in the Valley &amp; Western Virginia</b>	<b>1,190</b>	<b>\$59,300,000</b>	<b>\$252,700,000</b>

### **Investment Highlight - Project Oasis and Mineral Gap**

Part of the InvestSWVA public-private partnership is Project Oasis – a program to attract data centers to Southwest Virginia. The program emphasizes the ability of the area to assist data centers locating in the area to achieve their sustainability goals by taking advantage of the region’s solar farms and availability for geothermal cooling.

The DP Facilities data center in Mineral Gap (Wise County) offers a high-security, 65,000 square foot facility in a reclaimed mine site with N+2 redundancy, 45 MW of power capacity, and an estimated power usage effectiveness of 1.2. The 22-acre site has room to expand by an additional 200,000 square feet. An on-site solar facility provides 3.5 MW of power for the data center. The \$4.6 million solar project is the first solar project in the state to be built on reclaimed mine land.



# Data Centers' Contribution to State and Local Government Budgets

Data centers pay millions of dollars in state and local taxes in Virginia, even though Virginia has a sales and use tax exemption on some equipment for data centers that are large enough to qualify for the exemption. All data centers (large and small) pay state employer withholding taxes. At the local level, both large and small data centers pay real estate taxes, tangible personal property taxes, business license taxes, and industrial utilities taxes. Additionally, many data centers still must pay state sales and use taxes on their purchases of data center equipment because they are not large enough to qualify for the Virginia data center incentive.

In addition to the taxes that data centers pay directly, the economic activity that they generate also results in additional tax collections. Data centers pay taxes directly to state and local governments. The employees and business suppliers that are paid directly by the data centers also pay taxes. All of these sources of tax revenue are included in the tax revenue estimates described in this report

## Statewide and Regional Tax Collections Associated with Data Centers

In addition to the taxes paid directly by data centers, local governments and the Commonwealth of Virginia collect tax revenue from the secondary indirect and induced economic activity that data centers generate. Table 7 shows our estimates of the taxes directly and indirectly generated by data centers statewide in Virginia and in each of the four sub-state regions in 2021 through that first round and second round economic activity.

**We estimate that in 2021, data centers were directly and indirectly responsible for generating \$174 million in state revenue and \$1 billion local tax revenue in Virginia.**

Table 7: Tax Revenue Directly and Indirectly Generated by Data Centers in Virginia in 2021

Region	Local Taxes Collected	State Taxes Collected
Central & Coastal Virginia	\$18,200,000	\$10,900,000
Northern Virginia	\$974,100,000	\$153,700,000
Southern Virginia	\$8,900,000	\$7,600,000
Valley & Western Virginia	\$2,200,000	\$2,000,000
<b>Virginia Statewide</b>	<b>\$1,003,400,000</b>	<b>\$174,200,000</b>

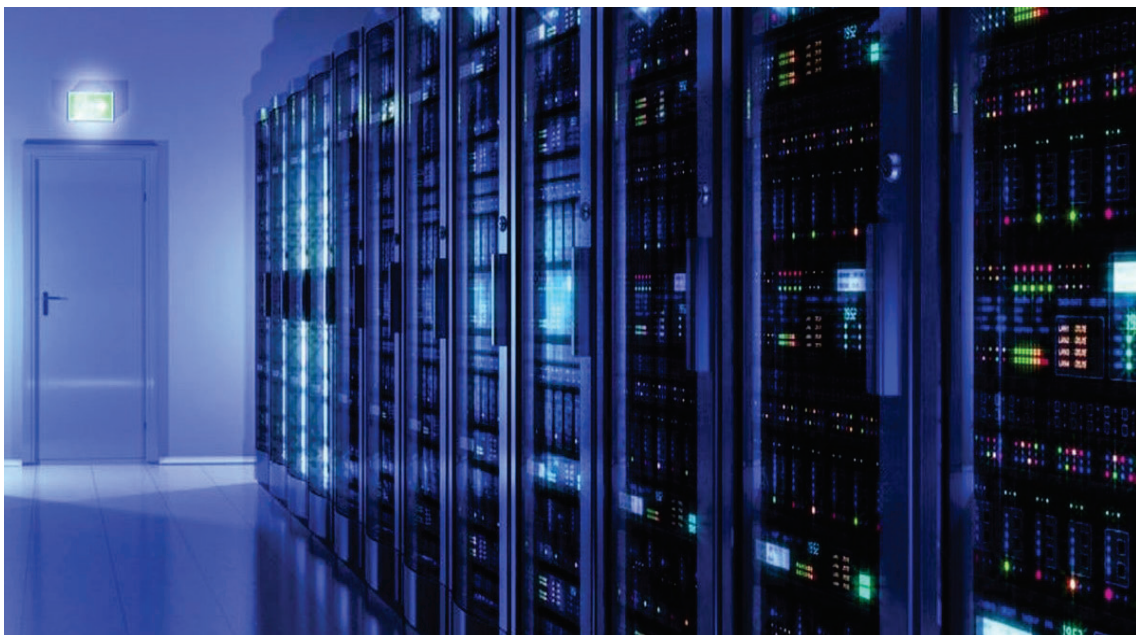
## Data Centers Contribute to Local Government Budgets

Data centers generate a large amount of property tax revenue for local governments without placing many demands on local government services. Additionally, the industry also places downward pressure on overall tax rates, thereby improving the locality's business climate and economic attractiveness.

### Data Centers' High Local Benefit to Cost Ratio

Data centers provide a high benefit to cost ratio in terms of the tax revenue they generate relative to the government services that they and their employees require. Loudoun and Prince William Counties are home to the most significant concentrations of data centers in Virginia. County staff in those localities were able to provide us with detailed data on the tax revenue generated by this industry in each locality from real and business personal property taxes.<sup>24</sup> As a result, we are able to use those data in combination with data from other sources to compute the benefit to cost ratio associated with data centers in each locality. If local fiscal data were available, similar stories could be told for Mecklenburg and Henrico Counties where there are larger data centers, and to a lesser degree in places like the Cities of Harrisonburg and Virginia Beach, and Albemarle, Culpeper, Fairfax, and Wise Counties which also have data centers.

To quantify the budgetary cost that data centers and their employees imposed on these localities in 2020,<sup>25</sup> we use data from the Virginia Department of Education on local elementary and secondary education expenditures per student, and data from the Virginia Auditor of Public Accounts on local non-education expenditures per county resident. This approach focuses on the largest costs that any business imposes on a local government – the costs associated with providing primary and secondary education, and other county services, to the employees of that business.



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<sup>24</sup> It should be noted that, of necessity, these estimates exclude BPOL and other local taxes that also apply to data centers. As a result, the revenue estimates provided almost certainly under-estimate the actual local tax revenues from data centers.

<sup>25</sup> 2020 was the most recent year that data was available for these calculations.

Table 8 details the calculations used to estimate the budgetary cost that data centers and their employees imposed on each of these two counties in 2020. As shown, we estimate those costs to be approximately \$37 million in Loudoun County, and \$5 million in Prince William County.

Table 8: Estimate of Total Budgetary Costs Imposed by Data Centers and Employees in 2020

	Loudoun County	Prince William County
<b>County Private Sector Data Center Employment<sup>26</sup></b>	3,500	500
Students per Employee <sup>27</sup>	0.51	0.73
Per Student County Education Expenditures <sup>28</sup>	\$11,161	\$5,502
<b>Total Education Costs<sup>29</sup></b>	<b>\$19,922,385</b>	<b>\$2,008,230</b>
County Residents per All Employees <sup>30</sup>	2.55	3.85
Per Resident Non-Education County Expenditures <sup>31</sup>	\$1,382	\$1,427
<b>Total Non-Education Costs<sup>32</sup></b>	<b>\$12,334,350</b>	<b>\$2,746,975</b>
<b>TOTAL COSTS<sup>33</sup></b>	<b>\$32,256,735</b>	<b>\$4,755,205</b>

<sup>26</sup> Data Source: Loudoun County Economic Development Authority and Prince William County Department of Economic Development.

<sup>27</sup> Data Source: Virginia Department of Education and U.S. Bureau of Labor Statistics. Derived by dividing total county elementary and secondary school enrollment in 2020 by total county employment in 2020.

<sup>28</sup> Data Source: Virginia Department of Education.

<sup>29</sup> Calculated as county private sector employment in data centers in 2020, times students per employee, times per student education expenditures.

<sup>30</sup> Data Source: 2020 Census and U.S. Bureau of Labor Statistics. Calculated by dividing total county population in 2020 by total county employment in 2020.

<sup>31</sup> Data Source: Virginia Auditor of Public Accounts and U.S. Census Bureau. Derived by dividing total county non-educational expenditures in 2020 by total county population in 2020.

<sup>32</sup> Derived as county private sector employment in data centers in 2020, times county residents per employee, times per resident non-education expenditures.

<sup>33</sup> Derived as the sum of total education costs and total non-education costs.

As shown in Table 9, combining the estimates of budgetary cost from Table 8 with data from each of the localities on the local revenue generated by data centers shows that in 2020 the benefit to cost ratio associated with the industry was:

- **13.2 in Loudoun County** — which means that for every \$1.00 in county expenditures that data centers were responsible for generating in 2020, it provided approximately \$13.20 in tax revenue.
- **13.5 in Prince William County** — which means that for every \$1.00 in county expenditures that data centers were responsible for generating in 2020, it provided approximately \$13.50 in tax revenue.

Table 9: Estimated Benefit/Cost Ratio Associated with Data Centers and Employees in 2020

Locality	Estimated Tax Revenue (Benefit)	Estimated Budgetary Cost	Benefit/Cost Ratio
Loudoun County	\$424,700,000	\$32,256,735	13.2
Prince William County	\$64,200,000	\$4,755,205	13.5



## Local Data Centers Reduce the Burden on the State Education Budget

Because of the way that the State of Virginia partially funds local education from State coffers, the tax revenue generated by data centers in some localities reduces the burden on the State education budget.

On average, the state of Virginia funds 55% of primary and secondary education expenditures, and localities are required to locally fund the remaining 45%.<sup>34</sup> But, that local funding percentage is adjusted up or down based on each locality's "ability to pay" as measured by Virginia's composite index formula that takes into account the locality's property tax base, adjusted gross income, and taxable retail sales. Of these three factors, property tax base receives the highest weight (50%) and, therefore, has the largest influence on the final calculation.<sup>35</sup>

The 2020 composite index for Loudoun County is 0.5450 and for Prince William County it is 0.3739.<sup>36</sup> When we recalculate those indices to take into account the loss of tax base implied by the loss in tax revenue that would have occurred if data centers had not existed in these localities, those indices fall to 0.5026 and 0.3609, respectively.

As shown in Table 10, according to our estimates, this means that in the absence of data centers in Loudoun and Prince William Counties, the State of Virginia would have to reallocate \$90.5 million in state education funding away from other Virginia localities to provide \$73 million in additional funding to Loudoun County, and \$17.5 million in additional funding to Prince William County.

Table 10: Estimated Additional Revenue Required to Compensate for Loss of the Data Centers in 2020

Locality	Revenue Loss	State Education Funding Off-Set	Additional Local Tax Revenue Required from Other Sources
Loudoun County	(\$424,700,000)	\$72,968,000	\$351,732,000
Prince William County	(\$64,200,000)	\$17,548,000	\$46,652,000
<b>Total</b>		\$90,516,000	

<sup>34</sup> In actuality, however, baseline local funding percentages are typically higher than 45% because of local initiatives.

<sup>35</sup> Virginia Department of Education. The actual formula weights each locality's property tax base by 0.5, adjusted gross income by 0.4, and taxable retail sales by 0.1. Each metric is then divided by school population and total population and those per capita figures are divided by the average across all localities to determine ability to pay. The per capita figures are then themselves weighted with each per capita school population metric receiving a weight of 0.66 and each per capita population metric receiving a weight of 0.33.

<sup>36</sup> Virginia Department of Education.

# Virginia's Data Center Sales and Use Tax Exemption

Virginia's data center incentive program is primarily a sales and use tax exemption on qualifying equipment.<sup>37</sup> Generally, the sales and use tax exemption is available to data centers that make a minimum new capital investment of \$150 million and that create a minimum of 50 new jobs in a Virginia locality. If the data center is located in an enterprise zone, the minimum new job requirement is reduced to 25. Each new job must pay at least 150% of the annual average wage in the locality where the data center is located. Tenants of colocation data centers that qualify for the incentive may also receive the sales and use tax exemption. The incentive program is set to sunset in 2035.

In March of 2021, Virginia revised its sales and use tax exemption to require only 10 new employees and \$70 million of capital investment for data centers that locate where the unemployment and poverty rates are higher than statewide averages.<sup>38</sup>

According to the JLARC, as of fiscal year 2017 (the most recent year that data is available), 24 data centers had qualified for the incentive, plus 135 colocation data center tenants.<sup>39</sup> According to JLARC's 2021 report on Virginia's economic development incentives, in fiscal year 2020, \$138.3 million of sales and use tax was exempted under the incentive.<sup>40</sup>

## Virginia Treats Data Centers Like Other Capital-Intensive Industries

The Virginia data center incentive program offers qualifying data centers the same tax treatment that it applies to all manufacturers. Like most states, Virginia exempts all manufacturing firms (regardless of size) from paying sales and use tax on their production equipment. Part of the rationale for exempting manufacturing equipment from sales and use tax is that the manufacturing industry requires large amounts of expensive equipment in order to make products. If the state charged sales and use tax on manufacturing equipment, manufacturers would locate in other states in order to reduce their costs of production. Virginia's sales and use tax exemption for qualifying data centers is a limited way to attract large data centers to the state.

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<sup>37</sup> Virginia also offers a single sales factor apportionment method for calculating corporate tax liability. According to JLARC's 2021 report, that incentive was first used by data centers in 2020 and amounted to a change in taxes of only \$100,000. Because this incentive has such a limited impact, we do not discuss it in this report.

<sup>38</sup> Dan Swinhoe, "[Virginia lowers threshold for data center tax exemption](#)," Data Center Dynamics, March 31, 2021.

<sup>39</sup> Joint Legislative Audit and Review Commission, Data Center and Manufacturing Incentives, Economic Development Incentives Evaluation Series. June 17, 2019.

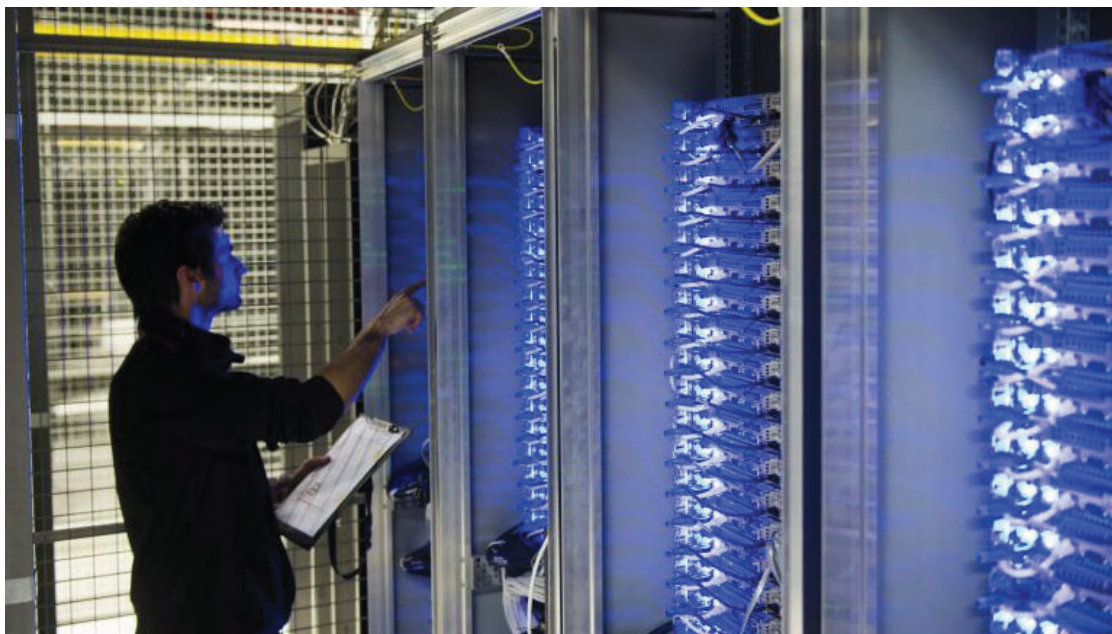
<sup>40</sup> <http://jlarc.virginia.gov/pdfs/reports/Rpt557.pdf>

## JLARC’s Evaluation of the Data Center Incentive

In June of 2019, Virginia’s Joint Legislative Audit and Review Commission published an evaluation of the state’s data center incentive using confidential tax information that is not publicly available.<sup>41</sup>

**JLARC found that 90% of the data center investment made by the companies that received the sales and use tax exemption would not have occurred in the state of Virginia without the incentive.** Instead, that 90% of data center investment would have occurred in states other than Virginia. So, the “cost” of the State data center incentive is only 10% of the amount of State sales tax revenue exempted. Using the confidential tax information, JLARC estimated the economic and government budgetary impact, not of the total data center industry in Virginia (as we have done in this report), but specifically of Virginia’s data center sales and use tax exemption.<sup>42</sup>

Table 11 shows the text of Appendix N from the JLARC report with JLARC’s calculations of the amount of State tax revenue exempted by the Virginia incentive; the amount of additional State tax revenue that was generated by the investment of the data centers that received the tax incentive; the net impact of the incentive on the State budget (additional tax received minus tax revenue exempted); net new jobs added, net additional state gross domestic product (GDP) generated, and net new worker pay generated throughout the statewide economy as a result of the investment by data centers that received the incentive. Table 11 shows data for the fiscal years 2013 through 2017. This is the most recent data available that covers the years when the current version of Virginia’s data center incentive has been implemented. The General Assembly made significant revisions to the data center incentive in 2012.



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<sup>41</sup> Joint Legislative Audit and Review Commission, Data Center and Manufacturing Incentives, Economic Development Incentives Evaluation Series. June 17, 2019.

<sup>42</sup> Appendix N: Results of economic and revenue impact analyses.

Table 11: Economic and Tax Impacts of Virginia's Sales and Use Tax Exemption for Data Centers <sup>43</sup>

With Data Center Incentive	FY2013	FY2014	FY2015	FY2016	FY2017
State Tax Revenue Exempted	(\$81,298,000)	(\$80,131,000)	(\$93,249,000)	(\$54,757,000)	(\$54,516,000)
Additional State Tax Revenue	\$44,548,000	\$49,705,000	\$64,494,000	\$54,742,000	\$59,171,000
Net State Budgetary Impact	(\$36,751,000)	(\$30,426,000)	(\$28,755,000)	(\$15,000)	\$4,655,000*
State Revenue Recovered per \$1 of State Revenue Exempted	\$0.55	\$0.62	\$0.69	\$1.00	\$1.09
Net Additional Jobs	11,631	12,168	14,138	9,968	10,324
Net Additional State GDP	\$1,594,238,000	\$1,838,394,000	\$2,268,541,000	\$1,862,303,000	\$2,028,606,000
Net Additional Worker Pay	\$852,123,000	\$987,672,000	\$1,238,666,000	\$1,022,226,000	\$1,126,545,000

\* In 2017, the data center tax incentive generated more State tax revenue than it exempted.

The appendix to the JLARC report shows that:

- In 2017, the State took in \$1.09 in state tax revenue from data center related activity for every \$1 of potential state tax revenue that was exempted from qualifying data centers.
- In 2016, the data center incentive was revenue neutral – it generated one dollar in additional state tax revenue for every dollar of potential state tax revenue that it exempted.
- In every year since the data center incentive was modified in 2012, the State recovered the majority of the state tax revenue that was exempted from qualifying data centers.
- From 2013 through 2017, on average the State recovered 75 cents in state tax revenue for every dollar of potential tax revenue exempted from qualifying data centers. <sup>44</sup>

<sup>43</sup> Data Source: Appendix N: Results of Economic and Revenue Impact Analyses.

<sup>44</sup> The JLARC report states that the data center incentive recovered 72 cents in state tax revenue for every dollar of potential tax revenue exempted from qualifying data centers. That conclusion is based on including the years 2010 through 2012, prior to the significant change made to the incentive in 2012. The 75-cent estimate more accurately reflects

## Incentive Helps to Attract Some Data Centers that Do Not Qualify for Incentive

Data centers tend to cluster, with smaller data centers often locating adjacent to larger data centers. Therefore, one data center that is attracted by the incentive can attract other data centers to take advantage of the existing local fiber and power infrastructure.<sup>45</sup> Some of these follow-on data centers will be smaller than the larger data center projects that qualified for the tax incentive and may, themselves, not initially achieve the investment and job creation thresholds required to receive tax benefit from the state.

Because large data centers that qualify for Virginia's incentive help provide the infrastructure and technology supply chain to attract smaller data centers that do not initially qualify for the incentive, the incentive yields more data center investment than is measured by just counting the data centers that qualify for the incentive. Virginia's data center tax incentive plays an important role in attracting new data centers to the state and in keeping them from moving to other states.

## National Context for Virginia Incentives

Over 30 states offer some sort of incentive program to attract data centers. Twenty-six states have sales and use tax incentives that last for 10 years or more, with 11 of them having incentives that are valid indefinitely. Examples in the Southeast include:

- Alabama offers up to a 30-year sales and use tax exemption. (AL 40-9B-3)<sup>46</sup>
- Mississippi's 10-year sales and use tax exemption has no program sunset. (MS 57-113-25)<sup>47</sup>
- North Carolina's sales and use tax exemption has no program sunset. (NC 105-164.13)<sup>48</sup>
- South Carolina's sales and use tax exemption sunsets for new applicants in 2031 with benefits ending in 2041. (SC 12-36-2120)<sup>49</sup>
- Tennessee's sales and use tax exemption and reduced tax on electricity has no program sunset. (TN 67-6-206)<sup>50</sup>

In the last few years several states have added or expanded sales and use tax exemptions for data centers. The following list does not include states like Ohio and Texas which have robust incentives in place.

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<sup>45</sup> Loudon Blair, "[Finding Strength in Numbers: The Data Center Clustering Effect](#)," Data Center Knowledge,

<sup>46</sup> <http://alisondb.legislature.state.al.us/alison/CodeOfAlabama/1975/135558.htm> and Alabama Department of Revenue, General Summary of State Taxes.

<sup>47</sup> Mississippi Tax Incentives, Exemptions and Credits.

<sup>48</sup> North Carolina Data Center Sales and Use Tax Exemptions.

<sup>49</sup> South Carolina Department of Revenue Ruling #13-5.

<sup>50</sup> Changes in Requirements for a Qualified Data Center, Tennessee Department of Revenue.

<sup>51</sup> [Pennsylvania Brings in Data Center Tax Breaks](#).

<sup>52</sup> Matt Pilon, "[In a crowded pond, CT goes fishing for data centers with new incentives](#)," Hartford Business Journal, April 19, 2021.

<sup>53</sup> [Maryland Department of Commerce, Data Center Tax Incentive Program](#).

<sup>54</sup> Rich Miller, "[Quantum Loophole Plans 2,100 Acre Data Center Campus in Maryland](#)," Data Center Frontier, June 28, 2021.

## East

- Pennsylvania's original incentive was ineffective at attracting data center investment to the state while billions of dollars of investments were being made in nearby states. The legislature enacted a new sales and use tax exemption that is open indefinitely with benefits available for at least 15 years. (72 PS 9931-D) <sup>51</sup>
- Connecticut became the latest state to add a completely new data center incentive. Depending on the size and location of the facility, data centers could be exempted from state sales and use taxes for 20 to 30 years. (CT Public Act 21-1, HB 6514) <sup>52</sup>
- Maryland enacted a new sales and use tax incentive with a benefit period of 10 to 20 years depending on the level of investment. The incentive has no sunset date. <sup>53</sup> Following the enactment of Maryland's data center incentive, a data center developer announced plans for a new 2,100-acre data center campus in the state. (MD 11-239) <sup>54</sup>

## Midwest

- North Dakota enacted a data center incentive to replace an incentive that expired in 2020. The new incentive has no sunset date or limitation on the benefit period. (NDCC 57-39.2-04.17) <sup>55</sup>

## West

- Arizona revised and extended its data center sales and use tax exemption by 10 years to run through 2033. The benefit period ranges from 10 to 20 years, with the 20-year benefit reserved for data centers with that are considered a sustainable redevelopment project. (AZ 41-1519) <sup>56</sup>
- Idaho enacted a new sales and use tax exemption for data center equipment used in new data centers. The new incentive has no program sunset or limitation on the benefit period. (63-3622V) <sup>57</sup>
- Utah expanded its sales and use tax exemption for data centers with no minimum investment or employment criteria and no program sunset. (UT 59-12-104) <sup>58</sup>

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<sup>55</sup> North Dakota Century Code § 57-39.2-04.17.

<sup>56</sup> Dan Swinhoe, "[Arizona extends data center tax breaks for another 10 years](#)," Data Center Dynamics, April 27, 2021.

<sup>57</sup> HB 521.

<sup>58</sup> Utah Sales and Use Tax General Information, Revised 6/21 and SB 114.

## Competition Between States

With so many states offering incentives to attract data centers to their states, the competition for data centers is keen.

### New York - New Jersey - Connecticut

New Jersey is debating adding an incentive. There is a growing realization that the New York-New Jersey region lost its lead in the data center market to Northern Virginia, at least in part because New Jersey is not competitive with other markets on taxes.<sup>59</sup>

An even more dramatic illustration of the sensitivity of data centers to tax changes is the way in which data centers showed their mobility in response to a potential increase in taxes in New Jersey. In the summer of 2020, some elected state officials proposed imposing a 25/100th of one percent or a 1/100th of one percent tax on financial transactions processed in data centers located in New Jersey.<sup>60</sup> In the fall of 2020, the New York Stock Exchange ran its financial transactions out of its data center in Chicago for five days to practice for any possible relocation of the market to data centers outside of New Jersey. The Governor of Texas was involved in attempting to attract Nasdaq to migrate its data center operations to Dallas, the second-largest data center market in the United States. In the spring of 2021, the state of Connecticut enacted a data center incentive to make that state a viable alternative, in the event that New Jersey proceeded with the financial transaction tax.<sup>61</sup>

### Illinois - Indiana

In June of 2019, Illinois added a new data center incentive.<sup>62</sup> Although the Chicago area is one of the largest data center markets in the United States, it was not keeping pace with the growth of data centers in the markets of Northern Virginia, Dallas, and Phoenix – all located in states that provide sales and use tax exemptions to attract data center investment. Since the enactment of the Illinois incentive, several new large data center projects have been announced in the state, and over \$5 billion in additional data center investment has been committed, making it one of the fastest-growing states in terms of data center activity.<sup>63</sup> The neighboring state of Indiana also enacted a 50-year sales and use tax exemption for data centers to attract data centers to the Indiana suburbs of Chicago.

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<sup>59</sup> “Twenty years ago, New Jersey probably led the country and data center space, but we haven’t moved the needle at all in 20 years.” – Gil Santaliz, NJFX “New Jersey was once a hotbed of data center activity, with thriving markets for colocation and financial data centers. The state maintains a substantial and strategically important data center community, but the hottest leasing action has shifted elsewhere, primarily to Northern Virginia.” – Data Center Frontier, 1/28/20 “There is a bill being looked at, and it looks very similar to the broad strokes of what you see in Virginia.” – Santaliz

<sup>60</sup> Alex Alley, “[NYSE and Nasdaq threaten to leave New Jersey if transaction tax goes ahead](#),” Data Center Dynamics, October 20, 2020.

<sup>61</sup> Matt Pilon, “[In a crowded pond, CT goes fishing for data centers with new incentives](#),” Hartford Business Journal, April 19, 2021.

<sup>62</sup> Ally Marotti, “[Data center boosters hope new tax incentives 'stop the bleeding,' keep tech sites in Illinois](#),” Chicago Tribune, June 2019.

<sup>63</sup> Companies announcing large data center projects in Illinois since the enactment of the incentive include: Aligned Energy, Meta, Prime Data Centers, NTT, and Stream.

[https://www.insidenova.com/news/business/data-centers-tax-dollars-invest-in-local-communities/article\\_342caf78-7995-11ee-b6dc-83198a14d424.html](https://www.insidenova.com/news/business/data-centers-tax-dollars-invest-in-local-communities/article_342caf78-7995-11ee-b6dc-83198a14d424.html)

SPONSORED

## Data centers' tax dollars invest in local communities

Nov 2, 2023

### Tax Revenue

**Tax revenue generated by data centers in Prince William County has grown by more than 1,500% since 2012, for a projected total of \$101.4 million in 2022.**



# +1,500%

Across Virginia, the data center industry is making significant economic contributions to local communities. The taxes the industry contributes to localities like Prince William County help support schools and community infrastructure, mitigate economic fluctuations and sustain critical public services -- without requiring an increased tax burden on residents.

Data centers generate millions of dollars in tax revenue for Virginia, sparking an economic ripple effect felt in communities across the state.

Data centers provide the vital infrastructure necessary to support our digital lives. Due to the unprecedented and exponential demand for digital services, the data center industry is rapidly growing. As the industry grows, data centers contribute substantially to government revenues at the federal, state and local levels.

In 2021 alone, the data center industry's total fiscal support to federal, state and local governments across the United States equaled nearly \$100 billion, which is more than the GDP of countries like Guatemala, Bulgaria or Ghana. This tax revenue helps state and local governments fund critical services and expenditures in the communities where data centers are located.

As a thriving data center hub, Northern Virginia demonstrates the economic power spurred by the industry, which directly and indirectly generated \$3.5 billion in state and local tax revenues between 2017 and 2021. According to the 2023 National Impact Study, independently conducted by global consulting firm PwC, in 2020 the data center industry's total tax impact in the state was enough to fund Virginia's state and local expenditures on all cash assistance program payments -- in addition to almost one-third of housing and community development program expenditures.

Prince William has seen evidence of this economic return. Just over 10 years ago, Prince William collected only \$6.2 million from taxes on data centers. Since then, the tax revenue generated by data centers in Prince William has grown by more than 1,500%, to a total of \$101.4 million in 2022.

Tax dollars from data centers now constitute approximately 8% of the county's total tax revenue, enough to fund the county's libraries, departments of parks and recreation, transportation, public health, elections and planning, and the agency on aging, and public safety communications.

These tax revenues from data centers more than offset any services they require from localities. In fact, a 2022 report published by the Northern Virginia Technology Council showed that data centers returned more than \$13 in local tax revenue to Prince William for every \$1 they or their employees require in county services.

Data centers create economic ecosystems that diversify state and local economies through new jobs, revenue for other local businesses and other indirect and induced economic activity. Local companies and service providers that work with the data center industry, such as construction, electrical and mechanical services, equipment rental, security, and catering, expand in hubs of data center development, providing further economic growth, taxes, and job opportunities.

Virginia-based research firm Mangum Economics found that every operational job inside a Northern Virginia data center supports 6.9 additional jobs in Northern Virginia, including construction. In addition, employees of data centers and the companies in the industry's ecosystem in turn spend money at local businesses, pay local taxes and drive further growth.

As the 21st century economy expands and our lives become increasingly digital, the data center industry is building out to support our collective demand for digital services. State and local governments that welcome the data center industry benefit not only from the substantial taxes paid by the industry, but also from the diversification of their tax base, which lessens exposure to a reduction in economic activity and can alleviate residential tax burdens.

Combined with other economic benefits like diverse, stable and well-paying jobs, capital investment, and growth in the wider business ecosystem, the taxes paid by data centers have an enormous positive impact in local communities.

*Learn more at [centerofyourdigitalworld.org](https://centerofyourdigitalworld.org)*



Data centers support a diverse business ecosystem  
BY MARK TONER



The Multiplier Effect: Data centers provide sustainable job growth  
BY MARK TONER



MORE INFORMATION



Pathways to promising data center careers

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# **EXHIBIT C**

**ATTACHMENT 2**

Regular Ordinance No. \_\_\_\_\_ amending the  
Monterey Park Municipal Code

## ORDINANCE NO.

### AN ORDINANCE AMENDING MONTEREY PARK MUNICIPAL CODE CHAPTER 21.14 (ZCA-24-02) TO AMEND REGULATIONS GOVERNING DATA PROCESSING FACILITIES IN ACCORDANCE WITH SECTION 3(A) OF ORDINANCE NO. 2198 (ADOPTED BY VOTERS AS MEASURE JJ ON NOVEMBER 3, 2020).

The City Council of the City of Monterey Park does ordain as follows:

#### **SECTION 1:** The City Council finds and declares that:

- A. This Ordinance is adopted pursuant to the voters' directives in Ordinance No. 2198, as adopted November 3, 2020 via Measure JJ.
- B. Based upon recommendations of the Saturn Park Advisory Review Commission ("SPARC"), the City Council will be considering expansion of uses within Saturn Park.
- C. As a preliminary matter, however, the City Council finds that there is a current interest by developers to construct "data centers" within Saturn Park. A review of the Monterey Park Municipal Code ("MPMC") ~~confirms- indicates~~ that the "data center" land use per se is not ~~considered as part of defined in~~ the current zoning regulations. ~~While a "data processing facility" is listed as an allowed land use within Saturn Park, yet that term is also not defined. The City Council desires to clarify these uses and definitions. Additionally, since this term was added to the MPMC in 1998, it was well before the concept internet commerce emerged as the "new economy"; the term did not encompass the scope of uses contemplated by contemporary data center developers.~~
- D. It is plain that data centers ~~—as they have developed in the 25 years since the Saturn Park regulations were first added to the MPMC—~~are energy ~~hungry-intensive~~ land uses and part of a rapidly expanding digital infrastructure industry. ~~that are generally aesthetically displeasing and provide few public benefits. Current data show that, overall, buildings consume 74% of all electricity in the United States.~~
- E. Goal 2 of the City's Environmental Justice Element provides that "Community health and the reduction of exposure to environmental pollutants is a priority and part of all planning and policy practices." Additionally, Goal 3.1 provides that the City should "[m]aximize the use of the City's existing open space network and recreation facilities by enhancing those facilities and providing connections, particularly from disadvantaged neighborhoods."
- F. These Goals and Policies reflect the City Council's overall intent to provide for a cleaner, greener, and more enjoyable community both for our current

residents and for future generations.

- G. Requiring data centers to adhere with green building principles, to the extent feasible, is a form of climate action that minimizes greenhouse gas emissions, relies on energy efficiency and renewable resources, conserves water, optimizes material use, provides healthy and biodiverse environments, and bolsters an equitable society.
- H. Third party rating systems characterize the lifecycle considerations for green buildings. These programs can offer credibility, transparency, and consistency to project teams in pursuit of an elevated and well-defined performance standards for data centers.
- I. It is in the public interest to update the MPMC as to data centers while also considering additional uses for Saturn Park as contemplated by Measure JJ, SPARC, and the City Council.

**SECTION 2:** Pursuant to MPMC § 21.38.050, the City Council finds as follows:

- A. Land Use and Urban Design Element: This Ordinance complies with Policy 4.2 (Sustainable Practices); Policy 4.3 (Environmental Burden); Policy 4.4 (Freeway Buffer Greening); Policy 4.5 (New Development); Policy 4.6 (Active Transportation); Policy 11.1 (Privacy); Policy 12.1 (Compatibility); Policy 12.2 (Comprehensive Design); and Policies 25.1, 25.2, and 25.3 (specific as to Saturn Park).
- B. Environmental Justice Element: This Ordinance complies with Policy No. 2.1 (limiting environmental pollution); Policy 2.2 (promote enhanced health outcomes and improved quality of life); and Policy 3.2 (work with local business community to expand green space programs).
- C. These regulations will not adversely affect surrounding properties. Such regulations will operate citywide-in Saturn Park and will not affect a change in the use or the intensity of use of property in any other zone.

**SECTION 3:** *Environmental Review.* The City Council finds and determines that this ordinance is not subject to further review under the California Environmental Quality Act (Public Resources Code §§ 21000, *et seq.*; "CEQA") for the following reasons: (1) it will not result in a direct or reasonably foreseeable indirect physical change in the environment (14 Cal. Code Regs. § 15060(c)(2); (2) there is no possibility that the ordinance may have a significant effect on the environment (14 Cal. Code Regs. § 15061(b)(3); and (3) the ordinance, by itself, does not constitute a "project" as defined in the CEQA Guidelines (14 Cal. Code Regs. § 15378).

**SECTION 4:** *Renaming of Zone; Amendment of Zoning Map; Amendment of MPMC §*

21.02.210. All references to "O-P-OFFICE PROFESSIONAL ZONE (VOTER ENACTED)" within the MPMC are amended to read "S-P - SATURN PARK INNOVATION/TECHNOLOGY ZONE." All references to the "O-P zone" within MPMC Chapter 21.14 are amended to read "S-P zone." The reference to the "Mccaslin Business Park (O-P Voter Enacted)" in the Zoning Map is amended to read "Saturn Park Innovation/Technology Zone." MPMC § 21.02.210(B) is amended to add the "Saturn Park Innovation/Technology Zone" to the table of Zone Designations.

**SECTION 4:** MPMC Chapter 21.14 is amended to read as follows:

"Chapter 21.14

S-P - SATURN PARK INNOVATION/TECHNOLOGY ZONE

21.14.010. **Purpose.**

In order to provide for the development of innovation and technology uses that exhibit a diversity of business activity from both revenue and service quality standpoints, and which are compatible and responsive to abutting land uses, including residential developments, the following regulations apply to all properties classified in the S-P zone.

21.14.020. **Definitions.**

Unless the contrary is stated or clearly appears from the context, the following definitions govern the construction of the words and phrases used in this chapter:

"Data center" means a building, dedicated space within a building, or group of structures located on one or more acres of land used to house a large group of networked computer systems used for data storage and processing ~~for off-site users~~, to be used for the remote storage, processing, or distribution of large amounts of data. Such facilities may also include air handlers, power generators, water cooling and storage facilities, utility substations, back-up batteries, fire suppression systems, enhanced security features, and other associated utility infrastructure to support operations. This definition does not apply to smaller data processing facilities that are located on less than one acre of land and where such facilities are accessory or incidental to another primary use.

"Data processing facility" means a building, dedicated space within a building, or group of buildings primarily used for the processing, storage, and management of electronic data on less than an acre of land. This type of facility typically involves activities such as data entry, storage, conversion, and analysis for onsite use.

"Director" means the City Manager or designee. Unless otherwise designated by the City Manager, the Community Development Director is the Director.

"Green Building Rating System" means an assessment tool, created and managed by LEED LEED, Green Buildings Initiative ("GBI"), or other a reputable organizations in good standing and recognized by the building industry as meeting the standard of care, that includes the following general characteristics, at a minimum:

- A. Holistic approach to program requirements, with established and comprehensive sustainability metrics for measuring performance in a range of impact areas, such as energy; environmental justice; human and environmental health; integrative process; materials; site and surrounds; and water;
- B. Independent third-party verification;
- C. Mechanism for consistent evaluation and communication of achievement or levels of achievement;
- D. Standardized processes for project data tracking and project team support; and
- E. Commitment to continuous improvement with clearly delineated and transparent methods for program updates.

"Green Business Certification Inc." or "GBCI" is the global certification body for the LEED green building program and other sustainability rating systems, as well as the administrator of related professional credentials. ([www.gcbi.org](http://www.gcbi.org))

"Green Building Initiative" of "GBI is an international nonprofit organization and American National Standards Institute (ANSI) Accredited Standards Developer dedicated to improving the built environment's impact on climate and society. Founded in 2004, the organization is the global provider of the Green Globes® and federal Guiding Principles Compliance building certification and assessment programs.

"Leadership in Energy and Environmental Design" or "LEED®" is an internationally recognized and third-party verified green building rating system developed by the U.S. Green Building Council. ([www.usgbc.org/leed](http://www.usgbc.org/leed))

#### 21.14.030. **Permitted Uses.**

It is unlawful for any person to use, nor may any property owner permit the use of any lot classified in any S-P zone for any use, other than the following as set out in this chapter.

#### 21.14.040. **Prohibited Uses.**

All uses not permitted in this chapter are prohibited.

Ordinance No.

Page 4 of 13

21.14.050. **Principal Uses.**

| The principal uses are permitted as follows:

Administrative and professional offices; beauty salon or barber shop; bookstore;  
Cellular phone, telephone and pager store; coffee shop;  
Computer store, sales and service; confectionary shop;

Data Centers

Data processing facility;  
Delicatessen;  
Employment agency;  
Financial institutions' corporate offices, no retail banking;  
General research facility, not involving testing, manufacturing, fabrication or processing or sale of products, nor the use of a hazardous material that has a degree of hazard rating in health, flammability or reactivity of Class 4 as ranked by U.F.C. Standard 79-3 or succeeding standard;  
Gift shop;  
Ice cream parlor;  
Import and export offices;  
Investment service offices, stock brokers; Jewelry store, sales and service;  
Legal offices;  
Mailbox and service store;  
Medical equipment and supplies, sales and service; notary public;  
Photocopying and blueprinting; public utility customer service office;  
Real estate offices and title companies; restaurant, tearoom and cafe;  
Service businesses;  
Stationery;  
Studio, art, dance, martial arts, photography; tax consulting;  
Tobacco store;  
Travel agency;  
Video sales and rentals.

21.14.060. **Conditional uses.**  
Conditional uses are uses specifically enumerated in this chapter.

21.14.070. **Standards of Development Generally.**

All premises in the S-P zone must comply with the following standards of development as set out in this chapter and as may be adopted by city council resolution.

21.14.080. **Lots.**

- A. Lot Area. The minimum lot building on the S-P zone area of each lot is 5,000 square feet.
- B. Lot Width. The minimum width of each lot is 50 feet.
- C. Lot Depth. The minimum depth of each lot is 100 feet.

21.14.090. **Yards.**

The following minimum yards are required on all lots:

- A. Front Yard. No minimum front yard is required.
- B. Side and Rear Yards. Every lot must have and maintain minimum side and rear yards as follows:
  - 1. When the side yard is adjacent to a street, the yard must be at least 15 feet in depth.
  - 2. When adjacent to an R-zone, the yard must be not less than 50 feet, plus five feet in depth for each story above one story of building or each 10 foot increment above 15 feet in height of building on the S-P zoned lot. Where there is an opening, including, without limitation, windows, pedestrian doors and roll-up doors, in any facing a yard adjacent to an R-zone, the yard must be not less than 100 feet from any opening to minimum width of the R zoned lot. The yard may be used for parking, excepting a minimum 15 foot wide area abutting the R zone which must be landscaped and maintained in such a condition so as not to violate this code. The required landscaping must also conform to the standards set forth in Section 21.14.150.
  - 3. When the S-P zoned lot is separated from an R zone by an alley, a rear yard setback of 40 feet must be provided, as measured from the centerline of the alley. A minimum three-foot wide landscaped planter must be installed and maintained along the alley, excepting at any vehicular access driveway.
  - 4. When adjacent to a non-residential zone, commercially-zoned or M zoned lot, no yard is required.

21.14.100. **Building Height.**

No building or structure exceeding 40 feet or three stories may be located on any lot.

Buildings or structures exceeding the height limits may be permitted upon approval of a conditional use permit.

**21.14.110. Floor Area Ratio {FAR}.**

The floor area ratio may not exceed 0.5 when the lot is less than 10,000 square feet in area. When the lot is between 10,000 and 20,000 square feet in area, the floor area ratio may not exceed 0.65. When the lot is more than 20,000 square feet in area, the floor area ratio may not exceed 0.8. The floor area ratio may be increased to a maximum of 1.0 for all lots, upon approval of a conditional use permit.

**21.14.120. Off-Street Parking and Loading.**

Each S-P zoned lot must have and maintain off-street parking and loading facilities as required by this title.

**21.14.130. Required Walls.**

Except as otherwise provided in this chapter the following standards apply:

- A. Where any part of the front yard or street side yard of an S-P zoned lot is used for parking or loading, a masonry wall compatible in color with the commercial building and/or sight-obscuring hedge a minimum of three feet in height must be erected and maintained within a landscaped area a minimum of three feet in width adjacent to the sidewalk at the front or side yard property line as required by this title.
- B. When any S-P zoned lot has a common side or rear lot line with any R zoned property, a six-foot solid decorative masonry or concrete block wall compatible in color with the commercial building must be constructed and maintained along all such common side or rear lot lines. Where an easement exists, abutting the common property line, the decorative wall may be constructed along the boundary of the easement on the commercial lot. A minimum three-foot wide landscaped planter with automatic irrigation system must be placed adjacent to the wall, planted with trees, shrubs, ground cover and vines. Where a parking lot on the S-P zoned lot abuts a R zoned lot, the additional parking lot landscaping requirements of this chapter apply.

**21.14.140. Trash Facilities.**

Each S-P zoned lot must provide facilities for the storage and collection of trash as follows:

- A. Any outdoor trash facility must be enclosed by a minimum five-foot high

solid masonry, brick or concrete wall except for the access way which must be enclosed with solid decorative gates of the same height.

- A. Location and size are subject to approval by the Director. When any S-P zoned lot has a common property line with a R zoned lot, no trash facility may be located within the required building setback.
- B. Open vehicular and pedestrian access to and from such trash facility must be provided. No parking spaces may block such access to the trash facility.
- C. Trash facilities must be maintained in a closed manner at all times to prohibit visibility from public rights-of-way or adjacent property.

**21.14.150. Buffering and Maintenance of Landscaping and Easements.**

- A. For S-P zoned lots with side or rear yards that are adjacent to an R zoned lot, the following buffering provisions must be provided and maintained:
  - 1. Landscaping, irrigation and maintenance plans are required and the plans are subject to approval of the planning agency. The plans must incorporate, without limitation, 15 gallon minimum trees at time of planting, interspersed shrubs, ground cover, raised earthen berms and automatic sprinkler systems. The City may require the maintenance plan to include a bona fide service agreement with a City licensed landscaping service business. Maintaining an active service agreement on file with the Director is the responsibility of the owner of the subject property or authorized agent.
  - 2. All landscaped areas and easements must be maintained in good condition, weed and disease free, and in compliance with this code.

**21.14.160. Compressors, Air-Conditioning Units or Similar Mechanical Equipment.**

Each S-P zoned lot which has compressors, air-conditioning units or similar mechanical equipment, located on the roof and outside of the exterior walls of any building or structure, must comply with the following:

- A. All such equipment must be installed with permanent sound proofing measures, including, without limitation, enclosures, parapet and sound attenuating walls and screens. All such equipment must comply with noise standards set forth in this code. The location, type and scope of soundproofing measures for such equipment are subject to the approval of the Director.

- B. All such equipment must be maintained in a clean and proper condition to prevent collection of litter and filth, emissions of dust or fumes, vibration or electrical disturbances.

21.14.170. **Lighting.**

All outdoor lighting must be located and shielded so as to prevent the direct spillage of light or glare onto adjacent lots and streets.

21.14.180. **Site Development Plan Approval.**

Site development plans must be approved by the Director in accordance with this code before the Building Official issues a building permit.

21.14.190. **Limitations on Permitted Uses.**

Every use permitted in the S-P zone must comply with the following:

- A. All uses must be conducted totally within a completely enclosed building, except for those uses which are customarily conducted in the open. Those uses conducted in the open may not be closer than 100 feet to any R zoned lot, except for parking.
- B. No outdoor storage is allowed unless the same is enclosed by a view-obscuring fence or wall, provided that no stored material is visible above the fence or wall, that the fence or wall is approved by the Director and that such storage is limited to the accessory storage of items sold or utilized in the conduct of a permitted use on the premises. Where the S-P zoned lot is adjacent to a R zoned lot, no outdoor storage is permitted within 100 feet of a R zoned lot.
- C. No loading and unloading is permitted in any required side or rear yard.
- D. Where the S-P zoned lot is adjacent to a R zoned lot, no deliveries of goods and commodities nor loading or unloading shall be conducted during the hours from 10:00 p.m. to 7:00 a.m.
- E. Overnight parking of vehicles is prohibited, except those vehicles used in conjunction with a permitted use.
- F. Driveways cannot exceed 30 feet in width or 60% of the lot frontage.
- G. No use is permitted which produces or causes or emits any dust, gas, smoke, glare, noise, fumes, odors, electromagnetic emanations or

vibrations which are or may be detrimental to the health, safety, welfare and peace of the City and its residents and businesses.

- H. No use is permitted which uses or stores a hazardous material that has a degree of hazard rating in health, flammability or reactivity of Class 4 as ranked by U.F.C. Standard 79-3 or succeeding standard. A business materials usage and operations form must be filed with the Public Works Director before the Building Official issues a certificate of occupancy.
- I. No person may, at any location within the S-P zone, create nor allow the creation of noise which causes the noise level to exceed the applicable noise standards set forth in this code. Where the S-P zoned lot is adjacent to an R zoned lot, the noise level at the property line of the R zoned lot may not exceed the allowable noise level for residential properties.

**21.14.200. Conditional Uses.**

Auditorium, not within 300 feet of an R zone

Buildings exceeding height limit

Business college (office or medical, dental)

Child care center, not within 300 feet of an R zone

Commercial office or service units which are shared by more than 1 independently owned business enterprise

Commercial developments of 5 or more units or with an area of more than 1 acre, and within 300 feet of a R-zone

Financial institution (retail banking)

Floor area ratio not to exceed 1.0

Government or public facility, except those owned or operated by the City of Monterey Park

Gymnasium, reducing salon and health center

Hotel

Lot size over 1 acre

Places of entertainment, except as otherwise provided in this title.

**21.14.210. Data Centers - Development Agreement Required - Requirements**

- A. Data centers are permitted only with a development agreement in accordance with Chapter 21.44 of this code.

- B. For new buildings, modifications to existing buildings, and/or additions to existing structures greater than 25,000 square feet in building area or located on sites greater than 30,000 square feet in land area, projects must comply with the following, to the extent feasible:
1. Primary and secondary facades. Buildings must have identifiable primary and secondary facades. Public-facing facades must have dimensions perceived articulation, use mixed materials, and provide identification for the facility through the placement and design of entrances, lighting, canopies, artwork, signage, and other special features. Screening and enclosures must be installed to disguise outside mechanical equipment and storage. Rooftop equipment, stairwells, and features must be designed as integral to the building and enhance the form of the site. Ventilation and air-handling equipment must be screened from view with materials designed to attenuate noise.
  2. Pedestrian access. Sites must be designed and constructed in a pedestrian friendly manner. The design must be harmonious with the surrounding built and natural environments and identifiable with the site's location. Pedestrian walkways must be considered before designing vehicle driveways and parking areas for the safety and enjoyment of pedestrians.
  3. Landscape. Landscaping must be harmonious with off-site and streetscape landscaping. Where adjacent properties contain residential or other noise-sensitive uses, a minimum 15-foot-wide landscaped buffer must be placed along the property line in addition to any required boundary masonry block wall or fence.
  4. Parking. Minimum parking requirement for data center uses is one parking space per 250 square feet of office/meeting/technician workspace, plus one parking space per each 5,000 square feet of floor area or fraction thereof, devoted to computer equipment space, or as determined adequate by the Director based on site and project characteristics.
  5. Noise Study. A noise study must be conducted by a third-party acoustic engineer to document baseline sound levels and include expected maximum composite noise output with all mechanical, electrical, and any other noise generating equipment operating simultaneously at full operational load.
- C. In addition to any other public benefits provided in a development agreement, data center projects must provide the following public benefits:
1. Rating requirement. Applicants must submit documentation

demonstrating achievement of LEED or Green Globes certification, if feasible. "Gold" certification by GBCI.

2. Indoor water use reduction. Applicants must submit documentation verifying that a project meets maximum prescriptive fixture flow rates in accordance with the California Plumbing Code. The project must also achieve, if feasible, the LEED WE Prerequisite Indoor Water Use Reduction (WEp2) and a minimum 30 percent reduction in the use of indoor potable water, as calculated to meet the LEED WE credit Indoor Water Use Reduction (WEc2).
3. Construction waste management. Applicants must submit documentation verifying the diversion, if feasible of a minimum 75 percent of the project's construction and demolition waste, as calculated to meet LEED MR Prerequisite Construction and Demolition Waste Management Planning and LEED MR Credit Construction and Demolition Waste Management, or an equivalent Green Building Rating System requirement.
4. Monitoring. Applicants must submit documentation verifying that a project will meet the criteria necessary to achieve, if feasible, California Building Code and Option 1 of LEED EA credit (Enhanced Commissioning), in addition to LEED EA Prerequisite (Fundamental Commissioning) and Verification, or an equivalent Green Building Rating System requirement.
5. Light pollution reduction. Meet LEED SS Credit Light Pollution Reduction, if feasible, or an equivalent Green Building Rating System requirement.-
6. Prohibitions. CFCs and halons are not allowed in HVAC, refrigeration and fire suppression equipment. Meet LEED EA Credit Enhanced Refrigerant Management, if feasible, and additionally document that all HVAC refrigeration, and fire suppression systems do not contain CFCs or halons, or an equivalent Green Building Rating System requirement.
7. Electric vehicle charging. In addition to meeting the requirements of the Title 15 of this code, applicant will provide an additional 10% electric vehicle charging stations for private onsite use.
- ~~8. Such additional design standards that may be adopted by city council resolution."~~

#### 21.14.220. Exemptions.

D. Exempted Activities. During the effectiveness this Ordinance, or any

extension, the City may issue any permit or land use entitlement to any person or entity for constructing, placing, or operating within the McCaslin Business Park, i.e., Saturn Park, only if the criteria in this Section 21.14.220 are satisfied. The City Manager, or designee, must review any application for a permit or land use entitlement to determine compliance with the provisions of this Ordinance. City employees, City boards and commissions, and the City Council are permitted to accept, process and approve certain applications for land use entitlements, including, without limitation, use permits, variances, building permits, licenses and certificates of occupancy, necessary for constructing, placing, or operating within the Saturn Park area, only for development applications that: (1) were filed with the City before April 15, 2024; (2) include or are amended to include a development agreement per Chapter 21.44 of the Monterey Park Municipal Code; and (3) obtain City Council approval of the development agreement before, or concurrent with, approval of the project entitlements proposed in the timely-filed application. The City shall consider such applications in accordance with the rules in effect before adoption of this Ordinance, thereby exempting qualified applications from this Ordinance.

**SECTION 5:** *Electronic Signatures.* This Ordinance may be executed with electronic signatures in accordance with Government Code § 16.5. Such electronic signatures will be treated in all respects as having the same effect as an original signature.

**SECTION 6:** *Construction.* This Ordinance must be broadly construed to achieve the purposes stated in this Ordinance. It is the City Council's intent that the provisions of

this Ordinance be interpreted or implemented by the City and others in a manner that facilitates the purposes set forth in this Ordinance.

**SECTION 7:** *Severability.* If any part of this Ordinance or its Application is deemed invalid by a court of competent jurisdiction, the City Council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Ordinance are severable.

**SECTION 8:** *Recordation.* The City Clerk, or designee, is directed to certify the passage and adoption of this Ordinance; cause it to be entered into the City of Monterey Park's book of original ordinances; make a note of the passage and adoption in the records of this meeting; and, within 15 days after the passage and adoption of this Ordinance, and cause it to be published or posted in accordance with California law.

**SECTION 9:** *Effective Date.* This Ordinance will become effective 30 days after second reading and adoption.

PASSED AND ADOPTED this \_\_\_ day of \_\_\_\_\_, 2024.

\_\_\_\_\_  
Thomas Wong, Mayor

ATTEST:

\_\_\_\_\_  
Maychelle Yee, City Clerk

APPROVED AS TO FORM:

  
\_\_\_\_\_  
Karl H. Berger, City Attorney

RESOLUTION NO. \_\_\_\_\_

**A RESOLUTION ADOPTING DEVELOPMENT STANDARDS FOR DATA CENTERS IN ACCORDANCE WITH MONTEREY PARK MUNICIPAL CODE CHAPTER 21.14.**

**THE CITY COUNCIL RESOLVES AS FOLLOWS:**

SECTION 1: Authorizations. This Resolution may be referred to as the "Data Center Development Standards." It is adopted in accordance with Monterey Park Municipal Code ("MPMC") § 21.14.210(C)(8). The City Manager is authorized to promulgate administrative policies and procedures ("AP&P") to implement this Resolution.

SECTION 2: Standard Development Standards. The standards set forth in attached Exhibit "A," and incorporated by reference, constitute the Data Center Development Standards that represent public benefits required of any person executing a development agreement with the City.

SECTION 3: Contracting Authority. The City Manager is authorized to solicit bids, award contracts, and execute on-call contracts to ensure uniform application of the Data Center Development Standards.

SECTION 4: If any part of this Resolution or its application is deemed invalid by a court of competent jurisdiction, the City Council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Resolution are severable.

SECTION 5: Electronic Signatures. This Resolution may be executed with electronic signatures in accordance with Government Code §16.5. Such electronic signatures will be treated in all respects as having the same effect as an original signature.

SECTION 6: The Mayor, or presiding officer, is hereby authorized to affix his signature to this Resolution signifying its adoption by the City Council of the City of Monterey Park, and the City Clerk, or her duly appointed deputy, is directed to attest thereto.

SECTION 7: This Resolution will become effective immediately upon adoption.

**PASSED, APPROVED, AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF MONTEREY PARK ON THIS     DAY OF NOVEMBER 2024.**

---


Thomas Wong, Mayor

**City of Monterey Park  
Resolution No.  
Page 2 of 2**

Attest:

\_\_\_\_\_  
Mayechelle Yee, City Clerk

APPROVED AS TO FORM:



\_\_\_\_\_  
Karl H. Berger, City Attorney

RESOLUTION NO.

EXHIBIT A

Design Guidelines  
(Data Centers)

---

Data Centers must comply with the following, if feasible, to the Director's satisfaction:

1. Building Orientation: Prioritize public-facing elevations, screen less appealing elements, ~~maximize daylighting~~.
2. Access: Provide pedestrian and bicycle access along primary frontages, limit vehicle access width to 20 feet, except where necessary to comply with building codes.
3. Parking and Loading: Locate to the rear and/or side, separate from pedestrian/bicycle access.
4. Landscaping: Use native plants, create transitions between private/public spaces, buffer sensitive areas.
5. Lighting: Highlight features, prevent light spillage, use downward-directed lights with shields.
6. Security: Incorporate crime prevention and natural disaster protection measures.
7. Screening: Use architecturally compatible screening for mechanical/utility equipment.
8. Amenities: Include elements like outdoor seating, water features, vertical gardens, or artwork, if feasible while maintaining site security.
9. Signage: Keep unobtrusive but functional
10. Hierarchy: Identify primary, secondary, and ancillary structures.
11. Architecture: Balance proportions, ~~avoid monolithic scale~~ create articulation and scale diversity, promote human-scale elements.
12. Facades: Compose identifiable segments, design corner lots with two public-facing facades.
13. Roofs: Use identifiable, proportionate roof forms, compatible with flat roof design elements, when appropriate.
14. Materials: Incorporate at least 2-3 materials, select colors for depth and dimension.



15. Context: Ensure compatibility with surrounding neighborhood in scale and design.

16. Walls/Fences: Use compatible materials, break up long expanses, avoid chain link or barbed wire.

Sample Data Center Designs:

The following photographs provide examples of designs which integrate the intent of these Design Guidelines. These are merely sample designs and are not intended to be used as prototypes.

