Space Utilization

2014 SUE Score Rankings

- The chart to the right indicates the overall SUE (Space Usage Efficiency) score for each university for Fall 2014
- Texas State University is one of three schools with highest SUE score given of 200
- Highest learning space deficit in the state
Average Weekly Classroom Hours Per Week (Fall 2015)

- THECB Target (38 Hours)
- Average (43 Hours)

* Data Provided by Texas State University
Space Utilization

Class Lab Utilization

Average Weekly Class Lab Hours Per Week (Fall 2015)

- THECB Target (25 Hours)
- Average (39 Hours)

* Data Provided by Texas State University
## Space Needs
Based on Projected Enrollment Growth

<table>
<thead>
<tr>
<th>Type of Space</th>
<th>Current Utilization</th>
<th>Appropriate Utilization</th>
<th>Current Shortfall</th>
<th>Appropriate Utilization</th>
<th>2020 Shortfall</th>
<th>Appropriate Utilization</th>
<th>2025 Shortfall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching Spaces</td>
<td>760,368</td>
<td>1,396,755</td>
<td>(636,387)</td>
<td>1,468,544</td>
<td>(708,176)</td>
<td>1,551,108</td>
<td>(790,740)</td>
</tr>
<tr>
<td>Library Space</td>
<td>203,385</td>
<td>392,837</td>
<td>(189,452)</td>
<td>413,028</td>
<td>(209,643)</td>
<td>436,249</td>
<td>(232,864)</td>
</tr>
<tr>
<td>Office Space</td>
<td>626,165</td>
<td>781,925</td>
<td>(155,760)</td>
<td>782,053</td>
<td>(155,888)</td>
<td>826,022</td>
<td>(199,857)</td>
</tr>
<tr>
<td>Support Space</td>
<td>124,979</td>
<td>250,743</td>
<td>(125,764)</td>
<td>264,736</td>
<td>(139,757)</td>
<td>283,096</td>
<td>(158,117)</td>
</tr>
<tr>
<td>Total E&amp;G ASF</td>
<td>1,714,897</td>
<td>2,822,260</td>
<td>(1,107,363)</td>
<td>2,928,361</td>
<td>(1,213,464)</td>
<td>3,096,475</td>
<td>(1,381,578)</td>
</tr>
<tr>
<td>Total GSF</td>
<td>2,638,369</td>
<td>4,342,047</td>
<td>(1,703,678)</td>
<td>4,505,283</td>
<td>(1,866,914)</td>
<td>4,763,927</td>
<td>(2,125,558)</td>
</tr>
<tr>
<td>Student FTE</td>
<td>31,039</td>
<td>31,039</td>
<td></td>
<td>32,634</td>
<td></td>
<td>34,469</td>
<td></td>
</tr>
<tr>
<td>ASF per Student FTE</td>
<td>55.25</td>
<td>90.93</td>
<td></td>
<td>89.73</td>
<td></td>
<td>89.83</td>
<td></td>
</tr>
</tbody>
</table>

* Data Provided by Texas State University

** Space Needs based on 1.5% projected annual enrollment growth
Academics + Research

What we Heard

• Want to cultivate interdisciplinary research activity
• Need parking to accommodate research activity
• Want to understand where funded research facilities should exist (on/off campus)
• Need to identify where researchers meet
• Space utilization on campus needs to be re-evaluated
• Average expenditure per PI is $50k
• $45M restricted research expenditures is target - NRUF
Academics + Research
The Important Numbers

$47.7M
Total R&D Expenditures
Educational & General Funding
Designated Funds
Restricted Gifts
Restricted Grants

$27.2M
Restricted Research Expenditures
Restricted External Gifts
Restricted External Grants
<table>
<thead>
<tr>
<th>Emerging Research Universities</th>
<th>Additional Peers</th>
<th>National Peers THECB</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas Tech U.</td>
<td>U. Houston</td>
<td>U. North Texas</td>
</tr>
<tr>
<td>U. Texas, Arlington</td>
<td>U. Texas, Dallas</td>
<td></td>
</tr>
<tr>
<td>U. Texas, El Paso</td>
<td>U. Texas, San Antonio</td>
<td></td>
</tr>
<tr>
<td>Northern Arizona U.</td>
<td>Portland State U.</td>
<td>U. Oregon</td>
</tr>
<tr>
<td>Wright State U.</td>
<td>U. Arkansas, Fayetteville</td>
<td>U. Central Florida</td>
</tr>
<tr>
<td>U. Wisconsin-Milwaukee</td>
<td>U. Oklahoma, Norman</td>
<td></td>
</tr>
<tr>
<td>U. Central Florida</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Academics + Research
TXST Distribution of PI’s per TXST FY15 Unique PIs by College info

Office of the Assoc VP for Res, 15
Technology Commercialization, 2
McCoy College of Business, 3

College of Applied Arts, 21
VP for University Advancement, 1
VP for Student Affairs, 6
VP for Information Technology, 2
University College, 2
The Graduate College, 1
School of Criminal Justice, 1
Office of the Provost and VPAA, 1

College of Education, 17
College of Fine Arts & Communications, 6
College of Health Professions, 6

College of Liberal Arts, 22

College of Science & Engineering, 83

189
### Student Housing

#### Housing Needs

<table>
<thead>
<tr>
<th>Year</th>
<th>FTFT Enrollment</th>
<th>FTFT Occupancy Based on Enrollment Projections</th>
<th>Sophomore Enrollment</th>
<th>Sophomores at Current Occupancy</th>
<th>50% Sophomore Target</th>
<th>FTFT &amp; Sophomore at Current Occupancy</th>
<th>All FTFT + 50% Sophomore Target</th>
<th>Additional FTFT &amp; Sophomore Beds Required</th>
<th>** Add’l FTFT &amp; Sophomore Beds Required w/ 50% Sophomore Target</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>5,727</td>
<td>5,362</td>
<td>4,467</td>
<td>1,171</td>
<td>2,234</td>
<td>6,533</td>
<td>7,596</td>
<td>0</td>
<td>1,062</td>
</tr>
<tr>
<td>2016</td>
<td>5,813</td>
<td>5,442</td>
<td>4,534</td>
<td>1,189</td>
<td>2,267</td>
<td>6,631</td>
<td>7,709</td>
<td>98</td>
<td>1,176</td>
</tr>
<tr>
<td>2017</td>
<td>5,900</td>
<td>5,524</td>
<td>4,602</td>
<td>1,207</td>
<td>2,301</td>
<td>6,721</td>
<td>7,825</td>
<td>197</td>
<td>1,292</td>
</tr>
<tr>
<td>2018</td>
<td>5,989</td>
<td>5,607</td>
<td>4,671</td>
<td>1,225</td>
<td>2,336</td>
<td>6,832</td>
<td>7,942</td>
<td>298</td>
<td>1,409</td>
</tr>
<tr>
<td>2019</td>
<td>6,078</td>
<td>5,691</td>
<td>4,741</td>
<td>1,243</td>
<td>2,371</td>
<td>6,934</td>
<td>8,062</td>
<td>401</td>
<td>1,528</td>
</tr>
<tr>
<td>2020</td>
<td>6,170</td>
<td>5,776</td>
<td>4,812</td>
<td>1,262</td>
<td>2,406</td>
<td>7,038</td>
<td>8,183</td>
<td>505</td>
<td>1,649</td>
</tr>
<tr>
<td>2021</td>
<td>6,262</td>
<td>5,863</td>
<td>4,884</td>
<td>1,281</td>
<td>2,442</td>
<td>7,144</td>
<td>8,305</td>
<td>610</td>
<td>1,772</td>
</tr>
<tr>
<td>2022</td>
<td>6,356</td>
<td>5,951</td>
<td>4,958</td>
<td>1,300</td>
<td>2,479</td>
<td>7,251</td>
<td>8,430</td>
<td>718</td>
<td>1,897</td>
</tr>
<tr>
<td>2023</td>
<td>6,451</td>
<td>6,040</td>
<td>5,032</td>
<td>1,319</td>
<td>2,516</td>
<td>7,360</td>
<td>8,556</td>
<td>826</td>
<td>2,023</td>
</tr>
<tr>
<td>2024</td>
<td>6,548</td>
<td>6,131</td>
<td>5,108</td>
<td>1,339</td>
<td>2,554</td>
<td>7,470</td>
<td>8,685</td>
<td>937</td>
<td>2,151</td>
</tr>
<tr>
<td>2025</td>
<td>6,646</td>
<td>6,223</td>
<td>5,184</td>
<td>1,359</td>
<td>2,592</td>
<td>7,582</td>
<td>8,815</td>
<td>1,049</td>
<td>2,282</td>
</tr>
<tr>
<td>2026</td>
<td>6,746</td>
<td>6,316</td>
<td>5,262</td>
<td>1,380</td>
<td>2,631</td>
<td>7,696</td>
<td>8,947</td>
<td>1,163</td>
<td>2,414</td>
</tr>
<tr>
<td>2027</td>
<td>6,847</td>
<td>6,411</td>
<td>5,341</td>
<td>1,400</td>
<td>2,670</td>
<td>7,811</td>
<td>9,081</td>
<td>1,278</td>
<td>2,548</td>
</tr>
</tbody>
</table>

* Assuming that the University continues to house the same percent of FTFT and Sophomore students as Fall 2015 and disregarding waitlists

** Assuming that the University continues to house the same percent of FTFT students as Fall 2015 and houses 50% of total Sophomore students as of Fall 2015; disregarding waitlists

---

**Existing Conditions**
- 6,870 On-Campus Residents
- Exceeded operating capacity by 44
- First-time, full-time (FTFT) freshmen comprised 5,354 (80%) of the total beds
- 200 Resident Assistants
- Waiting list of 850 for Fall 2015

**Housing Space Needs**
- Currently a need for 500 beds (keeping Smith and Arnold open would address need)
Student Housing
Future Residence Hall Needs, Quality and Typology

Future Residence Hall Development

• Avoid large community-type bathrooms

• Support for Living-Learning Communities:
  • Faculty apartments
  • Offices
  • Smart classrooms/seminar rooms

• Access for non-residents to common and classroom space without jeopardizing the security of the residence

• Building capacity of at least 300 beds to balance efficiencies and develop a strong sense of community
Dining

Dining Needs

Existing Conditions

- 2,350 seating capacity in dining halls and food courts (including Jones Food Court)
- Both Harris Dining Hall and Commons Dining Hall have an adequate number of seats to accommodate the current volume with some additional capacity
- Desire for more healthy food options
Dining
Future Dining Needs, Quality and Typology

Future Dining Needs

• Should be a focus on Student-to-Student and Student-to-Faculty interactions in dining centers by designing space and operations to encourage lingering rather than turnover

• Accommodate future enrollment and resident growth:
  • **All You Can Eat Dining Hall:** 1 seat for every 2.5 residents in on-campus housing
  • **Retail Food Court:** 1 seat for every 5 residents in on-campus housing
Athletics
What we Heard

Existing Athletic Programs

• **Soccer**: Move soccer closer to eastern athletics. New stadium with seating capacity of 1,500 – 2,000 is desired

• **Baseball/Softball**: Improvements needed at stadiums with construction of support facility

• **Football**: Upgrades to attendee and team support facilities (Summer 2016)

• **Tennis**: Upgrades to existing courts and facilities with additional courts to allow for competitions

Desired Programs

• Dining area on east side of campus

• Academic support facility with parking

• Student housing near athletic facilities
Recreation
What we Heard

**Indoor Recreation Facility**
- No perceived need for expansion

**Outdoor Recreation**
- Great need for lit outdoor recreation fields including: Flag Football, Soccer, Lacrosse, Softball and Baseball
- Development options for the current Golf Course site are under review by the University
- There is a need for passive type recreation spaces located close to student housing for activities such as frisbee and catch

**Outdoor Recreation**
- Round Rock students do not pay the student recreation fee.
- As Round Rock expands they will need recreation facilities including an indoor court(s).
- Fitness spaces could be built or a sharing scenario worked out with nearby facilities.
Department of Health & Human Performance

What we Heard

**Existing Facility**
- The Jowers facility is confusing to navigate and at capacity

**Space Needs**
- New indoor facility could accommodate the cheer squad and academic programs
- Continued growth within the program has created a need for additional gyms, offices and class spaces, as well as additional storage facilities near the Event Center
Summary + Recommendations

- 60% of commuter students (within 5-miles) arrive via North-East of campus
- 34% (and growing) of resident students on West portion of campus
- Accessing campus core area is a challenge, and should be!
  - Pedestrians should be granted highest priority
  - Delivery/Service should be granted low priority
- Time of day matters
  - Work around peak class change times
- Need for coordinated deliveries in the future
  - Centralized, consolidated, managed
Transportation and Parking
Parking Services

Summary + Recommendations

- Permit zone system minimizes traffic (commuter students) on campus
- 12,000 parking spaces for 37,000 persons (0.32 spaces per person)
  - Texas A&M: 0.60
  - UT El Paso: 0.41
  - UT San Antonio: 0.36
  - UT Austin: 0.30
- Future demand for +2,400 net new parking based on enrollment to 2027 (1,200 spaces for residents)
- Commuter parking lots depend on transit service

<table>
<thead>
<tr>
<th></th>
<th>2015</th>
<th>2027</th>
<th>Growth</th>
<th>% Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Campus Population</strong></td>
<td>41,211</td>
<td>47,933</td>
<td>6,722</td>
<td>16%</td>
</tr>
<tr>
<td><strong>Commuter Students</strong></td>
<td>30,443</td>
<td>34,045</td>
<td>3,602</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Resident Students</strong></td>
<td>6,685</td>
<td>8,998</td>
<td>2,313</td>
<td>32%</td>
</tr>
<tr>
<td><strong>Employees</strong></td>
<td>4,083</td>
<td>4,891</td>
<td>808</td>
<td>19%</td>
</tr>
<tr>
<td><strong>Est. Parking Space Demand</strong></td>
<td>12,016</td>
<td>14,442</td>
<td>2,426</td>
<td>19%</td>
</tr>
<tr>
<td><strong>Commuter Students</strong></td>
<td>4,368</td>
<td>4,885</td>
<td>517</td>
<td>12%</td>
</tr>
<tr>
<td><strong>Resident Students</strong></td>
<td>3,715</td>
<td>5,000</td>
<td>1,285</td>
<td>32%</td>
</tr>
<tr>
<td><strong>Commuter Students</strong></td>
<td>2,603</td>
<td>3,118</td>
<td>515</td>
<td>19%</td>
</tr>
<tr>
<td><strong>Misc. Spaces</strong></td>
<td>1,330</td>
<td>1,439</td>
<td>109</td>
<td>8%</td>
</tr>
</tbody>
</table>

*Assumes 1.5% annual enrollment growth
**Net new parking space demand, in addition to parking lost to building projects
Summary + Recommendations

• Bicycling is growing in popularity and balances parking demand
  • Delaying or reducing the future demand for parking spaces
• Low-cost and quick-reward improvements for University and City
• Seek to pave informal bike paths in coordination with City
  • City Park St. / Charles Austin Dr. / Railroad crossings
  • Bicentennial Park along San Marcos River
• Improve crossings/intersection locations, particularly along campus edge
• Address pedestrian gaps along primary paths
Transportation and Parking
Transit Services

Summary + Recommendations

• 27,000 Average daily boardings; Off Campus Routes ~74%
  • 32,000 boardings per day at beginning of spring semester

• Transit is a necessary component of parking system (commuter students)

• Transit reaches a large portion of the City’s student apartment areas

• Potential for merger with City transit system (CARTS) for purposes of federal funding
  • Many challenges; few benefits for TXST
  • CARTS Daily Ridership ~500-800 per day (5-Year Transit Plan (2014))
Thermal & Electrical Utilities
Distribution Systems - Areas of Concern / Opportunities

- West side of campus capacity
- Electrical vulnerability
- Single utility path between plants
- Maintain service to critical facilities
- Develop key corridors
- Chilled water crossing
- East side of campus utility plan
Thermal & Electrical Utilities

Summary

Substantial Renewal Required
• 19 major pieces of equipment
• 20% of distribution piping
• +100 AHUs & associated building HVAC systems

Distribution Improvements
• Develop corridors to increase reliability and renew aging infrastructure
• Improve system efficiency to increase system capacity
• Modify electrical distribution to fully utilize benefits of CHP

Campus Growth Considerations
• New loads on far east and west sides of campus may drive utility upgrades
Technology
Outside Plant, Wireless, Electronic Security

Outside Plant
• Continued focus on redundancy
• Distribution routing / joint use with MPE utilities

Wireless
• (64) exterior mesh network antennas
• April 2016 CSP advertisement for solutions

Electronic Security
• Migration towards monitored access control solution
Impervious Cover
Existing Conditions

Areas that drain to existing ponds
• Additional IC may be added, contingent on improvements/upgrades to existing pond and storm sewer system to accommodate the increase in runoff

Areas that do not currently drain to a pond
• Additional IC may be added; however new development will need to address the increase in runoff to the system.
Water Summary
Existing System Analysis

System Summary
- Two wells + CoSM Connection

Potable Water
- No current deficiencies in system, but upgrades needed to existing well security and infrastructure

Fire Demand
- Some areas with less than 1,000 gpm fire flow available
  - Limitation due to available pressure at connection to CoSM water system
- 10 existing PRVs across campus

ELEVATED STORAGE TANK (WATER TOWER)
CITY OF SAN MARCOS INTERCONNECTION
JACKSON WATER WELLS STANDPIPE AND TRANSFER PUMP STATION
Wastewater Summary
Existing System Analysis

Wastewater
• Discharge to 3 different CoSM wastewater basin areas
• System full of old pipe
• No current deficiencies in campus system at connections to CoSM system

Storm Sewer
• 65.5 acres discharge directly to Sessom Creek, 112 acres to CoSM ROW
• Recommended upgrades established in Campus Storm Water Drainage Study and Plan Report, 2013
Utilities

- Water and Wastewater service stubs provided for future build-out
Preliminary Demand Summary
Program Assumptions to Date

**Academic + Support Space**
- 2.1 million GSF space (not including research space)

**Housing**
- 2500 Beds (775,000 – 820,000 sf)

**Dining**
- 60,000 – 75,000 sf

**Recreation**
- 9 Outdoor Rec Fields + 3 Baseball Fields

**Parking**
- 2400 Parking Spaces

**Athletics**
- Soccer Stadium, Seating Capacity 1,500-2,000

**Student Resources**
- Student Health Center
Density

FAR – Floor to Area Ratio – Metric for calculating building density

MAIN + WEST CAMPUS (238 ac.)

.64 FAR

FULL CAMPUS (469 ac.)

.37 FAR
Space Types Across Campus

5-MINUTE WALK FROM ALKEK LIBRARY
Developable Zones
Round Rock Campus