Assessment of University Sustainability Activities under the SUSTAINABILITY TRACKING, ASSESSMENT & RATING SYSTEM (STARS)

Prepared by:
Jorge Arellano
Halit Beyaztas
Joel James

Derek Klepac
Jason Lindsay
Marisol Overstreet

William Schneck
Phong Thanomkunlabut
John Thorne-Thomsen

Supervising Faculty:
Hazem Rashed-Ali, PhD.

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EXECUTIVE SUMMARY

The UTSA STARS Assessment

In the spring of 2011 semester, a group of nine graduate students from the Colleges of Architecture and Engineering – under the professorial guidance of Dr. Hazem Rashed-Ali, Assistant Professor in the College of Architecture, conducted a survey and assessment of UTSA sustainability activities. The university’s sustainability activities were evaluated against the requirements of the Sustainability Tracking Assessment & Rating System (STARS). STARS is a voluntary, self-reporting framework for recognizing and gauging relative progress toward sustainability for colleges and universities. The STARS system was developed by the Association for the Advancement of Sustainability in Higher Education (AASHE). The UTSA STARS assessment conducted by the student team and described in this report aims to achieve the following

• Identify and calculate the rating level and credit scores expected to be achieved by the UTSA campuses under the STARS systems,
• Compare UTSA’s rating level and credit scores with those of other universities reporting to the system,
• Identify of strength and weaknesses within UTSA campus sustainability activities based on UTSA’s scores and those of other universities,
• Develop recommendations for improving the sustainability performance of UTSA.

STARS consists of three major categories, each with a possible maximum of 100 points: Education & Research (ER), Operations (OP), and Planning, Administration, and Engagement (PAE). A fourth “Innovation (IN) category”, with a maximum of 4 points, is also included. STARS credits were developed by reviewing campus sustainability assessments, sustainability reports from businesses, and other sustainability rating and ranking systems. The final institutional STARS score is based on the average of the percentage of applicable points it earns in each of the three categories. Based on its score, each institution is assigned a rating level of Platinum (85 points), Gold (65 points), Silver (45 points), or Bronze (25 points).

In preparing this report, the team utilized the following data collection process and analysis methodology:

1. Data Collection: Team members collected data from contacts in relevant departments as well as from publicly available information sources.
2. Data Analysis: Team members calculated expected UTSA points and overall score, and compared them to average scores claimed by universities who have reported to the STARS system. At the time the analysis, there were 39 institutions with reported STARS scores. A number of specific universities were also included.
3. Recommendations: The team developed a set of recommendations for possible sustainability-related activities UTSA can pursue to improve its performance on the STARS rating System.
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4. Methodology Limitations:
   • The assessment included in the report was based on available data at the time the report was prepared.
   • The team adopted a conservative approach in awarding points to UTSA activities and only points clearly claimable were included in the calculations.
   • No innovation points were awarded in this report.

UTSA SCORES

The figures below illustrate the scores expected for UTSA in each of the major categories and sub-categories of the STARS rating system compared to the available points in each category and sub-category. The graphs show that UTSA can claim a total of 76.01 points out of a possible 300 points. This allows UTSA to claim a Bronze rating on the STARS system. The following observations and conclusions can be made regarding UTSA’s score:

1. UTSA performed best in the Planning, Administration, and Engagement (PAE) Category in which it’s score was close to the silver level. Both Operations (OP) and Education & Research (ER) Categories were well below the Bronze level.
2. In the PAE category, UTSA claims most of its points in the Coordination & Planning subcategory. The Public Engagement sub-category offers the weakest performance for UTSA in this category.

![Figure 1: UTSA Category and Total Score](image-url)
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3. In the Education & Research category, UTSA scores very low in the Curriculum sub-category, which offers the highest number of possible points in the STARS system. UTSA’s score is somewhat better, although still weak, in the Research and Co-curricular Education sub-categories.

4. UTSA’s score in the Operations category is the lowest of the three STARS categories. UTSA’s score in this category is impacted by the Climate, Buildings, and Energy sub-categories, in which UTSA score low.

Figure 2: UTSA Sub-Category Expected & Possible Points.

COMPARISON WITH OTHER UNIVERSITIES:

UTSA scores were compared to the average points claimed by all reporting institutions, as well as to the points claimed by three universities in particular: The University of Texas at Austin; The University of Texas at Arlington, and the University of Colorado at Boulder. Both UT Austin and UC Boulder are long term aspirants for UTSA (as identified in the UTSA strategic plan), and UT Arlington is UT System sister university with comparable conditions to UTSA. An average score for Texas institutions was also included. The figure below shows the results of this comparison, and a more detailed breakdown of the points is included on page 196 and Appendix 1.
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The figure shows that UTSA’s scores in all three major categories are well below the scores claimed by each of the universities being compared as well as the average scores of Texas universities and all reporting universities. While UTSA can claim a Bronze rating level only, all three Texas Universities (as well as the average Texas and overall scores, are in the Silver level, while UC Boulder has claimed a Gold level rating. UTSA is most competitive in the PAE category compared to the OP and ER categories.

Summary of Recommendations:

The following is a summary of the recommendations proposed by the project team to enhance UTSA’s sustainability activities and potential STARS score and rating level

1. In Co-Curricular Education, UTSA scores 8.5 out of a possible 18 points. UTSA should implement a student sustainability educators program, create a central sustainability website that consolidates information about UTSA’s sustainability efforts, develop means of disseminating student research on sustainability (possibly in The Paisano).
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2. In **Curriculum**, UTSA scores 4.02 out of a possible 55 points. UTSA should develop undergraduate and graduate program in sustainability, incentivize the development of more sustainable-focused and sustainable-related courses in all departments. Sustainability learning outcomes should be integrated into more degree programs at the undergraduate and graduate levels. Sustainability immersive experiences and a sustainability literacy assessment should also be considered.

3. In **Research**, UTSA scored 6.8 out of a possible 27 points. UTSA should develop an institutional definition of sustainability research and develop more incentives to increase the number of faculty and departments involved in sustainability research.

4. In **Buildings**, UTSA scored 2 out of a possible 13 points. UTSA should consider either adopting LEED standards for all new buildings and existing buildings or design new buildings in accordance with green building guidelines and policies as well as develop sustainable operations and maintenance guidelines and policies for all existing buildings.

5. In **Climate**, UTSA scored 0 out of a possible 16.5 points. UTSA should develop a GHG inventory and begin reducing greenhouse gas emissions.

6. In **Energy**, UTSA scores 1.2 out of a possible 16.5 points. UTSA should reduce its energy consumption per/square floor area and increase the size of its renewable energy sources.

7. In **Transportation**, UTSA scored 3.4 out of a possible 12 points. UTSA should add more energy efficient vehicles to its campus fleet, and should encourage alternative transportation options for students and staff.

8. In **Coordination and Planning**, UTSA scored 13 out of 18 points. Developing a campus wide sustainability plan, and a climate plan would further strengthen this category.

9. In **Public Engagement**, UTSA scored 8 out of a possible 31.75 points. UTSA could offer continuing education courses focused on or related to sustainability and/or a certificate program in sustainability. UTSA should also keep record of the number of student involved in community service activities as well as the average number of hours students spend on these activities.