Bulloch County Data Center Draft Ordinance Overview

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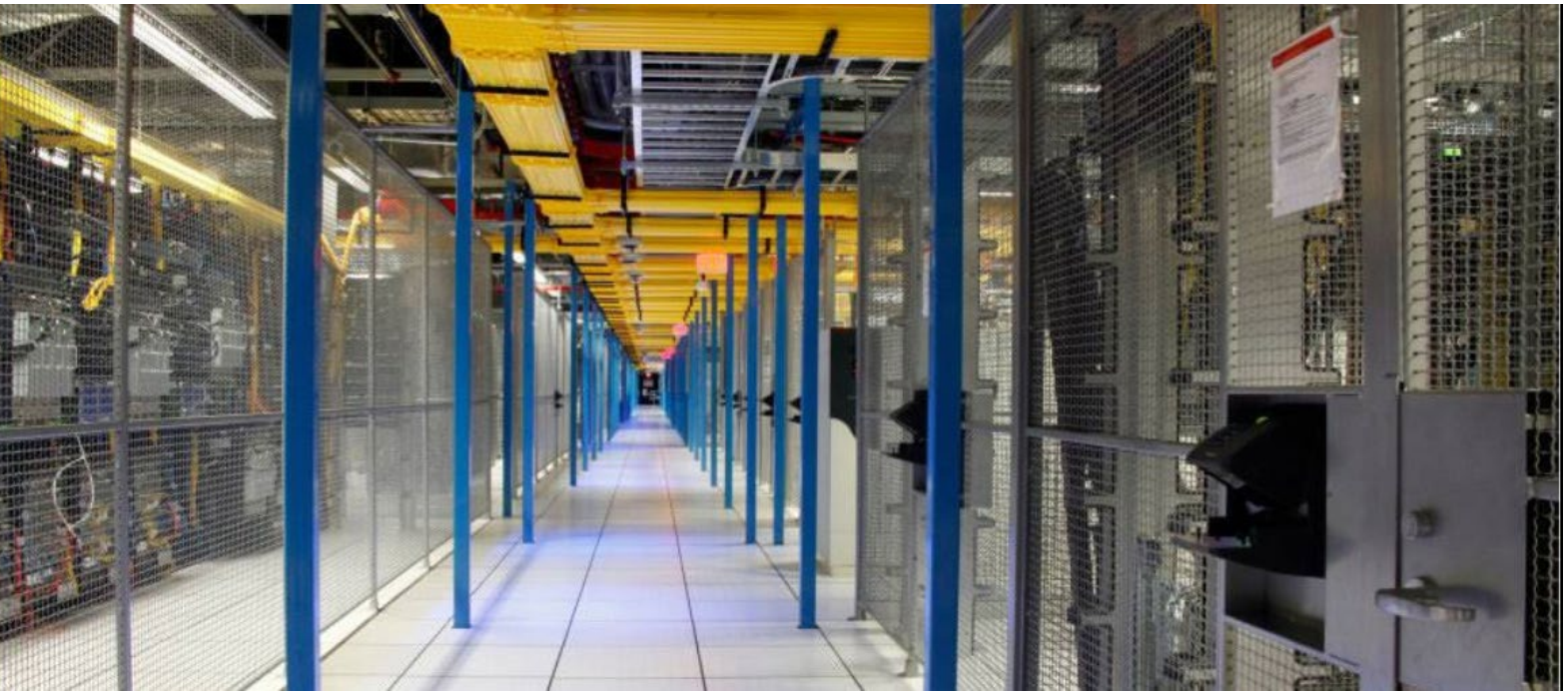
Planning and Development Director



Data Centers – What are they?

“a physical room, building, or facility that houses infrastructure for building, running, delivering, or transmitting technological applications and services, or for storing and managing the data associated with technological equipment, applications, systems or services. Data centers vary in size due to their use and proximity to the end data user(s).”

Data Centers – What are they?





Pros & Cons





Data Centers – What are the Issues?

- Noise
- Power Grid
- Water Use
- Downstream Discharge
- Land Use & Land Conversions
- Waste After Abandonment
- Air Quality/Emissions

Solutions

- Land Use
  - Section 1903.1: Use permitted by right ONLY in an Overlay Zoning District
  - Section 1903.4: Conditional use required for Medium Data Centers in Highway Commercial Zoned properties WITHIN the Overlay Zoning District
- Design Standards Requirements
  - 1903.5: Conceptual Site Plan approval by Planning and Zoning Board
  - 1903.5 (b,c,&d): Façade & and Equipment Screening
  - 1903.5 (c)(c & d): Building Height restrictions; changes in building's horizontal height and stepbacks

Solutions

- Noise & Air Quality
  - 1903.5 (c)(e): Generator testing limitations explained when adjacent to residential areas (limiting noise and emissions to certain times)
  - 1903.5 (c)(g): Decibel Levels established; Industrial noise testing required prior to Certificate of Occupancy
- Light & Glare
  - Photometric Plan required; 100% downcast lighting
- Landscape Buffering
  - 1903.5 (c)(h): Transitional landscape buffering required

Solutions

- Water Use
  - 1903.5 (d)(a): Cooling must operate on a CLOSED LOOP SYSTEM
  - 1903.5 (c)(b): All data centers must operate with a *Water Usage Effectiveness Ratio* less than 0.75 L/kWh
- Downstream Discharge
  - 1903.5 (c)(b)vii: Municipal water and sewer service required
- Adjacent Property & Setbacks
  - 1903.5 (c)(d)ii, iii : 350’ setback generally; 500’ setback when located in a Light Industrial (LI) or Heavy Industrial (HI) zoning district borders mixed-use or residential or agricultural zoned parcels

Where to Strengthen the Text

- Other communities have included the following statements in text:
  - *Wells.* The development shall not utilize private wells to provide water for any purpose. Development of this use is limited to areas that are served by the municipal water utility.
  - *Cessation of operations.*
    - (i) Upon permanent cessation of operation of the primary use on the site, which is defined as zero electrical load to the primary use only for 90 consecutive days or a total of 180 days over a 365-day period, whichever occurs first, the owner shall notify the county within 30 days of such occurrence. If the cessation of operation is caused by an Act of God, then repair or removal shall commence within 180 days.
    - (ii) Within 12 months of the date of the notification to the county, all structures on the site shall be demolished or removed to grade and the site restored to agricultural viability. Soil tests on the site shall be performed and provided to the county and native grasses or crops shall be replanted per USDA guidelines.

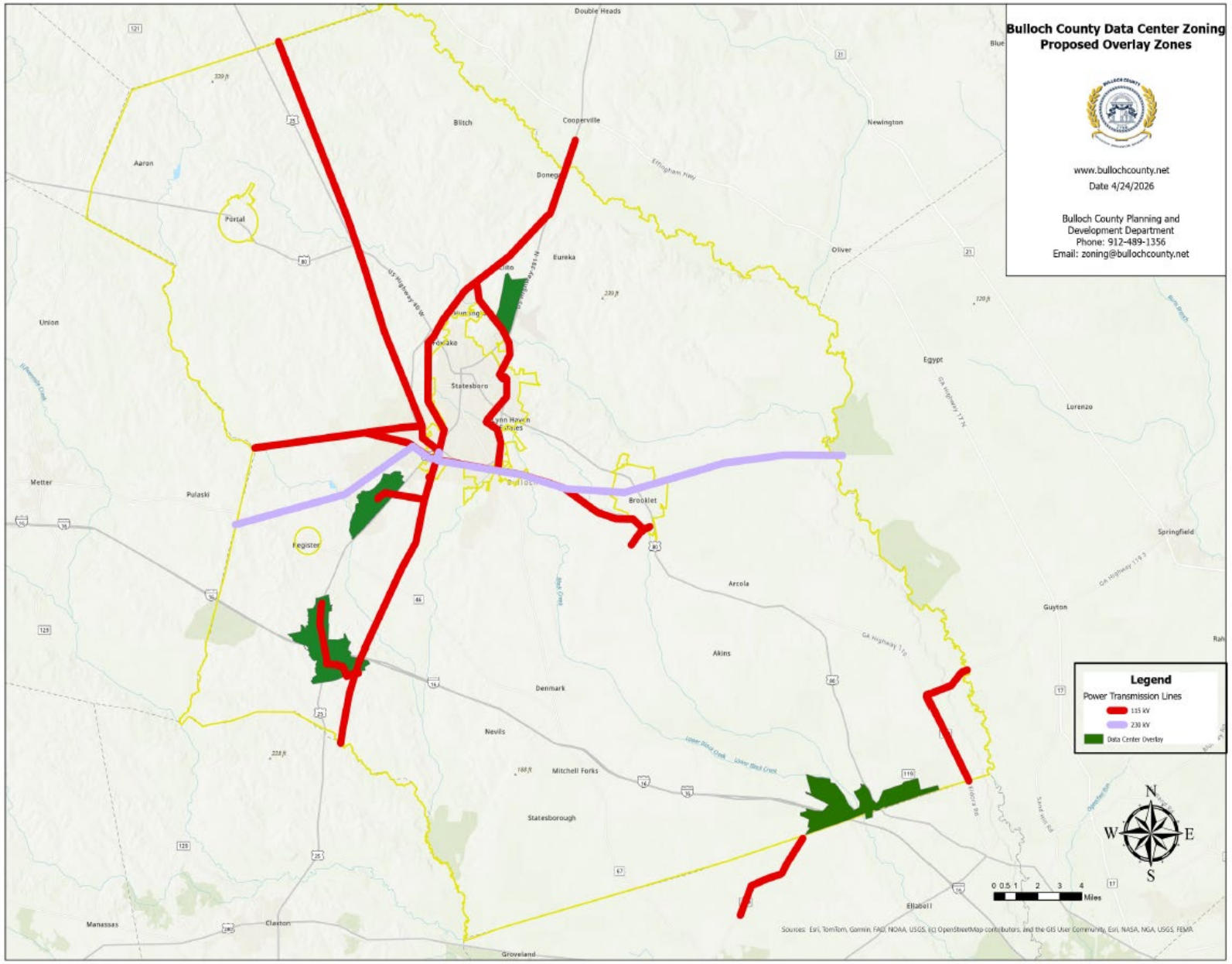
Data Centers – What are the Issues?

- Noise ✓
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Location for Data Centers – Where Should they Go?



Location of Data Centers Where Should they Go?



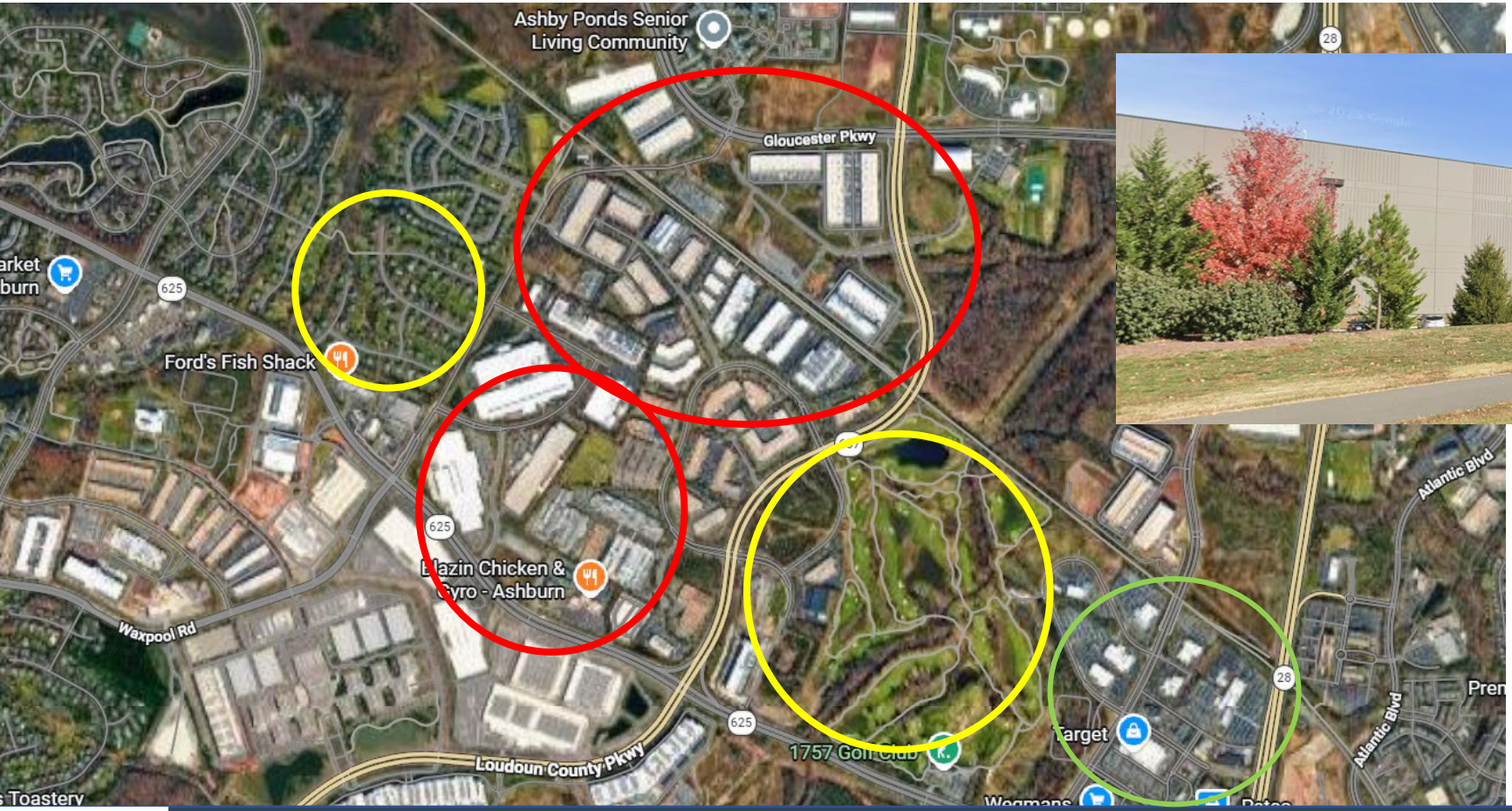
Location of Data Centers – Where Should they Go?





Haystack, Virginia

Location of Data Centers – Where Should they Go?





Ashburn, Virginia

Location of Data Centers – Where Should they Go?





Social Circle, Georgia

Location of Data Centers Where Should they Go?

