

# SUPPORTING THE MISSION OF THE UNIVERSITY



With our increased resource space and robust infrastructure, the Division of Information Technology can respond more quickly to the University's need for additional technology services and compute resources for teaching and research initiatives.

#### ENHANCE THE ACADEMIC EXPERIENCE

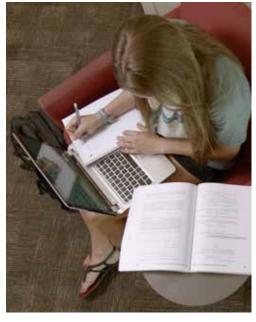
Our priority is to provide fast, reliable and secure technology infrastructure that enables campus members to discover solutions to tomorrow's problems and provide transformational learning experiences for our students.

#### YOUR MISSION, YOUR PRIORITIES.

Centralizing campus technology infrastructure gives college and division IT staff more time to create innovative IT solutions targeted to the unique mission of their unit, as well as supporting faculty and student needs.

- SAVE TIME. Avoid the significant time and cost of designing, building and maintaining local server rooms and support infrastructure.
- SAVE SPACE. Reallocate space currently used to house servers to functions that further the mission of the University.





#### **EMPOWER INNOVATIVE RESEARCH**

State-of-the-art high performance computing is essential to any research-intensive university. The new data center's combination of connections to a robust campus network and high bandwidth connections to the internet, allows for collaboration with universities around the world and positions Texas A&M to take advantage of billions of dollars of federal research funds.

- ★ CUSTOMIZED SOLUTIONS. The new data center will include build-to-suit co-location spaces designed specifically for new High Performance Computing Systems. With increased resource space, Texas A&M IT can respond more quickly to the University's need for additional services and compute resources.
- \* SPECIALIZED SECURITY. Highly sensitive research and other important data can be protected by our Secure Enclave. Once online, this service will guarantee Texas A&M is compliant with DFARS and new, more stringent federal regulations.

With our increased resource space and robust infrastructure, the Division of Information Technology can respond more quickly to the University's need for additional technology services and compute resources for teaching and research initiatives.

## BUILDING A FOUNDATION OF EXCELLENCE

#### SECURING OUR INFORMATION, SECURING OUR REPUTATION.

The new West Campus Data Center is designed from the ground up to integrate security into every layer. Our systems work together to protect the university's network, computers, data and personnel, while also protecting our reputation and ability to focus on research and discovery.

- **PHYSICAL SECURITY.** Controlled entry, 24-hour monitoring, video surveillance and a security guard ensure the safety of the building and high-tech equipment.
- **DATA PROTECTION.** From data in transit over the network, to data at rest, robust security tools are in place to scan for vulnerabilities and attacks. Systems and services are built to address increasingly stringent local, state and federal compliance requirements.

Whether you're working on highly-confidential research, or with sensitive student information, you can have confidence that physical and data security is our top priority. We can tailor our services to the level of security you require, and when the auditors call, we'll be there with you.



Redundant power and cooling systems ensure the availability of critical research and administrative systems whenever and wherever needed.



### ENGINEERING EFFICIENCY AND RELIABILITY

Repurposing the under-utilized food commissary warehouse was not only a cost-effective solution, but provided the ideal framework for our new high-availability data center. The 30-foot ceilings in the building are ideal for heat extraction, a key component of cooling a data center filled with high-tech equipment.

#### HIGHLY EFFICIENT AND COST EFFECTIVE

Built to LEED Silver standards, the new data center not only houses cutting-edge IT equipment, but highly efficient power and cooling equipment as well.

- ★ CLIMATE COOLING. The high-efficiency rooftop cooling system lets us take advantage of around 150 days a year when temperatures drop below 55 degrees and we can use "free cooling."
- ★ POWER THE CAMPUS. Two specialized generator housings can support the data center for over 48 hours, even at full capacity, as well as supplement the University's power grid at peak times, preventing Texas A&M from buying power at high prices elsewhere.

Now that the data center footprint on campus has more than doubled, the University can consolidate individually managed servers to one site and focus our security and bandwidth resources on a single location. The power delivery and cooling effectiveness of the new data center will be 80 percent more efficient than if servers are left scattered across campus.

#### HIGH-AVAILABILITY ACROSS THE BOARD

Redundant power and cooling systems, and redundant high-speed networking, ensure the availability of critical research and administrative systems whenever and wherever needed.

- \* CONTINUOUS MONITORING. Provides peace of mind in the physical security and operational integrity of all systems and services.
- ★ CERTIFIED PROFESSIONALS. Available 24 hours a day, our support staff are always available to offer advice or solve a problem.



#### **WEST CAMPUS DATA CENTER**

50,000 SQ FT

#### 30,000 SQ FT

of potential compute space.

#### 10,000 SQ FT

compute space open Fall 2017.

The highly available facility is ready to meet our present needs and those of tomorrow.



#### FOCUSED ON THE FUTURE

Technology will continue to have a significant impact on higher education, and with the addition of the new West Campus Data Center, Texas A&M University is poised for future success.

- \* **SPACE TO LEAD.** Texas A&M is a leader in research. To compete for funding on a global scale, we must continue to create partnerships and make investments to attract high caliber students and researchers. The IT infrastructure and systems in the new data center make the future possibilities almost endless.
- \* SPACE TO GROW. With 30,000 square feet available for data halls and IT equipment, the highly available facility is ready to meet our present needs and those of tomorrow. Our first phase includes opening two data halls and supporting 1.5 megawatts of IT infrastructure. As campus needs grow, the facility can easily expand to support up to 6 megawatts of infrastructure.

The Division of Information Technology provides a robust, secure and innovative IT environment that supports Texas A&M University's goals in teaching, research and service. We are confident the technology supported by the new West Campus Data Center will enrich the education of students, expand the effectiveness of faculty, empower researchers and extend the impact of the University for years to come.



#### **Division of Information Technology**