PW Digital Gateway FAQs

Revised 1/26/2022

1. *Will new electric substations benefit only the data centers?*

   No. Dominion Energy representatives explained at a December 15 Planning Commission work session that the new power infrastructure would improve the quality and reliability of the overall interconnected power grid. Power customers throughout the area benefit – not just the nearby data centers. Electric facilities in one location are used to help resolve power disruptions in other locations.

2. *Don't Data Centers require intense security perimeters and a mix of human and sophisticated electronic surveillance, with bright lights on all night around the buildings and grounds?*

   While data centers do maintain perimeters, these lines are often set back from the property line. Data centers employ various types of security personnel; however, most security measures reside within the building. Externally, perimeter fencing and security cameras are typically sufficient. Facilities employ the minimum required lighting to be able to utilize low-light security cameras and facilitate the safe ingress/egress of any employee, customer, or contractor remaining on site. In order to reduce lighting glare, facilities do have the ability to vary bulbs, use full cut-off lighting fixtures, directionally focus lighting, and implement motion lighting. The ultimate application and mix of these strategies determined by facility and end-user requirements as well as community standards.

3. *Will the amount of Data Center building and paving send polluted run-off into streams and County drinking water supplies? Don't Data centers also use huge amounts of chemicals for cooling water and cleaning, which will infiltrate the local environment?*

   No. Data centers comply with local and state stormwater management programs and regulations that do not allow accelerated runoff from the site. Before construction occurs, stormwater and erosion controls are put into place. Data Centers also regularly use detention ponds to mitigate water displacement and erosion.

   No. While legacy "open loop" cooling designs use large amounts of water, this design has become outdated based on cost and impact. Most data centers are migrating to closed-loop or zero water cooling systems. In either case, only domestic water usage is required (i.e. – sinks and toilets.) If refrigerant is used, it is maintained in a separated, sealed line and only opened for a controlled recycling process.

4. *If the Rural Area is exclusionary and continues an economic barrier to many, how does this CPA help people afford to live in Prince William?*

   This CPA is the most significant economic development initiative PWC has ever considered. One of the public benefits of this initiative is for the County to attain its longstanding goal of a 35%

commercial tax revenue base. **This would not only reduce the County's current reliance on residential taxpayers (enabling tax reductions), it would also provide additional tax revenues to fund PWC priorities that have not been able to be funded – affordable housing programs and transportation. Historically, there has not been sufficient funds left for residential tax reductions and these priorities after funding the primary governmental functions of public safety, criminal justice, education, health and transportation. Affordable housing and broader transit programs throughout the County would be enhanced by the additional revenue. The anticipated increase in commercial tax revenue and jobs growth from this economic initiative are currently being calculated by County Staff.**

5. *Why pursue this Digital Gateway Corridor if we already have 10,000 acres of land still available in the Overlay District for data centers? Besides, isn't the need for data centers subsiding, so there is no reason to plan for data center growth in our County?*

   A recent County study reveals that there are only about 600 acres remaining that is available in the 8,700 acre data center overlay district that meet data center developer requirements. Much of this acreage is broken up into many small parcels. Indicative of the strength and vitality of the Data center market, even with some 25+ million square feet of operating data centers, Loudoun County and its EDA (Economic Development Authority) are actively evaluating lands within Loudoun County to consider for additional "data center overlay" areas. Prince William must identify more suitable and available land in order to compete within this incredibly positive market. Data center operators want to continue their growth options in Prince William and view the PW Digital Gateway location as ideally suited for their billions of dollars of investment. The Data Center Market Study prepared by the County's consultant (BAE Urban Economics) confirms the strong market demand for additional data centers, stating:

   - **Northern Virginia has the largest data center market in the U.S. Data centers in Northern Virginia make up 48 percent of the primary market inventory of data centers in the U.S.**
   - **Real estate researchers predict continued market strength for the Northern Virginia data center market going forward. Experts say there is a practically unlimited demand in Northern Virginia for data centers. The high rate of growth in the sector will continue and be abated only by the lack of land availability.**
   - **Data centers prioritize six key factors when selecting new sites for development: fiber connectivity, environment, access, access to electrical power, access to water, a skilled workforce, and incentives. Of these, the most critical is access to high bandwidth connectivity.**
   - **By proximity to Loudoun County, but also in its own right, Prince William County provides companies and data center operators convenient access to the most interconnected network in the world.**
   - **The primary drivers for data center real estate site selection are availability of power and access to fiber.**

The following articles discuss the tremendous, ongoing need for data centers to serve our county's (the world's) insatiable demand:

- *https://www.gray.com/insights/the-data-center-industry-is-booming/*
- *https://datacenterfrontier.com/the-outlook-for-enterprise-data-center-demand-in-the-pandemic-recovery/*
- *https://www.enterprisenetworkingplanet.com/data-center/data-center-trends/*
- *https://www.forbes.com/sites/bernardmarr/2021/10/25/the-5-biggest-cloud-computing-trends-in-2022/*

6. *Pageland Lane is rural - is it the right area for data centers?*

Pageland Lane was rural 20 years ago but is no longer because of high volume of commuter and commercial truck traffic to and from Loudoun County, the massive 250 ft wide Dominion Energy major transmission corridor, Luck Stone Quarry to the north, the 3 million sq ft Gainesville Crossing Data Center Campus across Route 29 to the south and the nearby suburban development to the west along Heathcote Blvd. The family farming that has occurred for generations in our area is quickly becoming unsustainable. The electric power and data fiber corridors along Pageland Lane that already exist there now make this the most suitable area in all of Prince William County for data centers. The County's traffic projections for 2040 WITHOUT THIS CPA predict 25,000 vehicle per day on the road, which would trigger the need for the same 4 lane road improvements proposed in the CPA (especially since the commuter vehicle trips are very concentrated to am and pm peak hours and not spread out over a longer period).

7. *Will the PW Digital Gateway proposal will allow undesirable, heavy industrial and warehouses throughout the corridor and into our "backyards"?*

No. Specific language in the Comprehensive Plan text proposed by the applicants will limit redevelopment in the Corridor to Data Centers only. See link to the submitted materials: https://eservice.pwcgov.org/planning/documents/CPA/Planning-1st_Submission-CPA2021-00004-PW_Digital_Gateway-2021_0311.pdf

8. *Will data centers lower the value of Heritage Hunt homes?*
No. There will be no adverse effect on property values within Heritage Hunt. To the contrary, residential property values of every type in Loudoun County proximate to the high-paying, low impact, data center corridors have soared. Homes in Loudoun in the middle of Loudoun's data center corridor have tripled in value - here are a few Zillow examples of the Regency Neighborhood in Ashburn, which is surrounded by data centers:

43908 Loganwood Ct, Ashburn, VA 20147 | MLS #VALO435682
43999 Cobham Ct, Ashburn, VA 20147 | Zillow
43950 Vendome Ct, Ashburn, VA 20147 | Zillow

9. *Will Heritage Hunt Residents or battlefield visitors hear the humming of the data centers?*

   No. There will be acres of tree buffers, setbacks and natural topographical mitigations. New technology in HVAC and other building systems has resulted in noise levels much lower than those in data centers 10-15 years ago.

10. *Does this data center proposal offer a public benefit to PWC taxpayers?*

    Yes. PW Digital Gateway will be the greatest economic development initiative in PWC history. $30 Billion in capital investment, thousands of constructions jobs, 3,000 permanent, high-paying tech jobs, and an estimated <u>$700 million in annual tax revenue</u> to our County. This will result in lessening the burden on residential taxpayers, better schools, parks and County services. More than 80 percent of the County's current tax revenue comes from residential real estate taxes - that is not fair to those on fixed incomes, not balanced and not sustainable. This economic initiative will reduce this percentage to less than 70 percent.

    MOSTLY DUE TO ITS SUCCESS WITH DATA CENTERS, LOUDOUN COUNTY'S RESIDENTIAL REAL ESTATE TAX RATE IS 0.98 CENTS VS PWC'S $1.05 - 20% LOWER. Loudoun County now collects $600 million from its data centers <u>annually</u>; in fact, Loudoun data centers rely on the very same Dominion Energy transmission lines that run along Pageland Lane. Prince William County and Pageland Lane are providing the essential power/backbone for data centers in LOUDOUN, not Prince William. Loudoun County currently has 25 million sq. ft. of data centers in operation. Despite that already robust presence, the Loudoun County Economic Development Authority is currently and aggressively pursuing significantly more lands within Loudoun to try and retain its market dominance of this precious, clean, fiscally positive, high tax-generating industry.

11. *Will new unsightly transmission line corridors be needed to serve the proposed data centers in this PW Gateway corridor?*

    No. The <u>existing</u> 250 ft wide corridor of high voltage transmission lines in the Digital Gateway corridor are sufficient.

12. *Won't these data centers be hulking 4-7 floor structures towering over the landscape, Heritage Hunt, other surrounding homes, the Manassas Battlefield and Conway Robinson State Forest?*

    No. The data center buildings will typically be 1-2 stories (no greater than 3 stories) and will be context sensitive to adjacent uses as well as viewsheds from Manassas National Battlefield Park and Heritage Hunt. Balloon tests, extensive topographic and line-of-site studies will be required during rezoning and shared with the public. These will be used to determine the required site-specific building heights and forested buffers.

13. *Will the PW Digital Gateway proposal allow other industrial uses beyond data centers in the corridor, such as warehouses, gas stations, landscape businesses, recycling plants, asphalt plants, supply chain fulfillment centers and other undesirable truck and traffic-driven industries?*

    No. The carefully drafted, specific Comprehensive Plan restrictions that have been proposed specifically preclude new uses other than data centers.

14. *Do the new data centers require "grey water" from sewer treatment plants? There is no infrastructure in Prince William to provide it.*

    No. "Grey water" (partially treated and non-potable water) is not used by any data centers in Prince William County and the new data centers in PW Digital Gateway are not planning to use "grey water".

15. *Will the forests along Pageland Lane will be destroyed?*

    No. The vast majority of land within the Corridor consists of open, long-farmed fields and residence yards, not forests; however, the Comprehensive Plan text will require forested buffers (through preservation or reforestation) along the perimeters of individual data center sites (pods).

16. *Why are we building roads in rural Prince William County where we don't want them?*

    New roads are not proposed by the Landowners. Instead, segments of existing Pageland Lane and Sudley Road will be widened and made safer.

17. *Why are we putting water and sewer lines out to data centers in rural Prince William County where we don't need them? It's extremely expensive and will be paid for by the citizens.*

    The private data centers will pay the costs necessary to extend public water and sewer infrastructure that now exists on adjacent properties. The Service Authority confirms that this will be done without subsidy by or financial impact to its existing customers. These lines will not leapfrog other across/rural lands to serve the data centers.

18. *Don't data centers use massive amounts of water which will affect residential water usage?*

    No. Water will be supplied by the Service Authority, with no impact on existing customer usage. Specific Comprehensive Plan text is proposed ensuring that data center water-cooling systems are "closed loop". These state-of-the-art systems internally recycle water, reducing dramatically the use of public water and sewer service.

19. *Little Bull Run is a tributary to the Occoquan Reservoir (a source of drinking water for much of Northern Virginia) and data center development in this area will cause terrible water impacts.*

    The land draining to this portion of Little Bull Run will be subject to much greater environmental and storm water regulation and protection imposed with the rezoning and development processes for data centers. In fact, there will be significantly more review and regulation designed to protect our sensitive environmental features, water and drinking water than under existing agricultural and farming practices/regulations.

20. *Will Industrial uses in the area will dramatically increase the amount of stormwater and pollution runoff into nearby waterways?*

    No. Federal, state and local stormwater regulations will ensure that increased stormwater runoff does not impact our sensitive waterways and our precious water resources. Water quality will actually be enhanced by the elimination of over 100 older septic systems that have the potential to fail and pollute waterways. In addition, the flow of fertilizer and other nutrients that can enter streams from agricultural areas will be eliminated.

21. *Will data centers cause water shortages in the groundwater and local wells - including the Heritage Hunt Golf Course irrigation system?*

    No. Data centers will not use ground water from the local aquifers and will have no impact on nearby wells or the golf course irrigation system. The farms and homes along Pageland Lane that now use wells will be replaced by data centers that do not use wells that draw groundwater. This will have a positive effect on the local aquifer, groundwater and wells, including those for the golf course.

22. *Has the Rural Area designation along Pageland Lane helped to temper any increase in the already stifling traffic that transits the Manassas Battlefield Park each day?*

    No. The Rural Area designation has not prevented the stifling traffic on Route 29 in the Battlefield Park, Pageland Lane, Sudley Road and Gum Springs Road. County staff have predicted that, absent approval of the CPA, traffic will still increase along Pageland Lane to 25,000 vehicles per day by 2040. Similar increases will be experienced within the battlefield. However, with approval of the CPA, road improvements will divert traffic around the battlefield via Pageland Lane and the northern segment of the planned Battlefield Bypass (Sudley Road from Pageland Lane to Gum Springs Road). These road improvements are almost identical to one half of the road improvements shown in the official 2008 Battlefield Park General Master Plan.

For more objective, fact-based information, please see:

Link to County Website – Planning-lst_Submission-CPA202l-00004-PW_Digital_Gateway-2021_0311.pdf
(pwcgov.org)

Link to PW Digital Gateway – https://www.pwdigitalgateway.com/

Link to Pageland Lane video -
https://www.dropbox.com/s/cvf3ioi648jpxgx?Final%20Damage%20Continues%20on%20Pageland.mp4?dl=0

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