3.11.3 Physical Facilities

The institution operates and maintains physical facilities, both on and off campus, that appropriately serve the needs of the institution’s educational programs, support services, and other mission-related activities.

Compliance Judgment

___ Compliance  ___ Partial Compliance  ___ Non-Compliance

Narrative

Texas Woman's University (TWU) operates and maintains physical facilities that appropriately serve the needs of the institution. The Vice President of Finance and Administration (VPFA) has primary responsibility for the University’s physical facilities. The VPFA is responsible for establishing and communicating policies and procedures that ensure appropriate levels of operations and maintenance of the physical facilities.

The Facilities Management and Construction department, under the direction of the Associate Vice President of Facilities Management and Construction, is responsible for the planning, accountability, management, administration, construction, operation, maintenance, health, safety and environmental compliance of TWU physical assets. The University's physical plant consists of 60 buildings with approximately 2,496,335 gross square feet of floor space situated on 259.23 acres of land with campuses in three major cities. The responsibilities of this department include the design, implementation and maintenance of programs for the acquisition, distribution, and operation of utilities; and the maintenance and facilities, equipment, and grounds. This division ensures the reliable, efficient and economical delivery of energy products; manages programs for the modification of existing and construction of new facilities; oversees the development and execution of risk management (safety and health) programs; develops and implements energy management and conservation programs; and develops and reviews design and/or construction standards, criteria, or plans and specifications. Deferred maintenance and capital renewal, computer aided design, campus planning, solicitation of architect/engineering design or consultant services, environmental health, and physical security also fall within the purview of this department. The management staff collectively have many years of progressive technical, administrative, and trades experience.

The department is governed by the statutes of the State of Texas and a Strategic Operating Plan [1] that supports the University’s Mission and creates a responsive, flexible, and competent service organization. Facilities Management and Construction’s Risk Management division is responsible for environmental health and safety including fire protection/annunciation and sprinkler systems, emergency generator installation and testing and the University’s Risk Management and Emergency Operations programs which assists in limiting and/or managing risk such as arc flash prevention, ADA requirements, National Fire Protection Agency (NFPA) code enforcement, etc.
TWU’s main campus is in Denton with Institutes of Health Sciences in both Dallas and Houston. Also, TWU offers five degree programs at the Collin Higher Education Center (CHEC) in McKinney.

- The main campus in Denton [2] sits on 259.23 acres encompassing 2,105,572 gross square feet in 58 buildings of academic and support space. The university also leases three apartment complexes for additional student housing. The new Ann Stuart Science Complex opened in 2010, and the new Fitness and Recreation Center opened in 2011.
- The T. Boone Pickens Institute of Health Sciences – Dallas Center [3] opened in 2011. The Dallas Center sits on 3.69 leased acres located near Parkland Hospital and UT Southwestern Medical Center where students majoring in health fields have access to facilities for training and internships. The Dallas campus encompasses a four level parking garage and an eight story building of 193,383 gross square feet for a Health Systems Management, Nursing, Physical Therapy and Occupational Therapy programs plus a Stroke Center.
- The Institute of Health Sciences – Houston Center [4] opened in 2006 with programs in Health Care Administration, Nursing, Nutrition and Food Sciences, Occupational Therapy and Physical Therapy. The Houston Center sits on 0.65 acres with an eleven story building of 197,380 gross square feet located in the Houston Medical Center where students have access to facilities appropriate to their fields.
- Campus maps of the main campus in Denton, the Dallas campus, and the Houston campus show the layout of the campuses [5].
- The Collin Higher Education Center (CHEC) in McKinney opened in January 2010 where TWU has authority to offer bachelor’s programs for Child Development, Math, and Nursing. TWU also offers master’s programs for Administration (Education) and Special Education [6] [7]. (Note: Currently TWU does not offer ≥50% of any program at CHEC)
- TWU participates in a cooperative agreement with the Houston Academy of Medicine – Texas Medical Center (HAM-TMC) library [8]. As a member institution, TWU provides access to the HAM-TMC library for faculty, staff, and students studying Nursing, Nutrition, Occupational Therapy, Physical Therapy, Health Care Administration and Library Science at the Houston center. The HAM-TMC library is a world class medical library with over 357,000 books and bound journals and web pages that provide links to health science resources and services. The HAM-TMC library provides its member institutions online access to 9,101 electronic journals and 172 databases, access to individual consultations with professional medical librarians and library orientations for faculty and students.

The main campus in Denton, Dallas campus, Houston campus and the Collin Higher Education Center in McKinney, are each provided with buildings and equipment that appropriately support the mission of TWU. The University’s facilities are divided by academic functional area with 42% for teaching, 31% for office, 13% for library, 9% for support, and 5% for research [9] [10]. Of the total square feet of facilities space, 84.3% are located in Denton, 7.9% in Houston, and 7.7% in Dallas.
Table 3.11.3.A displays the number of classrooms and laboratories at each of the three TWU campuses in Fall 2011.

### Table 3.11.3.A - Classrooms and Laboratories, Fall 2011

<table>
<thead>
<tr>
<th>Campus</th>
<th>Classrooms</th>
<th>Labs</th>
<th>Classrooms for 80 or More Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>Denton</td>
<td>60</td>
<td>133</td>
<td>6</td>
</tr>
<tr>
<td>Dallas</td>
<td>16</td>
<td>46</td>
<td>3</td>
</tr>
<tr>
<td>Houston</td>
<td>14</td>
<td>25</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>90</td>
<td>204</td>
<td>13</td>
</tr>
</tbody>
</table>

Texas Higher Education Coordinating Board (THECB) Accountability System statistics provides square footage comparisons among Texas doctoral universities. The following information illustrates how TWU square footage for academic functional areas compares with peer institutions:

- TWU has 85.76 square feet of total academic space per student FTE while the average of the peer group is 94.26 square feet per student FTE [11].
- TWU allocates 36.17 square feet of teaching space per student FTE, this is below the average of other Texas institutions in the doctoral peer group where the average is 41.75 square feet [12]. TWU makes efficient use of classroom and laboratory space as demonstrated by meeting the space usage efficiency standards set by the THECB [13].
- Statistics on square footage per student FTE for office space show that the University’s square footage per student FTE is 26.5, slightly below the group average of 29.49 square feet per student FTE [14].
- The allocation of 11.3 square feet per student FTE for library space is slightly below the peer group average of 11.72 square feet [15].
- TWU allocates 7.82 square feet of support space per student FTE. This compares favorably to other Texas institutions in the doctoral peer group where the average is 6.49 square feet [16].
- The allocation of 3.97 square feet per student FTE for research space is slightly below the peer group average of 4.81 square feet [17].

Residential facilities including traditional dormitories as well as apartments for families are provided on the Denton campus totaling 1,805 bed spaces (1,686 owned and 119 leased) and were filled to 98.3% capacity for the Fall 2011 semester [18]. Residential facilities are not provided at the Dallas and Houston campuses. TWU also operates the Gertrude Gibson House for hosting meetings, department retreats, receptions, and for overnight lodging by TWU faculty, staff, and university sponsored guests. Dining facilities are available at all three campuses. The main campus has a variety of dining options for students in the Student Union, Stark-Guinn Commons and food-beverage kiosks in (MCL and CFO) academic buildings. The Dallas campus provides a café and Houston campus operates a food-beverage kiosk. All campuses have snack and beverage vending machines available. Athletic facilities are provided at the main campus in Denton for NCAA Division II competition in softball, basketball, volleyball, and gymnastics. A variety of fitness and recreation opportunities are provided on the Denton campus including exercise equipment, climbing wall, basketball, volleyball, outdoor adventure equipment rentals,
indoor pool, outdoor pool, walking/running paths, tennis courts, intramural field and a golf course. Fitness and Recreation facilities and exercise equipment are provided at both the Dallas and Houston campuses. Reasonable parking spaces are available at all campus locations. TWU built a 214-space surface parking lot in 2011 on the Denton campus and a four-level 592-space parking garage in 2012 on the Dallas campus.

A comprehensive master planning program includes the master plan for the University, a maintenance, renovation, and deferred maintenance plan; a project/fund balance plan; and an equipment maintenance plan to ensure that the physical resources are adequate for the needs of the University. A current written physical facilities master plan, as well as maintenance and deferred maintenance plans, and project and funding plans are maintained.

In 1979, with the help of Caudill-Rowlett-Scott architects/engineers/planners, TWU published the Campus Facilities Master Plan. HKS, Inc. Architects/Engineers/Planners created an updated Campus Facilities Master Plan in 1995. In February 2004 3D/International completed a Facilities Condition Assessment Report. In August 2011, the University selected SHW Group to complete an updated Facilities Condition Assessment audit and report. Denton Campus Facilities Visioning Forums provided valuable input from faculty and staff on facilities expansion needs as well as location of future facilities [19]. Additionally, the University Facilities Management and Construction Department sends out a call for projects each year [20]. Annually, as new major university physical facility resource project needs are identified, they are added to the Campus Master Plan for Capital Expenditures, Campus Master Plan for Deferred Maintenance, and Campus Development Plan to keep the campus facilities master plans up to date. The Campus Master Plans for Capital Expenditure [21] and Deferred Maintenance [22], along with the deferred maintenance actual expenditures report [23], are certified by the University Chancellor and submitted to the THECB annually. The TWU Board of Regents Finance and Audit Subcommittee reviews facilities and grounds needs and projects in detail before the meeting of the full board [24]. The TWU Board of Regents approved the Campus Master Plan [25] and approves updates during the quarterly meetings [26] [27] [28].

The University obtains input about facilities’ ability to appropriately serve the needs of the institution’s educational programs, support services, and other mission-related activities from faculty, staff and students. The feedback comes through various surveys [29] such as Noel-Levitz Student Satisfaction Surveys, Housing Customer Satisfaction Surveys, Environmental Initiatives Surveys, Dining Services Satisfaction Surveys, and Work Order Surveys. Other information sources include the Faculty Senate, Staff Senate, Student Senate Town Hall Forums, focus groups such as the Facilities Visioning Forums [19], and the annual call for projects [20]. Academic administrators, faculty, and support staff provide valuable input on proposed new construction to ensure that new facilities will meet the needs and concerns of programs. Input from the programming phases of the recently completed Ann Stuart Science Complex and the T. Boone Pickens Institute of Health Sciences Dallas Center projects is included [30]. Facilities Management and Construction maintenance personnel, custodians, landscape services, and management inspect buildings while completing their daily tasks and submit work orders for items requiring repairs.
Each year the Vice Presidents and Provost issue a University-wide call for projects. All major renovation projects and new facility construction projects must be submitted through the appropriate vice president, and reviewed by Facilities Management for feasibility and cost requirements prior to being reviewed and approved by the Provost, VP of Finance and Administration, VP of Student Life, and President/Chancellor before being submitted to the Board of Regents for review and approval annually. The university funds these major capital projects from several sources including University funded or state funded bonds, Higher Education Assistance Appropriations, University Fund Balances, private gifts, and grants. For capital projects the THECB requires project funding to be either in-hand or pledged. If the project financing involves private gift and grant funds, these funds are required to be either in-hand or the governing Board of Regents has to commit an alternative source of funds, should the primary source of funds not be forthcoming, or agrees to forego the project [31]. If the deferred maintenance for the campus exceeds 5% of the current replacement value of educational and general space, the University must provide an action plan to correct the excessive deferred maintenance backlog prior to approval of new major construction or renovation projects approved by the THECB. TWU’s Fall 2011 Campus Condition Index (CCI) is rated “Good” with a value of 3.8% [32]. As per the THECB, all institutions with a CCI rating of “Good” (defined as up to 5%) meet the standard.

Highlights of the University Campus Master Plans [21] [22] for improvements to facilities include the following projects on the Denton campus:

- Central Chiller Plant capacity upgrade including adding a 1,500 ton chiller inside the existing Central Chiller Plant, cooling tower, piping, pumps and electrical upgrades
- Major renovation of the Old Main Building and Undergraduate Lab Building including, mechanical, electrical, plumbing, and architectural changes
- Construction of a new building to replace the Graduate Research Building
- Construction of a new Administrative and Support Services Building
- Infrastructure upgrades to address campus circulation and drainage deficiencies
- A student referendum vote on a new Student Union is planned for Fall 2012.

A major emphasis and responsibility of the Facilities Management and Construction Department is the maintenance, repair, and operation (MRO) of the University’s buildings and infrastructure. The MRO of the Denton, Dallas and Houston campuses are handled by employees at each location with support from the main campus as needed. The three apartment complexes leased from Scott Brown Properties (SBP) for additional student housing in Denton are maintained by Tri-Star Repair and Construction, LLC (SBP in-house maintenance company) [33]. The Collin Higher Education Center (CHEC) facilities are maintained by Collin College (Collin County Community College District) [34] [35] [36].

The University has 32 maintenance, 17 HVAC, 75 custodial, 23 landscape, 16 general services, 8 asset and resources, 6 design and construction, and 4 administration personnel to maintain the buildings and grounds of the University’s three campuses. The Facilities Management and Construction policy for Small Capital Project Administration [37] [38] provides direction for the completion of small in-house capital projects while the Maintenance Management Program [39] provides direction for the completion of planned, preventive, and corrective maintenance.
TWU utilizes the TMA Systems maintenance management software for in-house work management. All work on TWU-owned properties is initiated by submission of a Work Request [40]. Work requests are converted into work orders [41] when they are accepted and assigned to a specific shop. Most work orders are completed by in-house personnel but some work orders are completed by outside contractors. When a work order is completed and closed out, a customer satisfaction survey is automatically emailed to the requestor [42]. The TWU Office of Internal Audits reviewed the University’s work order processes and procedures and determined that they are effective and have proper controls [43]. Preventive maintenance work orders are entered in the TMA Systems maintenance management system for scheduling and tracking completion [44]. Preventive maintenance supports the continuing operations of building systems by reducing equipment failure, extending equipment and infrastructure life expectancy, and reducing utility costs which in turn supports the University’s mission. Preventive maintenance has the highest priority after emergency work orders.

TWU provides appropriate physical facilities for administrative staff and servers to support the Distance Education program. The servers are located in secured physical locations with computer room air conditioning units and backup power sources. TWU provides many on-line education opportunities for students. The 2010-2011 Distance Education Annual Report [45] shows the program is expanding in both offerings and in student participation.

The Office of Technology maintains a sound technology infrastructure conducive to enhancing continuous improvement and the mission of the University. University policy 9.01 (Computer and Software Acceptable Use Policy) guides the appropriate use of technology information resources for the University and helps to ensure a safe and stable infrastructure for all end users [46]. Per its mission, the Office of Technology, “designs, manages, and implements technology systems, processes, and services that support the mission of the university” through collaboration and servant leadership.

In October 2011, TWU began evaluating the operational efficiency and strategic direction of technology within the University. TWU administration engaged the University community, academics, outside peers and external experts to gain a complete assessment of TWU’s technological capabilities. The analysis resulted in a sweeping change in responsibility and reporting for the technology departments. The Office of Technology now has three departments, Client Services, Enterprise Applications and Technology Infrastructure. The intent of the external evaluation and the reorganization was to provide an improved and higher level of technological service to the University community. The reorganization has allowed for a more centralized and collaborative approach to technology, allowing the Office of Technology to better service end users and provide greater resources to students, faculty, staff, academic programs, and university units. The executive summary of this analysis is provided for review [47].

TWU’s network consists of a 1Gbps fiber-optic backbone interconnecting buildings on the main campus. A leased 1Gbps circuit connects the Dallas campus to the Denton campus and a leased 100Mbps circuit connects the Houston campus to the Dallas campus. Station cabling to desktops occurs is via Category 6 copper wire, with an approximately 80/20 split of 1Gbps and 100Mbps
connections to desktop computers. TWU has a wireless network overlaying the wired infrastructure operating at 802.11a/b/g/n frequencies. The unit of Technology Infrastructure (TI) maintains the network. TI also provides application development, risk assessment, information security, continuity, and compliance to help ensure faculty, staff and student information is kept safe in a digital world [48] [49] [50].

Supporting Documents

[2] Virtual Denton Campus Tour
[3] Dallas Building
[4] Houston Building
[5] Campus Maps
[6] TWU Collin Higher Education Center Programs
[7] Collin Higher Education Center
[9] Campus Facilities Projects Recommended for BOR Approval List
[10] TWU Sq Ft by Functional Area
[11] Peer Group E&G Sq Ft per Student FTE
[12] Peer Group Teaching Sq Ft per Student FTE
[13] Space Usage Efficiency Fall 2011
[14] Peer Group Office Sq Ft per Student FTE
[15] Peer Group Library Sq Ft per Student FTE
[16] Peer Group Support Sq Ft per Student FTE
[17] Peer Group Research Sq Ft per Student FTE
[18] Housing Beds Fall 2011
[19] Facilities Visioning Forums
[20] Call for Projects
[21] MP1 Campus Master Plan Certification of Capital Expenditure Plan
[22] MP2 Campus Master Plan Certification of Deferred Maintenance and Demolition Plan
[23] MP4 Campus Master Plan Certification of Deferred Maintenance Expenditures
[24] BOR Finance & Audit Committee Minutes
[26] BOR Full Board Minutes
[27] Master Plan Land Use
[28] Master Plan Land Acquisition
[29] Various Feedback and Surveys
  Noel-Levitz Student Satisfaction Survey
  Housing Customer Satisfaction Surveys
  Environmental Initiatives Survey
  Dining Survey Questions
  Work Order Feedback Surveys
[30] Faculty Construction Input
[31] BOR Capital Project Funding
  BOR Capital Project Funding Certification
  THECB Dallas IHS Capital Project Application
  THECB Science Capital Project Application