Regional Growth Series
Briefing: Building for AI-Data Centers, Infrastructure and the Future of Regional Growth

August 2026

This briefing is part of the Allegheny Conference on Community Development's Regional Growth Series, which provides employers, investors, and regional leaders with timely insights and reflections on the policy, market, and execution issues shaping Southwestern Pennsylvania's growth trajectory. The session explored how the region can align its power, water, industrial sites, manufacturing base, talent, construction capacity, and financial ecosystem to compete for large-scale AI infrastructure investment.

Drawing from the panel and audience discussion, the document focuses on what determines whether AI infrastructure can move from site interest to operations, and whether the resulting investment creates broader regional value through construction, operations, manufacturing, supply chains, and community opportunity. The core takeaway: Southwestern Pennsylvania already has many of the required assets, but competitiveness will depend on how quickly and reliably assets can be integrated into a repeatable delivery system that moves sites from interest to operation while generating broader regional value.

Executive Summary

- AI infrastructure growth is accelerating, with regional opportunity extending beyond data centers into energy, manufacturing, supply chains, defense, and nuclear-related development.
- Regional strengths include power and natural resources, abundant water, industrial and brownfield sites, manufacturing capacity, technical talent, and a strong construction workforce.
- Speed-to-market is a defining constraint; site conditions, topography, infrastructure gaps, and permitting can significantly extend timelines.
- Water availability is not sufficient on its own – treatment, conveyance, cooling systems, wastewater handling, and end user requirements must be addressed early.
- Workforce demand is large during construction and sustained through 24/7 operations, maintenance, and ongoing facility upgrades.
- Capital and insurance depend on predictable permitting, infrastructure readiness, and clear execution pathways.
- Community confidence is part of project execution and depends on transparency around impacts, benefits, and infrastructure costs.

What the Discussion Signals for Regional Growth

1. Connected Growth Platform

AI infrastructure functions as an industrial multiplier rather than a standalone sector. Power enables data centers and industrial expansion, which in turn drives demand for manufacturing, equipment, and supply chains, reinforcing growth in technology, defense, and nuclear sectors. The Conference noted that roughly 70% of active projects are in energy and manufacturing, rising to about 86% when data centers are included.

2. Speed-to-Market & Execution Discipline

Time is a primary competitive factor. Topography, brownfield remediation, demolition, infrastructure upgrades, and permitting can delay projects. Success depends on early alignment among utilities, contractors, government, and financing partners to identify constraints upfront and reduce downstream delays.

3. Infrastructure Readiness

Physical resources are strong, but readiness varies by site. Water systems require coordinated planning across treatment, conveyance, distribution, cooling design, wastewater, and end user needs. Similar constraints apply to power and land, where aging infrastructure and upgrade requirements must be balanced with reliability and affordability for existing customers.

4. Workforce & Long-Term Value

A 250-megawatt facility may require ~1,500 workers at peak construction, including around 500 electricians, with ~5,000-6,000 total workers engaged over the build cycle. Long-term value continues through 24/7 operations, maintenance, service contracts, and recurring technology upgrades. Community colleges, trade and technical schools, apprenticeships, and employer partnerships are central to sustaining the talent pipeline.

5. Capital & Community Confidence

Large-scale AI projects concentrate capital and require confidence in permitting, design, infrastructure, and delivery. Investors also weigh community acceptance and risk. One panelist noted that projects must "earn their welcome" through transparency and engagement. At the same time, infrastructure investments must avoid shifting costs or service impacts onto existing customers.

Alignment & Friction Points

Areas of Alignment

- Strong power assets, natural resources, and water availability
- Industrial land, brownfields, and redevelopment potential
- Manufacturing base and complex industrial experience
- Technical talent and established technology presence
- Construction workforce, unions, and training institutions

Areas of Friction

- Slow permitting and site preparation, especially in complex terrain
- Aging infrastructure and site-specific utility constraints
- Large, sustained workforce requirements across construction and operations
- Capital and insurance sensitivity to execution uncertainty

Implications for Employers

- **Developers & Hyperscalers:** Engage utilities, contractors, and communities early; define long-term operational and upgrade needs upfront.
- **Construction, Manufacturing, & Service Firms**: Prepare for both high-intensity build cycles and sustained demand in equipment, maintenance, and technical services.
- **Utilities & Workforce Partners**: Align infrastructure investment and training pipelines with project demand while maintaining reliability and affordability for existing customers.

Where the Allegheny Conference Is Engaged

- Coordinating public, private, and civic partners to support project execution
- Connecting active project pipelines to sites, infrastructure, workforce, and supply chains
- Advancing a unified regional investment narrative
- Supporting a repeatable delivery model focused on speed, permitting, and execution readiness

Bottom Line

Southwestern Pennsylvania has the core assets to compete in the AI infrastructure economy. The opportunity lies in integrating those assets into a fast, predictable, and responsible delivery system that accelerates investment while maximizing workforce, supply chain, and community benefits.