

Protect Wake County Coalition

Responsible Growth Matters
Join Us in Making a Difference



Community Meeting Agenda

- Why We're Here – *Purpose & goals*
- What's Being Proposed - *Digital Campus plan*
- What's Missing - *Safeguards & protections*
- Power Impact – *Strain on the grid*
- Environmental Impact - *Noise & pollution risks*
- Health Impact – *Effects on families*
- Emergency Management Concerns – *Limits of local response*
- Understanding Overbuild Risk – *What If?*
- What's Next – *Path Forward*
- Community Approach – *What Not to Do*
- Resources for Wake County residents – *Tools & Support*
- Q&A – *Community Discussion*
- Closing Remarks – *Protecting New Hill & Wake County together*



Proposed Digital Campus

- 189-acre “Digital Campus” in New Hill
- Rezoning from residential to light industrial
- 4–6 buildings reaching up to 75 ft
- 100+ diesel generators for energy needs
- 300 MW power demand affecting resources
- Within 2 miles of neighborhoods & thousands of residents



Community Impact

- **Ordinance & Safeguards:** UDO lacks clear rules for data centers
- **Current Gaps –** Noise, light, water and power sources, air quality, emergency services
- **Stronger Protection needed:**
 - Limits on water, power, generator use
 - Enforced noise & light standards
 - Environmental impact assessments
 - Emergency Response capacity requirements
 - Transparency & Disclosure obligations

Power Impacts

- Proposed data center would draw 300 MW, over 2.5x the power used by all of Apex today (120MW)
- October Utilities Commission meeting on the 14th will review whether Duke Energy can even supply enough capacity to support this project, among dozens of other large load projects
- Senate Bill 266 shifts infrastructure and energy costs from large corporations onto residential users like you!
- Rising demand from data centers risks higher electric bills for families and small businesses
- Communities elsewhere (VA, TX,CA) already facing rolling brownouts & blackouts, higher costs for maintaining/updating the grid and stalled renewable goals due to unchecked data center growth





Protecting Our Power Grid

- Department of Energy (DOE) is forecasting blackouts to increase 100 fold across the US by 2030 due to the global AI race and rapidly expanding manufacturing needs of the U.S. economy*
- The DOE is actively encouraging power generation utilities to cancel shuttering Coal Plants and instead identify large-scale projects that can bring speed to power*
- U.S. Energy Secretary Wright forecasts that the U.S. will need 100 gigawatts more of firm capacity within the next 5 years.**
- 1 gigawatt of power is the estimated power required to power 1 million U.S. homes and is roughly the total capacity of the current Shearon Harris Nuclear Power Plant.

*

[Energy Department Launches Speed to Power Initiative, Accelerating Large-Scale Grid Infrastructure](#)

[Projects | Department of Energy](#)

**

[US urges utilities to keep coal-fired plants running as AI demand booms, energy secretary says | The](#)

[Mighty 790 KFGO | KFGO](#)

[US Crafting Plan to Stem Coal-Plant Closures, Energy Chief Says - Energy News, Top Headlines,](#)

[Commentaries, Features & Events - EnergyNow.com](#)

[Commentaries, Features & Events - EnergyNow.com](#)

Understanding Data Centers' Environmental Footprint



Proposed Apex data center property and actual site in northern Virginia

Understanding Data Centers' Environmental Footprint

Natelli's "Digital Campus" Concepts



- Proposing 5 or more buildings
- Up to 75 feet tall and each building approximately the length of a football field
- Total project estimated 300 Mega Watts but could be bigger?
- Other 190-acre data centers can fit 500 MW buildings or larger
- Next to SHNPP and Regional wastewater treatment plan

Understanding Data Centers' Environmental Footprint

NOx

Air Toxics

PM 2.5



Grid Power

Diesel Generators and storage tanks

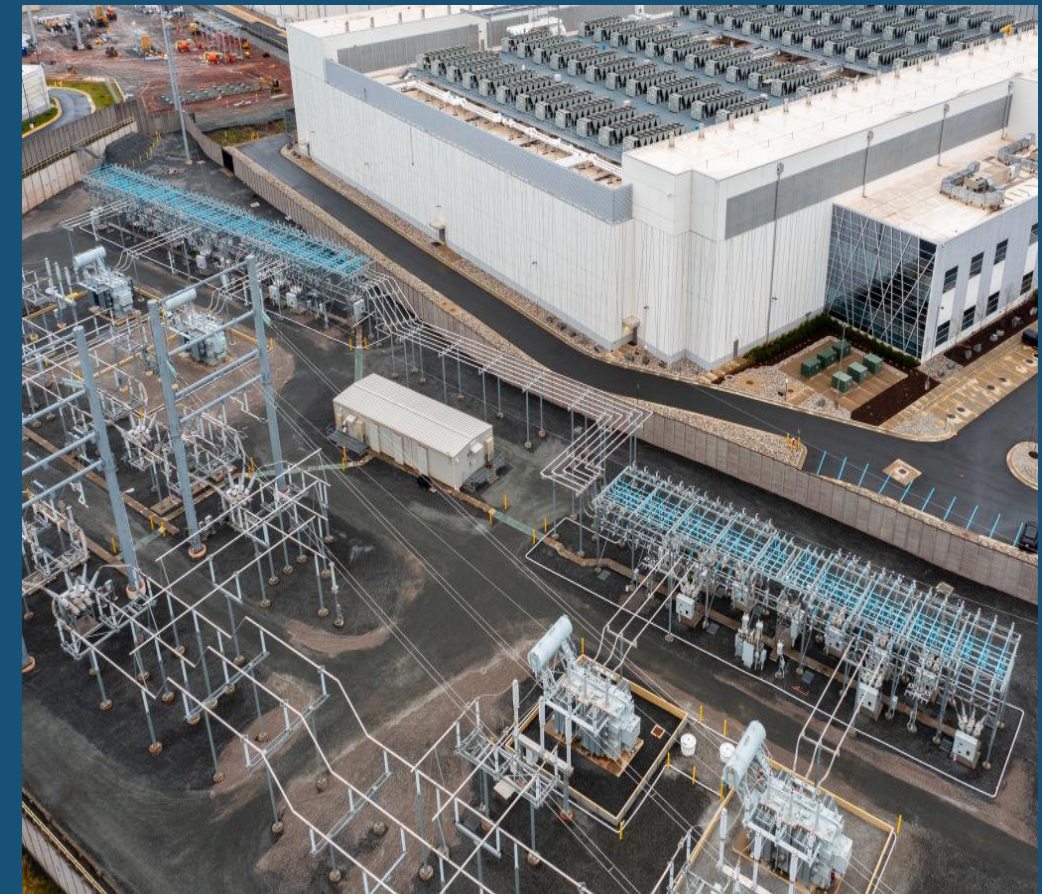
Air Quality

Mining, Li-ion Batteries, e-waste

Water contamination

Noise and smell

Lighting at night



Understanding Data Centers' Environmental Footprint

Treated Wastewater Proposed for Cooling System



- Data center application proposes using treated reclaimed wastewater for cooling servers
- Western Wake Partners wastewater treatment plant serves Apex, Cary, Morrisville and Research Triangle
- Cooling system estimated to need up to 2.7 million gallons per day
- Up to 1,000,000 gallons per day of water could be LOST to evaporation
- Will impact downstream users of Cape Fear River

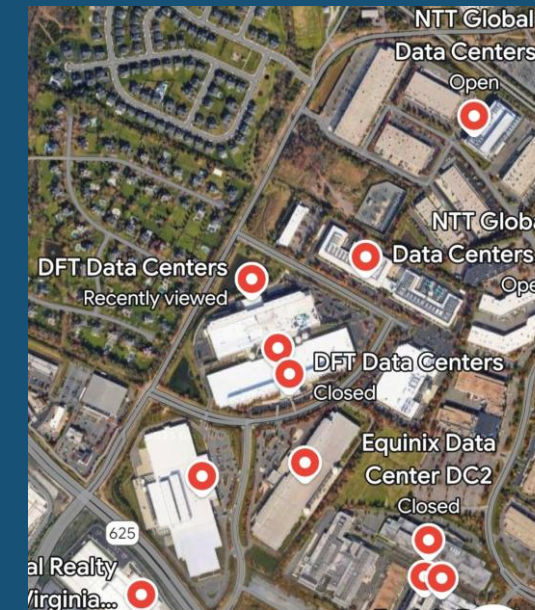
Understanding Data Centers' Environmental Footprint

Environmental considerations of rezoning

Natelli Investments applied to the Town of Apex to annex and rezone from Residential to Light Industrial

(LI) Conditional Zoning:

- LI used for building supply stores, gas stations, laboratories, warehouses and **NOT Data Centers**
- “Design minimizes adverse impacts, including visual impact of proposed use on adjacent lands.”
- “Design minimizes environmental impacts and protection from significant deterioration of water and air resources, wildlife habitat, and other natural resources.”



Health Effects of Data Centers

Exploring the significant health impacts of data centers



Air Quality Concerns

- Emissions from generators & cooling systems reduce local air quality
- Poor air quality → more ER visits, morbidities and mortality
- Linked to cancers, cardiovascular disease, asthma, diabetes, obesity and dementia

Children's Health Impacts (elementary aged children)

- For children, poor air quality negatively impacts neurocognitive development
- Delicate particulate matter that can cross the blood-brain barrier affects both brain structures and emotional regulation

Pregnancy Impacts

- Poor air quality during pregnancy linked to:
 - Higher risk of stillbirth and premature birth
 - Greater likelihood of respiratory, neurological, and metabolic problems in early childhood

Health Effects of Data Centers

Exploring the significant health impacts of data centers



Noise Pollution Issues

- Exposure to low-frequency noise, even at safe volumes, can increase stress and anxiety, as well as worsen heart disease with prolonged exposure.

Light Pollution Issues

- Increased exposure to ambient artificial lighting can adversely affect various human biological processes. This includes disrupting melatonin production, altering circadian rhythms, and impacting the sleep-wake cycle. Such disruptions may lead to mood disorders, depression, obesity, changes in eye health, and problems with spermatogenesis. Additionally, excessive light exposure has been linked to higher rates of preterm birth.

Emergency Services Concerns

Key challenges posed by proposed data center buildings

- 60-75 ft. buildings exceed Apex ladder reach, limiting firefighting
- High security slows fire access, giving flames time to spread
- ‘Surround and drown’ tactics could create toxic runoff of thousands of gallons/minute.
- Lithium backup batteries risk thermal runaway – fires are hard to extinguish and release toxic smoke
- 100 diesel generators heighten risks of explosions, air pollution, and environmental disaster.



Emergency Services Concerns

Current Gaps in Firefighting Resources

- 15+ minute response times - current stations are too far away, leaving large-scale incidents to escalate before help arrives
- Insufficient staffing—15–30 additional firefighters needed across three shifts to safely operate new equipment and facilities.
- High equipment costs—each new ladder truck and engine costs around \$1M, straining town budgets.
- Long lead times—it takes years to purchase, deliver, and staff new apparatus, delaying readiness.
- Water supply concerns—local hydrant system may not handle 4,000+ gallons per minute required in a major fire.

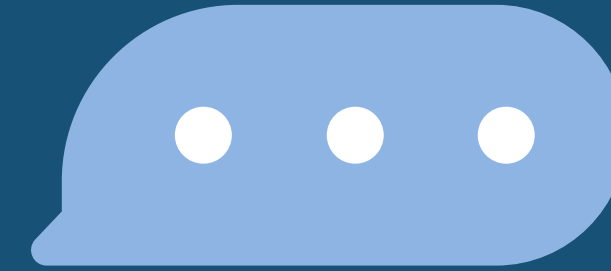




Understanding Overbuild Risk

We Have Been Here Before

The AI Rally May Be the New Dot-Com Bubble

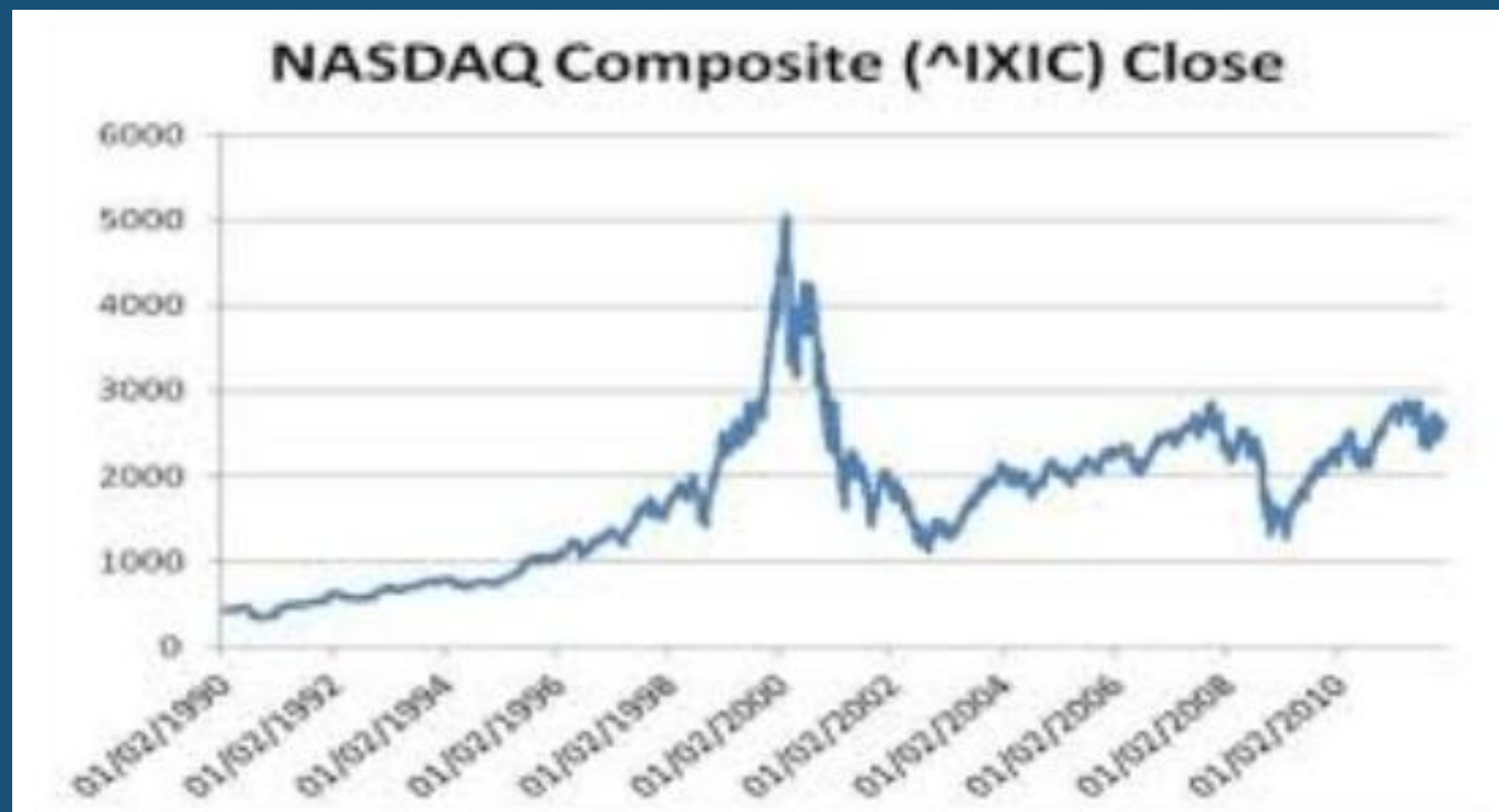


Sep. 23, 2025 12:32 PM ET | S&P 500 Index (SP500), SPX, SPY, DJI, NDX, DIA, QQQ, IVV, VOO | NVDA, AAPL, MSFT...



Anna Sokolidou
4.59K Followers

Follow



- AI-related stocks have seen meteoric valuation gains—raising concerns that the current rally mirrors the speculative excesses of the dot-com bubble.
- Massive capital expenditures on AI infrastructure (data centers, chips, etc.) may outpace the actual revenue these investments can generate.
- Many investors feel compelled to participate in the AI trend—or risk being left behind—creating herd behavior and reinforcing the bubble.
- If leading AI companies miss earnings expectations or broader economic headwinds emerge, the bubble could correct sharply.
- The sustainability of the rally depends heavily on future proof that AI investments deliver real business value, not just hype.

data center "overbuild"

All

Images

Videos

News

More

Search Assist

Duck.ai

Protected

All regions

Safe search: moderate

Any time

CDW

https://www.cdw.com

...

Axiom for Data Centers - CDW Server Room Tech

Shop Axiom upgrades at CDW-cost-effective, compatible, and trusted. CDW & Axiom deliver data center solutions that never void warranties.

Industry Leading Partners · Dedicated Experts · Wide Variety of Brands

Types: Computers, Cables, Data Storage, Electronics, Memory

Data Center Knowledge

https://www.datacenterknowledge.com › data-center-construction › analysts-warn-of-overbuild-risks

...

Analysts Warn of Overbuild Risks as AI Data Centers Reshape Industry

May 12, 2025 · As AI drives unprecedented data center growth, Moody's warns of overbuilding risks and infrastructure challenges in the race to gigawatt-scale facilities.

AIInvest

https://www.aiinvest.com › news › data-center-bubble-overbuilt-overvalued-overexposed-2506

...

Data Center Bubble: Overbuilt, Overvalued, and Overexposed

Jun 29, 2025 · The tech world is buzzing about the next big thing—AI, quantum computing, and the metaverse—but beneath the hype lies a ticking time bomb: the data center bubble. As Josh Wolfe of Lux Capital warns, we're repeating history. This isn't just another tech boom; it's a reckless overbuild of infrastructure that could crash like fiber-optic or cloud computing before it. And this time, the ...

Mizuho Financial Group

https://www.mizuhogroup.com › americas › insights › 2025 › Q3 › ai-capex-conundrum-growth-o...

...

AI's capex conundrum: Growth, overbuild fears, and the road ahead

Mar 21, 2025 · The AI boom has been transformative, with significant investments from hyperscalers. However, the release of DeepSeek-R1 has raised concerns about the sustainability of AI growth, leading to a selloff in AI stocks and fears of overbuilding data centers. However, history suggests these developments should be viewed as part of a broader strategic evolution rather than a sign of widespread ...

siliconflash.com

https://siliconflash.com › navigating-the-shift-understanding-overbuild-risks-in-ai-data-center-ind...

...

Navigating the Shift: Understanding Overbuild Risks In AI Data Center ...

May 12, 2025 · Summary: 1. Moody's Ratings report highlights the rapid growth in data center construction in 2025, raising concerns about credit risks and potential overbuilding. 2. AI data centers are evolving into massive campus-style "factories" with significant power capacity, leading to increased rack densities and adjustments in capacity planning by hyperscalers. 3. Power constraints are ...

Technology Magazine

https://technologymagazine.com › ai-and-machine-learning › the-ai-data-centre-potential-the-urg...

...

AI Expansion Sparks Data Centre Overbuild Fears

May 6, 2025 · The AI boom is pushing data centres to their limits as hyperscalers invest heavily to meet growing computing demands. According to a report from Moody's Ratings, hyperscale data centre capacity could expand by 20% annually after 2028. Yet, the same report cautions that the sector faces complex risks, including overbuilding, supply chain volatility and escalating financial pressures. Data ...

Tech Mindset

CR

BETTER TO OVERSPEND
THAN FALL BEHIND



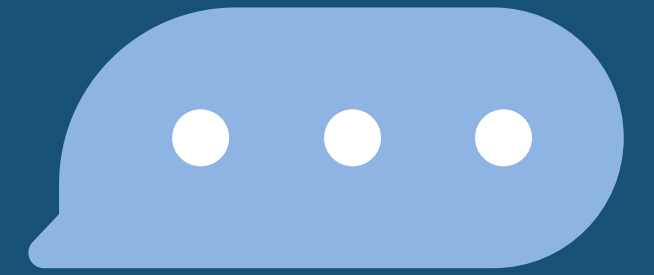
Meta's

\$600B

AI Bet

RACE TO SUPERINTELLIGENCE

Data Center Bubble: Overbuilt, Overvalued and Over Exposed



Historical Precedents: When Tech Overbuilds

This isn't the first time tech has chased a mirage. The 1990s fiber-optic boom saw companies like Global Crossing build \$30 billion in undersea cables—only to see prices collapse by 99% after the dot-com crash. Similarly, the 2000s cloud computing rush left ghost data centers in its wake.



Wesley Park • Follow

Wesley Park is an AI-powered market...

- Data centers are being built too fast, risking oversupply and wasted investment.
- Companies are betting on unproven nuclear tech (SMRs) to power them, which carries big risks.
- The situation mirrors past tech bubbles (fiber-optic cables, cloud rush) that ended in collapse.
- Analysts warn data center REITs are overpriced; energy-efficiency companies may be safer bets.



WHAT IF?

- The Building gets built; Duke Energy invests in the power and infrastructure BUT:
- The computers are never installed
- No new jobs
- No new tax revenue
- Just higher utility rates and an empty building?



Community Approach: “Just Say No” vs. “Responsible Growth”

Existing state laws that guide county and local processes are stringent and problematic

- Cannot vote their conscience, or even the representative conscience of the constituency
- This is why Statesville’s DC was approved and why a developer is taking legal action against Tarboro following their DC vote

Town Council is lawfully required to fairly review this application

- Cannot speak publicly in favor or against the data center
- If they vote no, reasons are required; these reasons must be consistent with what is permissible by law
- They can vote “yes, if...” and set conditions that the developer must agree to meet in order to move forward. If the developer does not agree, this can serve as the reason for what ultimately becomes a “no”

Strategic Pathway(s)

This outlines three potential paths
forward for development decisions.

01

Developer withdrawal may lead to
significant delays in project timelines.

02

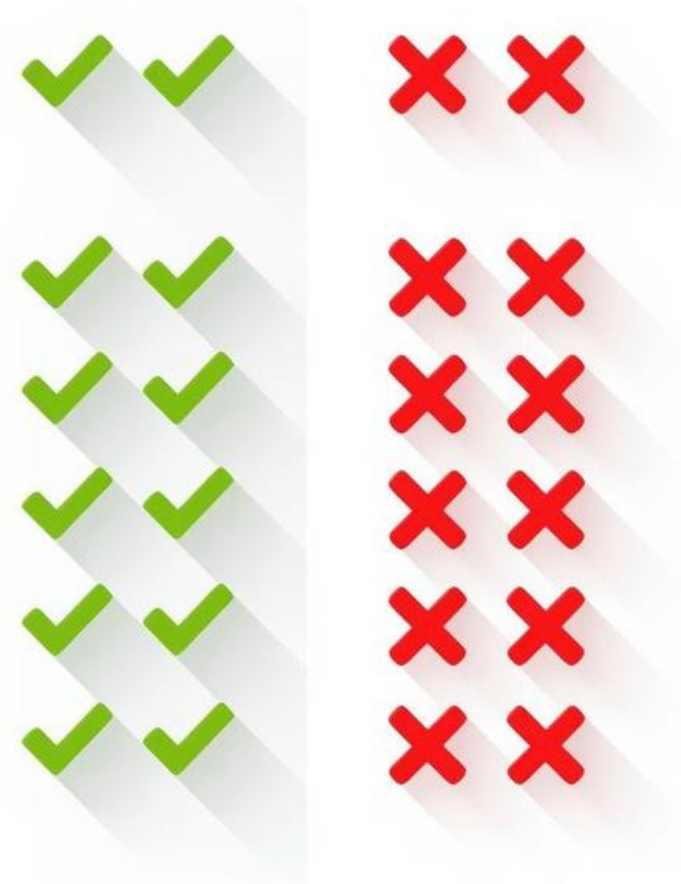
Town Council Votes 'No' could result in
halted activities and require re-evaluation.

03

Town Council Votes 'Yes' with extensive
conditions may impose **stringent
requirements** on developments.

Do's and Don'ts

DO



- Show up and wear **red**
- Invite friends!
- Ask to speak with town council members, candidates, etc. in private
- Be informed about the facts
- Attend town meetings, candidates' forums, etc.
- Canvass neighbors, local businesses

DON'T

- Be rude or disruptive when attending town meetings
- Say "not in my backyard"
- State that PWCC has endorsed certain candidates
- Publicly ask candidates or current TC members if they are in favor of the data center
- Be discouraged by what you've learned tonight

Important Dates for Apex

Upcoming meetings at Apex Town
Hall - wear RED!
Apex Town Hall – 73 Hunter Street

- Monday, October 13th - Planning Board Mtg. 4:30pm
- Tuesday, October 14th - Town Council Mtg. 6:00pm
- Thursday, October 23rd - Peak Plan 2055 Mtg. 4:30pm
- Tuesday, October 28th - Town Council Mtg. 6:00pm
- Thursday, November 6th - Planning Committee Mtg. 9:00am
- Monday, November 10th - Planning Board Mtg. 4:30pm
- Thursday, November 13th - Town Council Mtg. 6:00pm
- Monday, December 8th - Planning Board Mtg. 4:30pm
- Tuesday, December 9th - Town Council Mtg. 6:00pm



Resources



Sign Up Today

Digital and Paper Options

Choose between **paper** sign-up or
QR code for convenience.



Volunteer for Events

Engage at Apex Events

Join us for information sharing.
Paper Sign up available or email us!



Merchandise Available

Purchase yard signs, shirts, and
stickers.

Order on the Sign Up QR or email us
at www.protectwakecounty.org

Website

www.protectwakecounty.org

- **Data Center Impacts** – health, environment, community, costs
- **Your Representatives** – contacts & templates
- **Media Coverage** – articles & news links
- **Email Us-Order Merchandise**, ask a ?, leave a comment
- **Volunteer Sign-Up** – canvassing, outreach, legal, research, social media
- **Petition** – Change.org link to sign & share
- **Resources** – Flyers for neighborhoods, businesses, and workplaces



Questions???

**Thank You for Your
Time Today!**