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CONSULTING

DATA CENTERS. REAL DEMAND. REAL IMPACT ON COMMUNITIES.

Municipal and community leaders must balance growth with resources, resilience, and quality of life.

- ✓ More demand.
- ✓ More strain.
- ✓ More risk.
- ✓ Plan today.



WHY MUNICIPAL LEADERS SHOULD PAY ATTENTION



WATER IS LIMITED

Data centers can use millions of gallons of water per day, stressing local supplies and drought resilience.



POWER IS STRAINED

High electricity demand can increase costs, risk outages, and delay service for residents and businesses.



FIRE & SAFETY RISKS

Large facilities increase fire load and require specialized suppression and emergency planning.



INFRASTRUCTURE PRESSURE

Roads, bridges, sewer, and broadband face greater wear, congestion, and upgrade costs.



QUALITY OF LIFE IMPACTS

Noise, traffic, light, water restrictions, and environmental impacts affect community well-being.



LONG-TERM COMMUNITY COSTS

Service expansion, maintenance, and resilience investments must be planned and funded.

THE SCALE OF EXPOSURE



10+ STATES

Actively competing for data center investment—your community is in the market. (Deloitte, 2024)



UP TO 6 BILLION GALLONS/DAY

Potential U.S. water use for data center cooling by 2030—enough to supply millions of homes. (TLG, 2023)



20–30 GW BY 2030

U.S. data center power demand growth projection—competing with homes, schools, and businesses. (McKinsey, 2023)



EXTREME HEAT RISK

Heat waves increase cooling needs and strain water, power, and emergency services. (NOAA, 2024)



MULTI-JURISDICTION IMPACT

Impacts cross municipal boundaries—requiring regional coordination and shared solutions. (ICMA, 2023)



RESILIENCE & CONTINUITY

Outages to power, water, or networks can disrupt critical community services and data operations.

A FRAMEWORK FOR SMART DECISIONS

1



ASSESS & UNDERSTAND

Evaluate proposals for water, power, fire, traffic, environment, and community impact.

2



NEGOTIATE COMMUNITY BENEFITS

Secure commitments: infrastructure, water offsets, tax revenue, workforce, and resiliency investments.

3



PLAN & PREPARE

Integrate facilities into emergency plans, zoning, land use, and long-term capital planning.

4



BUILD SAFETY & RESILIENCE

Require fire protection, redundancy, and continuity measures that protect the community.

5



MONITOR & ENFORCE

Track compliance, resource use, and performance against agreements and code.

6



ENGAGE THE COMMUNITY

Communicate early and often—transparency builds trust and better outcomes.



Public safety and lawful prioritization come first. Protect people, then property, then processes.

DATA CENTER DEMANDS IMPACT COMMUNITY RESOURCES



WATER

- High daily usage
- Strain on aquifers and reservoirs
- Drought vulnerability
- Wastewater volume increases



POWER

- Higher peak demand
- Grid reliability risk
- Outages impact critical services
- Higher utility costs



FIRE & SAFETY

- Higher fire load
- Specialized response needs
- Water for fire suppression
- Increased EMS demand



TRANSPORTATION

- Construction traffic
- Road wear & safety
- Congestion
- Emergency access impacts



ENVIRONMENT

- Air & noise impacts
- Heat island effect
- Light pollution
- Land & habitat impacts



These demands don't just affect data centers—they affect your ability to serve and protect your community.

A BETTER WAY: PLAN WITH COMMUNITY PRIORITIES

Align data center growth with community goals and legal priorities under pressure.



KEY ACTIONS

- ✓ Map resource capacity and vulnerabilities.
- ✓ Set clear standards for water and energy use.
- ✓ Require infrastructure and public safety investments.
- ✓ Coordinate with partners and regional agencies.
- ✓ Build redundancy for critical services.

SUCCESS MEASURES

- ✗ Reliable water and power for all.
- ✗ Faster emergency response.
- ✗ Infrastructure that keeps pace.
- ✗ Transparent agreements and enforcement.
- ✗ Stronger, more resilient communities.



Strong planning today creates resilient, affordable, and livable communities tomorrow.

WHAT MUNICIPAL LEADERS CAN DO



LEAD EARLY

Engage stakeholders early—residents, businesses, developers, and regional partners.



ANALYZE IMPACTS

Use data to model fiscal, infrastructure, environmental, and public safety impacts.



NEGOTIATE SMART

Secure enforceable agreements with measurable community benefits.



PREPARE & PROTECT

Strengthen emergency plans, training, and redundancy for critical services.



REVIEW & ADAPT

Monitor outcomes and adapt policies as conditions and technology evolve.



Scan to learn more about protecting your community and managing risk.

ferndon.com

**RISK TODAY.
RESILIENCE TOMORROW.**



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SOURCES

Deloitte, 2024; McKinsey, 2023; TLG, 2023; NOAA, 2024; ICMA, 2023; FEMA, 2023; NIST, 2020; EPA, 2023; Uptime Institute, 2024; American Water Works Association, 2023.