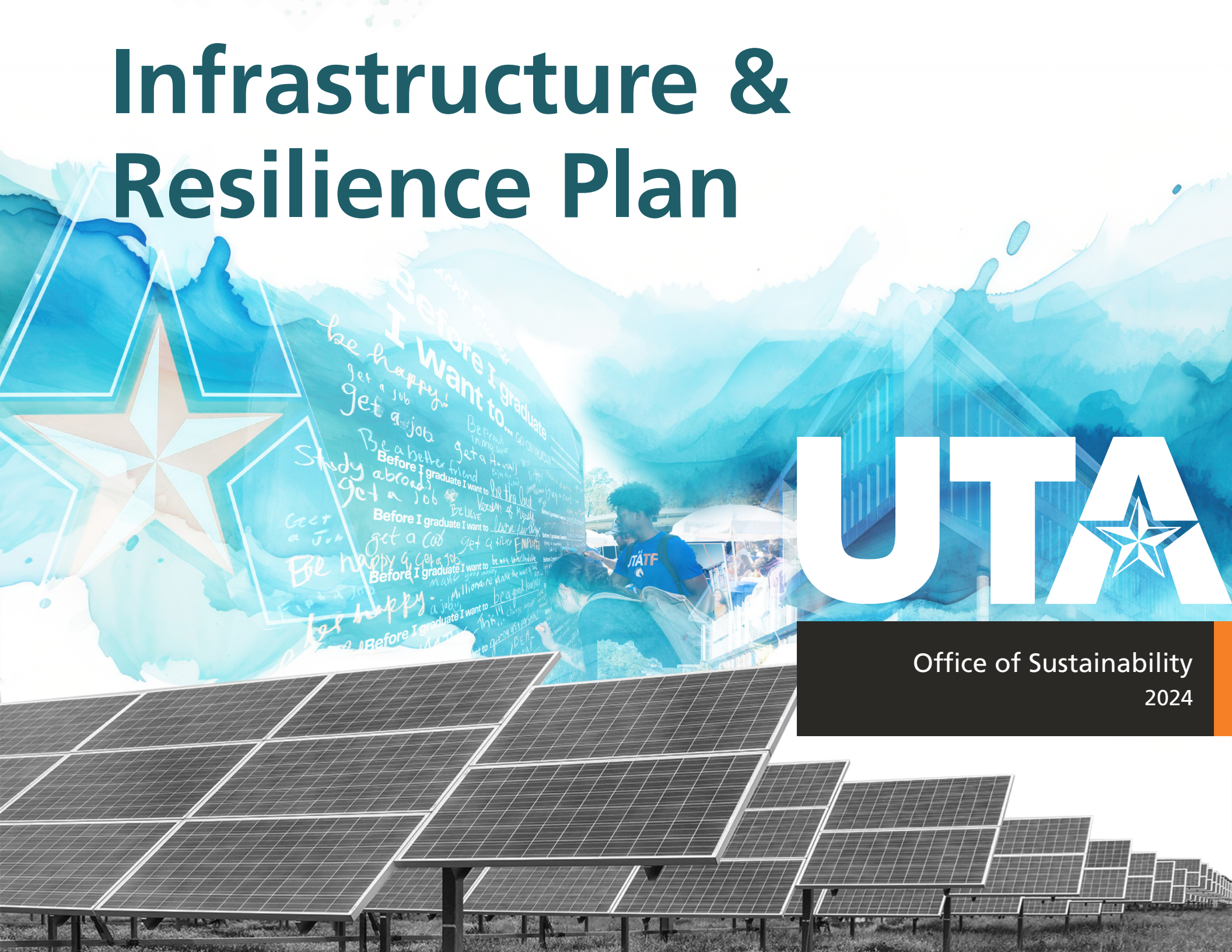
Infrastructure & Resilience Plan



Office of Sustainability

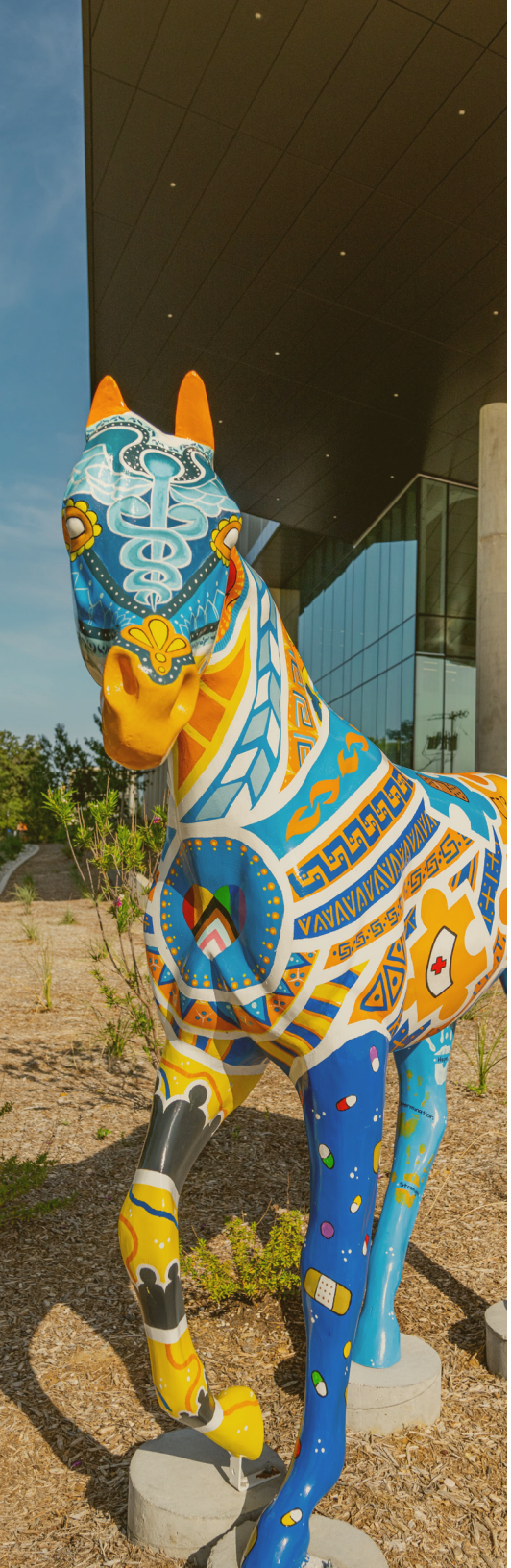
2024

Foreword

A LETTER FROM THE PRESIDENT

I know that we can come together to understand, plan, and take action that is needed to protect these walls and spaces, but more importantly, the people that pass through them.

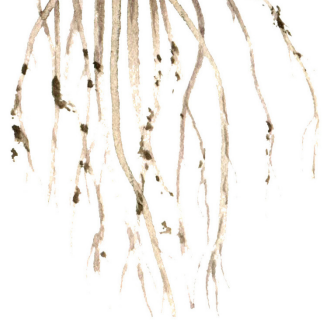
JENNIFER CROWLEY | **UTA PRESIDENT**



In 1992, global leaders convened for the “Earth Summit”, the first international gathering that provided consensus on creating action to create a “new charter” to set new norms to guide the transition towards sustainable development. Perhaps an even smaller known fact is that it was a Texan President who signed this declaration that promised to deliver the framework that ensured any further economic development would need to meet the needs of the present without compromising the ability of future generations to meet their own needs. We at UTA quickly followed suit, and shortly after the Earth Summit, began establishing our own programs to ensure that our actions here on campus would help contribute towards a more sustainable future for all.

In the more than 20 years that have followed, paralleling the evolving global sustainability landscape, our goals at UTA have significantly advanced. Over the next year, we will gather groups of leaders made up of faculty, staff, and students to envision the physical development of UTA’s future in the Campus Master Plan. At the same time, we have also chosen this time to launch our new Infrastructure & Resilience Plan (IRP). This document will update our goals around a variety of topics and will provide a pathway towards sustainable energy resources by 2040. This plan will also act as our main policy document to ensure that the development outlined in our Campus Master Plan is synergistic with our sustainability goals. The Infrastructure & Resilience Plan will outline actions that can be taken, but also the accountability and structure of people needed to deliver those actions. Finally, it recognizes that dramatic action comes with a price, most likely more than our historical development, and will look to outline, attract, and structure projects in alignment with new investment opportunities.

This plan is an exciting opportunity to shape a better future for ourselves and our region. I encourage you to not only contribute today, but in all the days that follow, in helping to craft and act upon the plan as it takes place and continues to evolve over the next few years.



ESTABLISHING OUR ROOTS

A timeline of sustainability at UTA

1990

1994 Campus-wide recycling program receives presidential approval

2000

2004-05 **Tarrant County Corporate Recycling Council** Environmental Vision Awards for recycling

2006 **Hispanic Outlook in Higher Education Magazine** Top 100 four-year colleges for Hispanics ranking granted

2007 University Sustainability Committee forms
AASHE membership begins
Composting program receives multiple awards
American Association of State Colleges & Universities Recognized as trailblazer in "closing the gap" between Hispanic and non-Hispanic white students

2008 Green roof on campus, receives multiple awards
Preliminary carbon footprint analysis completed
National Wildlife Federation Exemplary rating in Sustainability

2009 Maverick Office Green Team launches

2010
EPA Food Recovery Challenge participation begins

2011
AASHE STARS Bronze achieved
Organic community garden created
Engineering Research Building achieves LEED Gold
PV panels at College Park parking garage in operation

2012
The Green at College Park receives multiple awards
College Park Centers achieves LEED Gold
The Center for Metropolitan Density established
Public transit 2-year pilot project announced
EPA Food Recovery Challenge Certificate of Achievement

2013
North Texas Commission Working for Clean Air
Award: Best University
AASHE STARS Silver rating achieved

2014
EPA First of three Leadership Awards for Food Recovery Challenge granted (2014, 2018, 2021)

2015
Launched Institute for Sustainability & Global Impact
Partnered with Zipcar for on-campus car-sharing
First GRI Report launched

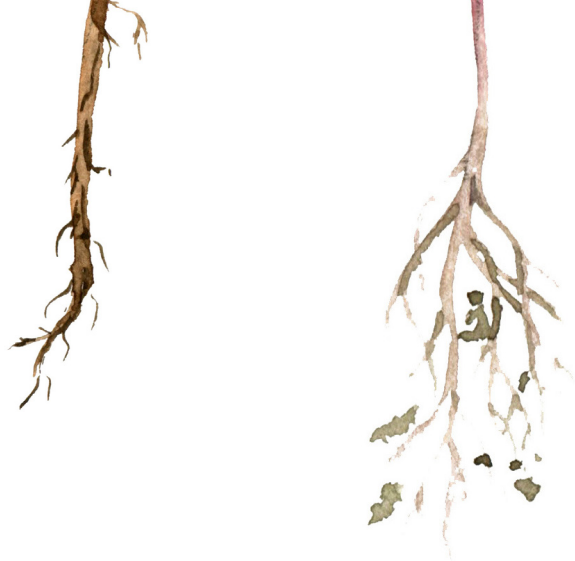
2016
AASHE STARS Silver rating achieved
CAPPA is established

2017
First Bike Share Program launched
Sierra Magazine Named "Cool School"for sustainability efforts on campus

2018
EPA Sun Belt Conference largest green power user
NACUBO Excellence in Sustainability Award

2019
STARS NTx + NTCRA Outstanding Composting Program
UNU-IAS Acknowledged Flagship Project
Strategic Plan is updated

2010



2020
UNU Honorable Mention for work on SDG6 for the Upper Trinity River Water Quality Report Card
Strategic Plan is updated
President announces eight DEI commitments

2021
THE Impact Ranks 1st
UNU-IAS Sustainable Cities Challenge ESD Contributions
Texas Tier 1 Designation
#1 in Texas awarding degrees to African-American students

2022
THE Impact Ranks 8th
AASHE STARS Silver rating achieved
US News & World Report Ranks third in Ethnic Diversity
NACUBO Excellence in Sustainability Award

2023
D CEO Magazine Ranks 14th among American higher ed. Non-profit & Corporate Citizenship Award Finalist

2024
IDC Future Enterprise Awards North American Special Award for Sustainability won for Sustainability Dashboards
State of Texas Alliance for Recycling Environmental Leadership Award for Innovative Organics

2020

Introduction TO THE PLAN

What is the Infrastructure & Resilience Plan (IRP)?

Limiting global temperature rise to 2.7 degrees F/1.5 degrees C is still possible, but only if we act immediately. The latest global findings indicate that the world needs to peak on greenhouse gas emissions before 2025 at the very latest, and reach net-zero carbon emissions by 2050. In order to do so we must immediately transition our existing systems and move towards a future where demand is lowered and energy supplies are low-carbon. This requires upgrading our existing building stock, and increasing overall energy efficiency, but also changing behaviors, policies, and even financing tools to implement the changes we need now. This plan looks to examine the future growth of the campus and also dig into existing operations, to identify the concrete strategies that are needed to achieve both short and long-term goals surrounding climate action. In this way, the IRP will identify a robust framework for change.

There is an emphasis on resilience in addition to diversifying the University's energy resource supply as this plan recognizes that the impacts of climate change are also already happening. This plan looks to understand the immediate vulnerabilities at UTA and turn them into intentional opportunities for both adaptation and mitigation of climate impact.

Change is at the center of the IRP; it will not only identify which exact actions are needed but will look at the people and resources that they need to achieve these goals. This plan recognizes that a shift needs to occur, and that a policy framework is needed to support this effort and to empower sustainability champions across UTA and the DFW region.

The Solar Situation

Being outside for any length of time in the heat can not only be uncomfortable, but it can be extremely dangerous, and hard surfaces like concrete and asphalt can make the ambient air temperature feel even hotter. It can be daunting living in a state that is already subject to extreme heat to learn that projections show that the Dallas-Fort Worth area will experience an average of nearly 80 days over 95 F by 2044, with five weeks of that time expected to be over 100 F.

While the sun has often been one of the more problematic celestial friends we have, it's important to remember that it also keeps us warm in the winter, boosts our moods and immune systems, gives life to plants, and is an abundant source of free, clean energy - energy that can be harnessed and used to cool our buildings, power our electronics, and give our grid stability when other systems fail.

Throughout this plan, there will be strategies to change the dynamic of UTA's relationship with the sun and find ways to not only tolerate the heat, but to thrive in it.

THE BIG PICTURE

WHAT

Identify strategies & changes needed in order to reach our goals

WHEN

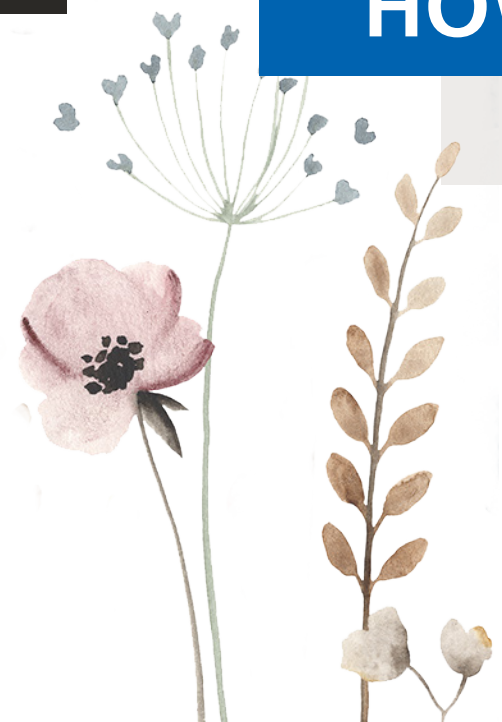
2040

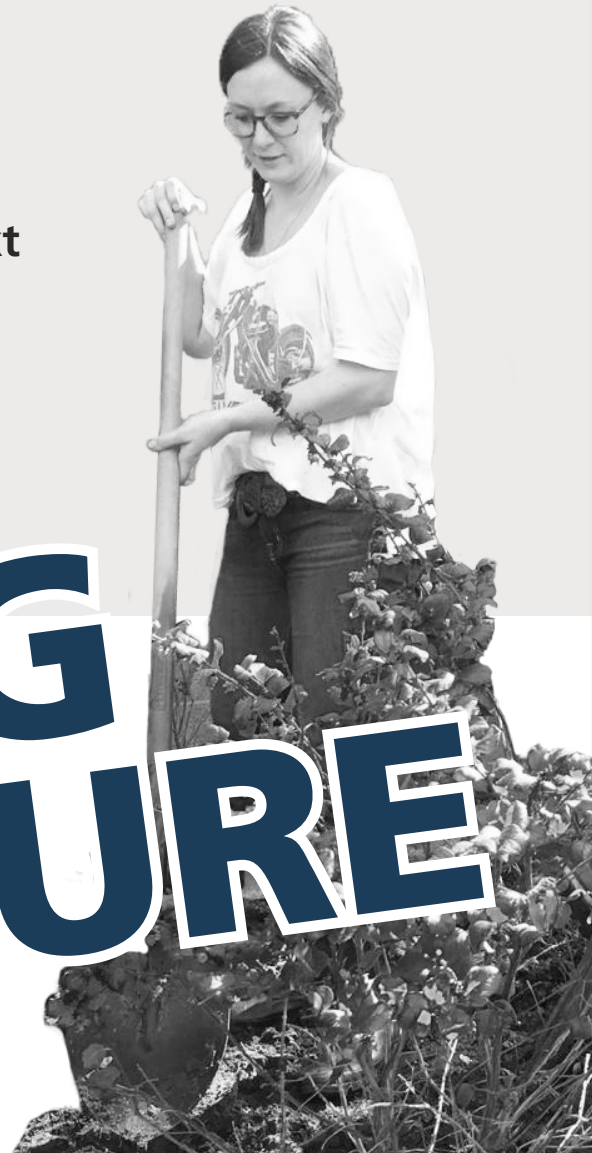
WHY

To improve environmental, social, and economic resources for the next generation of UTA students

HOW

Through collaboration, communication, & innovation





PHASE 1
Preparation & Kickoff

- Project Planning
- Engagement Planning
- Communication Plan

PHASE 2
Data Collection & Analysis

- Benchmarking & Research
- Engagement
- Data Collection
- Energy & Emissions Baseline

PHASE 3
Goals & Strategies Development

- Focus Group Workshops
- Preliminary Goals & Strategies
- Follow-up Surveys

PHASE 4
Plan & Tools Development

- Metrics and Supporting Policies
- Financing the Plan
- Implementation & Tracking

PHASE 5
Presentation & Approval

- University Leadership Presentation
- Approval of the Infrastructure & Resilience Plan

Kicking Off

An Engaging Discussion

While the Climate Action Plan is specific to UT Arlington, climate change is a challenge that extends beyond our campus. UTA must be a leader in addressing the challenges of climate change in our educational programs, research, operations, finance, and community engagement.

Through four interactive sessions with more than 100 participants, the kick-off workshop looked to identify the opportunities, barriers, and major areas that this plan must deliver success in.

In alignment with the Strategic Plan and Master Plan, the Infrastructure & Resilience Plan will complement the University's ability to thrive in the changing landscape of higher education as a leader, innovator and problem-solver tackling one of society's most pressing challenges.

Participants left us with a clear understanding that this plan must take action in the following:

CELEBRATE SUSTAINABILITY!

Recognizing the hard work and achievements of UTA to date

REACTIVE TO PROACTIVE: A HEALTHY CAMPUS IS A SUSTAINABLE CAMPUS

Preventative measures are the most important for protecting the campus overall

DEEPEN THE COMMUNICATIONS FABRIC OF UTA'S SUSTAINABILITY STORIES

Enhance visibility through signage, art, and student activities

EXPAND ON WASTE LEADERSHIP TO TACKLE THE FOOD-WATER-ENERGY NEXUS

Create programming that integrates UTA dining services, waste management practices, and state of the art energy solutions

CREATE A PHYSICAL GROUNDING POINT FOR INTERDISCIPLINARY WORK

Collaboration needs an intentional home to bring together researchers and students across different department

GET AGGRESSIVE ON THE INFRASTRUCTURE MODERNIZATION

Prioritize the strategies (and financing!) needed to deliver action on energy security

INNOVATE THROUGH RESILIENCE!

Climate change needs new technologies and ideas in order to protect the plan immediately. Utilize the brainpower at UTA to turn vulnerabilities into opportunities

STRENGTHEN THE REGIONAL IDENTITY OF SUSTAINABILITY

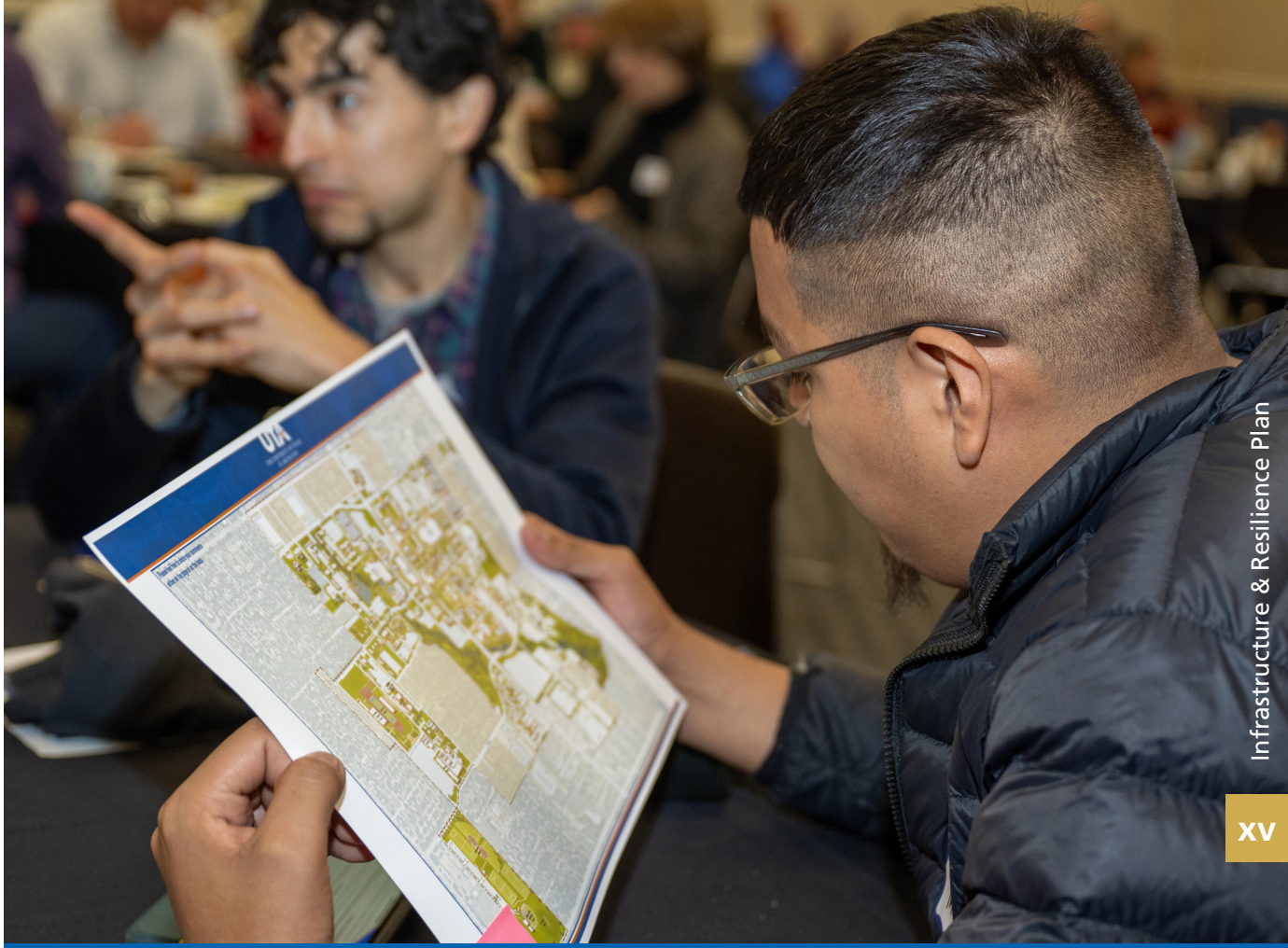
Did you know DFW is the first net-zero airport in the US? Or that UTA will be collaborating on the World Cup's sustainability actions in Dallas? UTA and its partner need to create a clear brand identity that puts sustainability front and center

Workshop Takeaways

During the engagement workshops, noteworthy themes were expressed by students, staff, and stakeholders. These insights have been instrumental in shaping the Infrastructure & Resilience Plan, ensuring that it aligns with the specific needs and objectives of the UTA community.

Groups convened across campus to discuss the implementation of energy initiatives, research in technology, large-scale changes in policies related to sustainability, behavioral changes, and funding for these endeavors.

These discussions have directly informed the creation of this plan, allowing it to now be used as a flexible and adaptable decision-making tool to guide infrastructure, facility, and operational changes over time.



Did you know..?

The University of Texas at Arlington ranked No. 14 among American colleges and Universities in an international measure for sustainability, according to the 2023 Times Higher Education Impact Rankings.

Key Themes

SOCIAL IMPACT

Highlight UTA as an exemplar university for research in sustainability

OPERATIONS & FINANCE

Utilize environmental impact in operational and financial decision-making

HIGH-PERFORMANCE BUILDINGS

Retrofit and design high-performance buildings across campus

ENERGY INFRASTRUCTURE

Shift to low-carbon energy infrastructure

FOOD & WASTE

Reduce food and waste by moving towards circular economy

ECONOMIC DEVELOPMENT & INNOVATION

Position the DFW region as a leader in sustainability and innovation

CULTURE & COMMUNICATION

Enhance the role of sustainability in culture & communications through story-telling and collaboration

MOBILITY

Shift to sustainable mobility patterns

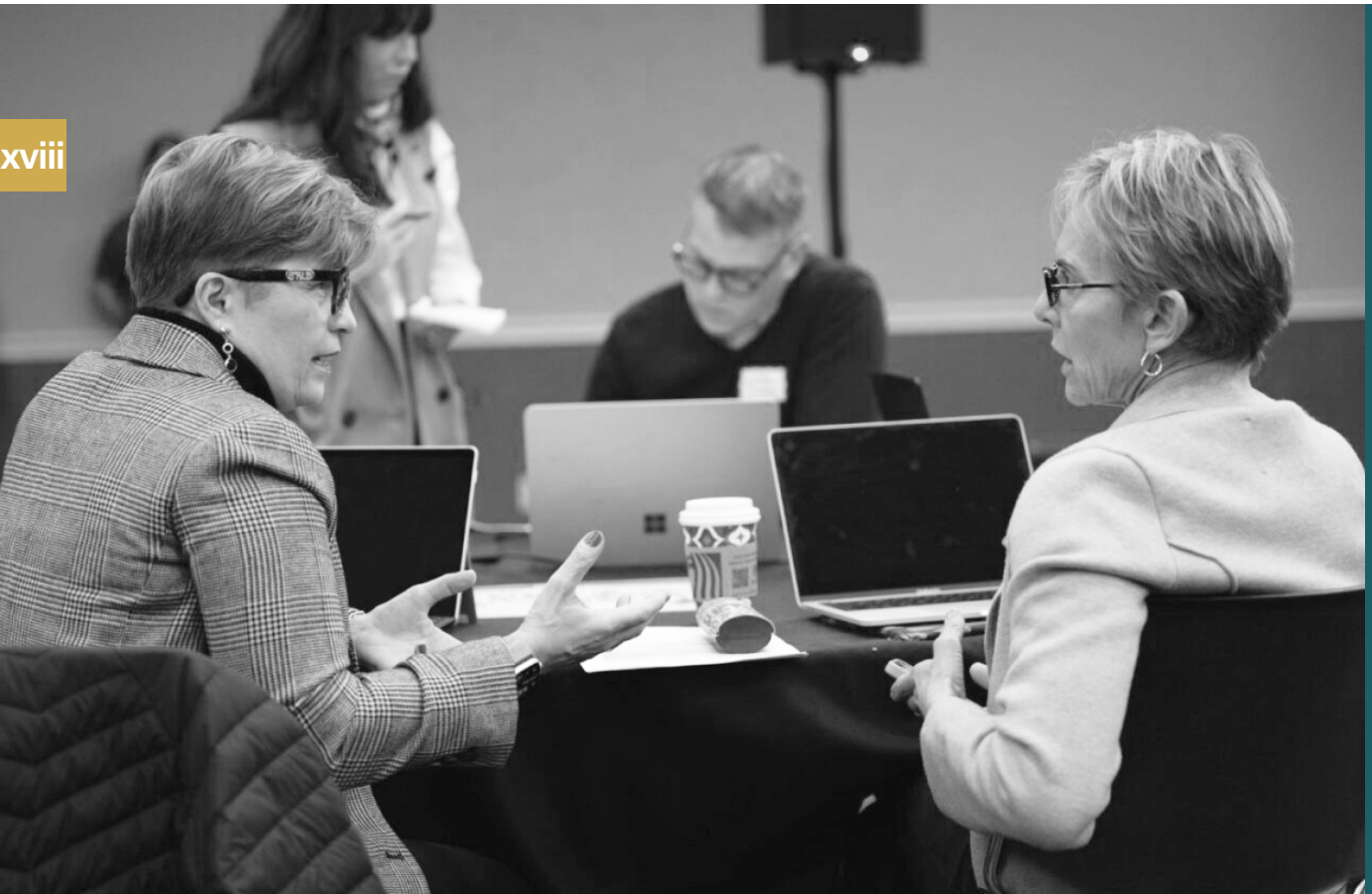
NEXT STEPS

Survey

We invite stakeholders to participate in shaping the future of climate action on our campus through an online survey. This input is invaluable as we seek to assess specific goals and strategies for mitigating climate change and promoting sustainability within our community. Survey respondents have the opportunity to provide feedback on current initiatives, identify areas for improvement, and contribute ideas for innovative solutions. We look forward to hearing your thoughts and perspectives as we move forward in our commitment to sustainability at UTA.

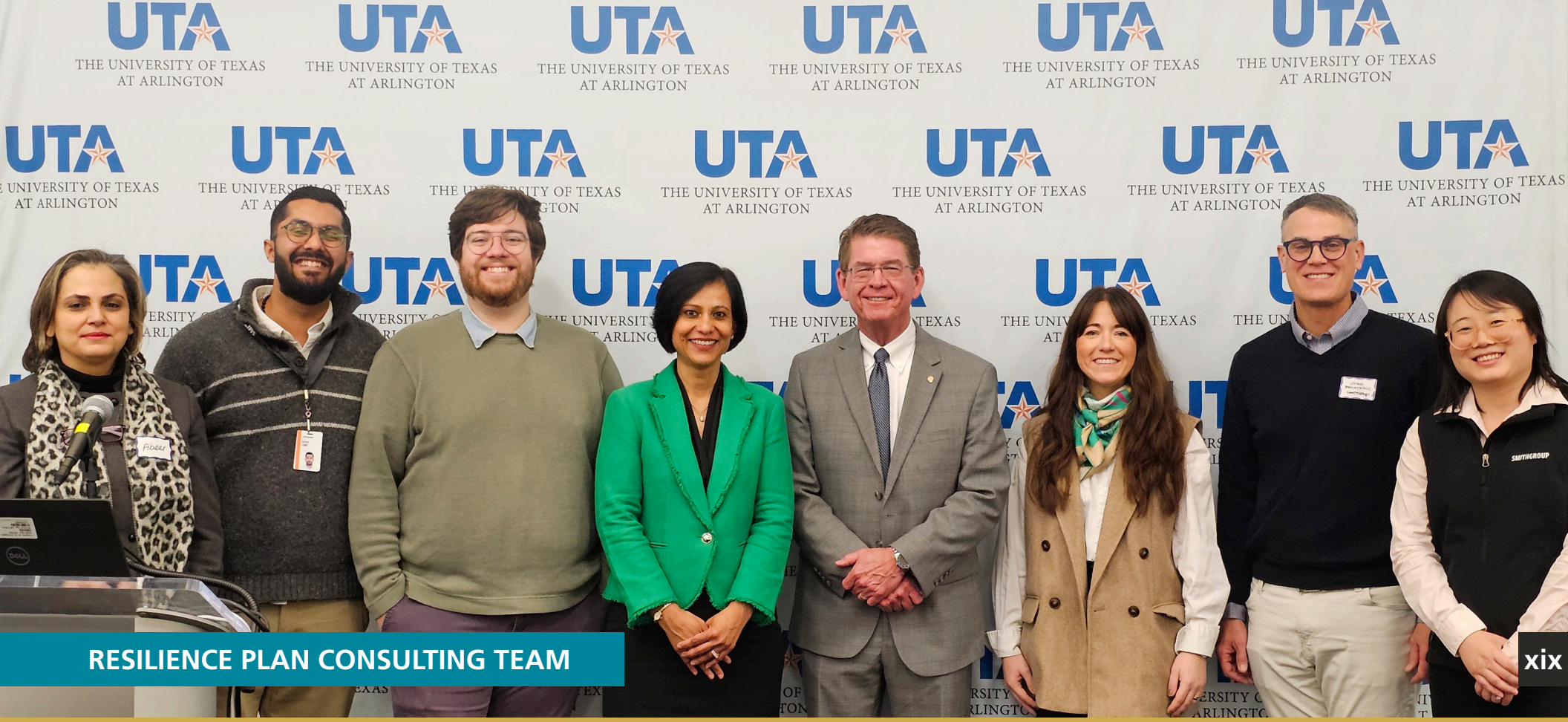
TAKE THE SURVEY

Click or Scan



Survey Goals

- Get stakeholder feedback about suggested strategies
- Understand timeline feasibility for implementation
- Incorporate any additional feedback into final plan



RESILIENCE PLAN CONSULTING TEAM

ACKNOWLEDGEMENTS

The consulting team would like to extend our thanks to the incredible team at UTA, as well as the students, staff, and community members who volunteered their time and insight for progressing this important effort.

We affirm that inclusion and diversity enable us to be agents of change in an evolving world.

JENNIFER CROWLEY | **UTA PRESIDENT**

We demonstrate leadership through innovative research and operational efficiencies that improve health and education, reduce inequality, and spur economic growth while simultaneously addressing climate change.

JOHN HALL | **UTA VICE PRESIDENT**

SMITHGROUP