

Consistent Sustainable Centric Design Innovation Drives SMU's Success in LEED Attainment

"Quarter four of 2024 marked the largest capital project completion period in the history of SMU across academic, residence life, athletics and infrastructure initiatives. The 236 acre campus fabric has been enhanced by creative architecture, technically sound engineering solutions, and sustainable centric design.

It has been rewarding to hear the comments and feedback from our alumni, students, faculty and staff about the recent and ongoing changes to our beloved campus fabric. Staying true to our Collegiate Georgian architectural heritage and imbedding cutting-edge engineering technology across multiple initiatives has resulted in a positive impact to our energy reduction goals and commitment to sustainable design. SMU's energy management platform enables remote monitoring and real-time analytics of energy usage and building performance, supporting continuous building optimization. Since 2017, SMU has saved over 33 million kilowatt-hours of electricity, reducing utility costs by 15% per square foot, even as the campus grew by 21% in student enrollment and expanded by over 660,000 square feet. Our trustee commitment to LEED certification has been a pillar to our design approach and energy modeling for new development as well as existing facilities. We have over four current projects pending LEED certifications."



Michael Molina, AIA, NCARB Vice President & University Architect



LEED Certifications



Dallas Hall Receives USGBC South Central Region 2023 Marquee Green Building Award and Achieves LEED Platinum Certification



The iconic Dallas Hall has once again demonstrated that historic preservation and environmental sustainability can go hand in hand. The flagship building, which holds the distinction of being the first structure on SMU's campus, continues to set benchmarks for sustainable practices in historic buildings.

Dallas Hall made history in 2015 when it achieved LEED for Existing Buildings Gold Certification, coinciding with its centennial anniversary. This achievement was particularly noteworthy as it made Dallas Hall the first building on the National Register of Historic Places to earn LEED Certification.

The building's sustainability journey didn't stop there. In 2021, Dallas Hall achieved another LEED for Existing Buildings Gold Certification, further cementing SMU's commitment to environmental responsibility while honoring the building's rich heritage. To maintain the building's status, information is submitted to the United States Green Building Council every three years.

For the first time in SMU's history, Dallas Hall broke another record and is the only building on campus to achieve LEED for Existing Buildings Platinum Certification. The ongoing initiatives at Dallas Hall focus on advancing operational efficiency, enhancing occupant experience, and meeting contemporary environmental standards—all while respecting the building's historical significance.



Landscaping



Agronomy

To improve soil structure in the landscape, SMU applies an organic treatment called Holganix. This treatment incorporates the soil with over 800 species of soil microbes to improve plant performance, soil and root health, faster growth, fewer herbicides, and core aeration.

Recycling

SMU uses mulching mowers to reduce the amount of organic material removed. Clippings are cut into fine pieces that fall easily to the soil surface and can be rapidly broken down by soil microorganisms, releasing nutrients from the mulched plant material back into the soil. All organic materials not worked back into soil are transplanted to organic recycling partners at University Park and Organic Recyclers. This material is processed into mulch SMU uses in flower beds to control weeds and maintain moisture to the roots of our plants. In the 2023-2024 fiscal year, SMU installed 500 cubic yards of recycled hardwood mulch on campus.

Irrigation

Over 1650 irrigation zones are inspected each month and repairs are made when needed to keep proper moisture on the landscape while reducing water waste from leaks or broken heads. The system is also modified as the requirements of the landscape changes and the plants mature. The system at SMU is connected to an on-campus weather station that allows us to monitor weather conditions. In addition, all zones are regulated by a central control system allowing us to access everything remotely by computers or phone.



Perennial Transplanting Project

SMU uses perennial flowering plants along with annuals in our flower beds. This allows us to transplant the perennials to permanent locations on campus once the flowerbeds are changed out for the winter. Each year, we can transplant approximately 4,800 plants permanently onto the campus grounds.

Construction Projects

As new buildings are created on campus or existing buildings undergo renovation, the surrounding landscape is evaluated for plant material that can be saved and transplanted elsewhere on campus. From 2022-2024, SMU was able to transplant 1075 plants and 8 trees.

Landscape Upgrades/Installation

All plants considered for use on campus are evaluated for the following traits:

- Low significant insect or disease problems
- Drought tolerance (once established)
- Noninvasive
- Long-lived
- Encourages pollinators







A Legacy of Green Buildings

For more than 15 years, SMU has prioritized sustainable design and construction practices, leading to an impressive milestone of over 25 LEED (Leadership in Energy and Environmental Design) certifications since 2007. This success stems from a commitment to create environmentally responsible, healthy, and efficient buildings across our campus.

Our buildings have energy saving features like improved insulation and glazing, lighting design with occupancy/vacancy sensors that automatically shut off lights, and advanced building automation systems that optimize heating and cooling. We also purchase renewable energy to reduce our carbon footprint. All new campus buildings are equipped with water conserving plumbing fixtures and efficient landscape irrigation systems. Our grounds feature native and drought-resistant landscaping that require less water, fertilizers and maintenance.

During design, windows are intentionally placed to maximize natural light and provide views to the outdoors. Inside the buildings, we select green building materials that have reports on the environmental impacts and human health effects, as well as using low-emitting materials that help maintain better air quality. Our ventilation systems monitor outdoor air flow to provide continuous feedback on building performance. Lastly, we use high efficiency filters that remove a wide range of indoor air pollutants, such as dust, pollen, pet dander, mold spores, and some bacteria.

But our LEED certified buildings don't just benefit the environment—they create spaces that enhance the health, comfort, and productivity of our campus community. Studies show that sustainable buildings contribute to improved cognitive function, reduced absenteeism, enhanced mood and wellbeing, and higher levels of occupant satisfaction. These benefits directly support our educational mission by creating environments where students, faculty, and staff can thrive.

Since FY2017

SMU Campus Growth

660K sq ft of building space **Total Electricity Savings**

43.6M kWh

due to long-term infrastructure upgrades and energy savings measures

\$12.2M

in power hedging strategy

\$1.7M

Annually total utility savings Reduced Total Cost of Utilities

15% per sq ft of building space