

CASE STUDY

Advancing Digital Infrastructure The QTS DFW2-DC3 Data Center in Wilmer, Texas

Executive Summary

In an era defined by exponential Data Growth, Artificial Intelligence, and Cloud Computing, reliable, scalable, and sustainable Data Infrastructure is paramount. The QTS DFW2-DC3 Data Center, part of QTS Data Centers' expansive South Dallas (DFW2) campus in Wilmer, Texas, represents a strategic investment in next-generation digital capabilities. This 560,000-square-foot, two-story facility, with a projected critical power capacity of 43 MW, has begun construction as of this Case Study and is expected to achieve substantial completion by January 2027, at an estimated cost of \$350 million. Rogers-O'Brien is the General Contractor with Checkmark's Contractual component at 1.6 million dollars.

Developed by QTS, a Blackstone Portfolio Company renowned for its Hyperscale and Enterprise Data Solutions, DFW2-DC3 will enhance the Dallas-Fort Worth region's status as a premier Data Center hub. Key features include advanced redundancy, efficient cooling systems, and a commitment to sustainability through Water-Free Technologies and Clean Energy Integration. Beyond technical excellence, the Project promises significant economic benefits, including hundreds of high-tech jobs and community partnerships.

This Case Study explores the project's background, specifications, strategic advantages, and broader implications, underscoring QTS's role in powering the future of Data-Driven Innovation.

Introduction - The Evolving Data Center Landscape

The Global Data Center market is projected to surpass \$300 billion by 2026, driven by surging demand for AI workloads, edge computing, and hybrid cloud environments. Texas, with its business-friendly policies, abundant power resources, and strategic location, has emerged as a leader in this space. The Dallas-Fort Worth (DFW) Metroplex alone hosts over 100 Data Centers, with 350 Data Centers in North Texas supported by incentives like sales tax exemptions on energy and equipment.

QTS Data Centers, headquartered in Overland Park, Kansas, and backed by Blackstone, operates a portfolio exceeding 2 GW of capacity across 13 U.S. States. With a focus on "Freedom Platform" designs that standardize security, scalability, and

efficiency, QTS serves Fortune 500 Enterprises, Hyperscalers, and Government Entities. The DFW2 campus in Wilmer exemplifies this approach, expanding QTS's Texas footprint alongside facilities in Fort Worth, Irving, and San Antonio.

Project Overview

Announced through filings with the Texas Department of Licensing and Regulation (TDLR) in April 2025, DFW2-DC3 is the third building in the South Dallas campus expansion.

This \$350 million project builds on the momentum of DFW2-DC1 (completing September 2025) and DFW2-DC2 (under construction since May 2025), collectively representing a \$650 million commitment to the region.

As of this Case Study, the Project remains in the planning phase, with groundbreaking imminent (NLT than November 2025).

Strategic Location and Site Advantages - Geographic and Infrastructure Benefits

Situated at 303 Mason Road, Wilmer, TX 75146, in Southern Dallas County, the DFW2 campus spans a 52-acre site near the Wilmer-Lancaster border...approximately 15 miles south of downtown Dallas. This location offers:

- ✓ **Connectivity:** Direct access to major fiber networks, including those from providers like AT&T, Lumen, and Zayo, ensuring low-latency connections to global internet exchanges.
- ✓ **Transportation:** Proximity to I-20, I-35E, and DFW International Airport (20 miles North), facilitating logistics for equipment deployment and personnel.
- ✓ **Power Reliability:** Backed by Oncor Electric Delivery's robust grid, with scalable utility power supporting up to 75 MW across the campus.
- ✓ **Tax Incentives:** Eligibility for Texas's Chapter 313 program and sales/use tax abatements, reducing operational costs for qualifying tenants.

Wilmer's zoning and environmental profile further de-risk the development, minimizing regulatory hurdles while aligning with regional growth in tech and logistics.

Technical Specifications - Facility Design

DFW2-DC3 is engineered as a two-story Hyperscale Data Center, totaling 560,000 square feet.

Designed by Highland Associates, it adheres to QTS's proprietary "Freedom" architecture, which prioritizes modularity and rapid deployment.

The layout includes:

- ✓ Data Halls: Multi-tiered White Space for servers and storage, optimized for high-density racks (up to 50 kW per rack).
- ✓ Support Spaces: Dedicated Mechanical, Electrical, and Plumbing (MEP) galleries, plus administrative areas for on-site operations.
- ✓ Redundancy: N+1 or 2N configurations for Power, Cooling, and Networking, achieving Tier III/IV uptime standards.

Power and Cooling Infrastructure

- ✓ Power delivery is a cornerstone, with 43 MW of critical IT load powered by utility feeds, diesel generators, and UPS systems for seamless failover.
- ✓ Cooling employs advanced air handlers and potential liquid immersion options, targeting a Power Usage Effectiveness (PUE) below 1.3....among the industry's best.

Sustainability and Operational Efficiency

QTS integrates environmental stewardship into every Project. For DFW2-DC3:

- ✓ Water-Free Cooling: Adoption of air-based systems to conserve local water resources, critical in Texas's arid climate.
- ✓ Renewable Energy: Procurement of clean power through renewable energy certificates (RECs) and potential on-site solar integration.
- ✓ Efficiency Metrics: LED lighting, smart BMS (Building Management Systems), and AI-optimized load balancing to minimize waste.
- ✓ Carbon Reduction: Projected 20-30% lower emissions than legacy facilities via efficient transformers and heat recapture.

These features not only reduce operational costs but also appeal to ESG-focused tenants, positioning DFW2-DC3 as a green benchmark in Hyperscale Infrastructure.

Economic and Community Impact

The DFW2 expansion, including DC3, is a catalyst for Southern Dallas County's economy. Key impacts include:

- ✓ Job Creation: Over 200 full-time high-tech roles (e.g., critical operations technicians, network engineers) and hundreds of construction positions during the 14-month build.

- ✓ Workforce Development: Partnerships with local colleges and veteran programs for internships and training.
- ✓ Local Investment: \$350 million direct spend on materials, labor, and suppliers, boosting GDP by an estimated \$500 million over the Project's Lifecycle.
- ✓ Community Engagement: QTS's commitment to responsible development, including noise mitigation, traffic management, and support for Wilmer's education and nonprofit sectors.

Conclusion

QTS anticipates leasing opportunities opening in Q4 2026 with the QTS DFW2-DC3 Data Center standing as a testament to forward-thinking infrastructure in one of America's Most Dynamic Markets, DFW.