THE UNIVERSITY OF TEXAS AT AUSTIN

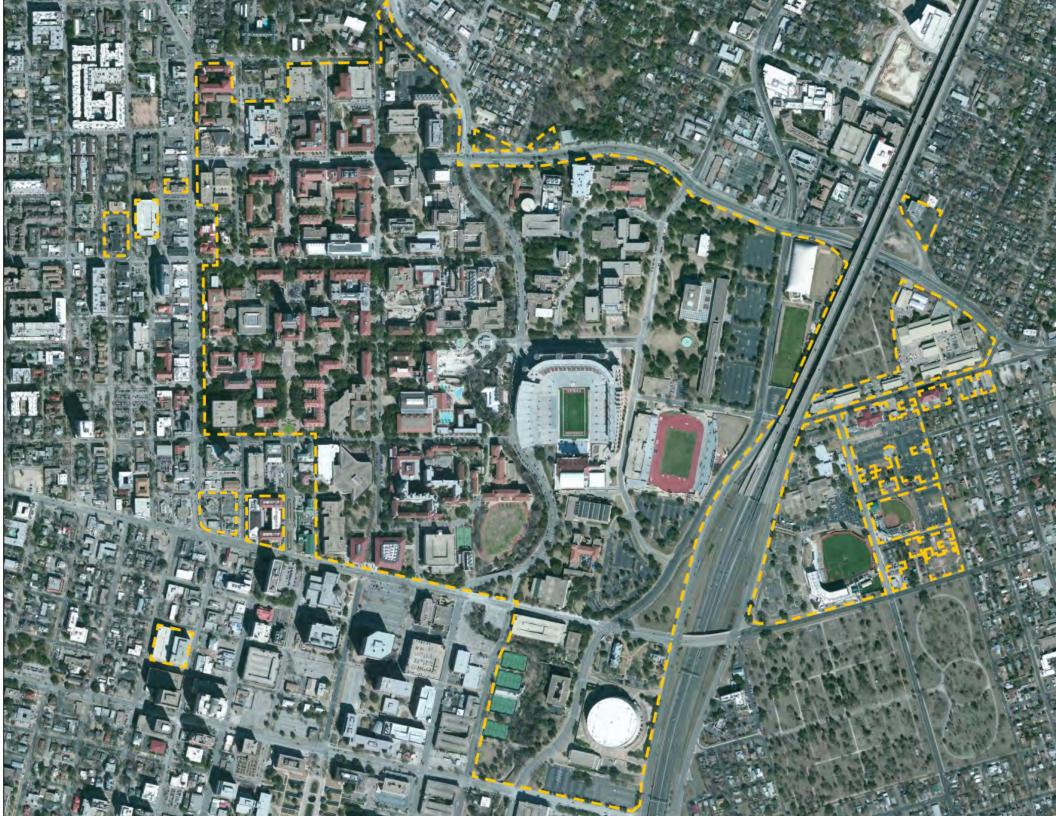
# CAMPUS MASTER PLAN

SPRING 2013

THE UNIVERSITY OF TEXAS AT AUSTIN

## CAMPUS MASTER PLAN

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#### **LEADERSHIP TEAM**

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Fritz Steiner Dean, School of Architecture

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#### MESSAGE FROM THE PRESIDENT

**By William Powers, Jr.** 28th President of The University of Texas at Austin

For some time, The University of Texas at
Austin has held a prominent position among
national and international universities.
Achieving and sustaining this level of
excellence comes through thoughtful planning,
dedicated implementation and a keen focus on
the timeless mission of the university.

Our university has a long history of planning, then building and supporting, a physical environment that is both unique and memorable. The most recent campus master plan, published in 1999, was produced by Cesar Pelli & Associates and provided a sound foundation for developing a sense of community. In 2004, the university's Commission of 125 released a series of recommendations for charting the institution's next 25 years. In recommendations five and six, the Commission called for a new university master plan to integrate academic planning and strategic goals with our facilities, infrastructure, and financial resources.

The Commission's recommendations are even more relevant today than in 2004. The university continues to demonstrate that we are efficient stewards of financial resources, even as those resources are constrained, both across our colleges and across our operations. While emphasizing academic and research excellence—we are doing better with less. With that thought in mind, we initiated this new master plan to identify the strongest return-on-investment opportunities for furthering our academic

mission over the next ten to fifteen years. The plan has done more than that; this process has positioned the university to excel for the next century. Being prepared for opportunity is our strategic goal.

The new master plan lays out a framework of strong ideas that will shape how we invest intelligently, and with consistency, when opportunities arise. With this document as our guide, we are in position to accommodate growth and enhance our existing campus, as well as extend, if needed, our outstanding utility and facilities infrastructure to new academic and research ventures. We are poised to engage with businesses and neighborhoods surrounding the campus on issues of housing and social environments that support academic achievement. We are also in position to revitalize the Waller Creek/San Jacinto Boulevard corridor as a place that knits together our core campus to the west with our central campus to the east while serving a greater role in improving mobility on campus.

I would like to commend the leadership of Dr. Pat Clubb and Dean Fritz Steiner for co-chairing the Master Plan Advisory Committee. Similarly, I personally appreciate the time dedicated to this effort by every member of the committee. Their sensitivity to balancing the operational needs of campus with the academic vision of our deans has helped to achieve a cohesive direction for generations.

Campus planning is done with a long-term view. It guides day-to-day business decisions and investments; it is concerned with creating lasting value. In this way, campus planning is a mirror of our academic mission to create world-class learning environments for our students, enable research that benefits the world, and provide public service to society.

## **DEFINITIONS**

#### **GENERAL TERMS**

**Civic space** – An area of a developed place—city or campus—that is considered a part of the public realm

**Facility Condition Index (FCI)** – Used in facilities management to provide a benchmark to compare the relative condition of a group of facilities. FCI equals the sum of the costs of maintenance, repair and replacement of deficiencies of facilities divided by the current replacement value of the facilities

**Floor to Area Ratio (FAR)** – A measure of building density, defined as the ratio of total building square footage to land area. For example, a two-story building that occupied the entire site would have an FAR of 2.0; a two-story building that occupied half the site would have an FAR of 1.0

**Human scale** – A physical environment, including buildings and open space, compatible with human dimensions, often characterized through measures of walkability (i.e., how friendly an area is to walking)

#### PROJECT-SPECIFIC TERMS

**Next steps** – Actions, phases, or studies that may be initiated after the completion of this master plan

**Phase One** – A phrase that refers to the process of completing this Master Plan, suggestive of the ongoing nature of planning and development on campus

**Infill building opportunities** – Opportunities for new construction that occur within already developed areas

**Phase Two** – A phase of planning, studies, or implementation of recommendations that occurs subsequent to the completion of this master plan

**Potential partnership opportunity areas** – A physical land area that is characterized by high potential for fruitful academic, research, or business partnerships that benefit both parties

**Stage** – A period or step in a process, activity, or development

#### **MOBILITY TERMS**

**Bike lane** – A striped lane on the right side of a street, minimum five feet wide, designated for bicycles

**Bike path** – A paved path, separate from roadways and from pedestrian paths or sidewalks, designated for bicycles

**Cycle track** – An exclusive paved bicycle way, running along a street but separated from travel lanes and pedestrians by a physical barrier, such as on-street parking or a curb

**Light rail** – A metropolitan electric railway system characterized by its ability to operate single cars or short trains along exclusive rights-of-way at ground level and by its ability to board and discharge passengers at track or car-floor level

#### ARCHITECTURAL GUIDELINES TERMS

**Bar building** – A building of significantly greater length than width, typically an elongated rectangle in plan whose width is less than ninety feet

**Big box building** – A multi-story building with a large footprint and repetitive, often undifferentiated façade treatment

**Campus-wide focus** – A landmark, easily recognizable building that helps define and project the image of the campus to the community at large

**Closed courtyard building** – A building organized about an interior, private courtyard whose interior presence may be undetectable from the building's perimeter

**Fabric** – Structures that do not stand out, but rather create a normative overall character of the campus

High-rise building – Any multi-story building on campus in excess of eight stories

**Local focus** – A building whose distinctiveness (by virtue of its size, use of materials, or location) makes it a memorable anchor that defines a particular district on campus

**L-shaped building** – A building whose plan is comprised of two "bar" elements that meet at roughly a right angle to form an implied courtyard or public space

**Open courtyard building** – A building organized about a courtyard that is open to or visible from the public right-of-way on at least one side

**Pancake building** – A building with a large footprint compared to its height—generally a single story building

**Pavilion building** – A free-standing building that is visible on all sides and seems to sit alone

Published by The University of Texas at Austin

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Written by: Sasaki Associates

Designed by: Sasaki Associates

Printed by: Document Solutions

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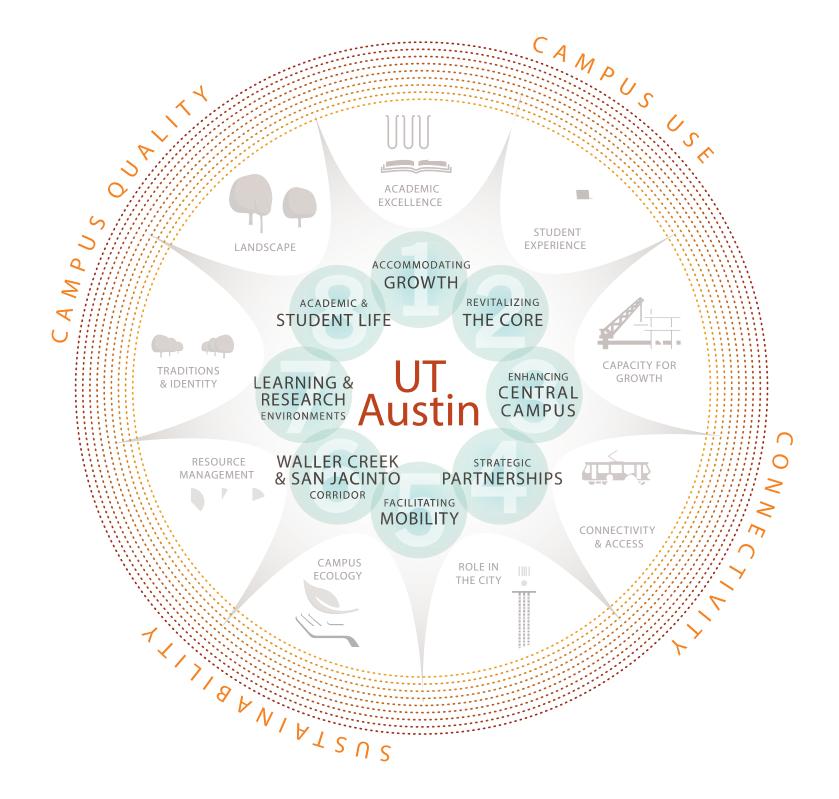
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## TABLE OF CONTENTS

INTRODUCTION
ACCOMMODATE POTENTIAL GROWTH
REVITALIZE THE CORE
ENHANCE THE CENTRAL CAMPUS
FORGE STRATEGIC PARTNERSHIPS
FACILITATE SAFER, MORE EFFICIENT MOBILITY
TRANSFORM THE WALLER CREEK/SAN JACINTO BOULEVARD CORRIDOR
CREATE IMPROVED LEARNING AND RESEARCH ENVIRONMENTS
INTEGRATE ACADEMIC AND RESIDENTIAL LIFE
SUSTAINABILITY STRATEGIES
FUTURE FOCUS
ARCHITECTURAL DESIGN GUIDELINES
HISTORIC RESOURCE SURVEY
SUSTAINABLE ENERGY FUNDING FRAMEWORK



## INTRODUCTION

his initial phase of the master plan for The University of Texas at Austin establishes the physical framework for sustaining a leadership role among the nation's preeminent public research universities. It also identifies additional studies needed in a future phase to cover the full spectrum of issues contributing to that goal.

The underlying intent of the plan is to respond to two specific recommendations from the Commission of 125. The first of these, Recommendation Five, focuses on the need for systematic integrated planning using objective data sources, with facility and financial resources in service to academic initiatives. The second recommendation, Recommendation Six, calls for the best use of facilities, built more efficiently, with better coordination among different university stakeholders, and for the need to address critical maintenance and renovation projects.

The plan also responds to the recent report of the Task Force on Undergraduate Graduation Rates, which emphasizes the contribution of the student campus experience to student success. The plan establishes the groundwork for additional study in this area.

While the digital revolution accelerates its challenges to traditional structures for learning and research, leading place-based scholarly communities such as UT Austin continue to be magnets for the world's best talent, both faculty and students. In this distinguished company, UT Austin has unusual assets. It is located at the heart of one of America's most vibrant cities; it has a magnificent campus that is connected to the city by an excellent transportation network; and as one of the nation's largest campuses, it has a scale and density well suited to supporting major initiatives in cross-disciplinary research and a fully integrated learning experience for students.

The plan document presents eight big ideas that respond to major opportunities to position UT Austin as the preeminent public institution of higher education in the 21st century. Following an elaboration of these big ideas, the plan synthesizes the ideas within a framework of sustainability and then maps a path for building on the plan in future planning phases. Finally, the document presents a set of implementation tools, including architectural design guidelines, a survey of campus historic resources and a framework for funding sustainable energy strategies.

## **BIG IDEAS**

Building on the university's extraordinary assets, there are opportunities for enhancement to allow UT Austin to move to the next level and become the leading public research university in the United States.

Opportunities exist to:

- Accommodate growth
- Revitalize the Core Campus
- Enhance the Central Campus
- Forge strategic partnerships
- Facilitate safer and more efficient mobility
- Transform the Waller Creek/San Jacinto Boulevard corridor
- Improve learning and research environments
- Integrate academic and residential life

To implement each of these opportunities requires big transformative ideas, and all are interdependent. Some are addressed in this phase of the plan, and the groundwork is laid for necessary future planning for the rest. Each challenge has a dedicated section linked to this introduction.

#### **ACCOMMODATE POTENTIAL GROWTH**

Research universities today are widely recognized as the catalysts for economic and social transformation in their regions. In fulfilling this catalytic role, research universities need to continue to grow. Growth at UT Austin is essential to accomplishing university goals. The challenge today is to preserve and enhance the university's assets in the context of this inevitable growth, while taking advantage of as-yet untapped expansion opportunities, some of them beyond the current confines of the campus.

#### **REVITALIZE THE CORE CAMPUS**

The Core Campus, bounded by Guadalupe Street, San Jacinto Boulevard, Martin Luther King Jr. Boulevard, and 27th Street, and including the original forty acres, contains the majority of UT Austin's historic buildings and landscape, and is one of the most densely built American campus environments. The challenge is to address the Core's aging buildings and infrastructure, while responding to the need to preserve but adapt historic buildings and landscape, the need to address changing patterns of research and teaching, and the need to resolve the frequent conflicts between cars, pedestrians, and bicycles.

#### **ENHANCE THE CENTRAL CAMPUS**

The Central Campus, east of the Core Campus and bounded by Interstate 35, 15th Street, and Dean Keeton Street, is significantly different in character from the Core. It is far less densely built, has less tree cover and more asphalt, and is less pedestrian-friendly. It offers significant opportunities for redevelopment and transformation into a natural extension of the Core. Beyond it, on the other side of Interstate 35 in East Campus, there are additional opportunities for growth.





#### FORGE STRATEGIC PARTNERSHIPS

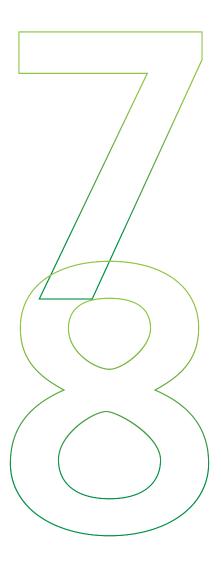
Universities no longer thrive in isolation. Partnerships with adjacent stakeholders have the potential to advance UT Austin's academic, research, and student-life goals. Exploring potential city, state, and private sector partnerships for promoting and guiding development adjacent to the university campus and beyond is recommended as a priority initiative.

#### **FACILITATE SAFER AND** MORE EFFICIENT MOBILITY

Moving around the campus easily, comfortably, and safely is critical to the wellbeing of the campus community. Safe, efficient mobility helps ensure a vibrant academic setting, where connectivity and community transcend traditional disciplinary boundaries.

#### TRANSFORM THE WALLER CREEK/ SAN JACINTO BOULEVARD CORRIDOR

Waller Creek and San Jacinto Boulevard currently form parallel barriers between the Core Campus and the Central Campus. Rethinking how both the creek and the roadway can become enhancements to the campus rather than barriers is essential to successful improvement of the Central Campus. The potential introduction of light rail on San Jacinto Boulevard makes the creation of a winning strategy doubly important.



## IMPROVE THE LEARNING AND RESEARCH ENVIRONMENTS

While the physical conditions for learning and research in individual buildings and the distribution of program uses around campus are not included in this first phase of planning at UT Austin, the larger framework for creating an optimum environment for learning and research is considered, and essential background data have been developed. As pedagogy evolves, the learning environment is no longer restricted to the lab and classroom, but includes space for formal and informal learning throughout the campus. As research increasingly crosses traditional departmental boundaries, plans by different schools must be integrated to provide a comprehensive research setting.

## INTEGRATE ACADEMIC AND RESIDENTIAL LIFE

Student success rates are heavily influenced by student and residential life programs on campus. While assessment and planning for student life and residential programs are not included in this phase of planning, the heavy concentration of students living in the West University Neighborhood and north of the campus will require university engagement if that residential area is to contribute to the university's success. On campus, the relationship of student dining and other services to concentrations of academic activity should also be reviewed.



## **CAMPUS FRAMEWORK**

he campus design framework builds on the historic layout of the campus, reinforcing the clarity of the campus organizational structure today while seamlessly extending that structure to guide campus growth and change in the future. The university, once an institution on the hill, apart from the city around it, will grow beyond its core in the coming decades. The campus design framework ensures that the campus beyond the core is connected, well structured, and emulates the best qualities of place that are admired at The University of Texas at Austin.

The framework establishes several structuring elements that will guide future development of the campus. These include the cruciform malls, grid of pedestrian streets, Speedway and Waller Creek corridors, and Central Campus districts.

#### CRUCIFORM MALLS

The iconic cruciform of malls that emanate from the Main Building at the top of College Hill creates the east-west and north-south axes. Beyond the original visual relationship to the State Capitol, the campus design framework reinforces the importance of these axes by strengthening their edges and visual connectivity. In the Central Campus, the transportation and landscape design of the East Transit Mall north of the stadium will transform this currently uninviting space into a comfortable, active, and desirable campus destination. North of the Main Building, streetscape improvements and strategic building interventions will enhance the North Mall.

#### **GRID OF PEDESTRIAN STREETS**

Beyond the east-west and north-south malls, the grid of pedestrian corridors and streets organizes the various districts of the campus. Within the grid, ensembles of buildings are structured around shady quads, courtyards, and corridors. This network of secondary campus spaces connects the campus, both physically and psychologically.



#### **SPEEDWAY**

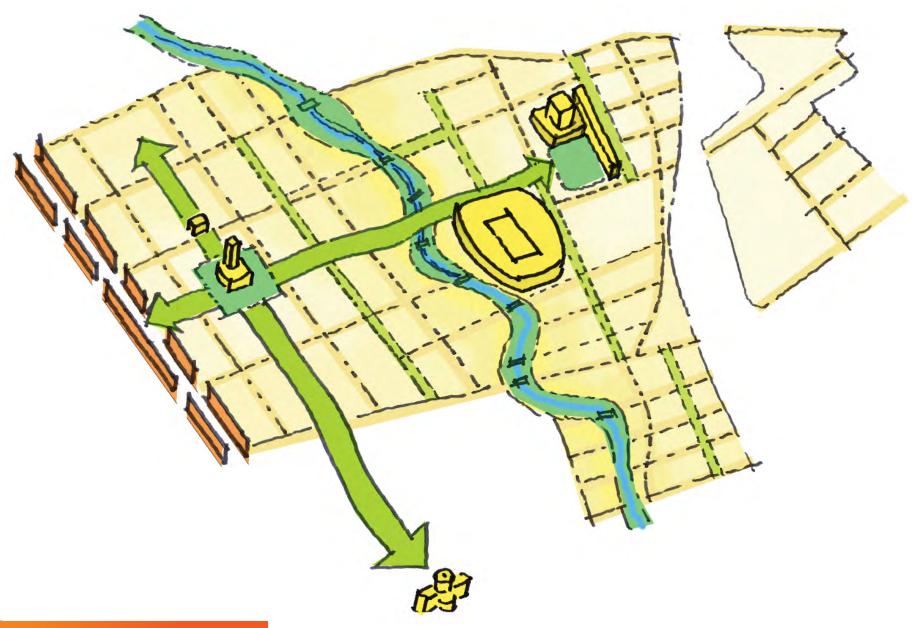
Of the many street and pedestrian walkways in the Core Campus, Speedway plays a particularly important role as a north-south pedestrian connector. Redesigning the landscape and balancing the needs of pedestrians, cyclists, and service vehicles will improve the character of Speedway and ensure its success as a human-scaled and comfortable campus place.

#### WALLER CREEK

Waller Creek is embraced as a natural treasure that meanders through the campus, providing an unexpected respite from the urban campus and a convenient pedestrian and bicycle corridor. The creek's location along the boundary between the Core Campus and the Central Campus creates opportunities to connect these two campus areas with landscape and architectural improvements. The master plan outlines a strategy to transform Waller Creek from a forgotten resource that has been encroached on over the decades, to a valuable asset with gathering places, pathways, and buildings that open to the creek.

#### CENTRAL CAMPUS DISTRICTS

The design framework for the Central Campus creates a number of sub-districts that fit within the overall street grid in the area between Waller Creek and Interstate 35. Each of these has a unique urban design structure, with distinctive campus spaces and landscapes, building on the attributes and programmatic needs of each district.



CONCEPT DIAGRAM

## **BACKGROUND**

he university has a long history of campus planning, accounting for its distinguished architecture and memorable public spaces. As discussed in detail in the Architectural Design Guidelines, there are many spaces on the UT campus that express different eras and different visions. From the urban campus, well-defined malls, and ordered outdoor spaces imagined by Cass Gilbert (1909-1922), the numerous new buildings built in the Herbert Greene years (1922-1930), the new architectural vocabulary and formal approaches to campus design established in the Paul Cret years (1930-1945), the introduction of modernist design on campus (1945-1960), the expansion of campus to the east and south and to satellite sites in the Ransom and Erwin years (1960-1975), and the slowing of the time of rapid growth (1975-1996), to the reframing of the direction of development on campus and the focus on enhancing the sense of community brought by the Cesar Pelli Master Plan (1996-2012), the UT Austin campus has seen many approaches to managing growth and using design to create a unique sense of place.

The last master plan for the UT Austin campus, published in 1999, was completed by the architectural firm Cesar Pelli & Associates, Inc., in association with the landscape architects Balmori Associates, Inc. The master plan established a comprehensive vision for the campus founded on historic patterns of development and the unique qualities of the campus environment. It articulated seven core planning principles to guide future development and proposed infill and design strategies for several areas of the campus. These strategies were complemented by detailed architectural and landscape design guidelines for the campus. Many of the infill building opportunities identified in the Pelli plan have been achieved, and this master plan establishes a framework for additional development of the campus.

## **SCOPE OF WORK**

he scope of work for the current study states that one of the goals is to create a framework for orderly university development and to give the university integrated access to the multiple data sources it needs to effectively set priorities for capital improvements. The tasks for this phase of the master plan are described below.

#### 1 HISTORIC RESOURCES ASSESSMENT

A historic resources assessment includes a survey of the university's building stock categorized according to historic significance and important features. The assessment provides a resource for evaluating restoration, renovation, and re-use potential and determining which buildings are appropriate for removal or replacement.

#### 2 MOBILITY PLAN

A campus-wide mobility plan integrates pedestrian, bicycle, vehicle, transit, and transportation demand management (TDM) strategies, and service-vehicle circulation. The mobility plan tests a range of mobility scenarios to address the complex mobility systems that converge on campus, and recommends an integrated strategy to address current and long-term conditions.

## 3 SUSTAINABILITY AND ENERGY CONSERVATION FUNDING STRATEGIES

Sustainability strategies integrate fully with the overall master planning process and coordinate with the efforts of the President's Sustainability Steering Committee. The focus of the sustainability task is to integrate the UT Natural Resource Management and Conservation Strategic Plan with other sustainability initiatives. It involves establishing baselines and goals based on the University's AASHE STARS submission, identifying metrics, and setting priorities around a variety of sustainability initiatives.

As a related effort, the master plan includes creation of an energy-conservation funding strategy. Working with UT Campus Planning and Facilities Management (CPFM) staff, a baseline for future energy consumption by building and use type is identified. Goals are set for future building energy use, and energy use intensity (EUI) targets are established based on the need to meet the energy use goals. These targets lead to recommendations for energy-conservation funding strategies.

#### 4 DECISION SUPPORT TOOL

A web-based tool—using existing databases and drawings—was developed to visualize existing patterns of space use, occupancy, historical significance, building condition, and other documented building characteristics. The tool has served as a decision-support system to inform the master plan process, and will assist the university with future capital planning.

#### 5 CAMPUS DEVELOPMENT STRATEGY

The overall campus development strategy is informed by and coordinated with the other elements of the plan. The strategy defines a flexible planning and urban-design framework for campus development; identifies options for campus growth, redevelopment and infill; defines the character, density, and urban form of new development; establishes an open space structure; and defines mobility systems within the urban context.

#### 6 BUILDING DESIGN GUIDELINES

The master plan is complemented by new design guidelines for buildings, and the design guidelines from the 1999 Pelli plan are updated accordingly. The new guidelines also consider different building typologies and construction techniques.

#### \* FUTURE WORK (Phase 2)

The current phase of the Master Plan lays the groundwork for more detailed study. The process for working with the university has accentuated the importance of developing plans in a variety of areas not included in Phase 1, to support the university's ambition to be a catalyst for economic success in Texas. Other issues not included in this process will be taken up at a later date, including the following:

- Completion of plans for individual colleges and schools
- Completion of a comprehensive landscape master plan
- Completion of a student and residential life plan
- Completion of a program-driven plan for the redevelopment of the Central Campus
- Completion of a plan for the accommodation of a new medical school
- Integration of school and college plans and other planning efforts with the master plan
- Development of a comprehensive learning environment strategy
- Development of an integrated strategy to support growth in research activity and interdisciplinary collaboration
- Coordination of transportation and mobility plans with outside agencies

## PHASE 1 PLANNING PROCESS

he UT Austin master plan was developed through a comprehensive planning process led by senior university administrators. It comprises three stages of work. The planning team and work program are described below.

#### **UT AUSTIN TEAM**

President William Powers, Jr. appointed a Leadership Team comprising senior university administrators and academic representatives to guide the master planning effort. The team includes Patricia Clubb, Vice President for University Operations; Fritz Steiner, Dean of the School of Architecture, Research Affiliate – Research Fellow; Steven Kraal, Senior Associate Vice President for Campus Planning & Facilities Management; David Rea, Director, Office of Campus Planning; and Professors Samuel Wilson and Sharon Wood. The Leadership Team provided direction to the master plan consultants through the duration of the planning process.

The Leadership Team established an Advisory Committee with broad representation from the university community to assist in the review of the master plan during each stage of work. The Advisory Committee met at key milestones during the planning process to hear consultant presentations of works in progress, provide feedback, and establish direction for subsequent stages of work. Members of the Advisory Committee are listed on page v of this report.

The Leadership Team also established the following four task groups to provide technical input and direction on the six central master planning initiatives:

- Historic Resources Assessment
- Mobility
- Sustainability and Energy Conservation Funding Strategies
- Decision Support Tools

The President's Sustainability Steering Committee was engaged in the planning process and provided input and direction on the plan as it evolved. Input on the Campus Development Strategy and Building Design Guidelines initiatives was provided by the Leadership Team and Advisory Committee. Membership in the four task groups and Sustainability Committee membership is also listed on page v.

A master plan website was established to solicit input from the broader UT Austin community. The comments received from the 'MyCampus' website were considered in the final plan recommendations.

The Phase 1 master planning process involved the following three stages of work.

#### **Stage 1: Discovery and Opportunities**

During the Discovery and Opportunities stage of the process, the consultant team established a dialogue with UT Austin stakeholders and developed a comprehensive understanding of the physical context, core issues, and planning framework that informed the development of the master plan. Stage 1 began with a meeting of the Advisory Committee followed by interviews with the master plan task groups to reaffirm goals and identify issues, needs, concerns, and priorities. The consultant team also reviewed existing background information, including previous planning studies, reports, and other data. This task was followed by an analysis of the fundamental characteristics of the UT Austin campus and surrounding areas, including built-form and design character, urban context, environmental conditions and measures of sustainability, open space structure, transportation, and mobility.

The consultant team synthesized the findings of these tasks, and presented them to the Master Plan Advisory Committee and task groups at a three-day work session in January, 2012. Separate meetings were also held with the President's Sustainability Steering Committee during this work session. The input received through this review process established the foundation for the development of master plan alternatives during the Exploration stage of work.

#### **Stage 2: Exploration**

During Stage 2 of the planning process, the consultant team explored a range of planning and design strategies for the UT Austin campus, with the goal of reaching consensus on a preferred strategy. The Exploration stage addressed issues such as options for maximizing campus capacity; development, redevelopment, and infill opportunities; character, density, and form of new development; open space structure; mobility and connections; and how these elements together support the overall function of the campus setting. Program options, adaptive re-use of potential sites, different building typologies and their fit within the spatial and aesthetic character of the surrounding campus context were also explored.

The planning and urban design strategies were presented to the Advisory Committee and task groups at a work session in March, 2012. Subsequently, the Leadership Team presented the master plan strategies to the deans of UT's schools and colleges and other stakeholder groups to solicit input. The feedback from the March work session and follow up presentations provided direction for development of the draft master plan.

#### **Stage 3: Master Plan Development**

The draft and final master plans were prepared during Stage 3 of the planning process. The draft master plan was informed by and coordinated with the supporting Task Group studies and was presented to the Advisory Committee, task groups, and President's Sustainability Steering Committee at a work session in May, 2012. The Leadership Team also presented the draft plan to UT Austin stakeholders following the work session.

The master plan and task group studies were refined over the summer based on the comments from these groups, and the refined master plan was presented to President Powers and Provost Leslie at a meeting in August, 2012. The final plan was prepared based on direction from the President and Provost, and from the Leadership Team. The final master plan (which is documented in this report), together with supporting technical studies, are posted online as interactive, navigable PDFs, which are also formatted for printing. These online resources can be accessed at https://www.utexas.edu/operations/masterplan/.



## SUSTAINABILITY STRATEGIES

Sustainability is intertwined with every aspect of the master plan, rather than a separate strategy.

The projected sustainability outcomes of this approach are set forth here, and apply to the overarching strategies for new and old buildings, development, and landscape throughout the campus and adjacent communities. Sustainability outcomes unique to each section are called out in that section.

#### **BUILT ENVIRONMENT**

- Building in a compact, efficient manner with a
  maximum height of six stories, depending upon
  the surrounding context, ensures efficient use
  of valuable land resources. Developing at urban
  densities in existing developed areas can save
  energy through use of more efficient central
  plants, application of eco-district strategies, and
  more efficient use of existing utility infrastructure.
- Adhering to sustainable siting recommendations minimizes heat gain and energy consumption to achieve more efficient use of valuable land and of other resources, including energy, water, and other utilities.

#### LANDSCAPE

- Designing landscapes and placing buildings thoughfully can create human-scaled, well-shaded campus spaces that improve human comfort.
- Designing a more human scale and welcoming environment ties together the campus to create better connections among different student groups, including those involved in academics, research, arts and culture, and athletics. Improving student life and building a stronger sense of community improves academic performance and student success.

• Employing landscape design strategies to preserve precious water resources and foster the overall ecology of the campus improve sthe resiliency of the campus setting. These strategies, which fully integrate with the efforts of the President's Sustainability Steering Committee, include incorporating more drought-tolerant planting materials, increasing the use of heat-dispersing ground treatments, preserving existing trees, and planting new trees to increase the amount of shade and lower the ambient temperature of outdoor spaces.

#### MOBILITY

 Developing an efficient and well-coordinated mobility strategy improves accessibility for all and reduces carbon emissions. In addition to the environmental benefits, more pedestrian travel and bicycle utilization increase physical activity, leading to better overall health.

#### **ENERGY**

 Establising an energy savings funding strategy establishes goals for future building energy use and provides targets based on the need to meet these goals. The targets lead to recommendations for energy-conservation funding strategies.



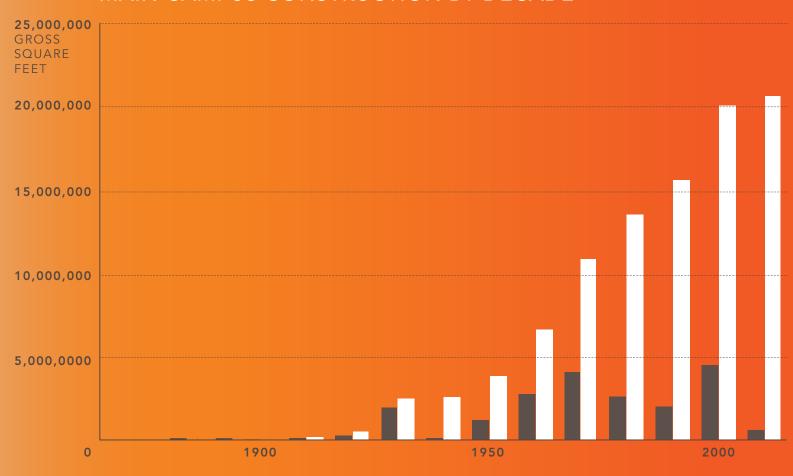
## ACCOMMODATE POTENTIAL GROWTH

While the 1960s and 1970s, and more recently the 2000s, show spikes in growth, the overall trend is steady since 1930

**GSF** 

CUMULATIVE

## **ACCOMMODATING GROWTH**MAIN CAMPUS CONSTRUCTION BY DECADE



BASED ON HISTORICAL TRENDS, UT AUSTIN COULD GROW BY 2.4 MILLION SQUARE FEET, OR ROUGHLY TEN PERCENT, PER DECADE. AS A NEW MEDICAL SCHOOL IS ESTABLISHED, GROWTH COULD BE SIGNIFICANTLY GREATER.

UNDERSTANDING HOW TO ACCOMMODATE THIS GROWTH IS CRITICAL FOR THE UNIVERSITY AND ITS SURROUNDING COMMUNITY.

## WHY GROWTH?

ost experts agree that the major research universities in the nation will play an increasingly important role in fostering the entrepreneurial and creative spirit that will fuel economic and social leadership for the United States in the coming decades. Universities will be essential to developing a sophisticated and highly trained workforce, and to generating solutions for a complex and environmentally challenged global economy. The United States remains the leader in the creation of new knowledge and technological advances and in providing sophisticated professional services across the globe based on multidisciplinary problem-solving.

UT Austin is a national leader in this effort. As the university extends its capabilities and its reach as an economic engine, the need for more and improved research space and for space to support a host of other new endeavors will almost certainly accelerate. While some supporting activities need not be immediately adjacent to the current campus, the focus on interdisciplinary collaboration puts a premium on proximity for key academic initiatives.

## PREDICTING GROWTH

Predicting growth for research universities is problematic.

Great universities are in the business of generating new knowledge, and new knowledge is inherently unpredictable, as is the funding for research.

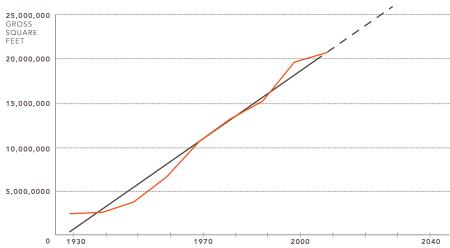
Student growth, by contrast, can be planned, but UT Austin does not currently predict growth in undergraduate enrollment. Even if it did, there is little correlation between enrollment and overall square footage; the range of square footage provided per student in different space categories varies widely.

Research requirements would seem to be one useful metric. But there is no clear correlation between the research dollars an institution has available and its research space. Alternatively, one might expect a relationship between published rank as a research institution and research space, but again, available space does not equate with judgments of quality.

Given these limitations, our strategy has been to predict growth on the basis of historical experience. We have examined historical growth at UT Austin since the 1930s and projected a straight-line trend out for thirty years. The trend line predicts a requirement of 7.2 million square feet over the next thirty years. The actual growth rate might be higher, especially with the planning of a new medical school and the associated research. Equally, it could be significantly lower, for example, if capital funds were not available.

#### MAIN CAMPUS CONSTRUCTION TRENDS





The trend line averages periods of slow and rapid growth and does not capture major bursts of construction activity, particularly in the 1960s and 1970s post-Sputnik era and again in the recent 2000s construction boom. It is possible that funding limitations may depress activity in the coming decade. However, the long-term trend is clearly upward. Given the already high density of the Core Campus, appropriate land use planning is essential.

Increased density in the Central Campus could accommodate about 75% of potential growth

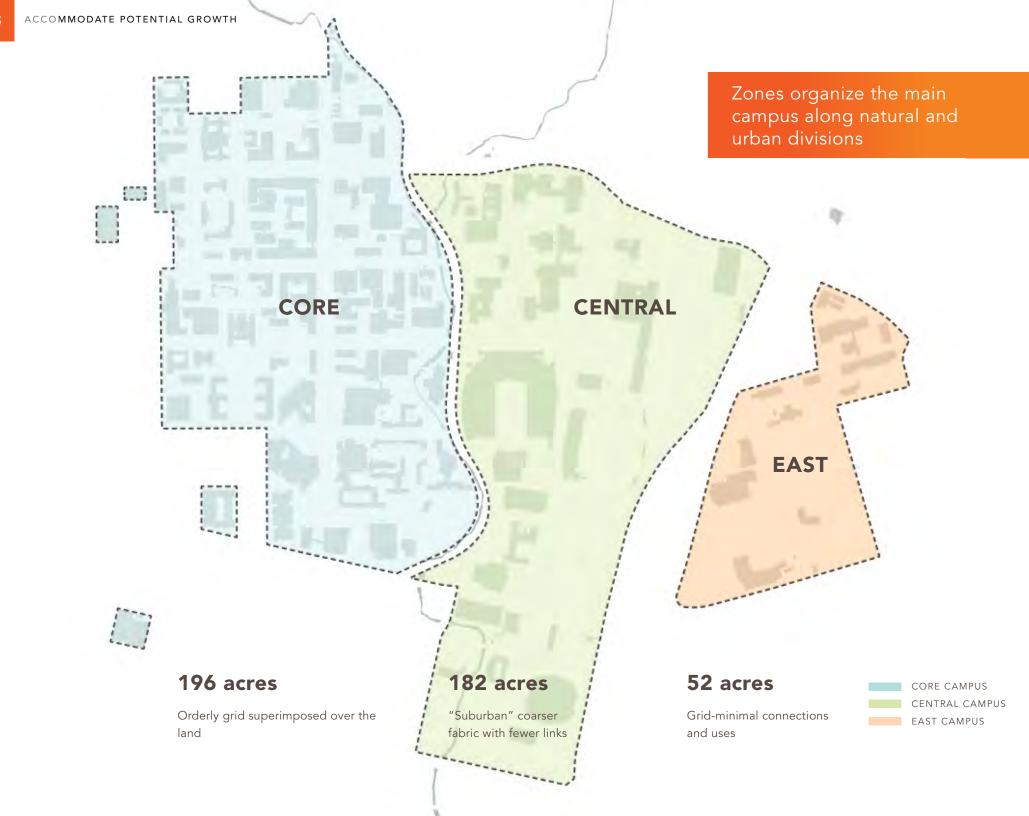
## **STRATEGIES**

ecisions on capital priorities will become increasingly difficult in the coming years, not only because of the expectation of more limited capital, but also because of land constraints. Land in the main campus (encompassing the Core, Central and East Campuses)will be at a premium in the coming decades regardless of the rate of growth. Therefore, decisions on individual buildings for specific schools or departments should be made in the context of a set of overriding strategies:

- Growth needs should be accommodated in the context of an overall strategy for land and building use and not on the basis of individual school needs.
- All proposals for buildings should be assessed in the context of all available data.
- Plans developed by individual schools should be consistent with and integrated into the broader campus master plan.
- Plans to address space needs should be based on a full range of considerations:
  - + Preferred research adjacencies
  - + Opportunities for shared resources
  - + Adaptability of historic buildings
  - + Assessment of existing buildings for potential replacement
  - + Optimum use of utility infrastructure
  - + Walkability for undergraduate programs
  - + Effective place-making
  - + Contribution to community building
  - + Quality of life for students
  - + The university's relationship to the city

## **PLANNING TOOLS**

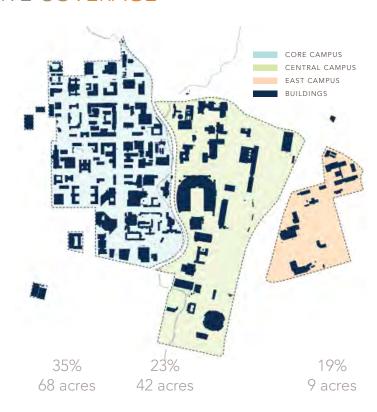
o assist in addressing issues of growth and to respond to the need to make better-informed decisions in a highly complex context, a suite of planning tools has been developed by the consultant in parallel with the master planning process. These dynamic visualization tools will provide UT Austin leadership with easy access to all the data necessary in assessing the overall context for decisions on building projects. Such data include energy use, condition, historic significance, academic adjacencies, space use, and occupancy. The tools also support the examination of capital-project priorities based upon selected institutional priorities and capital availability.



# **GROWTH OPPORTUNITIES**

o analyze the capacity of the main campus to absorb growth, the campus was divided into three zones. These are labeled the Core Campus, which includes land holdings west of San Jacinto Boulevard; the Central Campus, which includes land holdings east of San Jacinto Boulevard and west of Interstate 35; and the East Campus, which includes land holdings east of Interstate 35. Each of these zones has a different character. The Core Campus is densely built and gridded, with a tight axial network of streets and paths. The Central Campus is more suburban in character, with buildings sited individually and a limited connectivity network. The East Campus, subject to limited analysis in this study, is integrated into the street system but less densely developed.

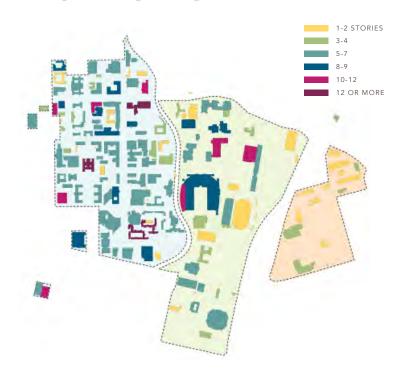
#### SITE COVERAGE



The Core Campus has a finer grain and higher density of building coverage relative to the other campus zones.

Land coverage varies significantly in the three zones. On the Core Campus, 35% of the land is covered by buildings. This number drops to 23% on the Central Campus and to only 19% on the East Campus.

#### **BUILDING HEIGHT**



The Core Campus has more tall buildings and a higher building density than the other campus zones.

#### **EXISTING FAR\* BY ZONE**



Core Campus density ranges between 1.4 and 2.3 FAR; highest current density in the Central Campus is 1.1. The twelve zones, divided across the three campuses and each marked in a different color above, are derived from the UT campus website.

Floor area ratio (FAR)\* is the system used to calculate building density on a site. If a site had a one-story building coverage on its entire land area, it would have an FAR of 1.0. The Core Campus has more multistory buildings as well as more land coverage than the other campus zones. As a result it is more than twice as dense (FAR 1.9) as the Central Campus (FAR 0.8), which in turn is four times as dense as the East Campus (FAR 0.2). Within each campus zone there is a range of densities. As is typical, the older parts of the Core have lower density. The original forty acres, in spite of the Main Building tower, have an FAR of 1.6. Further north, where the sciences and engineering are more concentrated, the density increases to 1.9 and 2.3.

#### PROPOSED FAR BY ZONE



The proposed increase in density accommodates 6,352,668 GSF.

To maintain a consistent character within each campus district and a smoother gradient across the whole main campus, guidelines for building coverage, building height, and floor area ratio are proposed.

The floor area ratio proposed for the Central Campus is 1.43, double today's density, and comparable to the original forty acres. On the Core Campus, redevelopment sites are relatively limited. In total, the development and redevelopment sites on these two campus areas could provide close to 5 million square feet of new construction, or twenty years of estimated growth, although realistically it may be challenging to achieve this density.



ZONE	EXISTING GSF	PROPOSED NEW CONSTRUCTION	PROPOSED DEMOLITION	NET NEW GSF	ZONE TOTAL GSF	EXISTING FAR	PROPOSED FAR
1	2,048,323	502,683	219,523	283,160	2,331,483	1.9	2.1
2	3,905,350	415,636	211,675	203,961	4,109,311	2.3	2.4
3	2,809,119	55,092	4,951	50,141	2,859,260	1.6	1.6
4	1,892,756	204,501	110,995	93,506	1,986,262	1.4	1.4
5	3,514,786	154,000	0	154,000	3,668,786	2.0	2.1
6	459,819	0	0	0	459,820	6.0	6.0
SUB TOTAL		1,331,912	547,144	784,768			

<sup>\*</sup>FAR (Floor-to-Area Ratio) – a measure of building density, defined as the ratio of total building square footage to land area.

ZONE	EXISTING GSF	PROPOSED NEW CONSTRUCTION	PROPOSED DEMOLITION	NET NEW GSF	ZONE TOTAL GSF	EXISTING FAR	PROPOSED FAR
1	1,703,753	904,480	245,364	659,116	2,362,869	1.1	1.5
2	609,940	2,550,550	155,789	2,394,761	3,004,701	0.3	1.7
3	2,210,424	739,493	0	739,493	2,949,917	0.9	1.3
4	1,132,095	2,375,597	724,137	1,651,460	2,783,555	0.7	1.8
SUB TOTAL		6,570,120	1,125,290	5,444,830			
ZONE	EXISTING GSF	PROPOSED NEW CONSTRUCTION	PROPOSED DEMOLITION	NET NEW GSF	ZONE TOTAL GSF	EXISTING FAR	PROPOSED FAR
1	238,587	0	0	0	238,587	0.4	0.4
2	274,611	378,002	0	378,003	652,614	0.2	0.4
SUB TOTAL		378,002		378,003			

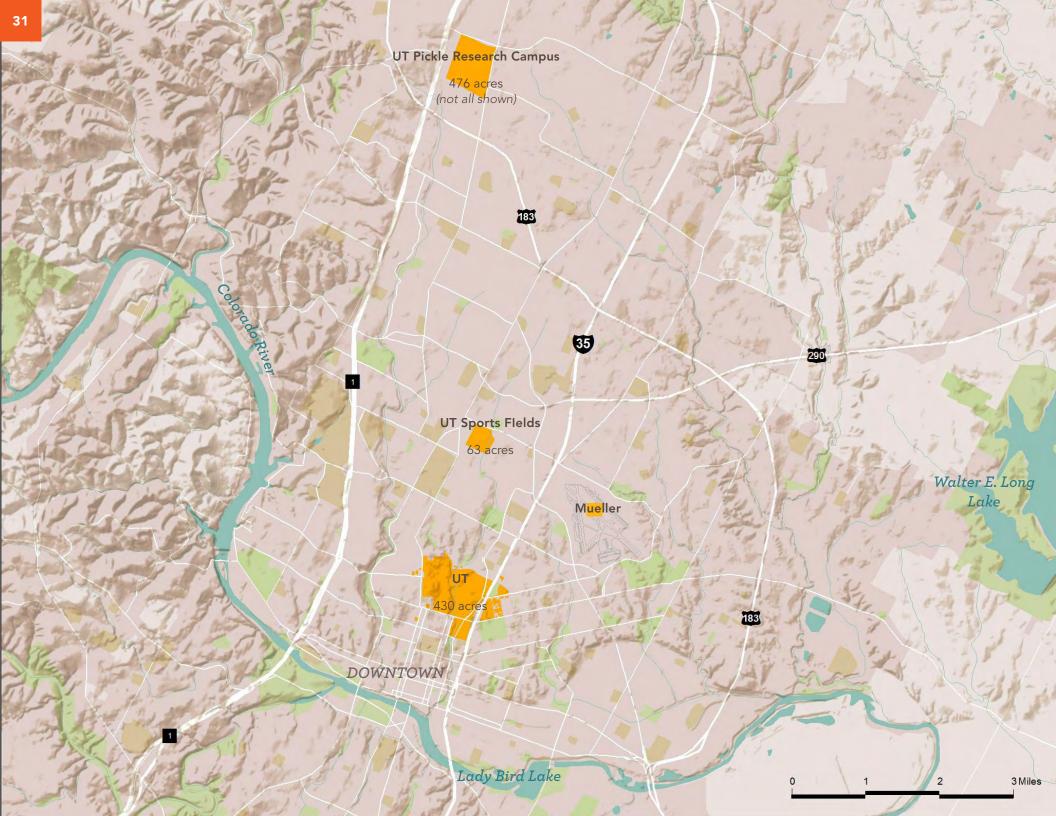
# POTENTIAL PARTNERSHIP OPPORTUNITIES

Sites adjacent to the campus may also provide for expansion in the future, when contiguity becomes an important consideration and when partnerships can be formed. The West University Neighborhood may provide opportunities for residential-life growth, while the State Capital Complex is another obvious area for consideration. The intersection of Guadalupe Street and West Martin Luther King Jr. Boulevard also offers some important adjacent sites, as does the Hancock site north of East Dean Keeton Street.

In addition to the 430 acres on the main campus of UT Austin, the university owns other properties that it might make fuller use of, as shown in the following map. Other opportunities for expansion through partnerships may emerge in different locations across the city.

#### POTENTIAL PARTNERSHIP OPPORTUNITY AREAS





# REVITALIZE THE CORE



THE MASTER PLAN SHOULD PRESERVE THE HISTORIC INTEGRITY AND ICONIC CHARACTER OF THE CORE CAMPUS WHILE RENEWING AND RE-PURPOSING OUTDATED FACILITIES.

## INTRODUCTION

he University of Texas at Austin's Core Campus is its most cherished physical asset. Planned in the early twentieth century as a formal arrangement of buildings and landscapes that reflect the Jeffersonian American ideal, the campus has developed into one of the country's densest and most renowned university settings. Embracing this historic legacy while re-purposing and renewing the Core Campus is a fundamental strategy of the master plan. Key initiatives to realize this goal include enhancing the open spaces to create a cohesive environment; improving connectivity within the Core Campus and surrounding areas; and addressing mobility conflicts.

In this master plan, the Core Campus is broadly defined as the area bounded by 27th Street to the north, Martin Luther King Jr. Boulevard to the south, San Jacinto Boulevard and Waller Creek to the east, and Guadalupe Street to the west. Streets running east-west through the campus change their directional designation in the middle of the Core Campus at Wichita Street, so the direction is dropped from street names when referring to these streets unless the entirety of the street area referenced falls within an east or west designation. The Core Campus is composed of several clearly defined precincts, including the historic Forty Acres, the West Mall and Guadalupe Gateway, north of Dean Keeton Street, and the East Mall. Several schools located within the Core Campus have prepared strategic facility master plans, which are acknowledged in the Core Campus revitalization strategy. The plans include the Cockrell School of Engineering Strategic Master Plan, the McCombs School of Business Strategic Facilities Master Plan, and the School of Architecture's Battle/West Mall Office Building Feasibility Study.

#### **UT AUSTIN CAMPUS**

FUTURE BUILDING OPPORTUNITIES

EXISTING BUILDINGS

UT AUSTIN MAIN CAMPUS BOUNDARY

#### **CAMPUS EVOLUTION**



1883-1930

Forty Acres



1930-1945

Paul Cret's Plan



1945-1975

Modernist Plan



1975-2010

Post-Modernism and the Pelli Plan

# HISTORY OF THE UT AUSTIN CAMPUS

he University of Texas at Austin opened on the forty-acre College Hill campus in 1883. As the campus evolved during four major eras of its history, enrollment and land area grew. It is now one of the densest campuses in the United States.

The University of Texas at Austin has one of the most iconic campus settings in the country. The building pattern embraces the topography and establishes formal and visual relationships among landmarks, other buildings, and campus spaces.

The Paul Cret plan of the 1930-45 era established an overall organization of the campus spaces, including the early twentieth-century buildings on the Forty Acres campus, the Women's Campus to the north, and the academic district east of Speedway. A cruciform of malls centered on the Main Building forms a direct axis with the State Capitol.

Congress allocates 40 acres of land for a university in Austin named College Hill

1839

#### THE UNIVERSITY OF TEXAS AT AUSTIN: HISTORIC TIMELINE

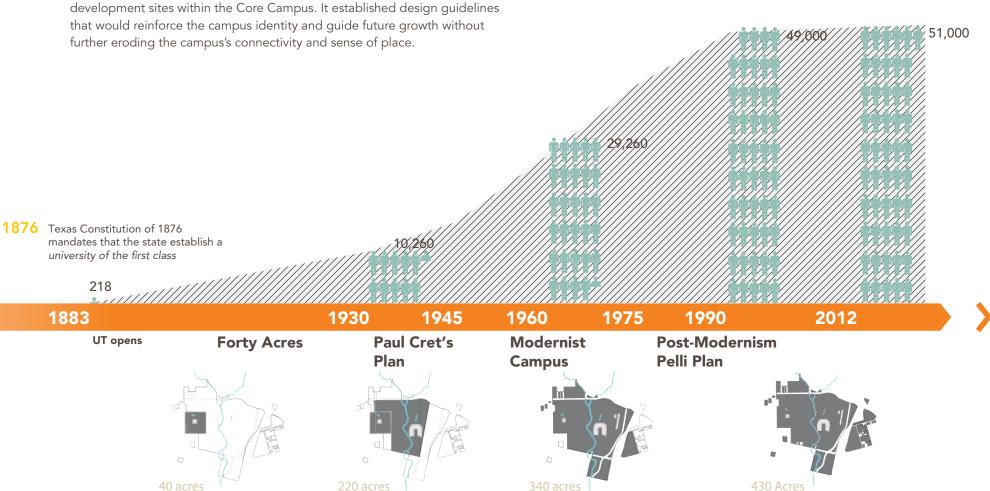
**REFERENCE:** The Campus Guide: The University of Texas at Austin, Lawrence W. Speck and Richard L. Cleary University of Texas at Austin, Handbook of Texas Online, William James Battle

After World War II, the campus saw enormous growth within the adjacent city grid and began encroaching into the Waller Creek natural corridor. As the Core Campus became denser, the original cruciform remained an important organizing structure, as it continues to be today. Many of the less iconic areas in the Core Campus have been built up within the city-block structure with little attention to the interconnected nature of space that characterizes the best campus designs.

The Pelli plan of 1999, the first plan in over fifty years, identified development sites within the Core Campus. It established design guidelines

6 students/acre

47 students/acre



**86** students/acre

119 students/acre



## **STRATEGIES**

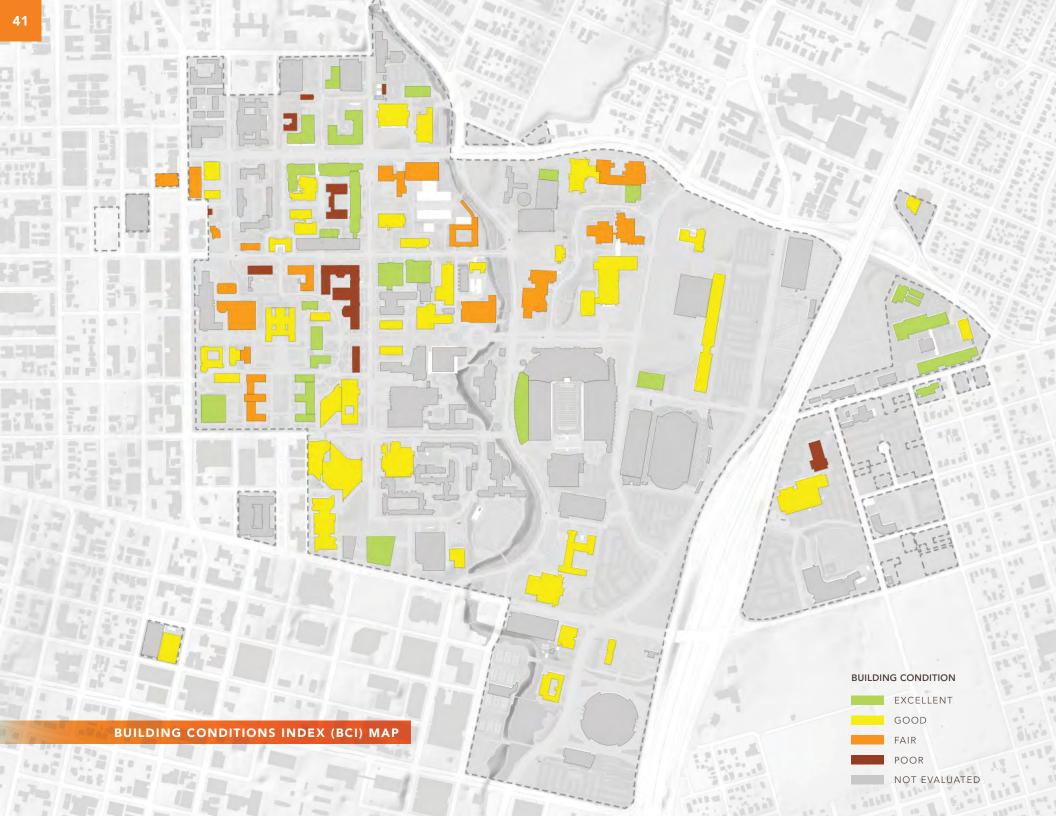
he Core Campus contains some of the most beautiful places on any campus in the world. It is rich with architectural treasures built throughout the twentieth century with care and attention to detail. The buildings are sited carefully in the topography, creating a well-connected, mature, and human-scaled landscape that supports a vibrant academic culture of engagement. The following strategies will guide reinvestment for the Core Campus.



There are many different types of successful student life spaces on campus



Speedway exemplifies the best and worst aspects of the Core

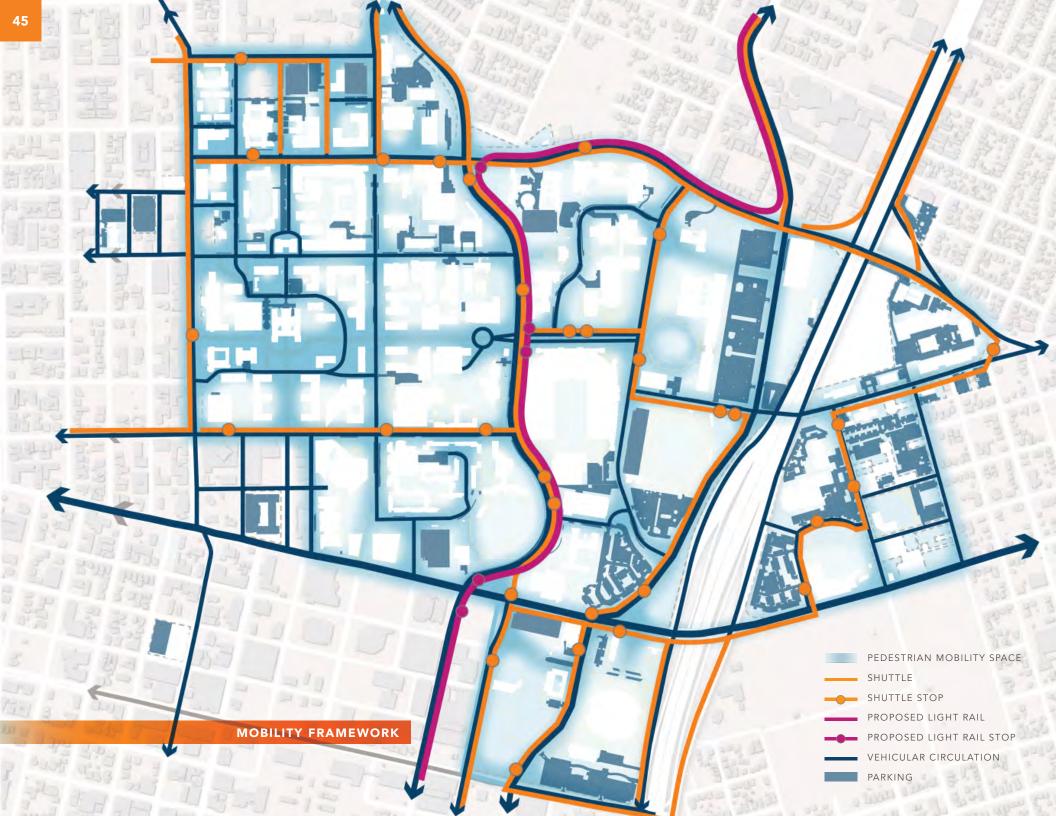


#### PRESERVE THE HISTORIC LEGACY

Many of the buildings and landscapes in the Core Campus are more than fifty years old and have historic value. The historic assessment that has been undertaken as a part of the master plan has identified buildings that have varying degrees of historic significance. Many buildings will be preserved and renovated to maintain their historic character while they are re-purposed for current and future academic and research needs. To meet the university's growth needs in the Core Campus, the master plan identifies those buildings that may be carefully removed because they are not historically significant and are in need of major capital investment. The master plan also identifies infill opportunities that strengthen the campus design, maximize the area's capacity, and improve connectivity.

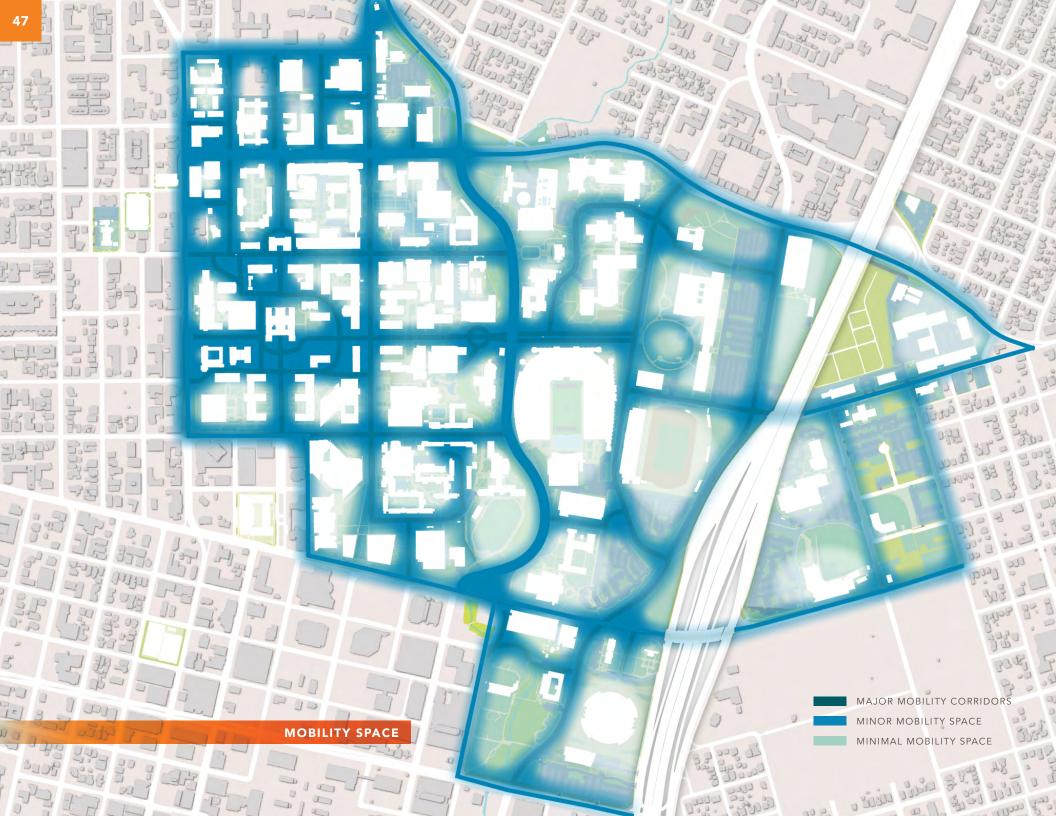
#### MAINTAIN DENSITY AND ACTIVITY

The Core Campus boasts one of the highest campus floor area ratios in the country. With an FAR of 1.8 to 2.0, the Core Campus has more than twice as much density, and likely twice as much population, as Harvard Yard or the Stanford Main Quad. The Core Campus is bustling with student activity and has an attractive energetic quality. Maintaining this level of density and activity is important to the sustained appeal of the Core Campus. Taking into account the buildings that have been identified for replacement as well as potential infill sites, the Core Campus could accommodate approximately an additional 700,000 gross square feet of new space.



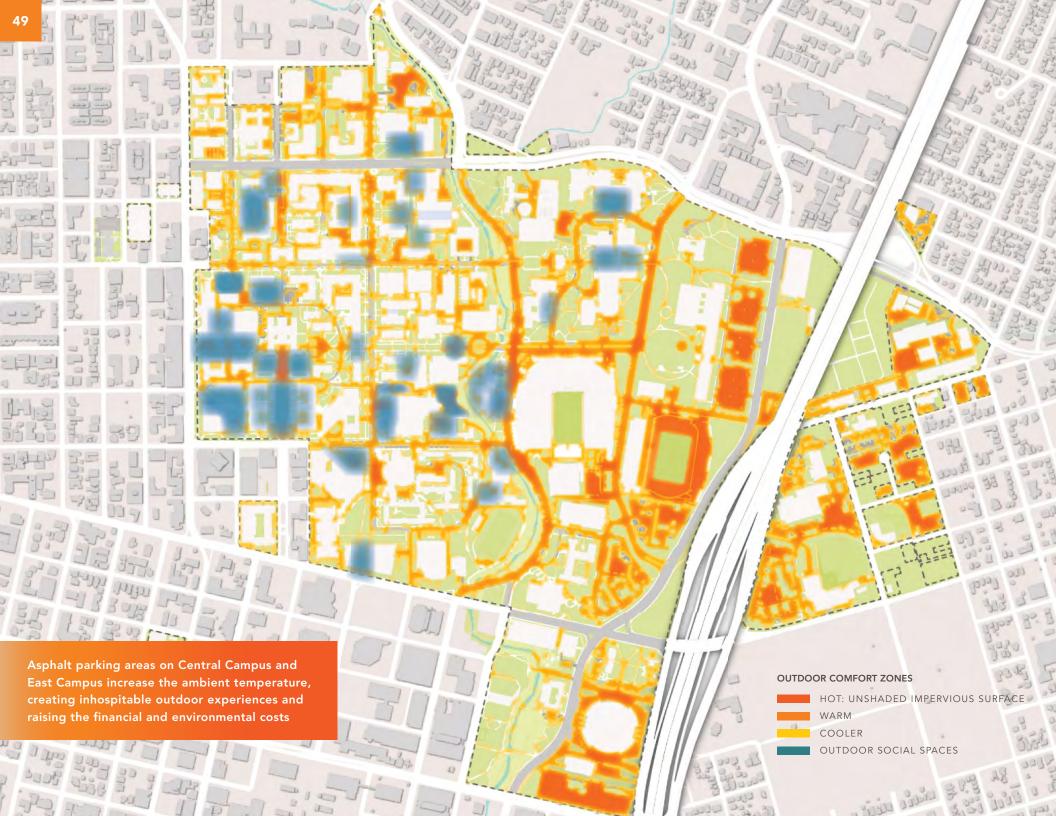
#### IMPROVE CONNECTIVITY

An important principle for the Core Campus is to improve overall connectivity, as well as the quality of campus spaces, both within the Core Campus and with other areas of the campus. The master plan incorporates strategies to improve streets and other mobility corridors throughout the Core Campus, including Dean Keeton Street, 24th Street, 21st Street, Speedway, Inner Campus Drive, and Guadalupe Street. Those strategies are described in detail in the Mobility section of this master plan. Related to connectivity improvements is increasing accessibility within the campus. A separate accesssibility study is currently underway to provide recommendations.



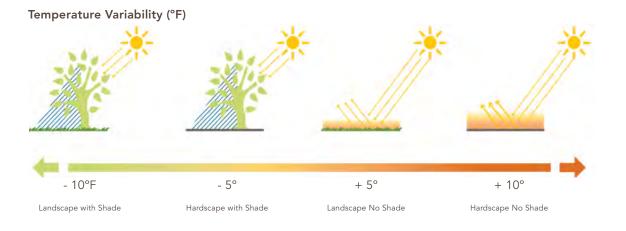
#### **ADDRESS MOBILITY CONFLICTS**

The high density of the Core Campus is desirable, but in many places pedestrians come into conflict with bicycles, cars, and service vehicles. Improving the safety and efficiency for all modes is one of the major design challenges in the Core Campus and is the primary focus of the master plan mobility recommendations. Further, the master plan continues to implement the principle established in the Pelli plan to enhance the pedestrian environment.



#### **ENHANCE THE CAMPUS LANDSCAPE**

The Core Campus has some of the most beautiful landscape to be found on any campus in the world. Mature oaks line the walkways and gathering spaces and provide an abundance of shade and comfortable outdoor environments. The factors that contribute to the comfort of outdoor spaces—lawn and ground cover, tree canopy and shade—combine in the Core Campus to mitigate the heat-island effect of development and improve overall human comfort.



# CAMPUS DESIGN FRAMEWORK

he campus design framework establishes the physical configuration and dimensional attributes that will guide future development of the campus. The framework has three primary elements: the building edges, heights, and massing that define campus spaces; the visual and physical relationships among different typologies of campus spaces; and the overall connectivity of spaces across campus.

The campus design framework begins by reinforcing the iconic cruciform of malls that emanate from the Main Building at the top of College Hill. Improving the physical coherence of these malls and reinforcing their role as armatures of community and student life will help clarify the primary campus structure. Beyond the east-west and north-south malls, a network of secondary campus spaces connect the campus, both physically and psychologically. The network of campus spaces provides a variety of places for students to study and interact. It includes courtyards and small quadrangles, as well as gathering places and pedestrian corridors.

KEY BUILDINGS

MAJOR FRAMEWORK

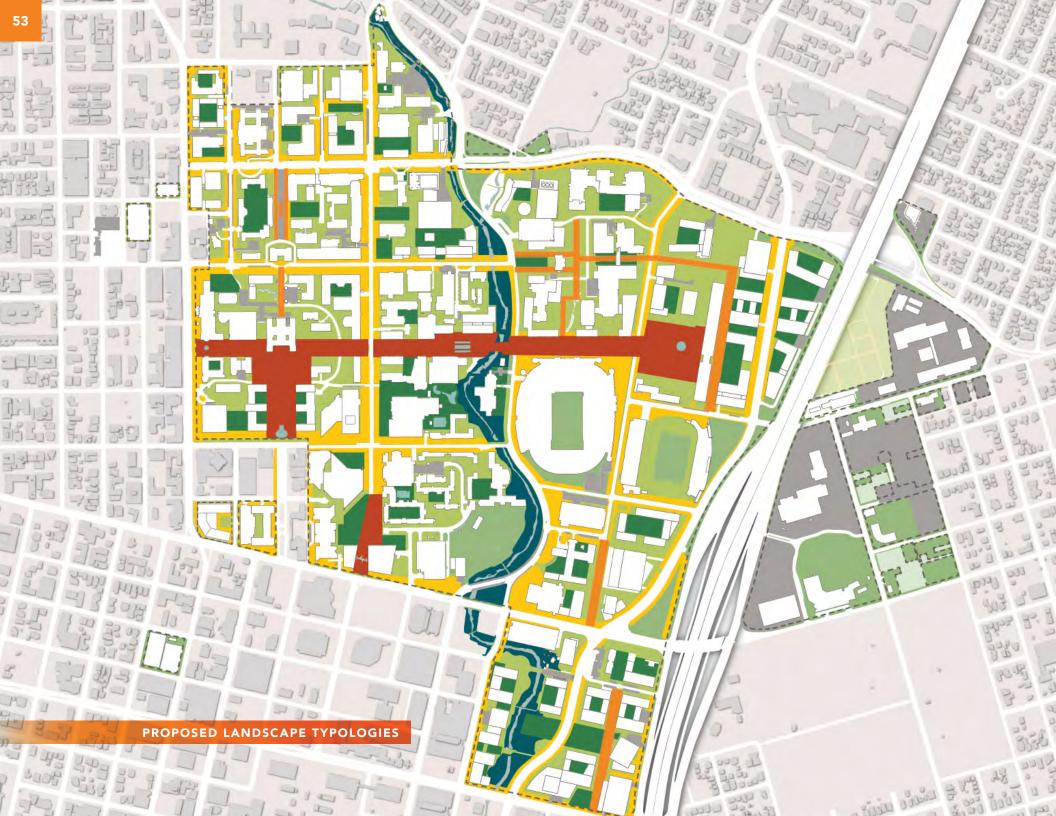
SECONDARY FRAMEWORK

MALLS/MAJOR AXIS

SECONDARY AXIS

OPEN SPACE

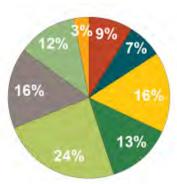
WALLER CREEK

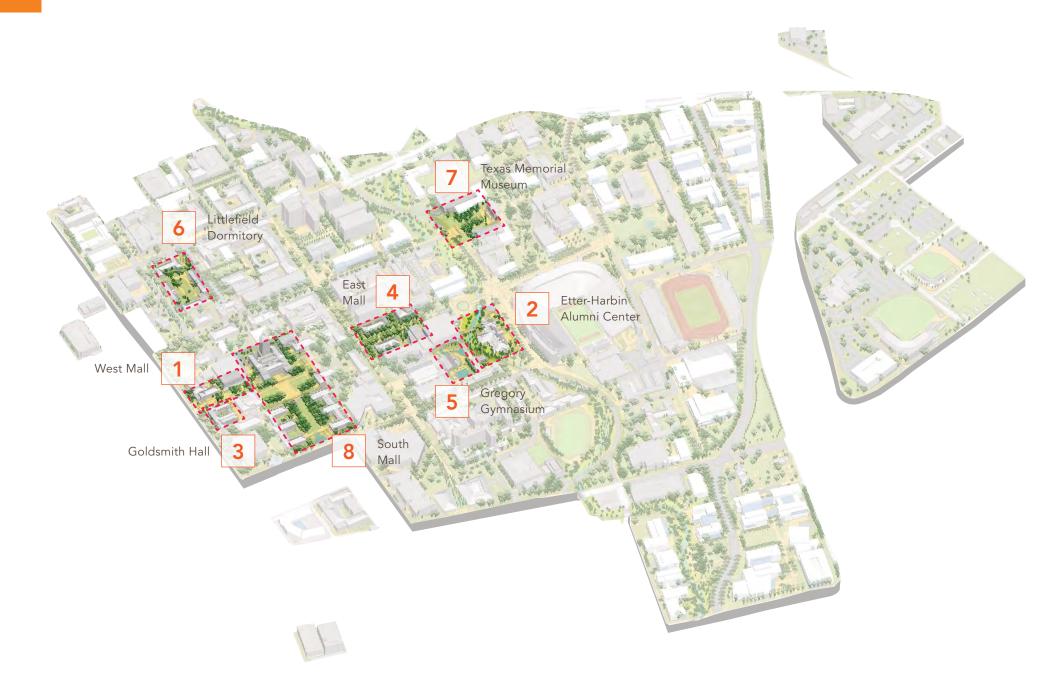


# CAMPUS REALM AND THE UT AUSTIN LANDSCAPE

he tree-lined walkways and shady gathering places on the Core Campus are the kinds of places that attract students and faculty to The University of Texas at Austin. They support the social activities and learning opportunities that keep students on campus and focused on completing their degrees. The combination of adequate amounts of lawn and ground cover, tree canopy, and shade create significantly more comfortable outdoor spaces in the Core Campus than anywhere else on campus. On hot days, with adequate shade, tree canopy, and surfaces that have a cooling effect, an outdoor space can be as much as twenty degrees cooler than an unprotected space.







## **CAMPUS REALM TOOLKIT**

he campus realm toolkit is a catalogue of different types of successful spaces within the Core Campus. In the toolkit, the elements that comprise the particular type of campus space—and work together to create these comfortable and successful spaces—are described and diagrammed. These elements include: building edges, landscape "rooms," connections and pathways, surface treatment, tree canopy, and microclimate. By identifying these elements, the toolkit provides the design guidance to improve existing spaces that are not as successful and to design new spaces, particularly in the Central Campus.

The campus toolkit consists of eight Core Campus spaces shown in the map on the opposite page.

57

Each of these spaces functions in different ways relative to the following five criteria:

#### **BUILDING FRAME**

Campus spaces are framed by building edges. The buildings' heights and the distance between them determine the relative sense of openness or enclosure of a space and have a significant impact on the experience of being in that space.

## LANDSCAPE AND PATHS

Each space has a combination of pervious and impervious surfaces. This is an important factor in storm-water management and in the heat-island effect. The toolkit illustrates the different ratios of pervious to impervious surfaces in different spaces in the Core Campus. The organization of paths, plazas, and green lawn determines how students will use the space and is an important design consideration.

## SPATIAL EXPERIENCE

The placement of trees, retaining walls, and other vertical landscape features determines the sequence of landscape "rooms" that create spatial complexity and provide a rich outdoor experience.

#### **TREES**

The University of Texas at Austin campus is defined by its amazing inventory of mature oak trees. Over the last century, trees have been cared for and carefully planted along pathways and around gathering spaces to provide shade and protection from the hostile Texas sun, creating a stunningly beautiful southern American landscape.

#### **MICROCLIMATE**

A comfortable microclimate in campus spaces can be created through a combination of strategies: orienting buildings to limit heat gain; using trees and buildings to provide shade for pedestrians; limiting impervious surfaces that absorb heat; and encouraging air circulation to cool the air.



#### SPECIAL PLACES/ DESIGN DETAILS

# WEST MALL: GUADALUPE GATEWAY

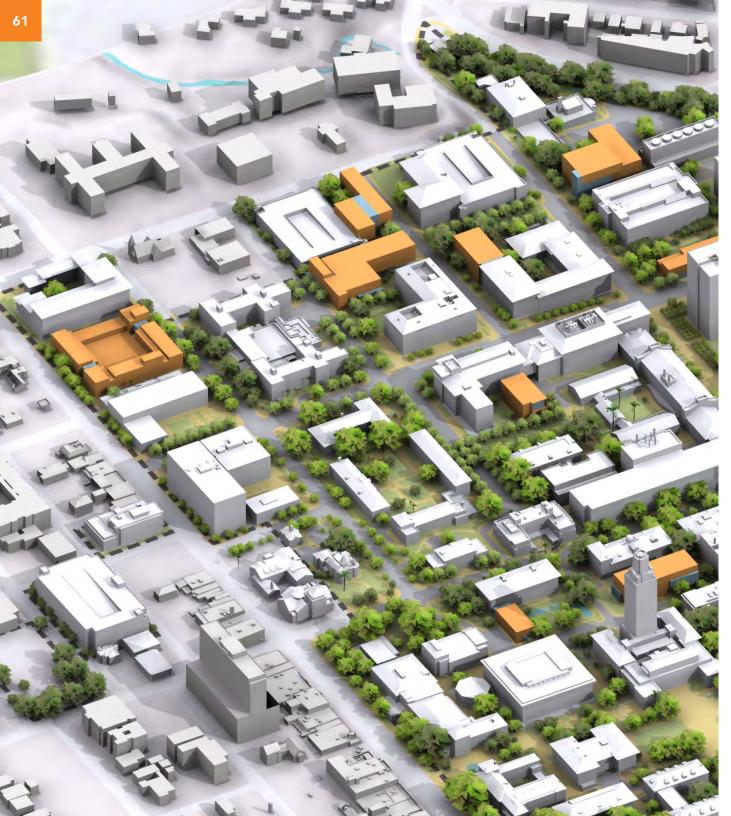
Improvements to the pedestrian experience along Guadalupe Street by narrowing the street crossing at intersections and enhancing the streetscape along the street's western edge will transform the Guadalupe corridor pedestrian environment. In the future, the university should work with the city and local businesses to devise a broader revitalization strategy for Guadalupe Street and the West University Neighborhood. This strategy should address land use and public-realm improvements in a way that balances community, university, and student-resident interests.

# NORTH OF MAIN BUILDING

The space north of the Main Building that is home to the affectionately named Turtle Pond is a chaotic zone of roadways, surface parking, and generally unusable patches of lawn. The master plan proposes construction of structured parking to the east of University Avenue that will double the amount of parking in the lot and allow the removal of street parking in this area. The parking garage will be designed with walls and hedges to limit the visual presence of cars in the area. Some parking along Inner Campus Drive can be removed to make room for increased pedestrian amenities and pathways.

The parking along University Avenue north of Mary E. Gearing Hall will be reconfigured to establish a tree-lined pedestrian mall that will continue to act as a managed parking area, but will also become a more useful formal pedestrian mall at the heart of the district. With the eventual removal of Burdine Hall, a building identified for replacement, an important historic axis to the Anna Hiss Gymnasium will be restored.





# NORTH OF DEAN KEETON STREET

The Core Campus area north of Dean Keeton Street is almost fully developed within the existing city block structure. A number of infill sites and building replacement candidates have been identified. Specifically, a new mixed-use development with a parking garage and student housing above is proposed where the Living Learning Centers are today on Guadalupe Street. The building at 2609 University Avenue and the Bridgeway Building have been identified for replacement. Infill development on these sites and on a few surface parking lots will create a fully built-out district north of Dean Keeton Street.

# ENGINEERING PRECINCT

The Engineering master plan has identified locations for constructing new buildings. These locations are illustrated here in the campus master plan with some minor repositioning to preserve a few precious open spaces along East Dean Keeton Street and Waller Creek in an already very dense precinct of the campus.





#### EAST MALL AND CROSSING WALLER CREEK

With the success of the Student Activity Center, and with the Liberal Arts Building opening soon, the East Mall will have a landscape makeover to transform it into a student gathering place with well shaded seating areas. Building on the Peter Walker plan for the East Mall, the connection across Waller Creek and San Jacinto Boulevard will be improved, and the transit mall will be redesigned to accommodate pedestrians in a tree-lined, comfortable campus environment with easy access to transit.

### **EXISTING MASTER PLANS**

Several of The University of Texas at Austin's schools within the Core Campus have prepared master plans for their existing facilities and the surrounding areas of the campus. These schools include the Cockrell School of Engineering and the McCombs School of Business. In addition, the School of Architecture has begun facility planning on a smaller scale. The design strategies and facility recommendations from each school are acknowledged within the overall campus master plan and in the strategy for the Core Campus. The following is an overview of the key building and site strategies from the school plans.

# COCKRELL SCHOOL OF ENGINEERING

The Cockrell School of Engineering occupies several facilities in the Core Campus in the area bounded by Speedway, San Jacinto Boulevard, and East 24th Street. A master plan prepared for the school in 2009 outlines a strategy to build six new buildings containing a total of 1,000,000 square feet on the main campus, including proposed shared space with other colleges, and to renovate three buildings containing another 600,000 gross square feet. The strategy assumes that 340,000 gross square feet of existing buildings will be removed.

#### MCCOMBS SCHOOL OF BUSINESS

The McCombs School of Business is located in the southeast corner of the original Forty Acres, at the corner of East 21st Street and Speedway. In 2011, the school prepared a strategic facilities master plan that called for construction of a new Graduate School of Business building and the phased renovation of the existing building to create a higher-quality teaching and learning environment.

#### SCHOOL OF ARCHITECTURE

The School of Architecture is located in four buildings along Inner Campus Drive within the Forty Acres: Goldsmith Hall, Sutton Hall, Battle Hall, and the West Mall Office Building. Facility planning for the School of Architecture has consisted of a feasibility study for Battle Hall and West Hall, which has master planning implications for the school.

# **SUSTAINABILITY**

he plan integrates sustainability strategies into its recommendations for revitalizing the Core Campus. The following strategies explicitly link plan elements to the sustainability of the Core Campus:

- Build in a compact, efficient manner with a maximum height of six stories, depending upon the surrounding context, to ensure efficient use of valuable land resources. Aspire to a floor area ratio of 1.5 to 2.0.
- Incorporate landscape design strategies that improve the resiliency of the campus setting by preserving precious water resources and strengthening the overall ecology of the campus. These strategies include incorporating more drought-tolerant planting materials, increasing the use of heat-dispersing ground treatments, preserving existing trees, and planting new trees to increase the amount of shade and lower the ambient temperature of outdoor spaces.
- Design landscapes and place buildings to create human-scaled, well-shaded campus spaces that

improve human comfort.

- Improve accessibility for all and reduce carbon emissions through an efficient and well-coordinated mobility strategy.
- Tie together the Core Campus by providing a more human scale and welcoming environment to create better connections among different student groups, including those involved in academics, research, arts and culture, and athletics. Improving student life and building a stronger sense of community will improve academic performance and student success.
- Build in a compact pattern and adhere to sustainable siting recommendations to minimize heat gain and energy consumption. This will result in more efficient use of resources, including energy, water, and other utilities.
- Retrofit and repurpose space, and use existing space more efficiently, in order to minimize the need for construction of new buildings.



# ENHANCE THE CENTRAL CAMPUS



THE CENTRAL CAMPUS PROVIDES AN OPPORTUNITY FOR THE UNIVERSITY TO ACCOMMODATE THE NEXT SEVERAL DECADES OF GROWTH AND EXPANSION.

# INTRODUCTION

he master plan guides university growth and ensures efficient and responsible development of the university's precious land resources. As the Core Campus reaches its full capacity, expansion is most likely to occur on contiguous and proximate UT Austin land to the east of Waller Creek. The master plan proposes a framework for future academic expansion that includes a variety of campus spaces, circulation corridors, and development areas. The campus framework emulates the best urban-design qualities of the historic Core Campus. It builds on existing assets and establishes a connected and human-scaled environment for the next great era of growth at The University of Texas at Austin. The plan also accommodates a planned new medical center with a mix of academic, research, and clinical facilities, envisioned to be located at the southern edge of the Central Campus adjacent to the University Medical Center Brackenridge complex on East 15th Street.



# **STRATEGIES**

- The Central Campus will become a vital, pedestrian-oriented campus district that is connected
  to the Core Campus through enhanced Waller Creek/San Jacinto Boulevard corridor crossings.
- The East Transit Mall is the primary campus space that ties together the Core Campus and Central Campus. The transit mall creates the opportunity to expand the pedestrian environment and to enhance the character of the landscape. The master plan provides a design that minimizes conflict between transit and pedestrian uses and improves their functionality with no changes to current bus routes.
- Increased density and building placement reinforces the public realm and reflects the campus form and character of the Core Campus. New development will be built in a compact, efficient manner with a maximum height of six stories, depending upon the surrounding context, to ensure efficient use of valuable land resources. The floor area ratio will rise to 1.5 to 2.0, similar to the Core Campus.
- In the long term, making the Central Campus more dense will require the relocation of several athletic facilities, including the football practice facility adjacent to Interstate 35, the Erwin Special Events Center south of East Martin Luther King Jr. Boulevard, and the Penick-Allison Tennis Center on Trinity Street. The sites for relocation have not been identified yet; however, the Erwin Special Events Center could be relocated outside of the main campus, as long as it is supported by a high level of transit access. Maintaining convenient student athlete access to practice facilities is critical to their academic and athletic success. Relocating the football and tennis facilities must be coordinated with a comprehensive planning effort for athletic facilities. In addition, the construction of a parking garage to replace the surface lots east of Sid Richardson Hall, west of Red River Street, and south of the Events Center, will further increase the density of the Central Campus.

# **BACKGROUND**

he Central Campus is bounded by San Jacinto Boulevard to the west, Interstate 35 to the east, East Dean Keeton Street to the north and East 15th Street to the south. The Central Campus comprises a number of disparate districts that lack strong connections or a sense of overall coherence.

The Central Campus is not developed very densely and is characterized by vast surface parking lots, significant topographic changes, and large expanses of irrigated lawn. It has many wide streets and unshaded pathways that make it unfriendly for pedestrians.

The academic district to the north of the stadium is home to the College of Fine Arts and the Law School. The North Central Academic District is characterized by large buildings, some with blank walls, that are spread out in a park-like setting.



Extend the East Mall onto East 23rd Street as East Transit Mall in order to connect the Central Campus to the Core Campus



Enhance the natural assets of the Central Campus

To the east of Robert Dedman Drive, the Lyndon B. Johnson Library complex sits on the crest of the hill along with the School of Public Affairs and the University Police Building. The complex is featured prominently on the hill framing the eastern extent of the East Transit Mall. The library complex feels far from the core of campus; although it is less than a five-minute walk from the East Mall, the lack of good pedestrian amenities—such as shaded walkways and seating areas—makes the distance seem much greater.

The district south of East 23rd Street and north of East Martin Luther King Jr. Boulevard is home to the Darrell K. Royal Texas Memorial Stadium and the university's Mike A. Myers Track and Soccer Stadium, the School of Social Work, some smaller sports facilities, and an abundance of surface and structured parking.

The southern extent of the Central Campus is home to several stadia including the Frank C. Erwin, Jr. Special Events Center, which may soon be reaching the end of its useful life. Relocating and reorganizing the parking and obsolete structures in the district will allow significant new development.

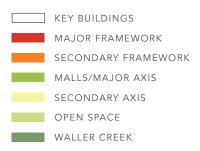


Wide roadways and vast open spaces characterize the Central Campus

# CENTRAL CAMPUS DESIGN FRAMEWORK

he design framework for the Central Campus creates a number of districts that fit within the overall street grid in the area between Waller Creek and Interstate 35. Each of these has its unique urban-design structure. These districts composing the Central Campus are:

- The north academic district that is home to the E. William Doty Fine Arts Building and the Law School
- The Lyndon B. Johnson Library complex district along Red River Street
- The performing arts district, including the Performing Arts Center and the Music Recital Hall
- The athletics district north of East Martin Luther King Jr. Boulevard
- The Waller Creek/San Jacinto Boulevard corridor
- The Medical District south of East Martin Luther King Jr. Boulevard





# SPECIAL PLACES/ DESIGN DETAILS

Although there will be several points of access from the Core Campus to the Central Campus, the most significant will be the extension of the East Mall as the East Transit Mall to the north of the stadium.

Beyond the East Transit Mall, each district has its own structure. An iconic space that anchors a collection of smaller quads, courtyards, and walkways is central to each district. The network of spaces within each district connects both internally from building to building and externally from district to district.

#### **EAST TRANSIT MALL**

East 23rd Street, or the East Transit Mall, along the north side of the Texas Memorial Stadium will be transformed from a barren road dominated by buses and traffic to a tree-lined pedestrian-oriented transit mall surrounded by community- and student-serving uses. With the narrowing and pedestrianization of San Jacinto Boulevard, and the landscape improvements to the Waller Creek side of the East Mall, the connection between the Core Campus and the Central Campus will be greatly improved. East 23rd Street from San Jacinto Boulevard to Robert Dedman Drive will be narrowed, still accommodating twoway bus traffic and diagonal pull-in stops, while creating room for a wide pedestrian walkway on the north side of the road. New building additions with ground-level uses facing the mall will create a better-defined and active edge to the space. New student-serving amenities for transit users and those who frequent the Central Campus will supplement the existing food court in the North End Zone.

# NORTH CENTRAL CAMPUS

Today the Central Campus area north of East 23rd Street is the location of several large buildings that house the School of Fine Arts and the Law School, as well as the Performing Arts Center and the Bass Concert Hall. The buildings were mostly built in the 1960s and 1970s and are characterized by massive brick forms with few windows or building entrances. The campus spaces between are generally disengaged from the buildings and crisscrossed with roads, parking, and service lanes.

The master plan identifies infill sites and potential building additions and extensions that will create opportunities to bring more ground-level active uses to the edges of buildings and better define the outdoor environment as a series of landscape "rooms." A new quadrangle between the Visual Arts Center and the E. William Doty Fine Arts Building, directly north of the new East Transit Mall, leads to a new tree-lined promenade that extends north past the Texas Memorial Museum to the Law School at the northern edge of the North Central District.

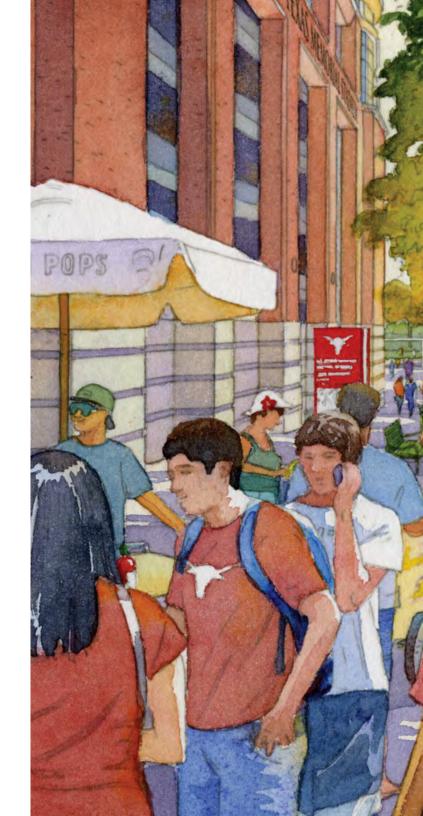
Applying the design criteria established in the Campus Realm Toolkit, existing trees are preserved and new trees planted to enhance the North Central District as an interconnected, shaded, and human-scaled campus environment.

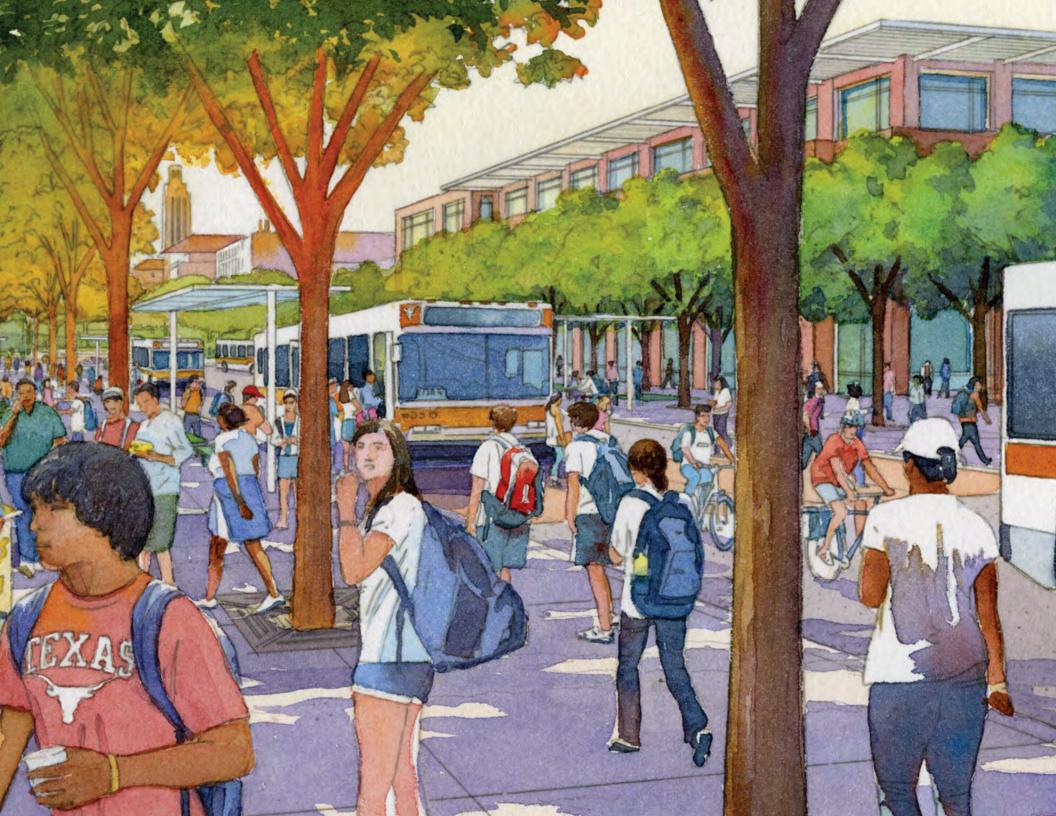


#### **EAST TRANSIT MALL**



Existing Condition







#### RED RIVER STREET AND LYNDON B. JOHNSON LIBRARY DISTRICT

Today the Lyndon B. Johnson Presidential Library complex is set in a rolling landscape of green lawn and oak groves, with expansive parking lots to the east. The Lyndon B. Johnson Library occupies a fourteen-acre site that is currently restricted to development by an agreement between the university and the federal government. Future development of the site would require an amendment to the agreement.

With the improvements to the East Transit Mall, the Lyndon B. Johnson Library complex will feel more connected to the Core Campus and will become a desirable place for university expansion. With the consolidation of the extensive surface parking into structured parking and the relocation of the football practice fields east of Interstate 35, Red River Street will become a major address for over two million square feet of new development. Structuring this new district in a way that respects existing buildings and roadways while creating an attractive and flexible new campus environment to accommodate future academic and research growth is the key master plan goal for this area.

Close up 3D view of the Red River Street and Lyndon B. Johnson Library District

# PLANNED ACADEMIC MEDICAL CENTER DISTRICT

The University is establishing a new comprehensive academic medical center on or near the main campus. The medical school will not only generate a need for its facilities but will also generate demand for more clinical and research space. Some existing health-science programs, such as pharmacy, nursing, and public health, may want to co-locate with the medical school. The medical school may also require nearby support facilities such as student housing and student-life facilities. Related programs in sciences, engineering, business, and law may also grow in areas related to health sciences. While the location of The University of Texas at Austin Medical School has not yet been determined, the master plan identifies a site that could accommodate an academic medical district in the south portion of the central campus in the area bounded by East 15th Street to the south, Trinity Street to the west, and Interstate 35 to the east. This area is currently home to the library collections depot, the School of Nursing, the Freshman Admissions Center, several tennis courts, parking lots, and the Erwin Special Events Center, which may need to be replaced.

The area north of East 15th Street shown in the campus master plan reflects the initial thinking for increasing density in the Central Campus. Subsequent planning for the Medical District has resulted in a new concept for this area.



# **SUSTAINABILITY**

he plan integrates sustainability strategies into its recommendations for enhancing the Central Campus. The following strategies explicitly link plan elements to the sustainability of the Central Campus:

- Build in a compact, efficient manner with an average height of three to four stories.
   Place taller buildings adjacent to Interstate 35 to ensure efficient use of valuable land resources. Aspire to floor area ratios of 1.5 to 2.0, similar to the Core Campus.
- Incorporate locally appropriate landscape design strategies to preserve precious water resources and improve the overall ecology of the campus. These strategies include incorporating more drought-tolerant planting materials, increasing the use of heat-dispersing ground treatments, preserving existing trees, and planting new trees to increase the amount of shade and lower the ambient temperature of outdoor spaces.

- Design landscapes and place buildings to create human-scaled, well shaded campus spaces that improve human comfort.
- Improve accessibility for all and reduce carbon emissions through an efficient and wellcoordinated mobility strategy.
- Tie together the Central Campus by providing a more human scale and welcoming environment to create better connections between different student groups, including those involved in academics, research, arts and culture, and athletics. Improving student life and building a stronger sense of community will improve academic performance and student success.
- Build in a compact pattern and adhere to sustainable siting recommendations to minimize heat gain and energy consumption.
   This will result in more efficient use of resources, including energy, water, and other utilities.



# FORGE STRATEGIC PARNIERSHIPS













LIBRARY





PARKS



PARTNERSHIPS WITH ADJACENT STAKEHOLDERS HAVE THE POTENTIAL TO ADVANCE THE UNIVERSITY OF TEXAS AT AUSTIN'S ACADEMIC, RESEARCH, AND STUDENT-LIFE GOALS. EXPLORING POTENTIAL CITY, STATE, AND PRIVATE SECTOR PARTNERSHIPS FOR PROMOTING AND GUIDING DEVELOPMENT ADJACENT TO THE UNIVERSITY CAMPUS IS RECOMMENDED AS A PRIORITY INITIATIVE.

# INTRODUCTION

s described in the "Accommodating Growth" section, to become the preeminent public university in the nation. The University of Texas at Austin will need to continue developing additional facilities. Increased density in the Core Campus and the Central Campus can at most accommodate only about fifty percent of potential thirty-year growth based on the historic growth rate of university space. As a medical school is developed on campus, facility growth will likely exceed historic rates.

There are a number of ways of accommodating university facility growth beyond these two campus districts on property already owned by the university. The Pickle Research Campus has the potential to accommodate appropriate research facilities as well as other support uses. East Campus also has development capacity for uses that don't require a location on the Core Campus or the Central Campus. In addition to university-owned property,

community-oriented facilities could potentially be accommodated at the Mueller mixed-use urban village. The University of Texas Medical Research Campus is already located at Mueller. With the exception of East Campus, all of the above locations are some distance from campus and will require auto or transit access.

Facility growth could also be accommodated in areas adjacent to the Core Campus and the Central Campus, including the West University Neighborhood, the Capitol Complex, and East Campus, with significant potential advantages for the university and other interested parties.

Some program growth needs can be met through partnerships with the city, state, other non-profits, and the private sector. Institutions of higher education are increasingly becoming aware of the importance of an economically vital and active community adjacent to their campuses and have created many successful projects to foster them.

# **STRATEGIES**

stratetic a

stratetic approach to fostering partnerships beyond the university is essential for success. The guiding principles for initiating strategic development partnerships include the following:

Promote economic growth in support of a vital Austin downtown

Accommodate appropriate university growth beyond the main campus to preserve development capacity for uses that are dependent on adjacency to other uses on the main campus

Support a vital and diverse urban community that will assist in attracting and retaining the best faculty, students, and staff

Leverage university resources through development partnerships that will reduce capital requirements, allow sharing of facilities and support services, and create new venture opportunities

Guide development to assure a high-quality and sustainable environment

Promote sustainability through smart-growth development principles, use of existing infrastructure, and developing within walking and bicycling distance of the campus

# PARTNERSHIP OPPORTUNITIES

pportunities for strategic partnerships to support campus growth vary by geographic area. Areas adjacent to campus each present a unique set of possibilities and potential partnerships.

# WEST UNIVERSITY NEIGHBORHOOD

Bounded by the university and Guadalupe Street on the east and West Martin Luther King Jr. Boulevard on the south, following an irregular boundary paralleling North Lamar Boulevard on the west, and extending to West 29th Street on the north, this portion of the West University Neighborhood has been designated in the University Neighborhood Overlay Planning Area (UNO), a city initiative passed in 2004, as an area intended to attract UT Austin students to live close to the campus in a dense urban environment. The UNO plan has been very successful, with approximately three thousand student beds added following the UNO plan adoption and with the potential for three thousand or more in the future.

While not planned as part of student life or university residence life, the neighborhood is home to more than fifty

Greek organizations and at least twelve co-ops. The potential of the West University Neighborhood to become a vibrant mixeduse student village and have a positive impact on student recruitment and retention is great. With more active university engagement and development, the West University Neighborhood has the potential to meet many of the university's goals for university student housing and student life programs. Without more active engagement by the university in the future development of the West University Neighborhood, there is risk that in time the attractive physical and social qualities of the neighborhood could deteriorate.

Guadalupe Street is the seam between the West University Neighborhood and the Core Campus. This commercial area, known as "The Drag," is a major commercial area serving the neighborhood and the university. Commercial uses include clothing stores, restaurants, bookstores, and the University CO-OP. As a major front door to the university, the current condition and appearance of this section of Guadalupe Street detracts from the university's image. The university should explore playing a leadership role in planning for the revitalization of this important campus town commercial area.





#### **INNOVATION DISTRICT**

Leading research universities and their host cities are discovering the benefits of collaborating on the creation of innovation districts near the heart of the university campus. Innovation districts can provide opportunities for collaboration between university research and private company research; technology transfer and shared facilities; equipment; and support services for small-firm startups. Innovation districts, such as the Kendall Square area in Cambridge, Massachusetts, have generated millions of dollars in economic activity and substantial tax revenue for their host cities. They have facilitated occupants' efforts to bring research ideas to market. Opportunities exist in the Capitol Complex area and in East Campus to establish an innovation district in central Austin adjacent to the university. The Capitol Complex Plan calls for up to six million square feet of private commercial mixed-use development in the Capitol Complex, an area ripe for innovation district uses. The University should explore opportunities to collaborate with the city and state in the creation of an innovation district.

#### ACADEMIC MEDICAL CENTER

As the university establishes a new medical school on The University of Texas at Austin main campus, a comprehensive academic medical center will likely develop. A medical school will not only generate a need for its facilities but will generate demand for more clinical and research space as well. Some existing health-science programs, such as pharmacy, nursing, and public health, may want to co-locate with the medical school. The medical school may also desire nearby support facilities such as student housing and student-life facilities. Related programs in sciences, engineering, business, and law may also grow in areas related to health sciences. While the location of the potential University of Texas at Austin Medical School has not been determined yet, the master plan identifies a potential site for an academic medical district in the south area of the Central Campus. This site is adjacent to the University Medical Center Brackenridge, a level 1 trauma center and leading regional hospital facility. Renderings of the area north of East 15th Street shown in the campus master plan reflect the initial thinking for increasing density in the Central Campus through strategic partnerships. Subsequent planning for the Medical District has resulted in a new concept for this area.

#### **EAST CAMPUS**

Phase 1 of the Master Plan does not include the East Campus, the area of university-owned land east of Interstate 35. This area currently accommodates a number of university support functions, including facilities services, central computing facilities, parking, and some athletic venues. There is capacity for additional facility growth that does not require immediate proximity to Core Campus and Central Campus uses. East Campus overlays the Blackland Neighborhood within the City of Austin's Upper Boggy Creek Neighborhood Plan area. Future phases of campus planning should include the East Campus and engage the leadership of the Blackland and Upper Boggy Creek neighborhoods in the planning discussion.



# **SUSTAINABILITY**

orging strategic development partnerships for areas adjacent to the university can have significant sustainability advantages. The following strategies explicitly link recommendations for strategic partnerships to the sustainability of the UT Austin campus:

- Develop at urban densities in existing developed areas in order to save building energy through use of more efficient central plants, application of eco-district strategies, and more efficient use of existing utility infrastructure.
- Develop residential or research district within walking distance of campus in order to reduce student commuter traffic to campus as well as faculty and research staff commuting to research facilities far from campus.
- Site university venues within walking distance of campus in order to make reducing parking requirements feasible.
- Initiate a planning discussion about future development partnerships in order to build community dialogue and trust across a range of environmental and social equity issues.

# **NEXT STEPS**

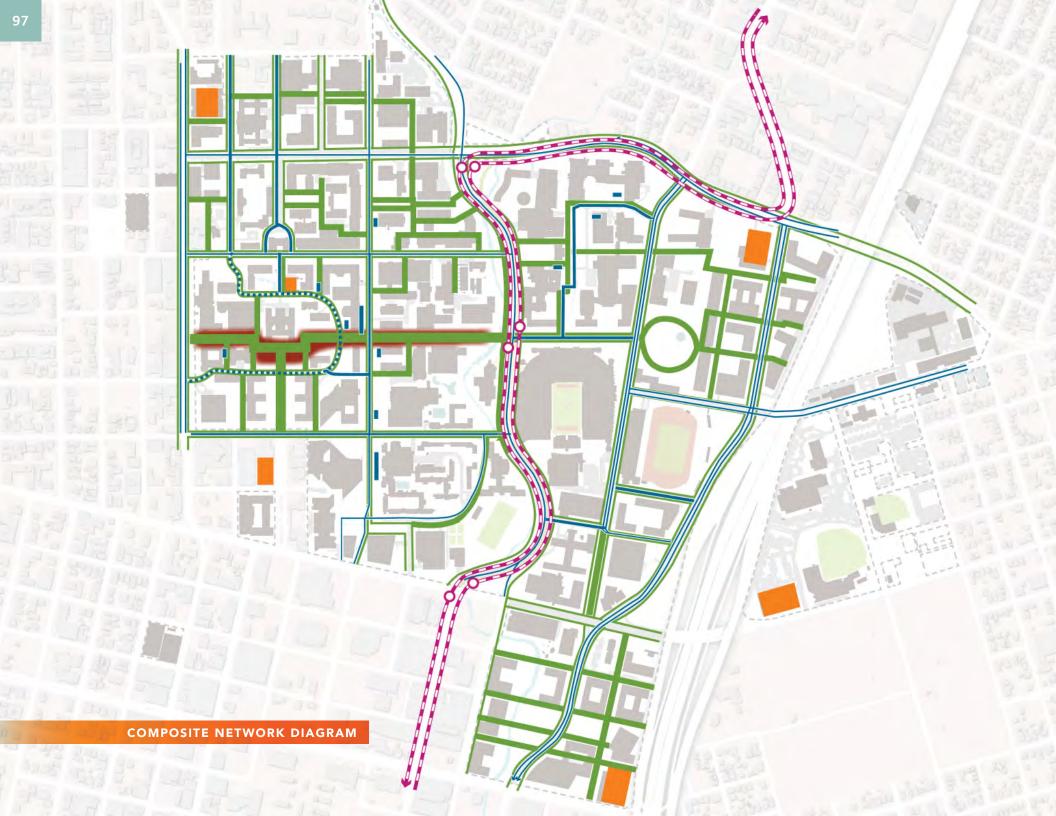
Il of the potential partnerships proposed will help the community as well as the university. It is imperative that The University of Texas assume a strong leadership role in forging these strategic partnerships. There is tremendous potential for economic development and job growth from all the proposed initiatives, strengthening the university's and region's economic competitiveness. If development can be guided according to best design practices, the university and the city will benefit greatly from the quality of the resulting university neighborhoods.

The strategic partnerships suggested above require different approaches and levels of involvement by the university. Each area should be explored to gauge the interest of potential partners and the possible roles of the university. The areas to be explored in Phase 2 planning studies include the following:

- Develop a deliberate strategy around engagement and investment in the West University Neighborhood as a major university housing village
- Explore with property owners and the city the opportunity to develop a revitalization plan for Guadalupe Street, including the potential for university investment
- Explore opportunities to collaborate with the city and state in the creation of an innovation district in central Austin
- Conduct an initial visioning process and create a program and concept plan for
  the new medical school to inform the site-selection decision and to evaluate how a
  medical center development on the main campus could impact program location and
  infrastructure decisions in the future
- Include the East Campus in Phase 2 master planning and engage the leadership of the surrounding Blackland and Upper Boggy Creek neighborhoods in the planning discussions



# FACILITATE SAFER, MORE EFFICIENT MOBILITY



A CAMPUS IS A COMMUNITY OF PEOPLE WHO INTERACT AND SHARE EXPERIENCES. THE CAMPUS'S TRANSPORTATION SYSTEM MAKES THAT INTERACTION POSSIBLE.

## INTRODUCTION

he campus of The University of Texas at Austin is large, dense, and complex, ordered by a grid, and overlaid with separate but interacting systems of mobility by foot, bicycle, vehicles of all sorts, and potentially light rail. The needs of travelers via all these systems involve using as corridors almost all the campus's open space and some indoor space. In many of these spaces, the character of corridor is in tension with or supersedes that of place.

Under these circumstances it is critical to harmonize the modes of mobility to, within, and across the campus. This means designing paths and spaces to ensure that people in motion know what to expect and how to behave. The best transportation system is one that comports with people's natural inclinations while providing clear and authoritative guidance and protocols. A campus traffic management plan must accommodate all modes as appropriate, taking into account safety, campus quality, convenience, sustainability, cost, wellness, connections to the regional network, and of course parking.

Many aspects of the campus's design and structure relate to mobility. Accordingly, references are contained throughout the master plan to issues such as the East Transit Mall and East Mall Crossing, the Waller Creek/San Jacinto Boulevard corridor, pedestrian conditions along and across Guadalupe Street, and the spatial organization and microclimates of pedestrian paths.

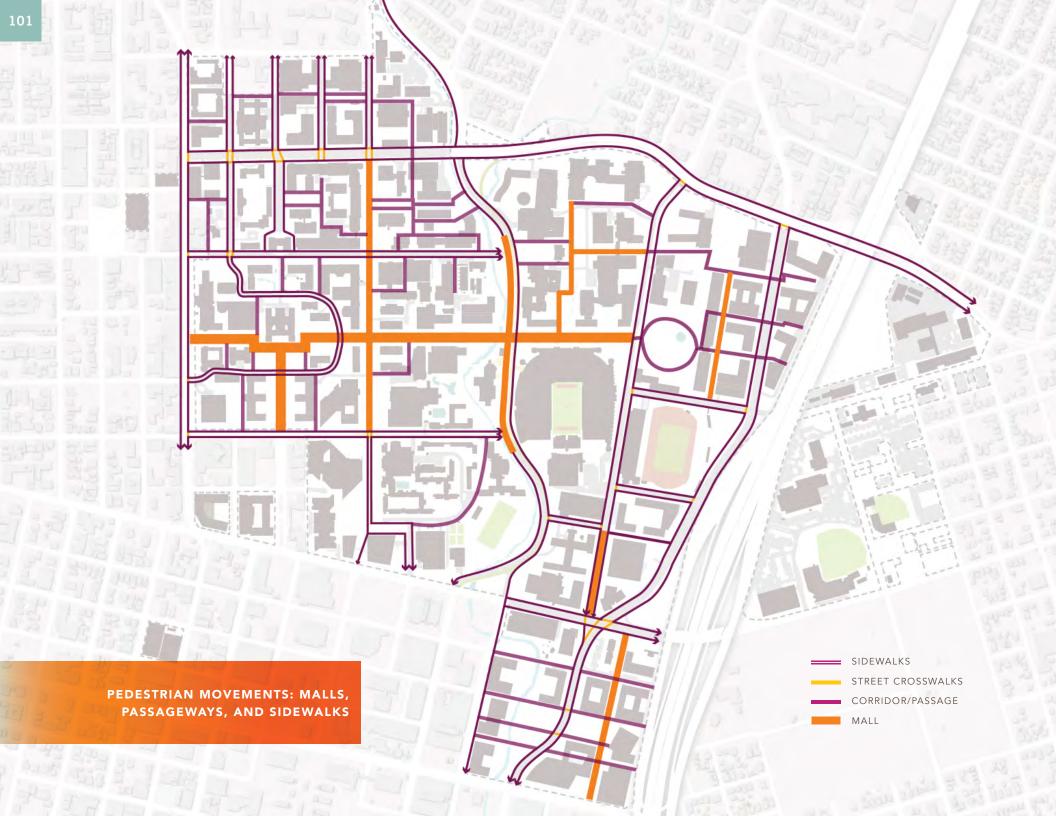




## **STRATEGIES**

he plan forwards four over-arching strategies to facilitate safer, more efficient mobility on the UT Austin campus. These strategies consider mode prioritization and integration, transportation demand management, and the importance of campus design to campus mobility.

- Walking is the favored mode of transportation on the main campus. All other
  modes should in general yield to pedestrians, subject to traffic controls such
  as crosswalks, curbs, signals and signs, lane markings, and other indicators of
  right-of-way.
- The primary transportation modes—walking, bicycling, private motor vehicles, university and service vehicles, buses, and potentially light rail—should be managed as distinct but intersecting and overlapping circulation systems. Each has its own pattern of connectivity and degree of access to buildings.
- Transportation demand management is an integral component of the
  university's mobility strategy. In keeping with a general commitment to
  sustainability and to the quality of the campus, the university's administrative
  departments should continue to support and promote alternatives to
  commuting by single-occupant vehicles. The transportation system should be
  managed in coordination with the goals and management principles of the
  University's Sustainability Committee.
- Traffic operations analysis should be integrated with campus design. Streets, footpaths, plazas, trails, and passageways through buildings must be orchestrated to create a direct and functional system of pedestrian access.
   Every aspect of campus design should be considered from the point of view of people in motion and should guide them with clear indications of right-of-way and the potential for paths to cross.



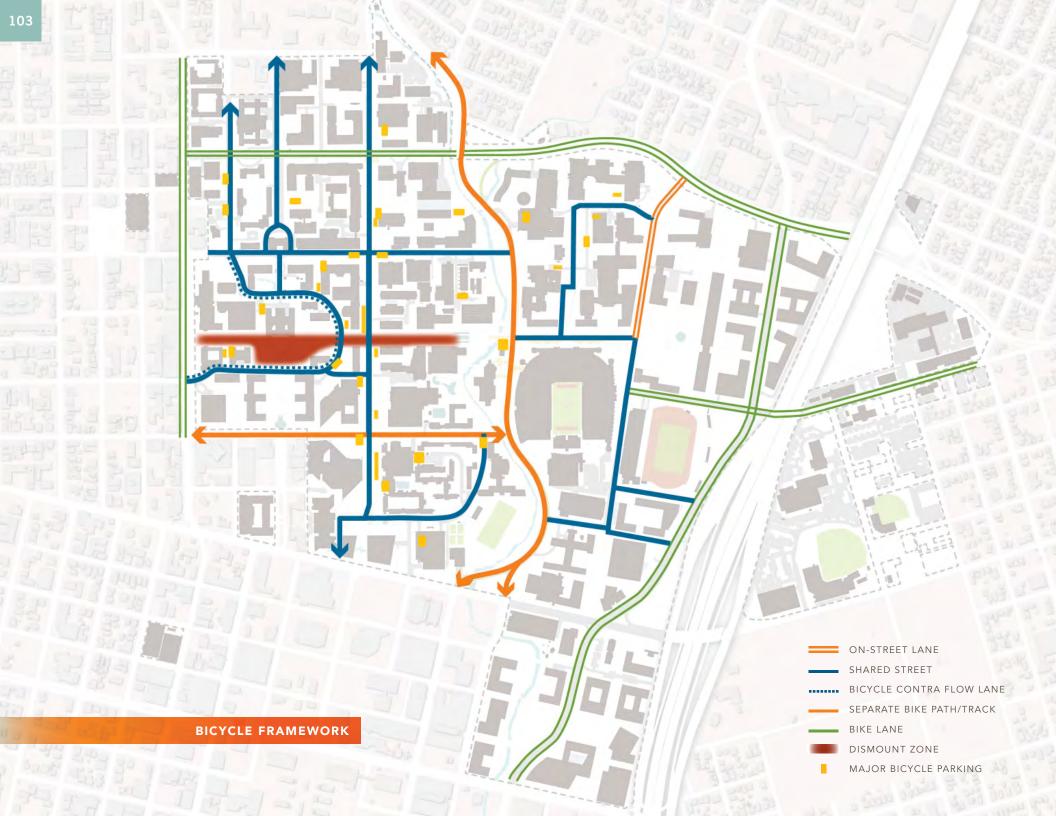
## MOBILITY SYSTEMS

### **PEDESTRIANS**

Pedestrian paths define the campus's main axes—the malls—and also comprise the fine-grained network of interstitial passageways formed by the arrangement of campus buildings. The qualities of surface treatment, shade, and freedom from obstruction exhibited by such spaces as the ones between Painter and Welch Halls, or between Parlin and Sutton Halls, should be models for improvements of existing pedestrian corridors (e.g., between Patterson and Woolwich Laboratories) and for the scale and treatment of new paths in the developing Central Campus. In the area north of East Dean Keeton Street, streetscape and pathway improvements should also be guided by reference to the best walkways in the Core Campus.



The space between Painter and Welch Halls



#### **BICYCLES**

As at other universities where student enthusiasm for health and green transportation combines with weather, topography, and campus/urban design to create an environment highly conducive to bicycling, the UT Austin campus is in danger of being overrun by moving and parked bicycles. Given the bicycle's health benefits and zero emissions, but more importantly its popularity as a transportation choice—which is well-established and unlikely to change—the master plan recommends that bicycling be embraced and encouraged. The University of Texas at Austin has both an opportunity and an imperative to become a great cycling campus.

The key to managing bicycle traffic in an affirmative way is to provide a functional and attractive system of connections and paths, parking, and support services.

#### **CONNECTIONS AND PATHS**

UT Austin's bicycle network is currently ill defined. The master plan proposes to establish a circulation system that leads in an orderly fashion from main cycle routes to parking, avoiding conflicts with pedestrian movements by channeling bicycles into defined corridors. New bicycle paths, including a cycle track on 21st Street and an off-street path along Waller Creek between East Dean Keeton Street and East Martin Luther King Jr. Boulevard will provide direct cross-campus access. Inner Campus Drive will have a bicycle contra-flow lane, permitting cyclists to use it in both directions and diverting bicycles from the West Mall/Tower Plaza Dismount Zone. Speedway will fulfill its role as a shared space, where bicycles will be allowed. The university should work with the city in developing a continuous and seamless system of bicycle facilities that extends beyond the boundaries of the campus and provides safe connections to surrounding neighborhoods. This is particularly important along major campus arterials such as Guadalupe Street and Dean Keeton Street. Design details, such as intersections and transitions from two-way paths to one-way lanes, are also important.

#### OTHER BICYCLE CONNECTIONS

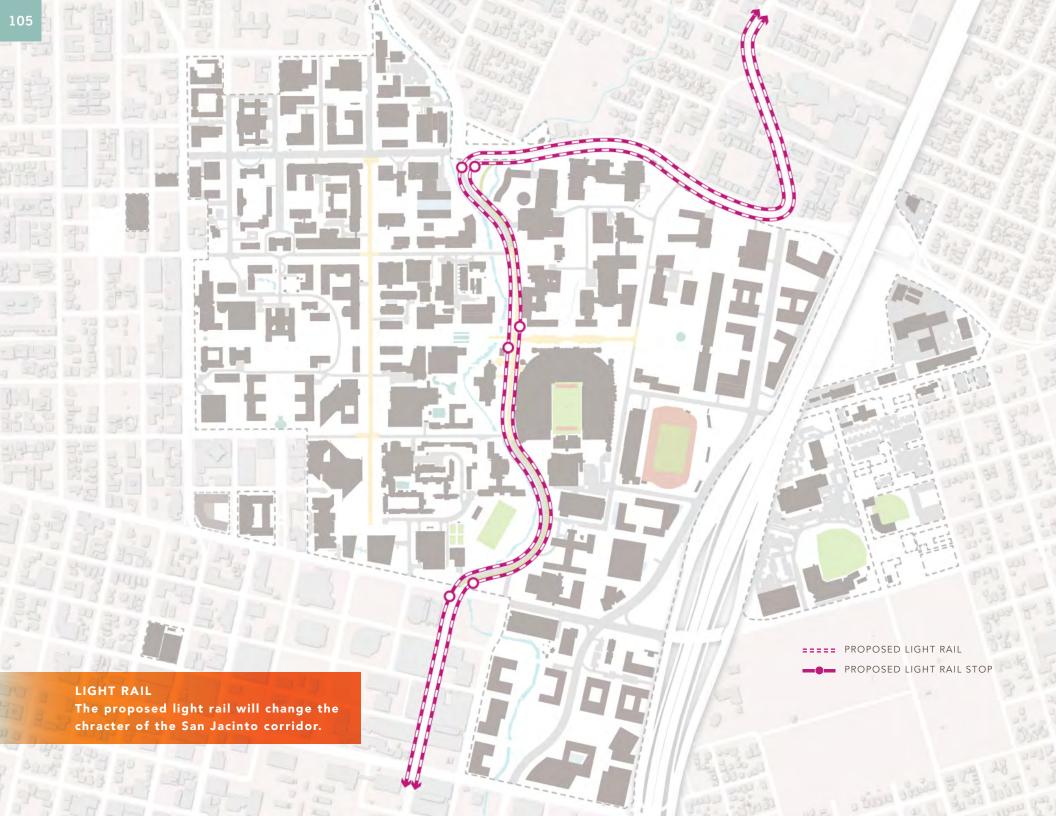
Aside from these major bicycle accommodations, certain paths and roadways—as shown on the Bicycle Framework diagram opposite—should be specifically recognized as bicycle connections. These will permit cyclists to reach most points on campus without conflicting with pedestrians.

#### **PARKING**

Bicycle parking can be made orderly and even attractive if thoughtfully sited and designed. The university should establish a number of large (50- to 100-space), semi-screened bicycle parking areas with racks that support bicycles neatly upright. Large bicycle parking areas should be accessible via bicycle paths and connections. In smaller groups, bicycle racks should be provided where demand exists, located unobtrusively. When appropriate, bike lockers should be incorporated in new buildings or parking garages.

#### SUPPORT SERVICES

The University of Texas at Austin already has a remarkably robust set of bicycling support services, including on-campus bicycle repair at the Kickstand, the Orange Bike bicycle-sharing program, and the UT Safe Cycling Campaign (supported by the Student Green Fee and the Office of Sustainability). The range of these activities, mostly student-initiated, indicates the level of healthy enthusiasm bicycles engender on campus. Opportunities should be sought to coordinate such efforts with local, city, and regional programs. Additional services, such as making showers available at points across campus, are a valuable support for bicycling commuters.



### LIGHT RAIL

The University welcomes the prospect of light rail service to Austin. As part of an already robust transit service, high-occupancy light rail running along San Jacinto Boulevard would give the campus a transportation system comparable to the best among American universities. Introduction of light rail would also provide an opportunity to reclaim Waller Creek as an open-space amenity, and to weave the creek, street, and rail corridors into a unique meeting and gathering place adjacent to Texas Memorial Stadium.

## SERVICE, DELIVERY, EMERGENCY, AND TRANSIT VEHICLES

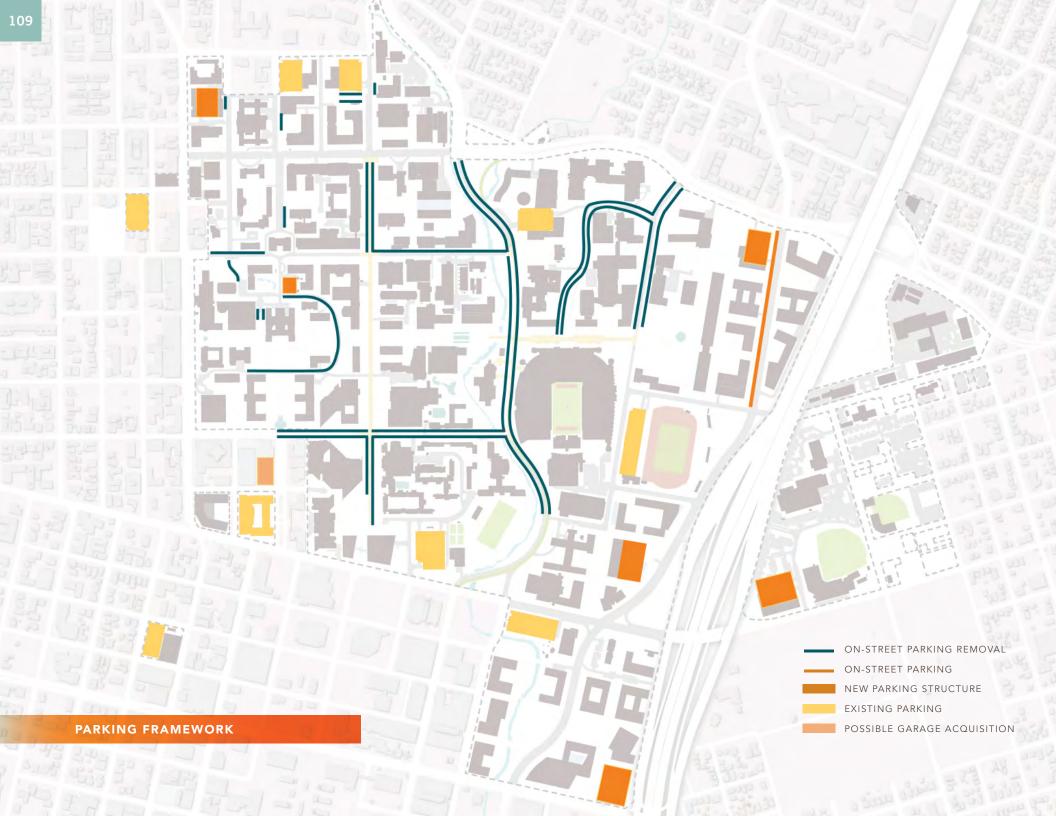
General vehicle traffic can be, and is currently, restricted in a variety of ways on campus. However, it is important in the placement of buildings and landscape features to preserve necessary access for service, emergency, and transit vehicles.

- Service and Delivery Vehicles. Buildings should be designed to provide access from existing service corridors. Locations of loading docks and service entries should be a primary consideration in the orientation of building functions. Some service access for smaller vehicles can be provided across appropriately reinforced walkways.
- **Emergency Vehicles.** All buildings should be accessible to emergency vehicles. Emergency access need not take the form of a paved surface; lawn can be installed over a reinforced sub-base.
- Transit. In order to preserve flexibility for the routing of transit operations, 21st Street, 24th Street,
  San Jacinto Boulevard, Robert Dedman Drive, and Red River Street should remain physically
  accessible by full-size buses. As detailed in the Waller Creek/San Jacinto Boulevard corridor section, a
  new configuration for the existing layover facility on East 23rd Street north of the stadium is proposed
  in connection with the extension of the East Mall.

#### **ACCESSIBILITY**

The overall campus master plan and its mobility plan component create a framework for campus improvements that incorporates universal access principles and enhances accessibility. The university's commitment is more than mere compliance; rather it is a commitment to provide access to all members of the diverse campus community. This framework encourages design beyond the minimum standards set forth in the Americans with Disabilities Act (ADA) Architectural Guidelines to provide environments inherently accessible to as diverse a population as possible. The master plan is also supported by a focused planning initiative addressing campus-wide accessibility, commissioned by the university's Project Management and Construction Services department.

To the extent that proposed open space and mobility improvements result in the elimination of accessible parking, those spaces will need to be replaced. Options include the redesignation of existing parking, the development of new accessible parking within structures, and the provision of shuttle service for handicapped drivers between more remote parking facilities and their destinations. These policy decisions should be thoroughly vetted within The University of Texas at Austin community.



#### PARKING

The removal of parking from the Core Campus, and its consolidation into a loop of structured facilities on the periphery, is one of the great accomplishments of the past two decades under the Pelli plan. It creates tremendous opportunities for rethinking how the streets of the campus are used and appointed.

Implementation of the current master plan will entail removing more existing surface parking, both from lots and along roads. These changes will be necessary because of proposed new buildings or rehabilitation of open space. Displaced parking will be replaced with new garages in the peripheral loop. It is also recommended that parking be re-instituted along the west side of Red River Road (a City of Austin street). In addition, a garage has been discussed for the A9/Lot 17 area to meet the need for parking in the northwest quadrant of campus. While the illustrative master plan currently shows an academic building in this area, a garage could be considered for this site.

On the demand side, the need for parking is largely a function of campus population. Enrollment at the university is not projected to change significantly. Although the master plan anticipates the construction of many new buildings, there will not necessarily be more students commuting to campus. Growth in research may account for increased employment on campus over the course of the master plan buildout. At the same time, on-campus parking need may be reduced through implementation of additional Transportation Demand Management measures, as described below under Transportation Demand Management, and through the provision of off-campus park-and-ride facilities.

In some special cases, ADA parking replacement may require more detailed study. For example, off-street parking closer to the Bass Concert Hall entrance may be needed to replace ADA street parking.

The priority and phasing of these projects and their impact on parking supply and demand remains to be determined. Preliminary analysis, as shown in the following table, indicates that there is adequate potential replacement parking on seven sites:

- At the southwest corner of East Dean Keeton Street and Red River Street
- On the site of the co-op buildings on Guadalupe Street north of West Dean Keeton Street
- On Lot 104, Disch-Falk Field
- On East 15th Street next to the Erwin Center
- Under and replacing the existing Lot 14, between Main Building and Painter Hall
- East of the School of Social Work building
- Behind the Student Services Building, between University Avenue and Wichita Street

Another potential site, outside The University of Texas at Austin's current land holdings, is immediately north of the AT&T Conference Center on University Avenue south of the campus. The removal of existing surface parking from locations such as the Waller Creek/San Jacinto Boulevard corridor will eliminate spaces that currently provide relatively low-cost options for faculty and staff. It is important to provide alternatives for these employees, both in remote facilities served by shuttle buses and through other transportation demand management measures.

Accessible parking may need to be relocated to garages and served by shuttle. The existing spaces along Inner Campus Drive do not meet technical standards for accessibility; this consideration contributes to the recommendation that those spaces be re-purposed as a contra-flow bicycle lane. A review of actual accessibility requirements and needs is currently underway.

## **PARKING REMOVALS**

PARKING REMOVALS	SPACES
North of Student Services	49
East of 27th Street garage	46
Lot 92 (North of Seay Building)	38
University Avenue	6
24th Street	60
Upper Inner Campus Drive	6
Inner Campus Drive (HP)	54
Speedway	24
21st Street	63
San Jacinto Boulevard	288
Trinity	150
Robert Dedman	133
Lot 14 (Painter Hall)	42
Between Main & Flawn	14
Between Chill St. 5 & ARC	53
Service Building	21
Lots 37-41 (LBJ Library)	1,107
Lot 70 (South of Myers Stadium)	298
Lot 80 (East of Social Work)	316
Lot 104 (Disch-Falk)	382
Lot 108 (Erwin Center)	460
TOTAL	3,610

## **PARKING ADDITIONS**

PARKING	RANGE	
ADDITIONS	LOW	HIGH
Lot 40	669	936
Co-op buildings	177	266
Lot 14 site	82	164
Lot 104	771	1,080
Lot 80 site	669	936
Lot 108 site	746	1,044
Red River on-street*	-	66
TOTAL	3,114	4,410

<sup>\*</sup> Red River is controlled by the City of Austin, not UT Austin.

## TRANSPORTATION DEMAND MANAGEMENT

To facilitate the growth and improvement of the campus, parking supply must be kept to a practical minimum. This involves active transportation demand management (TDM), the effort to reduce dependence on automobiles by coordinating transportation and land use. TDM is an integral part of any institution's sustainability program. The University of Texas at Austin has a commendably strong record of taking effective action to limit greenhouse-gas emissions through providing alternatives to driving alone. These actions have engaged the student body, which has learned to live much more car-free than is typical of collegians nationwide. The master plan analysis stage included a review of the Parking and Transportation Services division's existing TDM program From this analysis, the plan identifies ways to strengthen the TDM program with enhancements and new measures. Existing and recommended measures to encourage lifestyles of walking, bicycling, and transit use among faculty, staff, and students are shown below:

#### TRANSIT STRATEGIES

- Support and work with Capital Metro to achieve installation of GPS tracking systems on all shuttles
- Support the city's plans for a light rail system

#### **BICYCLE STRATEGIES**

- Continue to develop a methodology and plan to provide additional bicycle racks and lockers throughout campus based on the annual review of bicycle capacity conducted by the UT Austin bicycle coordinator
- Enhance bike repair access and education:
   provide targeted bicycle education to key
   demographics and locations; increase the hours
   of operation of The Kickstand; provide additional
   bicycle repair stations; provide long-term bicycle
   parking; develop a bike-share program

#### PEDESTRIAN STRATEGIES

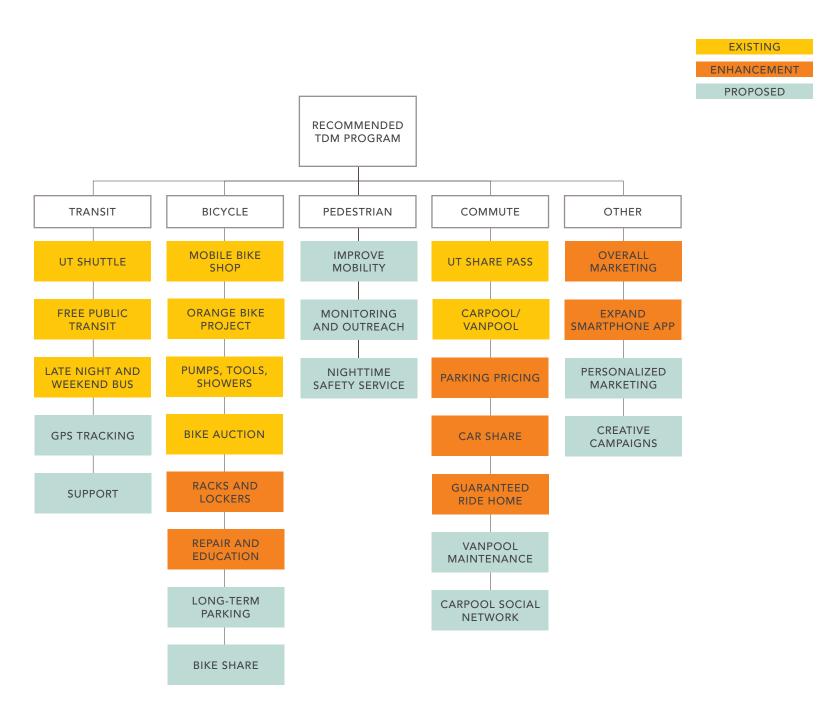
- Improve general campus mobility for pedestrians through measures described in this section
- Conduct an annual review of collision and crime data; provide a safety service for university affiliates walking home, to a bus stop, or to the car during late night hours. This recommendation requires study for cost and feasibility

#### COMMUTE INCENTIVE STRATEGIES

- Consider updating parking pricing structure to generate revenue to support recommended TDM strategies in this program or construction of a new parking garage
- Support Capital Metro in allowing vanpool drivers access to on-campus maintenance shops. This service would encourage more university affiliates to utilize the existing vanpool program
- Work to expand ridesharing options, such as by offering access to rideshare programs provided by public agencies or private companies. Through such programs, UT Austin faculty, staff, and students can find and share rides with others in the UT community
- Expand the existing guaranteed ride home program to make it available to those living within the Capital Metro service area

#### OTHER STRATEGIES

- Expand overall marketing: refocus the Parking and Transportation Services website to provide multiple mobility options; develop and implement creative marketing campaigns to encourage walking, bicycling, and use of transit
- Continue to implement marketing strategies that target individuals and influence them to shift their travel mode from single-occupant vehicle travel; identify student groups as volunteers, provide one-on-one guidance, solicit volunteers to become bicycle buddies to new commuters, and develop a commute club program



The projected impact on parking need of the proposed new measures and the enhancements of existing measures is as follows:

TDM PROGRAM CATEGORY	PARKING DEMAND REDUCTION POTENTIAL
Transit	< 1%
Bicycle	< 1%
Pedestrian	< 1%
Commute	2 – 4%
Other	1 – 3%
TOTAL	4 - 8%

These estimates represent reasonable estimates based on the experiences of other institutions, and are a worthy stretch goal. Applying these percentages to the existing supply of parking at UT Austin suggests that parking need could be reduced by between 560 and 1,360 spaces. Demand reductions of this scale would obviate the need for at least one of the potential parking facilities identified above.

## STREET SECTIONS



### SAN JACINTO BOULEVARD

## (CENTRAL)

#### **EXISTING CONDITION**

- Auto and bus traffic, bicycles, and potential light rail compete for mobility space; pedestrians marginalized
- No distinction between modes
- On-street parking limits space for other modes

#### PROPOSED STREET SECTION DESIGN

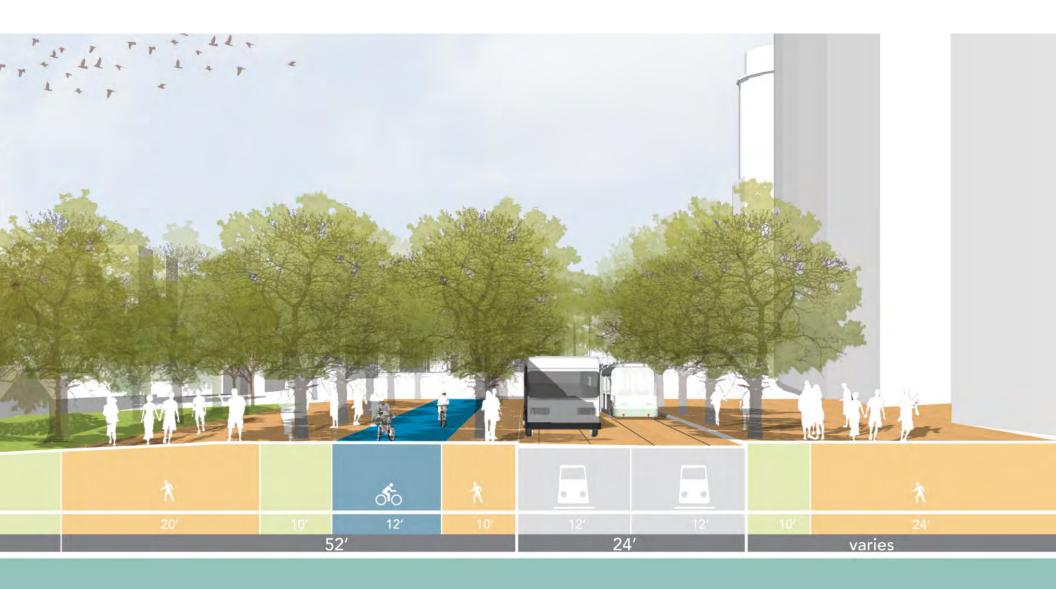
- Parking removed
- General auto access restricted; bus/light rail access only
- Bike path added
- Street trees added
- Walkway widths increased







varies





## **GUADALUPE STREET**

#### **EXISTING CONDITION**

 Lack of streetscape amenities and crosswalks create an uninviting pedestrian environment

- Streetscape improvements recommended
- Special paving and neckdowns at crosswalks, to narrow pedestrian crossings
- Potential for future bus rapid transit must be taken into account



**EXISTING CONDITION** 



PROPOSED STREET SECTION DESIGN



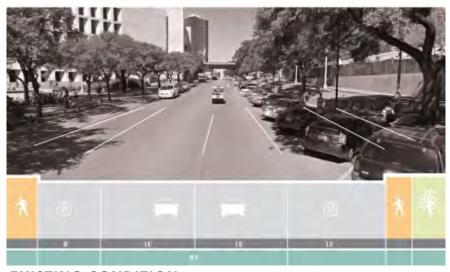


## **EAST 21ST STREET**

#### **EXISTING CONDITION**

• On-street parking and wide driving lanes limit opportunities to create a better streetscape

- Parking removed
- Two 12' drive lanes
- Street trees with bioswale added for shade and stormwater management
- Cycle track added and sidewalk width increased
- Existing utilities remain under sidewalk and cycle track



**EXISTING CONDITION** 



PROPOSED STREET SECTION DESIGN





## INNER CAMPUS DRIVE

#### **EXISTING CONDITION**

• On-street parking limits space to provide bike access on either side of the West Mall

#### PROPOSED STREET SECTION DESIGN

- Shared 1-way car/bike lane remains
- Parking removed
- Bike contra-flow lane added



**EXISTING CONDITION** 



varies





### EAST DEAN KEETON STREET

#### **EXISTING CONDITION**

• 4-lane capacity may no longer be needed with reduction of traffic to Mueller

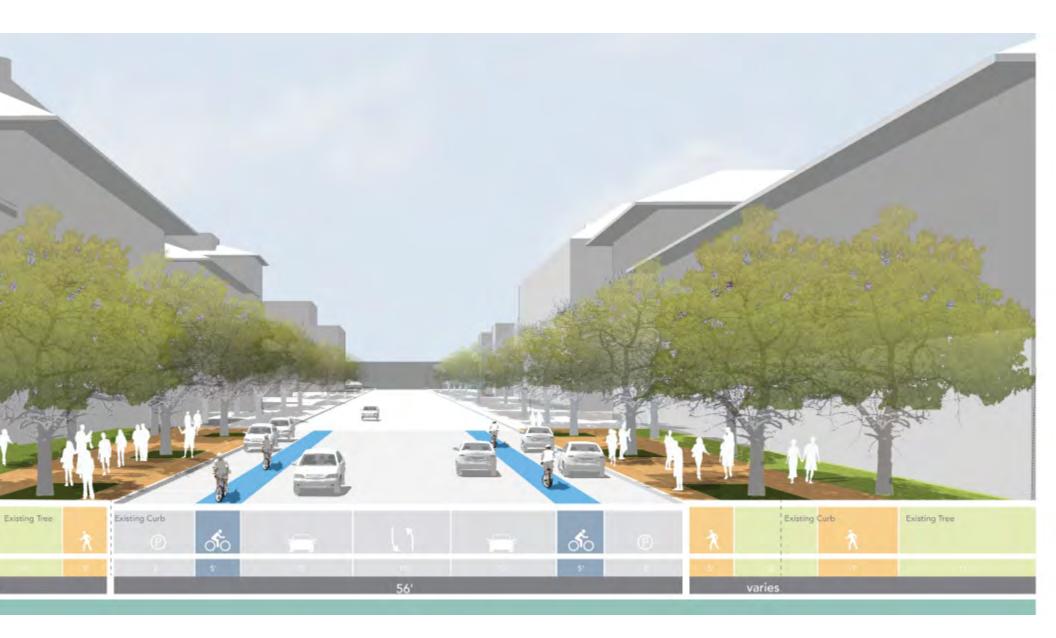
- Two drive lanes removed
- Tree alleé added on both sides of street
- Planters in streetscape reduce hardscape
- Cooperation with the city is necessary on design of public streets



**EXISTING CONDITION** 



PROPOSED STREET SECTION DESIGN





# SAN JACINTO BOULEVARD (NORTH)

#### **EXISTING CONDITION**

• On-street parking limits space for the future light rail and streetscape improvements

#### PROPOSED STREET SECTION DESIGN

- Parking removed, roadway narrowed
- Light rail lanes separate from roadway
- Bike lanes added
- Sidewalks improved



**EXISTING CONDITION** 



varies





## **ROBERT DEDMAN DRIVE**

#### **EXISTING CONDITION**

- On-street parking channelizes the roadway, creating an auto-dominated realm
- Wide lanes produce high-speed traffic
- Linear parking lots, inefficient and inhospitable

- Lane widths minimized 

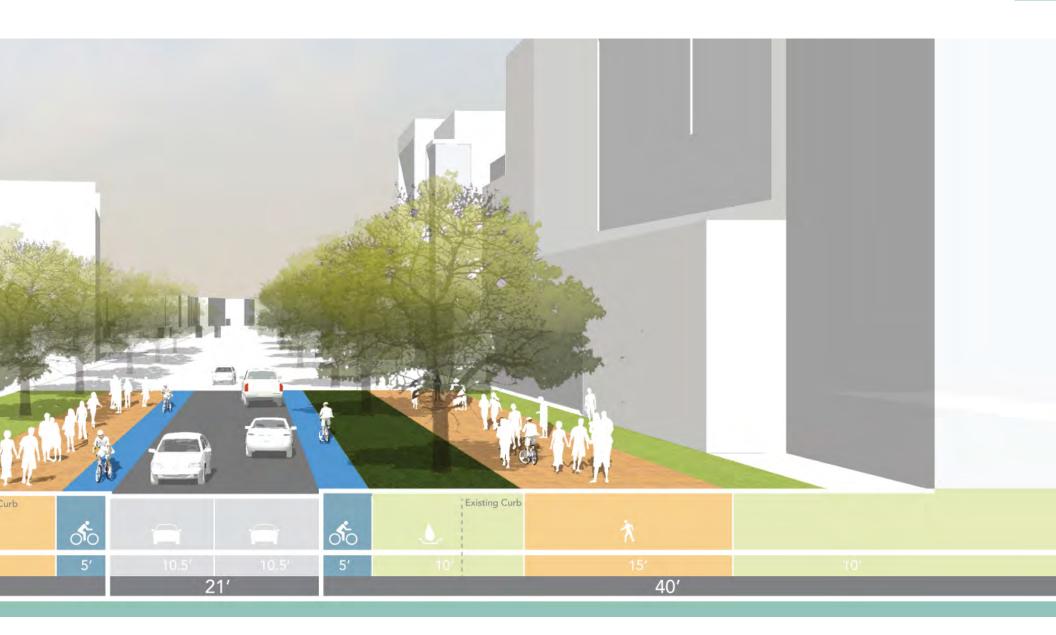
  Sidewalk widths increased
- Parking removed
- Existing trees preserved as street trees
- Bike lanes added



**EXISTING CONDITION** 



PROPOSED STREET SECTION DESIGN





## WEST 24TH STREET

#### **EXISTING CONDITION**

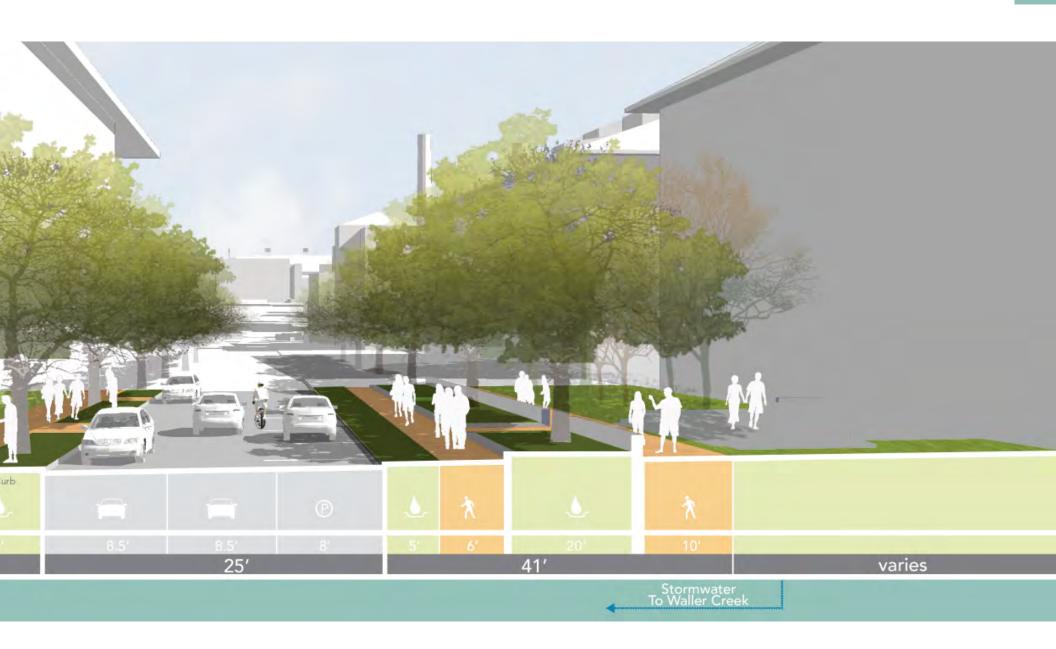
- North side of West 24th Street is unshaded: on-street parking limits space for street trees
- Hedge row acts as a landscape barrier adjacent to the narrow sidewalk and constrains the pedestrian realm

- North parking removed
- Street trees and planters added
- Hedge row removed for more permeability



**EXISTING CONDITION** 







#### **RED RIVER STREET**

#### **EXISTING CONDITION**

• Elevated practice fields and narrow sidewalks create an uninviting pedestrian environment

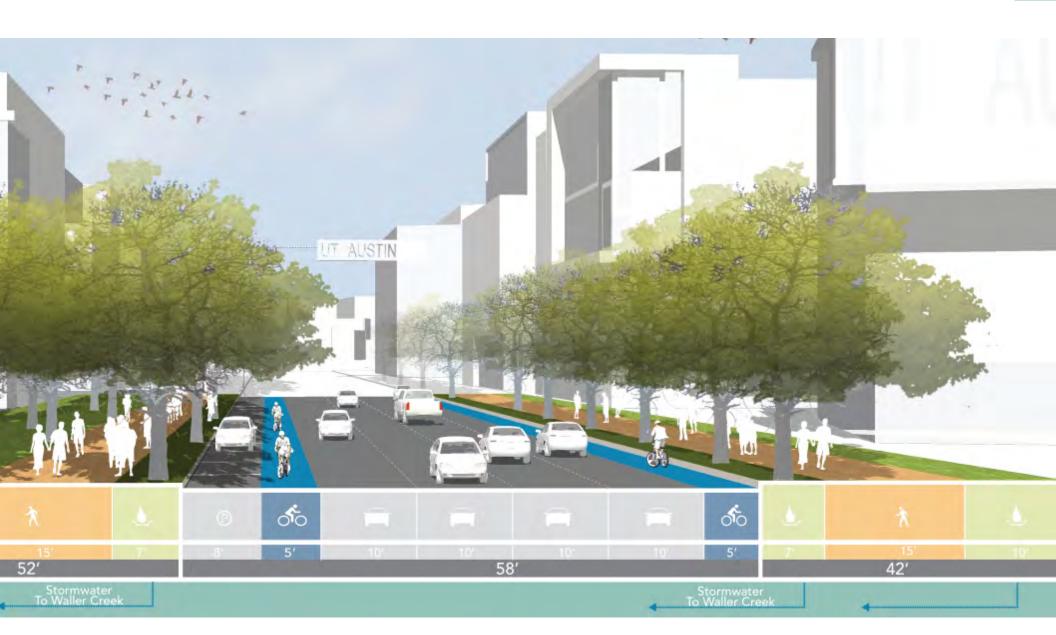
#### PROPOSED STREET SECTION DESIGN

- Practice fields excavated and replaced with street-level development
- Curb-to-curb width remains roughly the same
- Street trees added
- Sidewalk widths increased
- Parking added
- Cooperation with the city is necessary on design of public streets



**EXISTING CONDITION** 







#### **SPEEDWAY**

#### **EXISTING CONDITION**

- Auto traffic mixed with pedestrians and bicycles is unsafe and causes congestion
- Parking visually dominates the corridor

#### PROPOSED STREET SECTION DESIGN

- Peter Walker plan preserved
- Parking removed
- Rolled curb added
- Specialty paving added on sidewalk and street
- General auto traffic removed; access reserved for service vehicles and emergency vehicles only



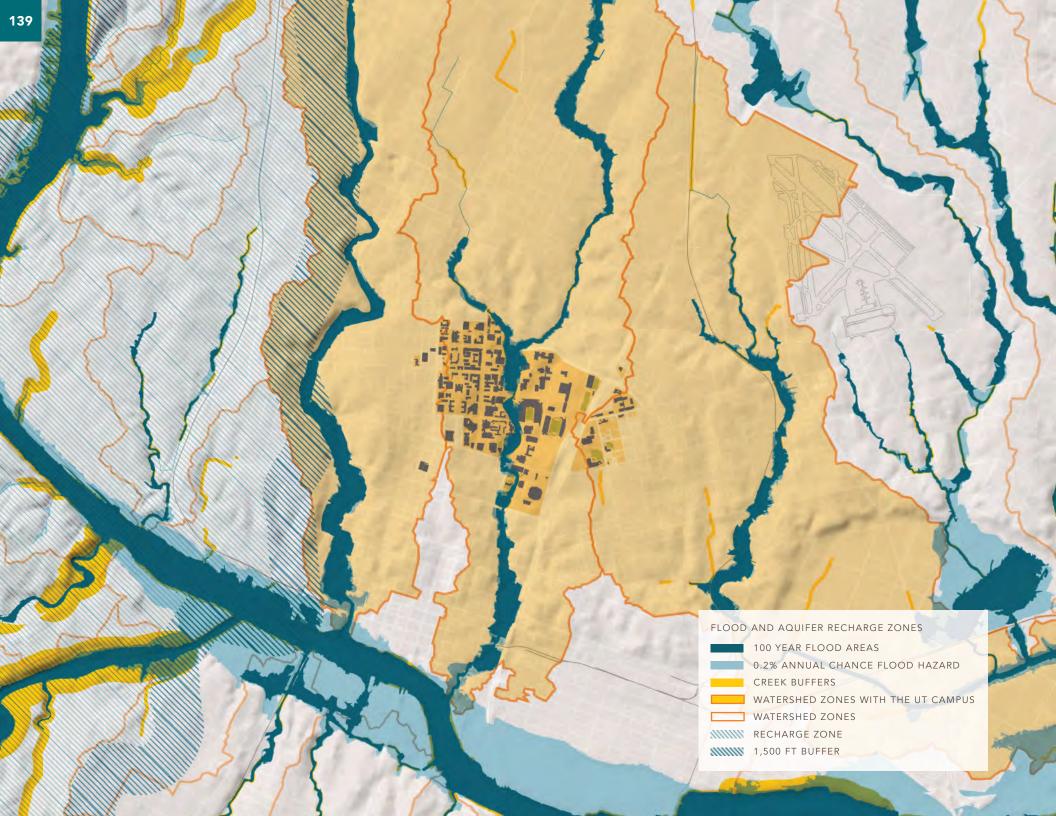




PROPOSED STREET SECTION DESIGN



## TRANSFORM THE WALLER CREEK / SAN JACINTO BOULEVARD CORRIDOR



THE WALLER CREEK / SAN JACINTO BOULEVARD CORRIDOR WILL BE TRANSFORMED FROM A MAJOR NORTH-SOUTH BARRIER BETWEEN THE CORE CAMPUS AND CENTRAL CAMPUS INTO A CONNECTIVE SEAM THAT BALANCES THE NATURAL ECOLOGY OF WALLER CREEK WITH AN EFFICIENT AND CONVENIENT TRANSIT CORRIDOR.

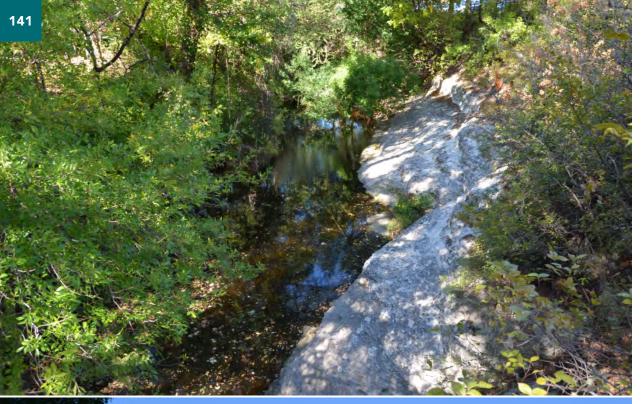
#### INTRODUCTION

aller Creek and San Jacinto Boulevard currently form parallel barriers between the Core Campus and the Central Campus. Rethinking how both the creek and the roadway can enhance the campus environment is essential to the successful improvement of the Central Campus. The master plan proposes a transit corridor along San Jacinto Boulevard that integrates a potential light rail alignment and enhanced bus service. San Jacinto Boulevard will be closed to vehicular traffic between East 21st Street and East 24th Street. San Jacinto Boulevard will also have generous, shaded pedestrian walkways and a bicycle path that will provide efficient crosstown bicycle travel.

The master plan considers Waller Creek and San Jacinto Boulevard together as a single integrated linear space that accommodates pedestrians in both the natural setting of the creek and the urban setting of the street. By combining the two corridors, the master plan blurs the boundaries between them, and makes more space available to the creek corridor.

The potential introduction of light rail on San Jacinto Boulevard reinforces the need for a comprehensive design strategy that addresses all mobility modes.

The UT Austin campus resides within the 3,700 acre Waller Creek watershed. This urban creek is an important tributary for the Colorado River and plays a vital role in the city.





### **STRATEGIES**

- A redesigned Waller Creek/San Jacinto Boulevard corridor will integrate the Core Campus and Central Campus.
- Waller Creek will be restored as a natural environment and developed as a campus amenity.
- San Jacinto Boulevard will be redesigned as a complete street that integrates the Core Campus and Central Campus areas.

#### **BACKGROUND**

aller Creek is an important tributary of the Colorado River and is one of the three major watersheds in downtown Austin. Of the three, it is the most impacted by urban development as it traverses the densest part of the city. Most of the UT Austin campus lies within the Waller Creek watershed.

Several different conditions along the Waller Creek/San Jacinto Boulevard corridor provide a range of opportunities for improvement. Between East 15th Street and East Martin Luther King Jr. Boulevard, Waller Creek loops away from the street and runs through the center of the block. Within this zone, the creek can serve as an amenity for development that can front on both sides of the creek. Between Martin Luther King Jr. Boulevard and East Dean Keeton Street, San Jacinto Boulevard and Waller Creek are flanked on both sides by dense university development. At the East Mall and around

the Alumni Center the creek widens and offers many opportunities for special gathering places, terraced amphitheater arrangements, and meandering pathways under the shady canopy of the creek landscape.

The Paul Cret plan for the Forty Acres treated Waller Creek as a generous informal park that formed a backdrop to the campus on its eastern edge. During the twentieth century, campus development gradually encroached upon this landscape, leaving only a narrow, densely developed, and compromised corridor. While the creek is continuous and day-lighted as it flows through the campus, there are stretches of it that are not easily passable and could be improved.

#### WALLER CREEK ECOLOGY

On the UT Austin campus, a number of riparian plant and tree species grow only in the Waller Creek corridor. Stewardship of the fragile Waller Creek ecology is an important responsibility of the university and a primary goal of the master plan. As development occurs adjacent to the creek and landscape improvements are planned, adhering to guidelines that reinforce the creek ecology will be critical. These principles are further articulated in the sustainability strategies of this master plan.

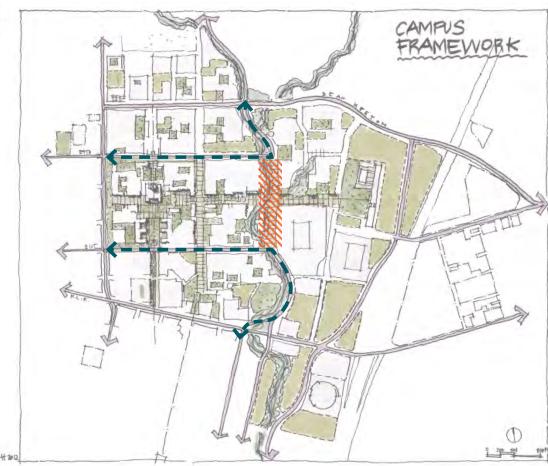


# WALLER CREEK/SAN JACINTO BOULEVARD CORRIDOR CAMPUS FRAMEWORK

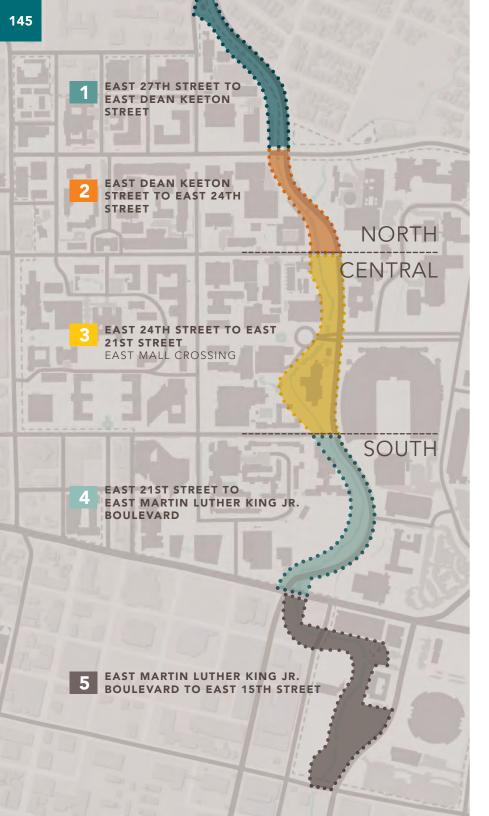
aller Creek and San Jacinto
Boulevard currently create a
wide barrier separating the Core
Campus from the Central Campus, both
physically and psychologically. Treating
these two corridors as a unified parkway
and limiting vehicular movements will
weave together existing and planned
pedestrian paths and bicycle and transit
routes in a way that minimizes the sense
of separation and stitches the two sides
of the campus together, both visually and
functionally.

For the purposes of the master plan, the corridor is divided into five zones. Each zone has unique conditions that call for different design strategies. Transportation recommendations for San Jacinto Boulevard are described in greater detail in the Mobility section of the plan.

UT AUSTIN



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#### **CORRIDOR ZONES**

rom East 27th Street to East 15th Street, the Waller Creek/San Jacinto
Boulevard corridor is about 1.2 miles long and comprises five distinct
zones. Starting at the northern end of campus, the five zones of the Waller
Creek/San Jacinto Boulevard corridor are:

### 1 EAST 27TH STREET TO EAST DEAN KEETON STREET

The northern extent of the Engineering precinct flanks the western branch of Waller Creek in this zone. As new facilities are planned to accommodate future growth in this already dense part of campus, there is a real opportunity to improve the back door quality of the Waller Creek edge. New buildings can open to the creek with shady terraces and landscapes that extend to water's edge. Service roads and parking areas will be redesigned to improve the pedestrian experience at the edge of the creek. Through this zone San Jacinto Boulevard will remain in its current configuration.

### 2 EAST DEAN KEETON STREET TO EAST 24TH STREET

The strategy for the area between East Dean Keeton Street and East 24th Street is similar to the strategy for the area to the north. The western edge of this zone will create stronger connections to the creek and provide a much needed open-space amenity for one of the densest parts of campus. A generous pedestrian walkway and bicycle path hug the creek edge. Furthermore, a pedestrian bridge will be constructed across Waller Creek. Along this stretch of San Jacinto Boulevard, the light rail corridor is to the east of the street corridor and separate from it. On-street parking will be eliminated.

### 3 EAST 24TH STREET TO EAST 21ST STREET

Between East 21st Street and East 24th Street, vehicular traffic along San Jacinto Boulevard will be restricted to bus and light rail. The paved transit right-of-way will shift to the east, creating a wide zone for additional landscape and a generous walkway and bicycle path. This part of Waller Creek is at the heart of the campus and will be heavily used by the campus community. Existing footbridges, gathering places, and art installations along the Creek should be improved and supplemented with additional terraces and seating areas.

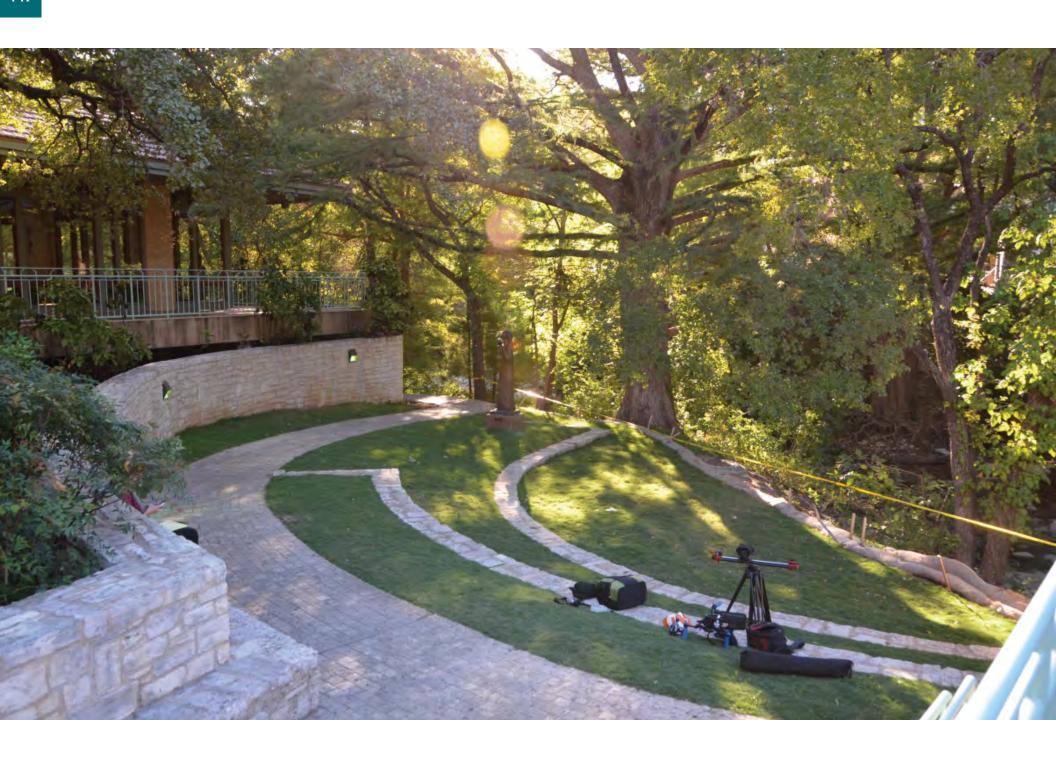
At the crossing between Waller Creek and the East Mall, new landscape treatments will create an enhanced pedestrian connection between the Core Campus and the Central Campus and provide greater visibility and accessibility to the Waller Creek/San Jacinto Boulevard corridor. This will be the most well travelled crossing and must be treated with special care and detail to create a memorable campus experience. With the eventual replacement of the F. Loren Winship Drama Building, a new building will improve the Waller Creek edge, enhance pedestrian access, and improve the quality of the outdoor spaces at the East Mall crossing.

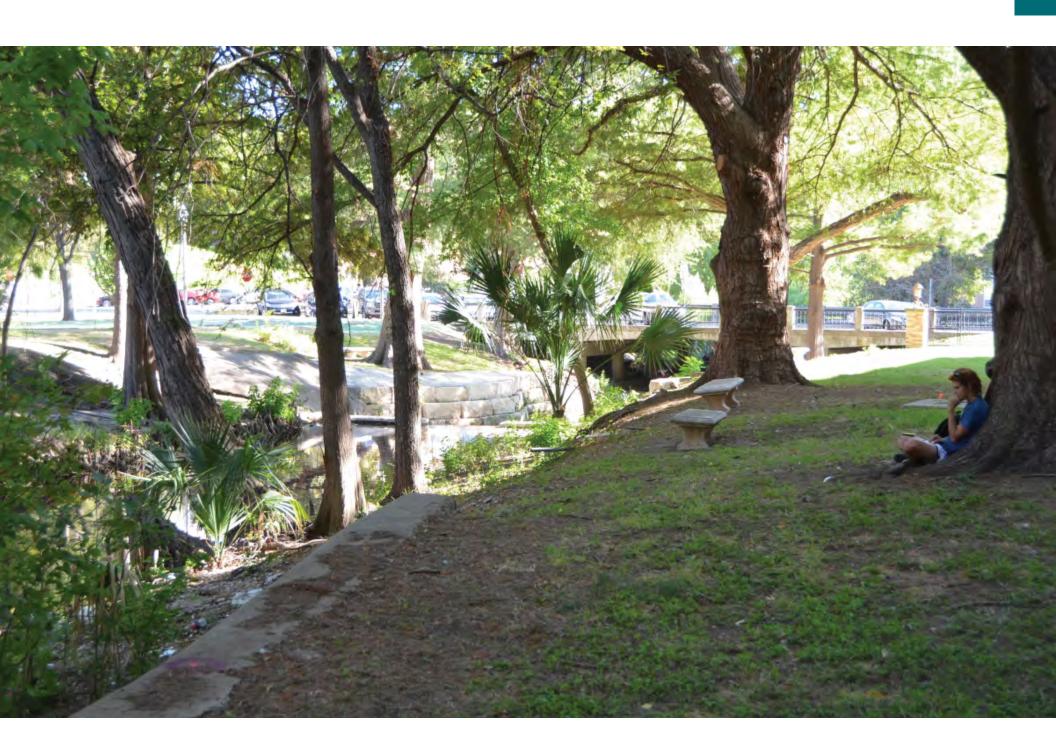
### 4 EAST 21ST STREET TO EAST MARTIN LUTHER KING JR. BOULEVARD

Although this zone of Waller Creek is not as built up as the Engineering precinct, every opportunity should be taken to improve the connectivity from the Core Campus and the Central Campus to the creek environment. The treatment of San Jacinto Boulevard along this stretch will be the same as the zone from East Dean Keeton Street to East 24th Street.

### 5 EAST MARTIN LUTHER KING JR. BOULEVARD TO EAST 15TH STREET

South of East Martin Luther King Jr. Boulevard, Waller Creek bends and flows mid-block between Trinity Street and Red River Street. As the land along this corridor is developed to accommodate a potential medical center, future academic and research facilities should be designed to embrace the creek as an open-space amenity in the district, with terraces and walkways facing the creek.





## WALLER CREEK/SAN JACINTO BOULEVARD CORRIDOR



SAN JACINTO BOULEVARD (CENTRAL) AT THE STADIUM: EXISTING CONDITION





## VALLER CREEK/SAN JACINTO BOULEVARD ORRIDOR

BEST PRACTICE: 50' DEVELOPMENT SETBACK

Pedestrian accessible/maintained



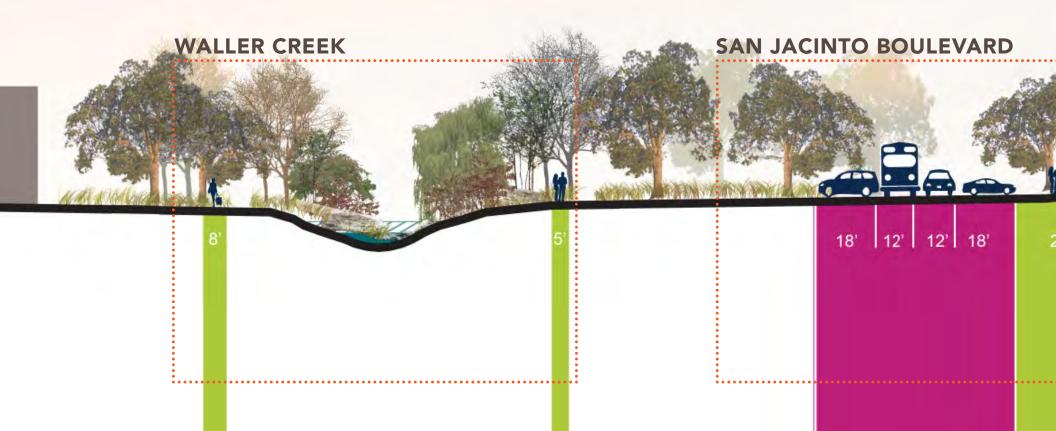
**CENTRAL WALLER CREEK ANATOMY** 

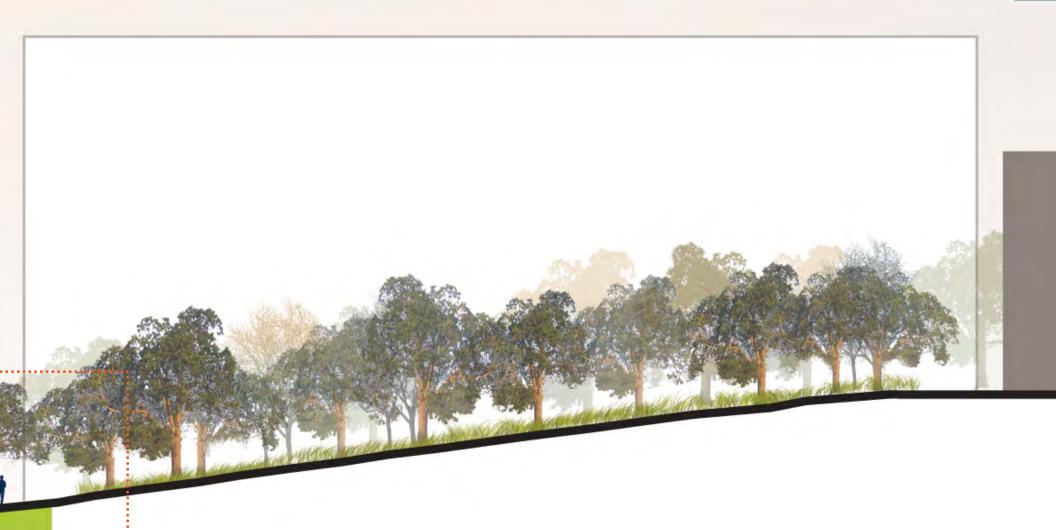


## WALLER CREEK/SAN JACINTO BOULEVARD CORRIDOR



SAN JACINTO BOULEVARD (NORTH) AT EAST 24TH STREET: EXISTING CONDITION





LAWN TEXAS MEMORIAL MUSEUM

## WALLER CREEK/SAN JACINTO BOULEVARD CORRIDOR



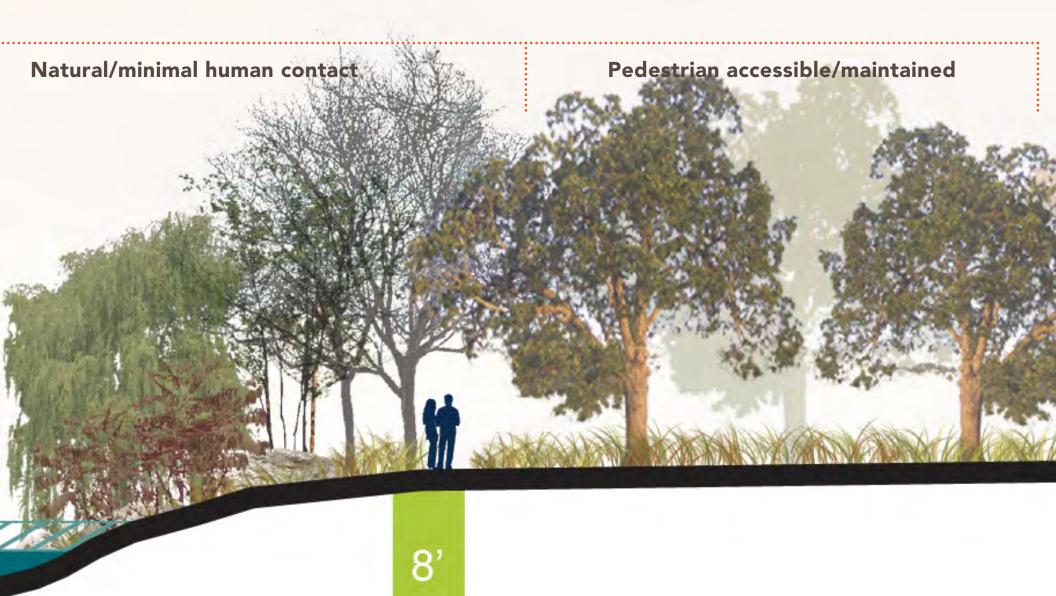


(TYPICAL)

## WALLER CREEK/SAN JACINTO BOULEVARD CORRIDOR

Pedestrian accessible/maintained **CENTRAL WALLER CREEK ANATOMY** 

**WALLER CREEK** 

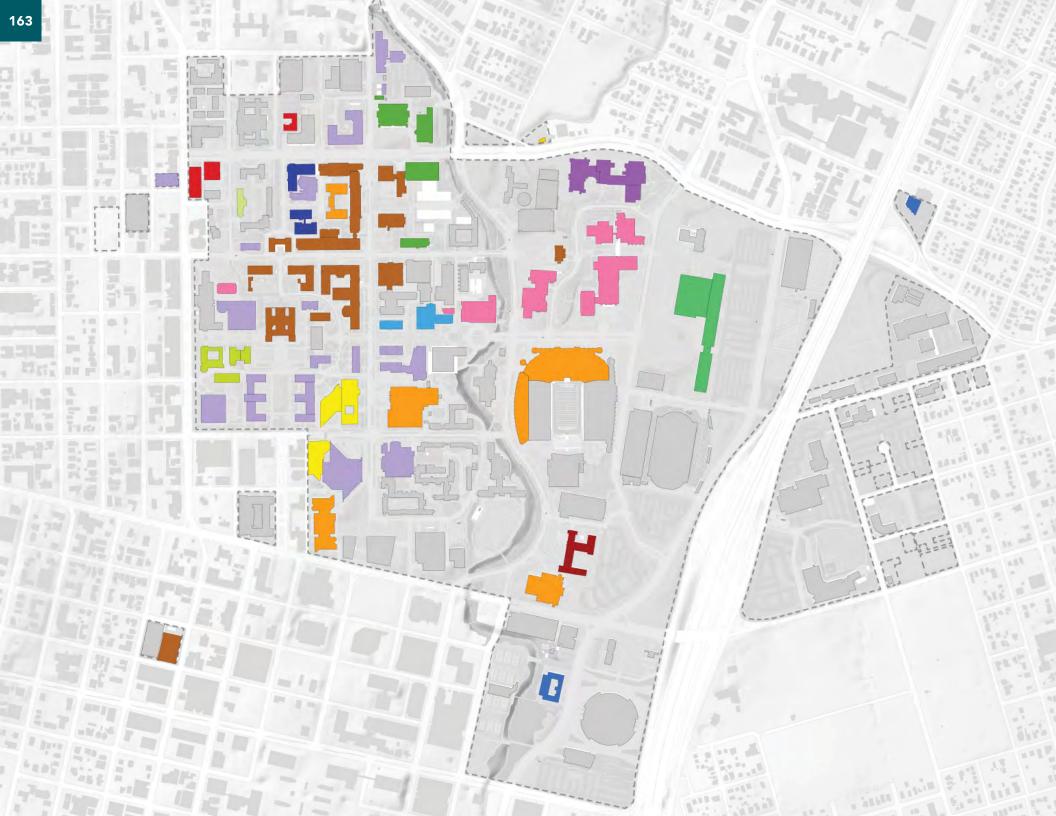


### **SUSTAINABILITY**

ransforming the Waller Creek/San Jacinto Boulevard corridor will improve the sustainability of the UT Austin campus in a variety of ways. The following strategies explicitly link recommendations for transforming this important corridor to the sustainability of the UT Austin campus:

- Incorporate landscape design strategies that improve the resiliency of the campus setting to preserve precious water resources and improve the overall ecology of the campus, including the following:
  - incorporate more drought-tolerant planting materials
  - + increase the use of heat-dispersing ground treatments
  - + preserve existing trees and plant new trees to increase the amount of shade and lower the ambient temperature of outdoor spaces
- Design landscapes and place buildings to create human-scaled, well-shaded campus spaces that will improve human comfort
- Develop an efficient and well-coordinated mobility strategy to improve accessibility for all and reduce overall carbon emissions
- Humanize and tie together the Core Campus and the Central Campus in order to create better connections among different student groups, including those involved in academics, research, arts and culture, and athletics
- Improve student life and creat a stronger sense of community in order to improve academic performance and student success

## CREATE IMPROVED LEARNING & RESEARCH **IRONMENTS**



#### INTRODUCTION

GENERAL CAMPUS USE BY COLLEGE OR SCHOOL

ARCHITECTURE

BUSINESS

COMMUNICATION

EDUCATION

ENGINEERING

FINE ARTS

GEOSCIENCES

GRADUATE STUDIES

LAW

LIBERAL ARTS

NATURAL SCIENCES

NURSING

PHARMACY

PUBLIC AFFAIRS

SOCIAL WORK

UNDERGRAD STUDIES

Predominant college occupancy defines the color indication where more than one college or nonacademic use shares occupancy of the same building. mprovement in the learning environment and in the quality and quantity of research space will be critical to meeting the university's goal of becoming the leading public research university in the nation. In addition to the university's research mission, comprehensive undergraduate education is an important part of UT Austin's mission. While assessment of needs in learning and research environments has not been included in this phase of the master plan, analytical tools have been developed to support the next phase of planning when this issue will be addressed.

Assessment of needs in teaching, learning, and research is frequently a bottom-up process in large universities, initiated at the school or college level. This has recently also been the case at The University of Texas at Austin, where a current master plan has not been available as a guide.

Two major schools at the university have completed impressive comprehensive plans: the McCombs School of Business and the Cockrell School of Engineering. These plans set a standard for documenting the vision of schools in the university and assessing the impact of that vision on physical requirements. Other schools may over time undertake similar studies.

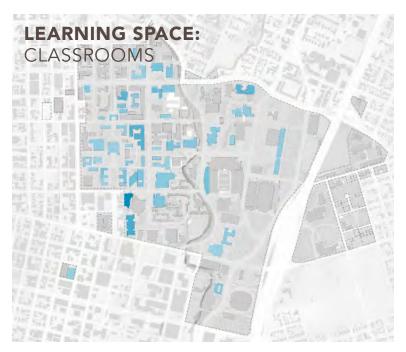
The context for these studies is an acknowledgment that investment in existing facilities has not kept up with the need for updating building systems and modernizing teaching and research environments. If the university is to achieve its goal of being the preeminent public research university in the nation, it must provide facilities that support today's changing needs and attract the nation's best scholars and graduate students. It must also have plans in place to accommodate the growth in research facilities that will almost inevitably accompany the university's growing success.

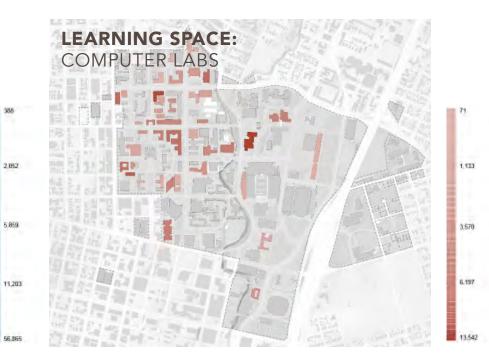
Studies by individual schools must be coordinated and integrated into an overall strategy for capital improvement, as recommended by the Commission of 125. Coordination will have a number of benefits. Specifically, it will

- Leverage limited available capital by combining overlapping needs
- Arbitrate competing expectations for land and building use by promoting an institutional rather than a school or college perspective
- Ensure optimum exploitation of the potential for collaboration among different schools
- Provide an integrated overall learning environment, especially for undergraduates, whose studies span multiple disciplines
- Support the campus as a whole as a community of scholars.

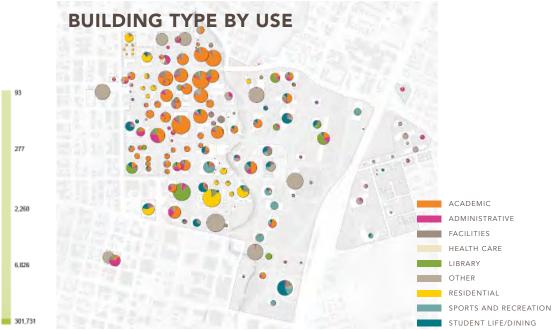
### **CURRENT CONDITIONS**

evelopment of planning tools as a component of the master plan process supports the ongoing assessment of current teaching and research spaces from a variety of perspectives: condition, current use, historic significance, adaptability, academic adjacencies, distribution of informal study space, and proximity to other resources. While currently available data has not been formally assessed as part of the current study, feedback from the Advisory Committee suggests there is a clear need to study the quality and adequacy of teaching and research space. As shown in the following diagram, teaching spaces are widely distributed across campus. Future distribution of programs across campus should consider potential opportunities for enhancing interdisciplinary teaching and research.

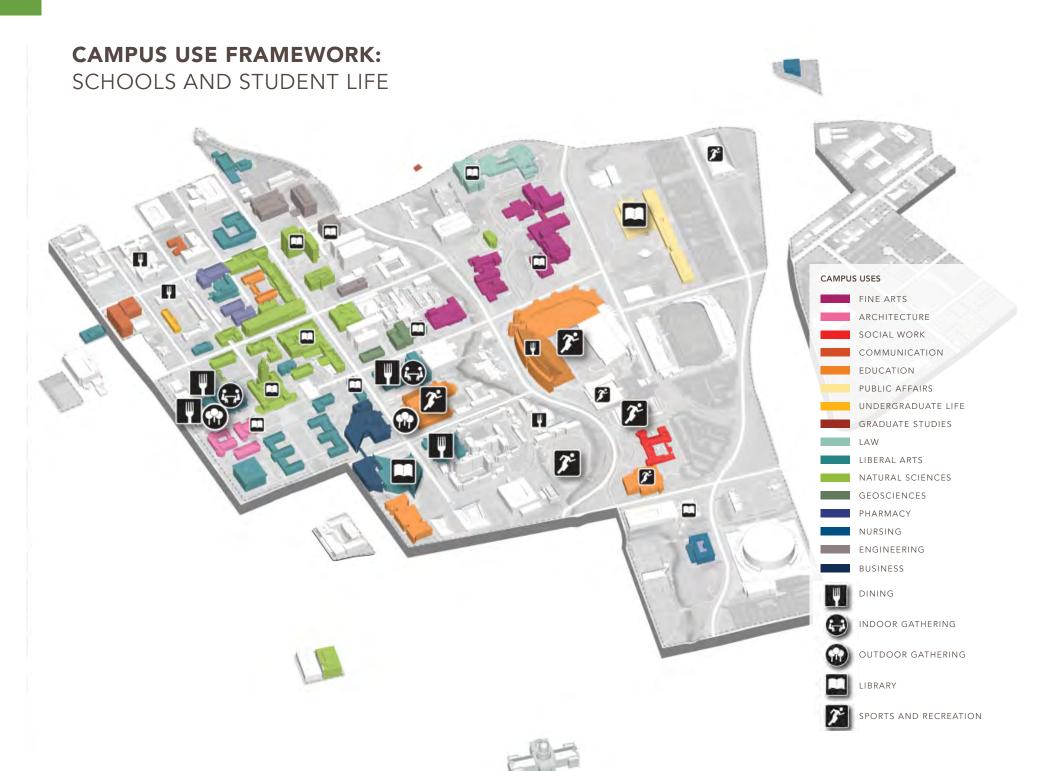








# INTEGRATE ACADEMIC & RESIDENTIAL



### INTRODUCTION

he four-year graduation rate has become a significant issue for The University of Texas at Austin. Improvement in four-year graduation rates is a major determinant of cost per degree. A strong residential-life program is a major contributor to student success; and as acknowledged in the February 2012 Report on the Task Force on Undergraduate Graduation Rates, the quality of campus life and the campus environment has a significant impact on graduation rates. Currently, as shown in the following diagram, only 18% of students live in campus housing. Many of UT Austin's competitors exceed this percentage, and many of the others are increasing their investment in on-campus housing.

While the February 2012 report does not specifically address the character of the physical campus, it does recommend that all first-year students live in university housing and that residential communities be more fully integrated with social and academic life on campus. Ample research on the impact of living in campus housing on student success supports this recommendation. A key characteristic of successful student housing is its proximity to dining halls, recreation space, and other student-focused activities.

With a relatively low percentage of students housed on campus, the West University Neighborhood is becoming a de facto university housing precinct.

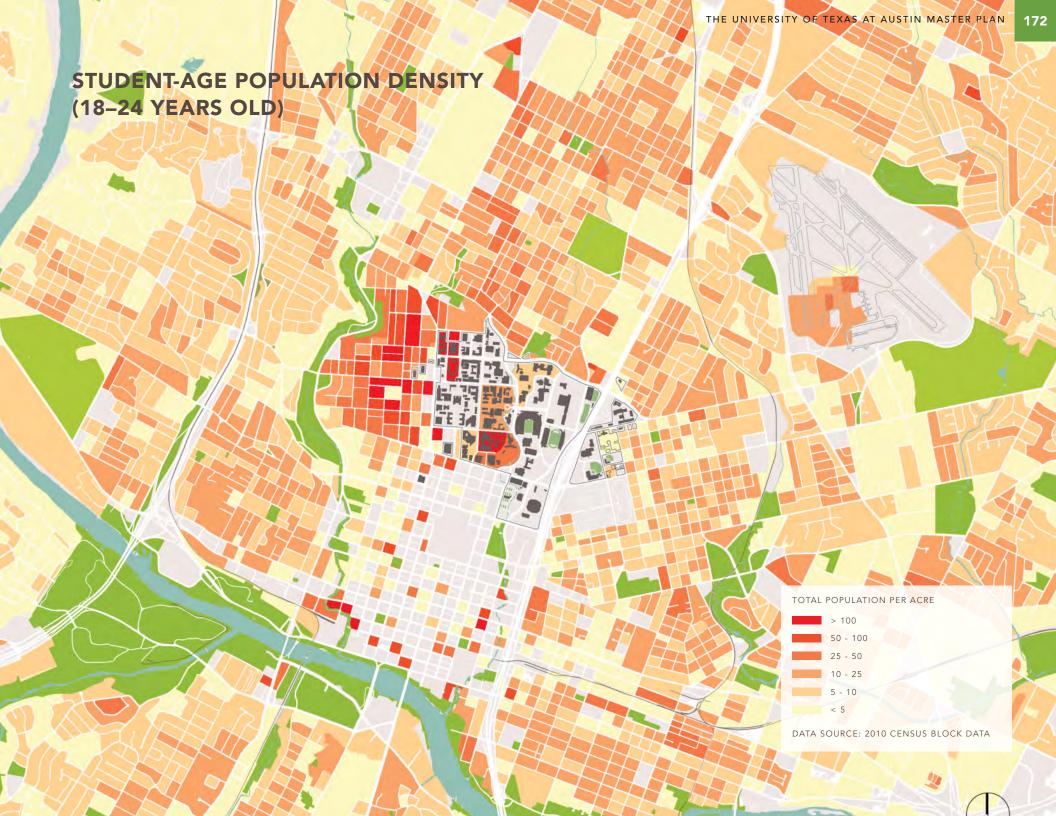
Changes in zoning have encouraged speculative development, and the result today is a densely populated student neighborhood, as illustrated in the diagram opposite. Since this neighborhood and the residential stock it provides are not controlled by the university, the area does not provide the kind of managed and supportive environment that leads to increased student success. It will be important for the university to develop strategies to incorporate the West University Neighborhood into its planning.

If the West University Neighborhood is to be thought of as an extension of the campus, Guadalupe Street becomes critical as the glue that binds the campus to the neighborhood. Currently, the street serves more as a barrier than a connection. A revitalization plan could transform the street, enhancing its attractiveness and functionality for both the university and the neighborhood.

Since the majority of UT Austin students are and will remain commuters, campus facilities supporting the development of a campus community are particularly critical. These facilities should recognize the vanishing boundary between academic and social life. The diagram opposite illustrates the current distribution of these facilities. An initial review of these student life facilities, including dining, recreation space, and informal spaces, suggests that they should be better distributed across campus.







### PRELIMINARY HOUSING PROPOSALS

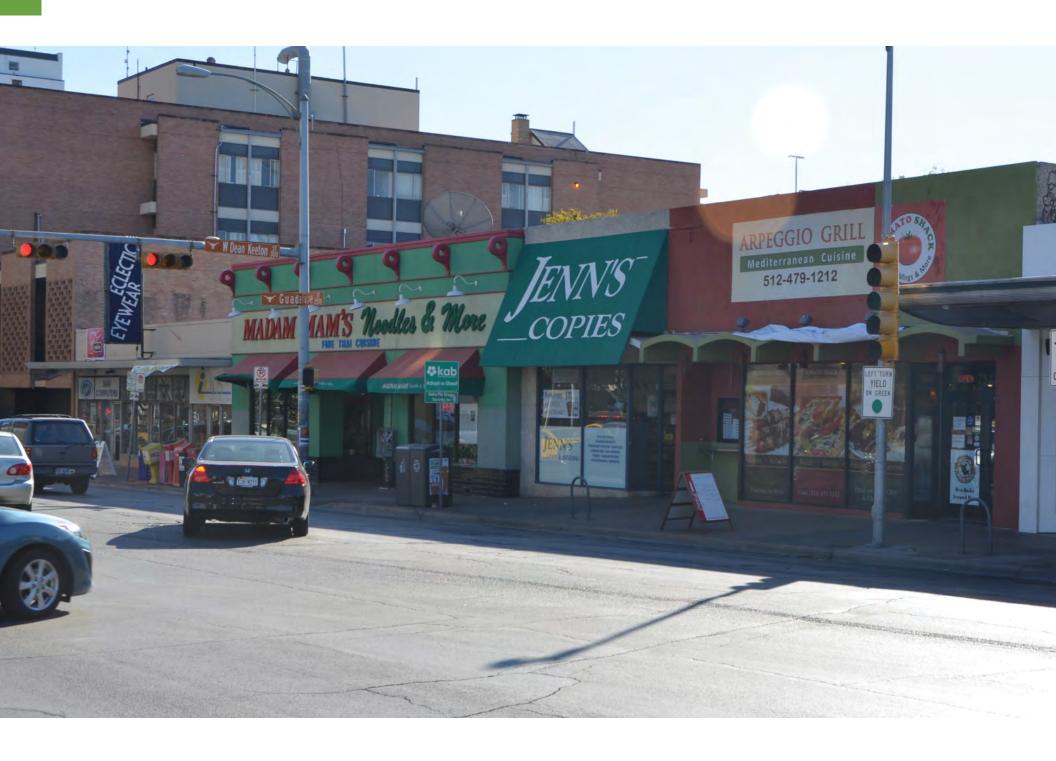


### PROPOSED HOUSING

he February 2012 Report of the Task Force on Undergraduate Graduation Rates acknowledges that the quality of campus life and the campus environment has significant impact on graduation rates. Research on the impact of living in campus housing on student success has shown that compared with students who live off-campus, those living on-campus are more likely to participate in extracurricular activities, report more positive perceptions of the campus social climate, and tend to be more satisfied with their college experience. They also report more personal growth and development, engage in more frequent interactions with peers and faculty, and are more likely to persist to graduation. There is also evidence that quality student housing can influence student choice of institution.

Currently, only 18% of students live in campus housing. Many of UT Austin's competitors exceed this percentage, and many of the others are increasing their investment in on-campus housing. Recognizing the positive impact on-campus student housing can have on student engagement, academic success, retention, and graduation rates, the Task Force recommends that all first-year students live in university housing, and that residential communities be more fully integrated with social and academic life on campus.

While a student housing study was not part of this master plan, the plan framework can accommodate additional student housing on campus. Also, with the heavy concentration of students living in the West University Neighborhood, this neighborhood is becoming a de facto university housing precinct. Since the neighborhood and the residential stock it provides are not controlled by the university, it does not provide the kind of managed and supportive environment that leads to increased student success. It will be important for the university to develop strategies to incorporate the West University Neighborhood into its planning if the neighborhood is to contribute to the university's success.







# SUSTAINABILITY STRATEGIES



### INTRODUCTION

### **PURPOSE**

In Fall 2011 the University began an update of its campus master plan, and a sustainability analysis was integrated with the first stage of the campus master plan.

The purpose of this chapter is to present recommendations related to sustainability that are integrated into the campus master plan and build upon recommendations in the Pelli master plan. These recommendations involve campus hydrology, natural areas, and guidelines for future buildings. Other recommendations relate to broad policies and strategies that the university may develop such as meeting goals for renewable energy purchase and establishing baseline data related to the use of various resources. Integration of sustainability in the curriculum, communication of sustainable practices, behavioral changes, and changes in operations practices are examples of other key elements for a campuswide approach to sustainability. However, this chapter focuses primarily on the sustainability elements that impact the physical planning, development, and operation of the campus and physical plant, rather than those that impact UT Austin's teaching and research mission.

The President's Sustainability Steering Committee, formed in 2007, comprises faculty, students, administrators, staff, and key partners as a forum for sustainability planning and policy. The focus of the sustainability planning was to integrate The University of Texas at Austin Natural Resource Management and Conservation Strategic Plan within the overall

master plan and to make recommendations regarding how the university might make its activities more sustainable. UT Austin uses the following definition of sustainability:

Sustainability refers to societal efforts that meet the needs of present users without compromising the ability of future generations to meet their own needs. Sustainability presumes that the planet's resources are finite, and should be used conservatively, wisely, and equitably. Decisions and investments aimed to promote sustainability will simultaneously advance economic vitality, ecological integrity, and social welfare.

— Campus Sustainability Policy, http://www.utexas.edu/policies/hoppm/01.A.03.html

The university can achieve sustainability over the long term only if it addresses competing demands on three fronts—environmental, economic, and social. The recommendations attempt to balance human health and well-being, the economic costs and benefits associated with sustainable practices, and environmental concerns. The recommendations are intended to be realistic and to combine environmental responsibility with economic practicality, but also to encourage innovation and inspire a broad change in thinking. Changes are intended to parallel the increased awareness of sustainability in society at large.

### UT AUSTIN CAMPUS SUSTAINABILITY POLICY IMPLEMENTATION PRINCIPLES

### **Academics**

- Strive for excellence in sustainability education and research
- Integrate sustainability concepts into curricula
- Support interdisciplinary scholarship, research, and faculty hires
- Increase faculty and student awareness of sustainability issues
- Enhance sustainability educational offerings
- Produce scholars who are literate in sustainability, research that illuminates and advances sustainability, and graduates who will carry the mission of sustainability into the state, the nation, and the world

### **Operations**

- Comply with all relevant environmental laws and regulations and aspire to go beyond compliance
- Integrate values of sustainability, stewardship, and resource conservation into activities and services
- Make decisions, including staff hires, to improve the long-term quality and regenerative capacity of the environmental, social, and economic systems that support the university's activities and needs
- Engage in pollution prevention activities and develop and promote practices that maximize beneficial effects and minimize harmful effects of operations, research, and activities on the surrounding environment
- Assess environmental impacts associated with activities
- Develop and track measures of progress
- Maximize the efficiencies of operations and services while minimizing wastes and footprint

### **Campus Planning**

- Evaluate the impact of construction projects
- Incorporate green building and design methods
- Consider the needs of future generations of the university community, including its greater Austin setting, in campus planning
- Minimize the environmental footprint of the campus

### **Administration**

- Inform administrative policies and procedures in the areas of planning, decision-making, assessment, reporting, and alignment
- Rely on scientific and technical analysis and support efforts to develop objectives and targets for operations, indicators, and measures to assure accountability
- Report on progress, with the overall goal of integrating knowledge of sustainability with actions to promote it

### **Outreach**

- Share with outside communities the knowledge generated from sustainability research, education, and practice
- Help promote environmental awareness and natural resource conservation
- Interact with the global community through onand off-campus activities
- Pursue efforts, including providing incentives, to engage outside communities in developing research and education programs that respond to their interests and needs for sustainable wellbeing, with the goal of promoting a global culture of sustainability

### **Implementation**

- Establish near- and longer-term procedures and mechanisms, including an oversight structure, to review the status of each element of this policy and to ensure its implementation
- Integrate informed and evolving practices for sustainability with the university's mission of creating a disciplined culture of excellence

### UT AUSTIN'S SUSTAINABILITY ACCOMPLISHMENTS

UT Austin has already taken significant steps towards sustainability, notably in the realm of campus community, energy, and water. A campus Office of Sustainability was created in the Campus Planning and Facilities Management (CPFM) portfolio within University Operations; both CPFM and University Operations have proactively advanced sustainable solutions for a variety of new construction, renovation, and infrastructure projects.

The university maintains active membership in the Association for the Advancement of Sustainability in Higher Education (AASHE), an association of colleges and universities that are working to create a sustainable future. UT Austin has achieved a Silver Rating in Sustainability Tracking, Assessment & Rating System (STARS), which reflects the university's strong achievements related to sustainability in education and research, operations, planning, administration, engagement, and innovation.

### The Silver Rating in STARS marks an important achievement in an established system for monitoring sustainability.

The STARS rating system, designed to assist institutions with sustainability planning via defined standards, goal-setting, and implementation, is a valuable framework for adopting the best sustainable strategies and for sharing information among a network of institutions. STARS resulted from an AASHE-led collaborative effort to develop a standardized system by which higher education institutions could measure their progress toward sustainability;

using this self-assessment and rating system, institutions can benchmark their sustainability progress over time and compare the results with others. UT Austin's achievements in this comprehensive approach to sustainable planning are commendable, and it is recommended that future development related to the physical plant continue to be closely tied to this system.

The university also uses a **Green Fee** of \$5 per student per semester to award funds for environmental service-related projects on campus, and currently has sixteen projects underway.

The Sustainable Sites Initiative (SITES) offers another important resource. An interdisciplinary effort by the American Society of Landscape Architects, the Lady Bird Johnson Wildflower Center, and the United States Botanic Garden, SITES creates voluntary national guidelines and performance benchmarks for sustainable site design, construction, and maintenance practices. The focus of the SITES system is on protection and enhancement of ecosystems, including global and local climate regulation, air and water cleansing, water supply and regulation, erosion and sediment control, hazard mitigation, pollination, habitat functions, waste decomposition and treatment, human health and well-being benefits, food and renewable non-food products, and cultural benefits.

# INTEGRATION OF SUSTAINABILITY INTO THE PLANNING PROCESS

The overarching sustainability goals of this master planning process are to contribute to the resilience of the campus's built environment, natural environment, society, and economy. The decisions made in projects today will affect the ability of future generations to meet their needs. This approach stems from the belief that the most creative and enduring solutions across the full spectrum of design challenges will emerge from a strong foundation in sustainability—the "triple bottom line" of the social, environmental, and economic conditions unique to each project.

As a result, the master planning team took a comprehensive look across different facets of sustainability—the **natural**, **economic**, **social**, **and built environments**. Together, these four areas form a framework for systems thinking (here defined as a way of looking at interconnectedness of different systems). The framework is an organizational tool to explore current conditions, goals, plans, and ideas at UT Austin.

In January 2012, a workshop was structured around a dialogue on identifying the sustainability questions facing UT Austin today and articulating what they mean for the planning process. This process identified seven key themes—energy, landscape, community, mobility, economic development, mission, and ecology—which draw from the four areas and form the basis for benchmarking progress as the plan is implemented.

The goal is to triangulate sustainability benchmarking against the models set by AASHE and the American College and University Presidents' Climate Commitment (ACUPCC), and to foster more focused sustainability strategies linked to this campus master plan and ongoing physical development on campus.

The President's Sustainability Steering Committee will monitor progress on the strategies and metrics for each of the sustainability themes, including proposing additional metrics and specific goals.

### FOUR FACETS OF SUSTAINABILITY

# SOCIAL S ECONOMIC BUILT ENVIRONMENT NATURAL ENVIRONMENT

### SEVEN SUSTAINABILITY THEMES



- ENERGY
- LANDSCAPE
- COMMUNITY
- **MOBILITY**
- **ECONOMIC DEVELOPMENT**
- MISSION
- **ECOLOGY**

### INTERSECTION OF THE EIGHT BIG IDEAS WITH THE SUSTAINABILITY THEMES

One of the early questions in the planning process was how to narrow the all-encompassing idea of sustainability into a framework tailored to the master plan and the broader issues and opportunities at UT Austin. The chart below shows the intersections between the eight big ideas of the master plan and the seven sustainability themes.

ACCOMMODATE POTENTIAL GROWTH

**ENHANCE THE CENTRAL CAMPUS** 

FORGE STRATEGIC PARTNERSHIPS

FACILITATE SAFER, MORE EFFICIENT MOBILITY

INTEGRATE ACADEMIC AND RESIDENTIAL LIFE

TRANSFORM THE WALLER CREEK /SAN JACINTO BOULEVARD CORRIDOR

CREATE IMPROVED LEARNING AND RESEARCH ENVIRONMENTS

REVITALIZE THE CORE

ENERGY	LANDSCAPE	COMMUNIT	MOBILITY	<b>ECONOMIC DEVELOPME</b>	MISSION	ECOLOGY
	0	İ	50		7	
•	•	•	•	•	•	•
•	•	•	•		•	•
•	•	•	•	•	•	•
•		•	•	•	•	
•	•	•	•			•
	•	•	•			•
•		•		•	•	

# Broad master plan recommendations

Build the Core Campus, the Central Campus, and other developed areas in a **compact, efficient manner** with an average height of four to five stories, aspiring to floor area ratios of 1.5 to 2.0

Develop at urban densities in existing developed areas in order to save energy through use of more efficient central plants, application of eco-district strategies (e.g., committing to district sustainability goals and coordinating investments and actions), and more efficient use of existing utility infrastructure

Adhere to sustainable siting recommendations in order to minimize heat gain and energy consumption and achieve more efficient use of valuable land and of other resources, including energy, water, and other utilitie

Design landscapes and place buildings to **create human-scaled**, **well-shaded campus spaces that improve human comfort** 

Implement landscape design strategies to **improve the resiliency of the campus** setting by preserving precious water resources and fostering the overall ecology of the campus

Incorporate more drought-tolerant planting materials, increase the use of heat-dispersing ground treatments, preserve existing trees, and plant new trees to increase the amount of shade and lower the ambient temperature of outdoor spaces

Develop a more human scale and welcoming environment that ties the campus together to create better connections among different student groups, including those involved in academics, research, arts and culture, and athletics

Improve student life and **build a stronger sense of community** in order to improve academic performance and student success

Develop an efficient and **well-coordinated mobility strategy** in order to improve accessibility for all and reduce carbon emissions

## SUSTAINABILITY RECOMMENDATIONS

o achieve an integrated sustainability approach, setting sustainability goals with defined metrics (to allow for measuring and reporting successes) and a specific timeline for achieving the goal are important steps for meaningful implementation. The following pages describe aspirational goals, existing UT Austin goals, sustainability strategies, and proposed metrics for the seven themes: energy, landscape, community, mobility, economic development, mission, and ecology.

The feasibility and cost implications of goals and proposed metrics will necessarily need to be evaluated on a continual basis, taking into account improvements in materials, technologies, and policies that improve sustainability. The proposed metrics here relate most closely to the master plan, and are intended as a complement to the AASHE STARS self-reporting framework.

Sustainable environments utilize energy efficiently:

Our goal is to plan and design high-performance environments that are efficient and that promote the use of energy from renewable sources where appropriate.



UT Austin has articulated two clear energy goals in the President's Sustainability Steering Committee's Natural Resource Management and Conservation Strategic Plan (2011):

The University of Texas at Austin will **reduce energy** consumption at the building level by an average of 20% per square foot per degreeday by August 31, 2020 using 2009 as the base year.

By August 31, 2020, 5% of all energy consumed by UT Austin facilities on the Main Campus, approximately 17M KWH, will be generated from renewable sources.

Energy infrastructure at UT Austin is highly efficient on the supply side, and future opportunities for efficiency and investment relate to existing and new building systems and demand reduction.

### **STRATEGIES**

The master plan incorporates sustainable design principles that support energy efficiency; for example, the plan minimizes energy loads and maximizes passive energy by identifying the preferred orientation for solar impacts for new buildings. In addition, the following strategies are recommended:

 Use the Sustainable Energy Funding Framework, which provides an approach for funding energy management and conservation, at the end of this document

- Use solar orientation analysis to help identify existing buildings' facades that could be mitigated by architectural or landscape interventions in support of energy conservation
- Mitigate heat island effect with plantings, building shading, increasing pervious surface area, and investigating possibilities for Solar Reflectance Index (SRI) for roofs
- Integrate commissioning and life cycle analysis (LCA) of materials into the operations process for new buildings, major building renovations, and replacement of MEP systems
- Reduce energy consumption at the building level and pursue appropriate renewable energy sources, per NRCP goals

- Targeted Energy Use Intensity (EUI) in kBtu/sf/yr excluding on-site renewable energy contribution
- Targeted EUI in kBtu/sf/yr including on-site renewable energy contribution (not counting carbon offsets)
- Targeted percent regional energy reduction per Energy Star Target Finder
- Percent change in demand reduction

Sustainable landscapes are functional and beautiful:

Our goal is to create not only enduring campus places but also working landscapes that provide wind protection and shade, perform stormwater management functions, and protect and regenerate natural systems and habitats.



### LANDSCAPE

Landscape is an important theme throughout the master plan, especially in light of recent drought conditions and water stress to the treasured trees on campus. Broadly speaking, UT Austin strives to manage the health of Waller Creek and has articulated a specific water use reduction goal in the NRCP:

By August 31, 2020, UT Austin will reduce water use by 20% with at least 40% of total water use coming from reuse/reclaimed sources.

Much of meeting this goal for water reduction and alternative sources will be achieved in the power plant, not through landscape irrigation practices.

### **STRATEGIES**

The open space network design expressed in the master plan is always in response to design for people and therefore seeks to maximize the impact of new social spaces. The pattern of landscape spaces emphasizes investments in landscapes for social engagement. In addition, the following strategies are recommended:

- Follow Sustainable Sites Initiative guidelines for future campus landscape
- Explore opportunities to capture, filter, and reuse rainwater where it falls, e.g., rain gardens, swales, and filter strips
- Increase pervious surfaces
- Establish and manage dry campus landscape zones outside of high-use areas

- Determine campus landscape areas that would benefit from additional tree shading
- Set shade goals for parking lots
- Use a combination of strategies for fifty percent of the site hardscape (roads, sidewalks, courtyards, and parking lots): shade, hardscape, and roof materials with Solar Reflectance Index (SRI) of at least 29
- Encourage architects for new or renovated buildings to investigate gray water recycling systems

- Percent precipitation managed on site
- Percent wastewater reused on site
- Percent regulated potable water reduction from baseline
- Percent native planting materials, and native vegetation with low water requirements, and temperature measured in outdoor spaces and pedestrian pathways.
- Percent change in shade cover and percent change of heat island effect of Central Campus compared to the Core Campus
- Percent of surface area of west, southwest, southeast, and east walls and percent of total roof area that is shaded by vegetation or vegetated structures (SITES 4.11)

Sustainable environments foster a sense of community:

Our goal is to create environments that encourage community engagement and interaction.



UT Austin strives to be a contributing, positive member of both the economic and social community of Austin. With the launch of the Division of Diversity and Community Engagement (DDCE) in 2007, the university has a home base for expanding its foundation of engagement and positively impacting the surrounding community.

While about 7,500 student beds are located on campus, about one-third of UT Austin students live in neighborhoods around the largely commuter campus. Most of these student residences are rental properties, and there is high demand for housing types other than single-family detached. In thinking about how community relates to the social mandate of sustainability and the planning and growth discussed in the master plan, the focus is on how to foster a good working relationship between the university, surrounding neighborhoods, and the City of Austin.

### **STRATEGIES**

Several strategies are recommended to achieve this goal:

- Study opportunities to increase on-campus housing
- Explore opportunities to strengthen the sense of community for commuter students

- Engage with surrounding neighborhoods and private student housing developers, especially those that abut and support the campus community, to create an environment that fosters positive student development outcomes
- Seek to improve the experience of the university setting for existing and future neighborhood residents

- Number of services and attractions within a half mile walking radius of housing [per LEED for Multiple Buildings and On-Campus Building Projects (LEED Master Sites) protocol]
- Percent area of new open space and social spaces, benchmarked against the percent area that characterizes the Core Campus
- Percent improvement in annual National Survey of Student Engagement (NSSE) results and annual Student Experience in the Research University (SERU) results
- Percent of students perceiving the campus as sustainable based on internal campus survey

Sustainable environments address mobility in all of its forms:

Our goal is to plan for a comprehensive system of pedestrian, bicycle, transit, and vehicular movement—a system that is coordinated with the campus use patterns and the transportation policies of the campus, the city, and the region



### MOBILITY

As discussed in the Mobility section of the master plan, mobility and its many forms are an important theme in daily life at UT Austin. The UT Austin shuttle system is one of the largest university shuttle systems in the country, with over 5.2 million passenger rides annually, and the consolidation of parking into garages over the past decade has effectively managed parking demand in support of a better campus environment. The impact of bicycles remains an issue to make cycling an integral part of the transportation system.

The University articulates a specific sustainability goal in the NRCP:

By August 31, 2020, UT Austin will reduce use of gasoline and diesel fuels for the campus vehicle fleet by 20%, while shifting 50% of the campus vehicle fleet to E85 gasoline and other alternative fuels. UT Austin will increase the number of car pool and mass transit users by 30%, and will utilize 100% natural gas fuel for the shuttle bus system.

### **STRATEGIES**

In addition to the strategies articulated in the Mobility section, the recommended sustainability strategies include the following:

- Focus on reducing reliance on cars and developing safe pedestrian and bicycle alternatives
- Integrate transportation and mobility networks, including pedestrian, bicycle, light rail, vehicular, and parking
  - $+\ Integrate\ all\ modes\ of\ on\text{-}campus\ transportation$

- + Set targets for students, faculty, and staff for commuting to campus by means other than single occupancy vehicle
- + Improve accessibility to the transit system by providing shelters or shaded areas for waiting passengers at all waiting stations and bus stops
- + Promote a bicycle-friendly campus by improving on-site bicycle parking and other bicycle program elements.
- Strengthen collaborative relationships with Capital Metro and the City of Austin
- Work with campus departments to identify a specific reduction in traditional fuel vehicles as alternative fuel vehicles meet their operational requirements

- Percent increase in number of bicycle commuters to campus
- Percent increase in number of bike racks and shower facilities (per LEED Master Sites criteria)
- Percent of shaded pedestrian network for the Central Campus as compared with the Core Campus
- Change in surface-to-structured parking ratio

Sustainable environments support local economic development:

Our goal is to facilitate UT Austin's role in economic development and strategic partnerships in communities and regions.



### **ECONOMIC DEVELOPMENT**

UT Austin is a major economic driver for the City of Austin. The university participates to various degrees in most of the regionally impactful economic development efforts (such as technology commercialization, scientific research, mobility and discussion of developing a medical school). Between 1990 and 2012, Austin's labor force increased by over fifty percent, more than twice the national rate. Austin's highly educated workforce makes the city attractive to new companies.

When defining how economic development relates to sustainability at UT Austin, the dialogue revolved around the question of how UT Austin can contribute to Austin's position as the economic hub of the region and ensure the long-term health, stability, and resiliency of the campus and surrounding community. The university is intricately tied to the health of the city, especially as the city anticipates growth in the high tech, medical and life sciences, clean energy, creative, and professional service industries.

The purpose of the university, stated in tandem with the UT Austin mission statement, is "to transform lives for the benefit of society." Ideally, the relationship between the university and the city is a symbiotic one, with mutual positive reinforcement. As such, some of the strategies and metrics suggest looking beyond the borders of campus to include surrounding communities.

### **STRATEGIES**

Within the master plan, two priority strategies support this goal:

- Explore opportunities to develop new research partnerships
- Explore opportunities for new commercial and residential developments serving the campus community

- Percent increase in research partnership dollars
- Percent growth in jobs in the greater Austin community attributable to campus activity
- Percent growth in campus retail; percent growth in non-campus retail
- Percent growth in auxiliary campus income (e.g. events, miscellaneous retail, publishing)

Sustainable campuses express the mission of the university:

Our goal is to plan and design campus spaces that embody and enhance the university mission.



The mission of The University of Texas at Austin is stated on the university's website as follows:

The mission of The University of Texas at Austin is to achieve excellence in the interrelated areas of undergraduate education, graduate education, research, and public service. The university provides superior and comprehensive educational opportunities at the baccalaureate through doctoral and special professional educational levels.

The university contributes to the advancement of society through research, creative activity, scholarly inquiry, and the development of new knowledge. The university preserves and promotes the arts, benefits the state's economy, serves the citizens through public programs, and provides other public service.

- Campus Mission,

http://www.utexas.edu/about-ut/mission-core-purpose-honor-code.

The dialogue of how the campus mission and sustainability goals interrelate revolves around how UT Austin strives for excellence in advancing environmental stewardship and sustainability on campus, in academic and research programs, and in public service and outreach activities. As the twenty-fifth president of The University of Texas at Austin, Robert M. Berdahl wrote,

"A university community is fundamentally about the interwoven character of a people and place, not one or the other, in an intricate social, cultural and institutional fabric.

The finest university campuses in the world have always been places—model villages, to borrow Thomas Jefferson's notion—where communal cohesion and strength are derived as much from the physical plan as from any philosophy or values that may be spoused."

- Robert M. Berdahl, 1999 Campus master plan

### **STRATEGIES**

- Explore opportunities to link enrollment goals, academic achievement, retention rates, and graduation rates to broader planning and sustainability goals
- Explore opportunities to connect sustainability with research and academic goals

- Change in recruitment and retention of students and faculty
- Change in four- and five-year graduation rates
- Change in number of new course offerings and paths to degree completion that emphasize sustainability and utilize the campus environment in teaching strategies

Sustainable environments are respectful of the flora and fauna of a site:

Our goal is to preserve and enhance biologically diverse and healthy habitats for both natural and human ecosystems.



UT strives to be a good steward of the ecological needs of the campus. In accordance with that goal, the master plan incorporates ecological design strategies to conserve existing natural areas, restore and enhance damaged areas, and broadly support biodiversity.

### **STRATEGIES**

The previously cited recommendation that the university consider adopting the Sustainable Sites Initiative pertains to the measurement of ecological health as well. Further strategies include:

- Manage and restore existing landscape ecology
  - + Identify and recommend strategies for enhancing native plants or plants with limited irrigation requirements, e.g., replace non-native turf with drought-hardy native turf and beds
  - + Maintain the extent of existing campus natural areas, prioritizing those in connection to existing natural corridors; preserve and enhance campus natural areas along Waller Creek and reinforce connections to areas of intact habitat
  - + Develop a strategic plan to control and manage known invasive plants found on site
  - + Develop a program and designate a site for onsite composting of landscape debris
  - + Develop strategies for soil management and enhancement

- Design functional landscapes
  - + Minimize pavement to address energy, water, and pedestrian comfort
  - + Manage stormwater to meet the credit requirements for quantity control (SITES 6.1)
- Embrace educational opportunities related to campus landscape ecology
  - + Establish educational and research activities associated with the Waller Creek/San Jacinto Boulevard corridor
  - + Develop an interpretive and educational master plan for all landscapes

- Percent area preserved or restored plant biomass on site (SITES 4.6)
- Percent area planted with appropriate vegetation that is native to the ecoregion (SITES 4.7)
- Percent area preserved of the total area of existing native plant communities on site (SITES 4.8)
- Percent area of the site vegetated area that is restored with native plant communities (SITES 4.9)

# FUTURE FOCUS

### **FUTURE FOCUS**

he current phase of the master plan has laid the groundwork for the integration of elements such as academic, student life, infrastructure, and landscape. The process for working with the university has accentuated the importance of developing plans in a variety of areas not included in Phase 1, to support the university's ambition to be a catalyst for economic success in Texas.

The area north of East 15th
Street shown in the campus
master plan reflects the
initial thinking for increasing
density in the Central Campus.
Subsequent planning for the
Medical District has resulted in
a new concept for this area.

### ACADEMIC PLAN COORDINATION

- + Coordinate individual academic plans, identifying overlaps and synergies
- + Develop a template for integrating plans of individual colleges and schools
- Develop a comprehensive learningenvironment strategy, including assessment of emerging learning trends and all learning space typologies, both indoors and outdoors
- + Create an integrated strategy to support growth in research activity and interdisciplinary collaboration

### LANDSCAPE MASTER PLAN

+ Develop a comprehensive landscape master plan

A GOAL OF THIS STUDY IS TO CREATE A
FRAMEWORK FOR ORDERLY UNIVERSITY
DEVELOPMENT AND TO GIVE THE UNIVERSITY
INTEGRATED ACCESS TO THE MULTIPLE DATA
SOURCES IT NEEDS TO EFFECTIVELY SET
PRIORITIES FOR CAPITAL IMPROVEMENTS.

A SECOND GOAL IS TO LAY THE GROUNDWORK FOR FUTURE PLANNING.

### **EAST CAMPUS PLAN**

+ Include the East Campus in Phase 2 master planning and engage the Blackland and Upper Boggy Creek neighborhoods

### STUDENT AND RESIDENTIAL LIFE PLAN

- + Develop a student and residential life plan
- Develop a strategy around engagement and investment in the West University
   Neighborhood as a major university housing village
- + Develop a program-driven plan for the redevelopment of the Central Campus
- Ensure implementation of a plan for the revitalization of Guadalupe Street, and invest in providing student services in the West University Neighborhood neighborhood to make it a genuine extension of the campus residential experience

### ATHLETICS MASTER PLAN

+ Develop an athletics master plan

### CITY COORDINATION

- + Coordinate transportation and mobility plans with outside agencies
- + Explore the potential to develop a revitalization plan for Guadalupe Street and for university investment
- + Explore opportunities to create an innovation district in central Austin in collaboration with the city and the state



# ARCHITECTURAL DESIGN GUIDELINES



### INTRODUCTION

he goal of these design guidelines is to provoke strong and innovative individual building design at UT Austin while at the same time creating a distinctive and pervasive sense of place for the campus as a whole. As most great university campuses demonstrate, compatibility and a holistic vision are not inconsistent with strength and particular identity of component parts.

One need only look around the state to find examples of urban districts whose weaknesses are created by a failure to balance concern for component identity with an interest in generating a larger presence. At one extreme, the SMU campus has a strong and singular identity based on a consistency of Georgian Colonial replica buildings but stifles any sense of progress or identity of component functions by its constrictive uniformity. At the opposite extreme, the Dallas Arts District (where four Pritzker-prize-winning architects have done major works) has become a series of self-absorbed monuments that neither holds together as a district nor nurtures a positive urban life in public spaces between buildings.

The history of the UT campus documents the value of creating buildings that are "related, to be sure, but independent," in the words of Paul Cret. From the first adopted master plan to the present, the very best buildings on campus have been done by focusing on both the particular building needs and opportunities and on the interests of creating a larger campus identity as well.

Top architects often do their most creative work when they are stimulated to generate unique solutions in response to particular situations rather than trotting out stock motifs from their previous body of work. Using a Texas example once again, the extraordinary Kimbell Museum in Ft. Worth became one of Louis Kahn's very best buildings and one of the most revered works of architecture in the state due in large part to height and scale restrictions imposed upon it that provoked a unique and responsive solution from its designer.

The principles and examples contained herein are intended to provoke architects working on the campus to exercise every bit of creativity they can muster in order to generate very unique buildings particular to this place. The results of their efforts should produce strong architecture that also generates a powerful campus ethos.

### **CONTENTS**

- **Creating Architectural Character**
- Building on the UT Austin Campus

210

# CREATING ARCHITECTURAL CHARACTER ON THE UT AUSTIN CAMPUS, A BRIEF HISTORY

- excerpted from *The University of Texas at Austin; an Architectural Tour* by Lawrence W. Speck and Richard L. Cleary

Introduction		201
The Cass Gilbert Era	1909-1922	201
The Herbert M. Greene Era	1922-1930	202
The Paul Cret Era	1930-1945	203
The Modernist Challenge	1945-1960	204
The Harry Ransom and Frank		
Erwin Era	1960-1975	205
The Era of Rapid Growth	1975-1996	206
The Era of the Cesar Pelli Plan	1996-2012	206

### Introduction

Today, the main campus of The University of Texas at Austin covers approximately 350 acres and includes approximately 140 buildings. The UT campus has been an urban laboratory for testing ways of managing growth and of using design to foster a sense of shared identity among all who study and work there. As a casual walk across the campus reveals, the process has been neither of a single mind nor consistently successful. Disparities of organization, scale, and building type testify to different visions, each expressive of its time. Today, with little land available for further expansion, planners and architects must address the changing needs of the university community by integrating new construction within the existing fabric.

The character of the early campus in the first decade of the twentieth century was a picturesque park, similar in aspiration to the landscaping of the State Capitol grounds but a poor relative in terms of realization. As at the Capitol, a central tree-lined drive led from 21st Street to Old Main and the grounds were planted with ornamental trees and shrubs and crossed by meandering paths. At the top of the hill, Old Main [now called Main Building] dominated a loose arrangement of flanking buildings in a variety of medieval-revival and classical styles of which only the Engineering Building (now the Gebauer Building, 1904) survives.

### The Cass Gilbert Years, 1909-1922

Following the failed master planning efforts of Coughlin and Ayers (1903) and Frederick M. Mann (1909) Cass Gilbert imagined an urban campus with well-defined malls, courts, and plazas. Rigorously ordered outdoor spaces defined by arcades and formal plantings replaced the rural green lawns of previous schemes. In January 1910, the Board of Regents designated Gilbert the University Architect and approved his preliminary scheme for the University Library (now Battle Hall, 1911). He held the position for twelve years. Although he would realize only one other commission, the Education Building (now Sutton Hall, 1918), his two buildings and the master plan upon which their placement was predicated have had a long-lasting influence on the planning and architecture of the campus.

Four powerful features set Gilbert's plan apart from its predecessors. First, it called for replacing Old Main with a much larger and more imposing classical building called University Hall. This established the idea of a very large building, prominent on the Austin skyline, which would serve as an iconic symbol for the university.

The second distinguishing feature of Gilbert's plan involved the creation of four malls leading down the hill from University Hall in approximately cardinal directions. Of these, the South Mall was the most prominent. It began at a broad plaza facing University Hall. From the plaza a treelined lawn and roadways descended to 21st Street flanked by arcades loosely inspired by the porticos Thomas Jefferson had designed along the Lawn of the University of Virginia. Gesturing toward the Capitol, this grand ensemble of University Hall, Main Plaza, and South Mall visually stretched the realm of the campus beyond the Forty Acres and projected a signature presence of the University of Texas as a strong, confident institution. The other three malls made important connections and contributed to a sense of clarity and coherence for the campus. The East Mall and West Mall terminated at well-defined campus gateways on Guadalupe Street and Speedway, respectively. The shorter North Mall was about as broad as it was long, giving it a less directional character than the others. Contrary to the previous development plans for the campus, Gilbert's axes indicated multiple connections to the city growing around it and provided ready options for expansion beyond the Forty Acres. At the same time they exuded an aura of order, stability, and permanence.

A third feature of Gilbert's plan, which would have lasting significance, focused on the creation of a more intimate, personal scale for the campus. Within the quadrants created by the cardinal axes, Gilbert envisioned quadrangles contained by carefully aligned, mostly linear buildings. The space within each of the four quadrants was to have a distinct character, but all were to be less monumental than the malls. These courts were settings for the everyday academic life of faculty and students. They complemented the malls in projecting the dual role of the university as both a powerful institution and a nurturing place of learning.

The fourth feature of Gilbert's plan that gave it appeal to university leaders over previous efforts had to do with its attitude toward consistency versus inclusiveness in the architectural character of

buildings on campus. Gilbert allowed for the retention of all of the existing structures except Old Main. Gilbert believed campus buildings should be carefully coordinated and proposed the classicism of the Spanish Renaissance as a suitable point of departure for creating a distinct and appropriate character for the University of Texas. In his correspondence with university officials, he argued that it was preferable to collegiate Gothic or generic forms of classicism because of the suitability of its broad, overhanging roofs and patterns of fenestration to Austin's climate, the history of Spanish influence in Texas, and the fact that it had not been overused in other parts of the country.

### The Herbert M. Greene Years, 1922-1930

The regents in 1923 retained James M. White, a faculty member at the University of Illinois with considerable experience with planning and supervising construction on that campus. The following year, they named Robert Leon White (no relation to James M. White) Supervising Architect with responsibility for the execution of the buildings Herbert M. Greene would design.

As the university assembled its design team, it formalized procedures for communicating with it by making permanent the formerly ad hoc Faculty Building Advisory Committee. The committee's responsibility was and remains to advise the president on campus planning and the design of buildings and major renovations. From 1922 until 1948, the committee chair was Dr. William J. Battle, Professor of Classical Languages. His interest in architecture went beyond academic knowledge of its history, and he championed good design on campus and in the community through service on building committees and planning commissions.

Herbert Greene's work on campus was significant for its quantity—twelve buildings—and quality. His classroom buildings, such as the Biological Laboratories, Garrison Hall, and Waggener Hall, skillfully adapted the Renaissance palazzo format of Gilbert's Sutton Hall to difficult sites and different programs. Greene and his project architects, notably George L. Dahl, a rising star among Dallas architects who joined [Greene's] firm in 1926, worked closely with Battle and supervising architect Robert Leon White (who had written his UT master's thesis on Spanish colonial architecture in Texas) in devising ornament inspired by the history and cultures of Texas and campus life. Greene broke new ground in

the robust, vaguely Lombard Romanesque architecture of Gregory Gymnasium, which demonstrates his willingness and ability to employ a variety of styles and materials as a means of creating landmarks and particularizing exceptional functions.

### The Paul Cret Years, 1930-1945

In March of 1930, the Board of Regents engaged Paul Philippe Cret as Consulting Architect responsible for the preparation of a new master development plan for the campus. Cret replaced James M. White, who had not retained the confidence of Battle and the chairman of the Regent's Building Committee, Edward Randall. Fifty-four years old in 1930, Cret was among the most prominent architects of public buildings in the United States.

In June 1931, a year into his contract for the master development plan, the Board of Regents hastily awarded Cret a second contract to design ten new buildings on the campus. This extraordinary commission was prompted by the creation of the Permanent University Fund by the Texas Legislature in April 1931 that greatly increased the university's ability to utilize income from its oil leases. The regents, fearful that the legislature might reduce the funding formula when it met again in 1933, took the architect they had at hand and moved forward quickly to get the new buildings underway.

Cret addressed the commission by establishing four distinctive architectural vocabularies that he would extend to the nineteen buildings for which he was Consulting Architect from 1931 to his death in 1945. Like Gilbert and Greene before him, Cret knew large campuses—as UT would eventually become—required architectural diversity. In a report written to the regents in 1933, he advocated buildings "related, to be sure, but independent, and requiring a certain variety of treatment, to avoid the monotony and the 'institutional' character inherent to the repetition of similar units."

The first of the vocabularies Cret employed was a clear outgrowth from the palazzo-based work of Gilbert and Greene in academic

buildings such as Sutton Hall, the Biological Laboratories, Garrison Hall, Waggener Hall, and the Chemistry Building (now Welch Hall). Cret's Physics Building (1933, now Painter Hall) had the limestone base, brick midsection, and elaborate bracketed eaves with red tile roof that was, by then, well established on the campus.

The second vocabulary Cret employed was more rugged and varied in massing and employed brick as the dominant building material. He used it for three dormitories for men in the vicinity of Greene's Gregory Gymnasium: Brackenridge Hall (1932), Roberts Hall (1936), and Prather Hall (1937).

Cret's third vocabulary was also characterized by informal massing with buildings assembled as collections of separate, sometimes juxtaposed, volumes. These buildings, however, featured all-stone facades rather than brick, which had become a dominant material in every new campus building since Sutton Hall. Three of Cret's best works—the Home Economic Building (now Mary E. Gearing Hall), the Architecture Building (now Goldsmith Hall), and the Texas Union, all of 1932—define this genre.

Cret's fourth vocabulary was also a new invention for the campus. Reserved for the most monumental buildings and ensembles, he called this vocabulary "New Classicism," dominated as it was by traditional features of classical composition such as symmetry and regularity, but restrained in the use of ornament. The most prominent example of this vocabulary is the Main Building, but also includes Hogg Auditorium (1933), and the Texas Memorial Museum (1937).

The pressure of designing new buildings slowed, but did not eclipse, Cret's work on the master development plan for the campus, and he submitted the completed document to the Board of Regents in January 1933. It knit his own work together with that of his predecessors. The scheme respected Gilbert's master plan with malls defining four varied quadrants where ranges of buildings defined pleasant outdoor rooms. Cret's South Mall is similar to Gilbert's proposal with double rows of trees along each side and buildings connected by colonnades, but Cret arranged the buildings perpendicular to the mall. Another departure is a reduction of the mall's width from the 300 feet Gilbert had proposed

to 225 feet in order to make the proportions more in keeping with the Great Lawn at the University of Virginia, which Cret admired greatly.

The formal approach to Main Building along the South Mall from Littlefield Fountain is the iconic feature of Cret's plan, but two other aspects merit attention here because of their significance for long-term development. First is the attention and positive qualities Cret gave to the space between buildings. Such space for him was not an empty void waiting to be filled but an opportunity to create views that link one place with another. These informal areas constitute features of a second aspect of Cret's plan: a gradient from highly formal spaces such as the South Mall and Main Plaza, defined by buildings and carefully pruned plantings of trees and shrubs, to more park-like settings. Foremost among the latter was Waller Creek, which Cret envisioned as a linear park that would recall the native landscape. Cret received additional guidance from the Kansas City landscape architects Hare and Hare, whom the university had retained in 1932.

### The Modernist Challenge, 1945-1960

In 1946, veterans returning from World War II swelled UT's enrollment to 17,260, nearly seven thousand more than before the war. This was the first of successively larger waves of men and women that over the next forty years would increase the student body to what is today approximately fifty thousand. The growth of the student population coincided with an equally dramatic expansion of the university's research mission, and required both larger and more technologically complex buildings than those erected before the war. A further complication was the emergence of new ideologies of architectural form that called for the invention of a language more expressive of modernity. These demands re-opened questions of architectural image and institutional identity that seemingly had been settled with the acceptance of Paul Cret's master development plan in 1933.

In 1948, the regents awarded the position of Consulting Architect to prominent Dallas architect Mark Lemmon. During his eight years of service to UT, he had responsibility for fourteen buildings on the Austin campus. Comfortable with historicism, Lemmon sought to maintain a

consistent character for the Austin campus faithful to the architectural vocabulary Cret had devised. The programmatic requirements, economics, and construction practices of building in the early 1950s, however, were not those of the 1930s, and many of the buildings realized under his direction are pale reflections of the work of Gilbert, Greene, and Cret.

When Lemmon's plans for the first of his projects became public in 1949, protest by architecture students spread off campus and into the pages of The Dallas Morning News. "If the university is to fulfill its role in developing the cultural background of the coming generation," they wrote in a letter to the Faculty Building Advisory Committee released to the newspaper, "its entire attitude should be creative, not imitative." They pointed to other universities that were "beginning to build in a free, rational and contemporary feeling," producing works then under construction, such as the Harvard Graduate Center by Walter Gropius and the Architects Collaborative and Baker House by Alvar Aalto at MIT. The controversy did not compel Lemmon to change course immediately, but his position changed over the decade and he employed a modernist vocabulary for his final building on campus, Kinsolving Dormitory (1958).

Lemmon, like Cret, favored an evolutionary approach to modernism, but architectural taste regarding institutional buildings in the 1950s increasingly favored more radical breaks with the past. The appearance of functionality, the absence of traditional ornament, and the prominent display of materials associated with modernity, such as brick, glass, steel, aluminum, and concrete were hallmarks of the new order. Lemmon and others who had established their reputations as historicist architects struggled to master the new conventions, and younger architects educated in the 1930s and later often took the lead in innovation.

Among the new generation were Louis C. Page, Jr. and Louis F. Southerland who met during their studies at MIT. Page and Southerland returned to Texas and formed a partnership that added Page's younger brother, George Matthew Page, following his graduation from UT in 1939. Page Southerland Page grew into a large, successful practice in the post-war years with many institutional and governmental clients. When Mark Lemmon's contract ended in 1956, the regents hired the firm as Consulting Architect. In this capacity Page Southerland Page realized

two buildings at the end of the 1950s that furthered the introduction of modernist design on campus. The W. R. Woolrich Laboratories (originally known as the Engineering Laboratories Building) of 1958 is a straightforward expression of its construction—reinforced-concrete frame and brick infill—with no ornament other than the patterns of the colored tiles facing the walls of the entrances. The McCombs School of Business (originally the Business Administration Economics Building, 1958) was the first modernist building on the Forty Acres. Upon its completion, observers found it strikingly new and innovative, but its design does not ignore the material palette and massing of nearby Waggener Hall. Unlike Lemmon's work that might be described as "Cretlite," Page Southerland Page sought to rework the ingredients of the older buildings on campus in fresh terms.

Page Southerland Page served as Consulting Architect for only two years, although the firm retained close ties with the university that led to commissions for other buildings on campus. At issue was the regents' reassessment of the role a Consulting Architect should play within the increasingly complex structure of the University of Texas System, which had expanded beyond the Austin and Galveston campuses. No longer comfortable with making a long-term commitment to a single figure or firm, the regents awarded more limited contracts. Jessen, Jessen, Milhouse, and Greeven served as Consulting Architect from 1958 to 1962 followed by Brooks, Barr, Graeber and White from 1962 to 1966. The regents abolished the position of Consulting Architect in 1967, adopting a policy of relying on administrative staff to coordinate the nomination of architects for building projects on a case-by-case basis. From this time to 1994, when the regents commissioned Cesar Pelli to prepare a master development plan, the story of architecture and planning on the campus revolves more around administrators than architects.

#### The Harry Ransom and Frank Erwin Years, 1960-1975

In the 1960s and 1970s, two giant figures in the university's history occupied center stage: Harry Huntt Ransom, in his capacities as president and chancellor, and regent Frank C. Erwin Jr.

Erwin was said to have asserted that the greatness of a university rested on buildings, athletics, and funding, and he certainly saw to it that all three flourished on his watch. Skillfully exercising his connections in the statehouse, Erwin was instrumental in the nearly tenfold increase in the legislature's appropriations to the university during his service as regent. His friendship with President Lyndon Johnson facilitated the university's access to sources of additional funding in Washington and encouraged the President to locate his library in Austin.

Among the first challenges Ransom faced as president was preparation of a ten-year plan for the university's growth. With enrollment forecasts projecting an additional ten thousand students over the course of the decade (the actual increase would be higher—approximately twelve thousand) and an ambitious agenda to expand research, especially in the sciences and engineering, Ransom sought not only to manage these increases but also to foster academic excellence. To this end he made a pivotal decision that all academic programs would remain on the main campus and only specialized research facilities would be allowed to move to satellites, such as the Pickle Research Campus in north Austin.

The ten-year plan also set the objective that instructional facilities be situated no more than a walk of ten minutes (the interval between classes) from Main Building. Future construction was to be directed to open areas within that radius. The demand for classrooms, laboratories, and offices was such that many of the new structures required larger footprints and significantly greater heights than the older buildings on campus, disrupting the carefully considered proportional and spatial relationships of Cret's master development plan.

Erwin played a prominent role in the expansion of the campus to the east and south. At the time of his appointment to the Board of Regents in 1963, the university's presence east of San Jacinto Boulevard was increasing. Before World War II, the only major buildings in the area were Memorial Stadium, Clark Field, Texas Memorial Museum, and University High School (now the School of Social Work). In the 1950s, Mark Lemmon directed the construction of the new home for the Law School, Townes Hall, on the hill behind the museum and a dormitory (Creekside Residence Hall) below it along Waller Creek. At the beginning of the 1960s, the Art Building was built on San Jacinto Boulevard and, as a demonstration of the new policy placing academic

buildings outside the ten-minute-walk zone, the Printing Division Building (now the University Police Building) was situated east of the stadium. Robert Dedman Drive, known then as Red River Street formed the western edge of a shrinking residential neighborhood platted on a grid of streets. Two blocks to the east was East Avenue, a north-south thoroughfare that became the right-of-way for interstate highway I-35, for which construction began in 1952.

The scattered university buildings and the low density of the neighboring private properties made the area a prime target for future development. In addition to providing sites for new buildings, land on the eastern periphery could be used for parking, a problem that had spiraled out of control by mid-century.

The highest-profile project on campus in the era was the Lyndon Baines Johnson Library and Museum and the adjacent Sid Richardson Hall, which extended the campus nearly to I -35. The Johnsons sought a nationally recognized architect and selected Gordon Bunshaft of the New York office of Skidmore, Owings & Merrill, whose Beinecke Rare Books & Manuscript Library at Yale University Lady Bird Johnson admired. Brooks, Barr, Graeber and White, who at the time held the position of Consulting Architect, were named associated architects for the project.

#### The End of Rapid Growth, 1975-1996

Frank Erwin stepped down from the Board of Regents in 1975, but the last of the buildings that he had a hand in creating would not be completed for a half dozen years. Among these were the Perry-Castañeda Library, which replaced the overcrowded tower of the Main Building as the central library and the College of Fine Arts complex on the site of Clark Field.

The commissions for these buildings were awarded to a broader range of firms than had worked in campus during the 1950s and 1960s, when the institution of Consulting Architect was in place. Among the relative newcomers was the Dallas firm, Fisher and Spillman, founded by J. Herschel Fisher and Pat Y. Spillman in 1962.

The firm received its first UT commission, the Joe C. Thompson Conference Center, in 1968 and became dominant on campus in the mid-1970s with a string of major commissions including the Fine Arts complex, the Lee and Joe Jamail Texas Swimming Center, and the Recreational Sports Center. Like Bartlett Cocke's Perry-Castañeda Library, their buildings are imposing structures characterized by monumental, geometric forms clad in broad masonry surfaces (brick rather than the library's Indiana limestone) with deeply set fenestration.

In the more central areas of the campus, several large new buildings were built in the 1980s, including the University Teaching Center and the Chemical and Petroleum Engineering Building, but the decade is best characterized as a time for renovations to the buildings of the pre-World War II era. The renovation and addition to Goldsmith Hall, home of the School of Architecture, by Thomas, Booziotis and Associates is noteworthy for the sensitive handling of new construction alongside original fabric. At the end of the decade, a distinguished member of the architecture faculty, Charles Moore, reintroduced architectural whimsy, last seen in the buildings of Greene and Cret, in the extension to the Etter-Harbin Alumni Center that he designed with faculty colleague Richard Dodge.

#### The era of the Cesar Pelli Plan, 1996-2012

In 1990, two projects were initiated that highlighted the consequences of building in a piecemeal fashion without attention to the relationship of each part to the whole. University officials announced in August of that year that the east wing of the historic Anna Hiss Gymnasium would be demolished to make way for a new molecular biology building. Architectural historian D. Blake Alexander decried the action in The Daily Texan by observing, "We are now getting to the point that we're encroaching upon and actually destroying the strongest element that holds the campus together—the original 1933 plan by Paul Cret....There is no long-range plan, and without one, the campus will continue to deteriorate." The issue for Alexander went beyond the loss of a historic building to a more general lack of appreciation for the significance the spaces between buildings can have on the quality of the campus. No small part of the beauty of Anna Hiss Gymnasium was its place in the

sequence of terraces Cret had laid out from the Littlefield group of dormitories to Speedway, but over the years they had been whittled away with the addition of new buildings, such as Burdine Hall (1970). The destruction of Anna Hiss Gymnasium's natatorium wing in 1994 removed another piece from the mosaic.

At the same time, students were preparing a referendum to support the creation of a new student services building. After it passed in early 1991, a site was selected north of Dean Keeton Street that was severely compromised by an adjacent decrepit apartment building and by difficult, if not dangerous, pedestrian accessibility. When students saw the resulting "rat-maze" design for the building, they initiated a referendum in late 1993 to withdraw their support. In response, newly installed President Robert Berdahl pledged that a campus plan would be launched that would examine the university's building and land needs to prevent such problems in the future.

By the time a request for qualifications was distributed to dozens of the top architectural and planning firms in early 1994, the ambitions of the new campus master plan had grown well beyond just a land-planning exercise. Unlike the ten-year plan of 1960, which directed growth primarily in quantitative terms, the new effort included qualitative directives to "promote interaction and community" and "identify and define a system of lively, interactive public spaces for the campus which can provide an environment for community exchange." President Berdahl was strongly committed to the planning process and saw the physical design of the campus as a vehicle for making the university a more humane, cohesive, and stimulating community.

The recommendations of the Pelli Campus Master Plan reframed the direction of building on the campus and have made a significant contribution to creating the "sense of community" its framers had envisioned. Even before its formal adoption, it began to positively influence projects like the John B. Connally Center for the Administration of Justice and the renovation of Gregory Gymnasium. Over the next fifteen years, substantial advances were made on all of the plan's various recommendations, and an era of phenomenal growth and physical transformation on the campus was conducted, for the most part, in an orderly, coherent fashion.

In accordance with the plan, Speedway was closed to all but emergency vehicular traffic in 1999 and much of the surface parking in the central campus was gradually relocated to four new parking garages at the periphery. Pedestrians began to reclaim the central campus in a way that had not been possible since before World War II. New occasions like "Gone to Texas," "Forty Acres Fest," and an enhanced spring graduation ceremony took advantage of the transformation. Informal demonstrations, festivals, parties, and performances began to happen more frequently, especially in the plaza in front of Gregory Gymnasium.

An ambitious redevelopment scheme by landscape architects Peter Walker and Partners was commissioned in 2006 for Speedway Mall and the East Mall. The Walker scheme adopted the activity nodes at 21st Street and 24th Street suggested by the Pelli Plan and took its intention for a gracious ensemble of open spaces on the campus to a higher level of interaction, beauty, and sophistication.

Two very large, new dormitory complexes, San Jacinto Residence Hall on Waller Creek and Almetris Duren Residence Hall on Whitis Avenue were completed in accordance with the Pelli Plan in 2001 and 2007 respectively. As predicted, they substantially enhanced the twenty-four-hour character of the campus, contributing to both safety and vitality. The plan indicated locations for new recreational activity centers, including outdoor swimming pools added to Gregory Gymnasium (2007) and a new Student Activities Center (2010) on the site adjacent to it. Benefitting all students, such social magnets are especially meaningful for those who are just beginning to orient themselves to campus life.

Similar success in consolidating activity, generating an active pedestrian life, and helping to create meaningful open spaces has been had with academic buildings constructed on infill sites in the campus core. The A.C.E.S. Building (2000), Seay Building (2001), North Office Building (2002), Neural and Molecular Science Building (2005), Blanton Museum (2007), and the Belo Center for New Media (2012) all occupy infill sites identified in the Pelli Plan and follow its massing recommendations to define well-formed open spaces around them.

By 2009, the Faculty Building Advisory Committee (FBAC) had begun to identify areas of concern where the Pelli Plan no longer satisfied current needs and advocate a new master plan. In 2008, for the first time a

Cret-era building (the Experimental Science Building, completed 1952, designed by Cret's successors Harbeson, Hough, Lingston and Larsen with Broad and Nelson and Robert Leon White) was demolished to make way for the new Norman Hackerman Building (2010). This loss has been followed by the demolition of an earlier Cret building, Taylor Hall (1934, demolished 2011), to provide space for the new Bill and Melinda Gates Computer Science Complex (planned completion in 2012). Neither of these removals of older buildings on the campus to make way for new ones was envisioned in the Pelli Plan. The FBAC called for a comprehensive historical inventory of campus buildings as part the new planning process to be sure the architectural heritage of the campus was appropriately protected. A grant from the Getty Foundation funded a pilot project for such a study on the Forty Acres undertaken by the School of Architecture's Historic Preservation program.

At the same time, plans by the city of Austin to improve Waller Creek with active development and hike and bike trails below 15th Street and by the regional transit authority to build a light rail line that might run along San Jacinto Boulevard demanded proactive coordination to be sure that the campus received the maximum benefit from these transforming urban initiatives. The potential of these efforts to positively impact the east side of campus between San Jacinto Boulevard and I -35 suggested that a new master plan might look for infill sites and growth potential there in a way that could not have been anticipated in the 1990s.

In addition, there was a growing sense among campus leaders that the design guidelines in the Pelli Plan had been interpreted too literally and became a constricting factor preventing the campus from receiving architecturally distinguished buildings.

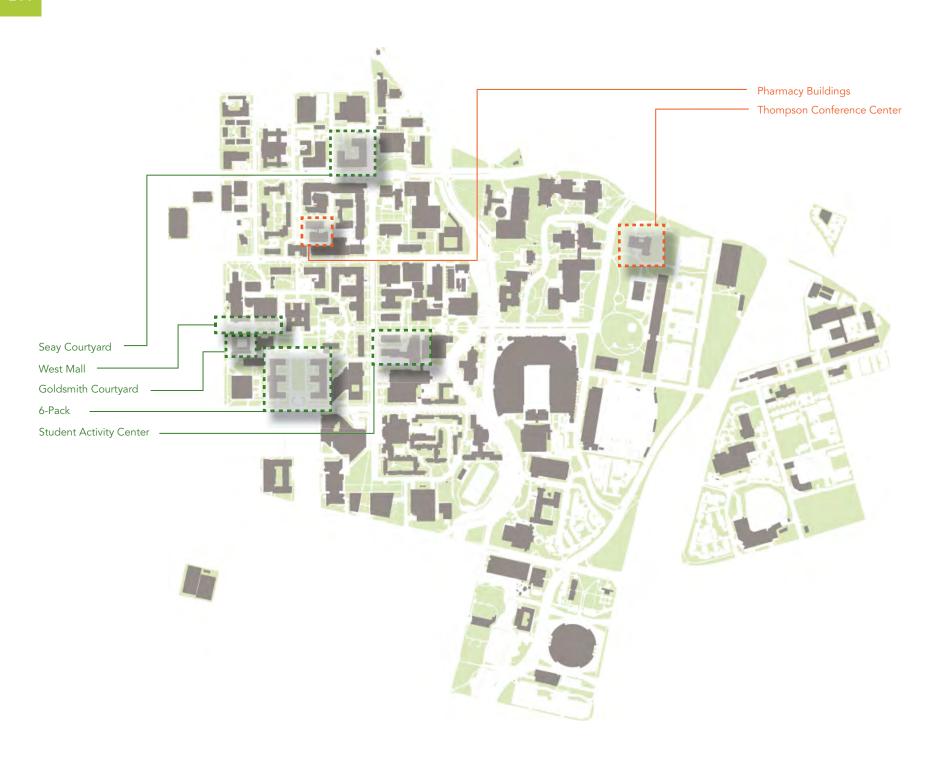


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# TEN ENDURING PRINCIPLES FOR BUILDING ON THE UT AUSTIN CAMPUS

- Buildings should create well-defined public spaces.
- The consistency of the fabric of buildings on campus should be tempered by exceptions that create local focus as well as campus-wide focus.
- A wide variety of building typologies should be employed in response to varied programmatic needs.
- Even as structures on the campus grow in size, they should maintain a human scale.
- Buildings should accentuate and make visible the vitality and richness of campus life.
- The broad palette of materials already employed on the campus should be used as a source book for future material choices.
- Besides the colors that result from the use of natural materials, applied color can also be used as a means to animate campus buildings.
- Building character should be responsive to the need to mitigate the strong sun and provide relieving shade in the hot Texas climate.
- Durability, performance, and long-term sustainability should drive architectural character significantly.
- Good value and practicality in terms of contemporary construction practices should be significant determinates of architectural character. The architectural character of new buildings on the campus should depict the university as a progressive and future-oriented institution.



#### **PRINCIPLE 1**

Buildings should **CREATE WELL-DEFINED PUBLIC SPACES**. The articulation of carefully formed, interactive outdoor environments is fundamental to the success of the Campus Master Plan. Massing, façade treatment, material choices and other architectural elements should all be employed to reinforce the **CIVIC CHARACTER** of the campus and to enhance its **PEDESTRIAN ENVIRONMENT**. Substantive contribution to creating public space character is more important than style.

#### **EXAMPLES**

- Goldsmith Courtyard
- West Mall
- Seay Courtyard
- **⊘** 6-Pack
- Student Activity Center
- Thompson Conference Center
- Central Deposit Library



V

The Goldsmith Hall Courtyard, built in the 1930s, creates an excellent venue for special activities and events staged by the School of Architecture as well as providing a nurturing community environment for everyday, informal activities. The courtyard's size, proportions, consistent architectural character and distinctive landscape features all contribute to its success as a well-defined public space.





Four different building elements built over a period of thirty-two years help create the Union Courtyard off the West Mall. Though the architectural character of the various faces is divergent, the consistent use of fossiliferous limestone ties the space together. Recent interventions help to define circulation and intimate sub-spaces within the larger public space.





The area between the Student Activity Center and the Rapoport Building creates a welcoming campus space even though the neighboring buildings have somewhat different architectural character and materials. The simple shape and uniform building heights help give the public space identity and cohesion.





The buildings of the "six-pack," also built over a three-decade time span, define not only the strong civic character of the South Mall but also intimate courtyards between buildings as well.





The Seay Building courtyard, built in the late 1990s, combines shade and enclosure to create a memorable and intimate space for the Psychology Department.

Consistent architectural character and strong landscape features tie the space together even though the ground plane is steeply sloped to connect various floor levels.

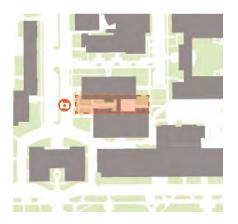


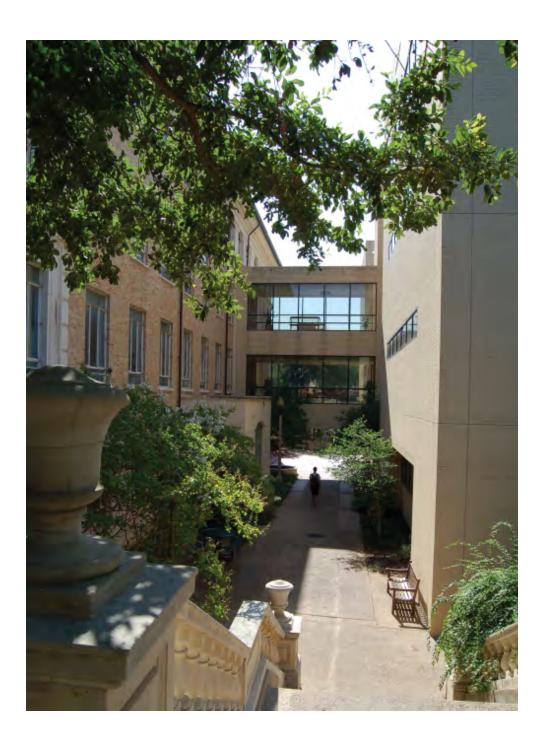


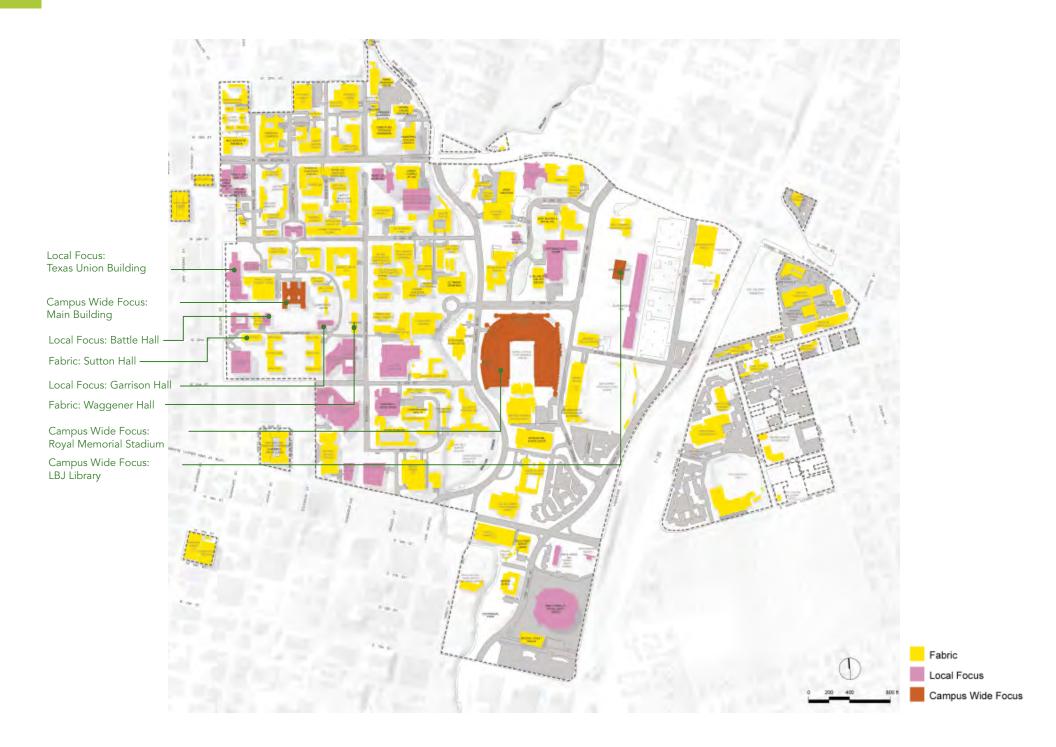
The free-standing nature of the Thompson Conference Center as well as its low, one-story volume on one end do not contribute to the creation of well-defined public space.



The crowding of the two Pharmacy Buildings from different eras so close together renders the left-over space between them less useful than it might have been.







## **PRINCIPLE 2**

The consistency of the **FABRIC** of buildings on campus should be tempered by exceptions that create **LOCAL FOCUS** as well as **CAMPUS-WIDE FOCUS**. Because of the large size of the campus, covering more than 350 acres, it is important to have landmarks and communities of buildings within the larger whole that have their own identity and character that is related to, but not dominated by, an overall architectural character. **DECISIONS** about whether a building should be a fabric building or a focus building should be made **EARLY IN THE DESIGN PROCESS** and should be based on both building function and position in the larger campus plan.

#### **EXAMPLES**

Campus Wide Focus: Main Building

Campus Wide Focus: LBJ Library

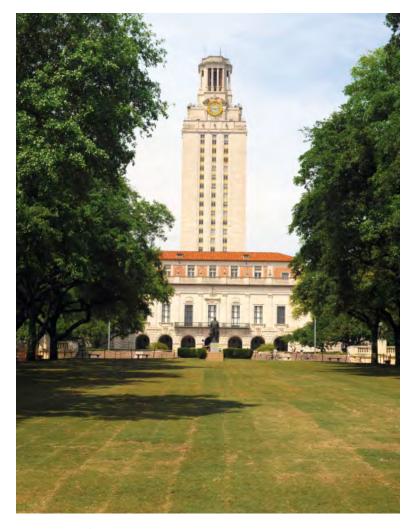
Local Focus: Garrison Hall

Local Focus: Texas Union Building

Local Focus: Battle Hall

Fabric: Waggener Hall

Fabric: Sutton Hal



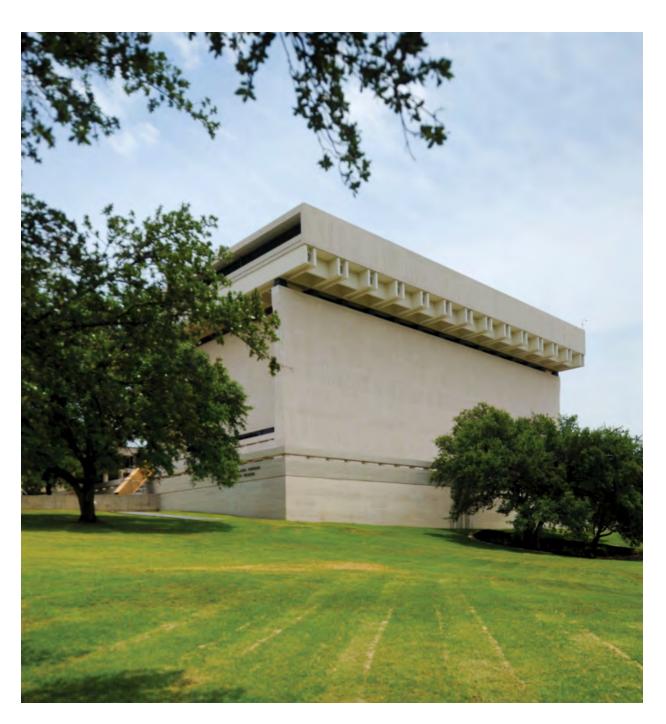
#### Campus Wide Focus

Landmark buildings such as the UT Tower create a campus-wide focus. Its height as well as its proportions and orientation set it apart and make it iconic. Yet, its colors and materials mark it as clearly a part of the larger campus.



#### Local Focus

When paired with Goldsmith Hall, the Texas Union provides a local landmark for the West Mall district. The two similar towers establish a welcoming gateway that marks the transition from "town" to "gown." Their appropriateness as a local focus comes from their position in the larger campus plan.



#### Campus Wide Focus

The LBJ Library and museum appropriately create a campus-wide focus further east. Its function as a monument that draws visitors from all over the world demands a more powerful scale and more dominant presence than normal academic buildings.



#### Local Focus

Because of its important location on the Main Plaza and because of its jewel-like architectural quality, Battle Hall creates a local landmark that is modest in scale but grand in effect.



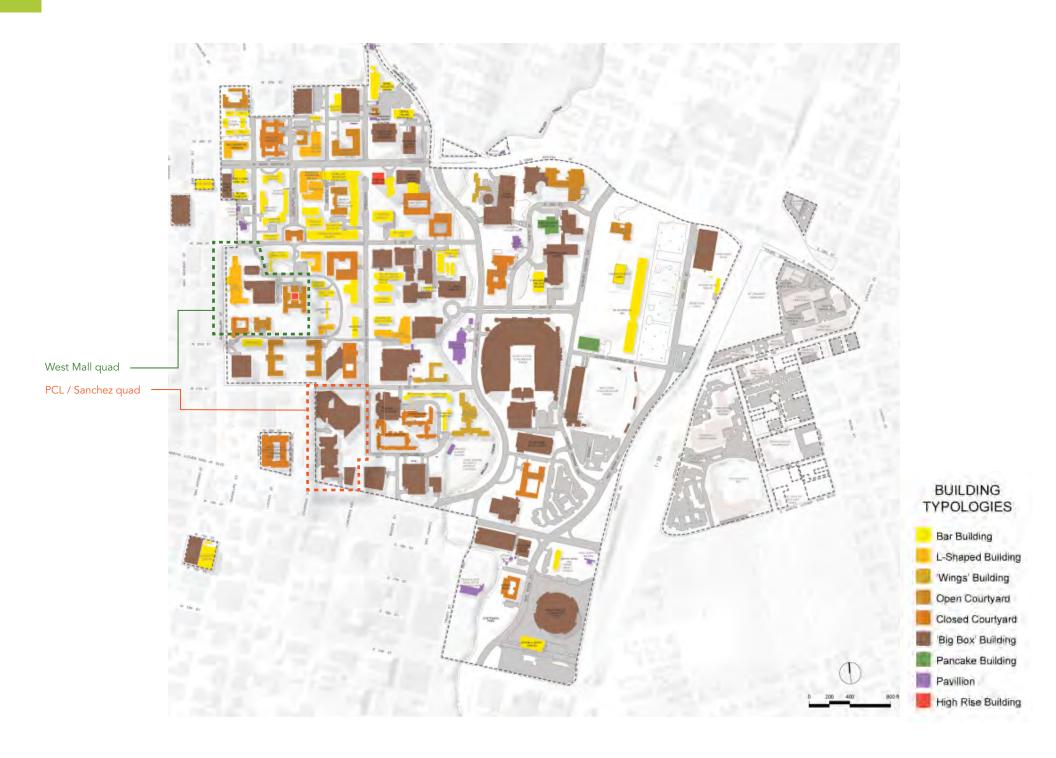
#### Fabric Building

Though it was designed by the same architect (Cass Gilbert) only a few years after Battle Hall, Sutton Hall plays an appropriate role as a "fabric" building. It is laudable for its gentle modesty and its role in creating strong campus spaces.



#### Fabric Building

Herbert Greene, who was campus architect during the 1920s, designed a number of "fabric" buildings like Waggener Hall that are essential in generating the cohesive feel of the 40 acres.



## **PRINCIPLE 3**

A wide **VARIETY OF BUILDING TYPOLOGIES** should be employed in response to varied programmatic needs. Bar buildings, L-shaped buildings, buildings made of wings, open courtyard buildings, closed courtyard buildings, pancake buildings, big boxes, tiny pavilions, and even high rise buildings can be incorporated gracefully into the larger campus fabric. Singular clusters of typologies, however, should be avoided in favor of mixtures and variability

#### **EXAMPLES**



West Mall quadrant

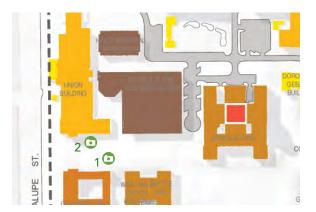


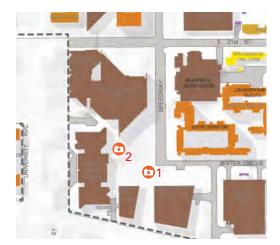
PCL and Sanchez quadrant





The West Mall benefits from having a number of different building types constructed during different eras of campus growth which offer varying scales and uses that together create an exemplary campus space. The deep recess of Flawn plays off of the noble face of the Texas Union - each of them using form, scale, and ornament in response to the grove of trees that line the West Mall.









The southwest corner of campus near MLK Boulevard suffers from a lack of character due to the predominant building typology of 'Big Boxes', including the Perry-Castañeda Library, the Sanchez Building, the University Teaching Center, the Blanton Museum and Jester Center. These large-scale buildings with repetitive openings have their place on campus but when grouped in singular clusters, they do not allow for the variety of scale and form that enlivens other quads on campus.



## **PRINCIPLE 4**

Even as structures on the campus grow in size, they should MAINTAIN A HUMAN SCALE. Both in massing and in façade treatment, buildings should be articulated into constituent parts so as to MEDIATE BETWEEN THE PEDESTRIAN SCALE AND THE SCALE OF THE WHOLE BUILDING. Taller buildings should STEP DOWN their massing to no more than five stories where they are adjacent to public spaces, and large expanses of very uniform façade treatment (especially top to bottom) should be avoided in favor of more responsiveness and particularity. Buildings with horizontal dimensions greater than 200 feet should incorporate CHANGES IN MASSING and/or façade treatment to prevent the building from overwhelming its surroundings.

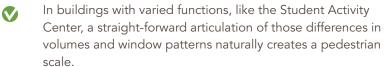
#### **EXAMPLES**

- Student Activity Center
- Main Building
- W Hackerman Building
- Robert Lee Moore Hall
- Ernest Cockrell Hall











Even the Main Building, the tallest on the campus, wisely steps down to an appropriate pedestrian scale where it is adjacent to important public spaces.

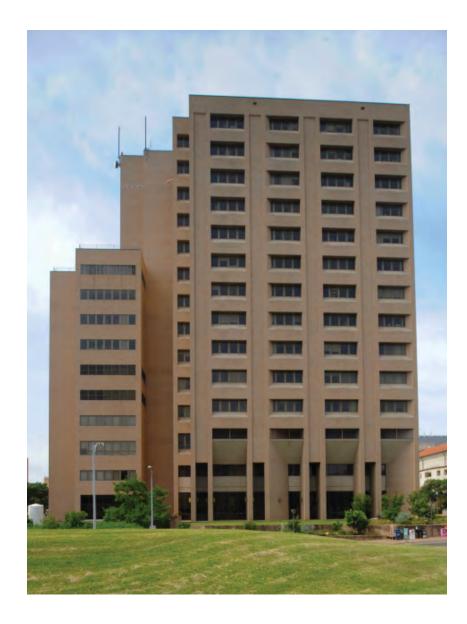


Long horizontal dimensions in the Hackerman Building are mitigated by scaling elements that break it into smaller volumes with varied treatment of materials, fenestration and roofline.



This six-story volume is also successfully scaled vertically by its use of materials of varying depths and textures. As the Hackerman Building reaches the ground, it becomes increasingly porus and welcoming.





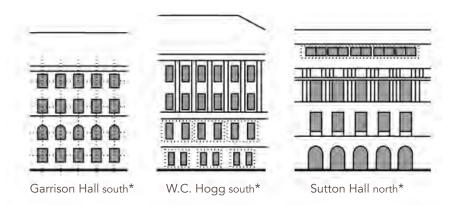




Uniform façade treatment top to bottom lends Ernest Cockrell Jr. Hall a bland, scale-less character.



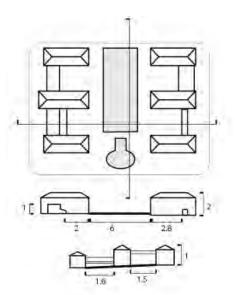
# **Window Organization**



"The general character of a building is influenced by the quantity of glass within the composition of an elevation. Elevations that have too little glass are perceived to be heavy and reminiscent of a fortress. Elevations that have too much glass are often associated with being thin and similar to a corporate office building."

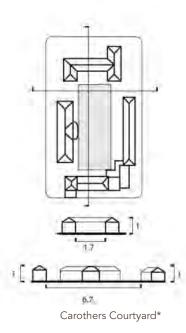
- Excerpt and diagram from UT Austin 1996 Building Design Guidelines, pp. 6, 20-21

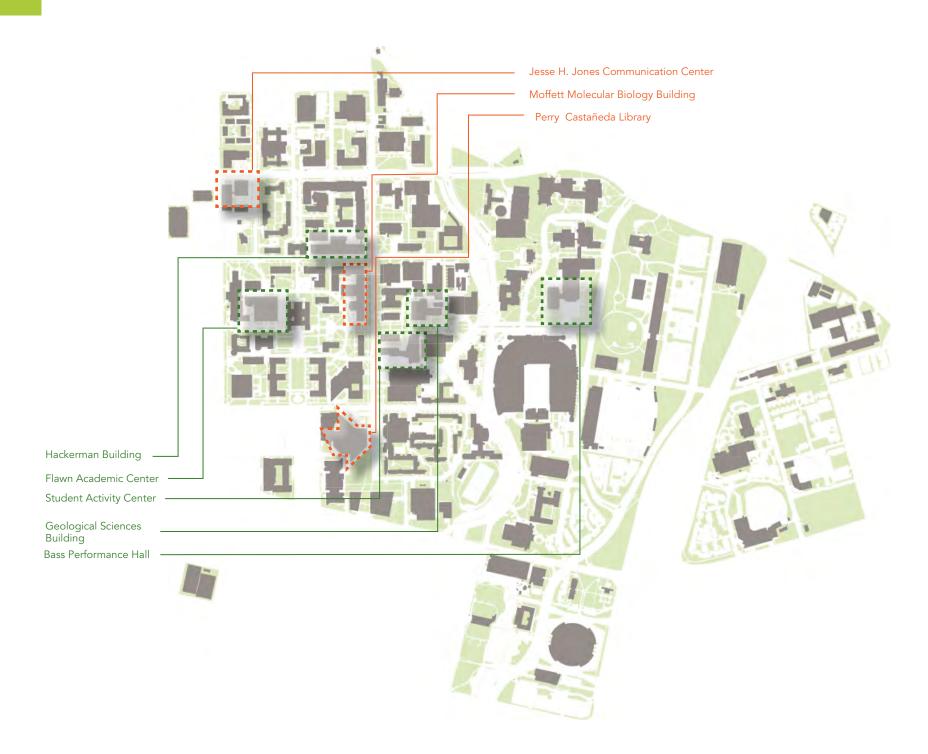
# **Height and Density**



"The original campus has a scale and density of building that is unique and humane. The height of buildings in relationship to their courtyards and surrounding open spaces allow for sunlight and prevailing breezes to make these environments pleasant."

- Excerpt and diagram from UT Austin 1996 *Building Design Guidelines*, pp. 6, 20-21





## **PRINCIPLE 5**

Buildings should accentuate and MAKE VISIBLE THE VITALITY AND RICHNESS OF CAMPUS LIFE. Public functions should be placed on the ground floor insofar as possible with more private or utilitarian functions on upper floors. Entry points should be accentuated both by façade treatment and by the creation of terraces or plazas outside for people to gather. Clear glass should be used on lower floors wherever practical to make the life inside the building visible as well as to provide a sense of security and inhabitation at night. Essential building elements that do not reinforce a sense of activity and occupation should be sublimated. Mechanical equipment and service areas should be shrouded from public view by enclosures that are designed as an integral element of the building's architecture. When roofs might be visible from surrounding buildings, they

#### **EXAMPLES**

Bass Performance Hall

Student Activity Center

Flawn Academic Center

V Hackerman Building

Geological Sciences Building

should be treated as a "fifth façade" requiring particular attention to these issues.

Moffett Molecular Biology Building

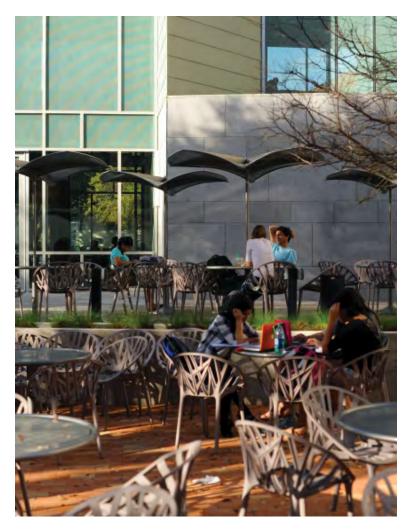
Jesse H. Jones Communication Center

Perry Castañeda Library



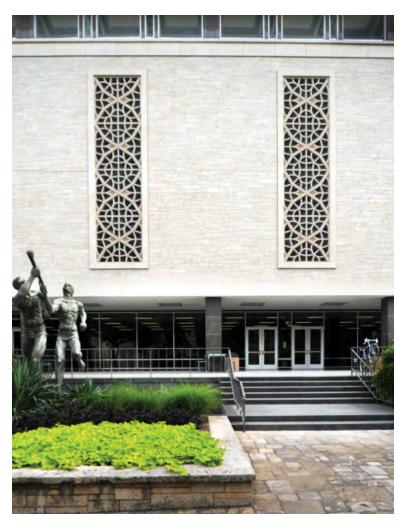


The 2009 renovation of the Bass Performance Hall successfully placed the public spaces of the theater such that they face the plaza to the south, activating and enlivening the plaza.



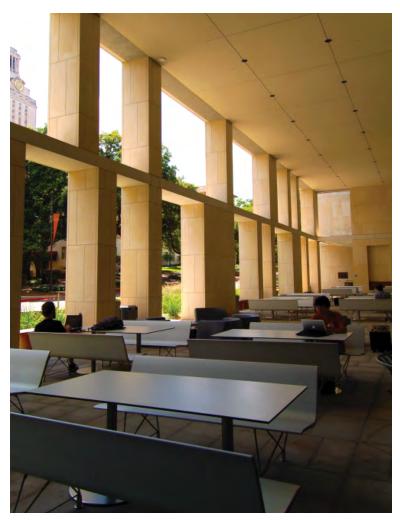
Entry points in the Student Activity
Center are marked by broad expanses
of glass with terraces outside where
people gather.





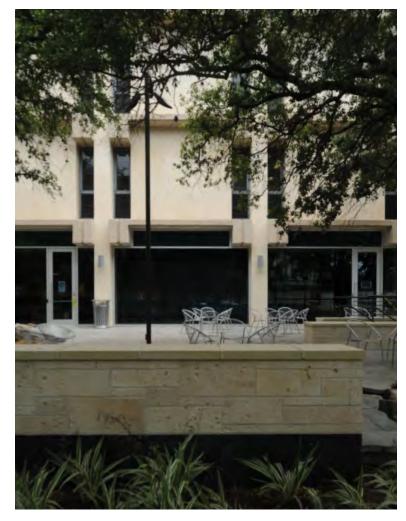


When Flawn Academic Center was inserted into the West Mall in the 1960s, it significantly increased the liveliness of that important campus space. By concentrating active, informal study and gathering spaces on the ground and keeping them open and visible to the mall, the life of the campus became more palpable and engaging.



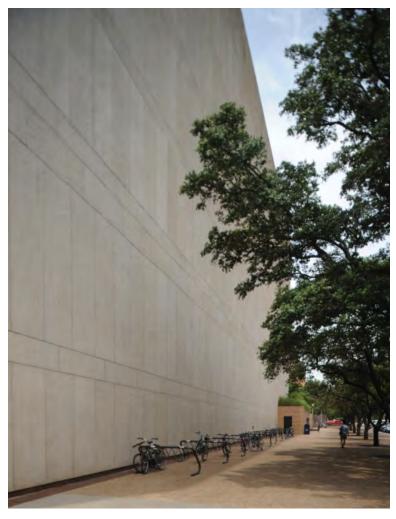
The Hackerman building's outdoor study porch adds life to the adjacent public space, even in a laboratory building that might otherwise have had a deadening effect on the streetscape.







In 2012, the 40-year-old Geological Sciences Building was converted from closed, blank walls on the ground floor to generous glass openings that connect a student activity and exhibit area indoors with a shady patio outdoors. This transformation has had a very positive impact on the interactive feeling of the East Mall.



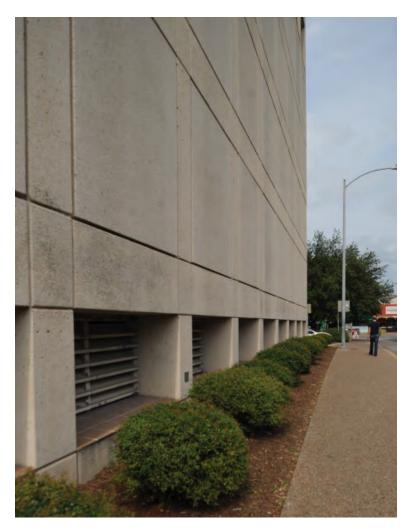
Some of the potentially mostinteractive places on the campus are greatly constrained by adjacent buildings that turn stark, bleak walls to the public space. The east wall of Perry Castañeda Library facing Speedway is a harsh case in point.





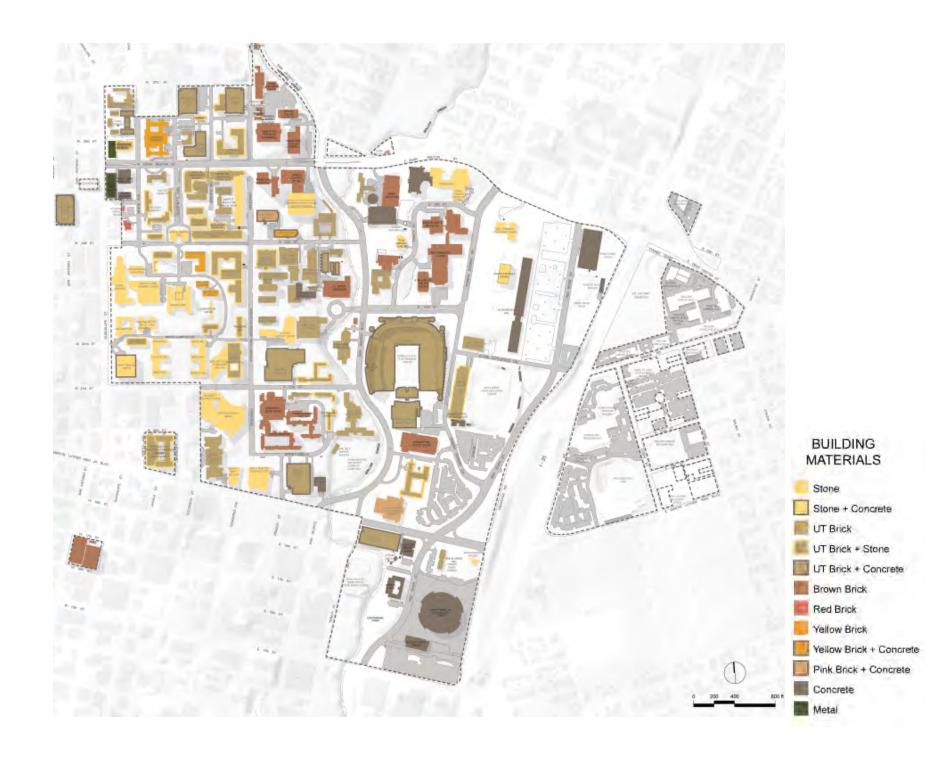


Though situated so close to Speedway, the Moffett Molecular Biology Building does not open the base of the building to the parade of passers-by. The walkway is compressed at both the street and the building face, with a massive retaining wall in between—discouraging positive social interactions between the public space and the building itself.



Efforts to humanize Dean Keeton Street and give it a friendlier pedestrian character will be deterred by the decision in the 1970s to put utility spaces on the ground level of the Communications Building and blank walls above.

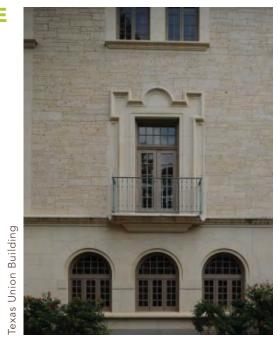




The BROAD PALETTE OF MATERIALS already employed on the campus should be used as a SOURCE BOOK FOR FUTURE MATERIAL CHOICES. The binding commonality of appropriate materials should have more to do with color, texture and character than with literal replication of what has been used before. A wide variety of stone types as well as a range of brick colors, terra cotta types, concrete finishes and metals may all be appropriate both singularly and in combination with each other.

## **STONE**

Fossiliferous Cordova Shell limestone is used above Cordova Cream smooth limestone base: both are set in a random ashlar pattern.



## **STONE**

PCL is comprised of monolithic Indiana limestone panels.



Perry-Castañeda Library

Fossiliferous
Cordova Shell
limestone panels
with pronounced
reveals are used in
conjunction with
Cordova Cream
smooth limestone
window surround.



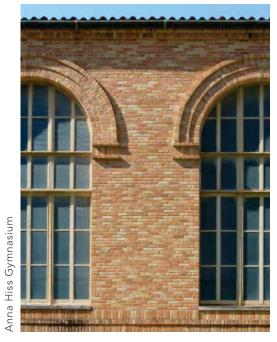
Large format fossiliferous Cordova Shell limestone panels are set within an architectural concrete frame.



**STONE** 

STONE + CONCRETE

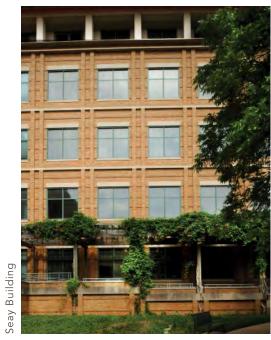
## UT BLEND BRICK



UT BLEND BRICK + STONE



Hackerman Building



Concrete basement, stairs and spandrel panel complement the UT brick.





UT BLEND BRICK

## **BROWN BRICK**



**RED BRICK** 



Littlefield Home



**YELLOW BRICK + CONCRETE** 



**YELLOW BRICK** 



## **PINK BRICK** + CONCRETE



CONCRETE



Communication Building

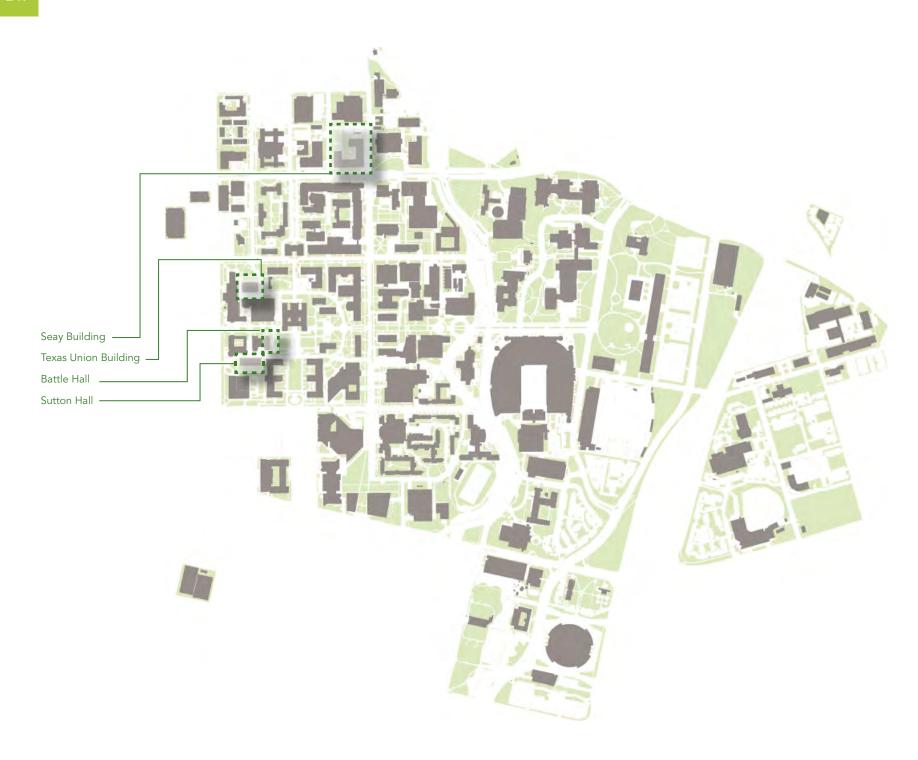








**TERRA** 

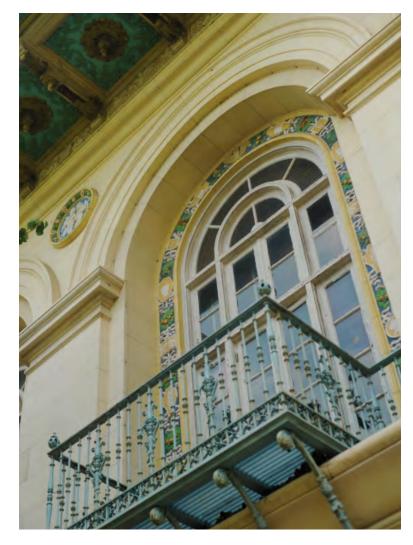


Besides the colors that result from the use of natural materials, **APPLIED COLOR** can also be used as a means to animate campus buildings. In the absence of applied color, the materials palette of the campus can sometimes produce bland, dull buildings. Color can be used to emphasize important functional elements like doorways and to give interest to otherwise often neglected surfaces like soffits.

## **EXAMPLES**

- Battle Hall
- Seay Building
- Sutton Hall
- V

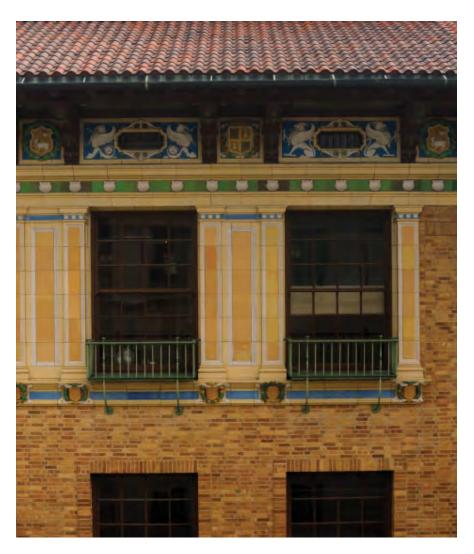
Texas Union Building



Battle Hall is greatly enriched by the generous use of strong color on doors, metalwork, window surrounds, ornament and soffits. Without this color, the palette of the building would be far less dynamic and beautiful.



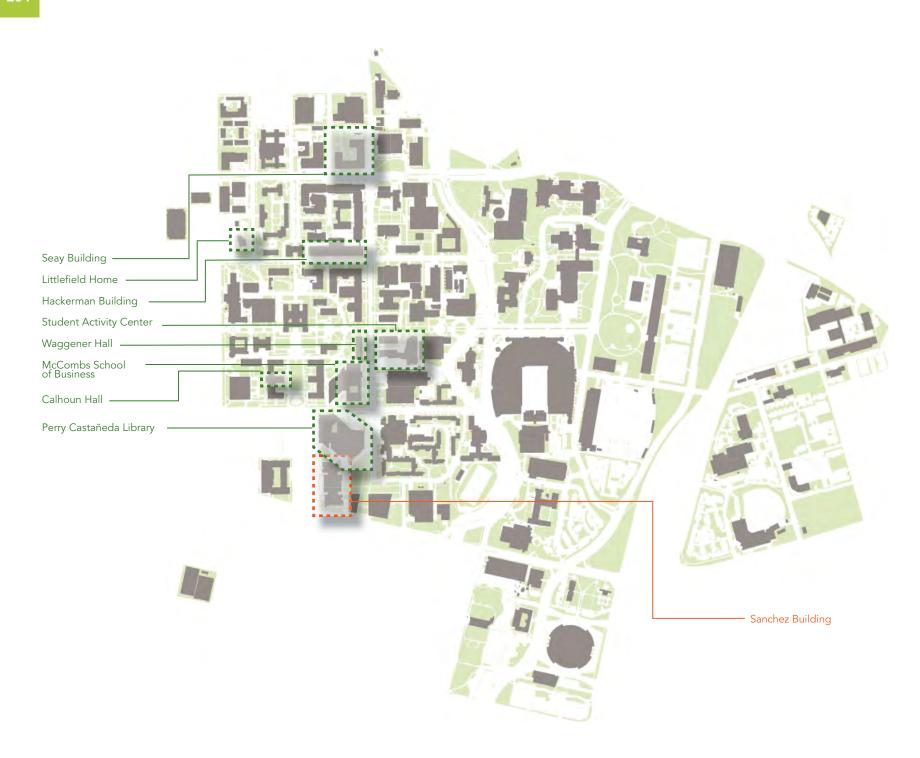
Strong color is used on the soffit of the Seay Building where it brightens an otherwise shadowy area and is also protected from the bleaching effect by the harsh Texas sun.



Even with the prominent color and texture in the brick and roof tile of Sutton Hall, Cass Gilbert chose to use strong applied color as well. Far from being trendy or dated as color is sometimes feared to be, the bright ochres, blues, greens and yellows have kept the building lively and full of interest for almost a century.



The bright orange doorway of the Texas Union emphasizes, even from a long distance away, where this important functional element is located. The use of strong color adds an appropriate, welcoming and upbeat feeling to this recreational building.



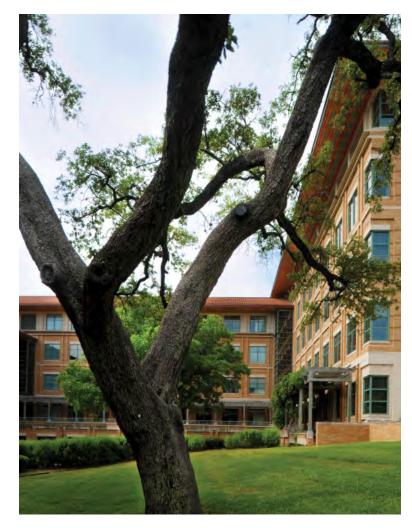
SUN and provide relieving shade in the hot Texas climate. Both in terms of massing and articulation of buildings forms, CLIMATE RESPONSE SHOULD BE A STRONG DETERMINATE OF ARCHITECTURAL FORM. Building and open space orientation should take advantage of solar angles and prevailing breezes. Creating courtyards, loggias, trellises and other shady outdoor spaces contribute greatly to thermal comfort on the campus, especially in the summer. Providing overhangs, sunshades and deeply recessed openings reduces heat gain and creates lively animation of facades when lit by the strong Texas sun.

## **EXAMPLES**

- Seay Building
- McCombs School of Business
- Calhoun Hall

- Littlefield Home
- ★ Hackerman Building
- Perry Castañeda Library

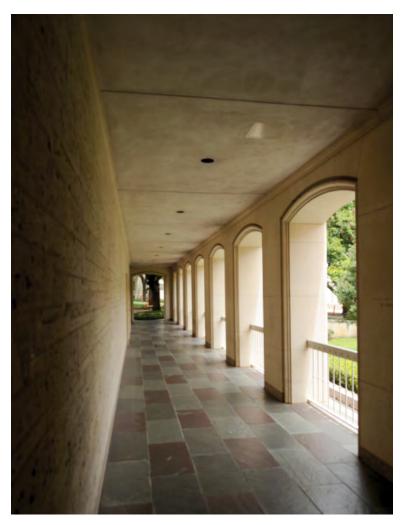
- Student Activity Center
- Waggener Hall
- Sanchez Building



The Seay Building combines deep shade of preserved trees, shadows cast by courtyard configuration, deep eaves and a loggia on the lower floor to create a climatically responsive building.



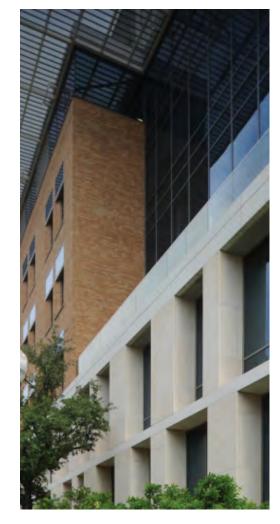
Deep eaves in the Business School allow for larger expanses of glass on the top floor with good protection from solar heat gain.



The loggia in Calhoun Hall provides a shady route between two important public spaces while also giving a cool, pleasant place in which to wait outside a large lecture hall.



The architectural character of the Littlefield Home is drawn significantly from porches on the south and east faces. They protect windows from direct heat gain and provide useful outdoor spaces oriented to prevailing southeast breezes.



Larger scale buildings can combine a variety of shading strategies to both block the sun and break up long facades. Here, the Hackerman Building employs a deep eave, recessed windows and an inset porch; all of which serve to activate the street and shade the building.



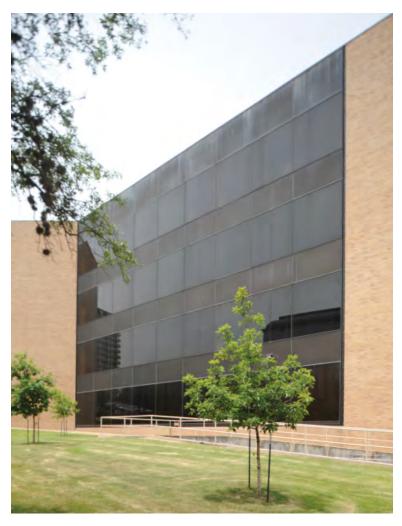
Deeply recessed windows help shield the Perry Castañeda Library from glare and direct sunlight. The vertical fins are angled in order to provide maximum shading efficiency.



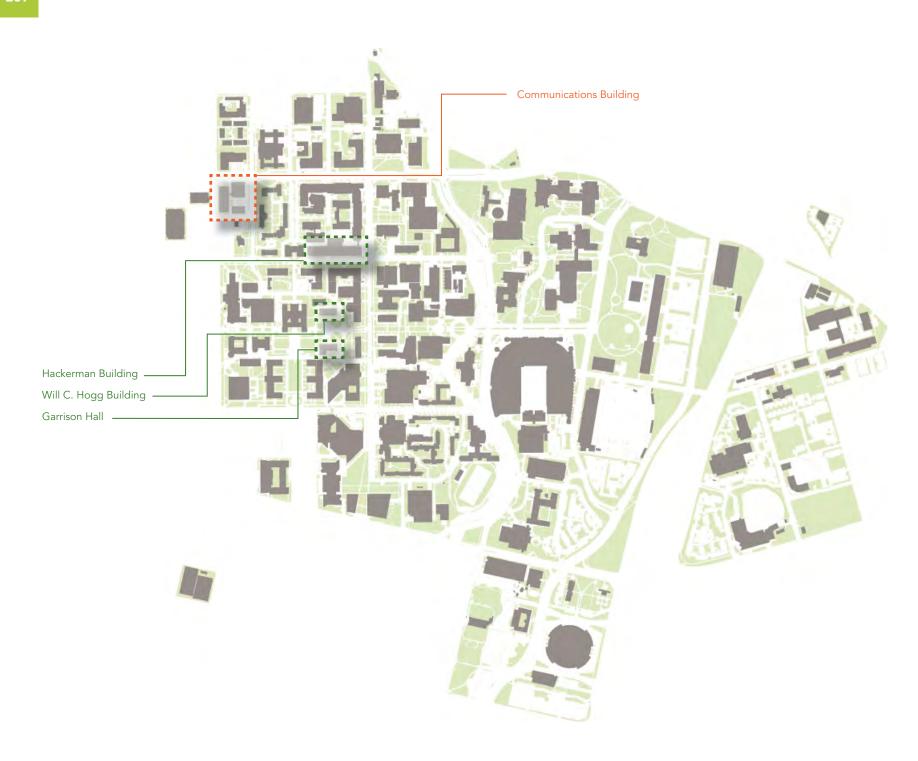
Projecting shading elements, such as these on the Student Activity Center, can provide shade as well as visual interest and texture.



The attic treatment of the top floor and strongly articulated brackets in Waggener Hall demonstrate how a thermal device like the cantilevered overhang can be a strong determinate of architectural form.



Even though it is heavily tinted, the large, unprotected glass on the south face of the Sanchez Building offers a poor climate response, both in terms of energy performance and architectural expression.



DURABILITY, PERFORMANCE AND LONG-TERM
SUSTAINABILITY should drive architectural character significantly.
With a very few exceptions, buildings at UT should be BUILT TO LAST A
HALF-CENTURY OR LONGER. (More than forty campus buildings are
already older than that.) Adaptive re-use over time should be a clear expectation.
Materials and construction methods should emphasize local and SUSTAINABLY
SOURCED MATERIALS AND RECYCLED MATERIALS as well
as long-lived assemblies that will require MINIMUM MAINTENANCE and
investment over time.

## **EXAMPLES**

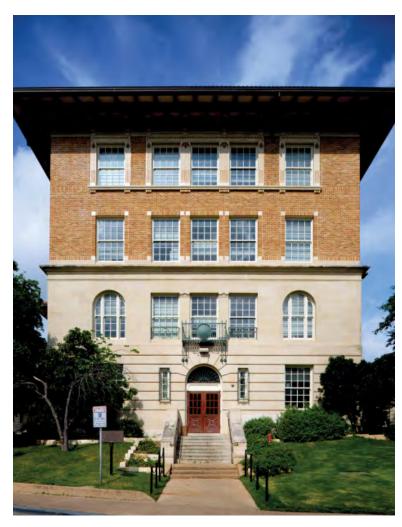
- Will C. Hogg Building
- Hackerman Building
- Garrison Hall
- Communications Building



Like much of the Forty Acres, the Will C. Hogg Building wisely employs a limestone base for durability and a sense of grandeur in the public sphere. Above, smaller scale brickwork easily and economically accommodates a greater number of smaller-scale openings



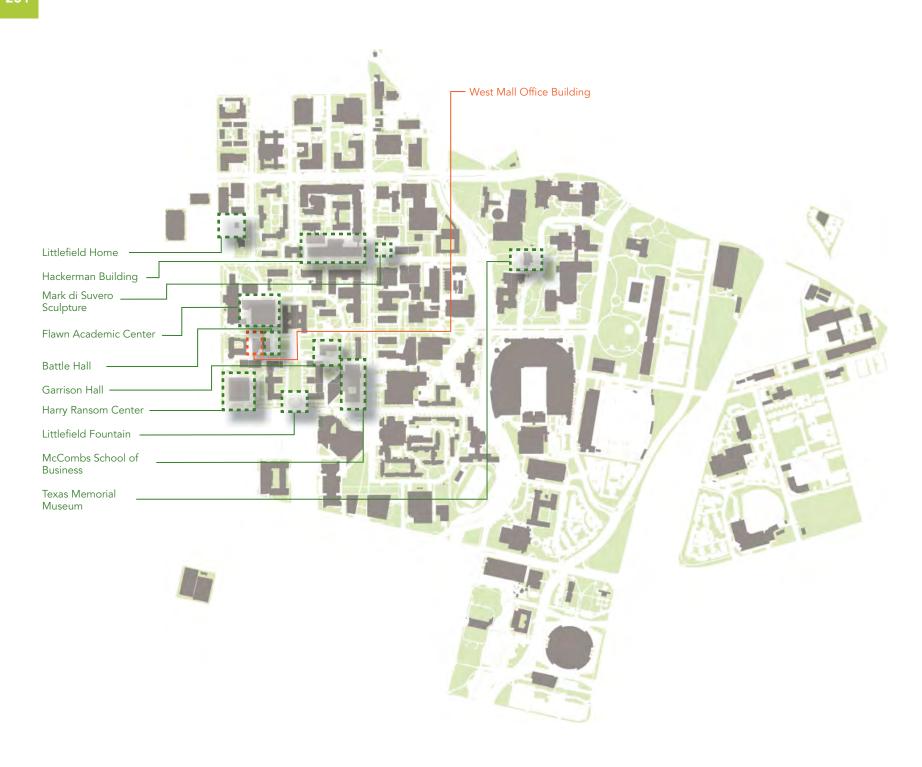
Seventy-plus years after the construction of the Hogg Building, the Hackerman Building uses the same fundamental strategy of a limestone base and brick top, yet the scale of the openings and the methods of construction accurately reflect the era in which it was built.



Garrison Hall did not have a major renovation from its time of construction in 1926 until its significant refresh in 2008. Even at that point, most of its exterior materials required only minor repair.



In order to save \$150,000 when the Communications
Building was designed in the early 1970s, the planned
copper skin of the building was changed to Cor-Ten steel.
Only two decades later, the failing skin had to be replaced at
a cost of three million dollars; twenty-seven times the original
cost "savings."



GOOD VALUE AND PRACTICALITY in terms of contemporary construction practices should be significant DETERMINATES OF ARCHITECTURAL CHARACTER. The university should not be spending its resources on superficial trappings of style that defy economic good sense. The architectural character of new buildings on the campus should depict the university as a PROGRESSIVE AND FUTURE-ORIENTED INSTITUTION. Tradition has its place, but should not overpower an authentic representation of the university's role as a place for creativity and innovation. Incorporation of art as an integral part of the architectural environment should be an important part of achieving this goal.



Although the historic Littlefield Home from the 1890s does not look like any of the other buildings on the campus, it is a valuable artifact of its era and should be preserved.



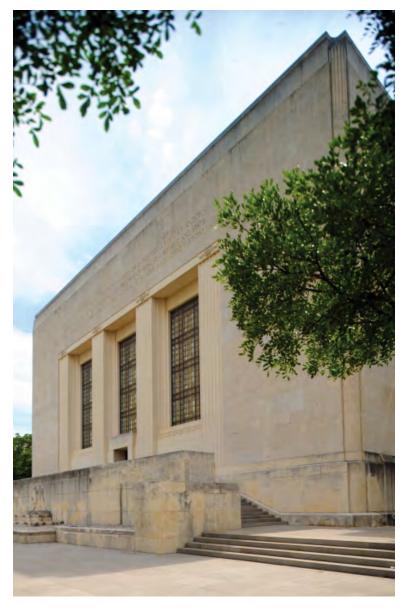
Battle Hall, completed in 1910 was a very progressive building of its era. Its architect, Cass Gilbert, was an innovator who built the tallest building in the world at the time.



As a World War I memorial, the Littlefield Fountain is firmly rooted in the time in which it was conceived in 1919.



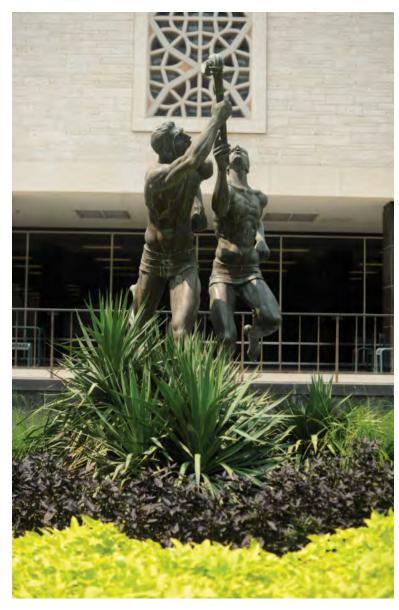
Garrison Hall of 1926 was innovative in its use of Texas emblems (longhorns, cacti, bluebonnets, lone stars) rather than standard classical motifs which had dominated earlier buildings on campus.



Paul Cret's Texas Memorial Museum of 1936 departed from the character of his earlier buildings on the campus. Its flat roof, clean lines, reduced ornament and generous use of glass block all recall the progressive Art Deco style of its era.



McCombs School of Business of 1950s was the first modern building to be built on the Forty Acres. Although it was very progressive in its era, it also maintained materials, scale and compositions that tied it to its surroundings.



The Charles Umlauf sculpture in front of Flawn Academic Center is an excellent representative of progressive art in the early 1960s when the building was built and the piece was dedicated.



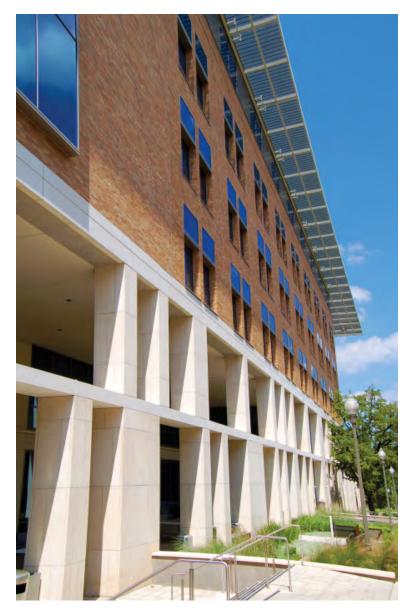
The West Mall Office Building is a telling example of how trying to replicate a historic style in an era when it is no longer practical can go wrong. Possession of the general trappings of earlier campus buildings without the craft and detail of earlier periods makes this 1960s building bland and lifeless.



When designed appropriately, progressive campus buildings of very different eras (like Sutton Hall of 1918 and the Harry Ransom Center of 1972 shown here) can create a dynamic yet compatible overall campus environment.



The Mark di Suvero sculpture dedicated in 2008 is another piece of public art on the campus that represents the university's role as a place for creativity and innovation.



The Hackerman building of 2010 extends the tradition of building that are progressive in their era but also respectful of campus context.

## COMPLIANCE WITH DESIGN GUIDELINES

In order to assure that there is consistent and reliable conformance to these Design Guidelines, a Campus Master Plan Committee will be established that has the strong professional and institutional knowledge required to evaluate compliance of proposed building designs for the campus. The committee will be appointed by the President and will consist of the Dean of the School of Architecture, two registered architects and one registered landscape architect chosen from the faculty of the School of Architecture, the Chair of the Faculty Building Advisory Committee (or their designee from that committee), the Director of the Office of Campus Planning & Facilities Management, and the Vice President for University Operations.

All building projects proposed for the campus will be presented to the committee at three different points:

- 1. at the earliest Pre-schematic stage
- 2. at the end of Schematic Design
- 3. at the end of Design Development.

Additional presentations may be required if substantial changes are made at a later stage. At least one member of the Campus Master Plan Committee will be assigned to the Ad Hoc Building Committee for each campus building and will participate in the architect selection process. A primary consideration for selection of architects for campus buildings should be their demonstrated ability to work within the Master Plan and these Design Guildelines to produce a building that will be an asset to the campus as a whole as well as to the departments or programs occupying the building.



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## HISTORIC RESOURCE SURVEY

## INTRODUCTION

he purpose of The University of Texas at Austin Historic Resource Survey is to identify historic structures that are valued by the university because of their architectural and cultural significance, character-defining historic exterior features, and their broader contribution to the campus master plan. This information will assist the university in understanding which structures are exceptional and should be preserved and restored, whether construction of an addition would be appropriate, or whether a resource is not considered to have any architectural or cultural significance to the UT Austin campus.

## **METHODOLOGY**

The methodology of the historic resource survey included the following elements:

- Identifying historic structures that were constructed prior to 1970 and collecting basic historic data on those structures
- Defining historic resource categories for architectural structures on campus
- Making a determination on the level of historical significance each structure has within the context of the main campus and place each one in a historic resource category
- Understanding which structures are exceptional
- Understanding which structures are not considered to have significance and where new construction is appropriate
- Mapping data from the survey

## **PURPOSE AND USE**

his survey, which is included as an Appendix, should be considered as a guide in the initial understanding of each building's historical significance and its value to the university in terms of exterior architecture and urban context. The historic resources assessment should be thought of as ongoing throughout the life of this master plan. Once a building is considered for restoration, renovation, adaptive use, demolition, or construction of an addition, it should be further studied and weighed as a historic or architectural asset to the university.

## **FACTORS FOR FURTHER STUDY**

Factors to be further studied include items such as:

- Adaptability for the intended use
- Significance of historic interiors
- Whether additions are appropriate and which forms and materials to consider for additions
- Condition of existing building systems and materials
- Cost effectiveness to integrate new MEP systems into the structure, comply with ADA and Building Code, or meet requirements for structural integrity for the intended use or code requirements
- Urban context, sculptures, water features, and historic landscape features and materials that contribute to the integrity of the building and its site
- Ability to make the building more energy efficient

## CONSIDERATION OF INTERIORS

Buildings on campus have interior spaces that contribute to their architectural identities and character, and these spaces and finishes vary in their level of historic significance. Many of the highly decorative historic spaces, character-defining features, finishes, forms, and materials are visible, while others are concealed, have been modified, or in some cases removed or replaced with substitute materials. Study and historic research on the interiors of these buildings was not included as part of this survey. Future research and study of the exceptional, primary, and secondary buildings should be undertaken by preservation professionals during the early planning stages of a project to gain an understanding of the historic interiors.

## ADDITIONAL CONSIDERATIONS

Historic landscapes, water features, and sculptures also contribute to the urban fabric and these elements were not included as part of this study. Further research should be undertaken on these elements as part of a comprehensive planning study for each building.

# SUSTAINABLE ENERCY EUNDING FRAMEWORK

# CREATING A SUSTAINABLE ENERGY FUNDING FRAMEWORK AT THE UNIVERSITY OF TEXAS AT AUSTIN

s the university undertakes an in-depth review and analysis of its planning options to meet future growth, energy supply and its utilization become critical components of an overall successful master plan. The university adopted its Natural Resource Management and Conservation Plan (the "Resource Plan") on February 16, 2011. The Resource Plan sets forth certain goals with respect to reliability, efficiency, and sustainability; strategies for reaching resource goals; and general funding guidelines. The consultant team was asked to discuss broad elements and issues that should be considered in the context of a holistic, sustainable funding framework. Moreover, the purpose of the framework is not only to accelerate investment in energy conservation, but more generally to encourage deployment of capital and human resources in an optimal manner to meet Resource Plan goals with respect to energy. This cannot be done in isolation from other UT Austin goals and candidate uses of resources. Therefore, a part of the recommended sustainable funding framework for energy is the integration with Decision Support Tools, which are being developed as part of the master plan and have a much broader scope than just energy.

The Sustainable Energy Funding Framework report is attached in its entirety in the Appendix. It provides an assessment of how the university is today funding its energy investments, whether such funding approaches are consistent with meeting the goals as set forth in the Resource Plan, and what actions the university may choose to take to insure that funding is complete as required in meeting such goals. The specific energy goals articulated in the Resource Plan are as follows:

## SUPPLY

- Maintain or improve overall plant efficiency (8000 Btu per kWh) and reliability
- Avoid capital investment where possible
- 5% of all energy consumed to be produced by renewable sources

## **DEMAND**

 Reduce energy consumption at the building level by an average of twenty percent per square foot by August 31, 2020 using 2009 as the base year An initial assessment of traditional funding and spending in recent years indicated that a significant funding gap existed between anticipated budget levels of the Utilities & Energy Management (UEM) and Facilities Services (FS), the two organizations within the Campus Planning and Facility Management (CPFM) group that will be responsible for overseeing investments in energy related assets, and the level of budget likely required to meet the Resource Plan goals. It was noted that UEM has been able to fund miscellaneous plant replacement and upgrades out of its maintenance and operation/repair and replacement (M&O/R&R) account and major projects with long-term UT System debt. But UEM also has had to cover the cost of incremental staff to install and maintain building level meters out of funds traditionally reserved for maintenance and operation. FS has had very limited success in expanding staffing within its operating budget. With a target of twenty percent energy reduction at the building level set for 2020, it was obvious that an alternative approach to funding was required, one that would not only underwrite both manpower and capital necessary to satisfactorily reach the goals as set forth in the Resource Plan but also be sustainable to ensure such investments continue over a longer time horizon.

Working with CPFM staff, the consultant team initiated a process whereby options were explored that could be used to address the funding gap. CPFM staff indicated a preference for a self-directed mechanism that could be used to invest in energy-related projects. Multiple examples of such mechanisms currently in use at other universities were discussed, along with their specific purposes and applications. Additionally, an assessment was undertaken regarding the current allocation of energy costs among the university's clients and possible options for pricing of energy services that would enhance the linkage between energy services rendered and their value to the customer.

The outcome of the assessment was a Campus Energy Conservation Framework. The framework was based upon eight pillars in support of the overarching resource goals of reliability, efficiency, and sustainability for energy and water. These eight pillars were;

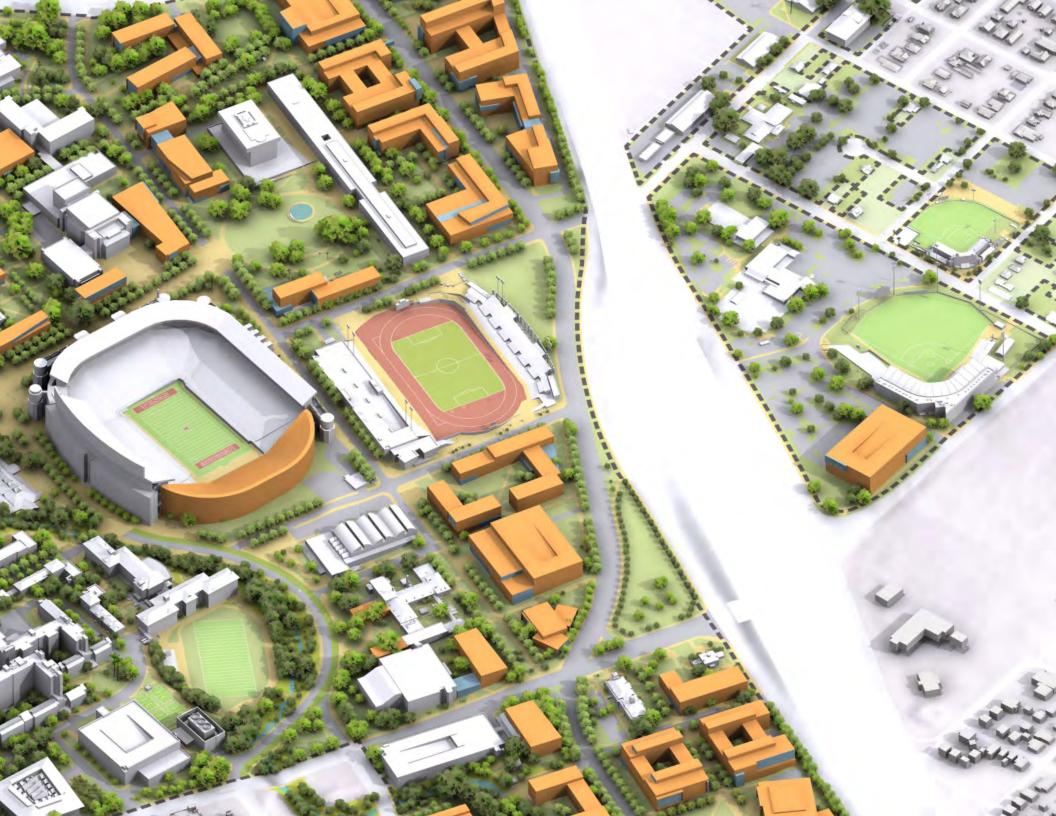
1. Encourage and facilitate decision quality and optimization at the CPFM portfolio level

- 2. Align the Utilities & Energy Management budget and accounting to the maximum extent possible with the total revenue requirement for utilities enterprise supply
- 3. Enlarge the scope of the Utilities & Energy Management revenue requirement, budget, and accounting to explicitly include, communicate, and recover a significant portion of the demand side energy efficiency and renewable energy costs on utility bills by incorporating a reinvestment recovery cost supplement on utility billings
- 4. Expand and reinforce the use of traditional funding sources
- 5. Implement a replenishing self-directed fund to supplement (not displace) traditional funding sources
- 6. Enable the reinvestment of cost savings until institutional objectives expressed in the Resource Plan are met
- 7. Take advantage of external funding opportunities
- 8. Build internal capabilities to maintain resource goals as a priority and sustain performance.

Critical to the success of this framework is the creation of a self-directed, sustainable energy fund, referred to as the UT Acceleration Fund (UTAF). This fund would provide a material, supplemental, and complementary source of funding to enable UT Austin to meet the cost of its resource goals effectively and on schedule. Additionally, it is also suggested that an Energy Resource Management Supplement be established. In order that the UTAF be sustainable, it is suggested that CPFM preserve the lion's share of incremental savings that flow through the UEM budget to reinvest in Resource Plan goals. One mechanism to accomplish this could be to deploy savings measured in the UEM fuel and other traditional accounts through the accounts related to the Energy Resource Management Surcharge.

The implementation of placing the Energy Resource Management Supplement on the campus utility invoices is one of the key elements of the overall Campus Energy Conservation Framework.





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