APPLICATION FOR TEXT AMENDMENT
to the *UNIFIED DEVELOPMENT ORDINANCES*

Submitted: September 28, 2026

Proposed Language

AN ORDINANCE AMENDMENT PROPOSED BY RANDY ADAMS, MEGAN CARSON, AND ROBIN SMITH MODIFYING CHAPTERS 4, 5, 6, AND 11 OF THE *UNIFIED DEVELOPMENT ORDINANCES (UDO)* TO ESTABLISH USE DEFINITIONS, USE-SPECIFIC CONDITIONS, AND DEVELOPMENT STANDARDS FOR HYPERSCALE DATA CENTER CAMPUSES; AND TO UPDATE THE PRINCIPAL USE TABLE TO REFLECT THE NEWLY ESTABLISHED HYPERSCALE DATA CENTER CAMPUS USE DEFINITION WITHOUT VIOLATING THE PROHIBITION OF DOWNZONING

Be it ordained by the Winston-Salem City Council and the Forsyth County Board of Commissioners, that the Unified Development Ordinances (UDO) are amended as follows:

Section 1. Section 4.1.4.C.4 of the UDO is amended as follows:

4 Zoning Districts
4.1 Introductory Provisions
4.1.4 Dimensional Requirements
4.1.4.C. Additional Standards
4.1.4.C.4 Noise

NOISE
All air handling machinery, dumpsters, compressors, cooling systems, private energy generation systems, or water coolers for nonresidential uses shall be placed in a ground-level yard to minimize noise and set back a minimum distance of 1,000 (one thousand) feet from any existing dwelling, school, church, cemetery or burial ground, site of cultural or historical significance, including but not limited to sites listed or eligible to be listed on the National Register of Historic Places, public park, community facility, or other sensitive receptor. The buffer yard shall be 100 (one hundred) feet wide.

Section 2. Section 5.1.5 of the UDO is amended as follows:

5 Use Standards
5.1 Permitted Uses
5.1.5 Table of Principal Uses
5.1.5 Table of Principal Uses

TABLE 5.1.1: PRINCIPAL USE TABLE

Z = Permit from Zoning Officer
P = Planning Board Review A = Special Use Permit from BOA E = Elected Body Special Use Permit
(Lo) = Following a use indicates the use is a low-intensity use
(Hi) = Following the use is a high-intensity use.

USE TYPE	RESIDENTIAL DISTRICTS																	COMMERCIAL DISTRICTS												Ind. Dist.			I & MU Dist.						CONDITIONS
	YR	AG	RS40	RS30	RS20	RS15	RS12	RS9	RS7	RSQ	RM5	RM8	RM12	RM18	RMU	MH	NO	LO	CPO	GO	NB	PB	LB	NSB	HB	GB	CB	MRB-S	E	LI	GI	CI	IP	C	MU-S	
BUSINESS AND PERSONAL SERVICE USES																																						
Services, A																			Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z	Z			Z	
Hyper-scale Data Center Campus																															E						

Section 3. Section 5.2 of the UDO is amended as follows:

5 Use Standards
5.2 Use-Specific Standards
5.2.26.2 Hyperscale Data Center Campus

A. PURPOSE
A hyperscale data center campus is a large-scale digital infrastructure platform located on a distributed computing campus and designed for massive data processing and storage, built with modular hardware, software-defined orchestration, and horizontal scaling across thousands of servers requiring a minimum of 25 MW of electricity to operate.

B. DIMENSIONAL AND DEVELOPMENTAL STANDARDS

1. The facilities containing massive data processing hardware and storage and the structures enclosed in the ground-level mechanical yard shall not exceed the height of the principal building located on the same zoning lot.
2. The facility or facilities housing the hyperscale data center shall match the building materials, design, scaling, and layout of nearby buildings to the extent practicable, as determined by the Director of Planning and Development Services or their designee.

3. Any new structure and any addition to an existing structure intended to provide data processing shall be set back 1,000 (one thousand) feet from all neighboring property lines with line-of-site to the Hyperscale Data Center Campus.
   a. Within the setback area, a 100 (one hundred) foot wide Type IV vegetative buffer yard shall be provided to offer year-round screening performance.
   b. Use of existing vegetation, including the preservation of the existing tree canopy to meet the buffer yard requirements is required.
   a. Hyperscale Data Campuses may provide fencing, walls, earthen berms, vegetation, or alternative compliance in accordance with Section 6.3.2 to adjust the screening and landscaping to meet the unique constraints of the zoning lot, at the discretion of the Director of Planning and Development Services or their designee. Hyperscale Data Center Campuses may not use the fifty percent (50%) reduction that is available when an earthen berm is provided.
4. Any new structure and any addition to an existing structure intended to function as cooling systems or energy generators shall be considered to exist within a "Utility Service Area" and shall meet the Utility Services Area Screening Standards.
5. A lighting plan meeting the requirements of Section 6.6.2 shall be provided for any new structure and any addition to an existing structure intended to provide data processing, cooling, or energy generation. Exterior lighting must use cutoff fixtures, minimize skyglow, prevent light trespass, and be shielded from adjoining properties. No light trespass from any fixture shall exceed 0.1 foot-candles as measured at any residential zoning district boundary. A photometric plan demonstrating compliance shall be submitted with the development application.
6. All utilities, emergency energy generation, related facilities, and heating, ventilation and air conditioning (HVAC) units in the ground-level yard shall be located and/or shielded to not be visible from the public right-of-way and neighboring properties.
7. If the limitations and specifications of facilities and equipment make the previous section difficult to satisfy, the Director of Planning and Development Services may allow alternative solutions. These alternative solutions must account for the quality of life of surrounding properties and minimize the impacts of on-site facilities and equipment to the greatest extent possible.
8. All energy distribution lines providing direct service to individual buildings shall be placed underground.
9. Noise Standards. Noise limits shall be as follows. Annual community-impact assessment report must be submitted to Planning Director or designee. Continuous Noise Limits: Maximum 45 dBA at property line (day). Maximum 40 dBA at property line (night). Low-frequency noise (≤ 200 Hz) shall not exceed 40 dBC at property line.
   Backup Generator Noise. Testing noise shall not exceed 45 dBA at property line. Generator use shall only be permitted for testing and emergencies. Onsite power generation by fossil fuels to be used to provide continuous, routine, or supplemental power to the electric grid or data center operations during normal conditions are prohibited.
   All diesel generators shall use Ultra-Low Sulfur Diesel (ULSD) or cleaner alternative fuels.

Natural-gas generators are not permitted unless the applicant demonstrates that zero-emission backup systems (battery energy storage, hydrogen fuel cells, or equivalent) are infeasible due to site-specific constraints.

Applicants are encouraged to use battery-based, hydrogen fuel-cell, or other zero-emission backup systems. SUP findings may require zero-emission systems where feasible.
Generators shall be equipped with selective catalytic reduction (SCR), diesel particulate filters (DPF), hospital-grade mufflers, and acoustic and emissions-rated enclosures. Pre-construction noise modeling required. Sound levels shall be measured at A-weighted and C-weighted frequencies. Postconstruction verification is required bi-annually.

Environmental performance. Public-facing environmental performance dashboard required.

a. **Enhanced stormwater controls** shall exceed state minimums by 25%. On-site stormwater reuse for cooling required. No net increase in peak runoff for 1-, 10-, and 25-year storms. 100-ft stream buffers required.

All applications must provide verification from the water and sewer utility provider that the utility has sufficient capacity and infrastructure, including at predicted future drought and wastewater surge conditions, to support the Hyperscale Data Center Campus through the full build-out of the project. If additional infrastructure is needed, verification is required that those improvements will be fully funded by the Hyperscale Data Center Campus developer or owner.

b. **Daily water and sewer usage**. Applicants will disclose anticipated peak and daily water and sewer usage at the time of conditional zoning application. The application must include a pre-treatment survey for any contaminants that may be discharged from the facility. The pre-treatment survey for any hazardous contaminants such as PFAS that may be discharged from the facility will be paired with a sustainability plan for treating, filtering, and sustainably disposing hazardous water contaminants on-site.

Potable water use limited to ≤ 10 million gallons/year unless SUP findings justify otherwise. Closed-loop cooling required for all new facilities. All cooling and ventilation equipment shall operate with equipment shown to decrease water usage as approved by the Department of Watershed Management. Water Consumption and Sustainability Plan. All applications shall disclose anticipated peak and daily water and sewer usage at the time of conditional zoning application.

A facility may exceed its Baseline Allocation by up to 15% only if it demonstrates: a. Increased water-efficiency measures (e.g., heat-recovery chillers, hybrid cooling). b. Expanded stormwater reuse capacity. c. No adverse impact on watershed hydrology. d. Submission of an updated Water Consumption and Sustainability Plan.

Water use above the baseline allocation shall be regulated through the following incremental thresholds (more than +15% above baseline allocation). Any increase above 15% shall require: a. A major water use modification review by the Planning Director. b. Demonstration of no net increase in peak runoff for 1-, 10-, and 25-year storms. c. Installation of additional water-reduction technologies approved by the Department of Watershed Management. d. A public hearing and amendment to the Special Use Permit. e. A revised pre-treatment survey identifying all potential contaminants.

Stormwater and infiltration thermal controls. Heated water from cooling systems, roof drains, or equipment washdown shall not be discharged to stormwater systems without temperature mitigation. Detention, shading, infiltration, and vegetation systems will be used to limit stormwater temperature increase to ≤ 1.0 °C above pre-development conditions at outfalls. Hyperscale data centers shall demonstrate that post-development stormwater temperature and flow regime do not cause thermal impairment or violate antidegradation policies for receiving waters.

A bi-annual Water Performance Report shall be submitted and shall include total bi-annual water consumption, thermal controls efficiency, comparison to baseline allocation, water-efficiency improvements, cooling-system performance metrics, leak detection, and repair logs.

d. Air Quality. Backup generators must meet EPA Tier 4 Final emission standards. Generator testing limited to 8 AM–5 PM, weekdays only. Annual emissions inventory and impact analysis to be submitted to the Planning Director. The Cumulative Air-Quality Impact Analysis (CAQIA) will include combined emissions from generators, cooling systems, construction, and traffic, impacts on nearby residences, schools, parks, and sensitive receptors, regional air-shed impacts, and interaction with other industrial sources within one (1) mile, as well as long-term climate impacts (CO_2e). If cumulative impacts exceed acceptable thresholds, additional mitigation or zero-emission backup systems are required.

e. Energy Efficiency & Carbon Reduction. Minimum LEED Gold or equivalent certification. Bi-annual reporting of energy use intensity (EUI). 20% minimum on-site renewable generation or storage capacity. Participation in Duke Energy demand-response programs. Energy Consumption and Sustainability Plan.

Applications must disclose the peak and average power demand of the proposed Hyperscale Data Center Campus for the full build-out of the project. Additionally, verification is required from the power utility provider that the utility has sufficient capacity and infrastructure necessary to supply the Hyperscale Data Center Campus through the full build-out of the project. If additional infrastructure is needed, verification is required that those improvements will be fully funded by the Hyperscale Data Center Campus developer or owner.

f. Tree Canopy Preservation and Reforestation Plan required in alignment with Forward 2045 environmental stewardship principles.

g. Air heat plume performance standards. Hyperscale data center operations shall not increase hourly average ambient air temperature at any property line by more than 1.0 °C above upwind reference conditions under typical peak-load operation. Facilities shall use vertical or high-velocity discharge configurations where feasible to promote plume rise and dispersion, rather than low-level horizontal discharge into adjacent neighborhoods. Compliance shall be demonstrated through pre-construction modeling of anthropogenic heat flux and plume dispersion. Post-construction field measurements shall be conducted at upwind and downwind monitoring points during peak-load conditions.

h. Compliance & Enforcement. Failure to comply with *Forward 2045* environmental standards shall constitute a violation of the UDO. Failure to maintain continuous monitoring equipment shall constitute a violation of the UDO. Exceeding any air-quality limit shall constitute a violation of the UDO. Failure to submit required bi-annual reports shall constitute a violation of the UDO. The Planning Director or designee may require additional mitigation, operational adjustments, replacement of non-compliant equipment, and suspension of generator testing. Repeated violations will result in SUP revocation.

10.Traffic threshold. A Traffic Impact Analysis (TIA) shall be required for all proposed Hyperscale Data Center Campuses. The TIA shall be prepared by a licensed professional engineer and shall evaluate transportation impacts across all phases of development, including construction, fit-out, operation, maintenance, and decommission. The TIA shall demonstrate consistency with the site master plan, environmental performance standards, noise and air-quality standards, stormwater management plans, and emergency response plans.

11.Phased Development. Development applications for campuses proposed to be constructed in phases shall include a phasing plan identifying the projected electrical load in megawatts, water demand in gallons per day, and impervious surface area in square feet attributable to each phase. The phasing plan shall address the cumulative impact of all phases at full build-out, not merely the impact of the initial phase.

12.Emergency-response coordination plan is required pre-approval. The plan shall be prepared in consultation with Forsyth County Emergency Services and shall address fire response, Battery Energy Storage System (BESS) Hazards, generator fuel, hazardous materials, emergency access and circulation, and communication protocols.

12. Decommissioning. If Hyperscale Data Center Campus operations cease for 24 (twenty-four) consecutive months, the Hyperscale Data Center Campus will be deemed abandoned and the owner will be obligated to remove all structures, equipment, fuel

systems, hazardous materials, and related improvements, and to restore the site to its previous condition.

13. Services, A Classification Unaffected. Nothing in these use-specific standards shall be construed to limit, restrict, modify, or otherwise affect the permitted uses, dimensional standards, administrative permitting pathway, or any other development right applicable to data center or computer services uses classified as Services, A under the Forsyth County UDO. These standards apply exclusively to uses classified as Hyperscale Data Center Campus and have no effect on the Services, A category or on any use, structure, or site element developed or approved under that category.

Section 4. Section 6.3.2 of the UDO is amended as follows:

6 Development Standards
6.3 Buffer yard Standards
6.3.2 Determination of Buffer yard
A. PROCEDURE
The type of buffer yard required shall be determined as follows:
1. STEP ONE
Identify the zoning type for the proposed project and all adjacent properties, excluding properties across a public right-of-way. The zoning types are defined as follows for the purposes of this section only.
a. SINGLE FAMILY RESIDENTIAL (SFR) ZONING TYPES
Single family residential zoning types include the H, YR, AG, all RS Districts (including RSQ), and MH (single lot or unit).
b. MULTIFAMILY RESIDENTIAL (MFR) ZONING TYPES
Multifamily residential zoning types include all RM Districts and the MH District where a manufactured housing development is involved.
c. LOW INTENSITY COMMERCIAL (LIC) ZONING TYPES
Low intensity commercial zoning types include the CI, CPO, GO, LO, PB, LB, IP, C, and NB Districts.
d. HIGH INTENSITY COMMERCIAL (HIC) ZONING TYPES
High intensity commercial zoning types include the NSB, HB, GB, CB, E, and MU-S Districts.
e. INDUSTRIAL (IND) ZONING TYPES
i. Industrial zoning types include the LI and GI Districts and certain uses which require outdoor storage, have high trip generation rates, or have the potential for nuisance to adjacent properties due to noise, light and glare, or typical hours of operations.
ii. The following list of specific uses identified in Table 5.1.1, Principal Use Table, shall be classified as industrial zoning types for buffer yard purposes.

1. Implement sales and service;
2. Kennels, outdoor (F) (See Section 5.2.42, Kennel, Outdoor (F);
3. Outdoor display retail;

4. Motor vehicle repair and maintenance;
5. Motor vehicle storage yard;
6. Recreational vehicle park;
7. Recreation services, outdoor;
8. Storage and salvage yard; and
9. Dirt storage sites (See Section 5.2.27, Dirt Storage.);
10. Hyperscale Data Center Campus.

Section 5. Section 11.2 of the UDO is amended as follows:

11 Measurements & Definitions

11.2 Definitions

TABLE 11.2.2: DEFINITIONS	
Hyperscale Data Center Campus	A hyperscale data center campus is a large-scale digital infrastructure platform located on a distributed computing campus and designed for massive data processing and storage, built with modular hardware, software-defined orchestration, and horizontal scaling across thousands of servers requiring a minimum of 25 MW of electricity to operate.

TABLE 11.2.2: DEFINITIONS	
Utility	An area which contains any surface mounted cooling systems, emergency & non-emergency generators, heating, ventilation, or air conditioning equipment or freestanding above ground devices, such as utility boxes, booster boxes, switchgear, and transformers, which are part of an underground utilities system: (A) Private utility service area - an area, on private property, which contains privately owned utility structures for the exclusive service of the premises where they are installed; or, (B) Public utility service area - an area, on either private or public property, which contains utility structures owned by a utility for the service of one or more premises but excluding utility substations.

What is the reason for the proposed ordinance change? Be specific and elaborate.

It is our view that the current UDO definition of a computer data center is insufficient to zone new types of hyperscale data center campuses operating beyond 25 MW according *Forward 2045* principles and recommendations.

The current data center definition reflects older types of data centers as "A category of 'Services, Business A' in which the primary service is data processing. This type of facility is primarily devoted to computers, with minimal employment required for monitoring and servicing" (UDO Section 11-15).

A 'Services, Business A' designation relies on two distinctions. One, that the business operation is small-scale, and secondly, that it does not feature external structures. Services A's modest size encompasses low-intensity, enclosed-building service businesses with minimal off-site impacts such as noise, odor, vibration, or air and water pollution. Services A businesses such as barber shops operate according to neighborhood-compatible or business park-compatible uses due to having negligible impact on adjoining property.

In the past, data center applications fell under use Services, Business A due to their small size, minimal number of employees, and enclosed office-type buildings.

While Services A computer data centers have been in existence since the 1940s, new industrial scale hyperscale data center campuses produce impacts far beyond the scope, scale, and zoning intent of Services A. Hyperscale data centers are characterized by a size typically exceeding 500,000 sq feet "that provides extreme scalability capabilities and is engineered for large-scale workloads with an optimized network infrastructure, streamlined network connectivity and minimized latency."[1]

The second difference derives from the size of industrial scale data centers. To provide a steady and reliable source of energy and cooling in the maintenance of an extensive server equipment system, industrial type data centers must rely on external infrastructure such as high-voltage transmission lines, substations, large cooling towers, backup generators (often numbering in the hundreds), and fiber optic networks. While use Business, Services A operations and the new generation of data centers share a small number of an on-site full-time work force, hyperscale size and external structures do not fit the zoning rubric of use Business, Services A: Services A in Forsyth County's UDO is a low-intensity commercial category intended for small, customer-serving uses. A hyperscale campus is a high-intensity industrial utility use. They are not interchangeable.
Because the uses are categorically different, defining hyperscale campuses separately does not "down-zone" Services A designated data centers —it simply assigns the correct category. The dispositive characterization of this amendment is that it is *affirmative* in nature. It creates a new category with affirmative threshold criteria, affirmative permitting pathways, and affirmative development standards tailored to the actual scale of impact of the facilities it classifies. It does not restrict, prohibit, condition, or diminish any existing use category or any existing development right.

[1] IBM, What is a hyperscale data center? | IBM. Accessed August 2026.

The following table compares the use intensity of UDO Services, Business A with industrial type data center operations, including SIC codes. While Services A is compatible with SIC 737 (Computer-Related Services), to our knowledge, no SIC code exists yet for industrial scale cloud or AI data center operations. The absence of an applicable SIC code provides additional evidence of a definitional mismatch with the older Services A definition for data centers.

Characteristic	Services A (UDO Definition)	Industrial Scale (Hyperscale) Data Center Campus
Typical Building Size	Small to medium; enclosed building	500,000 sq ft to several million sq ft per campus
Power Demand	Negligible; standard commercial utility service	25–1,200+ MW; requires resolute 24/7/365 transmission infrastructure
Water Consumption	Minimal; standard plumbing	Closed Loop System as Required by NC Law [Example F-1669 in Rural Hall: An initial 600,000 gallons to be flushed and replaced on a regular basis.] Evaporative Cooling [Not currently permitted in NC]: 1–5 million gallons per day (evaporative cooling)
Noise & Vibration	Minimal; enclosed operations	Significant; backup generators, cooling towers, HVAC at industrial scale
Employment Intensity	Moderate; typical office/service staffing	Moderate; 1–5 employees per MW despite massive operational footprint
Traffic Generation	Low to moderate; business hours	Low vehicle traffic, but extraordinary utility/freight/construction/decommission traffic
Off-Site Infrastructure	None required	Dedicated substations, transmission lines, fiber conduit, water supply and wastewater upgrades
Permitted SIC Codes	SIC 733, 735, 737 (limited), 738, 7699	No SIC equivalent; operates as large-scale digital utility infrastructure
Adjacent Property Impact	“Little impact” required by UDO	High: noise, electromagnetic field, visual mass, light pollution, utility grid loading

The comparison chart supports the view that the new generation of large-scale data

centers require industrial use-specific standards addressing power demand, water consumption, noise, pollution, buffers, and emergency management requirements.
North Carolina's zoning framework explicitly notes that down-zoning concerns arise when a property owner loses a previously allowed intensity or use category.
The UNC School of Government highlights that down-zoning limits occur when regulations reduce allowable development intensity or permitted uses. Here, no such reduction occurs.
A hyperscale data center campus has never been a Services A use. Therefore, defining it separately does not remove any right that ever existed under Services A.
Services A never included hyperscale infrastructure extending often over hundreds of acres, with massive and continuous power and cooling demands. Services A uses do not include large mechanical yards, substations, multi-building industrial campuses, or 25–1,000 MW electrical loads. Because hyperscale campuses were never permitted under Services A, clarifying their correct classification cannot be down-zoning.
The proposed amendment does not remove, restrict, or diminish any currently permitted use. It does not reduce development density, eliminate permitted uses in any zoning district, or create nonconformities — and therefore does not constitute a "down-zoning" under the controlling statutory definition at N.C.G.S. § 160D-601(d).
Rather, the amendment adds a new category with affirmative threshold criteria calibrated to the scale of impact generated by hyperscale facilities, enabling Forsyth County to apply proportionate development standards commensurate with actual infrastructure demands.

Bibliography

City of Winston-Salem. Unified Development Ordinances (UDO) and Amendments. Winston-Salem: Planning and Development Services, updated December 15, 2025. Accessed August 2026.
IBM, What is a hyperscale data center? | IBM. Accessed August 2026.
National League of Cities Data-Centers-Fact-Sheet-3.pdf. Accessed August 2026.
North Carolina Data Centers — 19 Facilities | USDataMap]. Accessed August 2026.
UNC School of Government, *Chapter 160D Implementation Resources*. Authored by Adam Lovelady, James Joyce, Ben Hitchings, and David W. Owens. Chapel Hill, NC: UNC School of Government, 2020–2026.
UNC School of Government, *160D Guidance Document: Amending an Ordinance*. Chapel Hill, NC: UNC SOG.

What stakeholders may be affected by this proposed ordinance change? If any, have you contacted them? Include a list of stakeholders and their contact information along with any comments they may have expressed.

The petitioners acknowledge that a new data center amendment will affect different groups and individuals in Forsyth County. This includes, but is not limited to, governance, resource management, and regulatory bodies; residents impacted by a proposed data center; schools and religious communities; economic development agencies; data center operators and tenants.

The submitted list (Appendix) provides a focus on the stakeholder group we know best: Forsyth County citizens in their roles as parents, homeowners, religious practitioners, teachers, small business owners, elders, farmers, beekeepers, and gardeners; citizens of different ethnicities, abilities, and income levels. These stakeholders know that large data centers adjacent to residential areas without regulatory standards aimed at protecting the health and wellbeing of residents are a growing public and environmental health threat nationally.

Beginning in the spring of 2026, community members have reached out to the Forsyth County Planning Board Staff, the Planning Board, and the County Commissioners through extensive letter writing and regular attendance and personal testimonies at hearings. We organized two public panels for the Forsyth County community to present in-depth information about operational and environmental impacts of large and poorly (if at all) regulated data centers. The Planning Board and Commissioners will likely have read our letters and listened to many of us.

Affirming the standards and guidelines of *Forward 2045,* the Forsyth County Planning Board voted against the very first Forsyth County proposal for a hyperscale data center. A month later, the Forsyth County Commissioners also voted to protect Forsyth County's community. However, we knew that the regulatory gap was not closed and still posed a dangerous opportunity for other hyperscale data center campus proposals to slip through the gap. In subsequent community meetings, we decided to exercise our civic rights and responsibilities and prepare for the submission of this petition for a text amendment in support of the work of the Forsyth County Planning Board Staff, the Planning Board, and the County Commissioners.

Following recent data center developments in Forsyth County and understanding the limitations of the current UDO, concerned residents worked together to correct this gap through the attached UDO text amendment petition. It represents a synthesis of national studies, state zoning regulations, and local experience with the goal to propose zoning policies that ensure Forsyth County's preparedness for future hyperscale data center applications.

Enclosed please find an appendix at the end of the attached sheets with a list of community stakeholders who have responded to our call for county-wide support of this petition. The list includes stakeholders' comments as well.

How, in your opinion, does this further the goals and implementation of *Forward 2045*?

The proposed ordinance will further the goals and the implementation of *Forward 2045* as explained below, building on and expanding the data center requirements as listed in the *City-County Planning Board Staff Report,* Zoning Case F-1669.[2] The themes that are specifically relevant, based on our analysis on the effects of F-1669 on our community, are attainable and stable housing, managed growth and land use, and a sustainable and healthy environment. The current UDO definition of a computer data center leaves it up to a case-by-case decision process which depends on the degree to which elected city and county officials follow the recommendations of *Forward 2045*.[3]

1. **Attainable Housing and Stable Neighborhoods**
   It has been our strongest motivation in fighting the proposed Rural Hall hyperscale data center due to a potentially devastating threat to residential neighborhoods with diverse populations and different income levels, historical churches, small businesses, historic farmland, retirement communities, elementary schools, and family homes.

   Forward 2045's guiding principle of equity states, "Equity Forward 2045 seeks to reduce disparities and build an equitable community that provides the opportunity to thrive regardless of a resident's neighborhood, race, ethnicity, income, age, or ability." As one participant is quoted, "A place where every individual is valued, honored and cared for" (Introduction).

   Clearer use definitions with measurable MW-based intensity and MW thresholds provide objective and quantifiable criteria and standards for special-use permits that are currently lacking. As a result, residential communities defined by ethnicity, income, age, and neurodiverse ability will be protected from the harmful effects of large data centers and their industrial operations.

2. **Managed Growth and Land Use Implementation**

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[2] CITY-COUNTY PLANNING BOARD STAFF REPORT, F-1669_202606051655577774, p. 6. These requirements reflect the Forward 2045 guiding principles of equity and resilience in that they demand a reduction of water and air pollution; employing the principles of environmental justice to protect economically insecure communities; the lessening of our human carbon footprint; and an emphasis on renewable energy, sustainable development, and quality of life.

[3] The current definition does not cover impact on the surroundings of a data center. "A category of 'Services, Business A' in which the primary service is data processing. This type of facility is primarily devoted to computers, with minimal employment required for monitoring and servicing" (UDO Section 11-15).

The proposed tiered definition of data centers by electrical demand rather than square footage ties managed growth and land-use review directly to county-wide resource burdens such as overall grid capacity, water consumption, wastewater treatment plans, and cooling infrastructure. The new definition thus supports better and more precise planning to forecast load and substation needs in electric grid coordination and water demand modeling. MW thresholds also align local ordinances with NC HB 1063 (Ratepayer and Resource Protection Act), which imposes separate clean-energy and cost-allocation obligations on facilities at or above 40 MW.[4]

3. **Sustainable and Healthy Environment**

The Guiding Principle of Resiliency as expressed in Forward 2045 "seeks to promote resiliency by ensuring that our community can withstand, adapt to, and recover from natural disasters, climate change, economic downturns, and technological changes as they affect our day-to-day lives and future" (Introduction). Appropriate tiered zoning of data centers will build community resiliency by ordinances that demand and enforce the following *Forward 2045* goals as listed on p. 64.

• Identify and eliminate data center barriers to renewable energy production in City and County codes and ordinances.
• Promote the integration of renewable energy technologies into current and future data center developments.
• Promote the use of green infrastructure to reduce impervious surfaces stormwater runoff.
• Support recommendations on climate action from the Winston-Salem Community Sustainability Program Committee by enforcing strict environmental standards for data center generator emissions and heat domes.
• Participate in local and regional planning for emergency response and hazard mitigation, including the development of local environmental emergency hub sites designed specifically for data center emergencies.
• Consider incentives to increase data center energy efficiency.

Bibliography

City of Winston-Salem. Unified Development Ordinances (UDO) and Amendments. Winston-Salem: Planning and Development Services, updated December 15, 2025. Accessed August 2026.

[4] NC HB 1063. "§ 62-129. Definitions and application of terms. 33 For purposes of this Article, the following definitions apply: General Assembly Of North Carolina Session 2025 Page 2 House Bill 1063-First Edition 1 (1) Data center. – A facility or group of co-located facilities under common 2 ownership or control used to house computer systems, servers, network 3 equipment, and associated infrastructure for the storage, processing, or 4 transmission of data. Facilities under common ownership or control, or that 5 are operationally or contractually integrated, whether located on one or 6 multiple parcels, shall constitute one "data center" for purposes of determining 7 the applicability of any threshold, requirement, limitation, or fee pursuant to 8 this Article. 9 (2) Large data center. – A data center that (i) has a projected peak electricity 10 demand of 40 megawatts or greater or (ii) has a projected annual water 11 consumption in excess of one billion liters. 12 (3) On-site clean generation. – Electric generation that is both (i) directly 13 interconnected with a data center and (ii) produced by a clean energy facility 14 or clean energy resource as those terms are defined in G.S. 62-133.8." https://www.ncleg.gov/Sessions/2025/Bills/House/PDF/H1063v1.pdf

North Carolina General Assembly. House Bill 1063: Regulation of Data Centers. Session 2025. Raleigh: NC General Assembly, 2025.
Winston-Salem/Forsyth County Planning Board. Forward 2045 Comprehensive Plan. Winston-Salem: City-County Planning Department, 2024. Adopted by Winston-Salem City Council, November 18, 2024; Forsyth County Board of Commissioners, August 28, 2025.

In Support: 349 Forsyth County Concerned Citizens Signed Petition for a Text Amendment

Signatures were collated on the text amendment petition page at ruralhallinfo.com until September 27, 2026.

On the secure raw data site, ruralhallinfo.com collected

- 385 signature rows total
- Of the 385 signatures, 370 were forysth_resident = YES
- Of the 370 forsyth_resident = YES, 21 were duplicate submissions. (Same name, same address, submitted more than once). For the final document, duplicates were removed, with comments retained (on any duplicate submission) and any comments are included on the submission of the attached document.
- 370 forsyth_residents - 21 duplicates = 349 unique Forsyth County signers.

Ruralhallinfo.com will continue to post updated information about the petition and related developments. The petition drive is closed as of September 28, 2026.