Jerry Moore
State Chief Information Officer
Information Services

OKLAHOMA
Office of Management
& Enterprise Services

Steven Harpe
Director

Disaster recovery and high availability TX1 data center
FAQs

OMES takes its duty to provide disaster recovery and high availability services to its customers seriously. The pandemic has underscored the need for the state's technology to be reliable and recoverable at all times, which is why we have invested in a secondary data center so you can continue delivering core services to citizens, regardless of the circumstances.

As part of this effort, we will also be able to refresh select hardware in our Lincoln Data Center and provide agencies with cloud readiness assessments.

OMES is committed to continued delivery of innovative, sustainable offerings and the core of this bold new alignment is a solution we are confident will serve each agency's unique mission.

Between our two data centers highlighted below, we have your technology needs covered.

Who is the solution provider?

- In partnership with NTT and RagingWire, we selected their TX1 data center as our Disaster Recovery site. Located in Garland, Texas, TX1 is a best-in-class data center that offers a 100% availability SLA, dedicated infrastructure options, 24/7 on-site support and proven operational procedures for delivering superior performance.
- RagingWire is an affiliate company of NTT that benefits from the advantages below. NTT and RagingWire are industry leaders with deep experience operating world-class data centers.

What is the financial impact?
- This project was funded through the Coronavirus Aid, Relief, and Economic Security Act.

THE BENEFITS OF THE

TX1 DATA CENTER

- ❯ Faster response times in critical situations.
- ❯ Built-in security to defend against cyber threats.
- ❯ Compliant with several major frameworks.
- ❯ Reduced risk of downtime even during maintenance.
- ❯ More control over our technology infrastructure.
- ❯ Increased ability to deliver services to Oklahomans, seamlessly.

Learn more about how TX1 and OMES' disaster recovery strategy can help your agency by contacting your IT strategist.

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When will my agency benefit from this solution?
- Equipment is currently being delivered and the entire project will be complete by Dec. 31.

How does this differ from the state's previous backup process?
- Our previous backup process included backing up data on tapes stored in Stillwater, Oklahoma, which was a backup of the state's information. A recovery process would have taken months.
- This new, truly redundant and high availability system, will go beyond simply a copy of our information. We will be able to access our systems within a matter of seconds and our network will be resilient to any potential disruptions.

**What is a cloud readiness assessment and how can my agency benefit?**
- A cloud readiness assessment is a process that analyzes your applications' readiness and explores your application portfolio.
- The primary goal of a cloud readiness assessment is to provide you with a gap-analysis of your applications that can be seamlessly moved to the cloud.
- More information will be shared about how you can opt in to an assessment as we move forward with this initiative.

This year has proven that the state's technology infrastructure must be ready to support any disaster at **a moment's notice**. By investing in TX1, we are able to provide our customers with the **guarantee** they can continue delivering **core services to Oklahomans**, no matter the circumstance.

CIO JERRY MOORE

on TX1's capabilties

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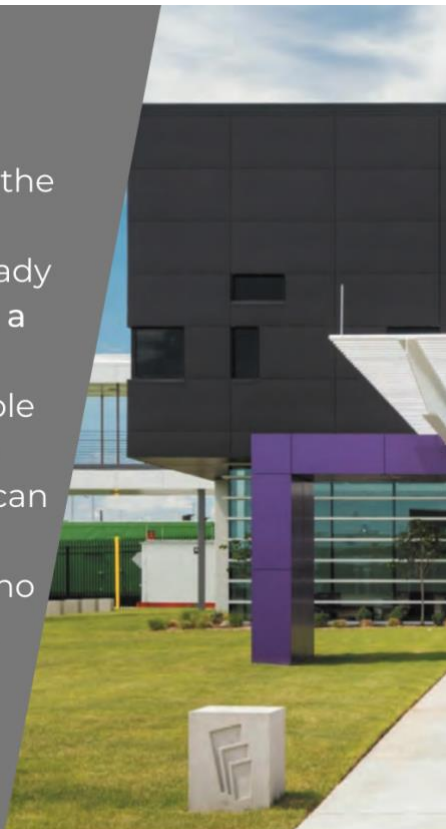
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Oklahoma's Lincoln Data Center

Year built: **2010**.
Square feet: **95,000**.
Employee seats: **331**.

Did you know? The LDC can also withstand winds up to **200 miles per hour**.

LEED Silver Certified

Due to efficiencies in power, cooling, lighting and a "no batteries" policy.

SUSTAINABILITY

99.982%
Data Center uptime.

3 chillers
using environmentally safe R134a.

3 water towers
with a 50,000 gallon water tank underground.

2 flywheel uninterruptible power supplies
at 900 kilowatts with no batteries.

4 diesel generators
at 1,000 kilowatts each.

28,500 gallons
of diesel fuel underground.

72 hours of runtime
at 100% capacity and currently running 40% capacity.

SERVERS

4.25 petabytes
SAN storage.

13.25 petabytes
in backup.

2,522 Windows Servers
from over 110 agencies.

217 Linux and 4 AIX
from over 110 agencies.

1 mainframe
with 8 active LPARS.

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Oklahoma's Disaster Recovery and High Availability TX1 Data Center

TX1 is located in Garland, TX, and has been recognized as one of the "**most beautiful data centers in the world**". TX1 is a 230,000 square feet, 16 megawatt colocation facility. It is the first building of RagingWire's mega data center campus development on **42 acres** with **more than a million square feet of data center space** and **144 megawatt critical IT load** at full build out.

100+ real time security feeds
along with a high-security gated entrance with anti-climb perimeter fence.

Designed to withstand an EF3 tornado
with winds up to 136 mph.

9 layers of security to access the IT infrastructure
with multi-factor identification and multi-level security zones.

34MW Backup Power

130MW expandable substation (Garland Power & Light) built for NTT Dallas TX data center campus which means:
Very low risk of damage or disruption to feeders.
Dual power feeds for superior redundancy.
Power via concrete encased conduits.

100% uptime SLA
during maintenance.

Designed for smarter efficiency
Stratification of heat rejection as hot air rises allows TX1 to be more efficient by utilizing 22-28 ft. tall ceilings.

Water-less cooling using indirect air exchange heat wheel
Each 1MW vault contains 4 rooftop unit wheels, each with a 350kW cooling capacity.

TX1 uses a highly **intelligent** and self-healing N-Matrix data center infrastructure management system **integrated** into operations for **real-time control** and **monitoring**.