As revenue needs increase for Madison County' s Government, the County explores and evaluates the development of Technology Zones/Corridors to attract new business ventures to the county.

Technology Zone Study, 2024

Madison County Board of Supervisors

Dustin Dawson, Member of the BOS
Tracey Gardner, Economic Development
Brian Gordon, Deputy County Administrator
James Jewett, Member of the BOS
Jonathon Weakley, County Administrator

Contents

Executive Summary

This report presents the findings of research conducted by Madison County Staff and Members of the Board of Supervisors. The focus of this report is to assess and to propose the possible creation of a technology corridor/zone(s) in Madison County to support a substantial and enduring contribution to the county's tax base. A primary motivation to possibly pursue this direction is to mitigate the cost of county operations – including the school system – that falls on our citizens who pay real and personal property taxes. A secondary yet impactful motivation is to provide high-paying employment opportunities to local citizens. The report also discusses the potential disadvantages to the county of creating technology zones. The report summarizes the county's infrastructure and land base with respect to the practical ability of Madison County to consider technology zones. Finally, this report concludes with a general policy discussion regarding the desirability of creating technology zones in the county and a possible framework for the development and implementation of technology zones in the county.

Introduction:

Significant economic challenges face smaller, rural counties such as Madison County, VA. Limited tax bases and rising costs for local services such as public schools and public safety services places an increasing burden on local taxpayers many of whom are over the age of 65 and/or on limited, fixed incomes. The local citizenry of counties such as Madison County are also opposed to any significant changes to the counties' rural, bucolic character. Unfortunately, the desire for little or no change poses significant challenges to local elected leaders and county staff efforts to plan and execute economic development efforts that would increase the tax base of the county to alleviate the tax burden on county residents. The Madison County Board of Supervisors are exploring economic strategies to develop policies that will attract high-impact, low-footprint businesses to the county. One of those development strategies discussed in this paper involves the possible creation of technology zones/corridors in the county to attract businesses that would offer higher tax revenue and employment opportunities for the county and its citizens with minimal impact on the character of the county.

Methodology:

Research was conducted into technology zones by obtaining technology zone policy documents from selected counties that surround Madison County and have been successful in attracting high-tech enterprises such as data centers, advanced specialty manufacturing and other companies that are classified as 'technology' businesses. Economic Development Officials from these neighboring counties were interviewed and County officials attended regional economic development meetings. Additionally, Virginia state code was referenced to assure that any designation of a special economic development zone such as a technology zone was compliant with state law.

Overview of Technology Zones:

A technology zone is a designated area of a county or town that is set aside for the development of technology related businesses. The definition of what a 'technology' business is and does varies somewhat among the neighboring counties researched. However, these definitions may be summarized businesses that:

1. Engage in the development and production of information technology products and services such as software development and cloud computing (data centers).
2. Engage in the manufacturing of advanced, specialized products and services such as medical devices, industrial components, and other products.
3. Provide support products and services that support the Department of Defense.
4. Engage in supply-chain management and marketing.

It is important to note that local jurisdictions may identify the specific categories of businesses and organizations that may be included in the jurisdiction's technology zone. The text from the state code is displayed below.

§ 58.1-3850. Creation of local technology zones
A. Any city, county or town may establish, by ordinance, one or more technology zones. Each locality may grant tax incentives and provide certain regulatory flexibility in a technology zone.

B. The tax incentives may be provided for up to ten years and may include, but not be limited to:

(i) reduction of permit fees;
(ii) reduction of user fees; and
(iii) reduction of any type of gross receipts tax. The extent and duration of such incentive proposals shall conform to the requirements of the Constitutions of Virginia and of the United States.

C. The governing body may also provide for regulatory flexibility in such zone which may include, but not be limited to:

(i) special zoning for the district;
(ii) permit process reform;
(iii)exemption from ordinances; and
(iv) any other incentive adopted by ordinance, which shall be binding upon the locality for a period of up to ten years.

D. Each locality establishing a technology zone pursuant to this section may also adopt a local enterprise zone development taxation program for the technology zone as provided in § 58.1-3245.12.

E. The establishment of a technology zone shall not preclude the area from also being designated as an enterprise zone.

Technology Zone Benefits to Jurisdictions:

Technology zones are intended to have a high-impact, low footprint effect on a jurisdiction. The two major objectives for localities are tax revenue and employment opportunities that are beneficial for local communities. Additional proffers may also be part of the application process for technology companies applying to locate within a technology zone.

The additional tax revenue from businesses locating within a technology zone are principally derived from the Machinery and Tools Taxes assessed on the equipment used in the production of goods and services by such businesses. Data centers are an example of the large amount of tax revenue that is generated by M&T taxes. These facilities include many computer servers whose numbers will run into the tens of thousands for larger data centers. As part of the incentive programs offered by localities to attract these facilities, accelerated depreciation schedules and tax rebates on computer servers are offered to data center companies. Estimates for Louisa County revenue from the two AWS data centers are projected to be up to $25 million per year. Estimates for each of the large data centers in Culpeper County project revenue in the ballpark of $6 to $7 million dollars per year in tax revenue which includes property and M&T taxes. Culpeper County has also received proffers from data center operators in the range of $.23 - $.28 per square foot fees to support fire services within the county. At the projected 9.7 million square feet of completed data centers' floor space, this is a significant amount of money supporting local fire departments.

The second major benefit of technology company location with a jurisdiction is the employment opportunities provided to local citizens. According to Culpeper County Economic Development Director Bryan Routhamel, data centers locating to the county produce 50 – 90 jobs per facility. The average data center job pays approximately $130,000 per year. Amazon Web Services or AWS estimates that each of its data centers generates an additional 4 jobs for the local community for every 1 job created in the data center. The consulting firm PWC estimates the job multiplier effect at 6 jobs created in the community for every 1 job created in a data center. Upon further investigation, many of the 'ripple' jobs created by data centers are in the electrical, plumbing, and HVAC support services.

Technology Zone Costs to Jurisdictions:

Technology Zones are not without costs or challenges. Public utility services are almost always required to attract businesses. This includes public water and sewer services, adequate roadways, fiber connectivity, and sufficient electrical service. Electrical power service is the major factor in siting data centers. Large data centers require up to 100 MW or more of electric power. Newer AI data centers require approximately 600MW. Service to the substations that must be built to service larger data centers require 230 KV transmission lines with bi-directional power feeds for redundancy. Smaller data centers may require less power but are not commonly found. Water consumption requirements for data centers have decreased from previous technologies due to air cooling and water recycling but can still be significant. Data Center developers often require some local commitment to funding the necessary infrastructure. Other possible businesses such as specialty manufacturing, software development, medical research and services would require less public infrastructure than data centers, but these services would still need to be available in most cases.

While the companies that locate to a technology center increase tax revenue and job opportunities, tax incentives offered by jurisdictions are often significant and will reduce the tax revenue derived from the technology businesses. Other considerations for jurisdictions are Comprehensive Plan goals, local zoning rules (land zoned in technology zone usually remains in original status until a technology use is employed), availability of suitable land and pad sites, and public opposition to new development. Citizen concerns of increased local traffic, population growth, view shed considerations, and noise will be points of concern when implementing technology zones and attracting new companies. Technology zones are usually restrictive in nature regarding the requirements imposed by localities on perspective businesses that would locate there; however, a technology zone often includes several 'by-right' uses such as data centers which potentially creates future conflicts within localities.

One note of interest regarding currently existing technology zones across our area is that outside of data centers, there has been little interest form other technology defined businesses. Inquiries to neighboring counties indicate that, outside of data centers, there appears to be no other businesses locating in designated technology zones. Rockingham County moved away from designated technology zones and has a technology incentive program that applies to any business locating anywhere in the county. Rockingham County's position is that any business would likely use advanced technology in its processes.

Madison County's Current Infrastructure for Supporting New Business:

A current assessment of public utilities and services within Madison County is ongoing at the time of the release of this report. Some initial information regarding utilities and services is summarized below.

Public water and sewer services are available in the town of Madison and a limited area around the town. Public water is available near the Greene County line and services the old Lace Factory. Sewer service extends to the town of Madison and includes a connection from the public schools located within the Route 29 corridor. The current system is close to capacity with a limited number of EDU's available for use and held by a few individuals. The Rapidan Service Authority (RSA) is developing plans to upgrade the sewage treatment plant in Madison with a proposal to rebuild the plant to the same capacity as currently exists and another proposal that would essentially double the capacity of the plant. The cost of the latter option would be approximately 15% greater than the construction of the former proposal according to estimates by RSA staff. Additional easements would also be desired to run the new discharge pipe along Route 29 directly to the Robinson River. Regardless of the choice of plant size, this upgrade will be several years away.

Electrical power infrastructure in Madison County is a limiting factor in the development of technology businesses, especially data centers. The county is serviced primarily by a single 115 KV radial feed to the Pratts substation (see appendix). Data centers require bi-directional 230 KV lines to create single 300 MW substations. Any option to bring 230 KV service into the county would require several miles of easements and the cooperation of neighboring counties. There also must be a potential end-user (such as a data center) to trigger consideration of such an upgrade. If this were to be the case, it would take at least 5 years and significant effort to complete the upgrade. Unfortunately, the county passed on a 230 KV upgrade several years ago. (details follow in the appendix). Given this limitation, it is unlikely that Madison County could entertain a policy of attracting data centers to the county. There is a smaller data center operating in the city of Harrisonburg, VA that is 100,000 square feet and powered by a 69 KV service. The Economic Development Director of Harrisonburg indicated that there has been some additional interest in such facilities, but no definitive proposals. This scale of data center may be an option for the county if there is any interest in such a facility.

Madison County contains a natural gas pipeline that runs some distance from Route 29 (1-3+ miles) in a semi-parallel course. It is uncertain as to the potential for this service by technology or other businesses considering locating to Madison. There does exist natural gas co-generation technologies that offer electricity as an output. This may be possible to apply to data center operations or other industries such as hydroponics.

Telecommunications infrastructure is not yet completed. The county does have significant fiber optic data cables running along Route 29, but access and usage information is not yet available. Hopefully, the fiber broadband project in the county will open more telecommunications capabilities for present and future businesses.

Summary and Future Actions:

The designation of technology corridors or zones has been adopted by many local governments in Virginia to attract technology related businesses. It appears that the primary objective of these centers so far is to attract data centers although local policies are not exclusively targeted to data centers. Many of the economic development directors whose jurisdictions host data centers have noted that the jurisdictions, while welcoming data centers, do not want to rely solely on them for business development. Businesses such as manufacturing, supply chain services, and biotechnology among others have been mentioned as opportunities to sustain economic growth. All jurisdictions have some tax incentives for businesses to locate in their jurisdictions; mainly, rebates on M&T taxes. These jurisdictions also have adequate public utilities services available to perspective and existing businesses or have some assistance programs in place to help provide them.

The evaluation of Madison County's existing public utility infrastructure confirms that this is a significant limitation to attracting businesses – technology or otherwise. However, Madison County is not without positive factors that could nurture current businesses and attract new businesses. Some advantages include:

- The county's proximity to the City of Charlottesville and Albemarle and Culpeper counties
- Route 29 passes through the county
- Limited, but some public utilities infrastructure
- Quality of life
- Available land
- Relatively low costs compared to many other more urban areas of the state.
- A county government that facilitates business attraction and growth??
- County citizenry that supports intelligent and limited growth of new businesses??

We also are fortunate to have a strong agricultural and tourism base and we have some long-time private sector employers such as Madison Wood Preservers.

The county has some options for attracting new businesses.

- Develop a cohesive economic development policy that will attract and support new businesses that will not detract from the character of the county.
- Create tax incentives such as the ones employed successfully in other countries to attract business.
- Continue to develop our hospitality and tourism industry.

To conclude, Madison County can move forward to increase our tax base to alleviate the local tax burden on citizens. A starting point is this report which at the very least will start conversations around the development of economic policy.

Appendix

Listing of Incentives from Neighboring Jurisdictions:

As described in the text of the state code, local jurisdictions may use various tax and regulatory incentives to attract businesses to a technology zone. It should also be emphasized that a technology zone is created by local ordinances. Also, there may be other sources of economic development incentives through state and federal programs. The following section lists the incentives for technology zones in selected neighboring counties.

Culpeper County (source: Culpeper County Development Web Site and Economic Development Director Bryan Rothamel):

Partnership for Economic Development and Job Training
Eligible businesses:

Can receive reimbursement of 100% of Machinery and Tools (M&T) taxes for three years for investments over $500,000
With fewer than 26 employees can receive this incentive for investments over $250,000
That invest over $3,000,000 can receive an additional 50% of M&T taxes for years 4 and 5
Can receive up to 50% of the new real and personal property taxes for approved employee training for a period of five years
Can receive up to 25% of the new real and personal property taxes for approved employee training for an additional five years (years 6-10)

Technology Zone
Grants within the Technology Zone equal up to 40% of all taxes paid to the County for the five years after project completion. Initial year grant also includes cost for all site plan and building plan fees. Businesses can qualify if they invest $10 million and hire 10 new full-time equivalent employees in a given calendar year.
Accelerated Depreciation
In addition to direct incentive payments, Culpeper County has adopted an accelerated depreciation schedule for the assessment of business personal property including machinery and tools. The following factors are used to depreciate business property assessments for County tax purposes:

Year 1 – 70% of Original Cost
Year 2 – 60% of Original Cost
Year 3 – 50% of Original Cost

Year 4 – 40% of Original Cost
Year 5 – 30% of Original Cost
Year 6 + 20% of Original Cost

In order to assist knowledge-based businesses, Culpeper has adopted a more aggressive depreciation schedule for computer equipment including mainframes, personal computers and related equipment. The following factors are used to depreciate computer equipment assessments for County tax purposes:

Year 1 – 65% of Original Cost
Year 2 – 50% of Original Cost
Year 3 – 40% of Original Cost
Year 4 – 30% of Original Cost
Year 5 + 20% of Original Cost

Spotsylvania County (source: Spotsylvania BOS Ordinance 24-2):

Sec. 24-6. Incentive Period.

Qualified Technology Businesses shall receive the benefits of the Technology Zone incentives for a five (5) year Incentive Period. A Qualified Technology Business may apply to qualify to receive the benefit of Technology Zone incentives for one (1) additional Incentive Period of five (5) years.

Sec. 24-7. Qualifications.
For a Technology Business to be a Qualified Technology Business eligible to receive the benefits of the Technology Zone incentives, it must be located within the boundaries of the Technology Zone and meet the following qualifications:

(a) An Existing Technology Business must meet one (1) of the following criteria:
  (i) Provide additional Capital Investments of at least one hundred thousand dollars ($100,000.00) over the Base Year; or
  (ii) Increase the average number of Full-Time Employees by the greater of:
  (A) Ten (10) percent over the Base Year; or
  (B) An average increase over the Base Year of at least three (3) new, Full-Time Employees.
(b) A New Technology Business must meet one (1) of the following criteria:
(i) Provide Capital Investments of at least one hundred fifty thousand dollars ($150,000.00) within the boundaries of the Technology Zone; or
  (ii) Employ at least five (5) Full-Time Employees.
  (c) The following conditions apply to both Existing Technology Businesses

and New Technology Businesses:
(i) Wages paid to Full-Time Employees must be equal to or greater than twenty (20) percent above the County's average annual salary as determined by the DED.
(ii) The Technology Business must meet and maintain the minimum qualifying employment and investment levels through year 5 in order to qualify as a Qualified Technology Business.
(d) Qualified Technology Businesses that have completed one (1) five-year Incentive Period and are seeking qualification for an additional Incentive. Period will be treated as an Existing Technology Business for qualification. purposes and Technology Zone incentives for a second five (5) year period will be treated as an Existing Technology Business for qualification. purposes.

Sec. 24-8. Incentives.

Qualified Technology Businesses located within the boundaries of the Technology Zone are afforded the following incentives:

(a) Tax Rebates.
(i) Rebate on Business, Professional and Occupational License tax imposed by the County pursuant to Section 11.1-10 of the County Code; and
(ii) Rebate on Machinery and Tools tax imposed by the County pursuant to Section 21-1 of the County Code and, Chapter 35, Title 58.1 of the Code of Virginia of 1950, as amended.

Greene County (source Ordinance 7-14-2020 (2)):

(1)Tax reduction—New businesses.a.One hundred percent reduction on business, professional and occupational license tax imposed by the county pursuant to chapter 22, article II of the County Code; andb.One hundred percent reduction on tangible business personal property and machinery and tools tax imposed by the county pursuant to chapter X article X of the County Code.

(2)Tax reductions—Existing businesses. For those qualified defense businesses that are existing defense businesses, reductions shall only be applicable to taxes assessed on the portion of gross receipts or acquired tangible business personal property, machinery, and tools directly attributable to the expansion of the business. The amount of each tax reduction shall be a percentage of that portion of taxes paid by the qualified defense business each year of the incentive period that is directly attributable to the expansion of the business.

(3)Permit fee grants. For those qualified new and existing defense businesses site plan, building and zoning permit fees will receive grants to be paid through the Greene County Economic Development Authority.

(4)Additional incentives for substantial job creation or substantial investment. For businesses which are deemed by the board to create the potential for substantial job creation or substantial investment, the board in its discretion may, pursuant to a performance agreement authorized by the board, grant additional full or partial tax reductions for any tax authorized by Code of Virginia, § 58.1-3853 and the Virginia Constitution, and may grant any such other incentives as are authorized therein. In granting such additional incentives the board may consider such factors as the number and quality of jobs to be created, the level of investment and the envisioned impact on the local economy, and prospects for growth of the business within the county.

(5)Targeted industry status. The county administrator will direct community development functions to grant accelerated review to any qualifying defense production project. Nothing herein shall be construed as limiting the board's power to grant additional incentives as may be permitted by law to defense businesses on a case-by-case basis including, but not limited to, incentives granted pursuant to performance agreements and individualized arrangements with or without the involvement of the Greene County Economic Development Authority.

Orange County (source Orange County Economic Development Incentive Policy 2023):

Orange County Economic Development Incentives To complement and further enhance the opportunity of investment in Orange County, the Orange County Economic Development Authority offers the following economic development incentives to entrepreneurs, existing businesses or businesses locating new operations in Orange County. These incentives may be awarded to certain high value companies who qualify by meeting the target industries of the Economic Development Strategic Plan, promise high growth and/or fill a service gap in the local economy. These incentives are performance based which can be utilized in collaboration with the Commonwealth of Virginia incentive programs; and are subject to EDA approval and may be modified on a case-by-case basis.

1. Real Estate Improvement Tax Grant - A grant paid in arrears on assessed value of improvements. The grant may be provided annually for up to three years based on the real estate tax paid for the improvements arising from the business investment made. The grant may be up to 100% of the annual real estate tax paid. Qualifying rehabilitated structures must have a new assessed value increase of no less than 20%. Qualifying real estate must be industrial, commercial, or mixed use and be no less than 20 years old.

2. Manufactures Machinery & Tool's Tax Grant - High value qualifying manufacturers may receive a tax grant paid in arrears for up to three years based on the machinery and tools tax paid for qualifying new or used specialized machinery or equipment in value of no less than $50,000.

3. Service Industry Business Personal Property Tax Grant - High value qualifying professional service companies may receive a tax grant paid in arrears for up to three years based on business personal property tax paid for qualifying new or used business personal property in value of no less than $50,000.

4. Fast-Track Plan Review & Permit Fee Waivers - Building and Planning officials will expedite the internal review process of plans for turnaround in approximately 7 business days (dependent on completion of application and complexity of type and use). Qualifying projects must create five new jobs and have an investment of $500,000 in new construction to waive and/or grant development fees. (New construction does not include costs associated with architecture or engineering services).

5. Discounted Pricing on County Owned Land - Qualifying commercial and industrial projects may qualify for discounted County owned land. Page 5

6. Encourage Diversified Retail- Designed to attract eclectic restaurants, retailers, and other visitor/recreation services. Qualifying companies can receive incentives valued at no more than $2,000. Incentive options for qualifying retailers include:

1. Reimbursement of marketing expenses completed in the first six months of opening.
2. Reimbursement for broadband connection fees.
3. Reimbursement of website design / redesign. In addition, they will receive a complimentary one-year membership to Orange County Chamber of Commerce (OCCC), which includes marketing opportunities through e-blast, newsletter, and website. Projects are funded on a first come first served basis. Qualifying companies must meet identified industry sectors in the following 4-digit NAICS codes or receive approval from the EDA. Industry NAICS codes approved are: 4421, 4422, 4431, 4441, 4442, 4451, 4452, 4453, 4461, 4481, 4482, 4483, 4511, 4512, 4521, 4529, 4539, 4541, 4871, 4872, 4879, 7111, 7112, 7121, 7131, 7139, 7213, 7223, 7224, 7225. NAICS code descriptions can be found in Table 1 on page 6.

7. Advance Start-ups - Designed to attract creative class talent, support local entrepreneurs, and encourage existing home-based businesses to locate in commercial space. Qualifying companies may access incentives valued at no more than $3,000. Incentive options include:

1. Interest-rate buy-down.
2. Refund for broadband connection fees.
3. Grant to defray the cost of website design
4. $500 cash grant for each full-time job created up to six employees for one year; which pay at least 250% the federal minimum wage. Projects are funded on a first come first served basis. Qualifying companies must meet identified industry sectors in the following 4-digit NAICS codes or receive approval from the EDA. Industry NAICS codes approved are: 4421, 4422, 4431, 4441, 4442, 4451, 4452, 4453, 4461, 4481, 4482, 4483, 4511, 4512, 4521, 4529, 4539, 4541, 4871, 4872, 4879, 5112, 5182, 5191, 5413, 5414, 5415, 5416, 5417, 5418, 5419, 7111, 7112, 7121, 7131, 7139, 7213, 7223, 7224, 7225. NAICS code descriptions can be found in Table 1 starting on Page 6.

8. Temporary Office Space - Designed to assist new companies locating to the community, Economic Development staff will attempt to provide free temporary office space for an

administrative staff up to three persons during construction up fit for a maximum of six months for projects approved by the EDA.

9. Red Carpet Roll Out - Qualifying high value businesses locating in Orange County will receive one year of membership to the Orange County Chamber of Commerce along with a welcome package of complimentary or discounted services from various local organizations, businesses and community events. The welcome package provides one year of complimentary or discounted pricing to local workshops and festivals; including small business development center classes, safety seminars/assessments from local police/fire/ems, chamber programs and Orange Downtown Alliance, Gordonsville & Montpelier festivals, etc.

10. Real Estate Development Cost Grant - Qualifying projects approved by the EDA may receive grants up to the lesser of 33% or $20,000 for real estate development costs. Qualifying costs are: construction material for building renovation or new construction; demolition of existing structures; storm water fees; water and sewer connection fees; and paving and sealing of parking lots. This incentive is funded through the EDA on a first come first served basis. Page 6

11. Significant Investment Incentive - Significantly larger economic development projects measured by capital investment, job creation, or some combination thereof, may be eligible for enhanced or expanded incentives.

Louisa County: (interviews with County Administrator, Christian Goodwin and Economic Development Director, Chris Coons, 2/23/24 and 3/11/24)

- Tax rebates on M&T taxes.
- Accelerated Depreciation on M&T taxable equipment.
- County funding of some infrastructure improvements such as public water to data centers.

Rockingham County: (interview with Casey Armstrong, Director of Economic Development, 3/12/24, "Economic Policy for Rockingham County" retrieved 3/15/24)

Rockingham County had technology zone designations in the past but have since discontinued them. The rational and policy is as follows:

- All modern businesses use technology in some fashion.
- Manufacturing located in the Rockingham area uses high-tech equipment.
- All business siting is controlled by zoning.
- All businesses that invest at a required minimum level of capital are eligible for an M&T tax rebate program. (see following section for minimum requirements)
  - Year 1 - 60% of machinery and tools tax paid on the new investment.
  - Year 2 - 50% of machinery and tools tax paid on the new investment.
  - Year 3 - 40% of machinery and tools tax paid on the new investment.
  - Year 4 - 30% of machinery and tools tax paid on the new investment.
  - Year 5 - 20% of machinery and tools tax paid on the new investment.

- Data centers are not sought after due to the distance from NOVA and the lack of adequate electrical power.

Technology Grants

A business located in the County that designs, assembles, manufactures, or develops, or maintains goods or provides services related to, advanced and innovative technological systems or devices; or uses advanced and innovative technological systems or devices to design, assemble, manufacture, develop and maintain goods and services, may be eligible for a technology grant. Grant eligibility requires that existing businesses must have invested at least 50 percent of the prior years' assessed value for Machinery and Tools as defined in the Virginia State Code or invest $20 million in new capital outlay for Machinery and Tools, either leased or purchased. New businesses must invest at least Five Hundred Thousand and no/100 Dollars ($500,000.00) in Machinery and Tools. Application for participation in the technology grant program must be made prior to purchasing the equipment that will become the new machinery and tools so that the taxpayer and the County can reach an understanding on what the expansion project entails and the tax for specifically which pieces of equipment will be included in the grant calculation. The beginning and ending dates of the installation period, up to twenty-four (24) months, shall be agreed upon in the approved application.

Existing Business Criteria:

Within the Twenty-four (24) month period determined during the application process, an existing business must either:

1. Invest in new machinery and tools having an assessed value of at least Fifty percent (50%)of the previous tax year's machinery and tools assessed value, or

2. Invest in new machinery and tools having an assessed value of at least Twenty Million Dollars ($20,000,000), whichever is less.

The investment referred to in paragraphs 1 and 2, immediately preceding, may be through either long term lease arrangement or purchase.

Before payment of each annual rebate described below, the taxpayer must satisfy the Commissioner of the Revenue that the machinery and tools associated with the expansion are installed and in use by filing an itemized schedule with the next annual tax return after the equipment is put in service, the schedule to include purchase price and date put in service. The installation must have occurred within the period of time Page 2 of 6 agreed to in the application process, up to twenty-four (24) months. The Commissioner must certify to the County the same, and the Treasurer must certify that all taxes for pre-existing and new machinery and tools have been paid in full by the due date.

If all criteria are met, the taxpayer is eligible to receive rebates of:

Year 1 - 60% of machinery and tools tax paid on the new investment.
Year 2 - 50% of machinery and tools tax paid on the new investment.
Year 3 - 40% of machinery and tools tax paid on the new investment.
Year 4 - 30% of machinery and tools tax paid on the new investment.
Year 5 - 20% of machinery and tools tax paid on the new investment.

New Business Criteria:

A new business venture must invest a minimum of Five Hundred Thousand dollars ($500,000) in machinery and tools through either long-term lease arrangement or purchase.

Before payment of each annual rebate described below, the taxpayer must satisfy the Commissioner of the Revenue that the machinery and tools have been installed are in use and have been included on the annual tax return, the Commissioner must certify to the County the same, and the Treasurer must certify that all taxes for pre-existing and new machinery and tools have been paid in full by the due date.

If all criteria are met, the taxpayer is eligible to receive rebates of:

Year 1 - 60% of machinery and tools tax paid on the new investment.
Year 2 - 50% of machinery and tools tax paid on the new investment.
Year 3 - 40% of machinery and tools tax paid on the new investment.
Year 4 - 30% of machinery and tools tax paid on the new investment.
Year 5 - 20% of machinery and tools tax paid on the new investment.

Information from Rappahannock Electric Cooperative

Below is some information to help you understand what it would take to support data centers in Madison. Please let me know if you have any questions. I'm also happy to jump on a Teams call or show up to one of y'all's meetings to talk about this with a larger group. There are lots of details and layers, so it does get overwhelming.

Data centers need to be served from a 230kV transmission line, and it needs two of them for redundancy (i.e., if the line from the north goes down, the line from the south can still carry the entire load) and to form a loop. Madison currently has 34.5kV lines which are distribution level, and a 115kV transmission line that ends at Pratts – this is a radial line, not a loop.

Any new 230kV transmission lines would be roughly 15 miles of new easements, require the cooperation of neighboring counties, and would go to the SCC for approval. A monopole transmission pole is taller and requires roughly 100 - 150' wide easements. This area has more of the H-frame poles which are wider and shorter per community feedback about protecting the viewshed. These require about 150' - 200' wide easements. One of my engineers mentioned that there was an attempt about 10 years ago to bring a 230kV line into Madison, but the plan failed due to community opposition. That was the 5 second description, but I'm sure you have some staff around who would be able to help fill in more detail there. We'd want to learn from the past to avoid repeating it.

There are three potential ways to bring in new transmission lines. All of these options would require 1) an end user triggering the need for the new lines, 2) a transmission load study (~6 months+) to determine the route, timeline, and cost, and 3) SCC approval (~12- 24 months) of the new transmission line before anything could be purchased or constructed. From the time we have a data center end user to final energized substation is traditionally a 4 - 5 year timeframe.

1. Starting in the southeast corner near where Louisa, Albemarle, and Orange touch. This would go through Albemarle, Orange, and Madison. This corridor has the existing 115kV line in it. Potentially 230kV could be brought into over top of the existing circuits if the easements are widened. The existing line is also owned by First Energy and is rather old. It could trigger other infrastructure improvements, and First Energy is both slower and more expensive to work with compared to Dominion. This option is possible, but improbable.
2. Coming up the 29 starting in Albemarle near the North Fork building. This option would touch Albemarle, Greene, and Madison. There are already some plans in place to upgrade the lines to 115kV (a transmission line, but not at data center level). New 230kV lines could potentially be built over top, but again this likely requires taller poles and wider easements. With Albemarle's potential Rivanna land purchase and Greene's interest in developments off the 29, they may be interested in pursuing this option.
3. Culpeper has a 230kV transmission line being built in the future to support its data center projects. A 230kV transmission line could potentially be extended off of that line and come through Culpeper down into Madison. The existing power corridors are supposed to be wide

enough for transmission lines to come through, but it would require more review to ensure the width is appropriate. Some of the power corridors do go through/over residential areas which is challenging.

I hope this helps!

Thanks,
Felicia

Felicia Ainsa, MBA
Economic Development Director | **Rappahannock Electric Cooperative**
M: 540-419-6665 | *fainsa@myrec.coop*
RAPPAHANNOCK ELECTRIC COOPERATIVE
RELIABLE • AFFORDABLE • FOCUSED ON YOU

References

Ainsa, Felicia, Rappahannock Electric Cooperative, Personal Communication (email), February 26, 2024.

Armstrong, Casey, Director of Economic Development, Rockingham County, VA, Personal Communication (phone interview), March 12, 2024.

Culpeper County (2024, March). Culpeper County Development Web Site, https://www.culpeperva.org.

Font, Juan (2023, October 30). *Working At Full Power: Data Centers In The Era Of AI,* Forbes Technology Council, https://www.forbes.com/sites/forbestechcouncil/2023/10/30/working-at-full-power-data-centers-in-the-era-of-ai/?sh=f8f81793ab02.

Greene County, VA (2024, March). Greene County Government: Ordinance 7-14-2020 (2), https://www.greenecountyva.gov/how-to/forms/2288-defense-production-incentive-zone/file.

Goodwin, Christian, County Administrator, Lousia County, VA, Personal Communication (in-person interview), February 23, 2024.

Mahan, Josh (2023, June 8). *Understanding Data Center Energy Consumption*, C&C Technology Group, https://cc-techgroup.com/data-center-energy-consumption/#:~:text=in%20the%20world.-,How%20Much%20Power%20Does%20a%20Data%20Center%20Use%20Per%20Square,as%20high%20as%20300%20watts.

Orange County, VA (2024, March). Orange County Economic Development, https://www.thinkorangeva.com/images/pdfs/2023_ED_Incentive_Policy_FINAL_9202023.pdf.

Rockingham County, VA (2024, March). Rockingham County Economic Development, https://www.rockinghamcountyva.gov/380/Economic-Development.

Rothamel, Bryan, Director of Economic Development, Culpeper County, VA, Personal Communication (in-person interview), February 2024.

Shull, Brian, Director of Economic Development, City of Harrisonburg, VA, Personal Communication (phone interview), March 13, 2024.

Spotsylvania County, VA (2024, March). Spotsylvania County Economic Development, https://va-spotsylvaniacounty.civicplus.com/584/Targeted-Industries.

Commonwealth of Virginia (2024, March). Virginia State Code, https://law.lis.virginia.gov/vacode/title58.1/chapter38/section58.1-3850/#:~:text=Creation%20of%20local%20technology%20zones.,one%20or%20more%20technology%20zones..

Wade, Andy, Economic Development Director, Louisa County, VA, Personal Communications (in-person interview and email), February 23, 2024, and March 11, 2024.