

Data Centers

COMMUNITY TASK FORCE - SITING & LAND USE



Presentation Agenda

- 1 Welcome
- 2 Group Share Out
- 3 Focus: Siting & Land Use
- 4 Group Discussion
- 5 Closing



Presentation Agenda

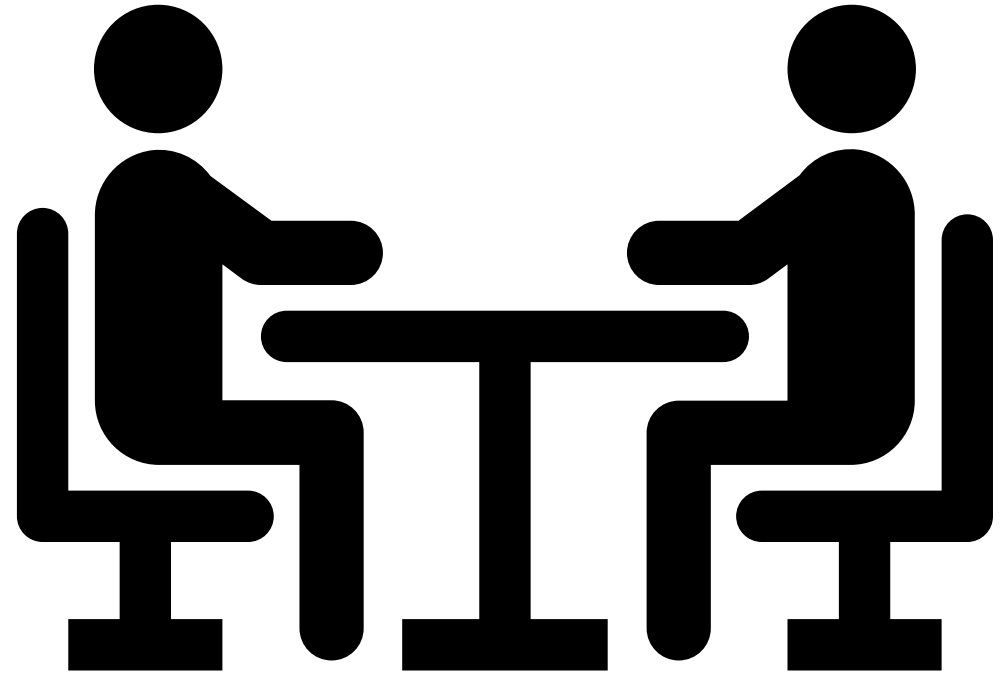
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Refresher of Last Week's Discussion

Discussion Questions:

1. What part of data center water usage is concerning?
2. How should existing policy be updated to address these concerns?
3. What part of data center energy usage is concerning?
4. How should existing policy be updated to address these concerns?
5. Should energy and water conservation plans be a part of applications?
6. How can compliance with conservation plans be ensured?
7. Should City Council add Data Center Regulation to its Legislative Agenda as a priority?
8. What outstanding questions do you have?
9. Highlight anything that you have a better understanding of, or if any concerns have been lessened due to the conversations tonight.
10. Highlight any concerns you still have regarding the Energy/Water nexus.

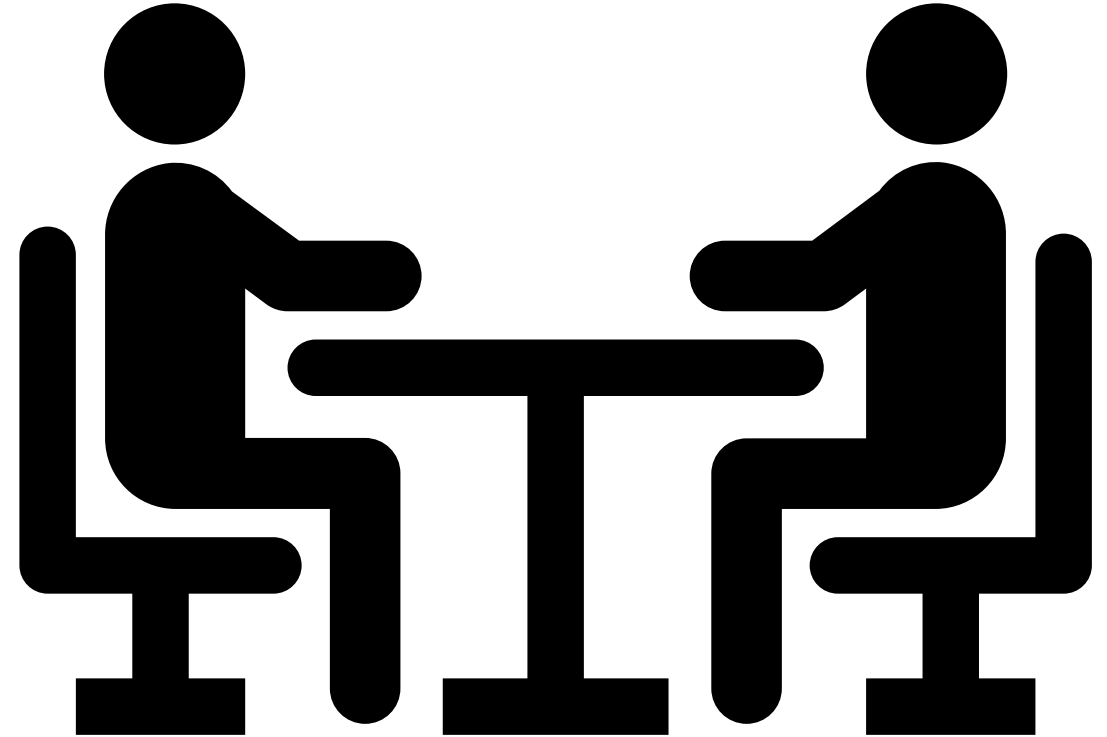


For Share Outs

Large group share out:

(Each group has 10 minutes)

- 1.** Have a representative from your table share out with the large group.
- 2.** Facilitators will capture information and share out in a follow-up.



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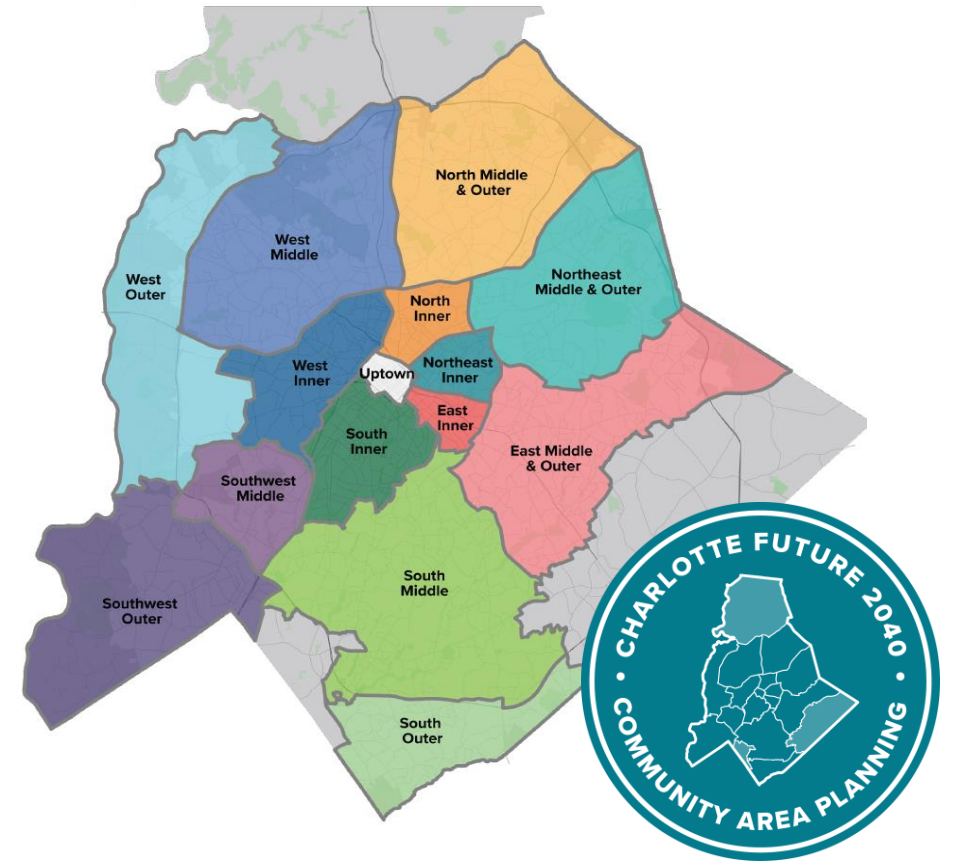


Charlotte's Guiding Policies

Charlotte Future 2040 Comprehensive Plan



Community Area Plans



2040 Plan & Data Centers

Charlotte Future 2040 **does not** have a section labeled “data centers”. It **does** have several policies that help the City make good decisions about them.

	GOAL 1	GOAL 2	GOAL 3	GOAL 4	GOAL 5	GOAL 6	GOAL 7	GOAL 8	GOAL 9	GOAL 10
Putting Data Centers in the Right Places										
Matching Growth with Infrastructure										
Protecting Community Health										
Supporting Equity										
Supporting Sustainability										
Working with Other City Plans										

CAPs and Data Centers

CAPs include several policies that directly relate to data centers:



COMMUNITY CHARACTER POLICIES

- **Checking Infrastructure Capacity (PT 9)**
Requires review of water, sewer, roads, emergency services during rezoning
WHY? Data centers can put pressure on these systems
- **Guiding Where Data Centers Should Go (PT 15)**
Calls for guidance on new land uses, including data centers
WHY? Ensures they're placed in the right locations and designed appropriately



ENVIRONMENTAL JUSTICE POLICIES

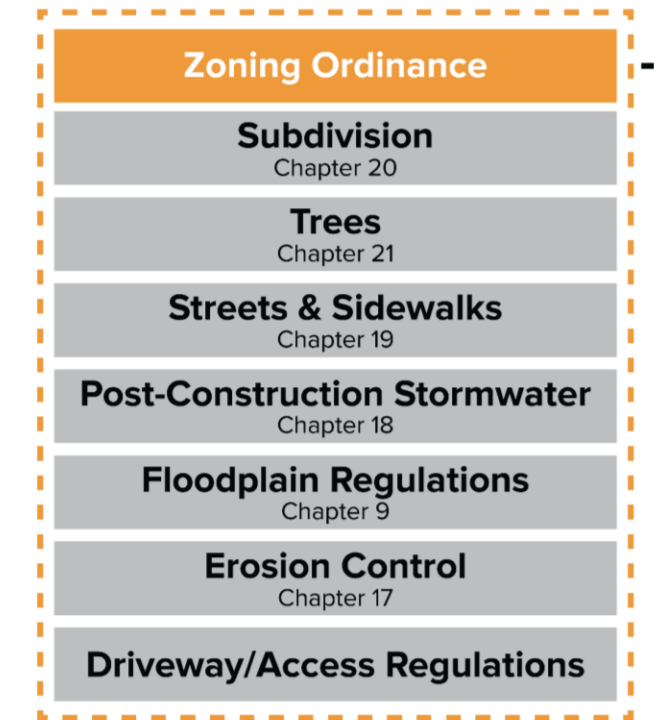
- **Protect Neighborhoods (EJ 1, EJ 2, EJ 3, EJ 4, EJ 7, EJ 8, EJ 13)**
 - Keeping incompatible uses away from homes
 - Reducing noise and air pollution
 - Tracking and reducing heat impacts
 - Considering environmental cleanup needs
 - Exploring better land uses near neighborhoods**WHY?** Protects neighborhood health, safety, and overall quality of life

Policy vs. Regulation

VISION Policy & Plans



LEGALLY BINDING Regulations & Ordinances



Unified Development Ordinance

✓ Adopted August 2022



Policy vs. Regulation

CHARLOTTE
FUTURE
2040
COMPREHENSIVE
PLAN

CHARLOTTE FUTURE
2040 POLICY MAP

UDO
UNIFIED DEVELOPMENT ORDINANCE

PARKS & PRESERVES	NEIGHBORHOOD 1	NEIGHBORHOOD 2	COMMERCIAL	CAMPUS	MANUFACTURING & LOGISTICS	INNOVATION MIXED USE	NEIGHBORHOOD CENTER	COMMUNITY ACTIVITY CENTER	REGIONAL ACTIVITY CENTER
									
All districts permitted	<u>6 Districts</u> N1-A N1-B N1-C N1-D N1-E N1-F	<u>3 Districts</u> N2-A N2-B N2-C	<u>2 Districts</u> CG (Commercial-General) CR (Commercial-Regional)	<u>4 Districts</u> IC-1 & IC-2 (Institutional Campus) RC (Research Campus) OFC (Office Flex Campus) OG (Office General)	<u>2 Districts</u> ML-1 ML-2	<u>1 District</u> IMU	<u>1 District</u> NC	<u>2 Districts</u> CAC-1 CAC-2	<u>3 Districts</u> RAC UC (Urban Core) UE (Urban Edge)
						TOD-TR TOD-NC		TOD-CC TOD-UC	

Charlotte's Development Regulations

CITY OF CHARLOTTE



ADOPTED BY THE CHARLOTTE CITY COUNCIL ON AUGUST 22, 2022
EFFECTIVE DATE: JUNE 01, 2023

Amended March 23, 2026

Unified Development Ordinance (UDO)

- ◀ **Introductory Articles**
- ◀ **Zoning Articles**
 - ◀ *Zoning Districts*
 - ◀ *Use Matrix and Standards*
 - ◀ *General Development Standards*
- ◀ **Subdivision, Streets, and Other Infrastructure Articles**
- ◀ **Stormwater and Natural Resources Articles**
- ◀ **UDO Administration, Nonconformities, and Enforcement Articles**

UDO and Data Centers

UDO Definition

◀ Telecommunications and Data Storage Facility

- ◀ *A facility, accessed only by employees, that houses computer systems and associated components, related to the transmittal and receiving of information, including but not limited to, telecommunications systems, telecommunication and telephone switching systems, cloud storage systems, and server farms.*

Allowed in 8 Zoning Districts

- ◀ **CG (General Commercial)**
- ◀ **CR (Regional Commercial)**
- ◀ **OFC (Office Flex Campus)**
- ◀ **RC (Research Campus)**
- ◀ **ML-1 (Manufacturing and Logistics 1)**
- ◀ **ML-2 (Manufacturing and Logistics 2)**
- ◀ **IMU (Innovation Mixed-Use)**
- ◀ **UC (Uptown Core)**

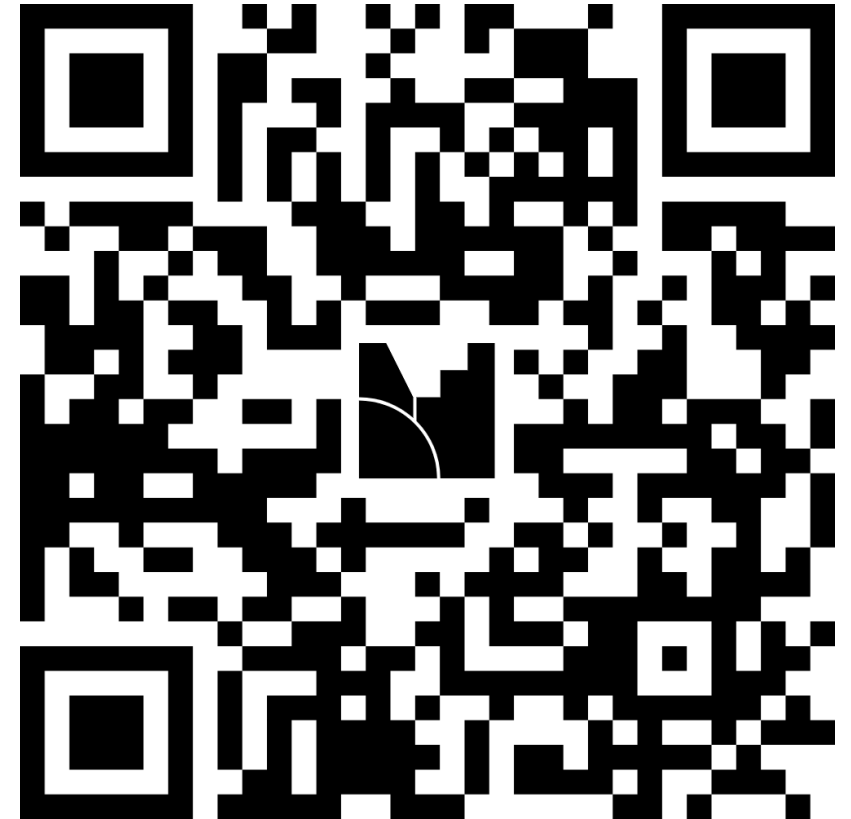
UDO and Data Centers

- ◀ **The UDO does not contain use-specific standards for data centers**
 - ◀ *Regardless of size, type, or capacity, data centers are treated the same*
- ◀ **Data centers are subject to applicable zoning district + general development standards**
 - ◀ *Setbacks, building height & length, blank wall requirements, landscape yards, screening, lighting, etc.*



Mentimeter Moment: UDO

- ◀ Scan QR code
- ◀ Code: 3991 3710



Applicable Standards: CG & CR

CG Standards

- ◀ Min Lot Width: 50'
- ◀ Frontage Setback: 16-40'
(depending on frontage type)
- ◀ Side Setback: 10'
- ◀ Rear Setback: 20'
- ◀ Max Building Height: 50' (65' with bonus)
- ◀ Max Building Length: 500'
- ◀ Max Blank Wall: 20'

CR Standards

- ◀ Min Lot Width: 50'
- ◀ Frontage Setback: 16-40'
(depending on frontage type)
- ◀ Side Setback: 10'
- ◀ Rear Setback: 20'
- ◀ Max Building Height: 50' (65' with bonus)
- ◀ Max Building Length: 650'
- ◀ Max Blank Wall: 40'

Applicable Standards: OFC & RC

OFC Standards

- ◀ Min Lot Width: 50'
- ◀ Frontage Setback: 16'-40'
- ◀ Side Setback: 10'
- ◀ Rear Setback: 20'
- ◀ Max Building Height: 50' (80' with bonus)
- ◀ Max Building Length: 600'
- ◀ Max Blank Wall: 20'-60'

RC Standards

- ◀ Min Lot Width: 25'
- ◀ Frontage Setback: 5'-36'
- ◀ Side Setback: 0' (10' Abutting N1)
- ◀ Rear Setback: 0' (20' Abutting N1)
- ◀ Max Building Height: 120' (250' with bonus)
- ◀ Max Building Length: 500'
- ◀ Max Blank Wall: 20'-50'

Applicable Standards: ML-1 & ML-2

ML-1 Standards

- ◀ Min Lot Width: 50'
- ◀ Frontage Setback: 16'-40'
- ◀ Side Setback: 0'
- ◀ Rear Setback: 10'
- ◀ Max Building Height: 80'
- ◀ Max Building Length: N/A
- ◀ Max Blank Wall: N/A

ML-2 Standards

- ◀ Min Lot Width: 50'
- ◀ Frontage Setback: 16'-40'
- ◀ Side Setback: 0'
- ◀ Rear Setback: 10'
- ◀ Max Building Height: 80'
- ◀ Max Building Length: N/A
- ◀ Max Blank Wall: N/A

Applicable Standards: IMU & UC

IMU Standards

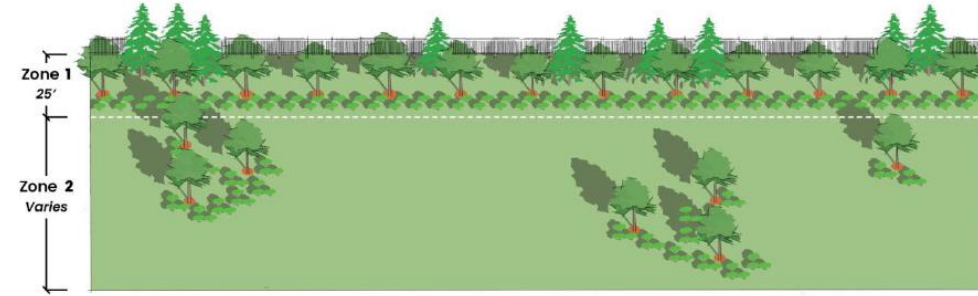
- ◀ Min Lot Width: N/A
- ◀ Frontage Setback: 5'-36'
- ◀ Side Setback: 0' (10' abutting N1)
- ◀ Rear Setback: 0' (20' abutting N1)
- ◀ Max Building Height: 80' (120 with bonus)
- ◀ Max Building Length: 500' (700' with bonus)
- ◀ Max Blank Wall: 40'-60'

UC Standards

- ◀ Min Lot Width: N/A
- ◀ Frontage Setback: 5'-36'
- ◀ Side Setback: 0' (10' abutting N1)
- ◀ Rear Setback: 0' (20' abutting N1)
- ◀ Max Building Height: Unlimited
- ◀ Max Building Length: 400' (600' with bonus)
- ◀ Max Blank Wall: 20'-50'

UDO Landscape Yard Standards

CLASS A LANDSCAPE YARD: ZONE 1/ZONE 2



Zoning District of Property Under Development	Development Type Required to Install Landscape Yard Per Section 20.9.B	Landscape Yard Required for Development When ¹ :	Landscape Yard Class Required
CG	Development in the zoning district	Abutting residential use, or abutting vacant parcel zoned: a Neighborhood 1 or a Neighborhood 2 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), R-8(CD), R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	B
CR	Development in the zoning district	Abutting residential use, or abutting vacant parcel zoned: a Neighborhood 1 or a Neighborhood 2 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), R-8(CD), R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	A
UC	Development in the zoning district	None required	
IC-1, IC-2, OFC, OG, RC	Development in the zoning district	Abutting single-family, duplex, triplex, or quadruplex dwelling, or abutting vacant parcel zoned: a Neighborhood 1 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), or R-6(CD), R-8(CD), R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	B
IMU	Development of an industrial use in the zoning district	Abutting any other zoning district except ML-1, ML-2, I-1(CD), I-2(CD), or BD(CD) Zoning District	B
	Development in the zoning district	Abutting residential use, or abutting vacant parcel zoned: a Neighborhood 1 or a Neighborhood 2 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), R-8(CD), R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	B
ML-1, ML-2	Development in the zoning district	Abutting any other zoning district except CG, CR, ML-1, ML-2, I-1(CD), I-2(CD), or BD(CD) Zoning	A
	Development in the zoning district	Abutting CG or CR Zoning District	
	Development in the zoning district - required for area along a street frontage	When located across a street with a right-of-way width of 100' or less from a residential use or from a vacant parcel zoned: a Neighborhood 1 or a Neighborhood 2 Zoning District, or R-3(CD), R-4(CD), R-5(CD), R-6(CD), R-8(CD), R-8MF(CD), R-12MF(CD), R-17MF(CD), R-22MF(CD), R-43MF(CD), UR-1(CD), UR-2(CD), UR-3(CD), MX-1, MX-2, or MX-3	B

¹ The Zoning Administrator will determine landscape yard applicability for any conditional zoning district not listed and established based on a Zoning Ordinance in effect prior to 1993.

Requirements	Landscape Yard Class		
	A	B	C
Width of Landscape Yard	Development Site Size: Up to 3 acres: 40' 3+ acres up to 7 acres: 65' 7+ acres to 10 acres: 85' More than 10 acres: 100'	25'	10'
Shrubs	Zone 1: 1 evergreen shrub per 2 linear feet Zone 2: 1 evergreen shrub per 300sf	1 evergreen shrub per 3 linear feet	1 evergreen shrub per 5 linear feet
Large Maturing and Medium Maturing Trees	Zone 1: 1 tree per every 30 linear feet Zone 2: 1 tree per every 2,500sf of landscape yard area in Zone 2	1 tree per every 30 linear feet	1 tree per every 50 linear feet
Required % of Trees to be Evergreen Trees	Zone 1: 40% Zone 2: Not required	40%	40%
Small Maturing Tree Substitution (Cannot substitute for required evergreen trees)	Zone 1: Not permitted Zone 2: In lieu of planting 1 required tree, 2 small maturing trees may be planted	In lieu of planting 1 required tree, 2 small maturing trees may be planted	In lieu of planting 1 required tree, 2 small maturing trees may be planted
Fence/Wall	Zone 1: Optional Zone 2: Not permitted The width of Zone 2 may be reduced by 25% if a fence/wall is provided in Zone 1	Optional	Fence/wall required
Fence/Wall Height ¹	6' min.	6' min.	6' min.

¹ The Charlotte Douglas International Airport is not subject to minimum or maximum fence height requirements.

UDO Landscape Yard Standards

Zoning District	Landscape Yard Width Abutting Residential	Landscape Yard Width Not Abutting Residential
CG	25' (Class B)	None
CR	40-100' (Class A)*	None
OFC	25' (Class B)	None
RC	25' (Class B)	None
ML-1	40-100' (Class A)*	25' (Class B) or None**
ML-2	40-100' (Class A)*	25' (Class B) or None**
IMU	25' (Class B)	25' (Class B) or None**
UC	None	None

*Exact Width Depends on total development site acreage

**Depends on abutting zoning district

UDO Lighting Standards

◀ Max Lighting Regulations

- ◀ Any lot abutting a Neighborhood 1 or Neighborhood 2 Place Type: **Zero foot-candle** at the lot line
 - ◀ A light meter detects no usable light
- ◀ Any lot abutting any other Place Type: **One foot-candle** at the lot line
 - ◀ A light meter detects 1 lumen spread over 1 square foot

◀ Lighting Design

- ◀ Light fixtures must be designed to direct light downwards (full or semi-cut off)
- ◀ Max total heights for freestanding full or semi-cut off luminaires
 - ◀ Commercial Place Type and Manufacturing and Logistics Place Type: 35'
 - ◀ All Other Place Types: 26'
- ◀ Flashing lighting is prohibited
- ◀ All exterior lighting shall be located, screened, or shielded in a manner as to not cause glare or impair the vision of cyclists or motorists.

Development Approval Process

◀ **By-Right Development**

- ◀ *The use is identified as permitted in the zoning district*
- ◀ *No special authorizations like variances, rezoning approval, or public hearings are required*
- ◀ *The local government issues permits if the development proposal meets all applicable codes and standards*

◀ **Approval Process**

- ◀ *City of Charlotte completes horizontal approvals*
 - ◀ **Zoning, Transportation, Fire, Urban Forestry, Stormwater, Grading**
- ◀ *Mecklenburg County completes vertical approvals*
 - ◀ **Building Code, Air Quality, Groundwater and Wastewater**
- ◀ *Other agencies complete their own review processes*
 - ◀ **CLT Water, NCDOT, Duke Energy**

Current Land Use Context in NC

State Legislation Limits Local Zoning Authority

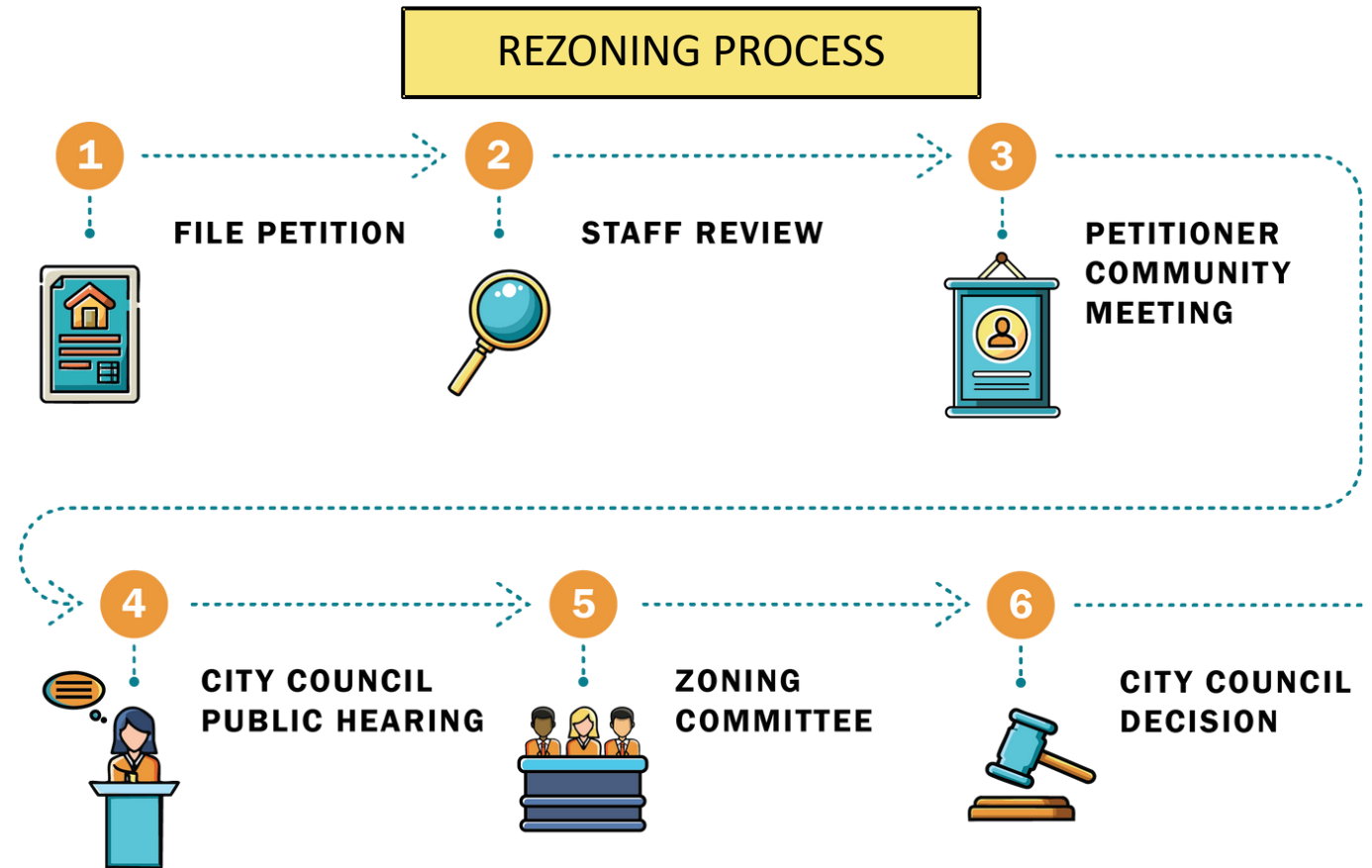
◀ **Current law: SB 382 / Session Law 2024-57**

- ◀ *Session Law 2024-57 amended 160D-601 to limit local governments from down-zoning property without the written consent from all affected property owners*
- ◀ *Went into effect on December 11, 2024, and was 6 months retroactive*
- ◀ *Down-zoning means:*
 - ◀ Decreasing development density;
 - ◀ Reducing permitted uses of land to fewer uses than are currently allowed; or
 - ◀ Creating any type of nonconformity on land not in a residential district.
- ◀ *Significantly limits planning authority throughout the State*

Rezoning

◀ Rezoning Approval Process

- ◀ Rezoning is the act of amending the official zoning map to allow a change in zoning classification
 - ◀ When owners want to develop or use their property in ways that do not conform to their current zoning regulations, they must apply for a change to their zoning classification
- ◀ Rezoning may or may not include site conditions above and beyond the ordinance requirements
- ◀ Rezoning petitions must be approved by City Council



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Group Discussion

Discussion Questions:

- **After hearing about the city's planning framework, what are the biggest concerns with how data centers interact with their surrounding area?**
 - Is this a concern specific to data centers or all large users?
- **What is most important to you?**
 - Site-planning guidance
 - Policy, procedural reviews
 - Incentivizing opportunities
 - Education materials
 - Something else that could support/alleviate potential impacts.
- **Tonight, we reviewed the current ordinance language. From what you heard, if given the opportunity to strengthen ordinances, what would you include?**
 - New policy provisions
 - Additional regulations
 - Required studies or evaluations
 - Other safeguards
- **Where do they fall short?**
 - Are there specific provisions that, as written, don't go far enough to address the concerns you've heard from the community?

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- ◀ **Next Meeting:** September 3, 2026
 - Same time
 - Same place
- ◀ **Next Meeting Topic:** Noise, Lighting and Urban Heat