

Ashburn, Va

Ashburn, Virginia—*Data Center Alley*—hosts over 275 data centers carrying about 70% of global internet traffic at peak, driven by dense fiber networks, proximity to subsea cables, cheap and abundant Dominion Energy power, large industrial-zoned parcels, and low natural-disaster risk near Washington, D.C. Virginia’s tax incentives and **streamlined zoning** amplified growth, with data centers adding \$16+ billion in assessed value and nearly half of Loudoun County’s property tax revenue. Anchored by early peering point MAE-East, Ashburn became a self-reinforcing cluster where Amazon (50+ hyperscale sites), Digital Realty, Equinix, and Microsoft colocate for low latency and redundancy. Typologically, hyperscale campuses dominate but blur with regional colocation hubs, producing hybrids that combine sheds, substations, cooling fields, and buffer lands. These facilities often consume two to three times more land in support space than server halls, transforming the suburban landscape into infrastructural parks that blur private control with the public commons.

- **Use-Specific Standards (Section 4.06.02):** Data centers adjacent to residential uses must provide enhanced buffers, including a berm at least six feet tall with landscaping and full screening of mechanical equipment.
- **Setbacks (Industrial Districts):** Buildings must be set back at least 35 feet from roads and 50 feet from nonresidential lot lines, with parking no closer than 25 feet.
- **Special Exception Rule (2025 amendment):** Data centers within 500 feet of residential property now require a Special Exception (SPEX) rather than by-right approval.
- **Buffer Yards (Section 7.04.03):** Buffer yards are required per the county’s Use Buffer Matrix, ensuring landscape screening between higher-intensity uses (like data centers) and less intensive or residential neighbors.
- **Landscaping / Screening:** Rooftop and ground-mounted mechanical equipment, as well as loading and refuse areas, must be fully screened from view, especially where facilities face public rights-of-way or residential areas.



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