

# 5. PRODUCTIVITY AND EFFICIENCY

## 5. Improving Productivity and Efficiency

*"People don't mind paying for a good service when they know they are getting the service they pay for. We have to be prepared to demonstrate to the state why we are worth what the state pays for higher education and the UT System, and that we are good stewards of state resources."*

### Addressing Financial Issues

A critical element of any strategic plan is an understanding of the resources necessary to accomplish the objectives of the plan along with a reasonable strategy for securing those needed resources. Over the last two decades, expenditures for the UT System have increased at a relatively consistent annual rate of 8% per year. If one assumes that same rate of growth, by fiscal year 2011 total expenditures will have increased by \$4.36 billion. The projected growth in expenditures may even be greater in order to accommodate strategic initiatives in research, student success, health care, etc.

Thus, recognizing productivity as a function of both quality and efficiency, it will be imperative for the UT System to become more productive to succeed in implementing the other objectives of this plan.

In planning for projected resource need, the UT System will work with campuses to determine how and where revenues might be increased and/or how and where expenditures can be reduced through more efficient and effective operations. Where feasible and appropriate, the System will also initiate greater use of a shared services model to reduce costs by generating economies of scale and standardizing processes while retaining campus autonomy and appropriate and customer focus.

---

### Goal

---

Each campus will model its projected five-year resource requirements, consistent with the objectives of the campus and System strategic plans, and determine a customized strategy for acquiring the necessary resources. The UT System will provide assistance to the campuses by helping develop the model, helping to monitor progress, and suggesting tools that might be implemented to accommodate the resource need.

---

## Strategies

---

To assist the System as a whole and the individual campuses find the resources required to fulfill their strategic objectives and public expectations, a number of suggested strategies are provided below.

### **Strategies to be implemented by UT System Administration:**

- **Shared Services** – The System will implement a shared services organizational model to oversee the installation and management of consolidated data centers and enterprise resource planning software systems. Campuses will be provided with incentives to participate when and where it makes sense to them and costs will be shared by the UT System and the participating campuses. Cost efficiencies will be created, information reporting will become more uniform and, over time, more and more administrative processes may be included.
- **Evaluation of Debt Capacity** – Working with the Board of Regents, the System will continue to monitor its debt capacity and costs and benefits of maintaining its current AAA rating. Strategically lowering our debt rating could have political ramifications and would increase our overall cost of debt, but would provide access to hundreds of millions of dollars of additional capital financing.
- **Expanded Use of Joint Purchasing** – The System will continue to explore new opportunities to leverage the collective size and strength of our campuses through joint purchasing agreements.
- **Review of Employee Benefits** – The System will continue to take the lead in evaluating employee benefit plans to ensure that they are competitive (that they assist in recruiting and attracting qualified employees) and cost-effective.
- **Greater Use of Online Classes** – Through the UT TeleCampus, the System will work with campuses to carefully manage the use of online courses and other distance education alternatives to enhance teaching efficiency.
- **Leverage of Information Technology Resources for Educational Purposes** – The

System will explore and facilitate the investment in information technology resources such as digital resources for the UT Libraries, expansion of the UT TeleCampus program, and enhanced supercomputing capacity.

### **Revenue enhancement strategies to be explored by the campuses with guidance from the System:**

- **Tuition and Fees** – Each campus will propose an appropriate tuition pricing strategy balancing resource needs, access, price differentiation, tuition elasticity, and financial aid leverage.
- **Auxiliary Revenues** – Campuses will work to ensure that auxiliaries cover all their costs, both direct and indirect, and are not supported from general or other revenue, freeing up resources to be applied to the institution's mission objectives. Strategies may include raising auxiliary prices, culling out or changing operations that are being subsidized, and investing in activities that are generating a positive return.
- **Gifts** – Working with the System Office of External Relations, campuses will develop strategies to increase private giving revenue. Increasing the payout rate of the endowments (including the PUF) could also be used to generate additional funds.
- **Clinical Revenues** – The six health institutions will need to continue to maximize both hospital and professional fees. Effectively managing billings and collections will be a key element to augment revenue in this area.
- **Grants and Contracts** – Each campus will continue to set goals and targets for increasing sponsored research revenue. Plans for enhancing technology transfer and patent licensing should be important elements of each institution's strategic research plan.
- **Investment Income** – The centralized investment of operating funds should provide increased investment income over the long run to the campuses and the System.
- **Other** – Campuses should explore other creative public/private partnerships to generate income and/or share costs with the private sector. Financial structures developed to monetize an institution's tax exemptions is one possibility.

### Cost Reduction Strategies

#### UT System Health Institutions

##### UT Southwestern Medical Center - Dallas

- Organized new Technology Development office to actively market technologies developed with the university and increase income from royalties, license fees, and patent rights

##### UT Medical Branch - Galveston

- Implemented more effective labor management methods to improve productivity and decrease total operating costs
- Developed the Texas Employees eXcel in Attendance Stewardship (TEXAS) to reward classified employees for being excellent stewards of their sick leave by providing employees with an additional incentive to use sick leave wisely

##### UT Health Science Center - Houston

- Improved billing and collection of charges associated with the physician's practice plan
- Eliminated the time and effort related to the processing of small purchase orders and related invoices through the use of Procurement Card for small purchases

##### UT Health Science Center - San Antonio

- Participated with other UT System institutions in pooling their buying power to license subscriptions to electronic journals from major publishers

##### UT M. D. Anderson Cancer Center

- Achieved substantial cost savings from direct manufacturers' rebates as a result of MDACC's equity ownership of Premier, Inc. and Premier Purchasing Partners

##### UT Health Center - Tyler

- Participated with other UT System institutions in pooling their buying power to license subscriptions to electronic journals from major publishers

### Efficiency Strategies to be Explored by the Campuses with Guidance from the System:

- **Outsourcing or Privatization** – Campuses may want to consider transferring non-core support services to outside contractors to increase flexibility and clarify the resources dedicated to an activity; it may also lower costs and improve service.
- **Increased Use of Student Labor** – Where possible campuses should contemplate creative use of student support to lower costs and provide needed revenue resources for students.
- **Decentralized and Streamlined Decision-Making** – Each campus should determine its tolerance for risk and its willingness to allow more decisions to be made at lower levels throughout the organization to reduce administrative overhead and allow the organization to be more responsive.
- **Labor Management** – Campus strategic plans may include a more effective and appropriate use of overtime, part-time, and temporary staff to lower personnel costs.
- **Utilities** – Each campus should review utility usage and implement energy conservation and pricing plans.
- **Flexibility of Faculty Staffing and Curriculum Reform** – Campuses should appropriately manage class sizes, courses taught, faculty workloads, and time students take to graduate and should include projections and targets for these areas in their strategic plans.
- **Increased Space Utilization** – Where appropriate, campuses should explore offering more classes at off-peak hours and possibly creating incentives for faculty to teach and students to take courses during those times.
- **Faculty and Staff Development** – Campuses may want to consider comprehensive development, management, and leadership programs to assist employees in enhancing their contributions, job satisfaction, and in making their institution an employer of choice.
- **Employee Severance Plans** – To the extent allowable under Texas law, campuses might consider the offering of severance incentive plans to allow higher paid employees to be

replaced with lower paid workers while bringing needed change and vigor into an organization.

- **Transferring Costs** – Campus plans might take into account the transferring of additional costs to students, contractors, partners, etc., to highlight the true costs of an activity and potentially lead to better understanding and management of those costs.
- **Elimination of Non-Mission-Critical Activities** – Each campus must continually review and eliminate activities no longer essential to the mission of the institution as part of its ongoing planning process.
- **Targeted Reallocation** – Campuses should transfer resources from lower priority to higher priority needs to increase overall effectiveness.

- **Mission Focus** – At some point, campuses may need to consider a narrowing of the organization’s mission and a willingness to specialize and allow other institutions to perform services they currently execute.

---

## Metrics

---

Progress will be measured through completion and evaluation of institutional financial plans that provide reasonable assurance that resources will be available to accomplish the strategic objectives. In 2006-07, the UT System will develop additional productivity metrics, beyond those already used in the analysis of financial condition and accountability and performance reporting frameworks that the campuses and the System can use to monitor and report on productivity gains.

### Cost Reduction Strategies

UT System Academic Institutions

#### UT Arlington

- Participate in multicampus energy purchasing consortium
- Reconfigure trunk lines and use laser connectivity between buildings

#### UT Austin

- Upgrade infrastructure of existing facilities and power plants
- Use energy efficient designs and equipment in new facilities

#### UT Brownsville

- Restructure university's custodial contract
- Evaluate possible on-campus flat electric utility rate
- Evaluate and reconfigure HVAC systems

#### UT Dallas

- Increase efficiencies in class scheduling
- Develop partnerships with non-university organizations to off-load some operating costs
- Develop partnerships with other universities to enhance programs and reduce costs

#### UT El Paso

- Develop energy-saving measures
- Restructure and/or eliminate maintenance agreements
- Outsource certain operations

#### UT Pan American

- Energy and operational cost reductions

#### UT Permian Basin

- Renovate university's central plant
- Increase programs available via the UT TeleCampus

#### UT San Antonio

- Increase use of online communication and the number of business processes available or fulfilled through Internet
- Consolidate courier trips among three locations

#### UT Tyler

- Use existing underutilized campus space in an alternative way
- Reduce unnecessary institutional memberships in professional organizations

## Using technology to enhance efficiency and productivity in the classroom

The UT System has achieved state and national recognition for its advancements in the use of technology in the teaching and learning environment, particularly in the area of fully online courses and degrees through the UT TeleCampus. It is engaged in a wide range of electronically delivered education, from technology enhanced academic courses and Web based training programs, to courses delivered via interactive television, to full degree programs offered over the Internet. These activities have accelerated and improved in quality over the past five years, and the System will position itself over the next decade to expand significantly the use of technology to improve the quality and efficiency of delivery of educational programs.

Nationally, distance learning in general is now being provided to almost two million users with an increase of about 25% per year. As a result of the rapid and sustained growth of online course delivery, the Sloan Consortium reports that 65% of colleges and universities offering graduate face-to-face courses also offer graduate courses online, and 63% of colleges and schools offering undergraduate face-to-face courses also offer undergraduate courses online. In addition, 56% identify online education as a critical long-term strategy.

---

### Goal

---

Moving forward, the growth of electronically delivered higher education courses and programs will be an essential element for Texas universities to reach their statewide audience over the next decade and more. The UT System must therefore engage in a strategic vision that will guide the participating institutions as well as the UT TeleCampus (UTTC).

---

### Strategies

---

*"We have to look at technology to stretch tight resources; we will not have sufficient resources to invest in bricks-and-mortar building to accommodate growth in demand for postsecondary education. There must be a way to use the Internet and other technologies. What is the State's responsibility? What is the UT System responsibility to develop solutions to the resources issues?"*

Many of the strategies below require a continued strong partnership between the UT TeleCampus and the participating institutions. While the institutions maintain authority over all campus-based policies and procedures with regard to degrees, faculty, and students,

the UT TeleCampus, through its vast array of resources, experience, and expertise, should be utilized in ways to decrease overall costs of online delivery.

#### **Expand technologically-delivered courses.**

The University of Texas System and institutions will continue to expand electronically delivered offerings, with a particular focus on online education, in order to meet the needs of a

growing college population and to assist the state of Texas with “closing the gaps.” As the centralized coordination and delivery point for the majority of fully online programs offered by UT System institutions, the UT TeleCampus will be positioned as the primary development partner and resource for hybrid courses as well as online education of the future. While not likely to increase in its current form, the academic use of interactive videoconference should not be dismissed.

- Every campus will be encouraged to develop a plan for online and technology-enhanced education that aligns with the campus mission as well as with UT System initiatives. UTTC funding will be allocated on a preferential basis to institutions that have developed such a plan for online course and program development.
- Campus-based initiatives will expand and, as appropriate and necessary, seek partnerships with the UTTC to design and develop online programs.
- Campuses will consider ways to ensure that students enrolled in degree programs at participating institutions will enroll in at least one fully online course each school year by 2015.
- A number of courses on each campus will be redesigned using technology to create hybrid or blended courses for reduced seat time.
- The UT System and UTTC will work with campuses to select a number of core lower-division undergraduate large enrollment courses for redesign based on the National Center for Academic Transformation (NCAT) strategies.
- Reviews of technologies that have an impact on participating institutions for teaching and learning (such as voice and video over Internet protocols) will be ongoing at the System level as the new technologies become available.

**Ensure quality of technologically delivered courses and services.**

Online courses and programs offered by participating institutions and the UT TeleCampus will conform to national quality standards and benchmarks, such as those developed by the Western Cooperative for Educational Telecommunications (WCET), the Southern Regional Education Board, and the Sloan Consortium. In addition, to ensure quality and

comply with Southern Association of Colleges and Schools requirements, the UTTC will ensure that students enrolled in fully online programs have access to relevant student services.

**Technology-enhanced courses:**

The use of technology to supplement or enhance the face-to-face classroom experience (use of PowerPoint, Internet, Course Management System such as Blackboard or WebCT, etc., but little or no replacement of seat time with technology)

**Hybrid/Blended online courses:**

Placing content within the Course Management System for planned purposes of replacing a portion of the face-to-face classroom experience with online learning.

**Fully online courses:**

Courses that are designed such that students do not participate in a face-to-face classroom experience and receive all learning and interaction via the Course Management System and the Internet.

**Interactive videoconference courses:**

Courses that are delivered via two-way videoconferencing on a closed network.

- Online instruction is fundamentally different from the instructional techniques in which most faculty were trained. Faculty moving to teach in an online or hybrid fashion will be encouraged to undergo appropriate training in instructional design, use of technology, and online class management strategies. The UTTC will expand its professional development in this area to meet the needs of all participating institutions for both fully online and hybrid development and delivery.
- A mandatory quality assessment will be performed on all online and hybrid courses prior to first delivery.
- A checklist of all possible student services will be developed by the UT TeleCampus in conjunction with institutions and will be distributed to each campus.

**The UT TeleCampus will expand its capacity to support participating institutions.**

Through its centralized resources and services, the UT TeleCampus will seek to add value by developing online programs that address areas of need and opportunity for all students. In addition, the UT TeleCampus is well placed to centralize and support institutions in developing courses, training faculty, and supporting students.

- The UT System will enter into a centralized contract for a Course Management System licensing, including associated academic products, in order to provide affordable access for all participating institutions up to the full enterprise product line.
- The UT TeleCampus will research and determine new areas of need and opportunity, and provide incentives to campuses to develop programs in these areas.
- The UT TeleCampus will acquire or build suitable collaborative core courses in key lower-division subject areas. Institutions can use these courses to scale their online offerings through the UT TeleCampus. Parts of the courses can be used to supplement existing or hybrid courses.

*"Consider the modalities of teaching. How much needs to be done in the classroom, in smart classrooms, with e-learning?"*

---

Metrics

---

- Increase in number of SCHs in online courses 8% to 10% annually through 2015
- Increase in number of hybrid offerings (courses planned for the purpose of replacing a portion of the face-to-face classroom experience with online learning) by 15% by 2015
- Increase in number of graduates who have completed at least four online courses to 75% by 2015
- Increase in number of faculty who have completed some training in online instructional methods by 25% to 30% by 2010 and by 50% by 2015
- Increase in number of fully online courses that are assessed for quality using the UT TeleCampus quality assurance system to 100% by 2015
- Provide 100% of relevant student services online from UT System institutions by 2015
- Provide affordable access up to the full Course Management System level to all participating institutions by 2010
- Increase in number of collaborative core courses developed and in number of campuses utilizing them