



The Outsized Impact of Data Centers in Rural Washington



Rural Washington has become a hub of data center investment due to the Washington state sales and use tax exemption for data centers in rural counties. There are at least 15 data centers across six rural counties. The largest investments have occurred in Grant and Douglas Counties, where thriving industry clusters have emerged. Data center investment in rural Washington state enhances local job opportunities and economic prosperity, and supports public services and infrastructure by increasing the state and local tax base.

Data centers create jobs

- Since the onset of data center construction in rural Washington in the 2000s, qualifying data centers have supported long-term job growth in the construction industry, particularly in the skilled trades.
- Construction Jobs:** Capital investment has produced average annual output of roughly \$690 million, supporting almost 5,300 construction, skilled trade, and other jobs each year since 2017. These workers received \$370 million in wages and benefits each year — dollars that will cycle back through the economy in the form of spending.

- Permanent Jobs:** In each of the last four years alone, data center operations in rural counties have generated an estimated \$158 million in economic output per year, and supported roughly 760 full-time operations and related jobs with nearly \$70 million in annual wages and benefits.

Data centers pay significant state and local tax revenues

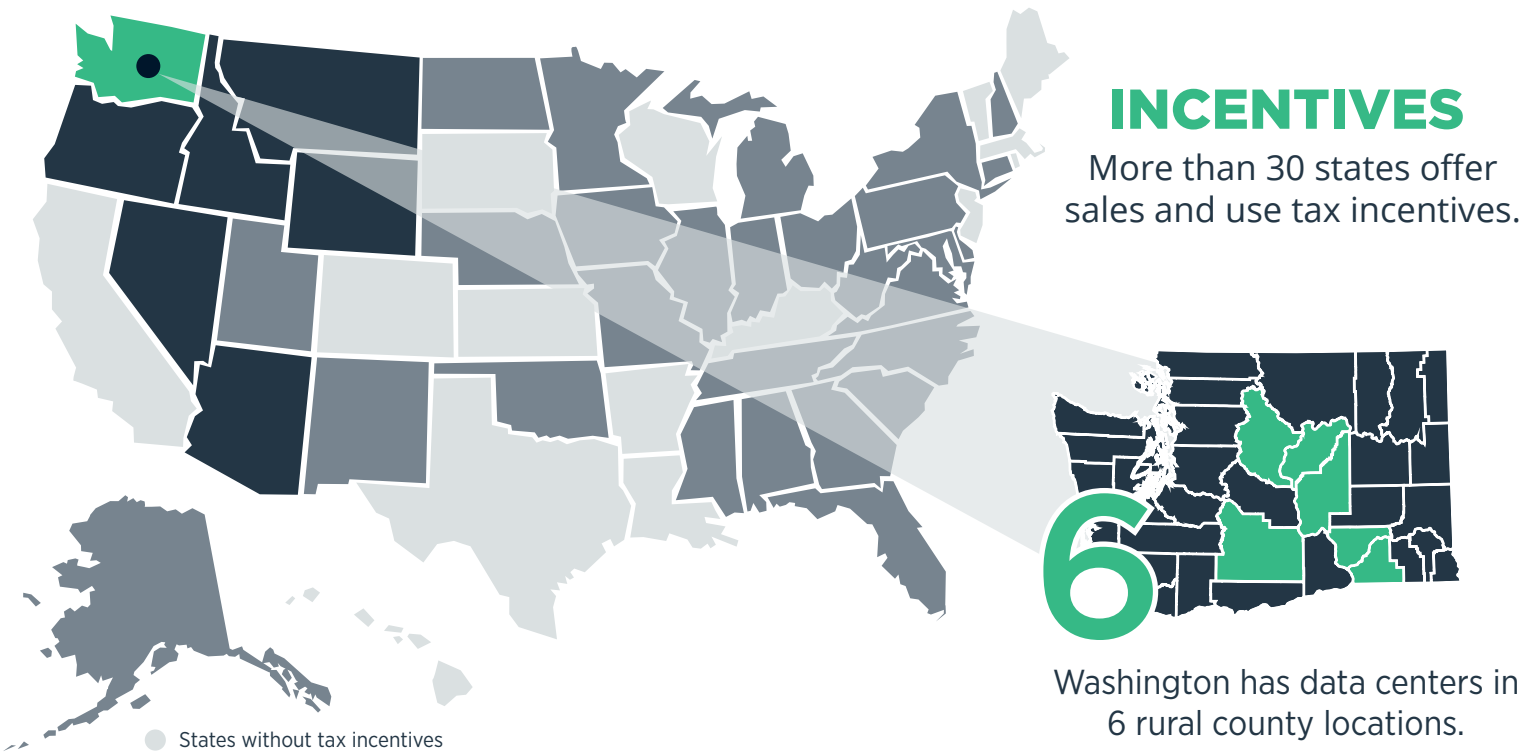
- Data centers generate significant tax revenues, especially compared to the minimal demand for government services. Qualifying data centers using the state’s economic development program have paid \$334 million in taxes to the state and to various local jurisdictions (2017-2021), including:
- \$238.5 million in state revenue.
 - \$95.4 million in local taxes that support counties, cities, schools, transit, libraries, hospitals and fire, and other vital public services.
 - In Grant County, data center real and personal property taxes have increased to over 20 percent of the county’s property tax revenue.

Washington’s data center tax program is no longer competitive

While Washington was one of the first states to offer this type of sales tax program, highly competitive data center sales and use tax

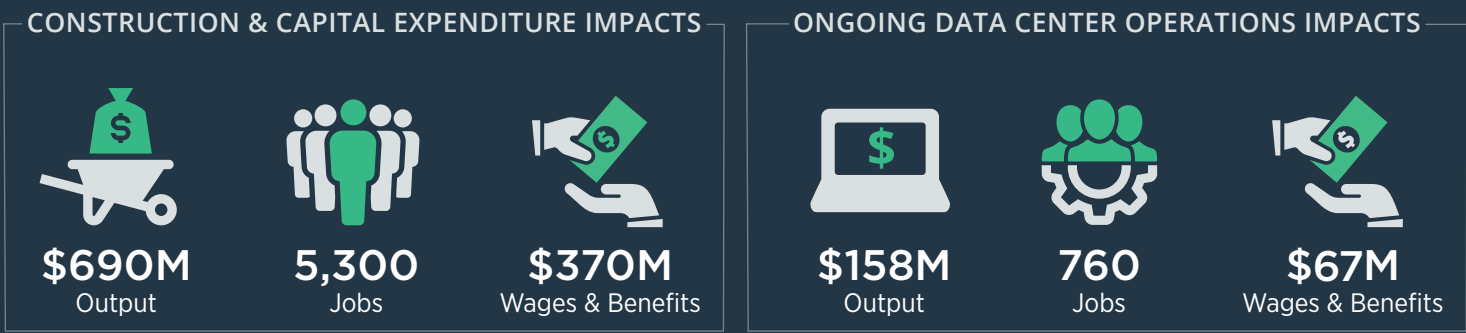
- exemptions have become common across the United States.
- More than 30 states offer a sales and use tax incentive to data centers, or do not have a sales tax. This includes almost all western states (ID, OR, UT, AZ, WY, MT, NV).
 - Twenty-five states have incentives that last 20 years or longer.

- Washington is one of the only programs in the country with a program that sunsets in the next few years.
- Imposing sales taxes on data center equipment drives up the cost of doing business in Washington state.

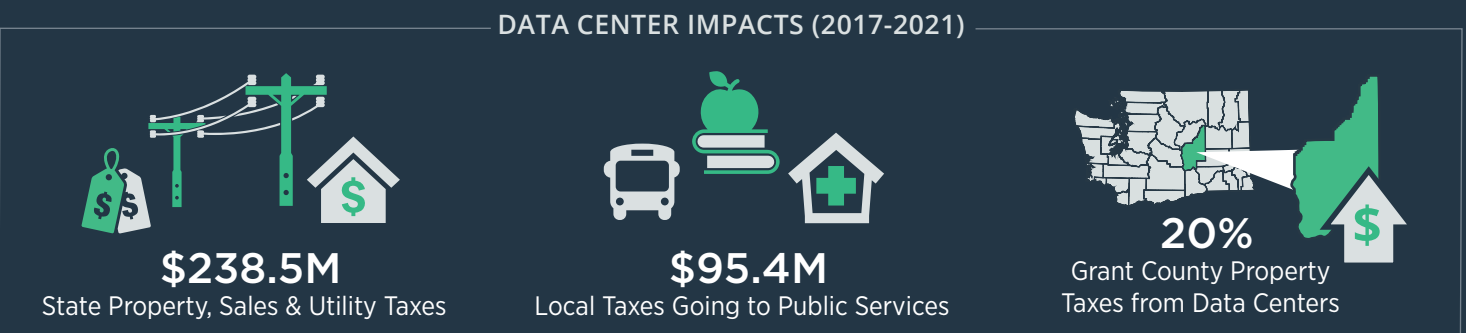


For references please see “The Outsized Impact of Data Centers in Rural Washington,” by ECONorthwest for the Washington Technology Industry Association, 2022.

Annual Rural County Data Center Jobs, Wages, and Output (2017-2021)



Data Center State and Local Tax Revenues



Rural Washington has become a data center hub due to the state sales and use tax exemption for data centers in rural counties. There are at least 15 data centers located in six rural counties in eastern Washington state.¹ All of these were constructed after 2006, with most construction occurring in the 2009-2015 time frame. Data centers are large, unassuming physical structures whose location in rural areas conceal the substantial economic investments necessary to build and operate the facilities. They require considerable initial financial investment in the physical building, as well as substantial ongoing mechanical, electrical, and technological investments in both the facility and the servers themselves. Data centers support long-term job growth in the construction industry, particularly in the skilled trades. They enhance local job opportunities, economic prosperity, and public infrastructure through increasing the state and local tax base.

These benefits are clearly noticeable in Washington state, as they stimulate economic innovation and regional economic growth. In rural Washington, large concentrations of jobs and economic growth continue to transform communities.

Data Center Investment Creates Long-Term Construction and Trades Jobs

Even outside of their initial construction, the complex environment and sophisticated service needs of data centers require constant capital reinvestment through maintenance and upgrades to equipment and the facility. In each of the last four fiscal years alone (2017-2021), capital

FIGURE 1:
Data center construction generates substantial economic output and supports long-term jobs

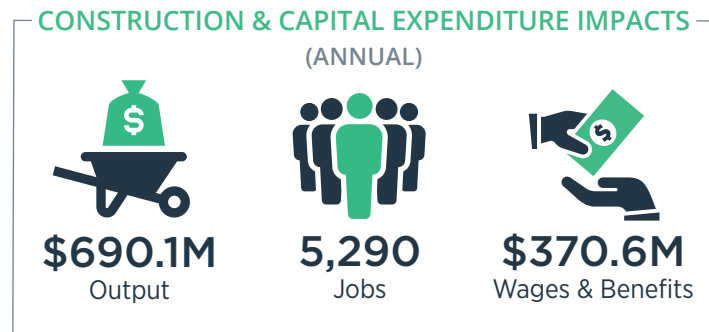
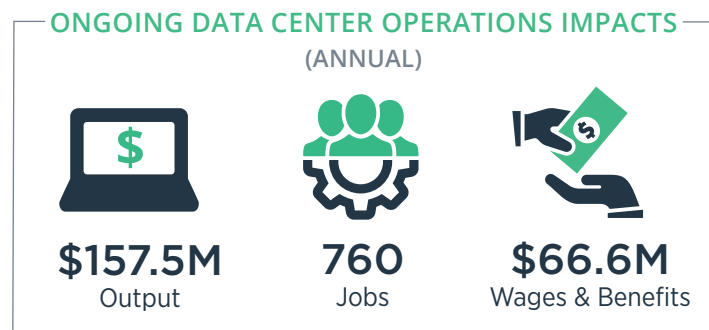


FIGURE 2:
Data center operations provide ongoing economic output and support consistent employment



investment by data centers in rural counties has produced an estimated \$690 million in annual economic output, and supported roughly 5,290 construction, skilled-trade, and other jobs per year.²

Data Center Operations Provide Consistent Employment

Once constructed, data centers are operated efficiently, with a focus on installing and maintaining network resources, providing security, and monitoring power and cooling systems. These functions have significant economic ripple effects.

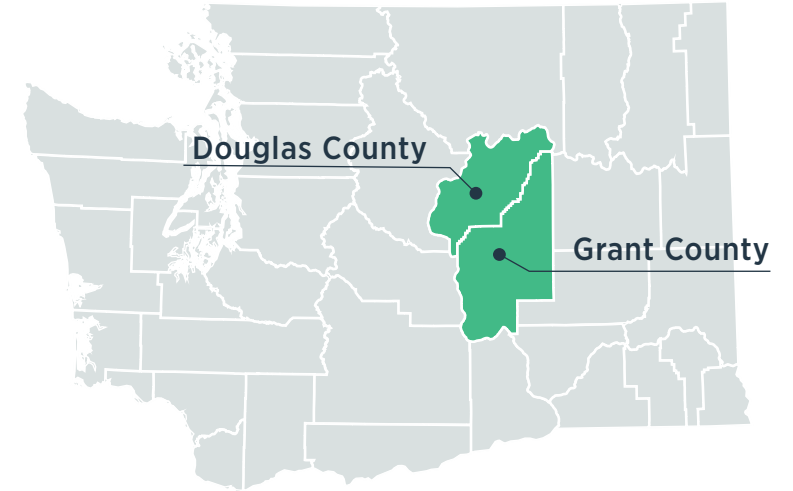
In each of the last four years alone, data centers operations in rural counties have on average produced an estimated \$158 million in annual economic output and supported roughly 760 full-time operations and related jobs in these counties.

Data Center Tax Exemption Produced 92% of the Industry's Economic Impact

Almost all of these economic benefits result from investments by data centers and their tenants who take advantage of the Washington state rural county data center sales and use tax exemption.³ Qualifying data centers in rural areas are much larger facilities than non-qualifying data centers, and require more jobs and investment to build and operate.

Data Center Tax Exemption Has Transformed Grant County's Economy

Two rural counties in Washington state are experiencing continued economic transformation due to the economic development program. Since 2006, Grant and Douglas Counties have become home to a dozen data centers, which



has resulted in a thriving information technology and communications cluster. Over the last five years alone, employment in the data processing and hosting sector has grown substantially more concentrated in Grant County.⁴ Employment in this sector is now denser in Grant County than in the rest of the state. The share of employees working in the data processing and hosting sector is almost 1.5 times greater in Grant County than the average county in Washington, including the Puget Sound. Data centers have seamlessly introduced technology to an agricultural region, resulting in a more diverse and vibrant economy.



¹ Qualifying and non-qualifying data centers are located in the following rural counties: Grant, Douglas, Yakima, Chelan, Walla Walla, and Franklin Counties.

² These outputs are the results of the IMPLAN analysis that ECONorthwest ran based on estimated data center capital investment in FY 2018–FY 2021. IMPLAN modeling produces results based on average impacts in the new commercial structures construction industry in rural Washington state. Jobs refer to direct, indirect, and induced jobs. These are measured in job-years, which is one year of work for one person. For example, a new construction job that lasts five years is five job-years. It is a more precise measure because an individual job may last for six months or a year or forever. The results shown here are average annual job-years generated through construction and capital expenditures by data centers in rural Washington.

³ RCW 82.08.986 and RCW 82.04.986 provide an exemption from state sales and use tax to eligible data centers or their tenants for the purchase and labor costs to install eligible server and power infrastructure equipment.

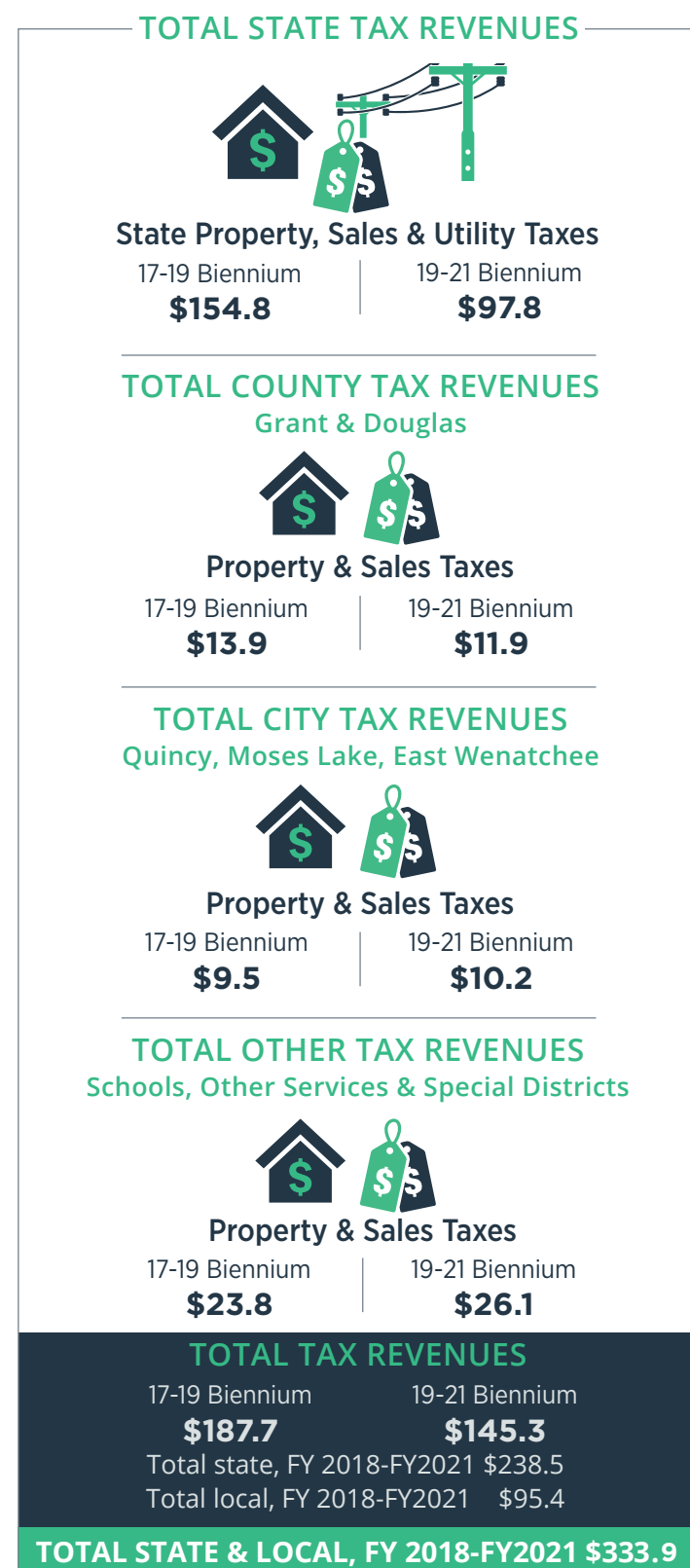
⁴ The location quotient (LQ) is a measure of economic concentration of an industry in a community or region. For Grant County, the LQ of jobs in the data processing and hosting sector was 0.45 in 2016, indicating that employment in this sector was less than half that of the concentration for the sector statewide. In 2020, the LQ increased to 1.5, meaning the employment density in Grant County increased to become 1.5 times that of the state.

Economic development programs for data centers create significant additional fiscal revenues to the state and local jurisdictions and reflect a significant fiscal surplus once the cost of serving the land use is taken into account. Data centers pay sales taxes on construction labor and materials, a significant sustained source of revenue even after their initial construction. Data centers also pay real property tax on the large parcels of land they own, as well as business personal property taxes on their equipment. Finally, they pay significant utility taxes on the electricity they consume much of which is renewable energy.

In fiscal years 2018 through 2021, data centers and their tenants paid an estimated \$238.5 million in state property, sales, and utility taxes. They also paid \$95.4 million in local taxes that support counties, cities, schools, transit, libraries, hospitals, fire, and other vital public services.

Data centers generate substantial tax revenues but do not generate a similar increase in demand for public infrastructure, services, schools, and housing that similarly-sized facilities do. In other words, they serve as net “fiscal donors” because the taxes they pay far outweigh the public goods they consume. The investments in land, buildings, and equipment made by data centers and their tenants have driven tremendous tax revenue growth for all of Grant County. Over the past four years, data center real and personal property taxes have increased to over one-fifth of the county’s current expense property tax revenue.

FIGURE 3:
Data centers pay significant state & local taxes⁵
(\$ MILLIONS)

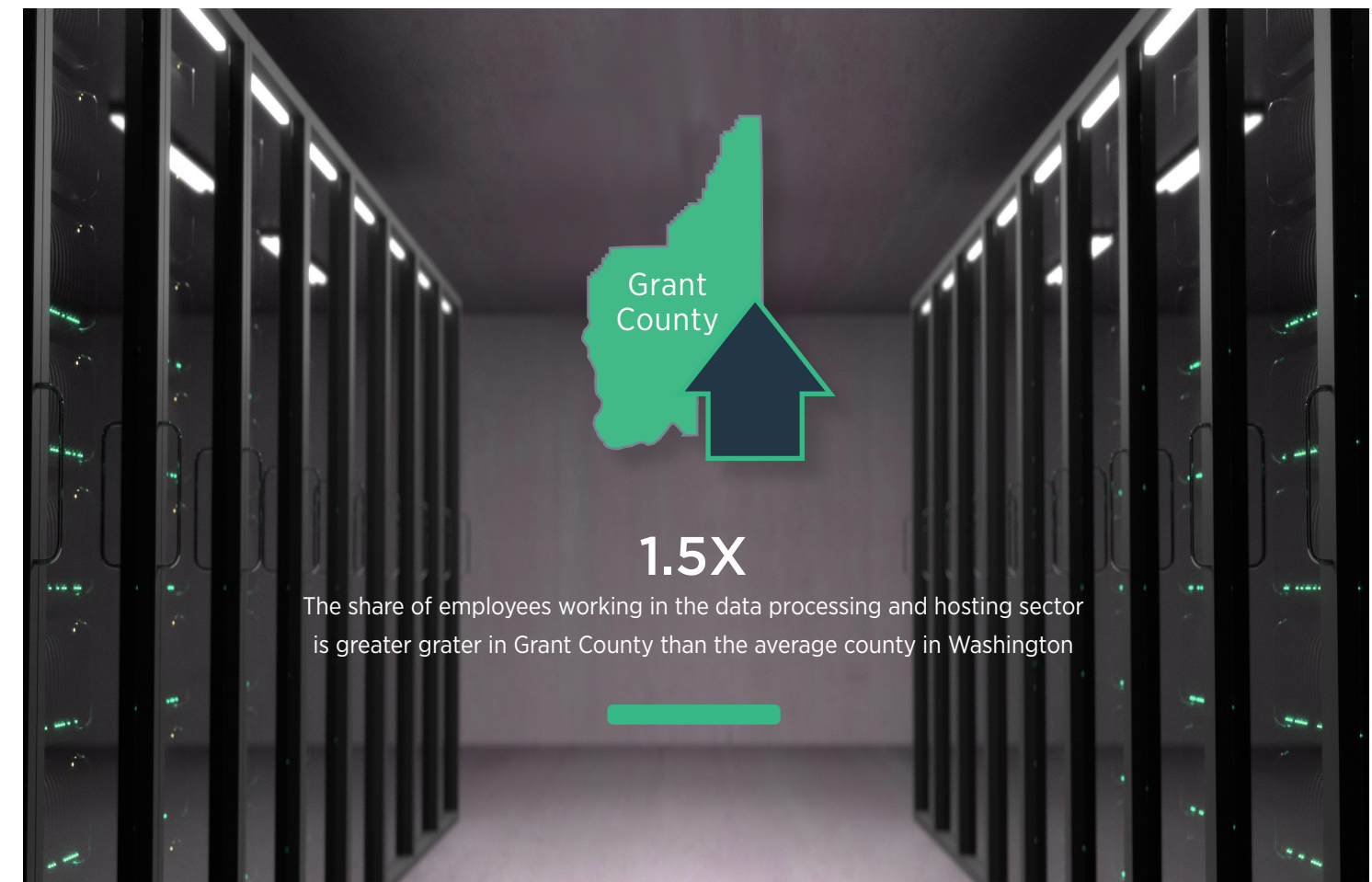
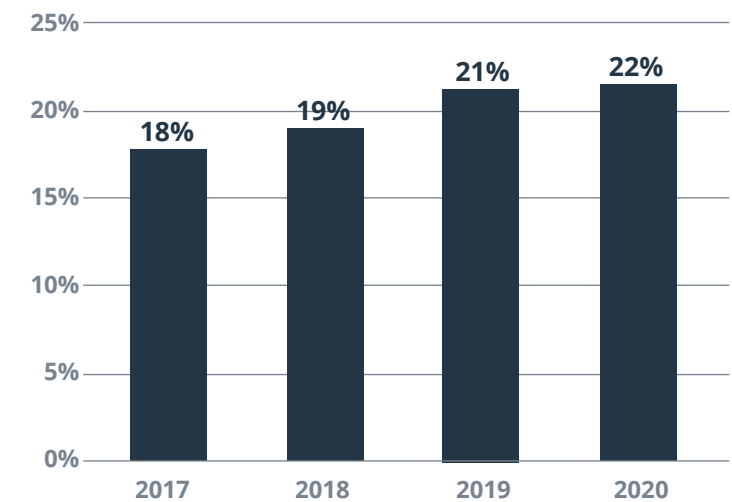


⁵ State and local tax revenues are estimates based on data from the Department of Revenue, the Douglas and Grant Counties Assessors' offices, the Washington Research Council, and ECONorthwest estimates of data center capital and operational expenditures.

Data Centers Pay \$1 out of every \$5 in Property Tax in Grant County

Through sales taxes, property taxes, business and occupation taxes, and utility taxes, data centers provide significant revenues to the state, city, county, and special purpose jurisdictions (i.e., ports, school districts, transit agency, fire, and library districts). These tax benefits flow from the development and subsequent operation of hyperscale data centers. The initial construction of the facility provides a large, one-time tax infusion, while ongoing annual maintenance, capital improvements, and general operations also contribute a flow of taxes to these governments.

FIGURE 4: Data center property taxes as a share of Grant County current expense property taxes

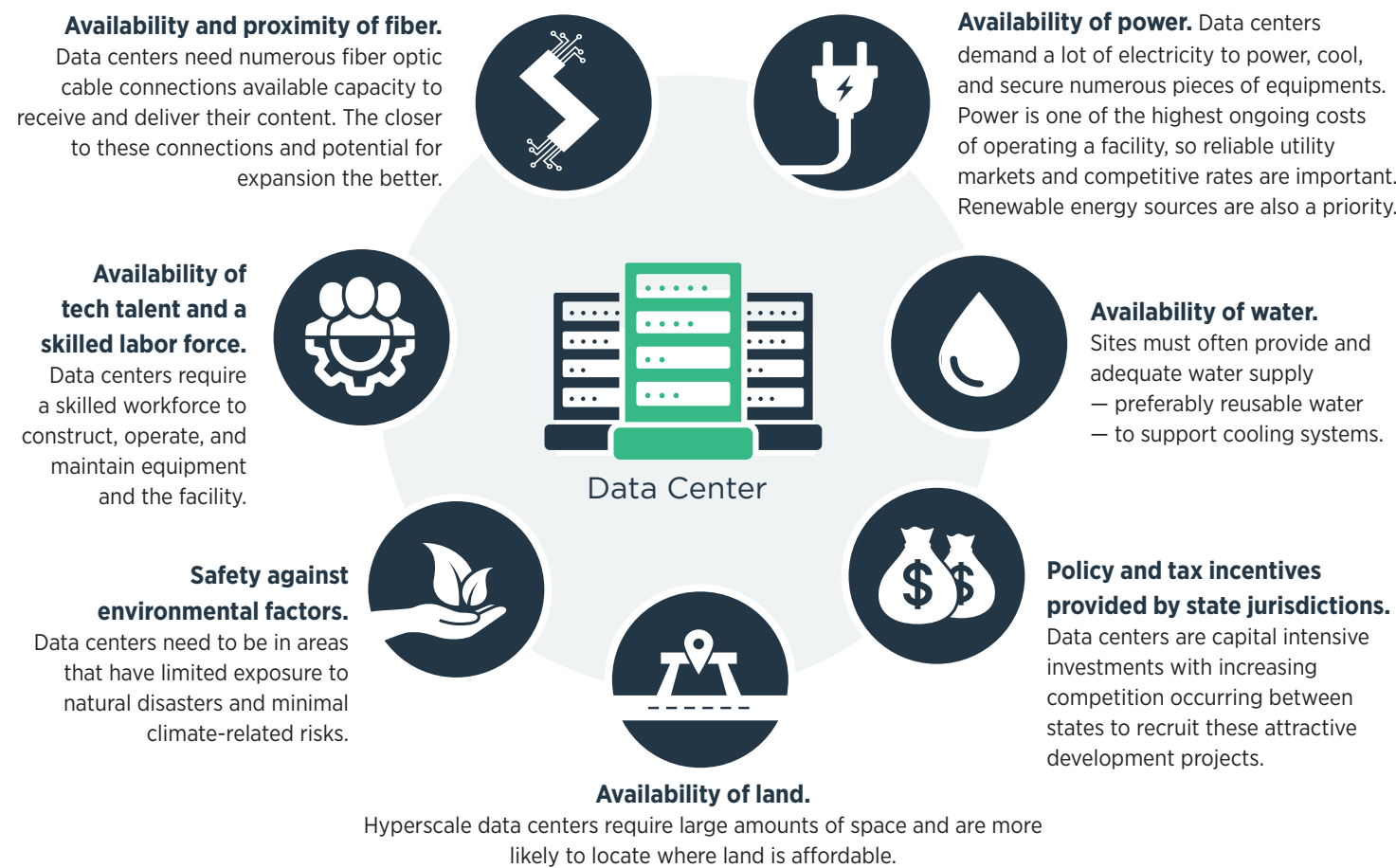


The data center market is highly competitive. Data centers can be nimble in location and relocation decisions. In Washington, the Grant and Douglas County centers were located strategically to take advantage of several major siting considerations, including fiber, renewable energy, reusable water, security, and tax incentives (see Figure 3). The Washington state rural county data center sales and use tax exemption has been highly competitive in attracting data center investment. However, because the program is limited to twelve qualifying data centers, the state is no longer viewed by the data center industry as an optimal location to locate or expand data center operations.

Power costs and net taxes (after incentives) are the most significant economic differentiators of data center markets, and the two rise together.⁶ The greater the capacity (in terms of electrical needs), the more expensive the servers, switches, and other gear necessary to provide service are. While rural Washington is considered to have relatively low power costs compared to other states, state tax policy puts it at a disadvantage.

Without a competitive tax policy environment, data centers will more likely locate in communities that create more favorable tax climates for business activity. Servers and supporting equipment must be replaced frequently due to their limited useful life and increasing server performance advancements. Over the life of a data center, purchases of server equipment are the single largest expense item

FIGURE 5: Key considerations in data center siting decisions



⁶ Washington Department of Commerce “State of the Data Center Industry.” 2017. p 5.
<https://www.commerce.wa.gov/wp-content/uploads/2018/01/Commerce-Data-Center-Study-and-appendices-2017.pdf>

for data center operation. For example, server purchases can account for about 60 percent of the total cost of ownership over a 20-year period in a typical hyperscale data center.⁷


The Sales Tax on Business Inputs Amplifies the Taxation of Data Center Activity

Washington state’s tax policy results in the multiple taxation of servers, switches, and other network gear.

FIGURE 6:
Data center equipment is taxed multiple times



⁷ ECONorthwest research on data center capital and operations expenditures.



\$330M

in total state and local taxes, for schools, public infrastructure, and government services.

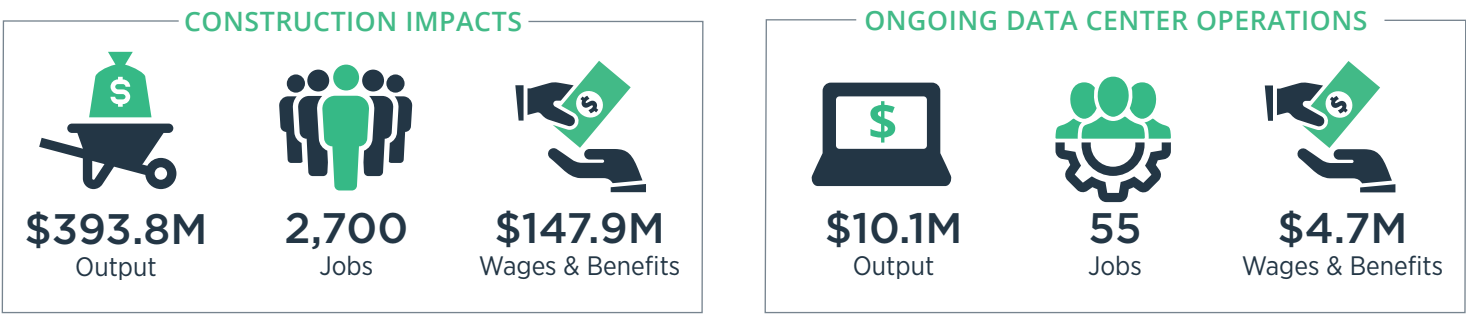
This practice is commonly referred to as tax pyramiding. A well-designed sales tax would apply only to final sales, rather than at various stages of production that impact business inputs. Business inputs constitute intermediate goods and services because companies typically resell these goods and services, or in the case of data centers, use these products and machinery to produce other goods or services that are sold to households and businesses.

While tax pyramiding is common in many industries, it is greatly amplified for data centers given their unique economic activity and their large, consistent investment in servers, switches, and other network gear.

The Tax Policy Landscape in the Nation Has Adapted to Data Center Economics, and Benefits

Washington state was one of the first states to implement a sales tax exemption, which attracted the initial investments that led to the well-established industry clusters in Grant and Douglas Counties. But over the past 15 years since Washington’s program was established, other states have enacted competitive tax incentive programs. Washington is now one of 30 states with a sales tax incentive. Additionally, Washington’s incentive is more restrictive than those of other states. It is one of only two with a program cap.

FIGURE 7: Construction and operation of a hyperscale data center would have significant economic impacts in a rural county⁷



Expansion of the State Incentive Could Grow Economic Opportunity in Other Rural Counties

Data centers create tremendous economic value for communities and the state. Construction of a hypothetical hyperscale data center in a rural county well-positioned for server investment

would produce about \$393 million in economic output, \$148 million in wages and benefits, and lead to almost 2,700 jobs through direct, indirect, and induced impacts to the economy. Additionally, data center maintenance and operations would produce sustained economic benefits including an estimated \$10.1 million in annual economic output

FIGURE 8: 30 states have sales tax incentives for data centers, and 5 states have no sales tax⁸

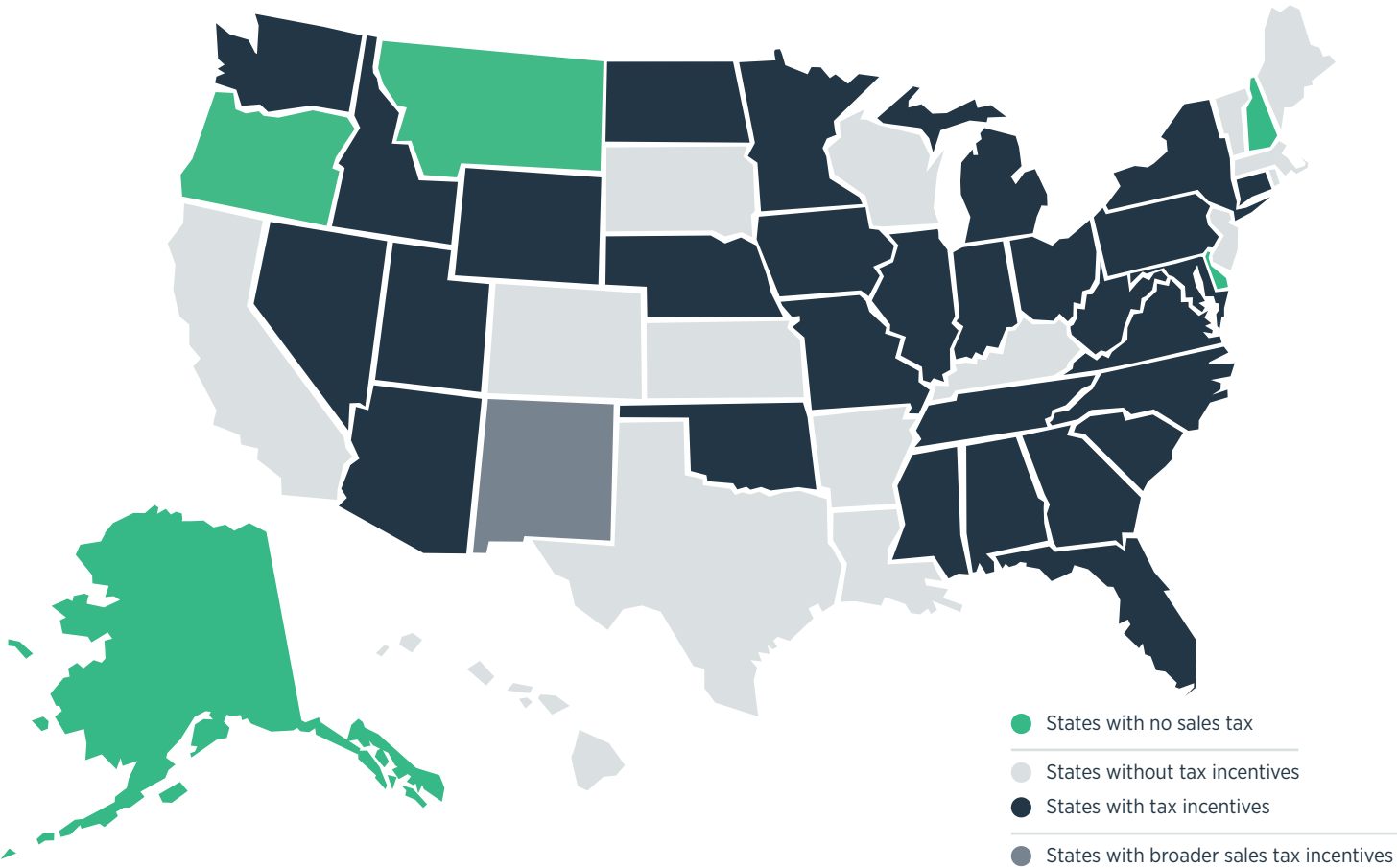


FIGURE 9: Washington's data center sales tax incentive expires sooner than all but one state⁹

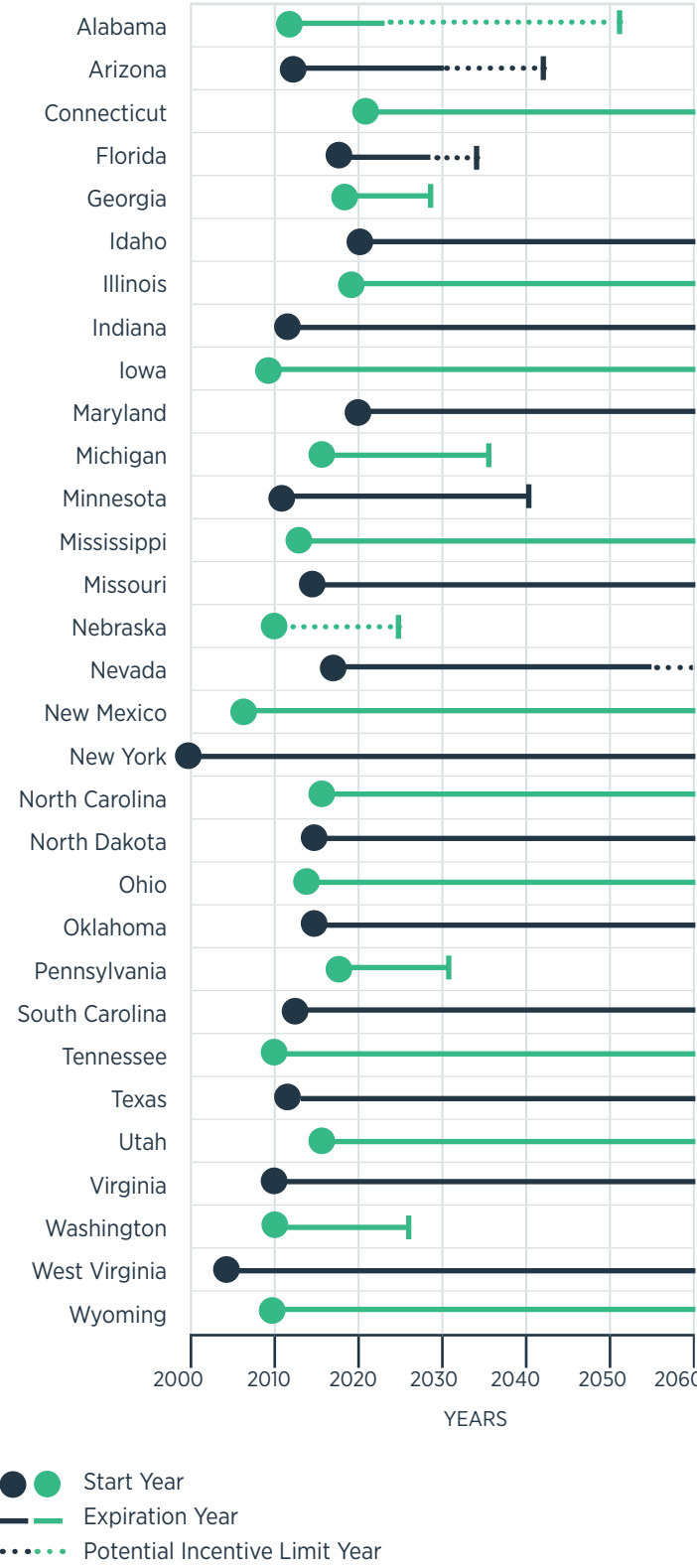


and 55 jobs paying roughly \$4.7 million annually in wages and benefits. Finally, future construction phases of a hyperscale data center, as well as the significant annual capital reinvestment data centers require, would sustain hundreds of construction and skilled trade jobs. These areas may otherwise have little investment from the information technology and communications sector. Similar to the experience in Grant County, a more competitive tax policy could allow investment and economic growth in other rural Washington counties, leading to regional economic growth and substantial state and local tax revenues.

⁷ These outputs are the results of an IMPLAN analysis that ECONorthwest ran based on assumptions about the investment behind a prototypical hyperscale data center in a rural county. IMPLAN modeling produces results based on average impacts in the new commercial structures construction industry in rural Washington state.

⁸ ECONorthwest research of states with sales tax incentive programs that target data centers.

⁹ Life of benefit information is noted for Alabama, Arizona, Florida, and Nevada. Other states may also have a benefit life that extends past the information of the law, or that ends prior to the expiration of the law, but this information was not available at the time of research.



Note: A state with an exemption period range will typically have a range that depends of the size of the investment is made for the data center or other factors such as whether the development project is sustainable.



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