



TRANSFORMATIONS:

SUSTAINABILITY ON CAMPUS AND BEYOND

Executive Summary of the 2012 Sustainability Report
and Environmental Action Plan

SUSTAINABILITY AT UT ARLINGTON

At the University of Texas at Arlington (UT Arlington), we view sustainability as a path of continuous improvement where our actions protect and enhance the human and natural resources needed for future generations to enjoy a quality of life equal to or greater than our own.

UT Arlington is committed to sustainable development and to creating a healthy, ecologically appropriate, economically viable, and socially responsible living and learning environment for all students, faculty, and staff. We recognize that responsible operations and management of shared resources can also enrich quality of life, in both direct and indirect ways.

This summary of *Transformations: Sustainability on Campus and Beyond*, our 2012 sustainability report and environmental action plan, highlights the progress we are making through the individual and joint efforts of administration, faculty, staff, and students—and through partnerships with communities, businesses, government, and other higher education sectors.

The full report, which is available for download at our website, discusses sustainability within four key areas: education and research, environment, social, and economic. This summary focuses more on the environment section with brief overviews of the other sections.

A TIMELINE OF SUSTAINABILITY AT UTA

1974

- ▶ Energy conservation efforts begin on campus.

1994

- ▶ Campus-wide recycling program receives presidential approval.

1995

- ▶ President's Recycling Advisory Committee forms.

1970

1990

2000

2004, 2005, 2006

- ▶ Environmental Vision Awards for recycling are presented by Tarrant County Corporate Recycling Council.

2006

- ▶ Top 100 four-year colleges for Hispanics ranking is granted by The Hispanic Outlook in Higher Education Magazine.

2006-2012

- ▶ President's Higher Education Community Service Honor Roll recognition is awarded.

INTEGRATING SUSTAINABILITY

The success of sustainability initiatives requires engagement, participation, and collaboration at all levels of the university, across campus, and beyond. To foster a university-wide and integrated approach to sustainability, former University President James D. Spaniolo launched the President's Sustainability Committee in 2007 (later renamed the University Sustainability Committee), followed by the creation the Office of Sustainability in 2010 and the execution of the University's Sustainability Policy in 2011.

Office of Sustainability

The Office of Sustainability aims to provide the framework for environmental stewardship, natural resource conservation, emissions reductions, and sustainability. To facilitate a culture of sustainability on campus, regionally and nationally, the office provides innovative initiatives, programs, campaigns, educational services, group activities, and outreach opportunities. The office coordinates and collaborates with other offices and departments and the University Sustainability Committee. Examples of campus sustainability programs include the car sharing program, campus-wide recycling, and the Community Garden at UT Arlington, which is highlighted on page 5.

2007

- ▶ University Sustainability Committee forms.
- ▶ Association for the Advancement of Sustainability in Higher Education membership begins.
- ▶ Composting program receives awards from the State of Texas Alliance for Recycling, the Greater DFW Recycling Alliance and the North Texas Corporate Recycling Alliance.
- ▶ Trailblazer in "closing the gap" between Hispanic and non-Hispanic white students recognition is received from the American Association of State Colleges and Universities.

University Sustainability Committee

The University Sustainability Committee brings together faculty, staff, student body, and community members to address opportunities to promote university-wide sustainability. The committee is divided into 11 functional work groups that work to advance and promote sustainability in these areas:

- Curriculum, Research, and Community Engagement
- Building and Development
- Climate
- Dining Services
- Energy and Water
- Landscaping and Habitat
- Management Systems
- Purchasing
- Transportation
- Waste Reduction
- Administration and Outreach

Learn more about our efforts at uta.edu/sustainability.

2008

- ▶ Nation's best universities for diversity ranking is granted by U.S. News & World Report.
- ▶ Extensive green roof is installed on campus and receives awards from Greater DFW Recycling Alliance and Recycling Alliance of Texas.
- ▶ Preliminary carbon footprint analysis is completed.
- ▶ Exemplary rating on sustainability is received from the National Wildlife Federation.

2010

2009

- ▶ Top 100 Places to Work ranking is received from The Dallas Morning News.
- ▶ Maverick Office Green Team launches.

2009-2010

- ▶ Outstanding Achievement in Initiative award is given by Air North Texas for clean air campaign.

2010

- ▶ U.S. EPA Food Recovery Challenge program participation begins.

2011

- ▶ Anti-Idling, Recycling, and Green Building policies are adopted.
- ▶ STARS Report Bronze Star level is achieved.
- ▶ U.S. EPA Green Power Partnership recognition is received for the purchase of renewable energy credits.
- ▶ Organic community garden is created.
- ▶ USGBC LEED-NC Gold Certification is received for the Engineering Research Building.
- ▶ 2012 Best Colleges ranking is granted by The Princeton Review.
- ▶ Photovoltaic panels at College Park parking garage begin operation.
- ▶ Center for African American Studies is established.
- ▶ U.S. EPA WasteWise program partnership forms.

2012

- ▶ Sustainable Sites Initiative certification is granted for the Green at College Park.
- ▶ Sustainable 16 ranking is received from Enviance Inc. and Environmental Leader.
- ▶ Master of Science in Real Estate (Sustainability) degree is added.
- ▶ USGBC LEED-NC Gold Certification is granted for the College Park Center.
- ▶ The Green at College Park architects receive American Society of Landscape Architects honor award.
- ▶ Be Air Aware challenge is formed in partnership with Air North Texas.
- ▶ Outstanding Greenscape Project award is presented by the Greater DFW Recycling Alliance.
- ▶ Center for Metropolitan Density is established.
- ▶ UT Arlington Research Institute long-term strategic plan is published.
- ▶ Sixth-fastest-growing public research university ranking is granted by The Chronicle of Higher Education.
- ▶ Public transit two-year pilot project is announced.
- ▶ College of Nursing Star Award is presented by the Texas Higher Education Coordinating Board for online RN-to-BSN program.
- ▶ Food Recovery Challenge certificate of achievement award is awarded by EPA.

ENVIRONMENT

BEGINNING WITH CLIMATE CHANGE

Because climate change has such broad environmental, economic, and societal impacts and risks, one of our top environmental priorities is to reduce our carbon footprint. In 2010, we conducted a greenhouse gas (GHG) emissions inventory to understand our most significant sources of emissions. We learned that approximately 75 percent of our emissions are from the electricity and natural gas we use to heat and cool our facilities. These findings, combined with increasing energy costs, place a priority on energy management—an area in which the University has found success.



ENVIRONMENTAL ACTION PLAN

The University Sustainability Committee used the results and recommendations of the GHG inventory, along with regional concerns about long-term water supply, to prioritize areas of action. The committee worked with administration and departments to develop five environmental performance goals for energy, buildings, transportation, waste, and water (summarized in the Environmental Goals, Actions, and Progress table below). They also incorporated plans related to habitat and open space development, which have interdependencies with the key environmental areas.

ENVIRONMENTAL GOALS, ACTIONS, AND PROGRESS

ENERGY: Reduce energy consumption in million British thermal units (MMBtu) by 20% from 2005 baseline by 2020.

Since 1974, UT Arlington has had an aggressive energy conservation program. We are taking action in the following key areas:

- Adopt green building principles.
- Utilize energy performance contracts.
- Generate on-site renewable energy.

624,541 MMBtu | 3% REDUCTION FROM 2005

The combined energy savings from two recent conservation projects total more than **\$3 MILLION** annually.

GREEN BUILDINGS: Develop a green building policy that provides guidelines for new and renovated campus buildings.



Achieved in 2011

The Engineering Research Building and College Park Center received Gold-level LEED (Leadership in Energy and Environmental Design) for New Construction certification.

TRANSPORTATION: Reduce gallons of fleet fuel consumed by 20% from 2005 baseline by 2020.

We are taking action through two key approaches:

- Lower barriers to eco-friendly mobility.
- Reduce University fleet emissions.

78,936 GALLONS | 2.5% REDUCTION FROM 2005

In the 2011-2012 academic year, campus shuttle, Mav Ride, and Mav Mover ridership increased by **36%** from the previous year.

More than **750** individuals use the University's car sharing program, Hertz On Demand, which provides hourly car rentals.

WASTE: Reduce tons of municipal waste by 20% from 2006 baseline by 2020.

We are taking action through two key approaches:

- Reduce, reuse, and recycle.
- Focus on food waste.

3,983.6 U.S. SHORT TONS | 33% INCREASE FROM 2006

138% more food waste was composted in 2011 than in 2006.

36% of our 2011 municipal waste was diverted from landfills through recycling and composting.

WATER: Reduce gallons of municipal water consumed by 20% from 2005 baseline by 2020.

We are creating a sustainable, water-wise campus environment through the following key approaches:

- Maximize water efficiency through equipment and technology.
- Transition open spaces to water-wise habitats.
- Manage stormwater impacts.

427,851,000 GALLONS/YEAR | 18.7% REDUCTION FROM 2005

Each year, we retrofit a portion of our facilities with water-efficient equipment and technologies.

The Engineering Research Building has a **28,000-GALLON** rain and condensate water capture and storage system for landscaping.

CULTIVATING SUSTAINABLE BEHAVIORS

Behavior change—for example, making it second nature to place a plastic bottle in a recycling bin rather than a waste bin—is an integral component to achieving our environmental and sustainability goals. The Administration and Outreach work group and the Office of Sustainability work with departments, campus groups, and community organizations to get the environmental sustainability message out to students, faculty, staff, and the Dallas-Fort Worth community.

- **Student groups:** Many groups such as the Environmental Society, UTA Volunteers, and the Campus Ecology for University Students work to encourage habits that help reduce waste, increase recycling, and conserve resources.
- **Faculty and staff:** More than 41 University offices and departments have Maverick Office Green Teams dedicated to “greening” their office operations through recycling, composting, and resource conservation.
- **Campus and community events:** Earth Day, Air North Texas Clean Air Action Day, electronic recycling fairs, and The Big Event are just some of the ways that the University educates and engages the campus and surrounding community about environmentally sustainable behaviors throughout the year.

The Green at College Park



The Green at College Park exemplifies the objectives in the University’s 2007 Campus Master Plan for natural spaces and serves as a role model for future campus construction activities. This four-acre park features natural habitat, restorative landscape design, and stormwater retention ponds. It is one of the first three projects worldwide to achieve certification during the pilot phase of Certified Sustainable Sites Initiative (SITES), a rating system for green landscape, design, construction, and maintenance.

VALUE OF COLLABORATION AND PARTNERSHIPS

Collaboration and partnerships harness the power of collective action to help solve some of society’s most pressing sustainability challenges. The Office of Sustainability is dedicated to cultivating relationships with local, regional, national, and international organizations and programs that promote environmental sustainability. The office actively pursues outreach opportunities to expand its impact beyond the physical boundaries of UT Arlington.



go green. breathe clean.

Through active participation in the multi-stakeholder **Air North Texas** ozone reduction partnership, UT Arlington works hard to encourage the campus community, businesses, and local governments to reduce transportation-related emissions. The University won the Air North Texas Outstanding Partner Involvement award for 2011-2012, our third annual award in recognition of our efforts.

We participate in several **U.S. Environmental Protection Agency (EPA)** programs:

- UT Arlington is the only higher education **WasteWise** program partner in the state of Texas. WasteWise helps organizations reduce waste and manage materials through waste prevention and recycling efforts.
- We are one of the first Texas universities to join the **Food Recovery Challenge**, a food waste reduction initiative within the EPA’s WasteWise program. Through the Food Recovery Challenge, we aim to increase our food waste composting an additional 5 percent.
- The University was awarded **Green Power Partnership** recognition due to our purchase of 3.5 million kilowatt-hours worth of renewable energy credits (RECs) to offset the Engineering Research Building’s energy use. The RECs avoided more than 3.9 million pounds of carbon dioxide emissions from traditionally generated sources.



UT Arlington joined the **American Association for Sustainability in Higher Education (AASHE)** in 2007 and participates in its Sustainability

Tracking, Assessment & Rating System™ (STARS), a self-reporting framework for colleges and universities to measure their sustainability performance. Our first STARS submission in January 2011 received a bronze rating.

EDUCATION AND RESEARCH

Our educational programs, comprehensive research, and community service help to cultivate the holistic systems thinking that sustainability requires. UT Arlington embraces our role in educating and preparing graduates with the knowledge, skills, and habits to help society shift to a more sustainable world, both in their professional and personal lives. In addition to offering sustainability and environmental degree options, the University embeds sustainability themes into more than 100 courses across 16 departments. The University Sustainability Committee and Curriculum, Research, and Community Engagement work group provide sustainability fellowships, grants, and awards to encourage faculty, students, and others to deepen their understanding of sustainability issues.

Our state-of-the-art research centers, including the Center for Renewable Energy Science and Technology, the UT Arlington Research Institute, the Center for Nanostructured Materials, and the Texas Manufacturing Assistance Center, are helping develop technologies and processes to ensure a sustainable world for generations to come.

SOCIAL

The social dimension of UT Arlington's sustainability commitment focuses on embracing diversity and inclusion; supporting our outstanding students, faculty, and staff; and contributing to the well-being of our communities.

Growing Community



The organic Community Garden at UT Arlington, which was built in cooperation with the City of Arlington on undeveloped land, has become a public green space for families, community members, and garden enthusiasts. The University's award-winning composting program contributes compost to the gardens. Members of the community can adopt one of the 78 plots in the half-acre garden. Gardeners donate at least half of the produce to the Mission Arlington food bank program.

ECONOMIC

As a publically supported university, UT Arlington is committed to responsible management of the funds we receive and to providing an affordable education. For the first time in over a decade, tuition and fees for the 2012-2013 and 2013-2014 academic years will remain at 2011-2012 levels.

In addition, our operational, business, and research activities generate significant economic benefits. To measure the University's economic impact on the North Texas region and on the state as a whole, we commissioned an independent study in 2012. The results of the analysis are published in the Business Activity Impact Report, which is available for download at uta.edu/economicimpact.

“Institutions like UT Arlington ... generate business activity and opportunities for their immediate region, and they are one of the state’s most important sources of talent and technology—critical components of a healthy economy.”

Excerpt from the Business Activity Impact Report



It is not just the use of cutting-edge sustainable design principles that make the Engineering Research Building unique; it's the research and innovation inside the building that will move us closer to Tier One status and fuel economic growth for decades to come.

GOING FORWARD

Encouraged by our progress, we will continue to improve our impacts and to promote sustainability on campus and beyond. We are increasing opportunities for students to gain hands-on experience at the University and in partnership with businesses and municipalities. For example, we are working on providing student sustainability fellowships and securing paid internships for students to work on the Dallas/Fort Worth International Airport sustainability plan.

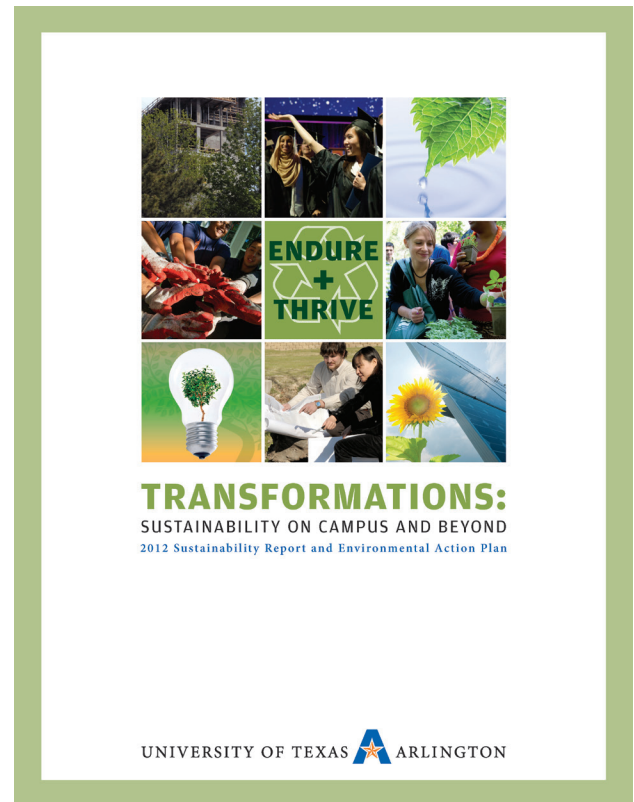
The University also plans to create a Center for Sustainability and Innovation that will serve as a sustainability nexus to foster collaboration, innovation, and entrepreneurship within the heart of the Dallas-Fort Worth Metroplex. The Center will engage private enterprises, nonprofit organizations, alumni, and the Maverick community to enhance the social, environmental, and economic fabric of our community.

PLANNED PARTNERSHIPS

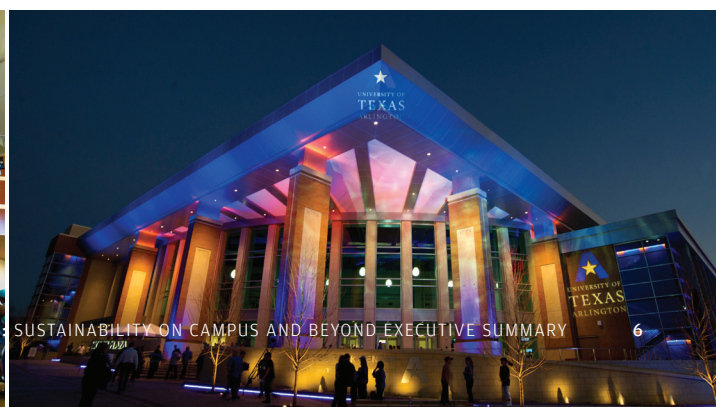
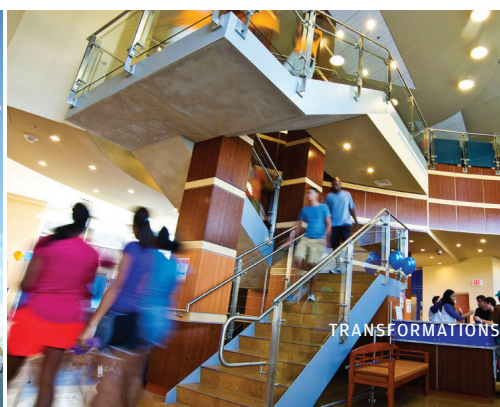
- U.S. Green Building Council
- International Council for Local Environmental Initiatives (ICLEI)
- Association for the Advancement of Sustainability in Higher Education
- National Wildlife Federation
- U.S. Business Council for Sustainable Development and local governments to develop water conservation and energy efficiency projects

EXPANDED EDUCATIONAL OPPORTUNITIES

- Executive certificate in Sustainable Management
- Two planned doctoral degrees: Globalism and Development, and Sustainability
- Alumni-funded “green endowments”
- Environmental Defense Fund (EDF) Climate Corps fellowship program
- Collaboration with regional businesses to foster sustainability entrepreneurship



Download *Transformations: Sustainability on Campus and Beyond*, our 2012 sustainability report and environmental action plan, at uta.edu/sustainability.





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