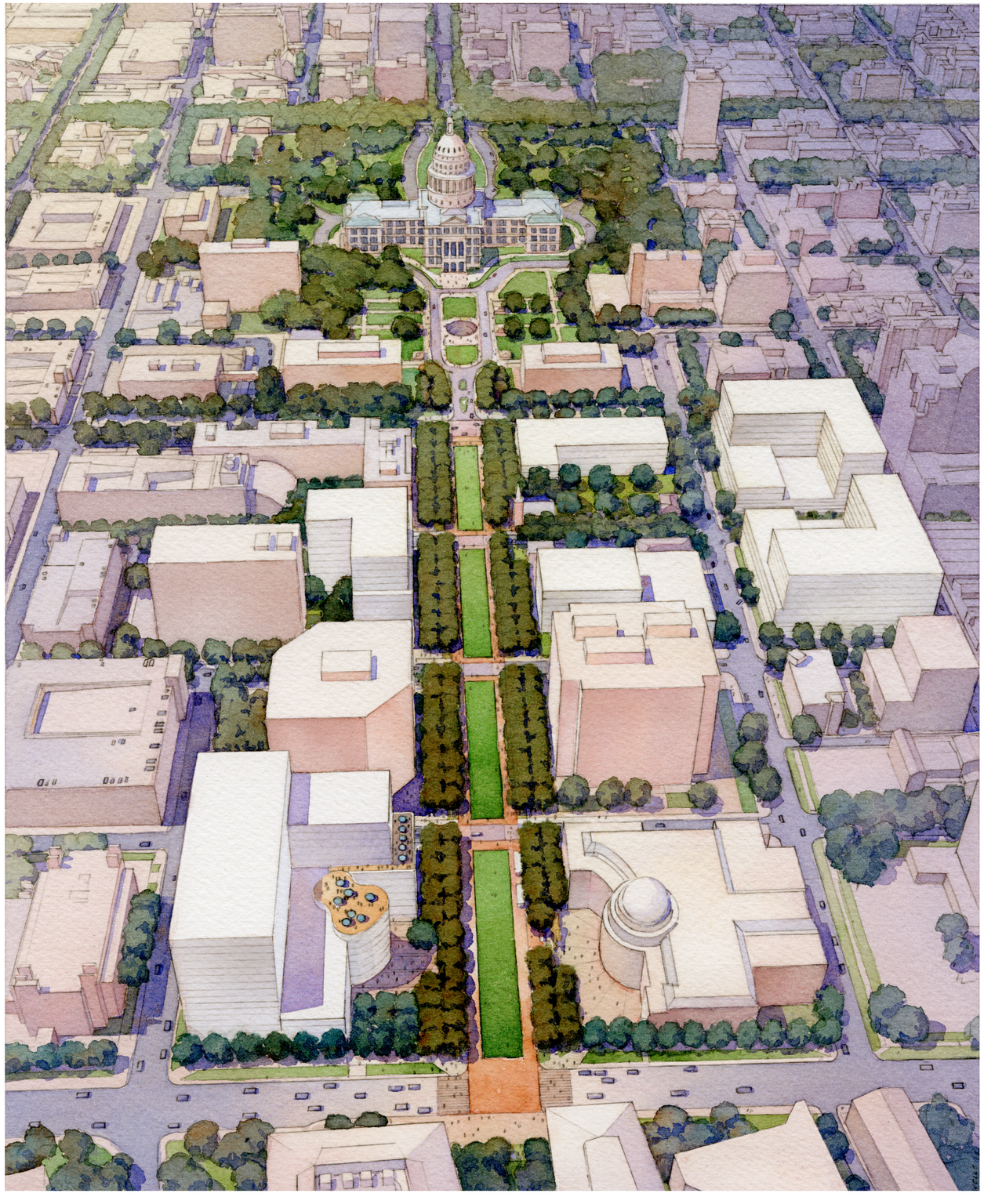
2016
Texas
Capitol Complex
Master Plan



As mandated by Texas Government Code, Section 2166.105, the Texas Facilities Commission has produced the 2016 Texas Capitol Complex Master Plan which addresses the strategic vision and long-term goals for the Capitol Complex and the extent to which Texas is able to satisfy its space needs through use of state-owned property in the complex. The Texas Capitol Complex Master Plan provides detailed, site-specific proposals for use of the property to meet the space needs of state agencies and for public sector purposes; recommendations for building design guidelines; recommendations for infrastructure needs; analysis and recommendations for financing options; time frames for implementation of the plan; alternative options for meeting state agency space needs outside the Capitol Complex; and other information relevant to the Capitol Complex.

The Texas Facilities Commission acknowledges the participation and contributions of the Partnership Advisory Commission, Texas General Land Office, Texas State Preservation Board, Texas Historical Commission, and other relevant interested parties, to ensure that the Texas Capitol Complex Master Plan comprehensively addresses the current and ongoing space needs of state government.

Cover Image: Conceptual aerial rendering of the Texas Mall and Phase 1-3 development. Courtesy of Timothy Wells.
Introductory Chapter Image: Conceptual diagram of potential future development in the Capitol Complex.

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TEXAS FACILITIES COMMISSION
Harvey Hilderbran, Executive Director
Peter Maass, Deputy Executive Director, Planning and Real Estate Management
John Raff, Deputy Executive Director, Facilities Design and Construction

CONSULTANTS

LEAD
Page, Austin, TX
www.pagethink.com

MASTER PLANNING
Sasaki Associates, Inc., Watertown, MA
www.sasaki.com

ECONOMIC ANALYSIS
HR&A Advisors, Inc., Washington DC
www.hraadvisors.com

COST ESTIMATING
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www.facilitiesresourceinc.com

TRANSPORTATION
Deshazo Group, Dallas, TX
www.deshazotang.com

ENGINEERING
Jose I. Guerra, Inc., Austin, TX
www.guerra.com

Courtesy of Timothy Wells

Conceptual rendering of the Texas Mall.

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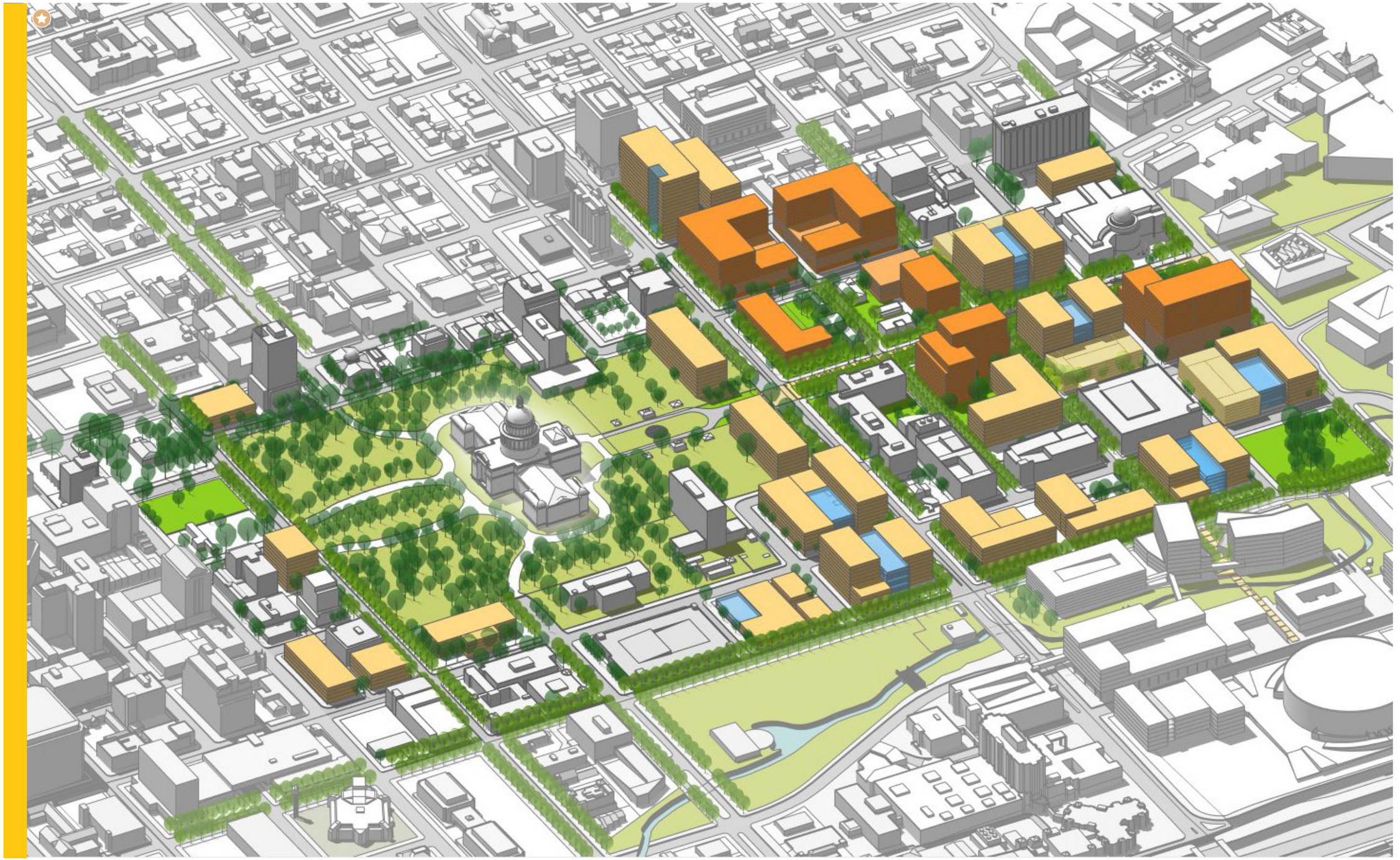
The star icon indicates a graphic or text section that has been revised as part of the 2018 Texas Capitol Complex Master Plan Update. Refer to the equivalent section within that document for new information.



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Introduction

1 Introduction

The 83rd Texas Legislature directed the Texas Facilities Commission to prepare a Capitol Complex Master Plan in collaboration with the Partnership Advisory Commission, Texas General Land Office, Texas State Preservation Board, and Texas Historical Commission. The 2016 Texas Capitol Complex Master Plan is the result of this collaboration and addresses the statutory requirements enumerated in Texas Government Code Section 2166.105. This document lays out a strategic vision, identifies long-term goals, and outlines an implementation strategy for the construction of new state-owned office buildings and grounds within the Capitol Complex.

Since its inception as the Board of Control, the Texas Facilities Commission has been responsible for strategic facility planning. A consistent theme in every planning report issued by the agency has reflected legislative mandates directing the acquisition of real property surrounding the twenty-five acres of the original Capitol grounds to serve long-term needs of the state government. In 1941, the Texas Legislature passed a joint resolution stating that “meeting space needs for state government by constructing, renting or purchasing facilities in widely separated parts of Austin was tending to lower the efficiency of state government.” The legislature therefore created a “Capitol Planning Commission” to plan for the expansion of a complex from the historic Capitol building northward “between Colorado and Brazos” to what was then 19th Street.

In 1955, the Texas Legislature directed that a master plan be drafted and ordered the construction of two new state office buildings. These mid-twentieth century legislative actions served as the catalyst for the eventual dominance of state facilities in what is now defined by statute as the Capitol Complex, which consists of property owned by or under control of the state, bounded on the north by Martin Luther King Jr. Boulevard, on the east by Trinity Street, on the south by 10th Street, and on the west by Lavaca Street. Outlying buildings include the William P. Clements Building located at 300 West 15th Street and the Ernest O. Thompson Building located at 920 Colorado Street.

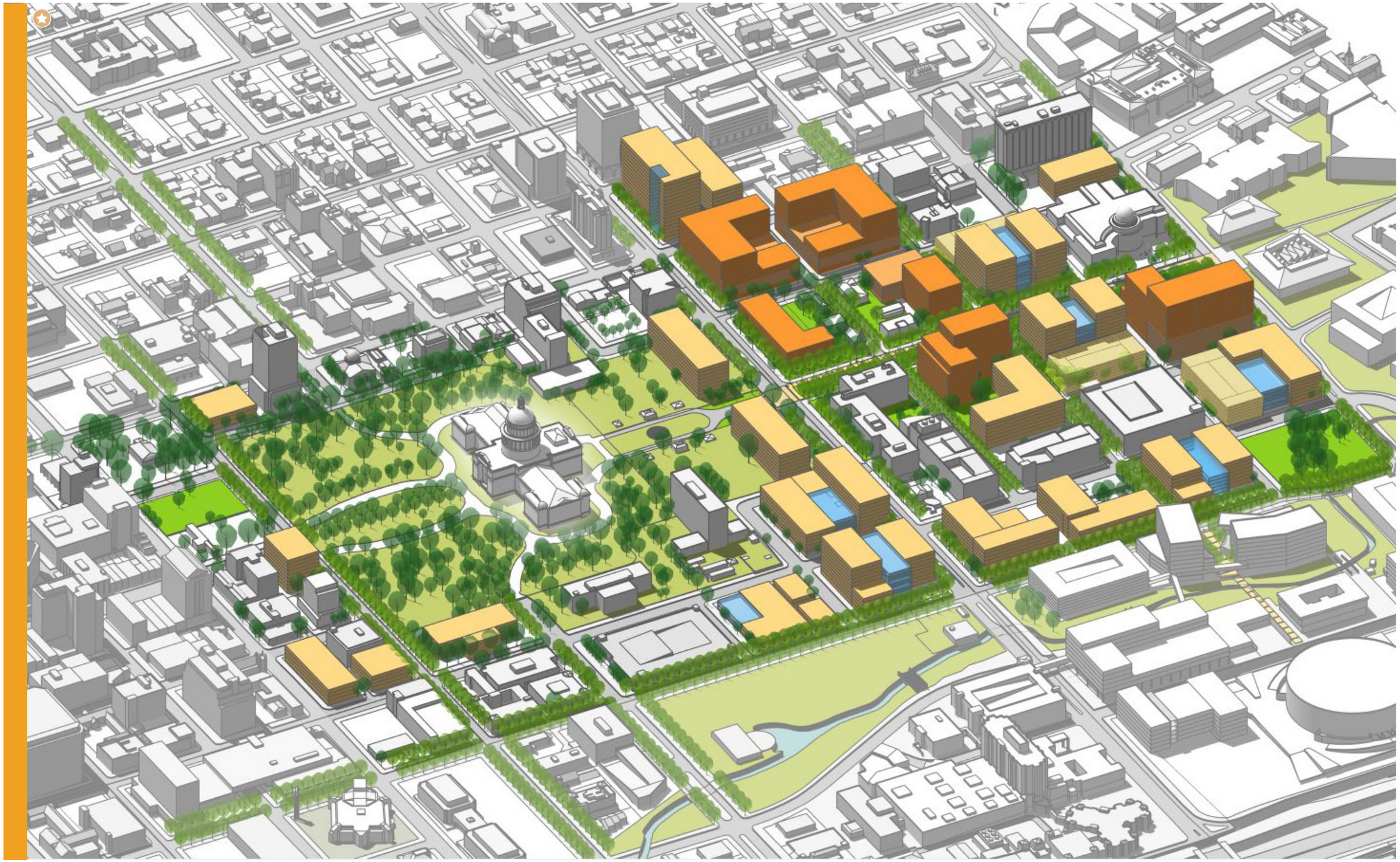
In keeping with the foresight and planning that began in the 1940s, Texas Government Code Section 2167.002 requires that preference be given to locating state agencies in state-owned buildings rather than in leased commercial office space. However, all existing state-owned buildings in Austin are at or over capacity and in many instances, the state has leased commercial office space for thirty years or more to meet the needs of state agencies. Most of this leased space is located in the Austin area where the state currently leases 1.2 million square feet of space. In the last decade, without state-owned space as an alternative, the state experienced a 250% increase in lease expenditures. With the consistent growth of the Austin real-estate market, these costs are expected to continue to increase.

To address the statutory mandate to give preference to locating agencies in state-owned buildings and to mitigate the impact of future cost increases, development of this master plan addresses a multi-phase program to construct new buildings in the Capitol Complex. Required elements of the plan include:

- An overview and summary of previous plans.
- A strategic vision and long-term goals.
- Analysis of state property and space needs.
- Site-specific proposals.
- Analysis of and recommendations for building design guidelines, infrastructure needs, and financing options.
- Time frames for implementation of plan components.

By pursuing a multi-phase plan, the state can eliminate extensive reliance on commercial lease space, consolidate widely dispersed state agencies, and create greater operational and fiscal efficiency in state government. As a result of appropriations made by the 84th Texas Legislature, the North Congress Avenue corridor is the area of immediate focus of the multi-phase program addressed in this master plan.

As established by statute, the Texas Capitol Complex Master Plan is a living document and will be updated every two years.



2

Executive Summary

2 Executive Summary

Guiding the development of the master plan are the following goals and design principles for the Capitol Complex, which were established through stakeholder meetings and Partnership Advisory Commission input:

- Provide state office space and support facilities for short-term and long-term needs.
- Create a destination that celebrates the Texas State Capitol and is symbolic of the great State of Texas.
- Create civic spaces, pedestrian friendly streets, and appropriately scaled environments that support human comfort.
- Establish gateways to the Capitol Complex and improve connections with surrounding districts.

DEVELOPMENT OPPORTUNITIES

Extensive analysis of the Capitol Complex identified potential sites for short-term and long-term development. These sites include surface parking lots, pre-cast parking garages that are in poor condition and will be in need of replacement, and existing buildings as they require replacement. Site capacity identified in the master plan is in compliance with the Capitol View Corridors (CVCs) and Capitol Dominance (CD) Overlay. Phase 1 focuses on surface parking lots since they provide the best opportunity for development without displacing existing office uses.

PROGRAM

Developing new office buildings in the Capitol Complex for the purpose of consolidating private market leases also represents a great opportunity to relocate staff from older spaces to modern and efficient office environments, thereby improving operational efficiencies. Visitors will also benefit from improved access to state agencies in a consolidated complex in downtown Austin. Currently, 5,000 employees in twenty-two leased properties occupying over 1.5 million gross square feet of office space are scattered over Austin. At full build-out of the master plan, the Capitol Complex has the capacity for accommodating approximately nearly 5 million square feet of new building space, more than three times the current need.

The 84th Texas Legislature has funded Phase 1 of the master plan, including approximately 1,025,000 gross square feet of new office space; this phase consolidates approximately seventy-five percent of current lease space into the Capitol Complex. Phase 1 implementation also includes 4,840 new parking spaces, three blocks of the Texas Mall landscape and associated streetscape improvements, and needed infrastructure upgrades to support the new development.

CAPITOL COMPLEX PLAN

The guiding vision for the Capitol Complex north of 15th Street is to create the Texas Mall—an expansion of the Capitol Extension open space. This idea is not new; as early as 1956 the Capitol Area Master Plan envisioned a grand Congress Mall extending to 19th Street (now Martin Luther King Jr. Boulevard). The mall will provide a gateway to the complex from the north as well as much-needed new open space for state employees, visitors, and special events; and it will define an important view corridor to the Capitol building. Congress Avenue will become a pedestrian-only tree-lined mall with lawn panels extending north of 15th Street to 18th Street. Vehicular access for these blocks will be limited to emergency and service vehicles. The lawn panels will continue from 18th Street to Martin Luther King Jr. Boulevard with travel lanes for vehicular drop-off. The Stephen F. Austin, William B. Travis, and Robert E. Johnson Buildings frame the mall, and new infill buildings along Congress Avenue will reinforce the view corridor of the Capitol.

Based on an assessment of existing building conditions and site utilization relative to site capacity, the long-term plan for the complex calls for redevelopment of selected building sites to meet state office space needs for generations to come.

South of 15th Street there is also an opportunity for increasing office space through the use of an infill site south of the Capitol grounds, east of Congress Avenue, as well as selective redevelopment of several buildings as they reach the end of their useful life.

Parking in the complex will be provided by a combination of underground parking below the Texas Mall and parking structures (above and below grade) integrated into each new building. In the future, parking for state workers and visitors will be much more conveniently located. This parking strategy will eventually replace the need for some of the parking garages located between San Jacinto Boulevard and Trinity Street, allowing this area to be redeveloped for higher and better use.

DESIGN GUIDELINES AND DESIGN REVIEW

Successful implementation of the master plan will require creating a high-quality public realm and architecturally appropriate buildings. To ensure the implementation of the master-plan vision, design guidelines for urban design, landscape architecture, and architecture are part of the master plan. The guidelines define the principles to be applied when reviewing all projects in the Capitol Complex. Proposed building designs and landscape projects will be reviewed for conformance with the guidelines by the State Preservation Board and the Joint Oversight Committee. They will be assisted by a panel of experts comprised of leaders in the disciplines of architecture and landscape architecture.

Figure 2.1
Capitol Complex Plan - Proposed Phase 1-3 Buildings

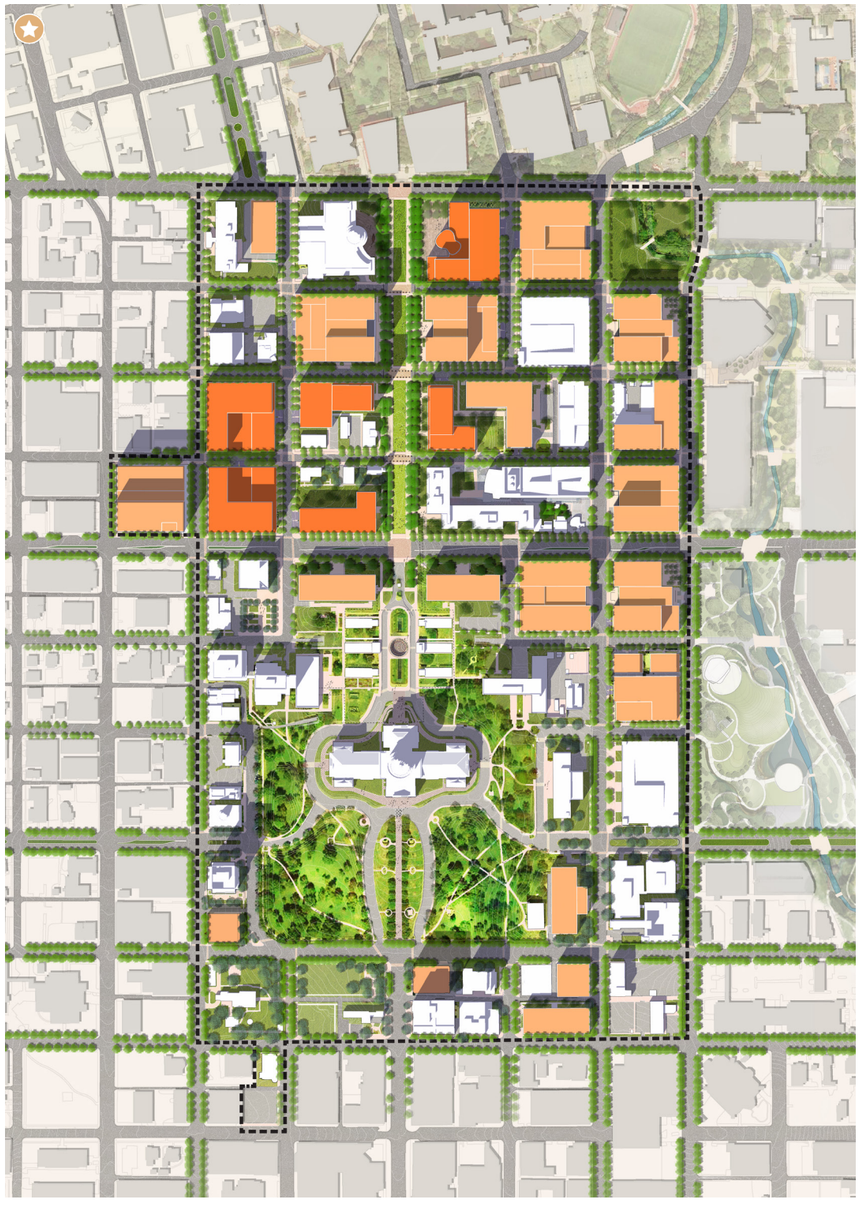
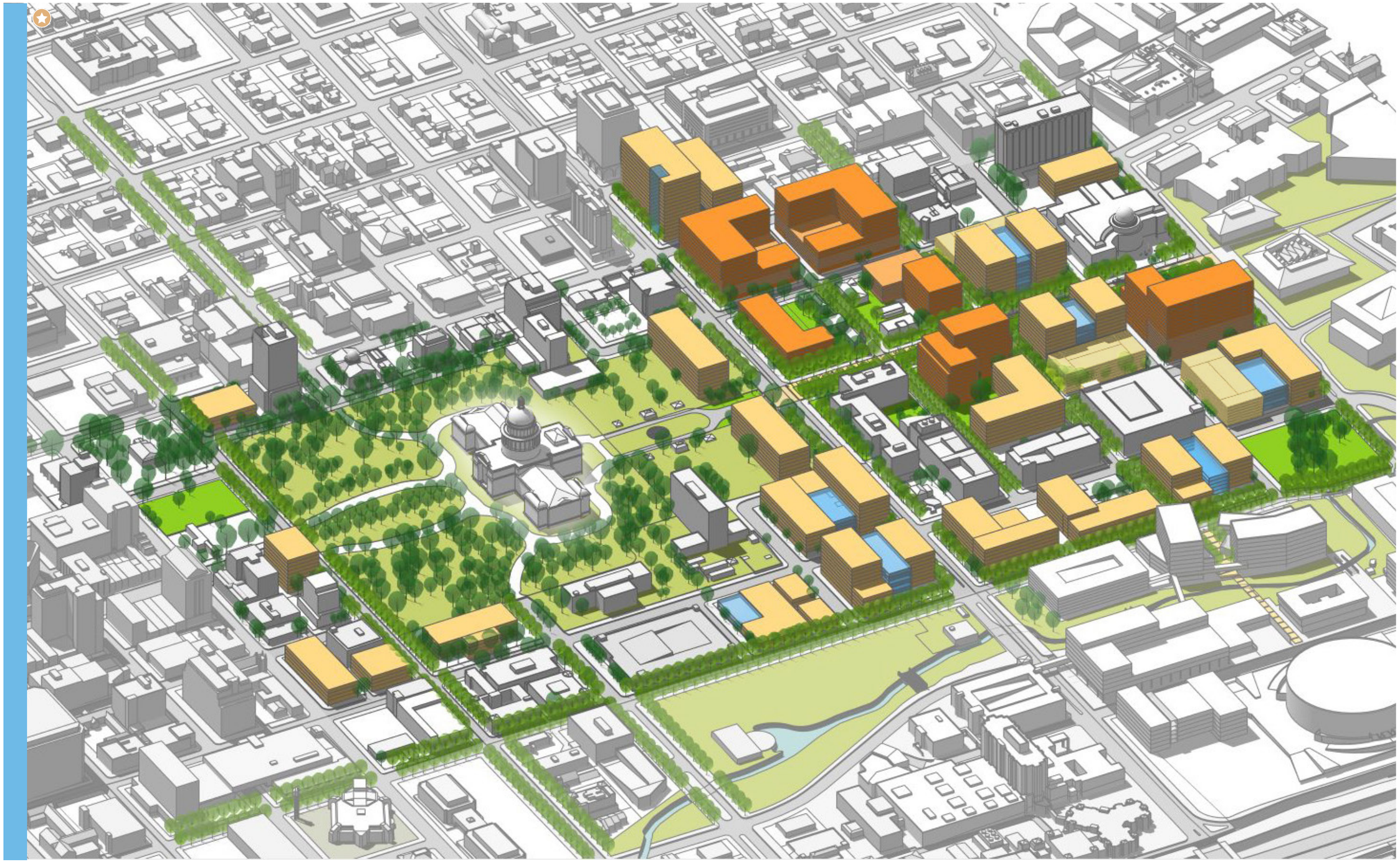


Figure 2.2
Capitol Complex Plan - Potential Future Buildings



3

Analysis and Program

3 Analysis

The analysis of the Capitol Complex examined the role of history, scale, density, land use, mobility systems, sustainability, opportunity sites, and site influences. The following is a summary of the analysis findings.

ROLE OF HISTORY

History of Planning

History shows the significance of the Capitol Complex as an integrated political center in the City of Austin since its founding. Capitol Square was envisioned with proximity to the Colorado River and embedded within the gridded city. As the city population increased after World War II, future plans for the Capitol Complex aimed to accommodate needed office space within a unified district vision that suggested a strong public realm and land acquisition toward 19th Street (now Martin Luther King Jr. Boulevard).

The following is an overview of the history of planning for the Capitol Complex from the founding of Austin in 1839 to the present day.

Established in 1839 by the Republic of Texas, the capital city of Austin was built on a 640-acre site fronting the Colorado River. Nestled between Waller Creek and Shoal Creek, the city plan was a grid bisected by Congress Avenue and extending northward from the Colorado River to “Capitol Square.” In 1839, temporary government buildings were constructed at the corner of Colorado and 8th Streets, and in 1856, a new Capitol building was built in Capitol Square along with the Governor’s Mansion.

Over one hundred years later in 1944, the 47th Texas Legislature created a Capitol Planning Commission to work with the Austin City Planning Commission on the “Capitol Plan Report” of 1944. The report noted the inefficiency of meeting state government office needs in facilities located across the city, and recommended the expansion of the Capitol grounds to the north between Colorado and Brazos Streets to what is now Martin Luther King Jr. Boulevard.

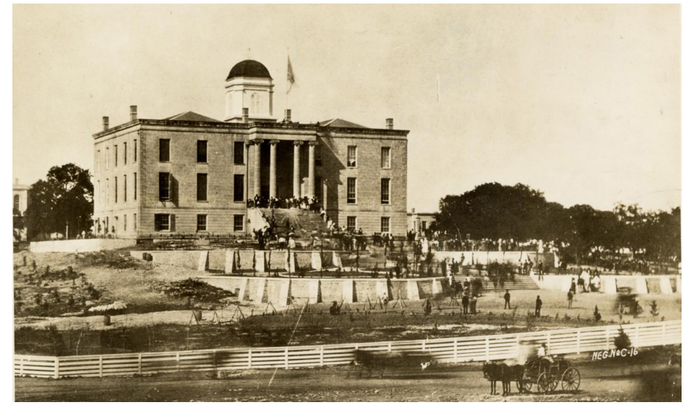
In 1956, Harold F. Wise and Associates prepared the Austin Master Plan, which included a detailed Capitol Area Master Plan. The State Building Commission defined the areas from 11th Street to 19th Street and Lavaca Street to San Jacinto Street as the Capitol Area. The 1956 Capitol Area Master Plan proposed two plans that would create a strong public realm, provide a front door to the Capitol from the north, and accommodate growth needs with land acquisition extending to 19th Street. The first plan envisioned a grand Congress Mall with underground parking, reinforced with buildings on the east and west sides. The second plan provided a narrower Congress Mall lined with new buildings and surface parking on the perimeter.

In 1963, a master plan entitled Capitol Area Master Plan and Its Development used the 1956 Capitol Area Master Plan as a framework for development. A series of modifications and additions to the plan recommended the following:

- Congress Avenue, 14th Street, and other streets north of the Capitol should be left open for use by the public.
- The visual axis between the Capitol and the University of Texas should be kept free and open by limiting the height of buildings.
- Land acquisition should proceed promptly as far as 19th Street, with vacant property to be used as parking facilities.

The next plan for the Capitol Complex was completed in 1989. The Texas Capitol Preservation and Extension Master Plan and Historic Structures Report by Joint Venture Architects, Ford Powell & Carson, and 3D/International created a framework for preservation and growth for the Capitol Complex. Key urban design concepts proposed in the plan included:

- Preserving and enhancing the view of the Capitol from the north with Congress Avenue designed as a special corridor with a landscaped center, one-way roadways, and proposed building sites.
- Creating underground connections north of 15th Street, linking the Capitol extension to other state facilities.
- Limiting the height of new buildings along Congress Avenue to 629 feet above sea level, or approximately 80 feet from grade.
- Setting built-to-lines for the face of new buildings at 105 feet from the centerline of Congress Avenue.



Old stone Capitol Building in 1853

Aerial view of the Capitol Complex in 1963 looking north to the UT tower

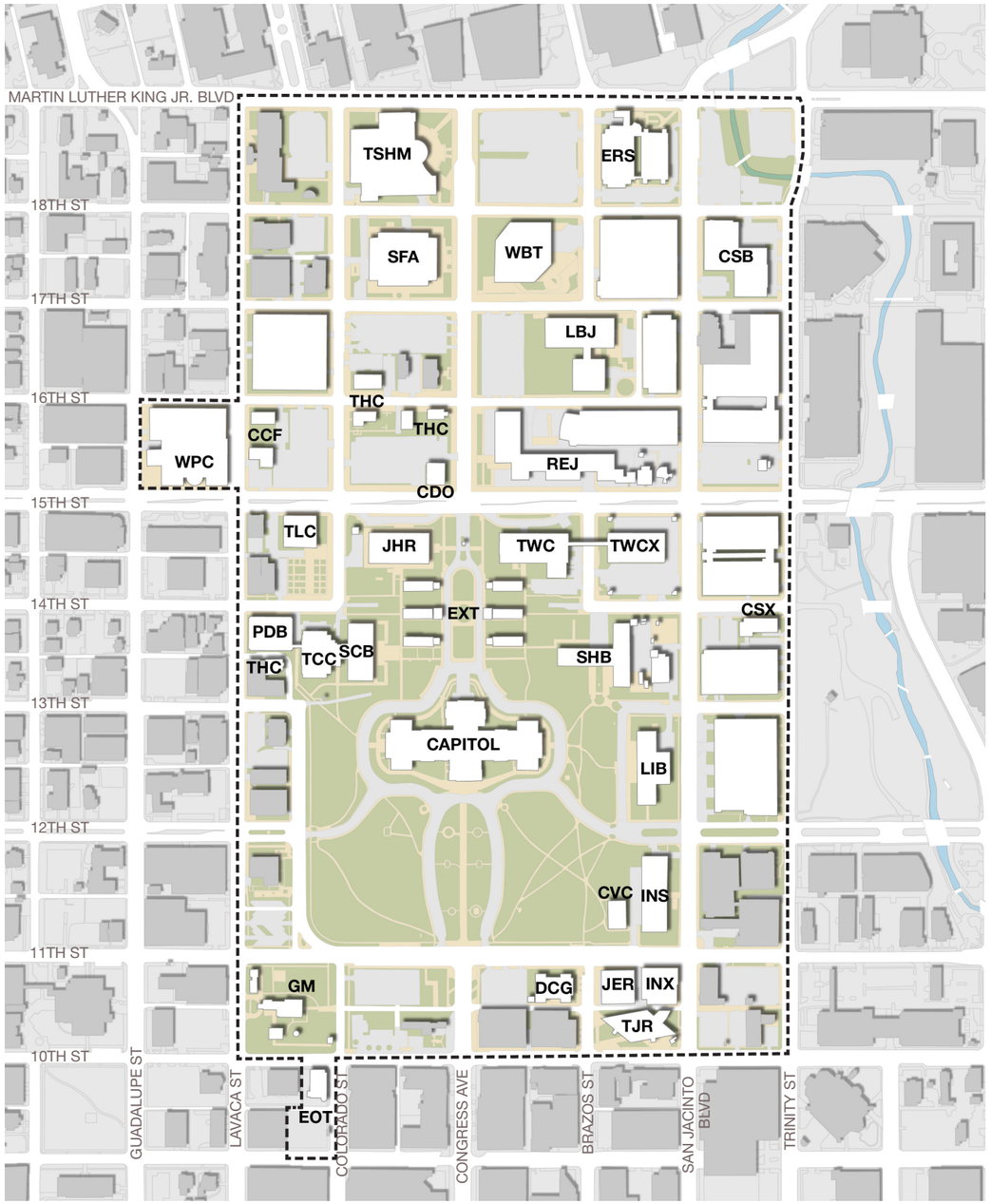


Figure 3.1
Buildings in Texas Capitol Complex Study Area

- State Owned Buildings
- Privately Owned Buildings
- Study Area Boundary

CCF	Capitol Complex Child Care Facility
CDO	Capitol District Office Building
CSB	Central Services Building
CSX	Central Services Annex
CVC	Capitol Visitors Center
DCG	Dewitt C. Greer Building
EOT	Ernest O. Thompson Building
ERS	Employee Retirement System Building
EXT	Capitol Extension (Underground)
GM	Governor's Mansion
INS	State Insurance Building
INX	State Insurance Annex
JER	James Earl Rudder Building
JHR	John H. Reagan Building
LBJ	Lyndon B. Johnson Building
LIB	Lorenzo de Zavala State Archives and Library
PDB	Price Daniel Sr. Building
REJ	Robert E. Johnson Building
SCB	Supreme Court Building
SFA	Stephen F. Austin Building
SHB	Sam Houston Building
TCC	Tom C. Clark Building
THC	Texas Historical Commission Building
TJR	Thomas Jefferson Rusk Building
TLC	Texas Law Center
TSHM	Texas State History Museum
TWC	Texas Workforce Commission Building
TWCX	Texas Workforce Commission Annex
WBT	William B. Travis Building
WPC	William P. Clements Jr. Building

3

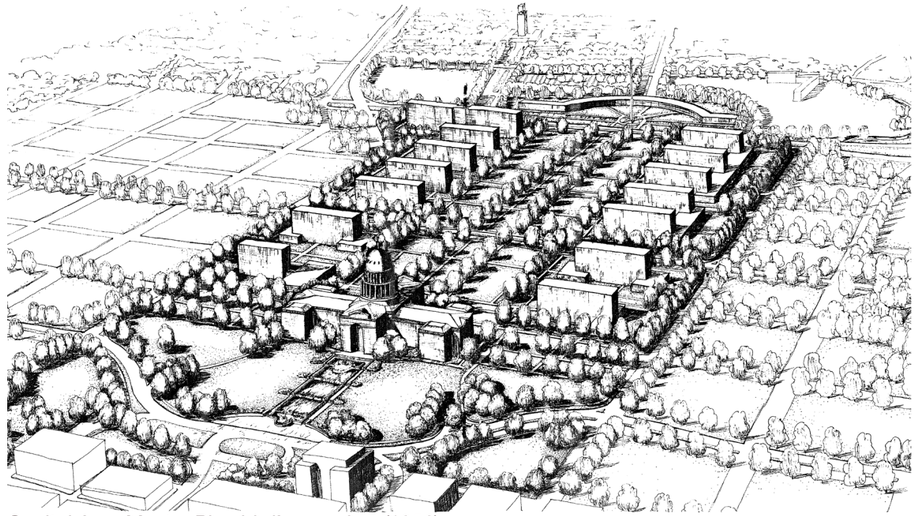
Historic Districts and Buildings

Several historic buildings are located within the Capitol Complex including the Governor's Mansion and a cluster of buildings along 16th Street which are operated by the Texas Historical Commission. The Texas State Capitol and Congress Avenue south of the Capitol grounds are registered National Historic Districts.

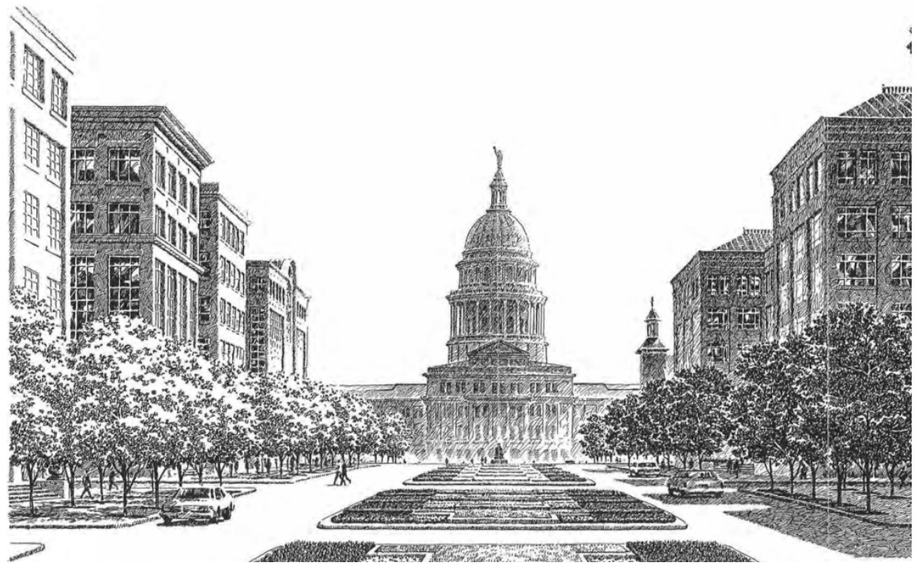
Observations from Planning History

Past plans for the Capitol Complex contain a number of recommendations that are still relevant today:

- The preservation of historic buildings and districts.
- Congress Avenue north of the Capitol as a potential gateway and special corridor to the Capitol building.
- An emphasis on land acquisition in creating an efficient and compact district for state facilities, with an approximate boundary for the complex defined as 10th Street to Martin Luther King Jr. Boulevard and Lavaca Street to Trinity Street.
- Identification of the area north of 15th Street as part of the larger Capitol Complex with existing uses and future growth.
- Provision of open space as a significant element framing the Capitol building.
- Maintenance of capitol view corridors.
- Use of appropriately scaled buildings to accommodate program needs and establish an identity for the complex.
- Various solutions for integrated parking, including underground parking, above-grade parking structures, and surface lots.



Capitol Area Master Plan bird's-eye view (1956)



Texas Capitol Preservation and Extension Master Plan and Historic Structures Report vision (1989)

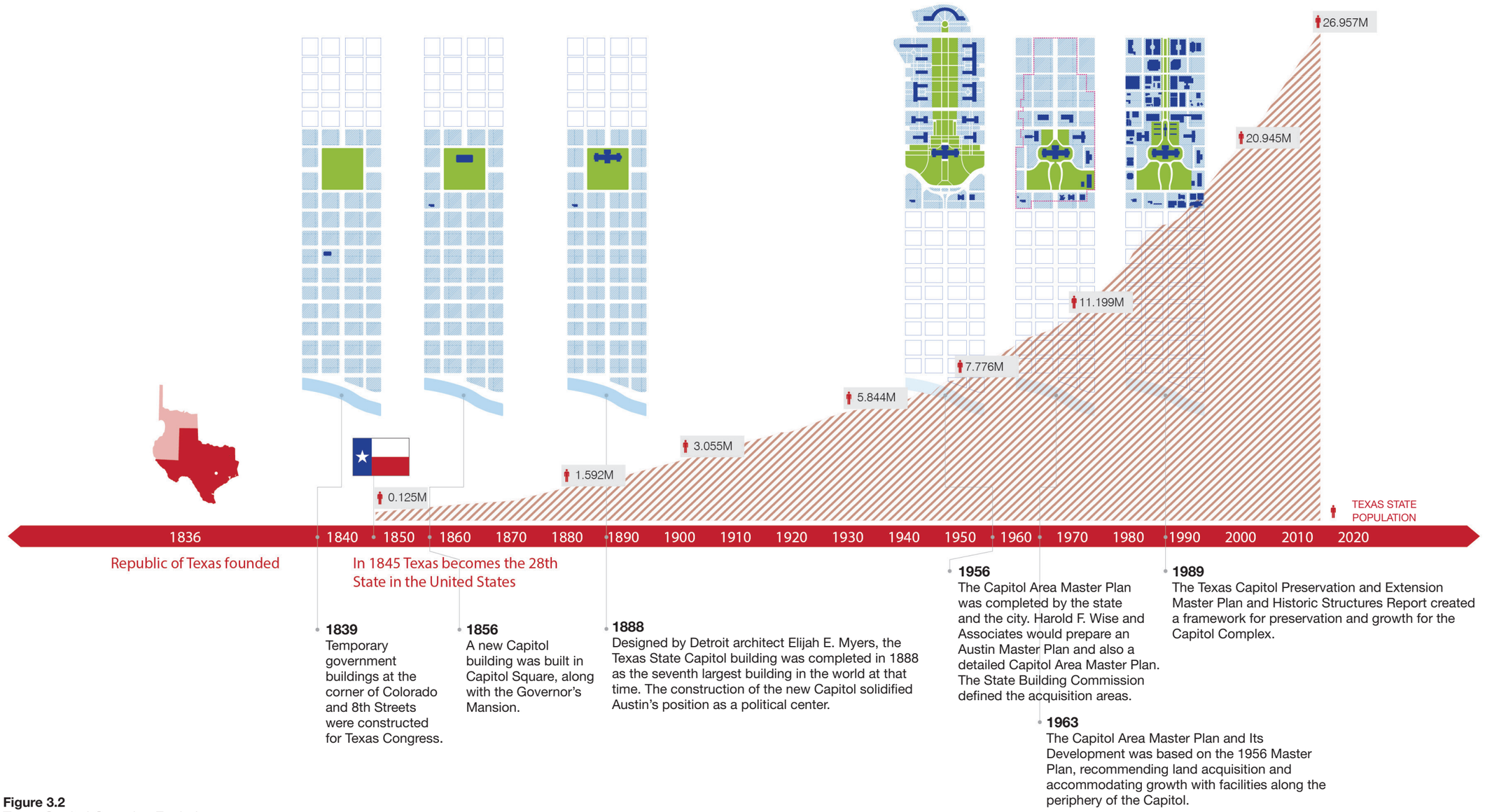


Figure 3.2
Texas Capitol Complex Evolution

3

SCALE, DENSITY, AND LAND USE

The scale and density analysis of the Capitol Complex examined topography, Capitol View Corridors (CVCs), landscape types, property ownership, building heights, overall density and land uses. The following is an overview of the key findings.

Sited on one of the highest points of the original Waller Plan for Austin, the Capitol Complex anchors the northern edge of downtown. The largest topographic change within the complex occurs between Congress Avenue and the Capitol, where the difference in elevation is over 50 feet. The eastern edge of the complex next to Waller Creek is the lowest elevation.

Most of the open space in the Capitol Complex consists of the civic lawn that makes up the Capitol grounds. Beyond the Capitol grounds, the open space system is somewhat fragmented and consists of elements such as courtyards and plazas associated with state office buildings, pedestrian walkways, and planting areas at building edges. Waterloo Park and Waller Creek are significant open-space elements located immediately to the east of the complex, but are somewhat separated by the large structured parking facilities between San Jacinto Boulevard and Trinity Street. Surface parking lots also cover large portions of the land area within the complex.

The State of Texas owns most of the land within the complex. Most privately-owned parcels are located along the west and south edges of the complex. Other private parcels include land at 15th Street and San Jacinto Boulevard, a parcel at Congress Avenue and 16th Street, and the Scholz's Garten restaurant at 17th Street and San Jacinto Boulevard.

Building heights within the complex are largely governed by the CVCs, which were implemented to preserve views of the Texas State Capitol building. Thirty view corridors establish a range of height limits across the complex, with a low of 22 feet for land along Trinity Street. The tallest buildings are the Stephen F. Austin, William B. Travis and Lyndon B. Johnson Buildings, which are each over ten floors, while the smallest buildings are the one and two-story historic structures located west of Congress Avenue.

Existing Floor to Area Ratios (FARs) by block range from 0.1 to 5.4. The densest blocks are those containing the Stephen F. Austin and William B. Travis Buildings, as well as the privately-held block between 11th and 12th Streets, west of Colorado Street. The lowest densities within the complex occur in the area west of Congress Avenue between 15th and 17th Streets, where there are small historic structures and large surface parking lots.

Uses within the complex consist mainly of office space and parking. There are few publicly accessible restaurants or support retail uses outside state office buildings, and limited residential uses. Cultural venues within the complex include the Texas State Capitol, the Texas State History Museum, Texas Historical Commission, and Capitol Visitors Center. The University of Texas Blanton Art Museum is located at the termination of Congress Avenue on the University of Texas campus. There is little public open space outside the Capitol grounds.

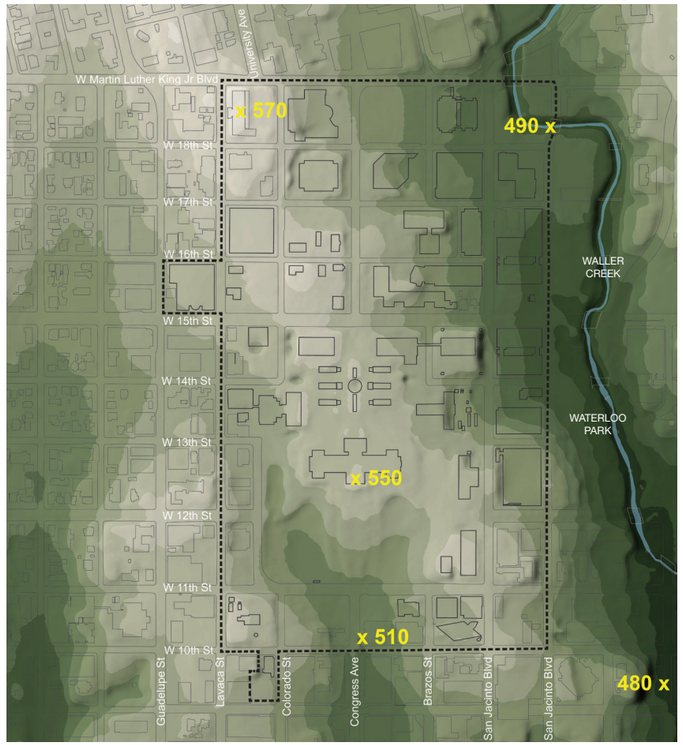


Figure 3.3
Topography

Scale, Density, and Land Use Observations

- The open space system within the complex is somewhat fragmented.
- Parking garages inhibit pedestrian connectivity with Waterloo Park and Waller Creek to the east.
- Most buildings within the complex are set back from the street and together do not create a consistent urban fabric.
- There are a variety of building scales across the complex that generally do not relate to each other.
- CVCs preserve views of the Capitol building, but limit building heights on the east and southwest edges of the complex.
- The overall density within the complex is relatively low for a downtown urban setting.

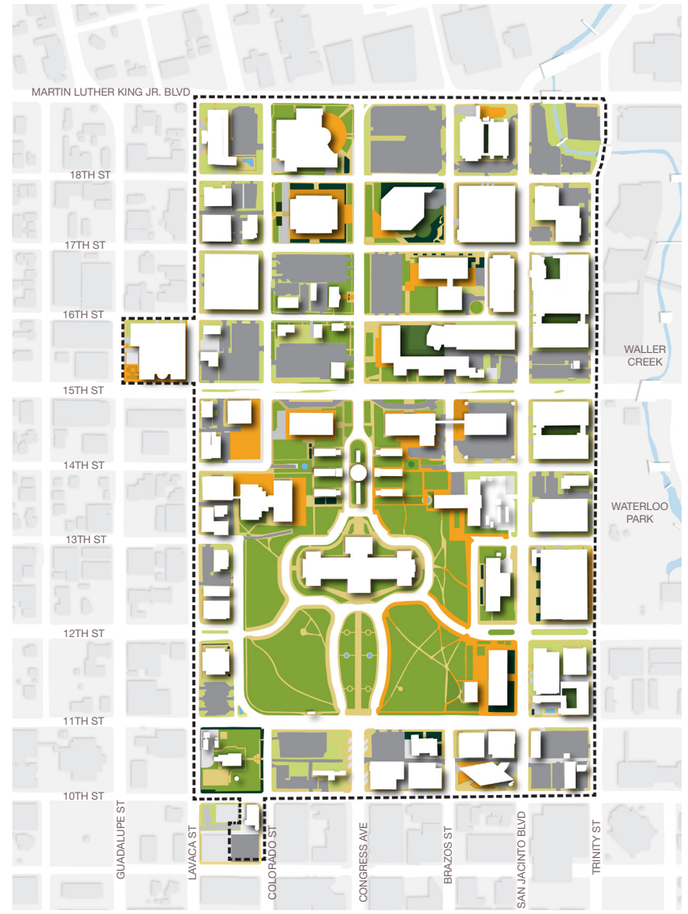


Figure 3.4
Existing Open Space

- Civic Lawn
- Undefined Lawn
- Courtyard
- Planting Area
- Pedestrian Area
- Plaza
- Water

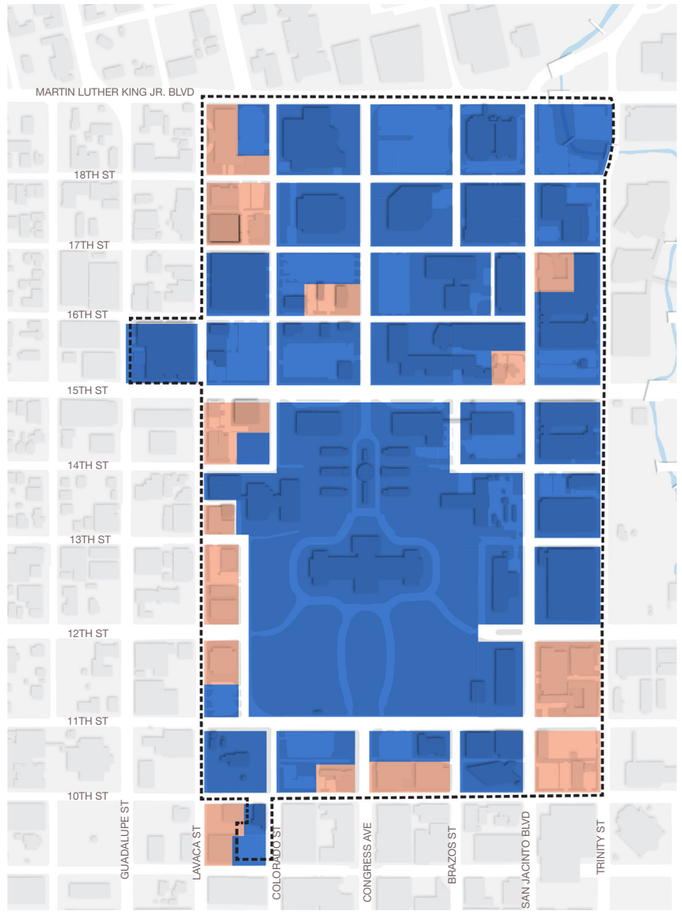


Figure 3.5
Land Ownership

State
Private

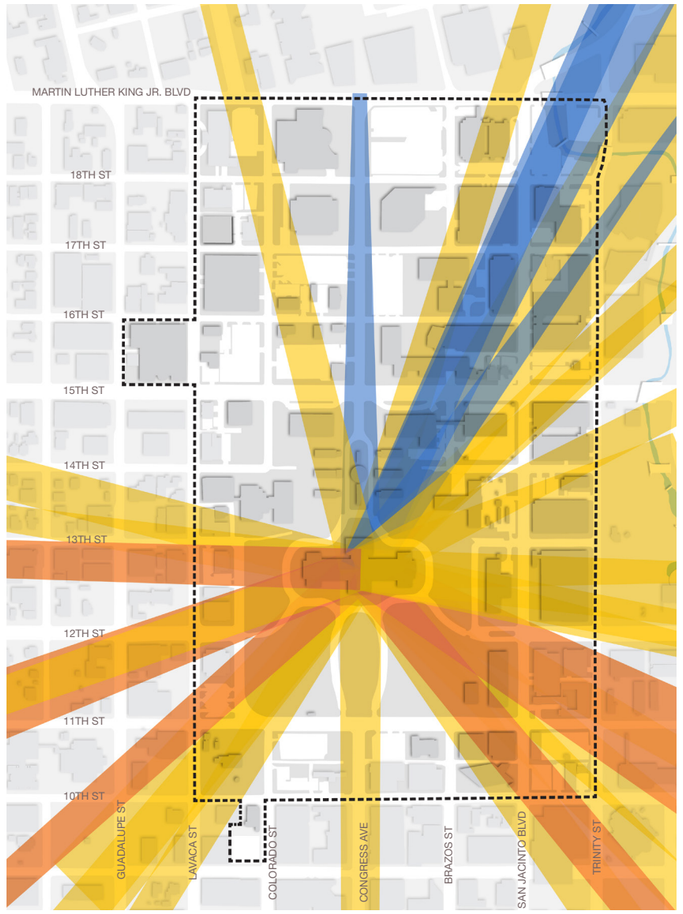


Figure 3.6
Capitol View Corridors

Established Both by City and State
Established Only by State
Conflicting Between City and State

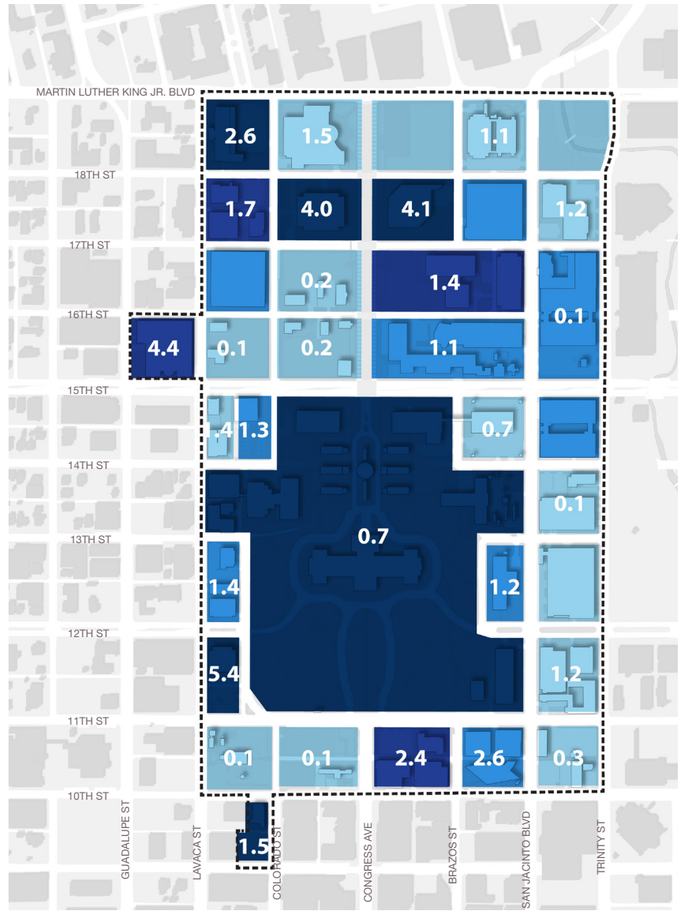


Figure 3.7
Existing FAR and Maximum Building Height by Block

X.X FAR Value
< 40 ft
40-80 ft
80-120 ft
> 120 ft

3

MOBILITY SYSTEMS

The following is an overview of the existing pedestrian, bicycle, transit, vehicular circulation, and parking systems that serve the Capitol Complex.

Pedestrian Circulation

The pedestrian system within the Capitol Complex occurs within two areas: the pedestrian pathways serving the Capitol building and grounds, and the pedestrian network within the surrounding urban context.

Pedestrian paths leading to the Capitol building are welcoming and well maintained. The vehicle-free pedestrian zone south of the Capitol is well used by tourists, visitors, and employees, and has more activity than does the area to the north of the building. Pedestrian sidewalks follow the driveways serving the Capitol building and extend through the park areas surrounding the Capitol.

Beyond the Capitol grounds, pedestrian sidewalks line the grid of urban streets that extend through the complex. In general, sidewalks in the area have little shade and are not very welcoming for pedestrians. High traffic volumes on several streets impact the quality and safety of the pedestrian environment, and curb cuts disrupt pedestrian movements along several key routes, such as the south side of 15th Street.

Most areas within the Capitol Complex are concentrated within a five-minute walking radius of the Capitol. Amenities and destinations such as Waterloo Park, the future University of Texas Medical District, and the restaurant and retail uses along the Lavaca Street corridor are within a five-minute walk of most office uses within the complex.

Bicycle Network

The City of Austin Bicycle Map identifies several bicycle routes that extend through the Capitol Complex. The routes are classified as high, medium, and low comfort, based on the quality of the cycling experience. High-comfort routes include the driveways serving the Capitol Complex, as well as 11th Street, Martin Luther King Jr. Boulevard, San Jacinto Boulevard, and Trinity Street. Medium-comfort routes include 12th Street, Congress Avenue (both north and south of the Capitol Complex), and Lavaca Street. In the future, separate bicycle lanes are proposed on Martin Luther King Jr. Boulevard, 11th Street, San Jacinto Boulevard, and Trinity Street.

Transit

The Capitol Complex is generally well served by existing bus routes on all major streets. Major north-south bus routes include the one way couplets of Guadalupe-Lavaca and San Jacinto-Trinity. In addition the Guadalupe-Lavaca corridor includes a dedicated MetroRapid bus service lane. There are limited bus stops at the heart of the Capitol Complex along 15th Street between Trinity and Guadalupe Streets.

Vehicular Circulation

The Capitol Complex is served by a grid of urban arterial roads. East-west arterials include 11th Street, 15th Street, and Martin Luther King Jr. Boulevard, while north-south arterials include Guadalupe Street northbound, Lavaca Street southbound, and Red River Street in both directions. Other streets in the grid serve as collectors. The principal access to the complex from Interstate 35 occurs from 12th Street, 15th Street and Martin Luther King Jr. Boulevard, while access to Interstate 35 occurs from 15th Street and Martin Luther King Jr. Boulevard.

The widest arterial road through the complex is 15th Street with three lanes in each direction. Given the high volumes of traffic it carries, 15th Street is somewhat of a barrier to north-south pedestrian flows, and functions as a divider between the north portion of the complex and the Capitol grounds.

Parking

Surface and structured parking are dominant land uses within the Capitol Complex, occupying over fifty percent of the land area outside the Capitol grounds. Most structured parking is located within the east portion of the complex along San Jacinto Boulevard. Large surface lots are distributed within the blocks north of 15th Street. While the ample supply of parking is convenient for the office uses in the complex, the large-scale garages create undesirable ground-floor conditions, and the extensive surface lots impact the quality of the urban environment throughout the complex.

Mobility Observations

- The primary mode of transportation to the Capitol Complex is the private vehicle, while high-capacity transit, bicycle, and pedestrian access are less frequently used.
- Although a grid of arterial roads provides convenient access to the complex, high traffic volumes impact the quality of the pedestrian environment, particularly on 15th Street.
- Structured and surface parking dominate the complex, particularly along San Jacinto Boulevard and north of 15th Street.
- Pedestrian connectivity between the northern portion of the complex and the Capitol grounds is impeded by heavy vehicular traffic on 15th Street.

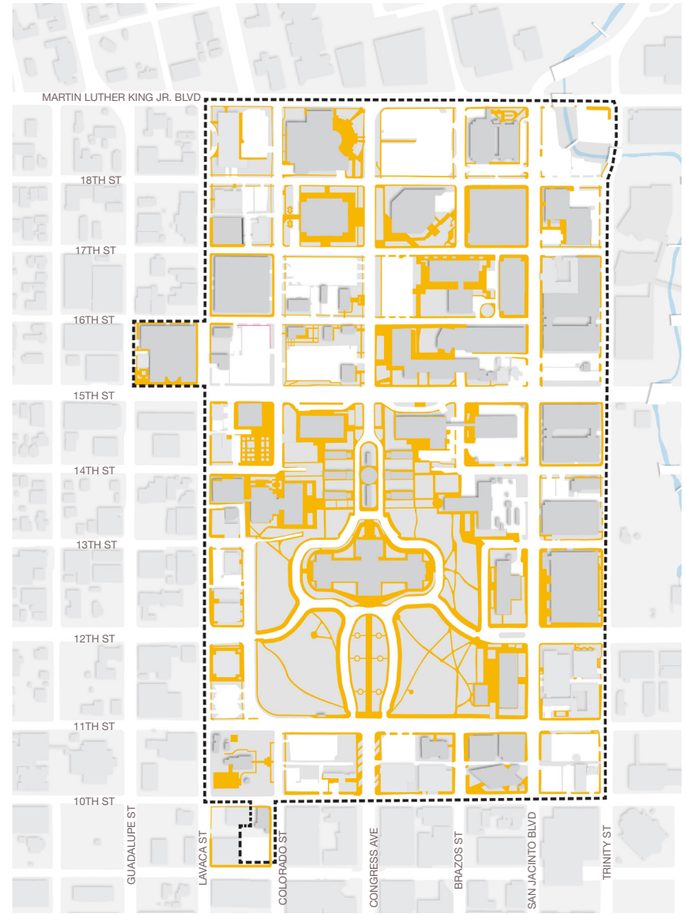


Figure 3.8
Existing Pedestrian Network

Pedestrian Path

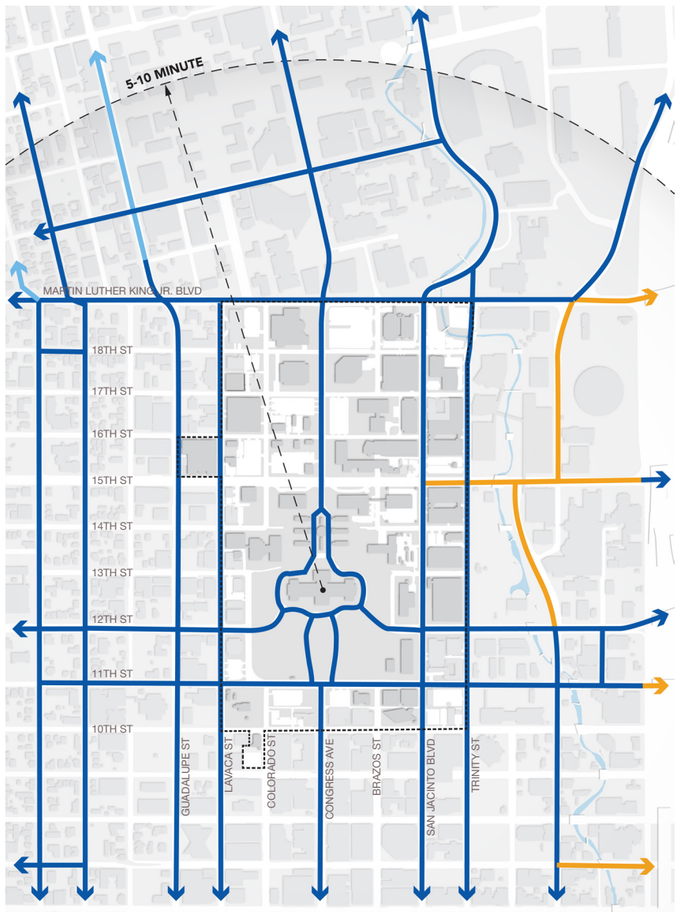


Figure 3.9
Existing Bicycle Network

- High Comfort
- Medium Comfort
- Low Comfort

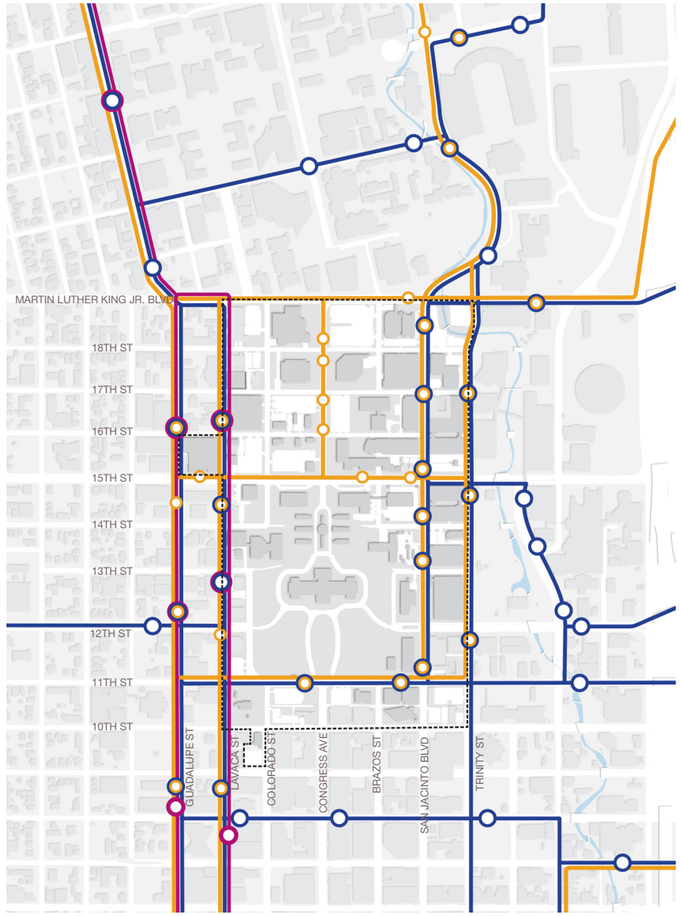


Figure 3.10
Existing Bus Network

- Local Service Route
- Limited and Flyer Route
- MetroRapid Route

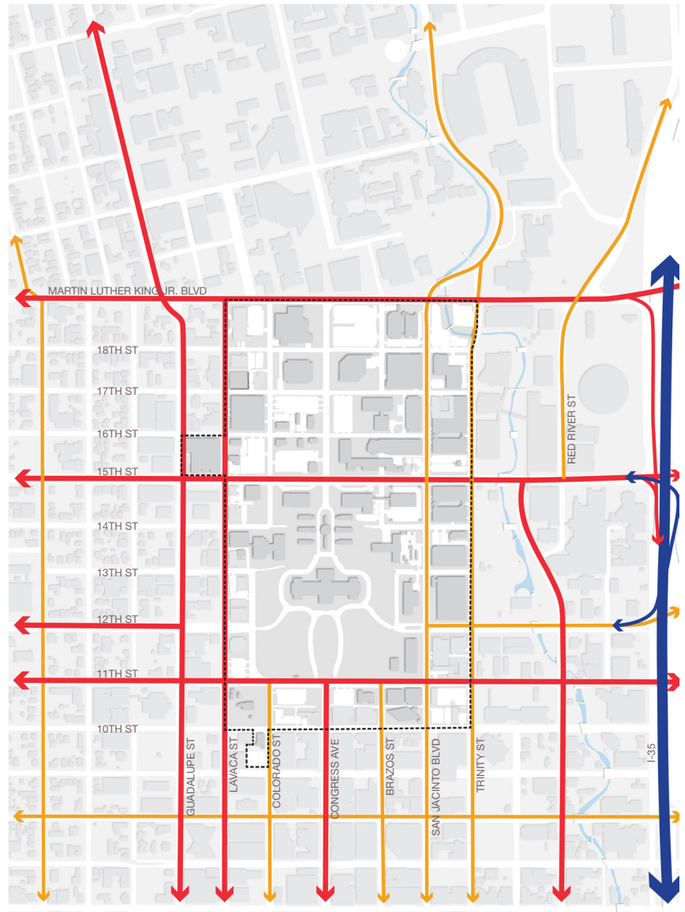


Figure 3.11
Existing Vehicular Circulation

- Arterial
- Collector
- Highway

3

SUSTAINABILITY

Sustainability is an important consideration in the long-term planning of the Capitol Complex. An initial examination of physical conditions in the complex revealed a number of areas where improvements could be made over time to enhance physical comfort and environmental performance. The specific areas examined included impervious surface areas, open space and tree cover, heat island effect, and flood zones, as described below.

Impervious Surfaces

Impervious surfaces include surface parking lots, building roofs, and other hard surface areas. These areas exacerbate stormwater runoff, limit ground water recharge through infiltration, and can contribute to the heat island effect. Impervious surfaces are the dominant condition in the Capitol Complex beyond the Capitol grounds. Accommodation for runoff retention or penetration is not currently in place within the complex and other high density areas throughout the city.

Open Space and Tree Cover

Substantial open space and vegetation south of the Capitol building provide habitat and needed open space within the surrounding urban setting. Many of the trees in this area are older with substantial canopies that provide shade and a more comfortable micro-climate. There is significantly less open space north of the Capitol, and there are fewer trees, which are generally smaller. In addition, few of the streets in this area have a continuous tree canopy, limiting shaded passage for pedestrians much of the year. These conditions create a less comfortable outdoor environment.

Heat Island Effect

The heat island effect is the impact on ambient temperatures of large, hard surface areas that are exposed to the sun, creating inhospitable outdoor experiences. These areas can be over twenty degrees hotter than landscaped areas that are shaded by trees. The heat island effect creates a less comfortable environment for pedestrians, and it increases the heat load on buildings and the resultant energy consumption for cooling. This is particularly notable in the area north of 15th Street where there are large surface parking lots and fewer trees.

Flood Zone

There are a few areas on the east edge of the Capitol Complex that are impacted by the Waller Creek flood zone. These areas include Trinity Street between 18th Street and Martin Luther King Jr. Boulevard, and Trinity Street north and south of 15th Street. Areas within the flood zone may be impacted by upstream development as they increase water volumes.

Sustainability Observations

- The predominance of large surface parking lots in the Capitol Complex decreases water quality by prohibiting infiltration and increasing runoff, and exacerbates the heat island effect.
- Lack of substantial vegetation north of the Capitol grounds decreases habitat and potentially limits employee access to open space.
- Shade provided by trees is abundant on the Capitol grounds but lacking elsewhere in the Capitol Complex.
- Thermal comfort strategies should include building orientation, natural ventilation, thermal mass and night purge systems as appropriate.

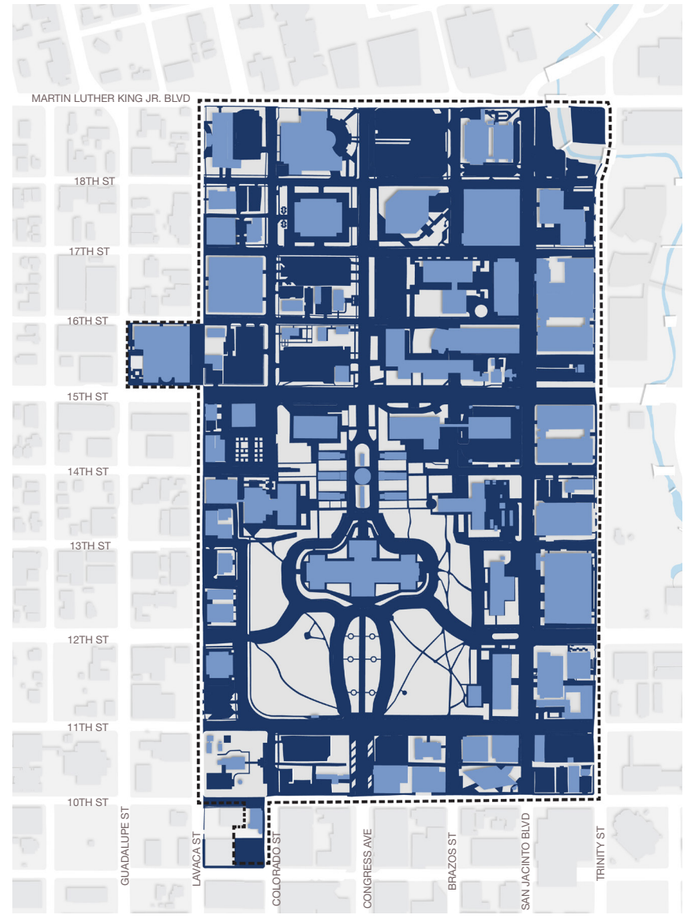


Figure 3.12
Existing Impervious Surfaces

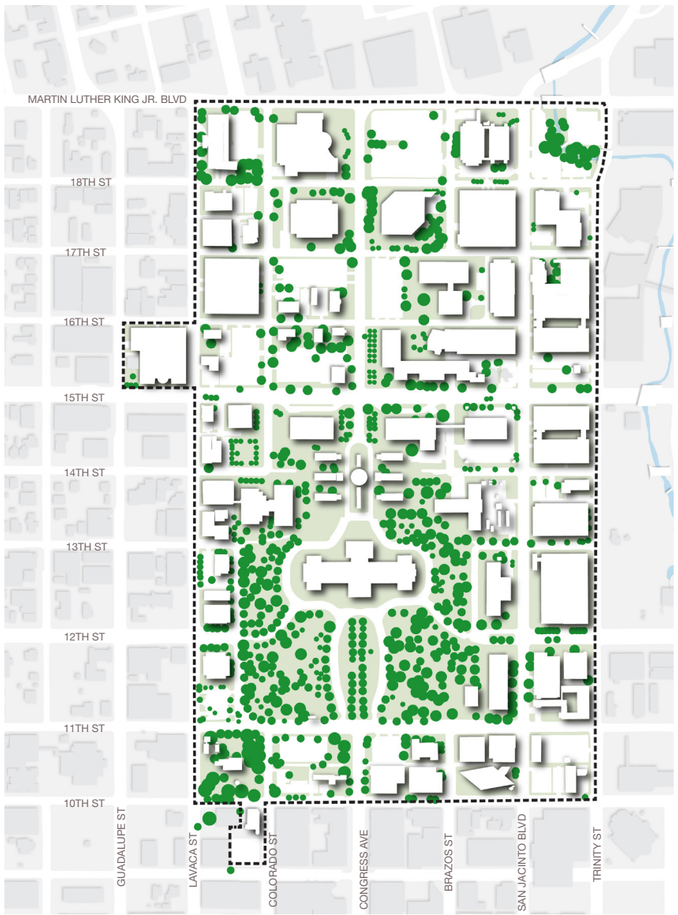


Figure 3.13
Existing Tree Cover

Tree Canopy

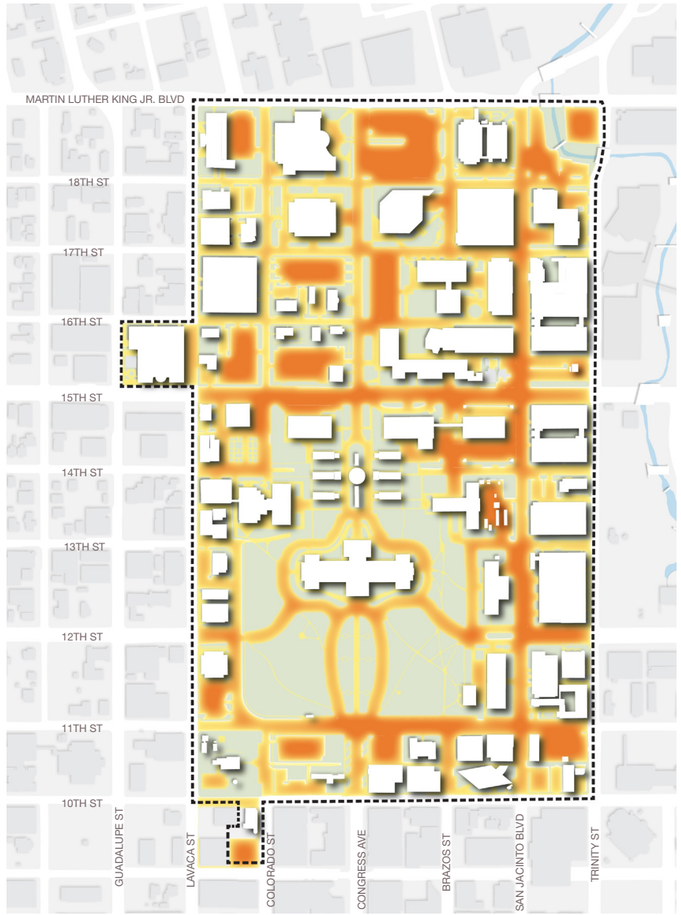


Figure 3.14
Existing Heat Island Effect

Hot Areas
Warm Areas

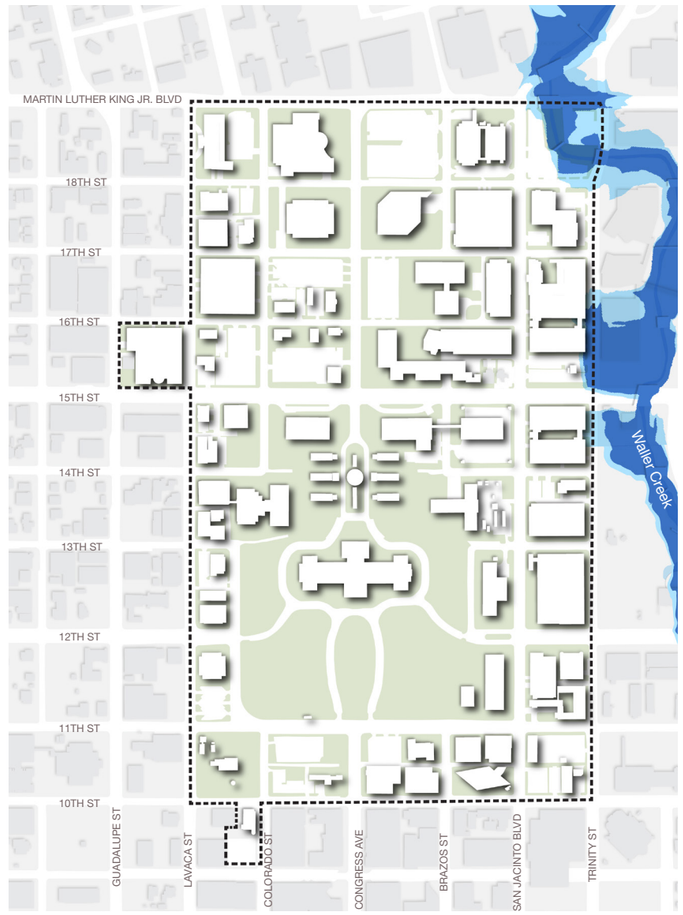


Figure 3.15
Existing Floodplain

100-Year FEMA Floodplain
500-Year FEMA Floodplain

3

OPPORTUNITY SITES

Opportunity sites are sites that can be considered for potential short- or long-term development over time. These sites include surface parking lots, parking garages that are in poor condition and could be replaced, and other potential building replacement sites.

The surface parking lots north of 15th Street provide the greatest potential for development in the short term, while the garages along Trinity Street and San Jacinto Boulevard may provide medium- to long-term redevelopment opportunities. A number of buildings across the complex could be considered for redevelopment over time, including the following (refer to figures 3.16 and 3.17):

- Central Service Annex
- State Insurance Annex
- Thomas Jefferson Rusk Building
- State Insurance Building
- Central Services Building
- Texas Workforce Commission Building
- Texas Workforce Commission Annex
- John H. Reagan Building
- Employee Retirement System Building (Long-Term)
- Stephen F. Austin Building (Long-Term)
- William B. Travis Building (Long-Term)
- William B. Clements Building (Long-Term)

Sites to the north, south and west of the Capitol building that are unencumbered by Capitol View Corridor restrictions and have greater redevelopment potential.

SITE INFLUENCES

The areas surrounding the Capitol Complex present opportunities for synergies and connectivity. These areas include the University of Texas at Austin campus, the University of Texas at Austin medical district, Waterloo Park redevelopment and Waller Creek, the Congress Avenue district, the 6th Street district, and the Lavaca/Guadalupe Street corridor.

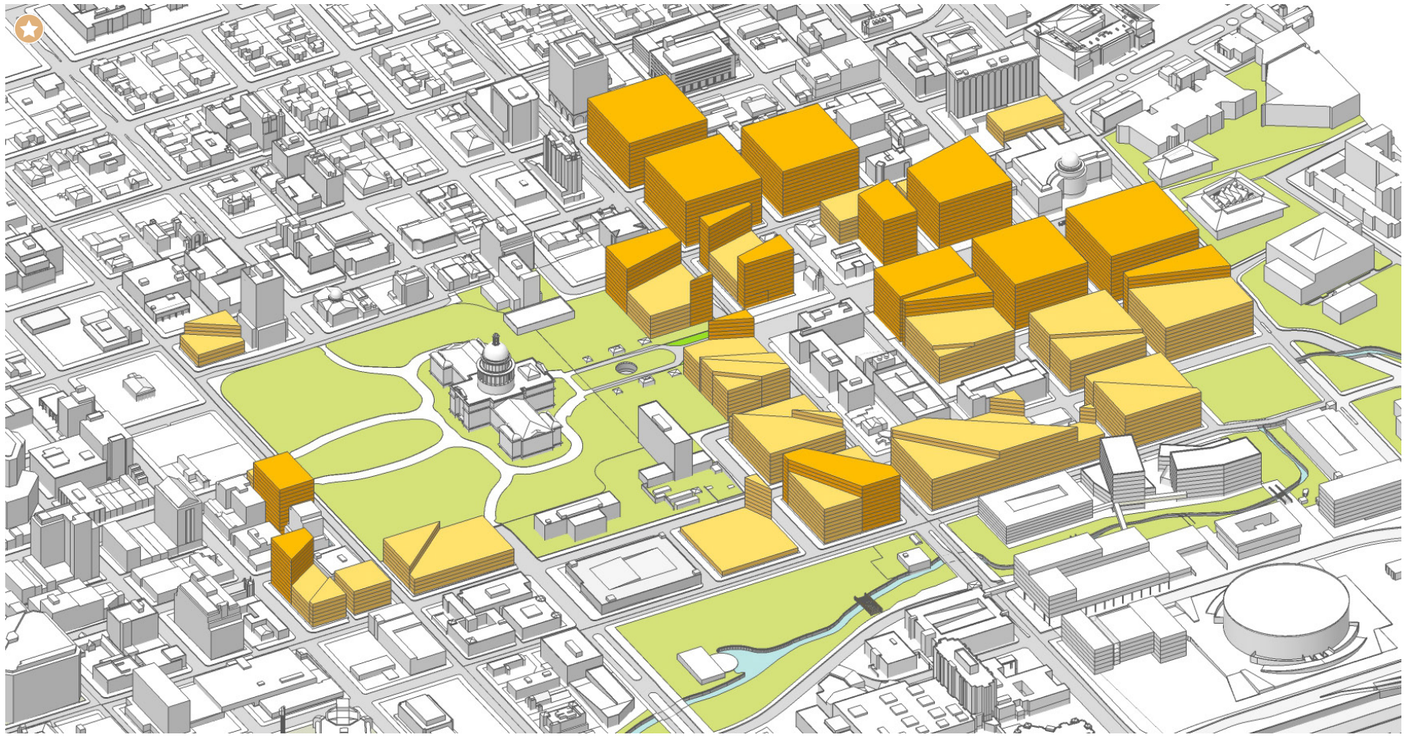


Figure 3.16
Opportunity Sites Perspective for Potential Future Buildings

Areas with CVC Height Restrictions
Areas with No Height Restrictions

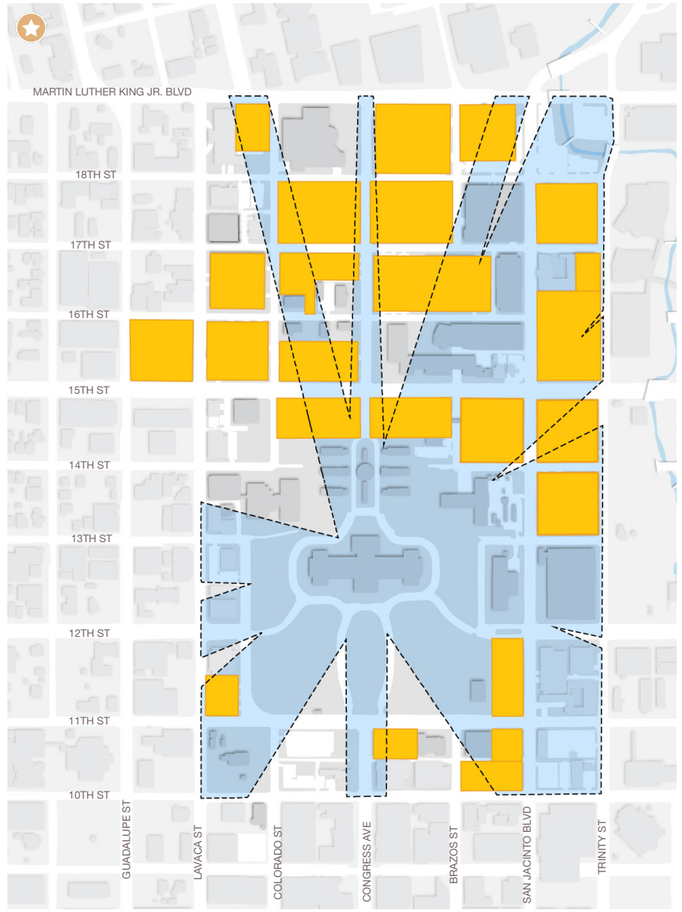


Figure 3.17
Potential Opportunity Sites

- Potential Opportunity Site
- Capitol View Corridor

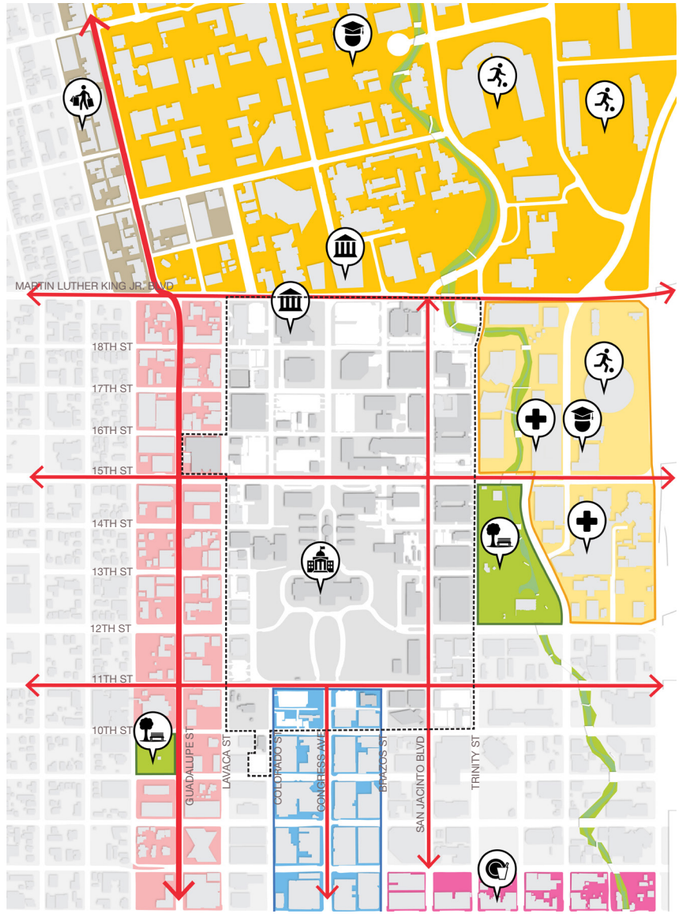


Figure 3.18
Site Influences

- UT Austin Campus
- UT Austin Medical District
- The Drag
- Lavaca/Guadalupe Corridor
- Congress Avenue District
- 6th Street District

- State Capitol
- University
- Museum
- Hospital
- Park
- Recreation
- Retail
- Restaurant

3 Program

LEASE CONSOLIDATION

The primary goals of constructing new office buildings in the Capitol Complex, and relocating state employees into them, are consolidating the workforce to improve quality of service, increase employee retention, and ultimately reduce overall operational costs to the State of Texas.

The redevelopment of state-owned land in the Capitol Complex will provide new office space for various state agencies currently leasing space in privately owned buildings at different locations throughout Austin. Consolidating staff into the proposed office buildings at the Capitol Complex has the potential to create operational efficiencies between and within agencies, while also eliminating lease costs in an increasingly dynamic real-estate market. New office development is a component of the comprehensive Capitol Complex Master Plan that includes new state-of-the art public facilities, streetscape enhancements, and open space amenities organized around a central civic space that will serve Texas residents and other visitors to the Texas State Capitol. Figure 3.19 shows the locations of current leased space that may be considered for consolidation.

The potential savings gained from vacating leased space could be leveraged as a source of funding for the construction and ongoing operations of new office facilities. To estimate these savings, the long-term costs associated with leasing space in the private market were projected. A discounted cash flow analysis was then conducted to estimate the present value of eliminating private lease obligations. The estimated present value of the savings from a conceptual lease consolidation plan was then compared to the costs of developing new publicly owned buildings in the Capitol Complex.

Current leased space accommodates over 5,000 full-time equivalent (FTE) employees in twenty-one leases occupying approximately 1.2 million net usable square feet (NUSF). Utilizing a building efficiency ratio of 1.2 this factors to 1.5 million gross square feet (GSF). Automobile parking should be provided at a ratio of 3.3 spaces per 1,000 GSF, yielding a minimum requirement of 4,800 parking spaces. Parking quantities assume some level of public transit and alternative means of transportation will be utilized by a portion of employees.

The two Phase 1 buildings and parking garages approved for construction by the 84th Texas Legislature (refer to figure 5.1) will result in over 1 million GSF of new office-building space in the Capitol Complex. The buildings will be capable of accommodating approximately 3,600 FTEs and over 4,450 new parking spaces. Upon their completion in 2020, the state could retire up to eighteen leases with annual lease cost avoidance of approximately $19.9 million.

The master plan considers known requirements and also anticipates needs for future space. Phases 2 and 3 of the near-term development described in this plan identifies more than 1 million GSF of additional building space with associated parking of over 3,000 new spaces. This yields a net addition of more than 800 parking spaces over the number of spaces previously contained in the displaced parking lots and garages.

Phase	Office (GSF)	Parking Supply
Lease Demand	1,200,000	4,800
Phase 1 Supply	1,025,000	4,451
Phase 2-3 Supply	1,055,000	3,157
Total Addition	**2,080,000**	**7,608**

Table 3.1
Lease Consolidation

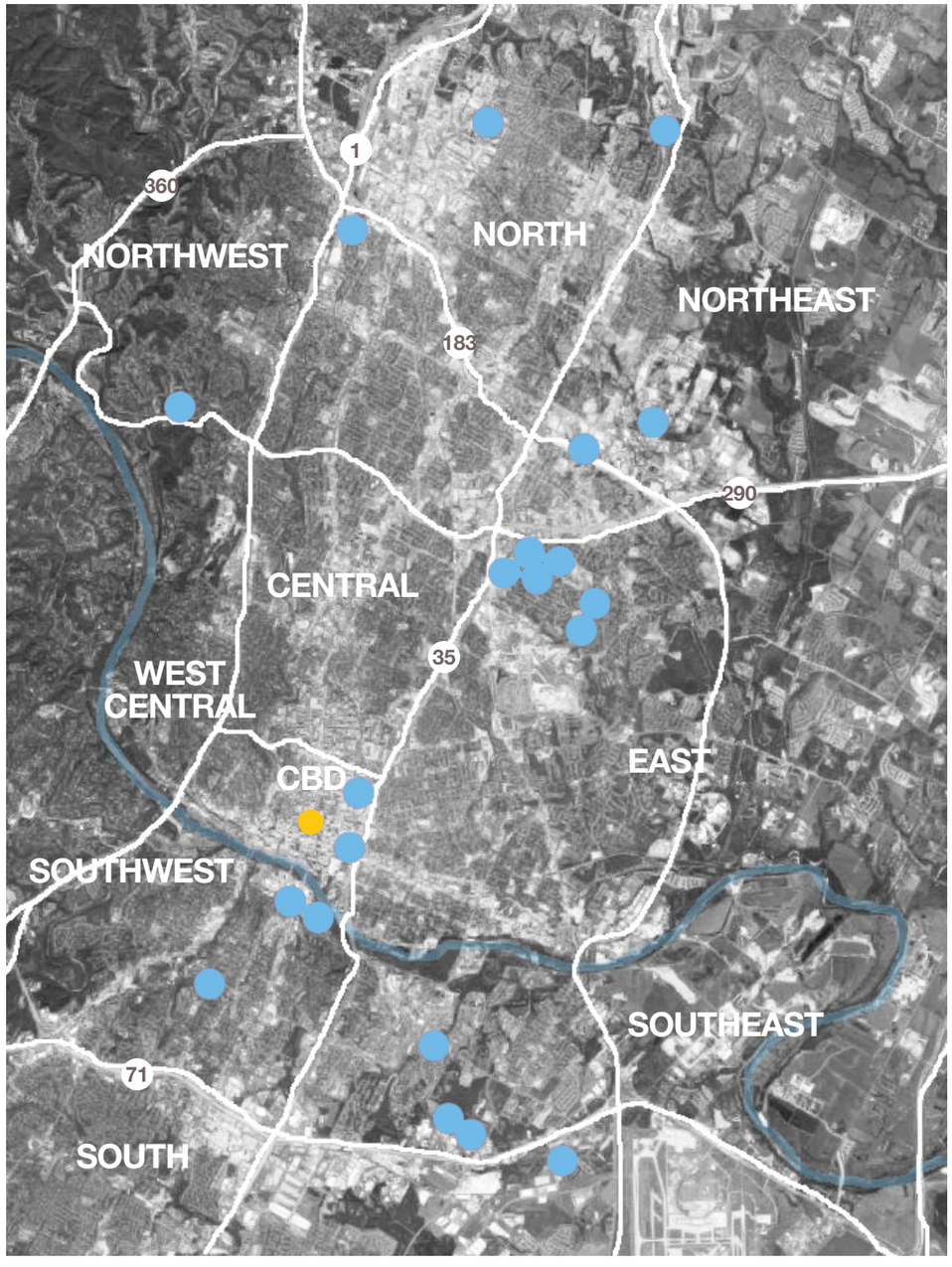
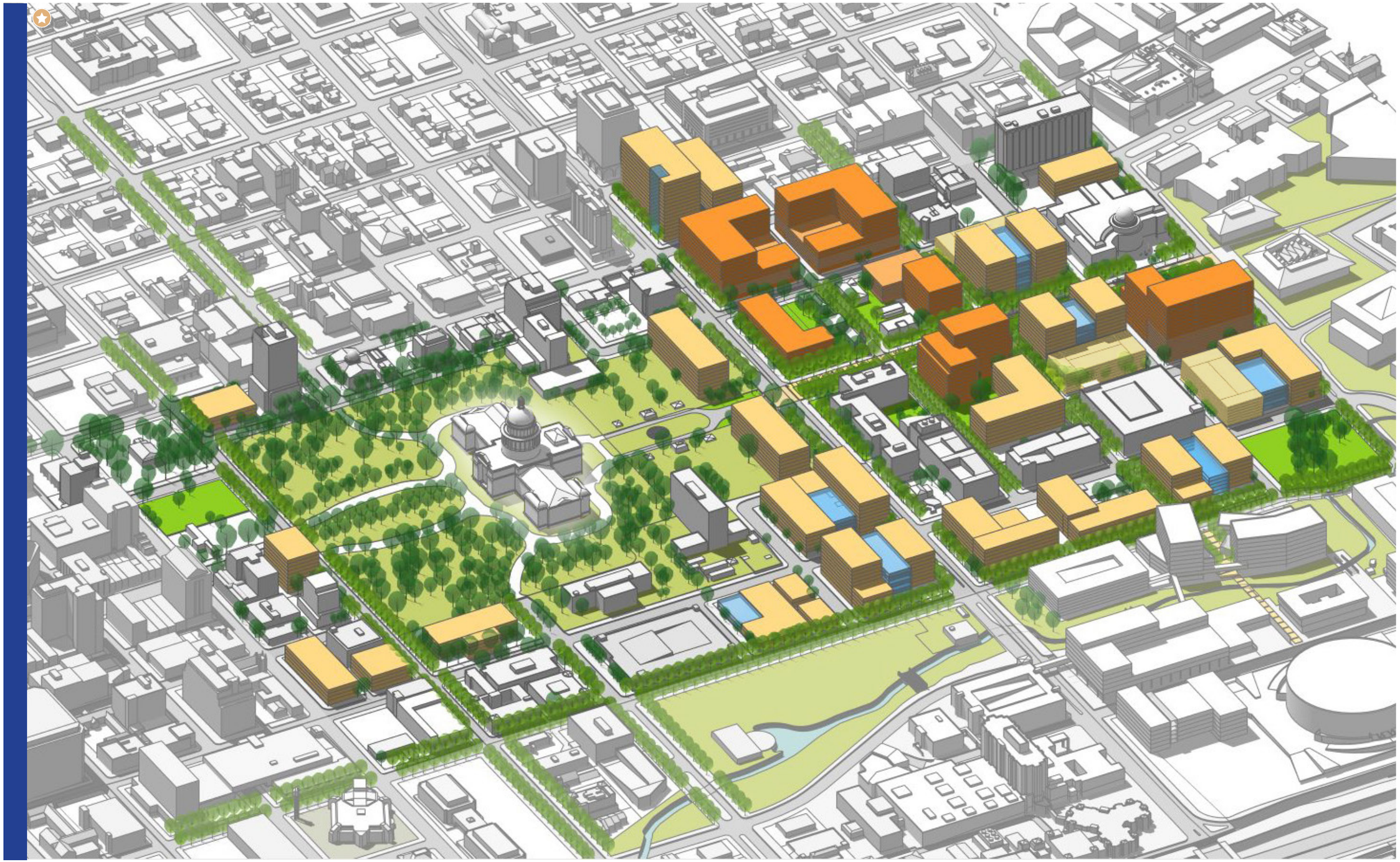


Figure 3.19
Current Leased Space Considered for Consolidation

- Current State-Held Lease
- Capitol Complex



4

Master Plan

Active and transparent street frontage in the 2nd Street District in downtown Austin

Planning & Urban Design Principles

The following planning principles were established early in the planning process for the Capitol Complex. The principles respond to the issues identified through stakeholder interviews. They reflect the consultant team's analysis of conditions within the complex:

- Create a destination in the heart of Texas that celebrates the Texas State Capitol.
- Provide state office space and support services for short-term and long-term needs.
- Define civic spaces to accommodate a variety of festivals and events.
- Establish gateways to the Capitol Complex to create a sense of arrival and transition to adjacent areas.
- Improve connections with surrounding areas, including Waterloo Park and the University of Texas at Austin Medical District, the Lavaca Street retail and service corridor, and Austin's central business district.
- Create vibrant streets by providing active ground floor uses, appropriately-scaled buildings, various modes of mobility, and environments that support human comfort.

The principles are intended to provide guidance for the development of the Capitol Complex over time, acknowledging that stakeholder priorities may evolve, and that conditions will change continually in the surrounding urban setting.

Successfully shaded sidewalk adjacent to the William B. Travis building in the Capitol Complex

4 Initial Design Concepts

During the master plan process, three alternatives were created to explore different options for the development of the Capitol Complex. The alternatives were based on the analysis of existing conditions and potential opportunity sites, the influence of the surrounding urban context, immediate and long-term program needs for state office space, and the planning and design principles established for the complex. Each alternative expressed a 'big idea' or overall vision for the complex as the basis for an integrated planning, design, and program concept. The proposed master plan is a combination of all three concepts. In all concepts and the synthesized master plan, a building south of 11th Street and west of Congress Avenue was later removed in order to preserve views from the Capitol grounds to the Governor's Mansion, to show deference to the mansion, and to preserve an existing park.

TEXAS MALL CONCEPT

The Texas Mall concept proposed to introduce a new public event space on Congress Avenue as the focus for the Capitol Complex north of 15th Street. As envisioned, Congress Avenue would become a tree-lined event space, with lawn panels extending between the Capitol grounds and a new "cultural gateway" at Martin Luther King Jr. Boulevard. Strategic infill sites along Congress Avenue would frame the Texas Mall while respecting the view corridor of the Capitol. To accommodate the need for parking in the complex, underground parking would be provided below the mall.

URBAN CONNECTIONS CONCEPT

The Urban Connections concept structures the plan for the complex around several key corridors where new development would be concentrated, complemented by strategic streetscape and open space improvements. In this concept, Congress Avenue would become an event street but would remain open to vehicular traffic. Wide lawns and rows of trees would line the street, creating a park-like setting, and selective infill would reinforce a more consistent street wall. Martin Luther King Jr. Boulevard, 15th Street, and 11th Street would also be improved with wider sidewalks, street trees, and other landscape features.

15th Street is identified in the Urban Connections concept as a potential multi-modal street that would be balanced with new development on both sides of the street, including cultural uses, and active ground-floor uses. The corner of 15th and Trinity Streets would be emphasized as a gateway to the complex from the emerging University of Texas at Austin Medical District.

HISTORIC PRECINCT CONCEPT

The Historic Precinct concept focuses on creating a new green space around the cluster of historic buildings west of Congress Avenue between 15th and 17th Streets. In this concept, the historic buildings would be preserved within a park-like setting that serves as a new destination north of 15th Street. 16th Street would be transformed into a pedestrian walkway through the precinct, and landscape and public realm improvements would transform surface parking areas.

Infill development in the Historic Precinct concept would occur on sites throughout the Capitol Complex in a manner that reinforces existing streets. Initial development would emphasize sites on the west edge of the complex with close proximity to the new University of Texas at Austin Business School, the AT&T Conference Center, and the Lavaca Street corridor. Existing garages along Trinity Street would be preserved as an important resource for the complex.

Other ideas in the Historic Precinct concept include reinforcing 12th Street as a connector linking Waterloo Park and Waller Creek to Shoal Creek and improving the pedestrian realm throughout the Capitol Complex.

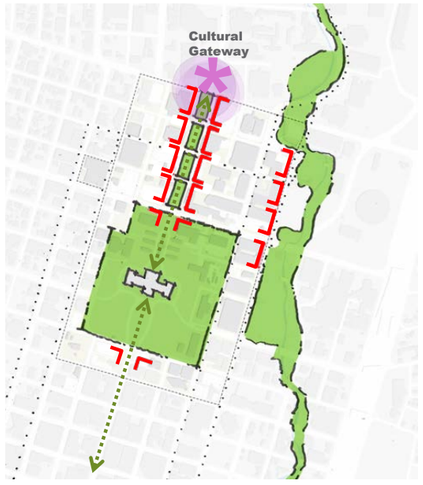


Figure 4.1
Texas Mall Concept Sketch

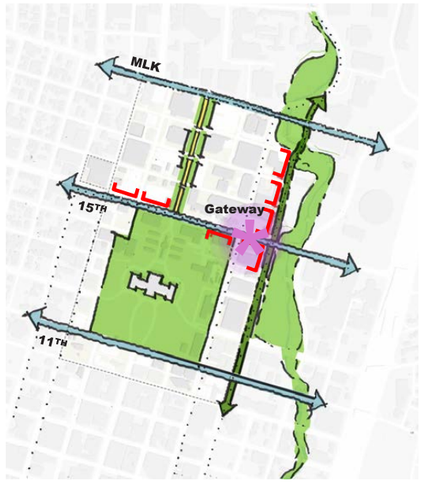


Figure 4.2
Urban Connections Concept Sketch

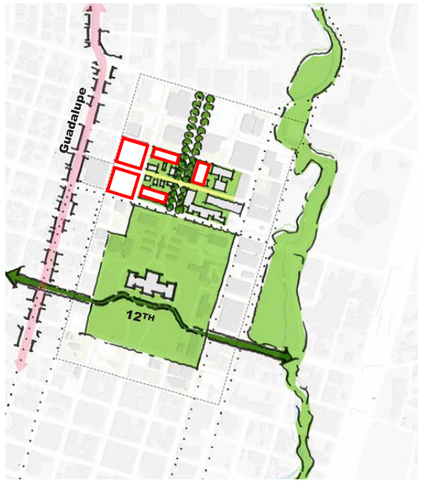


Figure 4.3
Historic Precinct Concept Sketch

Figure 4.4
Texas Mall Conceptual Plan

- Proposed Congress Avenue Development
- Proposed Trinity Street Development
- Proposed Infill Development
- Proposed Long-term Infill Development
- Existing Cultural Buildings

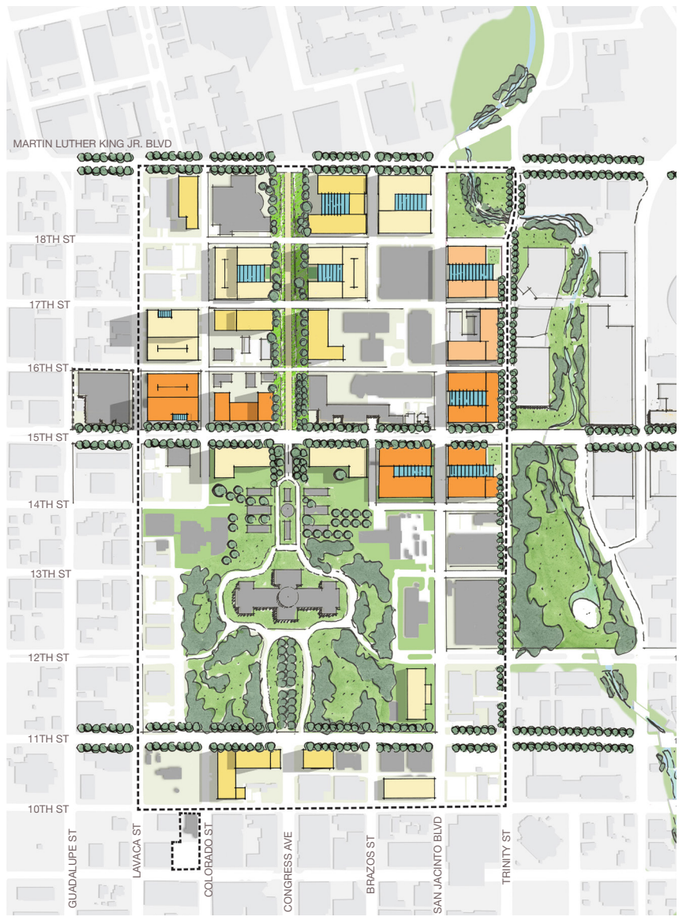


Figure 4.5
Urban Connections Conceptual Plan

- Proposed 15th Street Development
- Proposed Trinity Street Development
- Proposed Infill Development
- Proposed Long-term Infill Development

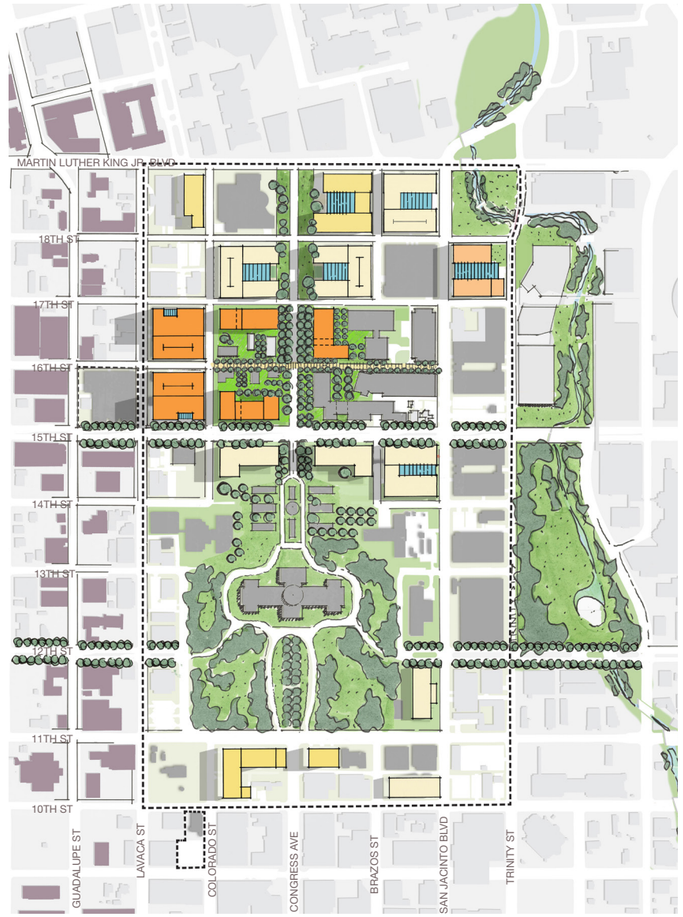


Figure 4.6
Historic Precinct Conceptual Plan

- Proposed Historic Precinct Development
- Proposed Trinity Street Development
- Proposed Infill Development
- Proposed Long-term Infill Development

4 Complex Plan

The Capitol Complex plan was developed with the preferred elements of the three concept alternatives. The most significant concepts carried forward were the transformation of Congress Avenue north of 15th Street into the Texas Mall and the preservation of the historic precinct along 16th Street. The plan consists of an urban design framework, which establishes the overall structure of the Capitol Complex, and an illustrative plan that describes in greater detail the various planning and design strategies and proposed character of the complex.

URBAN FRAMEWORK

The urban design framework establishes the overall structure of the Capitol Complex, including the major open space elements, priority streets, building sites, and cultural amenities that organize the complex. The framework defines Congress Avenue as an event mall connecting 15th Street and Martin Luther King Jr. Boulevard. The framework also proposes streetscape improvements to enhance several east-west corridors through the complex and facilitate connections with adjacent urban areas. It also creates a new historic precinct as an important open space element within the complex where existing historic buildings will be preserved.

The framework defines the opportunity sites identified in the planning analysis as development sites, acknowledging that buildings such as the Stephen F. Austin and William B. Travis Buildings are not likely to be redeveloped for fifty years or more. The development sites will accommodate the proposed master plan program as well as associated parking. Building edges are defined in the framework to encourage consistent street edges and active ground floors with publicly accessible uses and retail.

The urban design framework recognizes the existing Texas State History Museum and the University of Texas Blanton Art Museum as cultural anchors at the termination of Congress Avenue, creating a new cultural gateway to the complex.

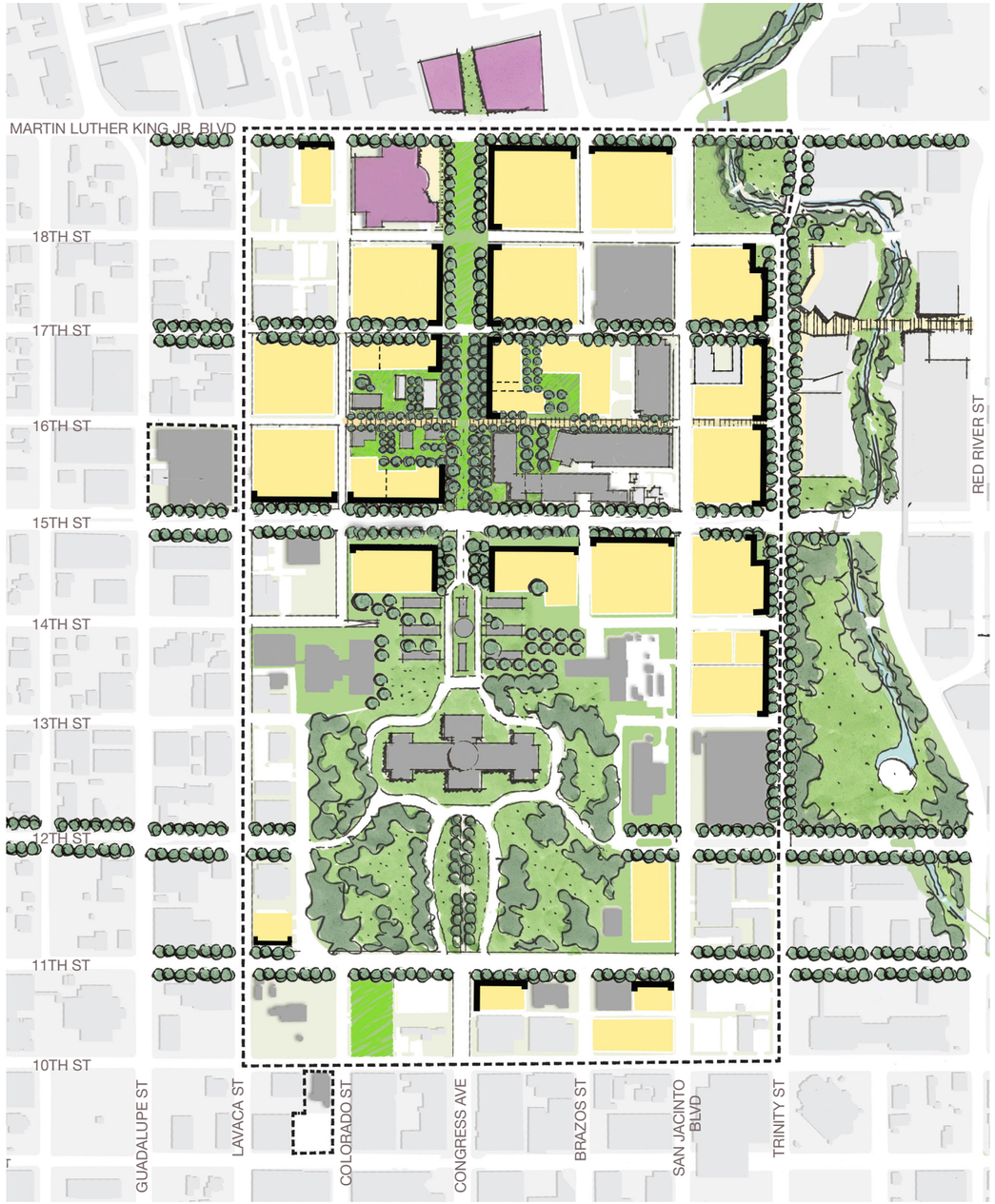


Figure 4.7
Urban Design Framework

PLAN OVERVIEW

The master plan describes in greater detail the various planning and design strategies and proposed character of the Capitol Complex. The plan builds on the most compelling ideas in the concept alternatives to create a visionary and integrated plan for the complex.

The plan envisions Congress Avenue as a tree-lined event space, with lawn panels extending between the Capitol grounds and a new “museum gateway” at Martin Luther King Jr. Boulevard. Strategic infill sites along Congress Avenue will frame the Texas Mall, while respecting the view corridor to the Capitol. To meet the anticipated need for parking in the complex, underground parking will be accommodated below the mall.

The plan also creates the Historic Precinct, where the existing cluster of historic buildings west of Congress Avenue between 15th and 17th Streets will be preserved within a park-like setting. This precinct will serve as a new destination north of the Capitol grounds. Throughout the complex, landscape and public realm improvements will transform existing surface parking areas.

Existing east-west streets are reinforced in the plan with strategic infill complemented by streetscape and open-space improvements. Martin Luther King Jr. Boulevard and 17th, 15th, 12th and 11th Streets will also be improved with sidewalk enhancements, street trees, and other landscape features that extend beyond the complex to adjacent urban areas, such as Waterloo Park and the Lavaca/Guadalupe Street corridor. 12th Street will also serve as an enhanced connector linking Waterloo Park and Waller Creek to Shoal Creek. The overall pedestrian realm will be improved uniformly across the Capitol Complex.

Strategic infill development will occur throughout the complex on the sites identified in the urban design framework. New development will be positioned to create strong and consistent street edges, and building heights will respect Capitol View Corridor height restrictions. Buildings will be designed to frame human-scaled courtyards and plazas in key areas, and floor plates will be narrow to maximize daylighting opportunities.

To the extent possible, garages with spare capacity will be used to accommodate new parking demand initially, and future parking structures will be developed as demand warrants. Parking structures will consist of both underground and above-grade structures that are sensitively integrated into new development in order to mitigate visual impacts.

Figure 4.8
Capitol Complex Illustrative Plan

- Existing Building
- Proposed Phase 1-3 Building
- Potential Future Building

Figure 4.9
View of Congress Avenue Looking South Showing the Proposed Phase 1-3 Buildings

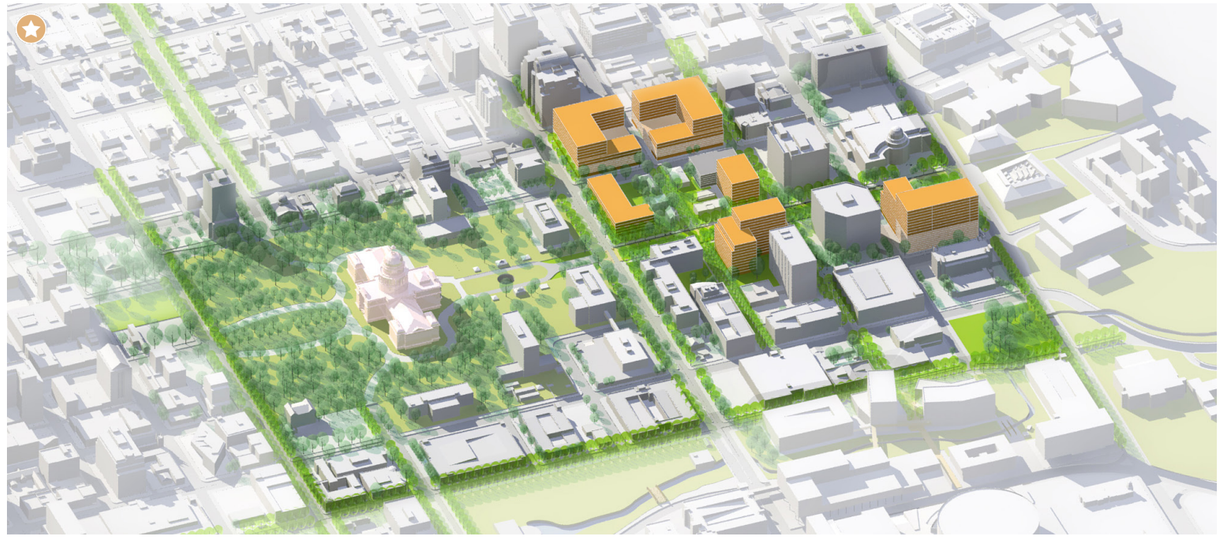


Figure 4.10
View of the Capitol Complex with Proposed Phase 1-3 Buildings

Figure 4.11
View of the Capitol Complex with Potential Future Buildings

Figure 4.12
Existing Congress Avenue Street Section

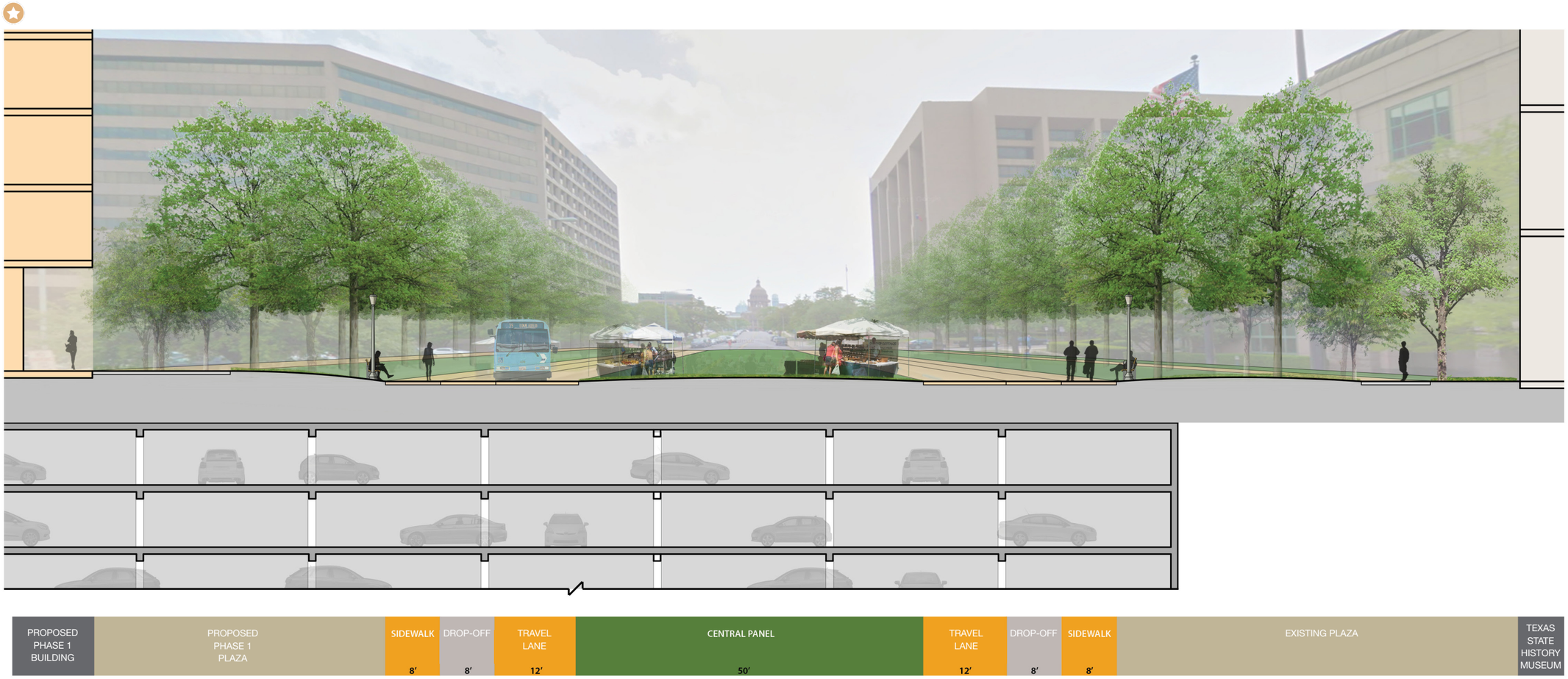


Figure 4.13
Proposed Congress Avenue Street Section from 18th Street to Martin Luther King Jr. Boulevard

Courtesy of Timothy Wells

View of the proposed Texas Mall.

Traffic

In order to create a cohesive complex, the master plan proposes strategic traffic modifications to facilitate connectivity through a variety of transit modes. The primary change is the creation of the Texas Mall as a pedestrian-oriented amenity that allows activity at the center of the complex and links the Texas State History Museum with the Capitol grounds. Congress Avenue will be closed to vehicular traffic from 15th Street to 18th Street. The block of Congress Avenue from 18th Street to Martin Luther King Jr. Boulevard will remain open to traffic as a means of drop-off for the museum and a new building to the east, as well as to maintain access to the museum parking garage.

A planning-level traffic analysis determined that the closure of Congress Avenue to through traffic will not significantly affect the vehicular flow through the Capitol Complex. The current configuration of Congress Avenue north of the Capitol grounds does not serve as a major arterial, as it runs only four blocks and carries a low traffic volume. Other roadways interior to the complex display reserve capacity in order to accommodate any demand shift created by this change. Additionally, maintaining vehicular access to the front door of the Texas State History Museum allows bus and passenger drop-off and parking garage access to retain their current method of operation and clarity of access to this public venue.

The second significant change to vehicular flow within the complex is the proposed modification of 16th Street, 17th Street, and 18th Street. These interior collector streets currently operate as one-way facilities with one through lane and parallel parking on both sides. The change will maintain the existing street width, while creating two-way traffic with one lane in each direction and parallel parking on only one side. The conversion is a positive design feature for area traffic circulation, as the additional lane of traffic approximately doubles the capacity of each of these streets. It also increases the options for gaining access to future buildings and the proposed underground parking garage, and it synchronizes with the same streets just outside the complex, which currently carry two-way traffic. Each of these streets will maintain access across the Texas Mall, employing stop signs at the mall to coordinate with pedestrian flows. Any loss of on-street public parking as a result of this change will be accommodated in the proposed parking garages, specifically with public parking spaces allocated in the new underground facility below the mall.

No modifications are proposed to existing major arterials that serve as links to and through the complex at large, such as Martin Luther King Jr. Boulevard or 15th Street. Only streetscape improvements are proposed for these facilities, as noted in the Open Space and Landscape Design Guidelines.

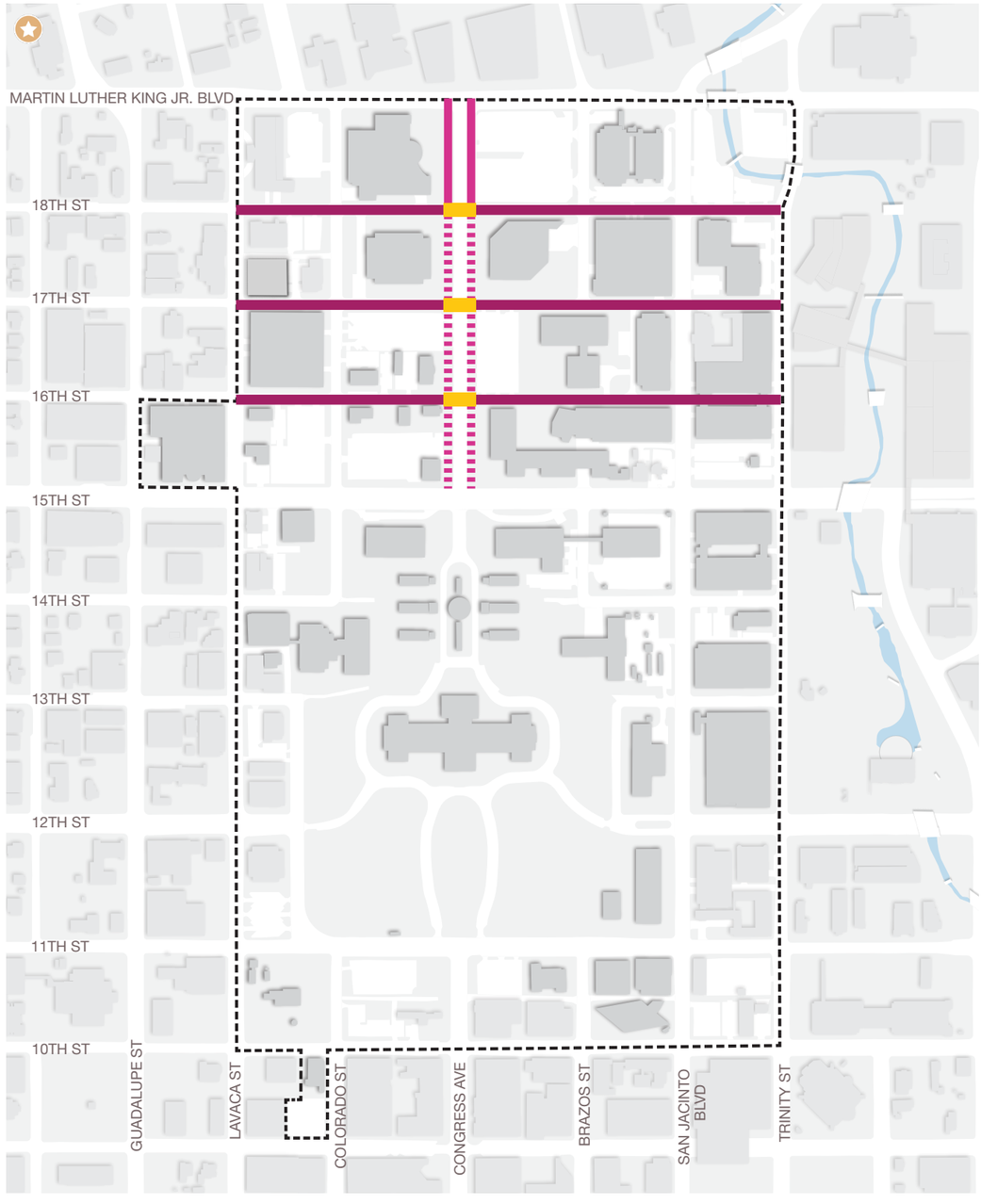


Figure 4.14
Traffic Modifications

4 Parking

The Capitol Complex Master Plan proposes below-grade and above-grade parking facilities to accommodate the demand created by proposed buildings as well as parking displaced by surface parking lots and garages targeted as development sites. Existing garages and surface lots were analyzed both during and between state legislative sessions to determine peak demands. This study revealed utilization rates and yielded a parking ratio appropriate for use in parking planning of building developments.

The study identified a parking ratio of 3.3 parking spaces per 1,000 gross square feet (GSF) of building space. This can be translated as 4.2 parking spaces per 1,000 usable square feet of office. These numbers are used to quantify the parking required based on the size of new facilities.

The analysis of existing parking facilities reveals that some facilities located further from the center of the complex operate at a lower demand than those in central locations. Proposed new parking is strategically located to provide convenient access to new and existing buildings for a majority of the employee and visitor populations.

A substantial below-grade parking structure is proposed in Phase 1 and Phase 2, to be located beneath the entire length of the Texas Mall. (Refer to figure 5.3) This facility provides ample parking in a central location that can be accessed from multiple portals and will begin on the block adjacent to the Capitol grounds, once it is completed in Phase 2. It will also provide public parking in a portion of the garage to accommodate public access in the heart of the complex. Parking portals will be spaced as required and located within new building footprints to avoid exterior access ramps that would eliminate large stretches of sidewalk at the street level. Additional parking facilities will be integrated into new building developments in order to provide close proximity for state employees and a continuity of urban fabric that is not interrupted by stand-alone parking structures.

The parking supply for Phase 1 and Phase 2 will accommodate the required parking ratio for these new buildings as well as that displaced by redevelopment of existing surface parking lots. In addition, surplus parking will be generated in order to accommodate the removal of an existing sub-standard parking structure and development of a new building in its place as part of Phase 3 improvements. Additional parking capacity is also provided to address increased parking demands that occur during legislative sessions.

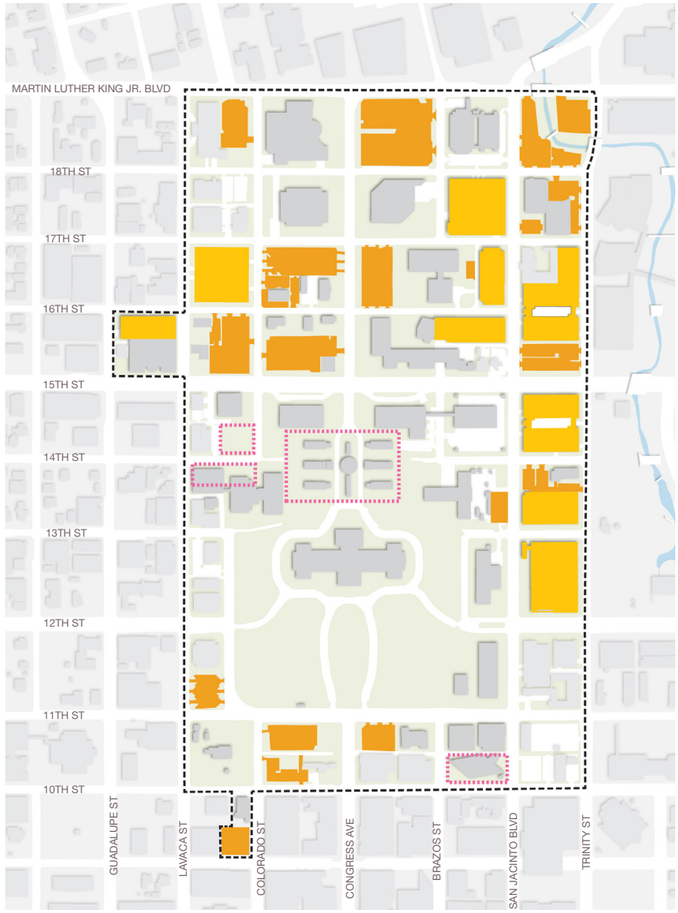


Figure 4.15
Existing Parking

Surface Lot
Above-Grade Garage
Below-Grade Garage

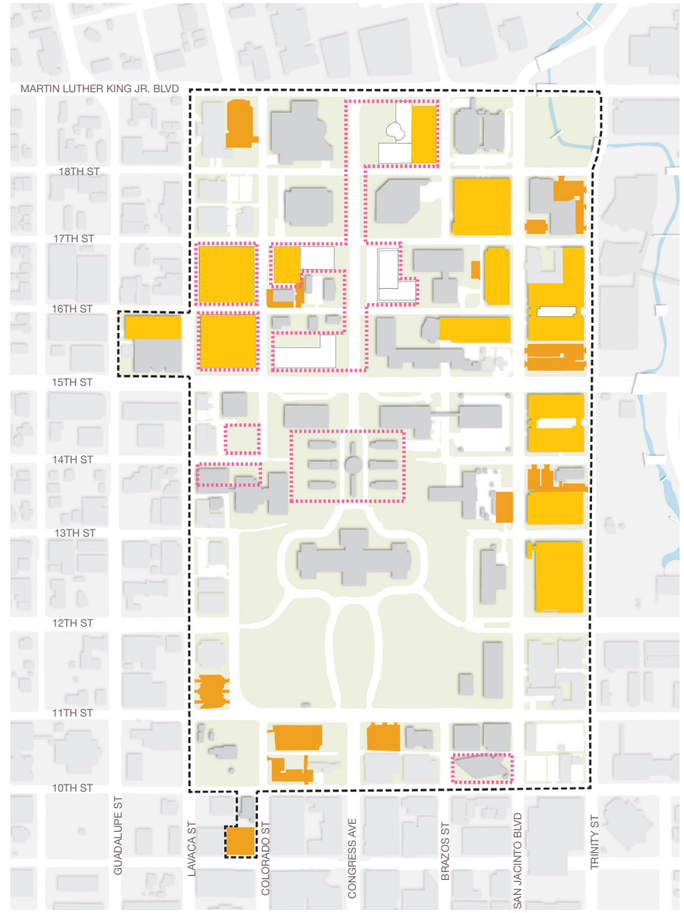


Figure 4.16
Proposed Parking Phase 1 to 3

Surface Lot
Above-Grade Garage
Below-Grade Garage

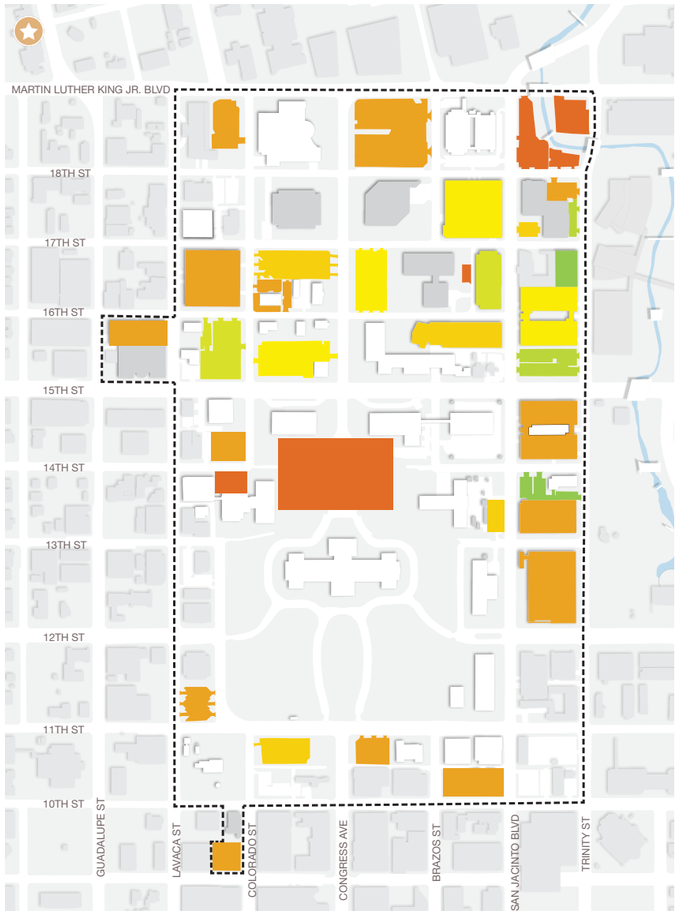


Figure 4.17
During State Legislative Session Parking Demand

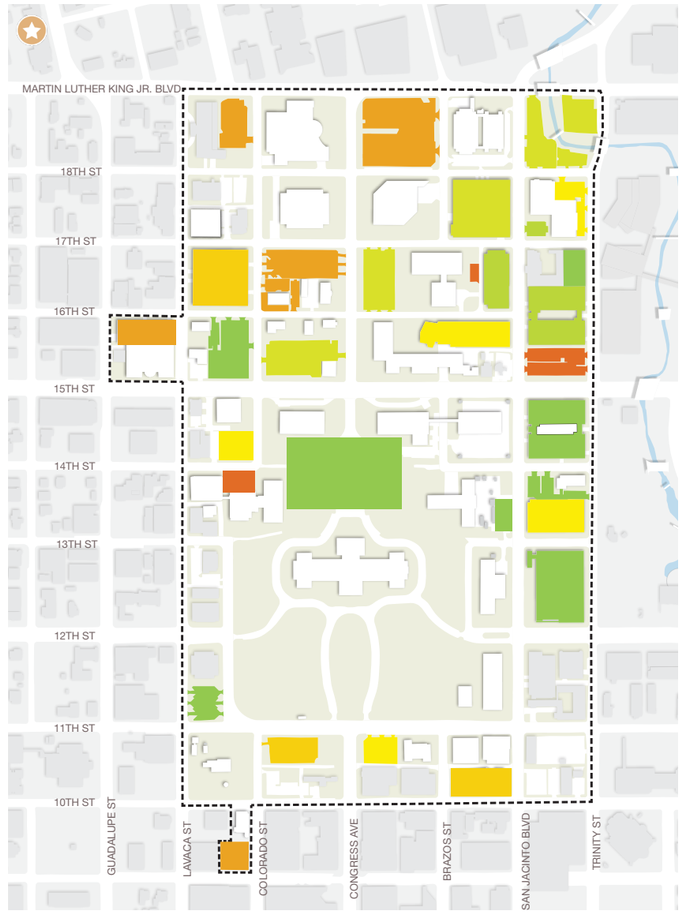
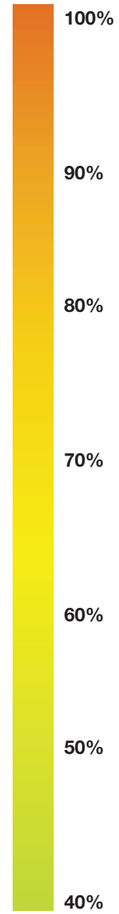


Figure 4.18
Between State Legislative Sessions Parking Demand



4 Infrastructure

In order to develop a cohesive planning strategy, the Capitol Complex Master Plan studied infrastructure upgrades that will help to integrate the complex into an efficient system of interconnected facilities. Previous studies of the utility infrastructure serving the Capitol Complex identified costly and inefficient systems as well as areas of vulnerability in the existing utility distribution systems. This plan examines how the proposed state office buildings and underground garage running beneath the Texas Mall will impact the existing utility distribution, and how utility expansion can be integrated with the construction of the garage.

THERMAL UTILITY EXPANSION

Chilled Water Distribution

The 2014 TFC Master Facilities Plan Report identifies both a need for centralized chilled water production and a plan to create that centralized production using the existing distribution. Consolidating the chilled water production within the complex will help to reduce maintenance demands and ongoing costs, as well as eliminate excess capacity required to maintain equipment redundancy in remote plants. Improved distribution networks will further ease maintenance, reduce vulnerabilities, and help meet the long-term needs of the complex.

There are currently two approaches to chilled water distribution within the Capitol Complex. South of 15th Street, most of the complex buildings are served by chilled water produced in the Capitol Complex Physical Plant (CCPP). Located in the basement of the Sam Houston Building, this plant serves thirteen buildings, including the Capitol and Capitol Annex. The plant acts as a base for facilities operations and maintenance personnel, and has adequate capacity to serve the southern half of the complex.

North of 15th Street, thermal utilities are decentralized. The plant located in the Stephen F. Austin Building also provides chilled water to the William B. Travis and Lyndon B. Johnson Buildings through direct buried pipe connections, while the William P. Clements and Robert E. Johnson Buildings are served by stand alone local chilled water production and distribution systems. Figure 4.19 illustrates the existing chilled water distribution.

The 2014 TFC Master Facilities Plan Report targets the addition of a Capitol Complex Physical Plant Annex (CCPPA) that will increase the capacity at the existing central plant location. This annex will serve existing and future buildings located north of 15th Street through a series of underground, walkable utility tunnels. These tunnels will be distinct from existing pedestrian tunnels in the complex. Chilled water supplies for buildings north of 15th Street can be shifted to the CCPPA, centralizing nearly all of the chilled water production in the complex in the basement of the Sam Houston Building. Construction of a thermal energy storage (TES) tank at an adjacent site will help the complex lessen electrical consumption during peak hours, reducing demand charges.

The proposed underground garage below the Texas Mall creates an opportunity to build a thermal utility tunnel in a loop configuration. Integrating the tunnel with the design and construction of the underground garage, thermal utilities may run along the perimeter of the garage or pass through the garage at designated crossings. As part of the Phase I development, a detailed design plan will be developed to determine the exact route of the tunnels, balancing costs and constructibility with the long-term needs of the complex. Refer to figure 4.20 for a map of the proposed tunnel route.

A thermal utility loop distribution will provide the complex with long-term flexibility, allowing additional loads and capacity to be added at any point along the loop. The potential need for additional capacity is expected sometime in the future, as the complex continues to develop north of 15th Street. The loop configuration also makes the system more reliable, allowing buildings to be served from either side of the loop should any section of pipe need to be isolated.

Construction of the underground garage will disrupt the existing chilled water feeds from the Stephen F. Austin Building to the William B. Travis and Lyndon B. Johnson Buildings. However, integrated utility crossings will allow connectivity to be reintroduced as needed. A detailed construction sequence will be developed to ensure that these buildings have continuous chilled water service during the construction of the garage. Options for serving these buildings include a discontinuous top level of the garage below grade at 17th Street and 18th Street, in order to accommodate civil utilities. Alternatively, the tunnel construction can be phased to provide service to these buildings from the CCPPA prior to being disconnected from the Stephen F. Austin chillers.

Heating Distribution

Heating water production will be decentralized with stand-alone gas-fired boilers and heating water pumps located at each building. Serving buildings with local hot-water boilers is preferred to distributed steam or hot water.

ELECTRICAL COORDINATION

The proposed underground garage impacts the existing Austin Energy electrical distribution at the intersection of 18th Street and Congress Avenue. A map of the area is shown in figure 4.21. The Austin Energy east-west distribution beneath 18th Street will need to remain in service throughout the construction of the garage. To ensure continuity of the electrical lines and civil utilities, the garage will be discontinuous for the first fifteen feet below grade at this intersection, as well as the 17th Street and 16th Street intersections. Lower garage levels will continue below these intersections. Further coordination between electrical lines and civil utilities will be necessary as utilities require upgrading.

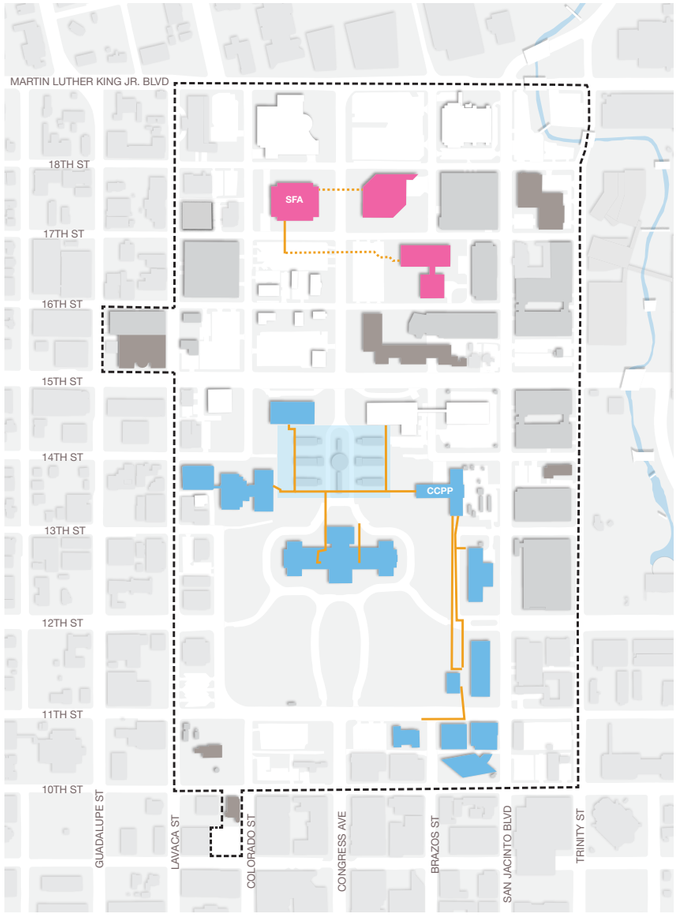


Figure 4.19
Existing Chilled Water Distribution

- Served by CCPP
- Served by SFA
- Stand Alone
- Not Served by TFC
- Existing Utility Tunnel
- Existing Direct Buried Pipe

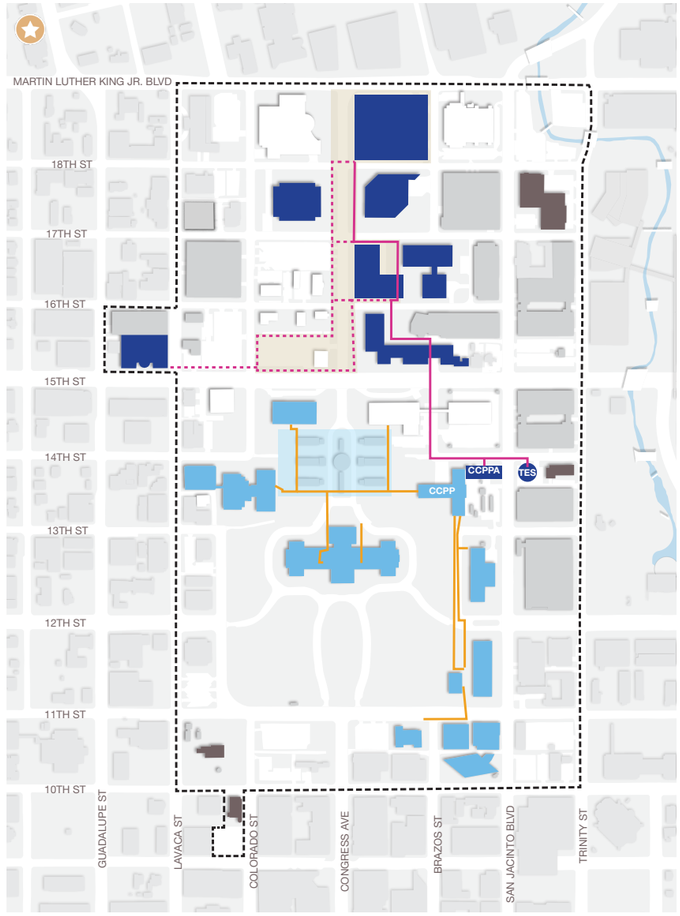


Figure 4.20
Proposed Chilled Water Distribution

- Served by CCPP
- Served by CCPPA
- Stand Alone
- Not Served by TFC
- Existing Utility Tunnel
- Proposed Utility Tunnel
- Potential Utility Tunnel
- Proposed Underground Parking

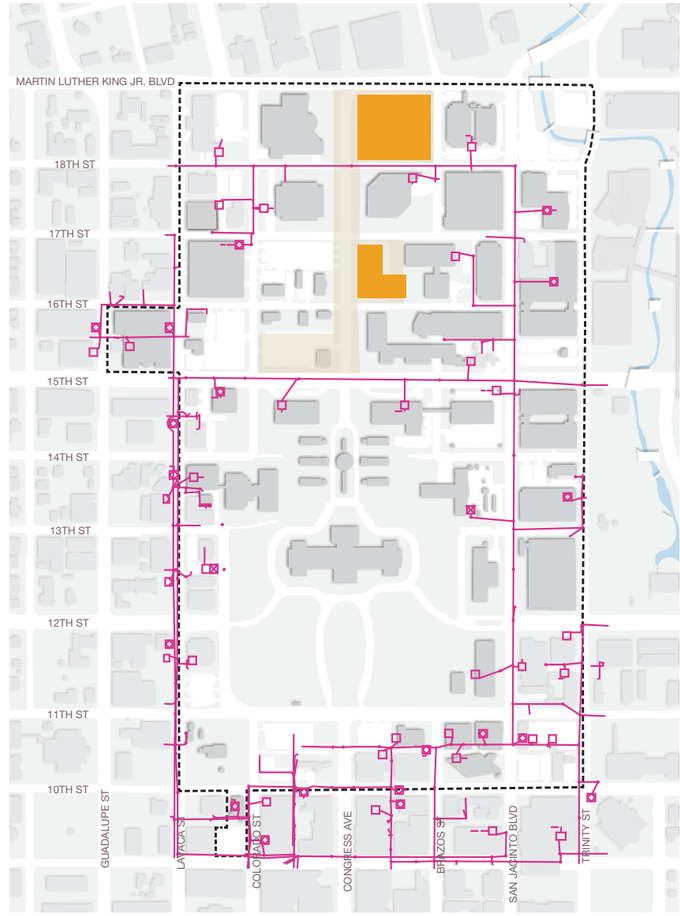


Figure 4.21
Garage Impact on Existing Electrical Grid

- Phase 1 Build-out
- Proposed Underground Parking
- Existing Austin Energy Grid

CIVIL UTILITIES

The proposed underground parking garage below the Texas Mall is an interconnected structure that will ultimately stretch four blocks in length. As a result, it will pass below three existing cross-street intersections at 16th, 17th, and 18th Streets. The rights-of-way for these streets carry various utilities below the streets. These services must be maintained or equivalent service provided before the utilities are taken off-line.

Existing utilities in the right-of-way include water, wastewater, storm drainage, communication tunnels, gas, electrical, and chilled water. With typical separations of eight feet, these utilities may require most or all of the existing 60-foot right-of-way.

As a strategy for maintaining clearance below grade for utilities, the underground parking garage will be discontinuous at its top level for the street crossings. The top level of the garage should ensure the preservation of the full existing right-of-way for these cross streets. The next level of the garage below the crossing should be a minimum of fifteen feet below grade, resulting in a utility zone 15 feet tall by at least 60 feet wide. However, if necessary or deemed more appropriate upon detailed design, utility sections may be handled with full access in a structure at the crossings. Utilities might be aligned horizontally across the ceiling or sloping along the walls.

Aside from the mall crossings, existing below-grade utilities in the right-of-way should be maintained wherever possible as development occurs throughout the complex. Connections to a new city reclaimed-water pipeline along Trinity Street will be reviewed for potential benefit to the complex, including reduced operating cost and reduced potable water consumption. Taps off the Trinity Street line will be provided at 14th Street and Brazos Street and at 12th Street and Brazos Street for use on state grounds. This reclaimed water main also passes along 11th Street on the south end of the complex, providing potential opportunities in that area.

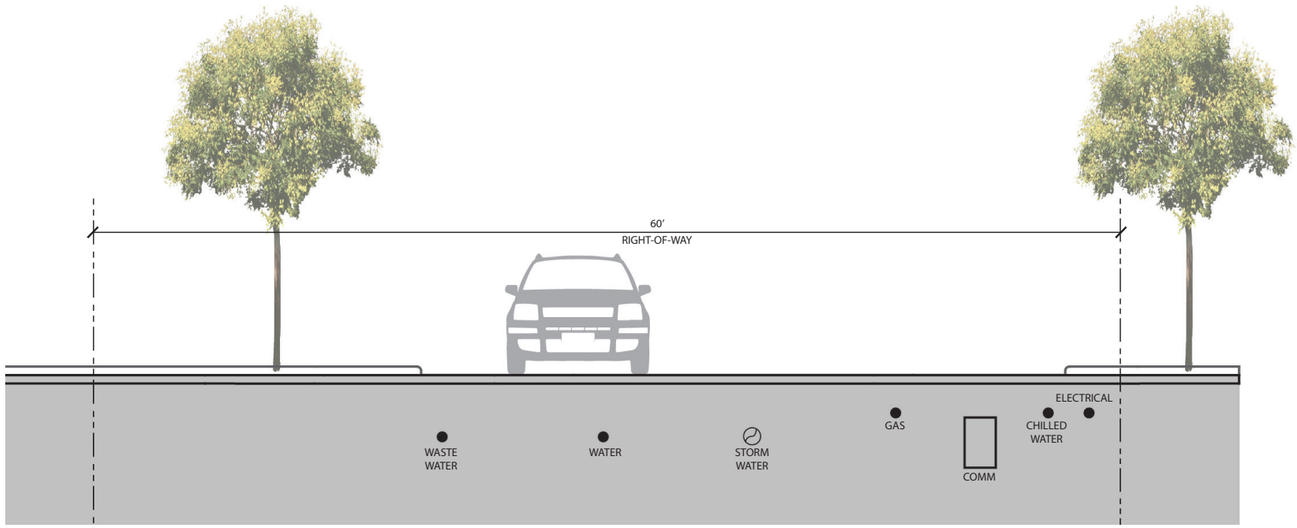


Figure 4.22
Existing Utility Street Section

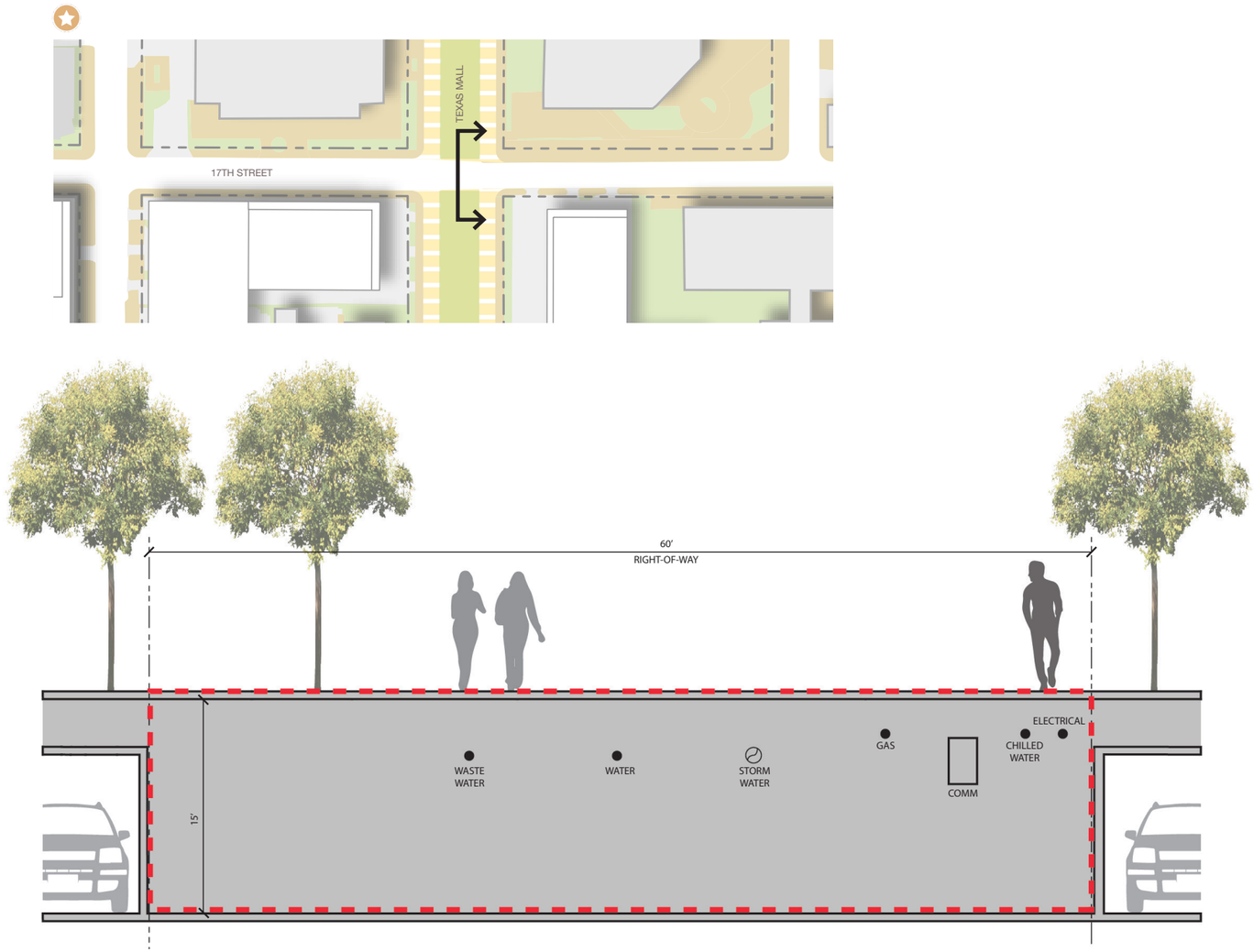
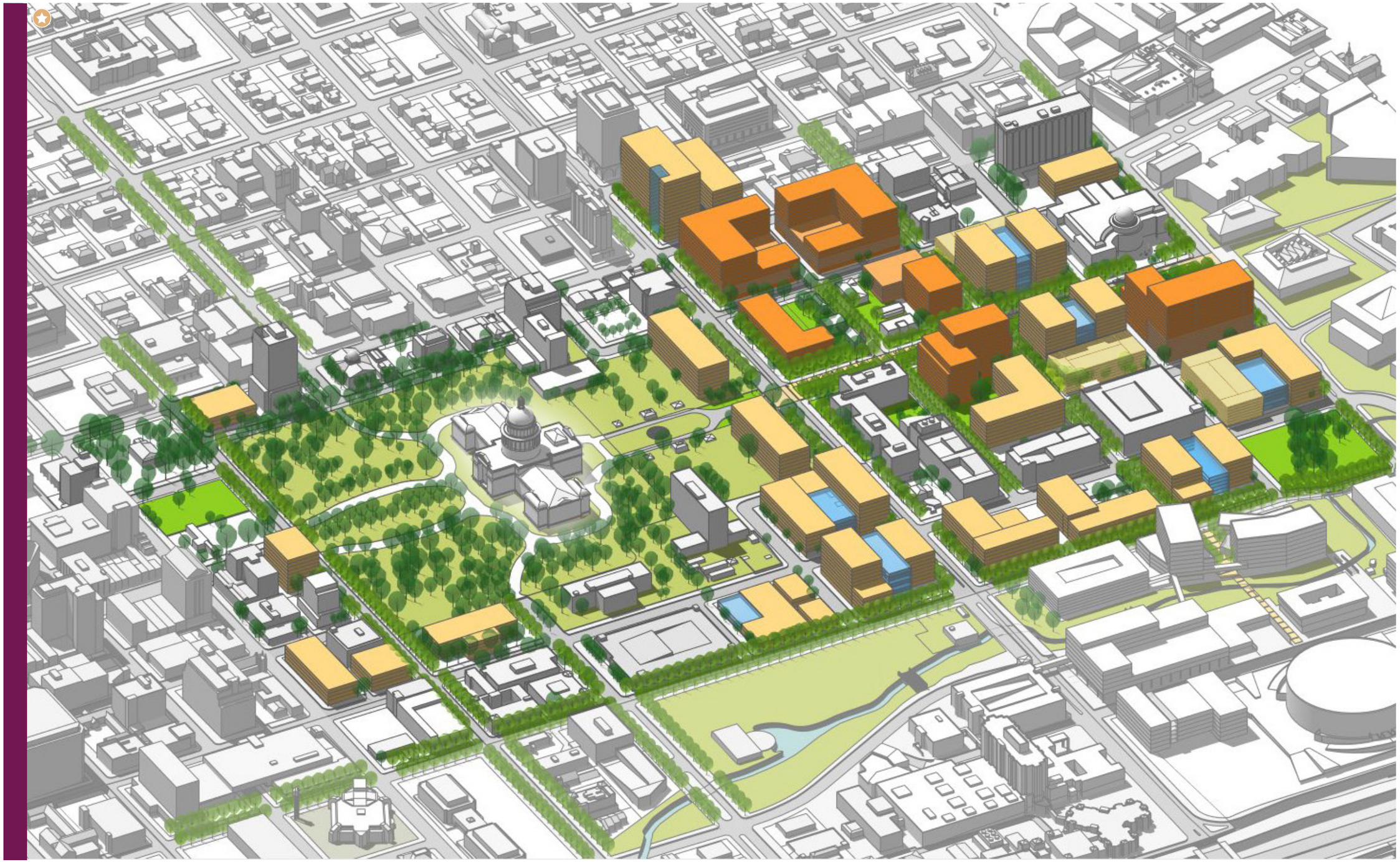


Figure 4.23
Proposed Utility Street Section



5

Implementation

5 Sequencing

PHASE 1

Phase 1 construction includes the development of buildings on the Congress Avenue (Congress) and Martin Luther King Jr. Boulevard (MLK) sites, as well as parking below three blocks of the Texas Mall. The building sites are currently occupied by surface parking lots. The Congress site will accommodate a new child care facility and the Department of Public Safety. This site utilizes surplus parking from nearby garages as well as new underground parking below the building and the adjacent Texas Mall. The Congress site is centrally located within the Capitol Complex and provides a strong opportunity for a district amenity to be located at the ground level.

The MLK site is unconstrained by view corridors or the capitol dominance overlay, affording ample building space for lease consolidation. The building helps to anchor the Texas Mall along with the Texas State History Museum. Coupled with the existing museum, a public function at the base of this building can create a significant gateway for visitors to the Capitol Complex. Parking for this building is accommodated below grade as well as in an integrated garage on the east side of the building, away from the Texas Mall.

Phase 1 projects were approved by the 84th Texas Legislature in 2015.

Phase	Site	GSF	Parking Supply
1	Congress	420,000	2,050
1	MLK	605,000	2,550
1	Mall Connector		240
New Parking			4,840
Displaced Parking			-389
Net Addition		1,025,000	4,451

Table 5.1
Phase 1 Data

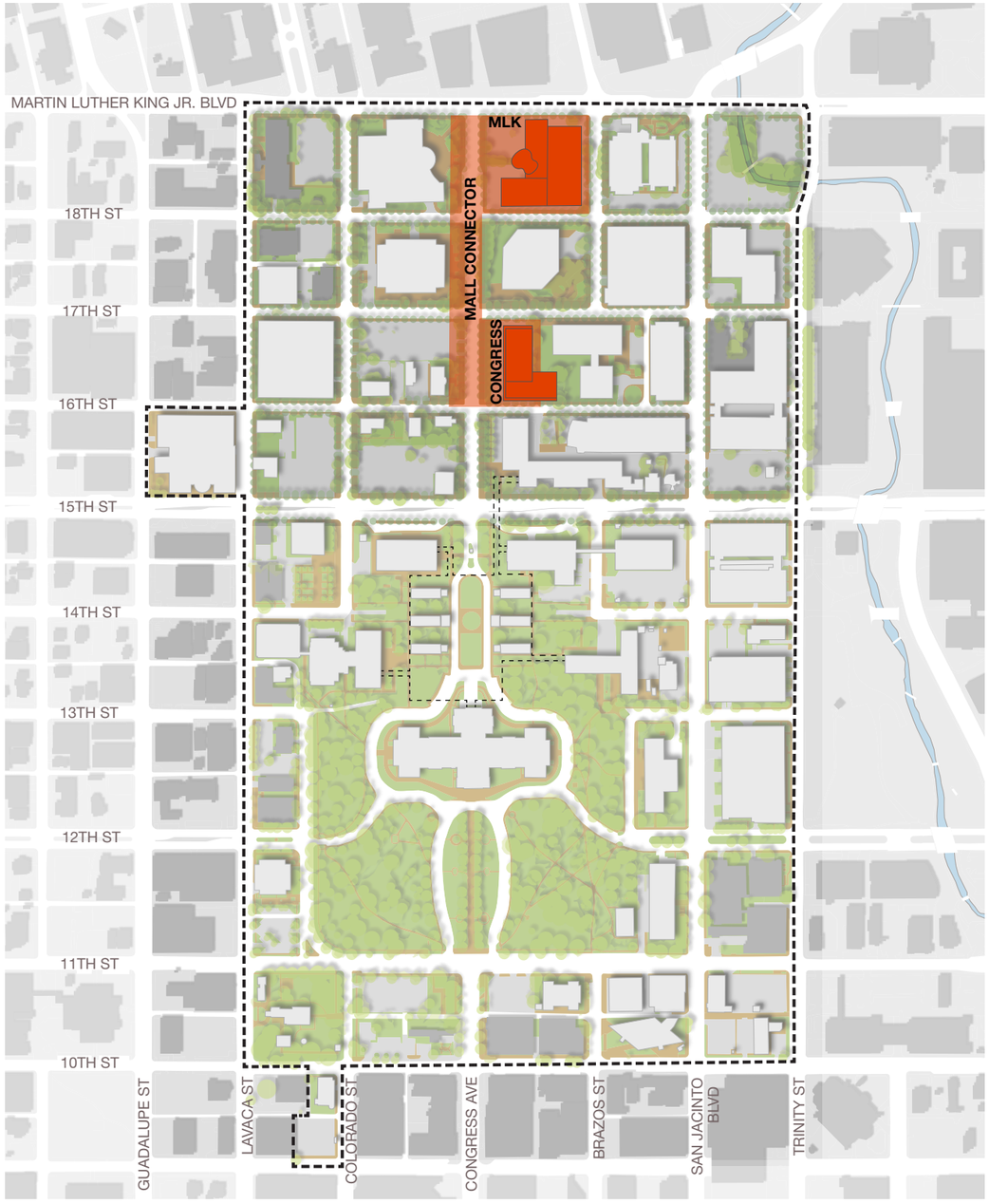


Figure 5.1
Phase 1 Plan

- Phase 1 Building
- Phase 1 Underground Parking
- Existing Building
- Existing Underground Building

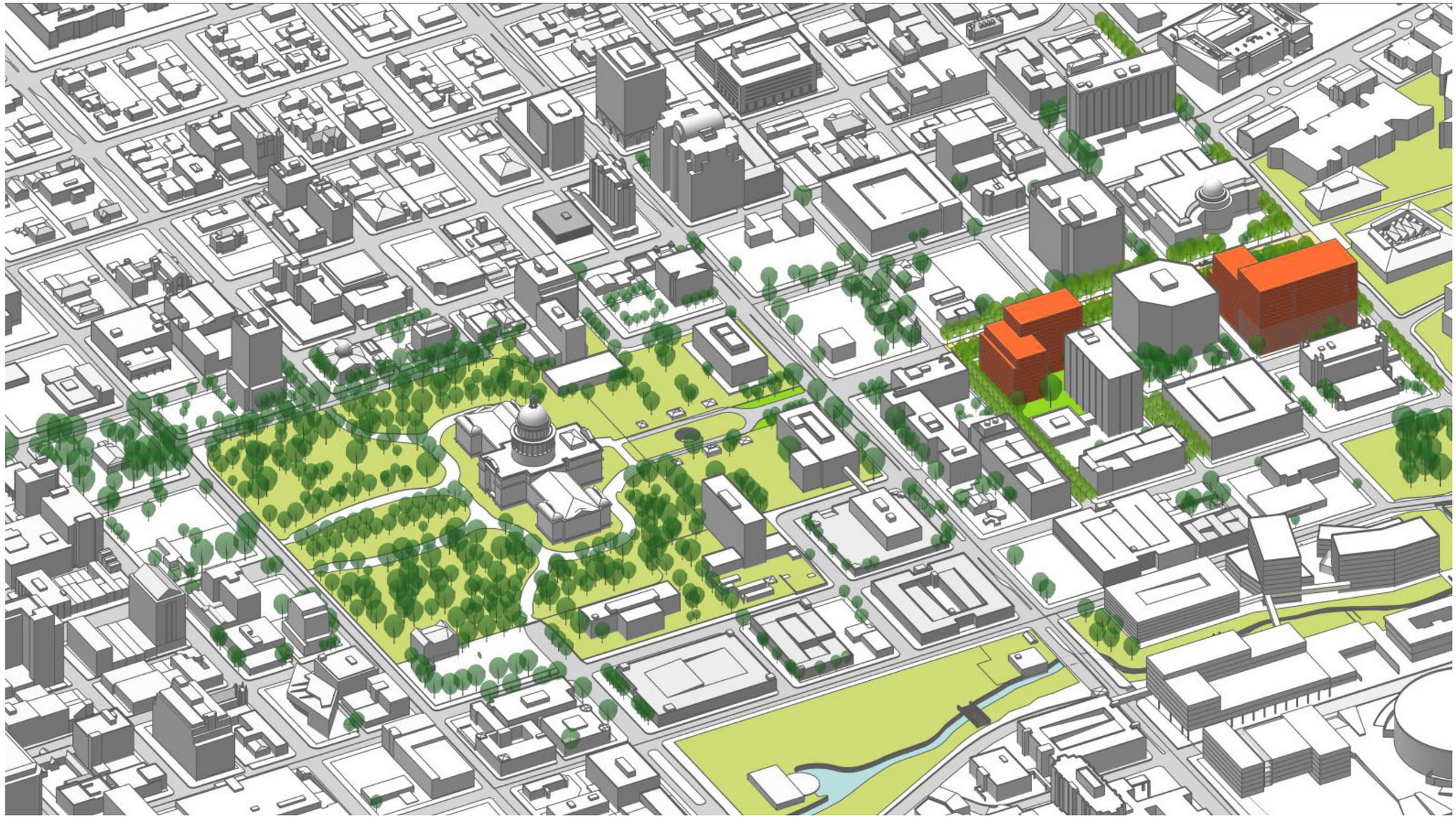


Figure 5.2
Phase 1 Perspective

5

PHASE 2

Phase 2 development includes buildings on the 15th Street and Lavaca Street (Lavaca) sites. The parcels are freed up by the Phase 1 development of the Congress site, which relocates the Capitol Complex Child Care Facility and the Department of Public Safety from the Capitol District Office Building. The remainders of these sites are currently surface parking lots.

The 15th Street site allows for the substantial completion of the Texas Mall and underground garage, creating a strong link between the northern portion of the Capitol Complex and the Capitol grounds proper. Parking for this site is provided below the building and below the final block of the Texas Mall. The garage also creates the ability to connect to an existing pedestrian tunnel for access to the Capitol Extension. The low scale of this building is a result of Capitol View Corridor and Capitol Dominance constraints, but it provides a more appropriate scale when paired with the adjacent historic buildings of the historic precinct.

The Lavaca site offers a minimally-constrained development site for maximizing lease consolidation and reinforces an important east-west gateway to the complex at Lavaca Street and 15th Street. Parking is provided both below the building and in an integrated parking structure above grade. Both the 15th Street and Lavaca sites are located along a major arterial through the district, providing the potential for public uses to occupy a portion of the ground levels of these buildings.

Phase 2 projects require approval and funding during future legislative sessions.

Phase	Site	GSF	Parking Supply
2	**15th Street**	165,000	900
2	**Lavaca**	360,000	1,650
New Parking			**2,550**
Displaced Parking			**-269**
Net Addition		**525,000**	**2,281**
Grand Total (Phase 1 & 2)		**1,550,000**	**6,732**

Table 5.2
Phase 2 Data

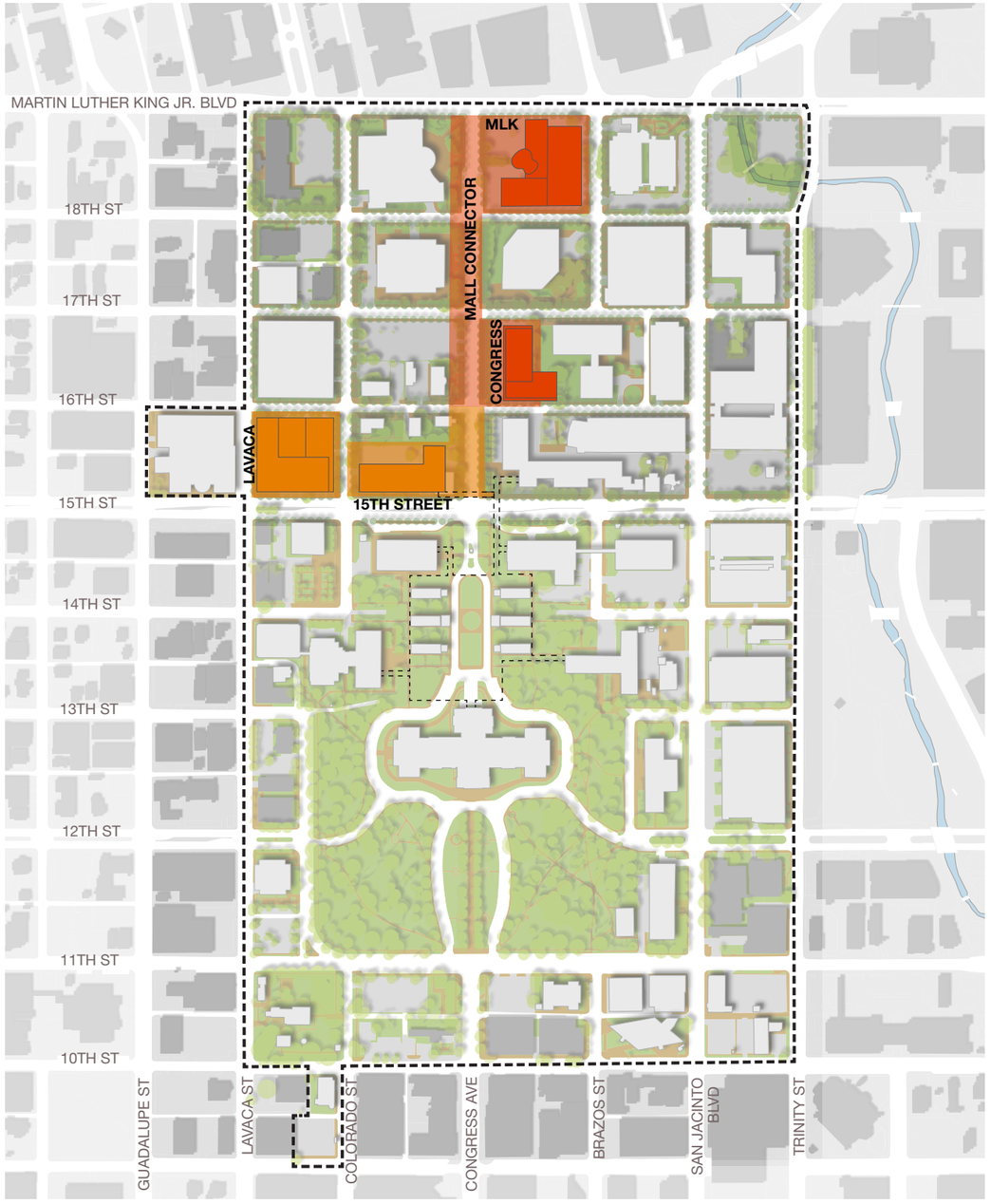


Figure 5.3
Phase 2 Plan

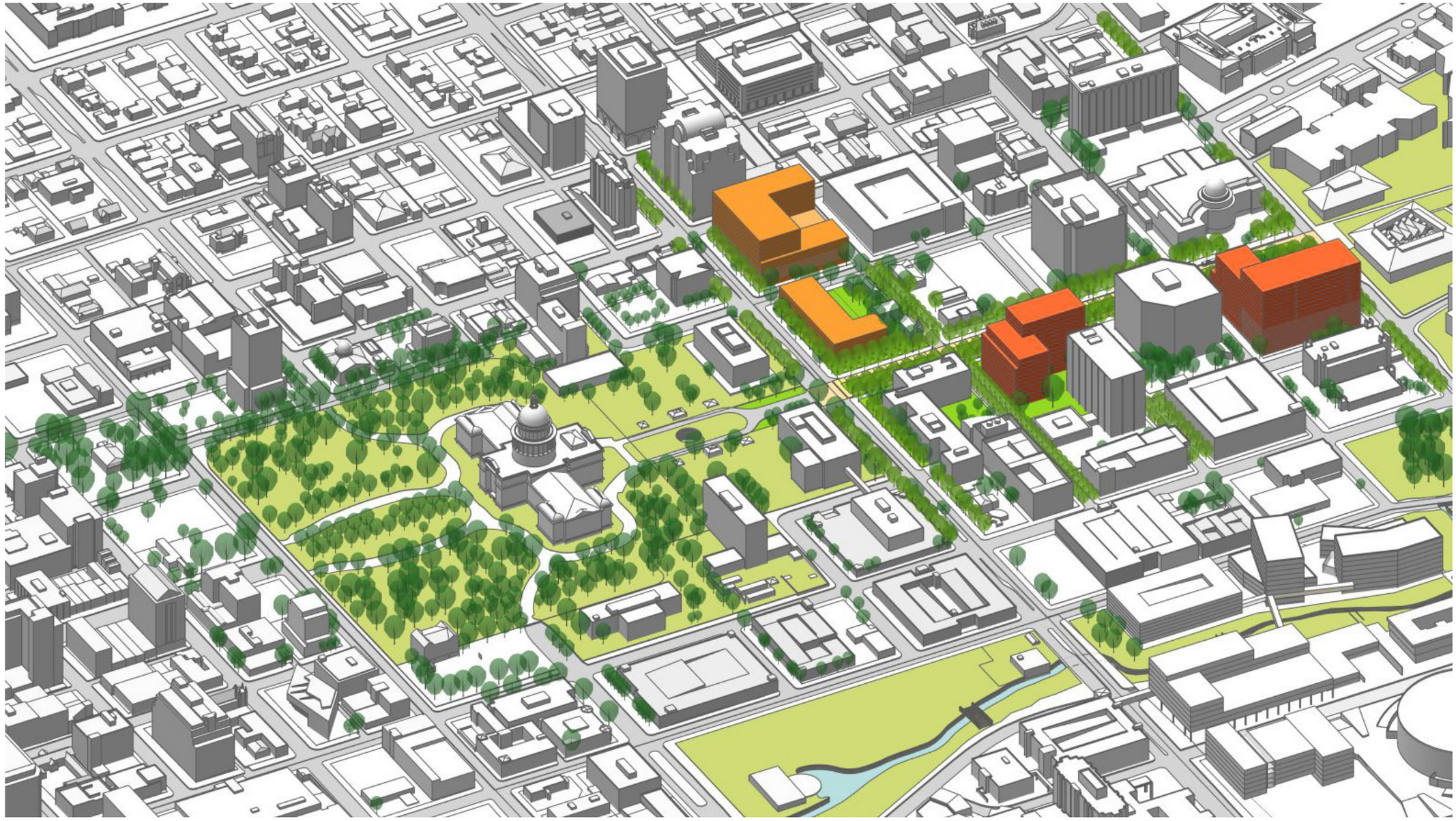


Figure 5.4
Phase 2 Perspective

5

PHASE 3

Phase 3 building sites complete the near-term development that reinforces a concentrated office complex surrounding the Texas Mall. Two sites are proposed for this phase, including the 17th Street site along the Texas Mall, which is currently a surface parking lot. The Colorado Street (Colorado) site, bounded by Colorado, Lavaca, 16th, and 17th Streets, is currently occupied by Garage E.

The 17th Street site finalizes the creation of a continuously reinforced edge to the Texas Mall and aides in the definition of 17th Street as an important east-west connector through the complex. This site includes integrated parking above grade and parking below the building that will connect to the Phase 1 Texas Mall garage. Mirroring the Congress site of Phase 1, this building is centrally located and can provide a district amenity at the ground floor as needed in the future. The massing of this building steps down from the existing Stephen F. Austin Building as a means of transitioning from the taller height of the existing buildings to the more intimate scale of the historic precinct.

The Colorado site replaces existing Garage E, a large pre-cast parking structure. Though Garage E provides a significant number of parking spaces for employees, the first two phases are designed to provide surplus parking in a central location that will alleviate the demand on this structure. New parking will be provided on site, both below grade and integrated with the new office building.

Phase 3 projects require approval and funding during future legislative sessions.

Phase	Site	GSF	Parking Supply
3	**17th Street**	170,000	840
3	**Colorado**	360,000	1,650
New Parking			**2,490**
Displaced Parking			**-1,614**
Net Addition		**530,000**	**876**
Grand Total (Phase 1, 2, & 3)		**2,080,000**	**7,608**

Table 5.3
Phase 3 Data

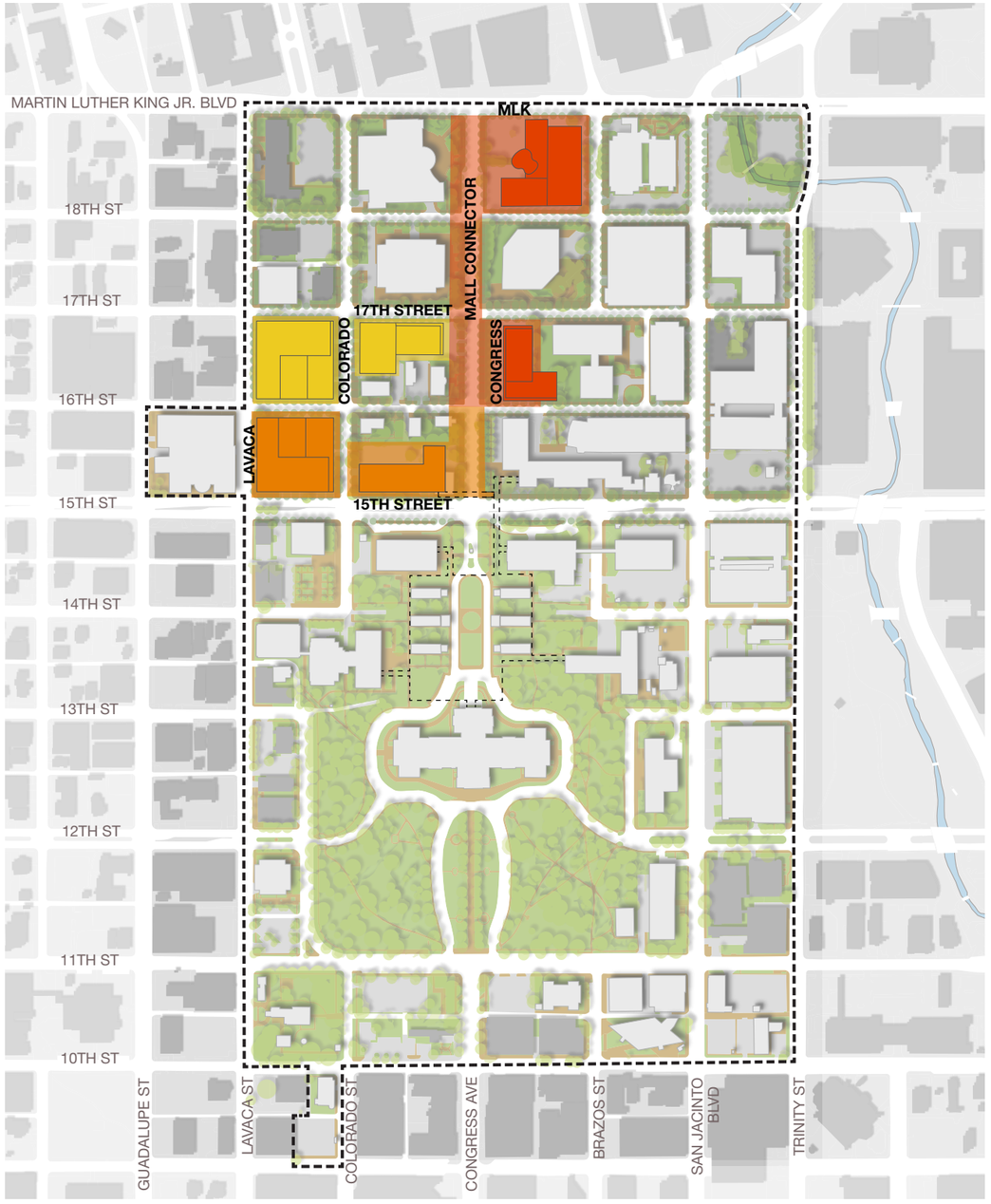


Figure 5.5
Phase 3 Plan

- Phase 1 Building
- Phase 1 Underground Parking
- Proposed Phase 2 Building
- Phase 2 Underground Parking
- Phase 2 Underground Tunnel
- Potential Phase 3 Building
- Phase 3 Underground Parking
- Existing Building
- Existing Underground Building

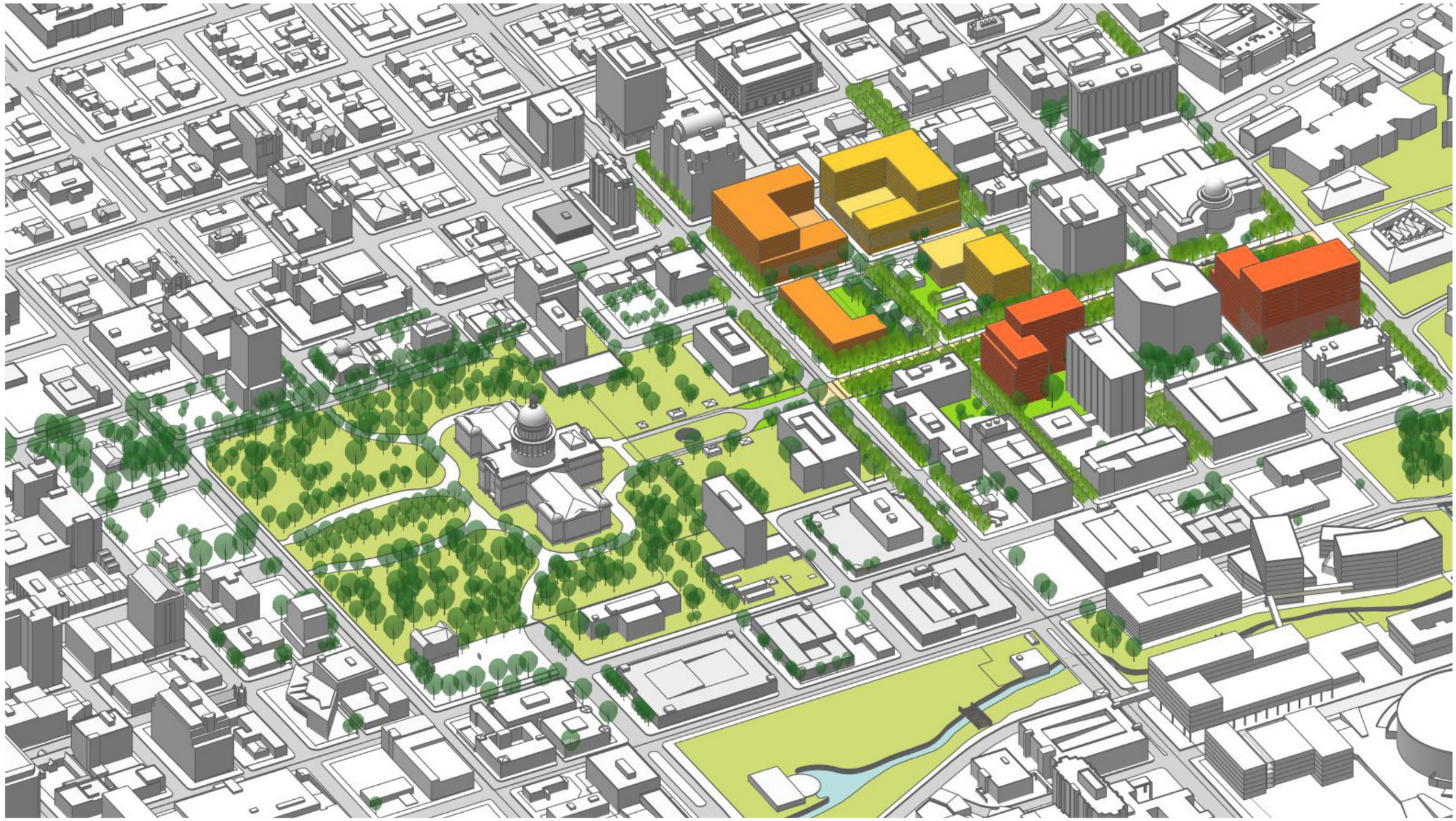


Figure 5.6
Phase 3 Perspective

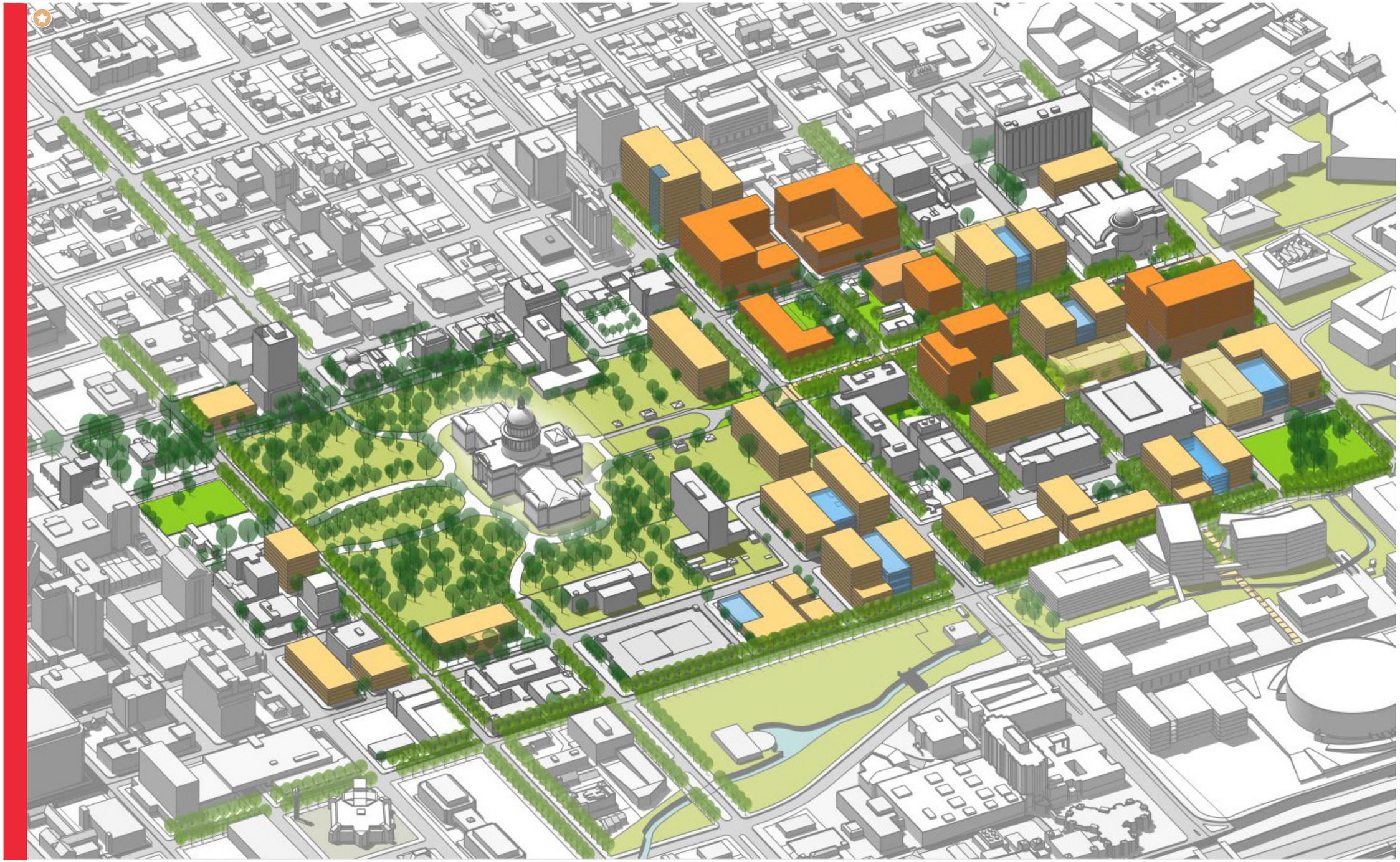
5 Financial Analysis

All construction projects identified in the master plan require prior consideration and approval by the Texas Legislature. The legislature determines the method of funding and may choose to use General Revenue (GR) appropriations, General Obligation (GO) bonds, or GR bonds to fund construction projects. GR appropriations are essentially cash allocations, while the GO and GR bonds are methods of debt financing. Given the substantial costs involved with large capital construction projects, debt financing is typically the preferred method of funding used by the legislature. As an alternative, the legislature may specifically authorize the use of a public-private partnership to construct a facility in the Capitol Complex.

The issuance of debt by the State of Texas is handled by the Texas Public Finance Authority (TPFA) in conjunction with the Texas Bond Review Board. In selecting the instrument of debt, TPFA must determine whether the construction project will include space that may be leased to a private vendor, as space intended for private use cannot be financed with tax exempt bonds. In the event that both public and private uses are anticipated within a facility, TPFA must ensure that the debt financing is taxable in its entirety or that it includes a percentage of taxable bonds in sufficient proportion to the tax exempt bonds issued for the balance of the public project. Typically, tax exempt bonds can be purchased at a lower rate than taxable bonds.

When consolidating leased space into state-owned buildings, the state is able to realize savings through lease cost avoidance. In essence, state funds that were previously used for lease payments can be used elsewhere, including paying down the debt incurred for new construction. Analysis of existing leases suitable for relocation into the new buildings to be constructed during Phase 1 indicates that the state can reach the break-even point in a cost-to-own versus cost-to-lease scenario in a relatively short period of time. If the state were to choose cash allocations to fund the Phase 1 buildings identified in the master plan, the break-even point would be achieved in approximately twenty-five years following the building delivery year. If debt financing is used, the break-even point is reached approximately thirty-five years following the building delivery year. When considering that the state invests in 100-year lifespan facilities, there are considerable long-term savings to be gained by consolidating leases into state-owned buildings.

In early 2014, the cost of the average lease for commercial office space in the Austin area was approximately $18 per square foot. By comparison, the Texas Facilities Commission spent $4.50 per square foot operating and maintaining state-owned buildings, including utility costs. Based on this comparison, once the state has reached the break-even point on its investment, the cost-to-own is approximately one-fourth the cost-to-lease and the state will realize significant savings throughout the remaining life of the asset.



6

Design Guidelines

6 Purpose and Compliance

PURPOSE

The Capitol Complex Design Guidelines capture the design intent of the master plan and provide guidance to designers as new state buildings and public spaces are built over time. They provide the Texas State Preservation Board, Joint Oversight Committee on Government Facilities, and Texas Facilities Commission with the tools to make decisions and give direction on development of the complex.

The chapter is organized into three sections:

- Urban Design Guidelines
- Architectural Design Guidelines
- Open Space and Landscape Design Guidelines

Each section includes several overarching principles which express the general intent of the plan and desired effect of design decisions. Following the principles, there are instructions outlining specific design requirements which, together with the principles, will lead to a cohesive, attractive, comfortable, and functional Capitol Complex.

COMPLIANCE

In order to ensure there is compliance with these design guidelines, proposed building designs and landscape projects will be reviewed by the Texas State Preservation Board and the Joint Oversight Committee on Government Facilities. Members of the Texas State Preservation Board include the Governor, Lieutenant Governor, Speaker of the House, and the Chairs of the House and Senate Administration Committees.

Because the design process requires professional expertise and in order to ensure compliance, the Texas State Preservation Board and Joint Oversight Committee on Government Facilities will be assisted by a panel of experts. The Governor, Lieutenant Governor, and Speaker of the House will each appoint a panelist, for a total of three experts. These experts should be selected from the leaders in the fields of architecture or landscape architecture in Texas, such as deans or former deans of schools of architecture, or highly recognized design award winners.

Review and approval should be based solely on the evaluation of compliance with design guidelines and not on personal preference. On any given project, the expert panel should meet to review projects at the following intervals:

1. At the end of Conceptual Design;
2. At the end of Schematic Design; and
3. At the end of Design Development, if deemed appropriate.

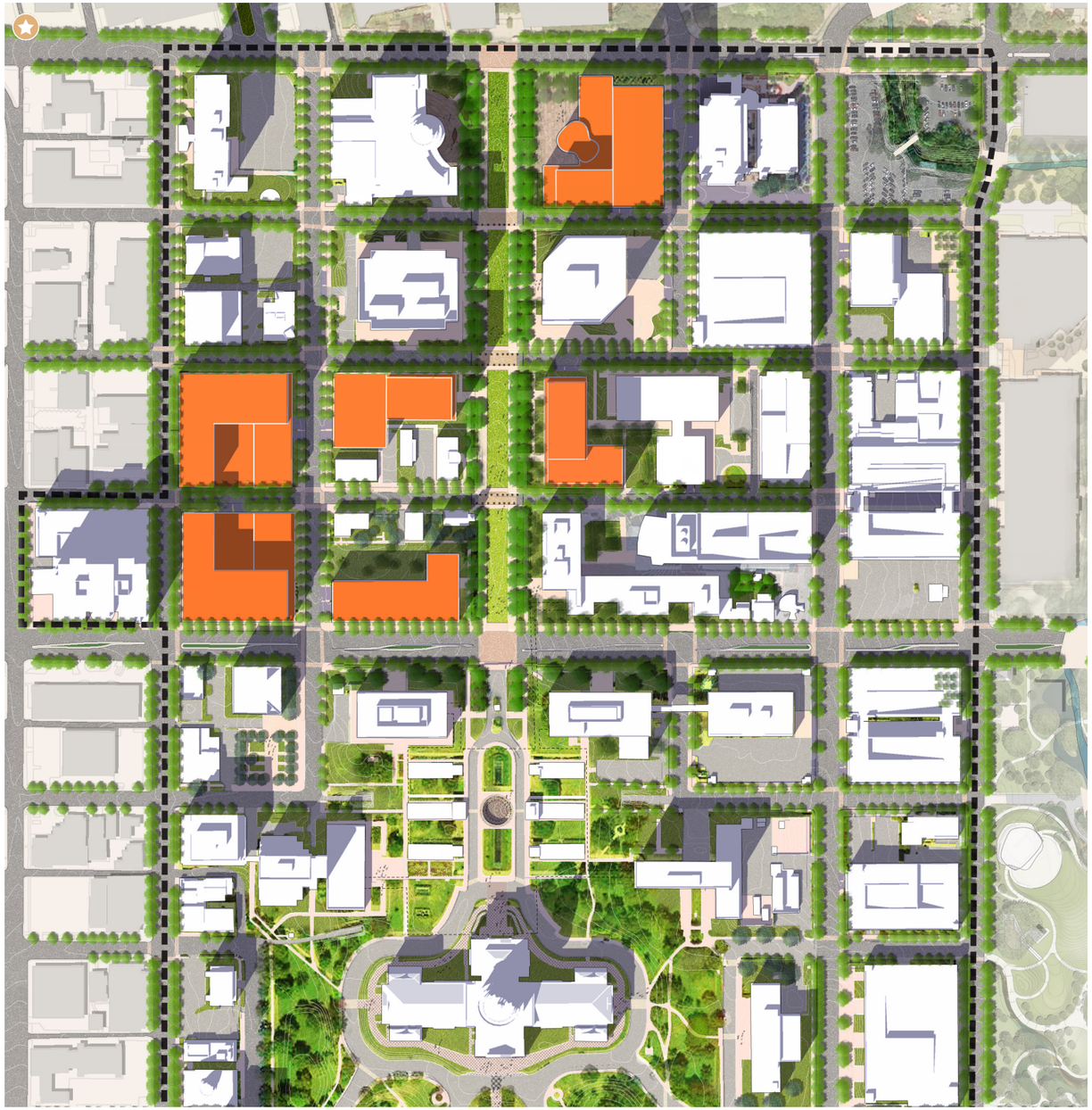
After the expert panel has determined that the proposed project complies with the design guidelines, the project will be sent to the Texas State Preservation Board and the Joint Oversight Committee on Government Facilities for review and approval after Conceptual Design, Schematic Design, and the end of Design Development. Additional review and approval may be required if substantial changes are made at a later stage of the design process.

A primary consideration for selection of architects and landscape architects for Capitol Complex projects should be their demonstrated ability to work within a master plan and design guidelines, and their expressed commitment to work specifically within the framework of the Texas Capitol Complex Master Plan and Design Guidelines to produce a building or landscape consistent with the historic significance of the Texas State Capitol and to enhance the Capitol Complex.

Courtesy of Timothy Wells

Bird’s eye view of the Capitol Complex with proposed phase 1-3 buildings.

6



Urban Design Guidelines

The Capitol Complex Master Plan provides an urban design framework to create a vibrant urban district that celebrates the Capitol as a destination and major civic space. The plan describes a district-wide structure for laying out blocks, streets, and major open spaces as well as siting buildings and key development blocks. A fundamental organizing concept is to establish the Texas Mall, a major civic space that can be used for events and connects the Capitol Complex to the University of Texas Austin campus. The plan also calls for restoring the historic Austin urban grid and for connecting the complex to its surrounding neighborhoods, including the UT campus, the UT Medical District, Waterloo Park, West End, and downtown Austin. Ultimately, the complex will have a vibrant quality of place and become a more attractive destination for visitors, employees, and residents.

The urban design principles and recommendations in this document provide additional design guidance to ensure the vibrancy, human-scale quality, and attractiveness of the new Capitol Complex.

PRINCIPLES

1. Identity
2. Urban Density
3. Civic Realm
4. Functionality
5. Mobility
6. Quality of Place
7. Sustainability

URBAN DESIGN PRINCIPLE 1

Identity

Create iconic places and landmarks in the Texas Capitol Complex that symbolize the state and its governance.

COMPLEX CHARACTER

A central aim of the master plan is to create a destination in the heart of Texas that celebrates the Texas State Capitol. Although the Capitol Complex will evolve over time, it will always center around the Capitol building and the 22 acres of park grounds that surround it. Future development shall respect the character of the historic buildings, as well as preserve and enhance views of the Capitol itself, while allowing for architectural diversity. New buildings will remain part of a cohesive whole, tied together through the urban design, architecture, and open space and landscape guidelines in a way that celebrates the civic role of the complex.

The Capitol Complex Master Plan creates a vibrant urban district that celebrates the Capitol as a destination and major civic space.

URBAN DESIGN PRINCIPLE 2

6 Urban Density

Maximize development potential to create a vibrant urban district that celebrates the Capitol as a destination, while maintaining a human-scaled and high-quality civic realm.

DEVELOPMENT SITES

The urban design framework for the Capitol Complex (refer to the Chapter 4 Master Plan for further detail) aspires to restore the historic Austin urban grid, comprised of blocks that are 310 feet by 350 feet; more recently developed blocks are double this size, at 310 feet by 750 feet. Creating shorter blocks with more frequent intersections will enhance pedestrian potential and make the complex more walkable.

Most development sites are located north of 15th Street, in a low-density area with many surface parking lots. Creating consolidated parking structures and underground parking will free up land for offices and limited commercial development. Refer to figure 6.1.

HEIGHT LIMITS

The Capitol View Corridors (CVC) Ordinance restricts building height within thirty view corridors to the Texas State Capitol. These heights are strictly enforced. They range from 65 to 140 maximum feet and must be carefully considered when determining the overall massing of buildings within the complex. Density should be maximized along the view corridors to take advantage of available developable land.

Additionally, building heights are limited within the Capitol Dominance (CD) Overlay, the area within a quarter-mile radius of the Capitol dome. Height limits are determined by the CVC maximum height or the CD Overlay height restriction calculation, whichever number is lower. Sites that fall outside the CVCs or CD Overlay have no height limits.

COMPLEX SCALE AND MASSING

On active public streets, buildings should be no taller than five stories before they reach a 15-foot step-back in order to give the complex a human scale. Behind the step-back, buildings may be as tall as allowed within the CVC and CD district when applicable. To further ensure a human scale, buildings should avoid large expanses of uniform facade treatment.

The recommended range of floor to area ratio (FAR) across the complex will ensure a balance between height and massing, ensuring a Capitol Complex that is dense but still open and modest in scale (refer to figure 6.3). Currently, many existing building heights are under 40 feet and several blocks are dominated by surface parking lots.

FAR recommendations vary by block from 0.1 to 6.9, with an average FAR of 2.1; this is nearly double the existing FAR of 1.1. The greatest recommended density is located in the area north of 15th Street, and along the Texas Mall – the main active corridors of the complex. The average FAR across the area north of 15th Street is proposed to increase to 3.3. While development is phased, the earlier phases are intended to create a critical mass of activity and place-making to help catalyze later phases.

Aerial photo of the existing Capitol Complex

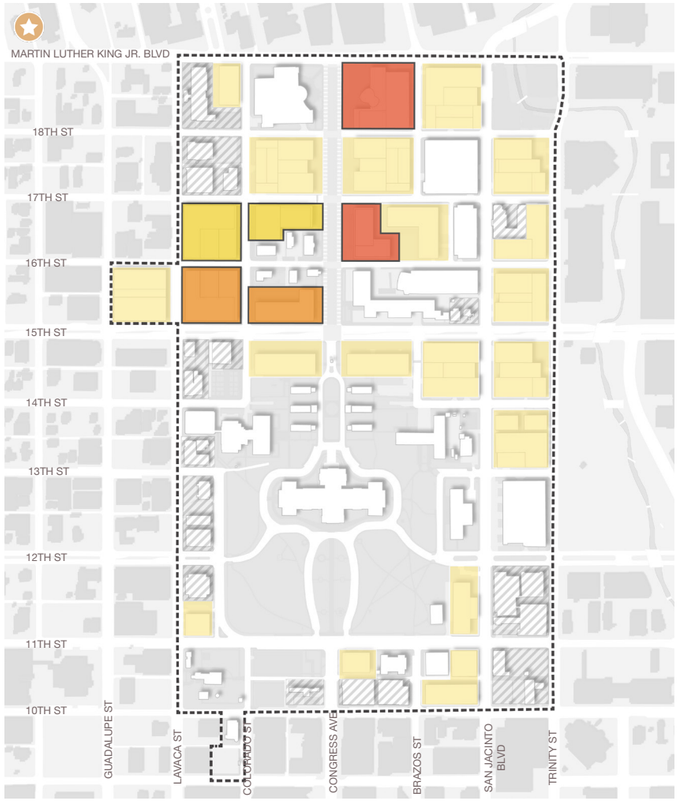


Figure 6.1
Proposed Development Sites

- Phase 1
- Phase 2
- Phase 3
- Full Build-Out
- Privately owned

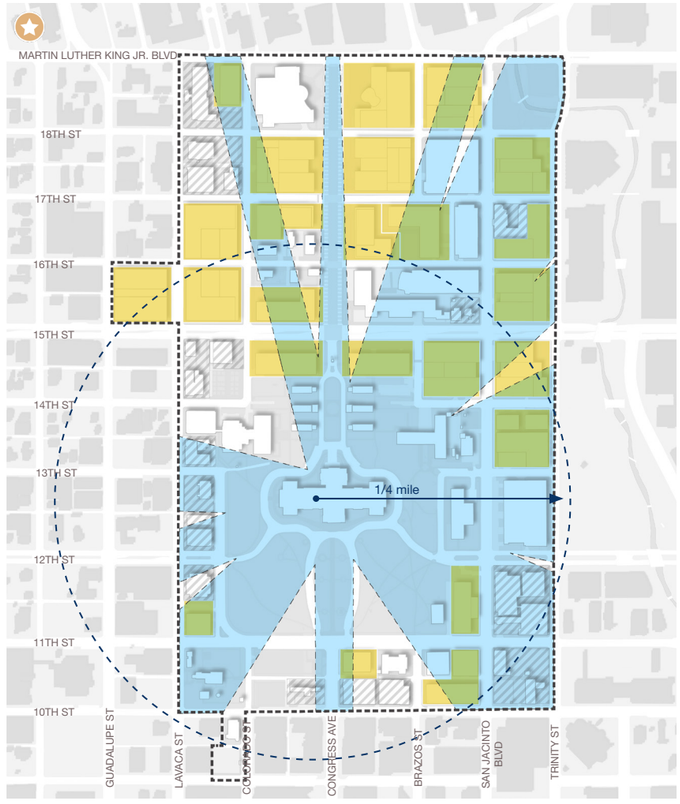


Figure 6.2
Capitol View Corridors and Capitol Dominance Overlay

- Development Site
- Capitol View Corridor
- Capitol Dominance Overlay

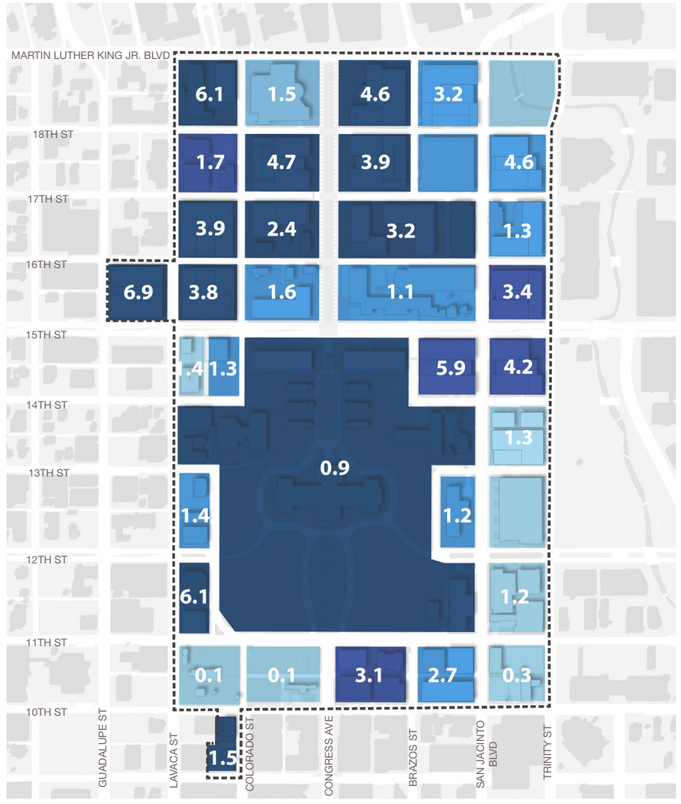


Figure 6.3
Proposed FAR and Maximum Building Height by Block

- X.X FAR Value
- < 40 ft
- 40-80 ft
- 80-120 ft
- > 120 ft

6

URBAN DESIGN PRINCIPLE 3

Civic Realm

Design buildings to frame the Texas Mall, open spaces, and streets and establish a human-scaled, connected, and active civic realm.

BUILD-TO LINES

Build-to lines, which ensure that buildings are constructed at the edge of a street or public space, shall be used to create a continuous urban fabric and reinforce the civic realm along key vibrant corridors in the complex, including the Texas Mall as well as Martin Luther King Jr. Boulevard, 15th Street, 17th Street, Trinity Street, and San Jacinto Boulevard. Generally, ground-level treatment along these edges should be transparent to enable visual access to the interior office and commercial uses, encourage a more vibrant street life, and communicate the unique character of the complex. New building edges will not protrude beyond the edge of existing state office buildings along Congress Avenue. Refer to figure 6.4.

SETBACKS AND STEP-BACKS

Although build-to lines shall be used in many areas of the complex, in some areas, setbacks from the property line will allow for a larger entry court at public entrances to buildings. In particular, the existing setbacks at the John H. Reagan State Office Building and the Texas Workforce Commission Building shall be maintained to create a landscape gateway to the Capitol park grounds.

To ensure a pedestrian scale despite the tall buildings that will be constructed, building designs should incorporate 15-foot step-backs at the fifth story along active streets and other public areas, including the Texas Mall. Adjacent building step-backs should be coordinated where their respective base elevations are similar.

ACTIVE EDGES

Active building edges, borders with active and visible uses such as retail or community spaces, help define cohesive and continuous corridors at the pedestrian, vehicular, and economic scales. To ensure that future development will support the urban design framework, building designs should locate active uses along the edges indicated in figure 6.5, rather than non-active uses such as service access, trash and recycling, and storage. Building designs shall also consider maximizing the transparency and visibility of these active uses along pedestrian, transit, and vehicular corridors, in order to integrate buildings, streets, and public spaces. Refer to the Architectural Design Guidelines for examples found in the complex.

The south entrance of the Texas State Capitol

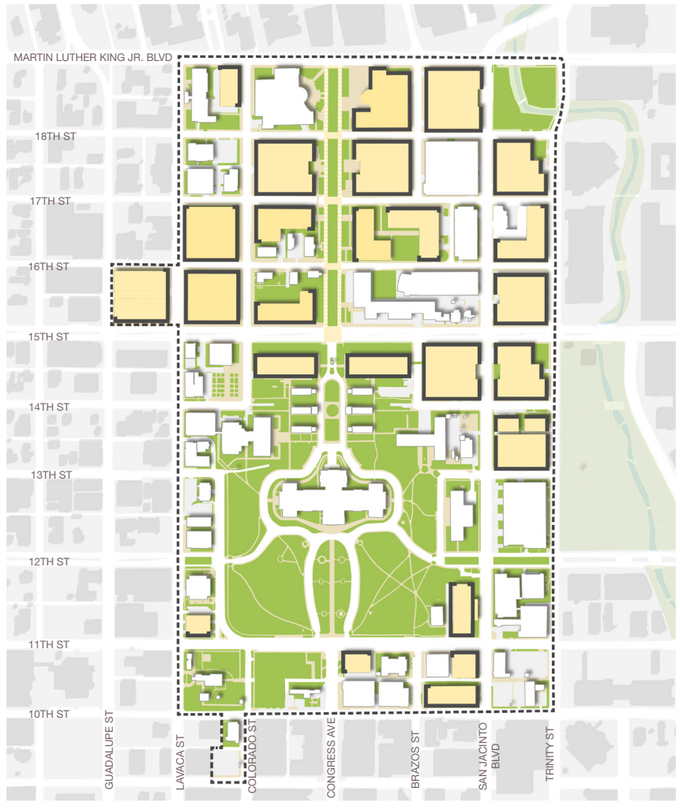


Figure 6.4
Build-To Lines

Build-To Line
Proposed Block
Open Space

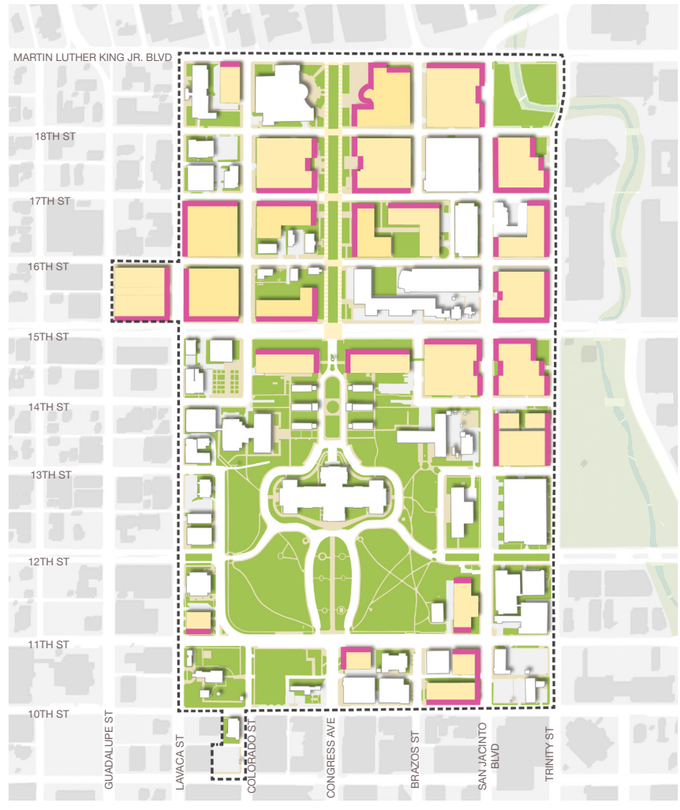


Figure 6.5
Active Edges

Active Edge
Proposed Block
Open Space

URBAN DESIGN PRINCIPLE 4

6 Functionality

Balance pedestrian needs with functional needs of service, security, and vehicles within the complex.

As a major civic area and visitor destination for Austin and the State of Texas, the Capitol Complex can accommodate a variety of festivals and events, especially on the new Texas Mall on Congress Avenue. The Mall will include flexible areas for public assembly, tourism, events, and festivals.

Pedestrian areas, including the Texas Mall, shall have extensive and continuous shade to create comfortable micro-climates for people walking and sitting in the complex. These areas should include seating, ample lighting, transit shelters, and other pedestrian amenities, as defined further in the open space and landscape design guidelines. Ground floors facing onto pedestrian areas should be transparent and accommodate a diversity of uses to increase pedestrian interest. Pedestrian street crossings shall be given special attention. Critical crossings shall incorporate differentiated paving patterns to signal to automobiles that pedestrians who may be crossing shall take priority.

All streets in the Capitol Complex shall serve as shared pedestrian and vehicular areas and shall have well-shaded sidewalks with curbs, bollards, and special paving delineating areas that are safe for pedestrians and protected from vehicular traffic. Several of these shared areas in the complex, especially the east-west connection to the UT Medical District, can be strengthened for pedestrians by adding sidewalks and street trees. Changing some of the streets from one-way to two-way will improve access to parking as well as vehicular circulation to and within the complex (refer to the mobility guidelines in this section for further detail).

Service areas shall provide optimized functionality for emergency and service vehicles and shall be designed with proper road widths and turning radii for large service trucks to access loading docks. Loading areas shall accommodate service, storage, trash, and recycling needs of the office buildings, commercial facilities, and other buildings in the complex. The master plan will also meet the functional needs of pedestrians and vehicles, while allowing service access. Figure 6.6 illustrates existing and future service and emergency access.

Existing pedestrian crossing along 12th Street at the State Archives and Library Building reflects balance of service, security, and vehicles.

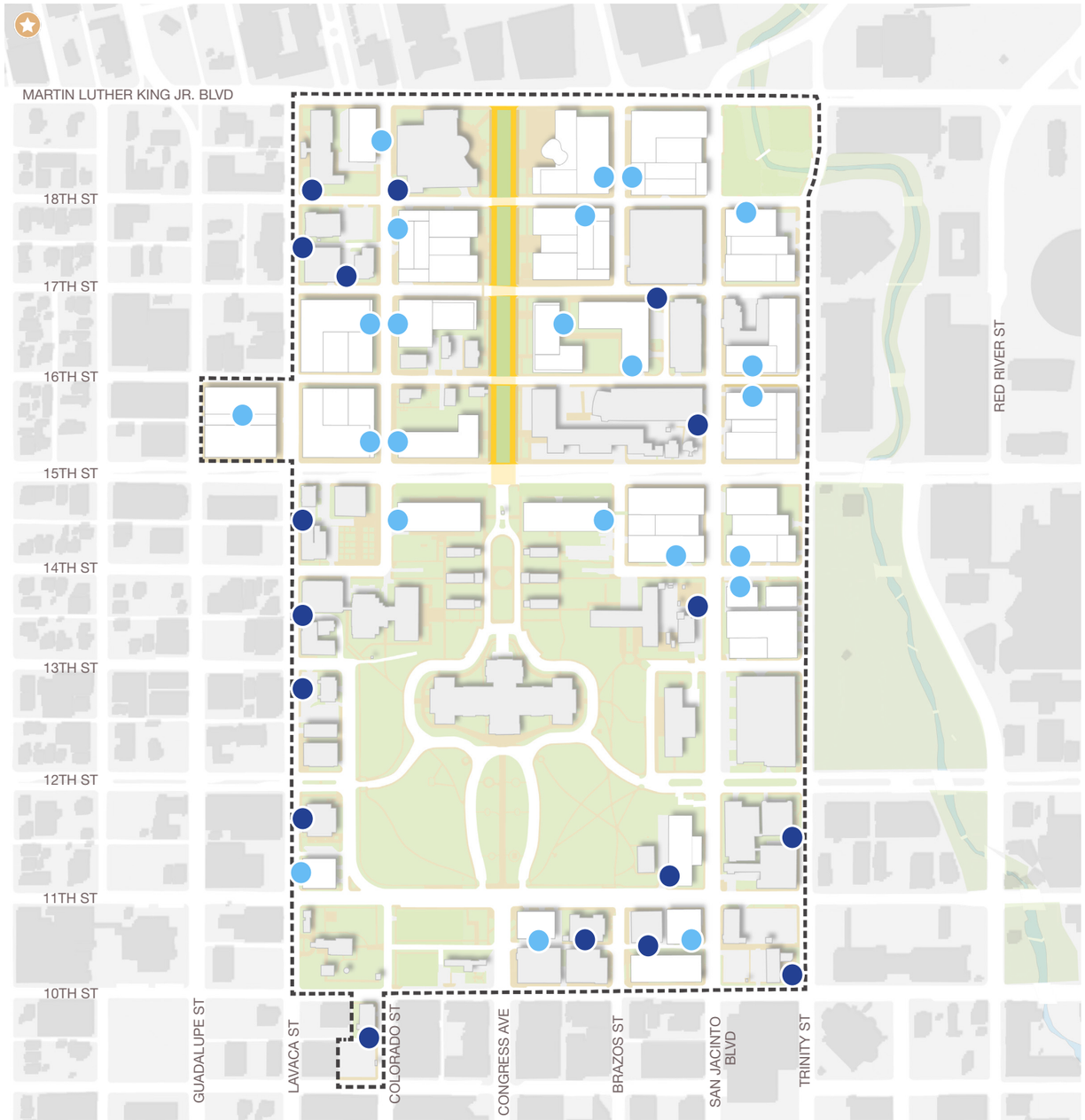


Figure 6.6
Service and Emergency Access

- Existing Service
- Potential Service
- Emergency Access Only

URBAN DESIGN PRINCIPLE 5

6 Mobility

Ensure safe and efficient mobility by providing multiple modes of transportation and access throughout the complex.

PEDESTRIAN CIRCULATION

The Capitol Complex is located at the nexus of several major Austin neighborhoods, where many residents, students, and visitors travel on foot. It is critical to create strong pedestrian connectivity along the north-south axis of the complex, connecting the UT Austin Campus with the Capitol and downtown via the Texas Mall and San Jacinto Boulevard. East 12th Street and West 17th Street will serve as major east-west pedestrian routes, linking Waterloo Park, Waller Creek, and Guadalupe Street to the complex.

BIKE NETWORK

The existing bicycle network lacks strong east-west connections through the complex. A shared bike lane should be added on 17th Street, and existing bike lanes that are popular and well-used should be reinforced.

TRANSIT NETWORK

Although the edges of the Capitol Complex are currently easily accessible by bus routes, the heart of the complex remains under served by transit. Bus routes along 15th and 17th Streets shall be considered as a strategy to resolve this issue. Drop-off loops along 18th Street will improve access at the northern gateway of the complex; buses will circulate through these loops from lay-by space along San Jacinto Boulevard and Trinity Street.

VEHICULAR CIRCULATION

Because Congress Avenue north of 15th Street will be transformed from a vehicular thoroughfare into a pedestrian-oriented mall, Lavaca Street and Trinity Street shall be reinforced as major north-south arterials. Furthermore, 16th, 17th, and 18th Streets shall be converted into two-way streets to improve access to the complex and its parking garages.

PARKING AND SERVICE

In addition to creating a series of parking structures, underground parking shall be constructed beneath the Texas Mall to provide centrally located parking for the complex.

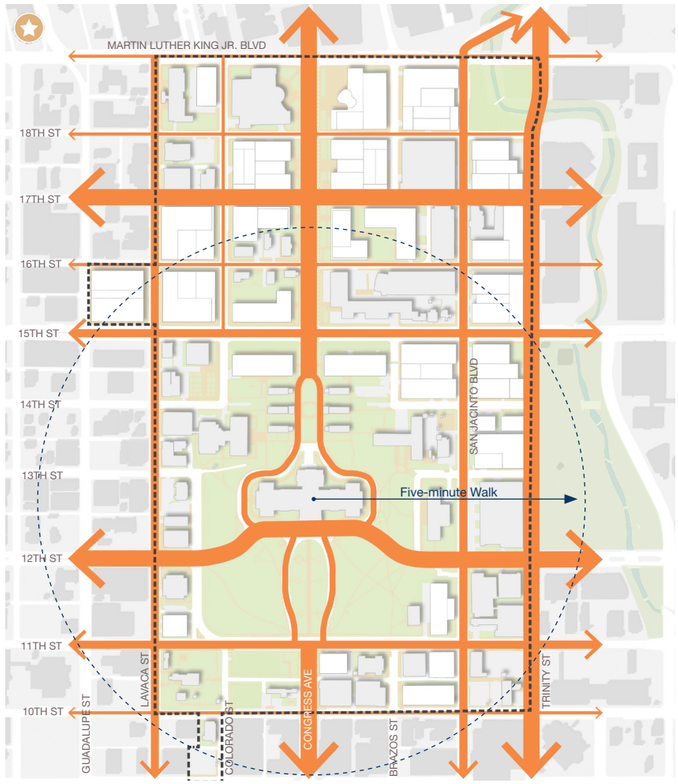


Figure 6.7
Proposed Pedestrian Circulation

Primary
Secondary
Tertiary

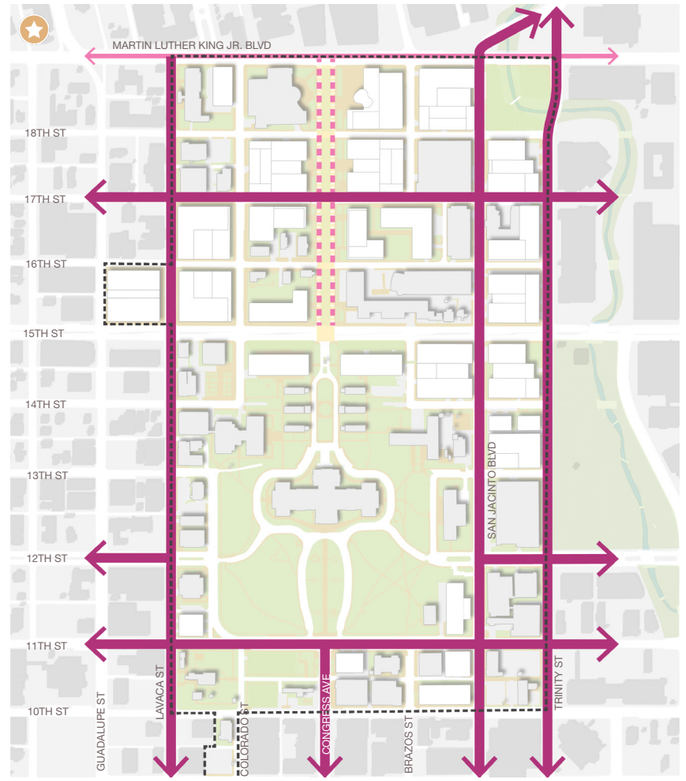


Figure 6.8
Proposed Bicycle Network

Major
Minor
Dismount Zone

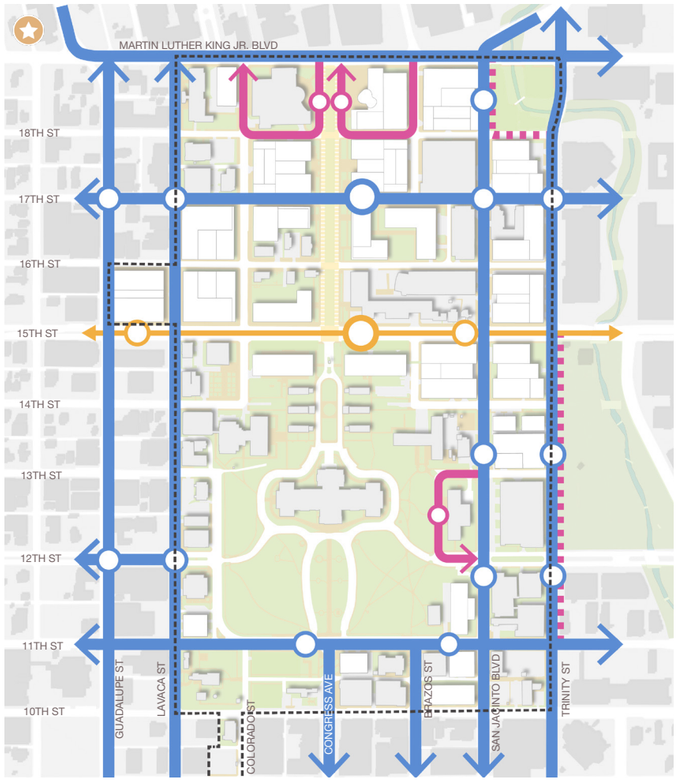


Figure 6.9
Proposed Transit Network

- Local Service Route
- Bus Drop Off
- Limited & Flyer Route
- Bus Staging

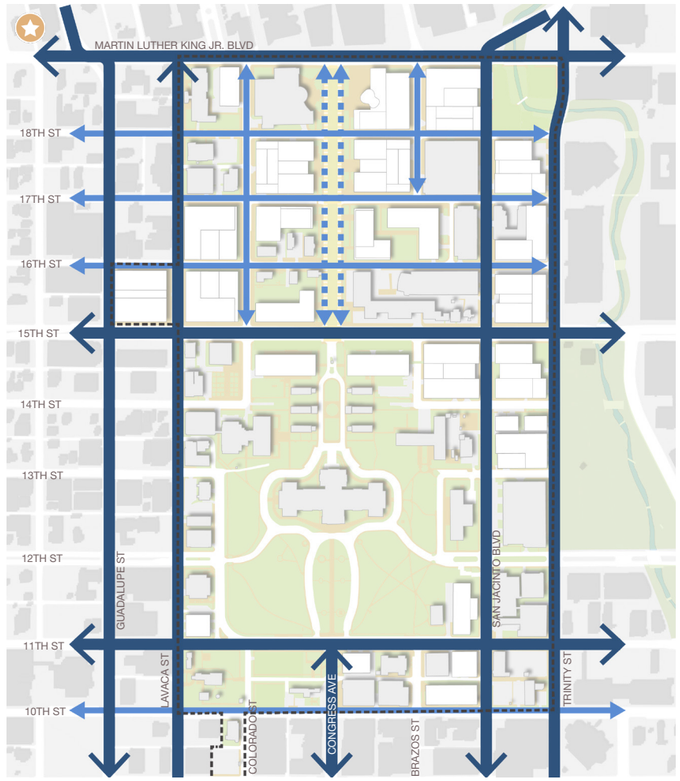


Figure 6.10
Proposed Vehicular Circulation

- Arterial
- Collector
- Pedestrian/Emergency Vehicles

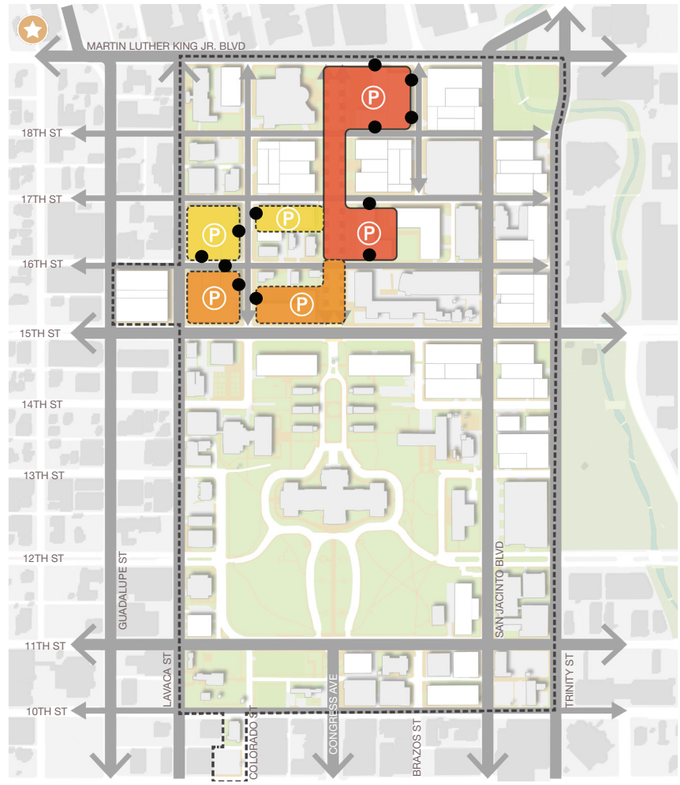


Figure 6.11
Proposed Parking

- Phase 1
- Phase 2
- Phase 3
- Potential Parking Structure Entrance
- Vehicular Circulation

URBAN DESIGN PRINCIPLE 6

6 Quality of Place

Establish gateways to the Capitol Complex to create a sense of arrival and impart a quality of place with a palette of landscape elements and ground-floor treatments.

GATEWAYS

A hierarchy of gateways should be created to impart a sense of arrival upon entering the Capitol Complex. The primary gateway shall be located on the north-south axis, connecting the complex at the civic scale to downtown and the University of Texas at Austin campus through the new Texas Mall at Martin Luther King Jr. Boulevard. Secondary gateways should be located on the East 15th Street and Martin Luther King Jr. Boulevard entrances to the complex, connecting the area to the Guadalupe Street retail corridor and providing access to Interstate 35. Finally, local gateways should connect to the UT Medical District and Waterloo Park to the east and the residential neighborhoods to the west.

GROUND-LEVEL TREATMENT AND BUILDING ENTRANCES

To create a more vibrant Capitol Complex, ground floors should have diverse and active uses as described under Urban Design Principle 3 - Civic Realm. Currently, very few restaurants and support retail uses exist. Ground floor uses should include services, shopping, and casual and informal restaurants to improve the working experience for state employees. These active uses should use transparent building materials to make services visible. Active edges should be concentrated on key corridors and public spaces, including the Texas Mall, 12th Street, 15th Street, 17th Street, and San Jacinto Boulevard, as indicated in figure 6.12.

SHADY STREETS AND OPEN PLACES

Many sidewalks and pedestrian plazas in the complex lack trees and shade. There is an opportunity to create continuous shade corridors leading from the University of Texas at Austin campus, which is characterized by an abundance of mature live oak trees. Adding new trees will improve air quality and increase outdoor comfort levels for employees, visitors, and residents of the Capitol Complex. Refer to the open space and landscape design guidelines for further detail.

Southern gateway to the Capitol Complex

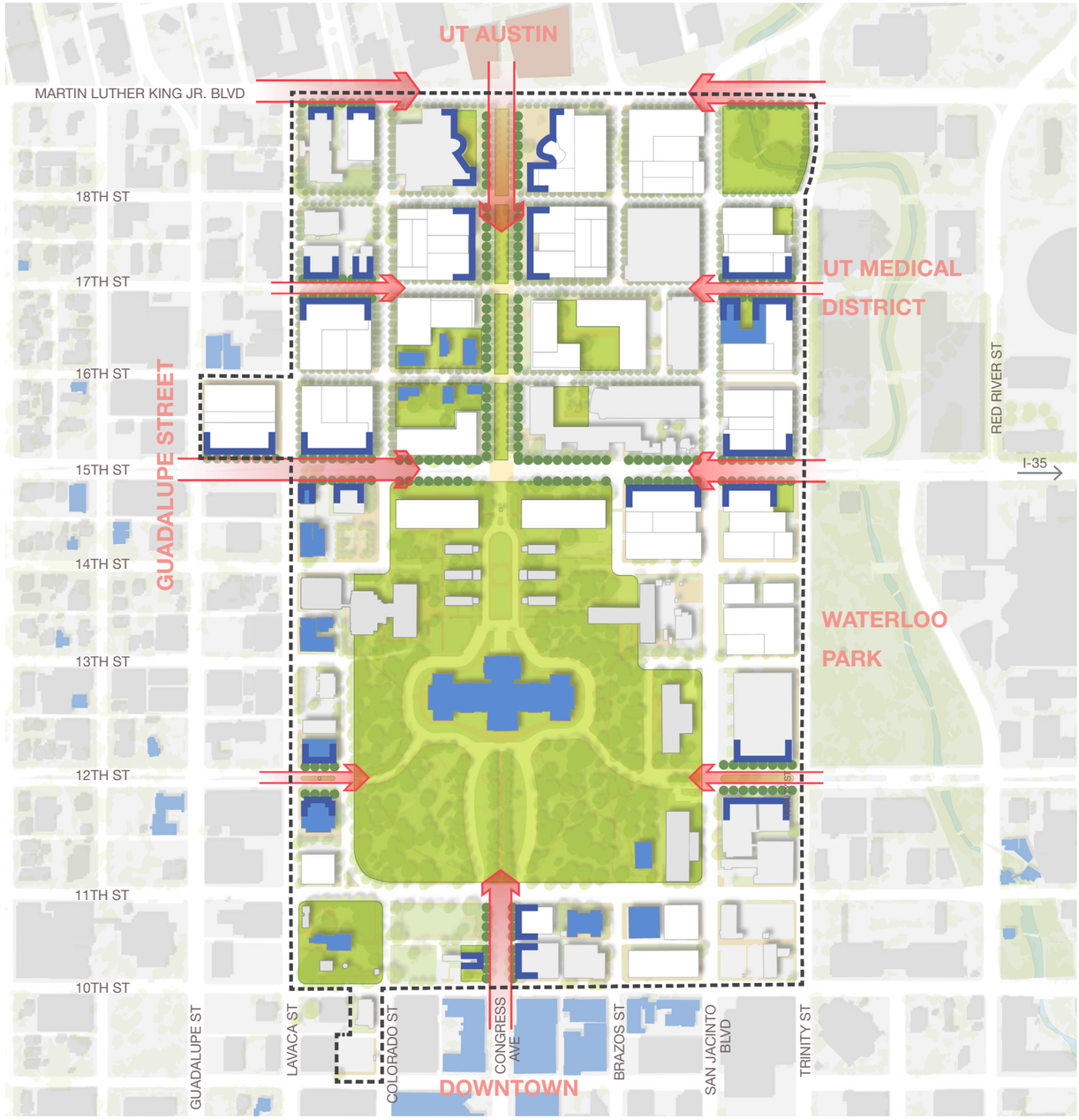


Figure 6.12
Gateways

- Complex Gateway
- Gateway Edge
- Landmark Building
- Open Space

URBAN DESIGN PRINCIPLE 7

6 Sustainability

Create a cooler micro-climate and mitigate the heat island effect in the complex through urban design techniques.

With average daily highs above 90 degrees Fahrenheit from June through September, the Austin climate is often uncomfortably hot. Beyond the overall Austin climate, multiple factors contribute to the micro-climate of the complex: tree canopy coverage, impervious surface area, the heat island effect, and building orientation.

These factors have the potential to increase or decrease the temperature across the complex and have far-reaching impacts on not only the viability of the outdoor pedestrian environment, but also energy consumption and emissions. Strategies to mitigate or increase these factors, as required, should be considered as the complex is developed, towards creating a high-activity environment that transforms the outdoor climate into an asset.

Existing landscape in the Capitol Complex

TREE CANOPY

Today, approximately 14 percent of the Capitol Complex has tree canopy coverage. The substantial open space and vegetation south of the Capitol provide environmental benefits, while fewer trees and a lack of green areas north of the Capitol prohibit meaningful habitat establishment and human access to open space. Trees also help decrease carbon emissions by reducing energy consumption in nearby buildings.

Across the entire complex, tree canopy coverage of 25 percent is desired to provide shade for pedestrians, improve air quality and streetscape aesthetics. Trees shall be planted in the northern areas of the complex to ensure continuous canopy coverage throughout the capitol area, as well as along major pedestrian paths. Site lines to the Texas State History Museum shall be preserved. All future construction projects in the complex shall comply with street sections and other open space and landscape guidelines, within the bounds of the project site.

Figure 6.13
Existing Shade Coverage

Shade from Buildings
Existing Tree Cover

Figure 6.14
Proposed Shade Coverage

Shade from Buildings
Existing Tree Cover
Proposed Tree Cover

6

IMPERVIOUS SURFACES

The predominance of impervious surfaces in the complex increases the heat island effect and prevents infiltration of water into the ground, increasing stormwater runoff. There is currently no accommodation for runoff retention, yet there is great potential to reclaim water for irrigation. Full build-out of the Capitol Complex Master Plan will reduce the total amount of impervious ground surfaces in the complex from 47 percent to 35 percent. The Texas Mall and a network of open spaces can provide permeable surfaces that help mitigate a hot micro-climate, improve the quality of stormwater runoff, and improve groundwater recharge. Building and site designs should consider strategies to decrease impervious surface area within the project site. Techniques to mitigate impervious surfaces include low albedo roofing materials on buildings to reduce heat island effect and stormwater management strategies to help control water runoff.

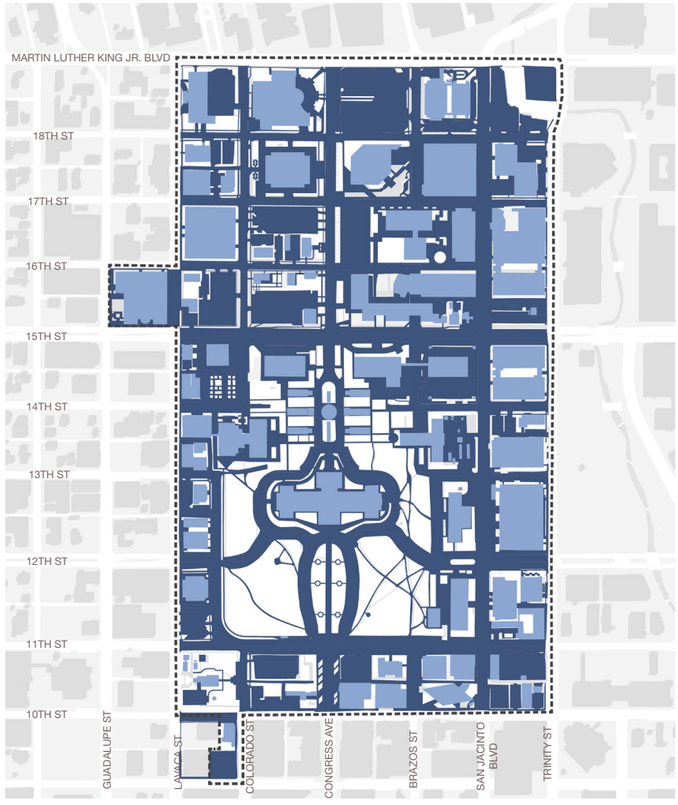
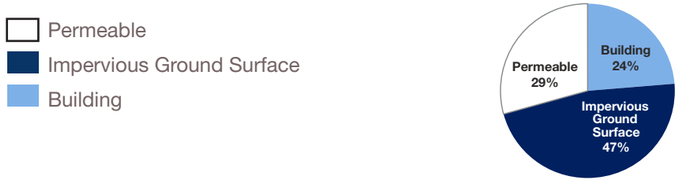


Figure 6.15
Existing Impervious Surfaces



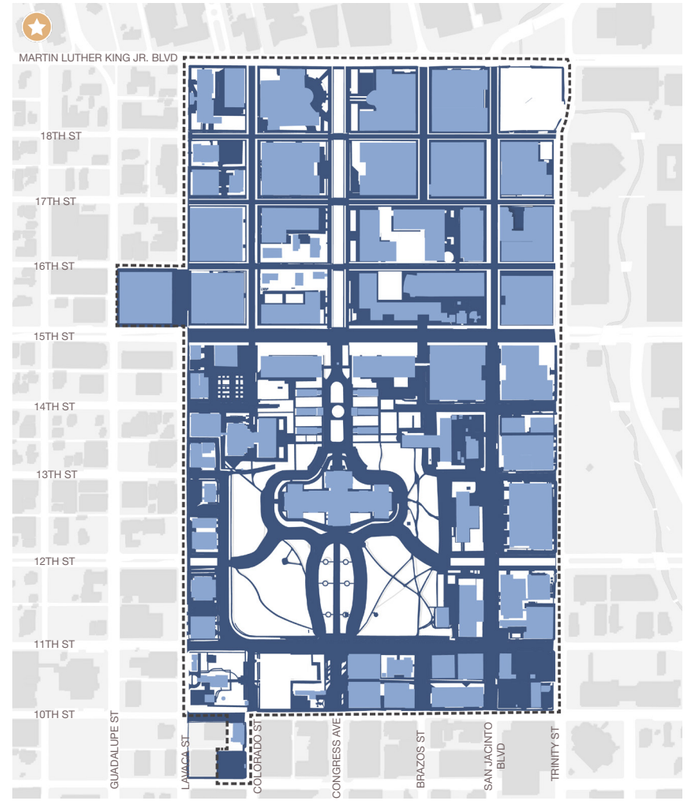
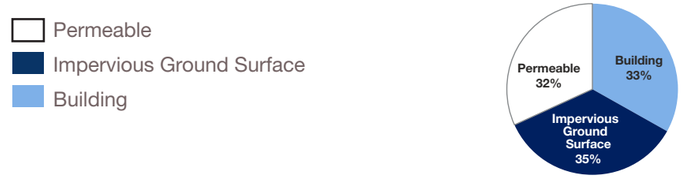


Figure 6.16
Proposed Impervious Surfaces



HEAT ISLAND EFFECT

The hot months of the Austin climate can be exacerbated by the urban heat island effect, which is caused when impervious surfaces such as pavement and buildings radiate absorbed solar energy, resulting in higher temperatures, decreased air quality, and increased cooling demand, leading to higher energy costs. Heat island effect can increase urban energy consumption by three to eight percent.[1] The black asphalt that predominates in the northern part of the Capitol Complex exacerbates the heat island effect, creating an unpleasant pedestrian environment and increasing energy consumption in buildings.

The design of outdoor spaces should consider strategies to create more comfortable micro-climates, to encourage use of the outdoor civic realm in the complex, and to reduce the ambient temperature as much as possible. Potential strategies include: building in a compact pattern to minimize heat gain, creating more shaded areas through strategically-sited buildings, preserving existing trees and planting new trees to lower the temperature of pedestrian areas, constructing shade structures such as trellises and loggias, and selecting less reflective paving and building materials. Employing these strategies can reduce the ambient temperature of an outdoor space by as much as 15 to 20 degrees.

BUILDING ORIENTATION

The heat generated by impervious surfaces is also impacted by building orientation. Where possible, buildings shall be oriented with the long axis east-west to limit east- and west-facing facade areas and maximize north- and south-facing facades. This will limit exposure to the most intense solar heat gain, assuming that south-facing facades incorporate sun shading or other technologies. When a building's long facade needs to face east or west to meet program requirements or reinforce a street edge or public space, sunshades and other architectural devices should be used to limit solar gain.

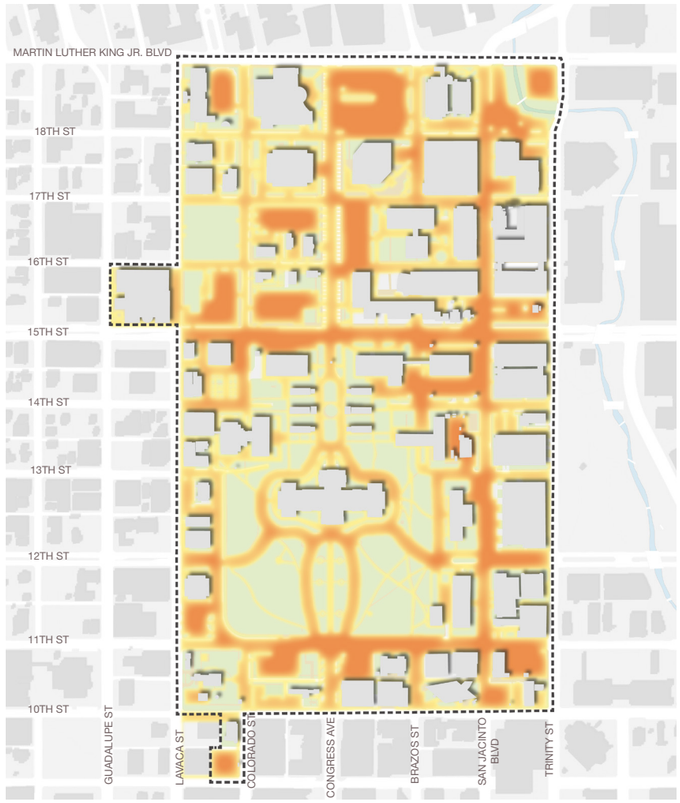


Figure 6.17
Existing Heat Island Effect

Hot (unshaded impervious surface)
Warm
Cooler

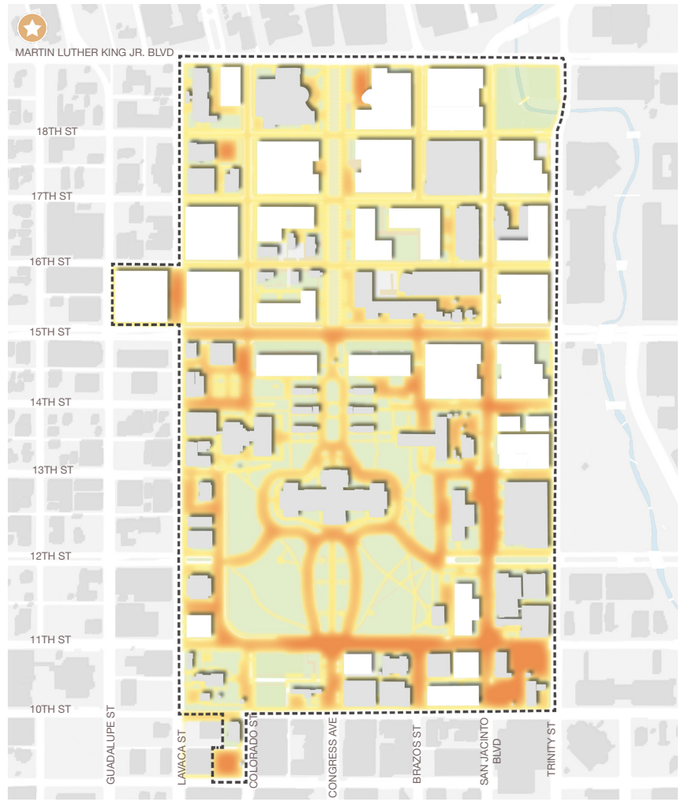


Figure 6.18
Reduced Heat Island Effect

Hot (unshaded impervious surface)
Warm
Cooler

1. L. Kamal-Chaoui and A. Robert, "Competitive Cities and Climate Change," *OECD Regional Development Working Papers*, No. 2009/02, OECD Publishing, Paris. DOI: http://dx.doi.org/10.1787/218830433146.

6

Open Space and Landscape Design Guidelines

The Open Space and Landscape Design Guidelines are organized into three sections:

- Open Space, which provides guidance for the Texas Mall, Waller Creek, building entrances, and building courtyards.
- Landscape Improvements, which details the requirements for all landscape improvements in the Capitol Complex.
- Streetscape, which provides guidelines in order to create a coordinated street environment.

The guidelines include eight overarching principles, which set the foundation for cohesive physical spaces within the Capitol Complex that people can view, use, and enjoy.

PRINCIPLES

1. Iconic and Unique Great Spaces
2. Sense of Place
3. Coordination
4. Accessibility
5. Functional Spaces
6. Security
7. Sustainability
8. Maintainability

OPEN SPACE AND LANDSCAPE PRINCIPLE 1

Iconic and Unique Great Spaces

Create open space that is iconic and memorable, and reinforces the scale and importance of the Capitol of Texas.

The Texas Mall along Congress Avenue will become a major central space that will connect the complex to the Capitol grounds. It will also act as the spine for the street system in the complex. The Texas Mall will serve as a pleasant pedestrian promenade and will host both small gatherings and large events. Streets throughout the Capitol Complex will serve not only as circulation spaces, but also as gathering and activity spaces.

The Texas Mall will be a grand linear space for public use, celebrating the prestigious and historic Texas Capitol building and grounds.

6

OPEN SPACE AND LANDSCAPE
PRINCIPLE 2

Sense of Place

Provide landscape improvements that express the character of South Central Texas and reinforce the character of the existing Capitol grounds.

Having a cohesive character helps give a place its identity. The design of the new Texas Mall and 15th Street environment in the Capitol Complex shall take its cue from the historic Capitol grounds, creating a unique sense of place. All other spaces shall have a unique and cohesive character that is more contemporary.

The existing furnishings on the north Capitol grounds will be extended along the Texas Mall so that the spaces are interconnected.

OPEN SPACE AND LANDSCAPE PRINCIPLE 3

Coordination

Design a coordinated environment that is supportive of new development and strengthens connections to the Capitol and other important destinations within the complex.

Streets and open space in the Capitol Complex shall be designed to direct pedestrian and vehicular circulation in a deliberate and complementary manner, maximizing mobility for all and enhancing the pedestrian experience.

The Capitol Complex open spaces and streets will have a consistent, coordinated approach to pedestrian, bicycle and bus improvements.

6

OPEN SPACE AND LANDSCAPE
PRINCIPLE 4

Accessibility

Ensure open space is publicly accessible and attractive.

The Capitol Complex will be welcoming to all visitors from all over. All pedestrian facilities and improvements to existing facilities must be designed to be fully accessible, with appropriate widths, grades, transitions, warning strips, and audio or other crossing indicators in compliance with the accessibility standards established by the Americans with Disabilities Act (ADA) and the Texas Accessibility Standards (TAS).

All streets and open spaces will be accessible to all, providing ADA-compliant curb ramps and pedestrian crossings.

OPEN SPACE AND LANDSCAPE PRINCIPLE 5

Functional Spaces

Design open spaces that are comfortable and usable in all seasons.

New open space and landscape improvements in the Capitol Complex shall encourage active and passive use throughout the day and year-round. The greatest priority is the provision of shade, which can be accomplished with canopy trees and landscape structures. Street furnishings shall be incorporated into landscape design to accommodate users and enhance comfort.

Shade will enable pedestrians to comfortably travel within open spaces and along streets throughout the summer months.

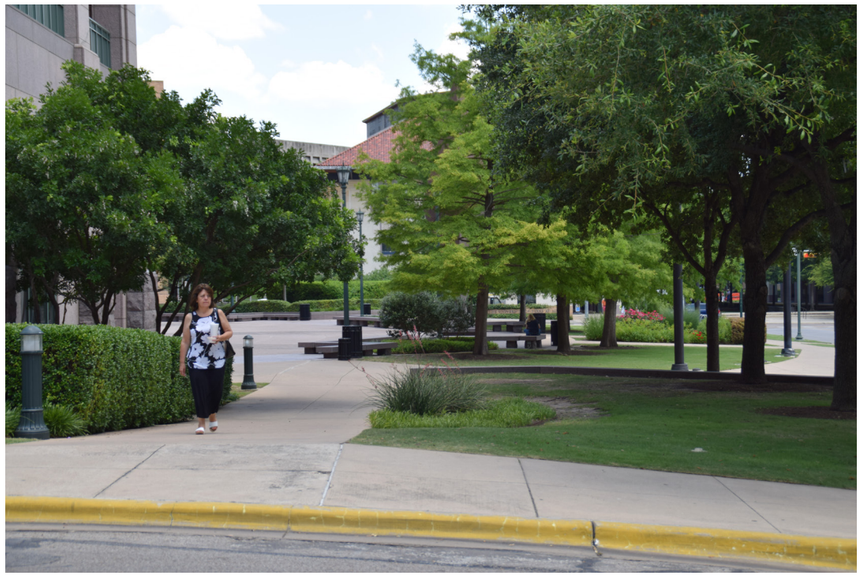
6

OPEN SPACE AND LANDSCAPE
PRINCIPLE 6

Security

Provide open space that is visible from inside out and outside in, and that creates a sense of security for users, both day and night.

Site lighting will be a key element in ensuring that all streets and open spaces are adequately lit at night. Trees and plants must be chosen and sited carefully and must be regularly maintained to provide views into and out of spaces. Appropriate law enforcement agencies will be consulted early in the design process for security and lighting program requirements throughout the complex.



Visible open spaces, furnished with lighting, will enable users to feel safe at all times of the day or night.

OPEN SPACE AND LANDSCAPE PRINCIPLE 7

Sustainability

Use landscape materials that utilize resources efficiently, are appropriate to the region, and are sustainable over the long term.

Using sustainable materials, such as native and climate-appropriate plants, local and durable landscape materials, and pervious paving, benefits the environment and is also economically sustainable.

(Above and left) Native and indigenous plant materials will reduce the need for irrigation.

Regional plants and materials, such as Texas pink granite and Live Oak trees, will evoke the Central Texas landscape for the long term.

6

OPEN SPACE AND LANDSCAPE
PRINCIPLE 8

Maintainability

Provide landscape improvements that are cost effective and maintainable over the long term.

Landscape material choices shall consider the need for landscape maintenance. Investment in durable materials such as granite paving and well-fabricated site furnishings will also minimize maintenance needs over time.

Concrete unit pavers are durable and easy to replace when maintenance requires removal.

The Capitol grounds bench and bollard are both durable and readily available when replacement is required.

Open Space

TEXAS MALL

The major open space component of the Capitol Complex will be the Texas Mall, a reconfiguration of Congress Avenue between 15th Street and Martin Luther King Jr. Boulevard. The mall will provide a continuation of the grand Congress Avenue corridor south of the Capitol grounds and can support major programmed events, such as the annual Texas Book Festival.

The Texas Mall shall reinforce the scale, character, and civic importance of the Texas Capitol Building and its grounds. A central view corridor, 50 feet wide, shall remain open along the entire length of the mall with no site furnishings above 42 inches in height, so that the view to the Capitol building is not obstructed.

Cross Section

The block of Congress Avenue between 18th Street and Martin Luther King Jr. Boulevard shall include a 50-foot-wide central panel and a 12-foot-wide travel lane, with an 8-foot-wide bus and vehicular drop-off lane on each side to access the Texas State History Museum and future development on the west side of Congress Avenue (refer to figure 6.19). The travel lanes only allow right hand turns onto 18th Street and Martin Luther King Jr. Boulevard so that drop-off traffic will not cross the mall. Access to the existing museum garage will not be impeded, as 18th Street will remain a two-way street. Sidewalks, 8 feet wide, shall align the drop-off lanes.

The mall will serve as a dismount zone for all bicyclist and be enforced through the use of standard regulatory signage.

The existing Texas State History Museum and the proposed building on the east side of this block will form a public space that creates a secondary cross-axis on the mall. The entry plaza at the proposed building shall complement the existing museum plaza and be perceived as an extension of the mall.

The blocks between 18th Street and 15th Street shall also contain the central panel, 50 feet wide, which shall extend along the center length of the mall between those streets. Twenty-foot-wide pedestrian ways shall line both sides of the central panel, so that all blocks of Congress Avenue include a consistent, continuous system of pedestrian ways.

Transition zones, including planting and paving of varying widths, shall line the outsides of the pedestrian ways and serve as a transition from the mall to adjacent buildings or other facilities (refer to figure 6.20). These zones shall also be the location for future monuments that are approved by the Legislature.

The character of the Texas Mall will be inspired by the recent improvements to the north Capitol grounds.

Paving and Hardscape

The mall paving shall be installed over an underground parking structure. The paving shall be suspended on a structural support system to provide air circulation to the tree roots and reduce soil compaction over the root systems, enabling the trees to attain a larger mature size.

The mall paving shall be predominately Texas pink granite to match the Capitol building. No curbs and gutters shall be used on the mall, but 16th, 17th, and 18th Streets shall transition approximately six inches in grade up to the mall to create one continuous horizontal plane. Decorative lane markers, such as bollards or delineation in the paving, shall be integrated into the paving to identify a travel lane for local, emergency, and service access. Secondary mall paving shall be a material compatible with the color range of Texas pink granite, such as an exposed aggregate.

Retaining walls, steps, and ramps, as needed, shall be Texas pink granite. Retaining walls shall be of an adequate width and height to allow for seating at the lower level. This may require a series of stepped walls in some locations.

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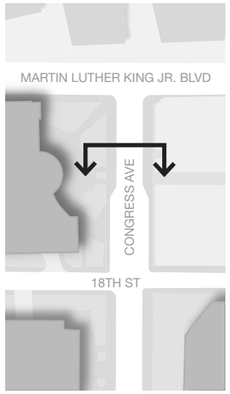

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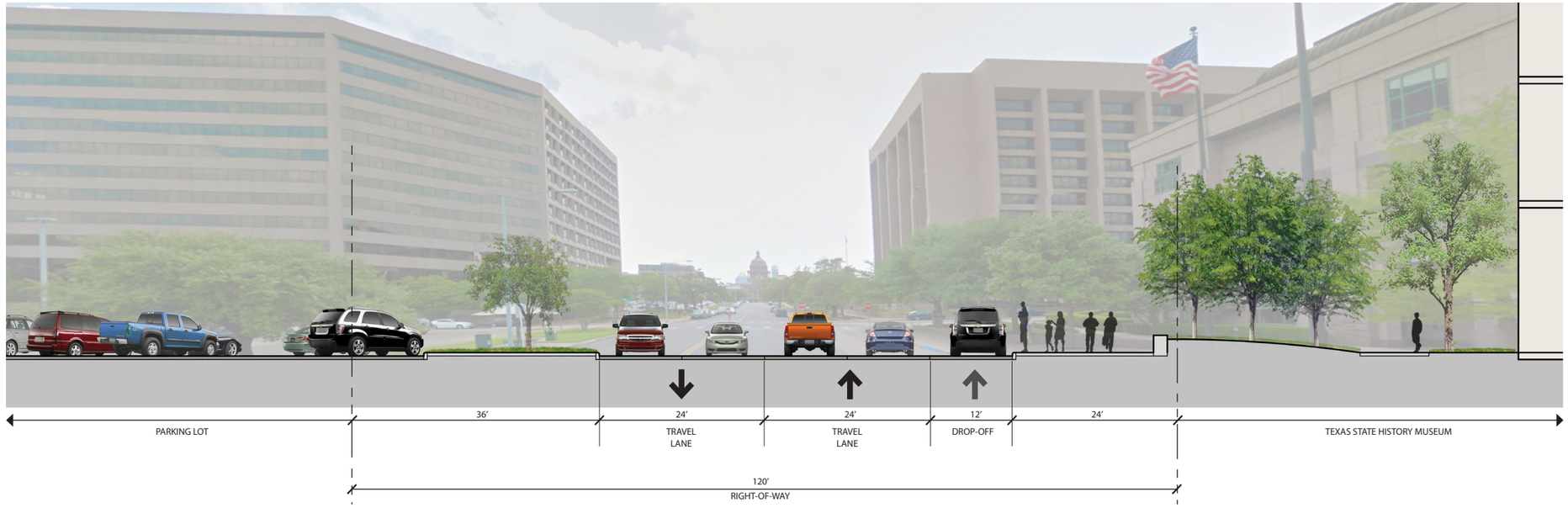


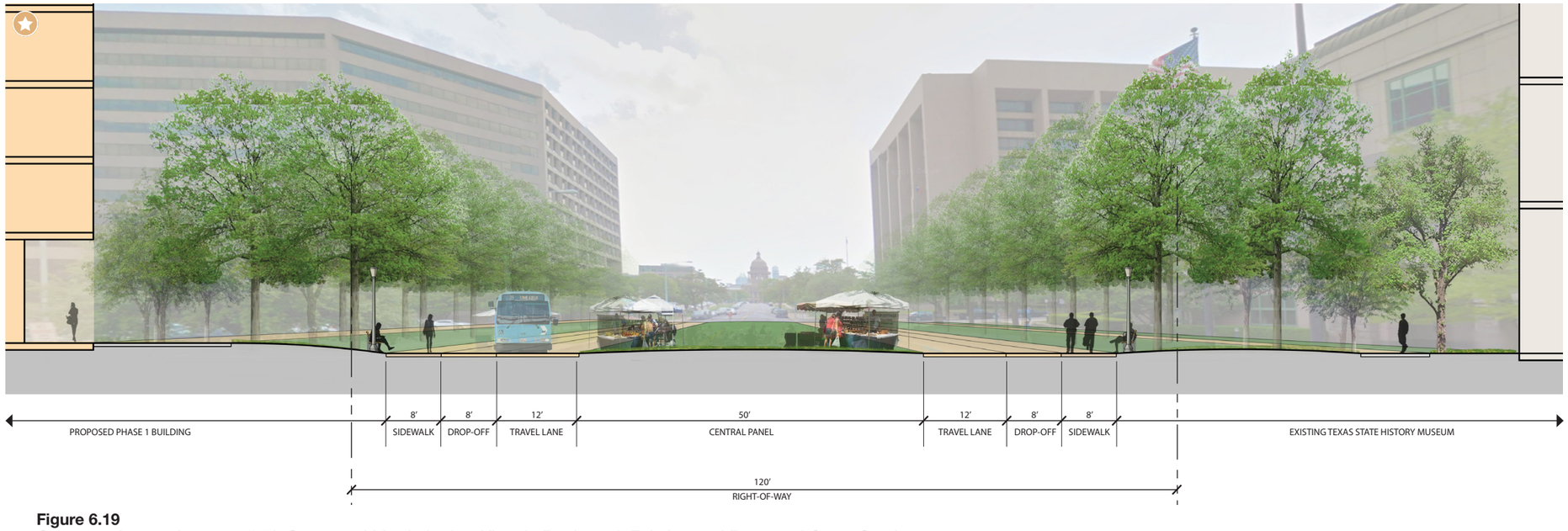
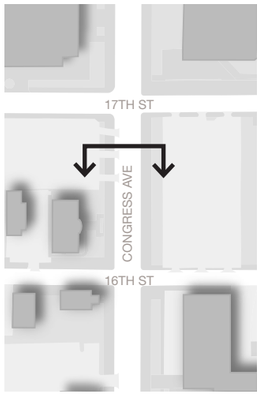


Figure 6.19
Congress Avenue between 18th Street and Martin Luther King Jr. Boulevard: Existing and Proposed Cross Sections



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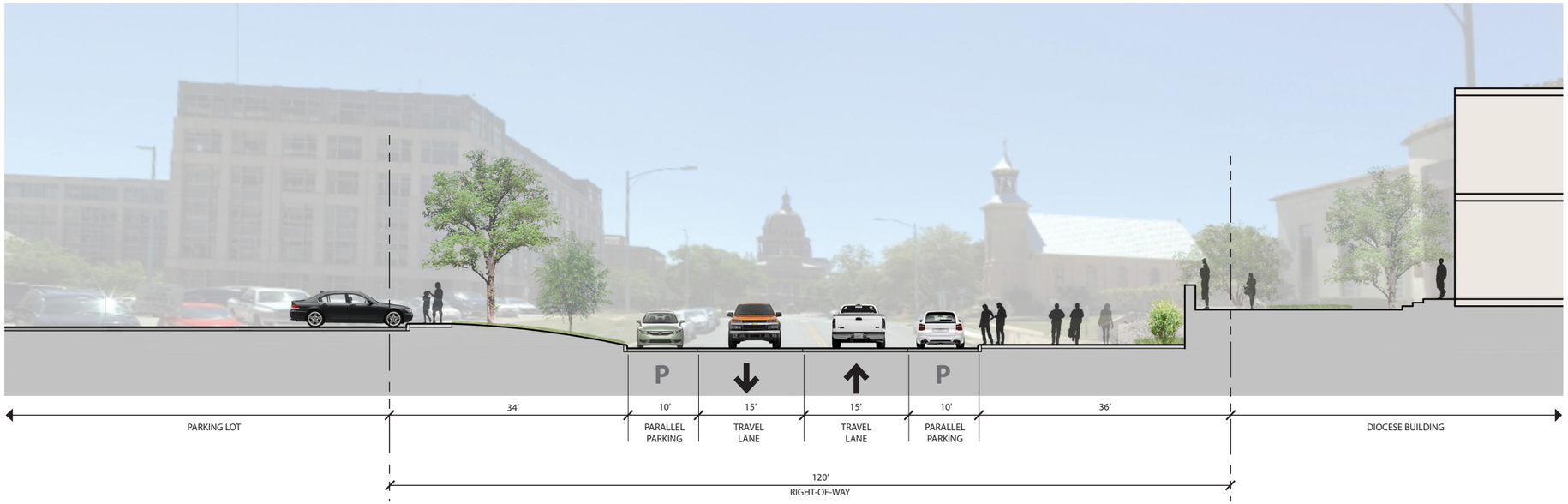


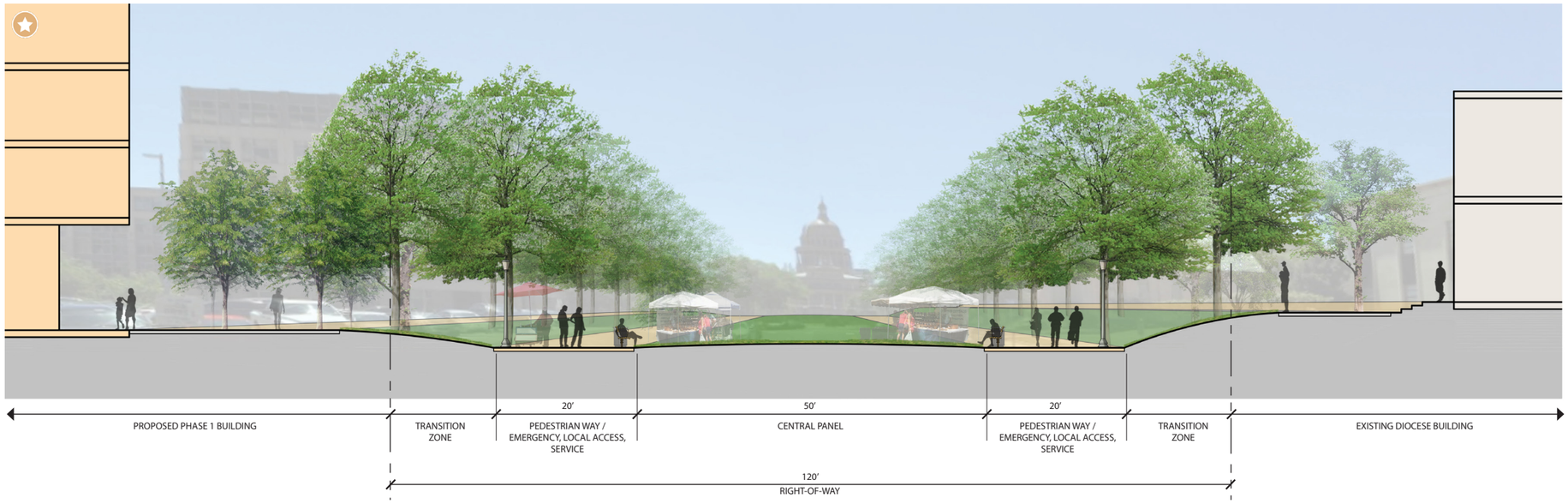


Figure 6.20
Congress Avenue between 18th and 15th Streets: Existing and Proposed Cross Sections

Planting

The mall planting will be installed over an underground parking structure. A landscape drainage system, located on the top of the structure, shall be coordinated with the garage designers.

Key planting concepts include:

- A staggered double row of Live Oak trees shall line each side of the mall, which will serve as a continuation of the existing Live Oaks on the south side of the Capitol grounds. Live Oaks shall be a minimum 5-inch caliper at the time of planting and shall be container grown. Live Oaks shall be limbed up a minimum of 7 feet to enable people to move freely under them and the canopy pruned to maintain views down the central panel to the Capitol building. Trees shall be locally grown to enhance the probability of success (from an area extending from San Antonio to Waco and Interstate 35 to Uvalde), having been grown in an alkaline soil and water environment for a minimum of five years.
- The central panels shall be treated with a combination of plant and hardscape materials that withstand pedestrian traffic and heat, and that are pervious whenever feasible.
- Shrubs and ground cover shall be native or indigenous, and mostly evergreen so that they have a presence during all seasons.
- Accent materials, such as native grasses, perennials, and annuals shall be included to provide color, texture, and fragrance.
- The central panels shall be treated with a combination of plant and hardscape materials that withstand pedestrian traffic and heat, and that are pervious, whenever feasible. The majority of the planting shall be a turf grass, such as Zoysia, to enable use of the panels.

Site Furnishings

Site furnishings will be an important element in making the mall comfortable and functional. These elements may include:

- Benches along both sides of the mall at appropriate locations.
- Trash and recycling receptacles.
- Drinking fountains.
- Tree grates or guards where trees are planted in paving.
- Wayfinding signage.
- Bicycle racks located on cross streets at appropriate intervals.

The benches, trash receptacles, and wayfinding signage shall match those located on the Capitol grounds. Drinking fountains, tree guards, and other furnishings that do not exist on the Capitol grounds shall be similar in character, color, and finish. Tree grates shall be a minimum of four feet by four feet in size, with four feet by six feet preferable.

Locations for monuments shall be identified within the transition zones.

Lighting and Electrical

Light standards shall match those located on the Capitol grounds and shall line both sides of the mall in alignment with the inner row of Live Oaks. Light sources shall be energy efficient, such as light-emitting diode (LED) lamps, and shall comply with dark-skies principles to minimize glare and light pollution (per International Dark-Sky Association). Preference shall also be given to general safety and aesthetic considerations. Light sources shall be shielded and shall be white in color.

Cam-lock connectors shall be located along the mall for event electrical service. Two connectors, flush with the paving, shall be provided on each side of every block.

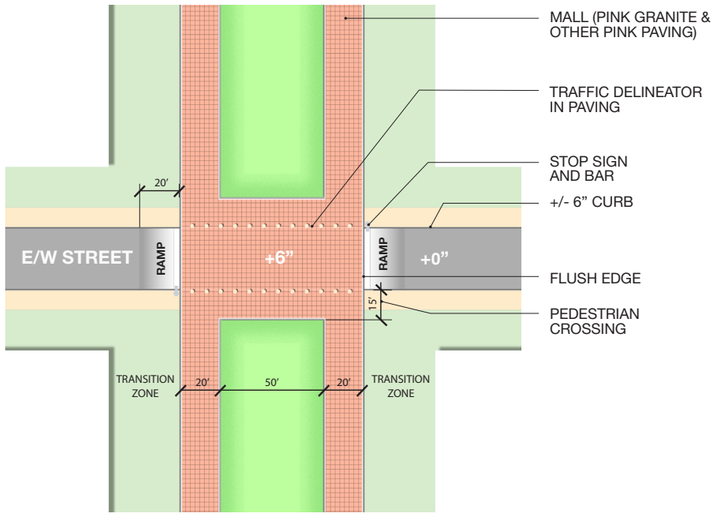


Figure 6.21
Typical East-West Street Intersection at the Texas Mall

The existing Capitol grounds site furnishings will be utilized on the Texas Mall to create a consistent character.

WALLER CREEK

Waller Creek is an important Austin amenity that runs near the Capitol and actually crosses the complex property at the intersection of Martin Luther King Jr. Boulevard and Trinity Street. Its hundred-year flood plain encompasses a large percentage of the site, which creates a prime opportunity to retain this block as an open space and park. The block is also located at one of the gateways to the complex and thus has the opportunity to become the setting for a beautiful, pastoral entry gate to the complex. Refer to figure 6.12: Gateways.

The existing parking lots shall be removed from the block and replaced with vegetation. Existing plant materials along the banks shall be thinned out and trees pruned, limbed up, or selectively removed. The creek banks shall be regraded so that they are less steep, which will open up both views and access to the water's edge. The regraded banks shall be planted with native riparian plant materials.

Pedestrian walkways shall be added through the park and along the creek edge, with benches located periodically to enable visitors to rest and view the creek. Trash receptacles shall be located adjacent to benches. The walkways shall be illuminated at night with pedestrian-scaled light standards to match those existing along the creek.

The gateway improvements at Martin Luther King Jr. Boulevard shall be carefully designed to be integrated with the Waller Creek improvements.

Overgrown vegetation shall be selectively cleared and litter removed from the Waller Creek corridor within the complex to enable both visual and physical access.

BUILDING ENTRY SPACES

Building entrances are extensions of the adjacent street or open space. They shall be welcoming and visible from the public right-of-way.

- Entrances shall be lighted during the night and perceived as safe during all times of the day.
- Paving materials shall be pervious, whenever feasible.
- Entry areas shall be planted and shaded by tree canopies, overhangs, overhead structures, or a combination.
- Benches, trash and recycling receptacles, and bicycle racks are encouraged and shall be of the overall streetscape vernacular if located on the sidewalk.
- Light standards, if located on the sidewalk, shall be of the overall streetscape vernacular. Light sources shall be energy efficient, such as LED lamps, and dark-skies compliant. Light sources shall be shielded and shall be white in color.
- Special features, such as fountains, are encouraged in order to activate the spaces and provide visual interest.

Building entrances will be important extensions of the Texas Mall and other streets.

BUILDING COURTYARDS

Building courtyards are typically located internal to the building site or on a secondary street. Courtyards shall be welcoming and accessible to all.

- Courtyards shall be lighted during the night and perceived as safe during all times of the day.
- The minimum cross section of a courtyard shall be 20 feet so that it is usable for gathering, dining, performances, social events, and similar public activities.
- Paving materials shall be pervious, whenever feasible.
- Entry areas shall be planted and shaded by tree canopies, overhangs, overhead structures, or a combination.
- Benches, trash and recycling receptacles, and bicycle racks shall be of the overall streetscape vernacular if located on the sidewalk.
- Light standards, if located on the sidewalk, shall be of the overall streetscape vernacular. Light sources shall be energy efficient, such as LED lamps and dark-skies compliant. Light sources shall be shielded and shall be white in color.
- Special features, such as sculptures, are encouraged to activate the spaces and provide visual interest.

Building courtyards provide important open space for the district and should be welcoming and usable by all.

6 Landscape Improvements

In general, landscape improvements within open spaces and on streetscapes outside of the Texas Mall shall address the following criteria:

- Paving materials should be sustainable, such as reclaimed pavers that are suitable for paving applications, or locally or regionally produced materials.
- Priority should be given to native and indigenous plant materials in order to reduce irrigation requirements.
- Priority should be given to long-lived materials.
- All existing trees shall be retained whenever feasible.
- The need for irrigation should be minimized. Alternatives to the exclusive use of turf grass shall be considered in order to reduce water consumption and maintenance requirements.
- If required, a water-efficient system (e.g., drip irrigation systems and bubblers at trees) should be used. Turf grass should be irrigated with a rotary system.
- All open spaces shall be lighted.
- Furnishings—benches, trash and recycling receptacles, bicycle racks, and similar items—should be provided as appropriate.
- All landscape improvements shall comply with "Water Efficiency Standards for State Buildings and Institutions of Higher Education Facilities," prepared by the Office of the Comptroller, State Energy Conservation Office, dated January 2011, or the version in effect at the time.

Existing parking lots should be softened through the use of a consistent planted edge and/or screen fence at the height of 48 inches until the time that the parcel is redeveloped. Canopy trees should be planted along the perimeter at a spacing of no more than 30 feet to provide adequate shade.

Paving materials, such as the Texas Pink granite, are both durable and beautiful.

Priority shall be given to native and indigenous plant materials.

In the interim, existing parking lots shall be softened with plantings and shaded with canopy trees.

All feasible efforts must be made to preserve existing trees when new development occurs.

Streetscapes

GENERAL

The streetscape goal for the complex is to create a coordinated street environment that is supportive of existing and new development and strengthens connections to the Capitol grounds and other important destinations. Streetscapes should be designed to be context-sensitive, safe, convenient, and attractive for all modes of travel and users. All streets, with the exception of Congress Avenue and Trinity Street, shall retain their existing curb-to-curb cross section but may require re-striping.

The design objective is to create a pedestrian environment of streets that is:

- Interesting, with appealing things to see, touch, hear, and smell, that make one's time in the complex a positive experience and encourage return visits.
- Attractive, with building and landscape improvements that create a beautiful setting in which people can walk, drive, work, and spend leisure time.
- Safe, allowing people to feel comfortable and secure, whether alone or in a group, during the day, evening, and night.
- Successful, where walking becomes a primary means of internal circulation within the complex.
- Composed of a hierarchy of street spaces and places relating to the varying functional roles of the complex area streets.

The design vocabulary shall be unique to the Capitol Complex. All streets should have the same design vocabulary with the exception of:

- Texas Mall (Congress Avenue), which is described previously in this section.
- 15th Street shall have a streetscape character that is consistent with the Texas Mall by utilizing the same street lights, street furnishings, and Live Oak trees. As a result, it will become a "seam," interconnecting the existing Capitol grounds with the new mall.

GATEWAYS

The complex should be marked by a hierarchy of gateway elements at the following locations:

- Primary Gateway: Martin Luther King Jr. Boulevard at the Texas Mall (Congress Avenue).
- Secondary Gateways: 15th Street at Trinity and Lavaca Streets, and Martin Luther King Jr. Boulevard at Trinity and Lavaca Streets.
- Local Gateways: 17th and 12th Streets at Trinity and Lavaca Streets.

All other internal street intersections at Lavaca Street, 15th Street, Trinity Street and Martin Luther King Jr. Boulevard (complex perimeters) may have a small-scaled marker, such as a Capitol Complex sign or a pavement marker, consistent with the street furnishings vernacular.

Gateways should be unique, vertical elements consisting of granite, light standards, light fixtures, and other appropriate elements. Gateways should include signage to identify the complex.

SIDEWALK EXTENSIONS

Sidewalk extensions (bulb-outs) are used to provide a widened segment of sidewalk for pedestrian safety. They should be used only on streets with parallel parking. Refer to figure 6.22 for a prototypical corner bulb-out.

- All corners on streets with parallel parking should have corner bulb-outs. All corners with bus stop locations should have transit bulb-outs.
- Amenity bulb-outs are encouraged in order to provide greater sidewalk area for furnishings, and should be placed in any location where additional sidewalk space is desired.

Sidewalk extensions (bulb-outs) provide shorter, and therefore safer, pedestrian crossings.

Figure 6.22
Typical Sidewalk Extension (Bulb-Out) Plan

SIDEWALK PAVING

The sidewalk is defined as the entire area between the curb and the building wall. The sidewalk should be divided into three zones (refer to figure 6.23):

1. Curb Zone: minimum 4 feet wide containing the elements that separate the sidewalk from the street and provide the necessary infrastructure to support pedestrian and motorist activity, including lighting, signage, furnishings, street trees, and other vertical elements.
2. Pedestrian Circulation Zone: minimum of 6 feet wide and clear of obstruction.
3. Frontage Zone: immediately adjacent to the building wall. Depending on the width of the overall sidewalk, the frontage zone may contain amenities such as seating, outdoor dining, planting, or architectural elements of the building as long as these do not interfere with pedestrian movement.

The minimum sidewalk width shall be 15 feet unless specific site conditions make it infeasible (refer to Street Sections). In general, sidewalks should be paved with a concrete unit paver of a consistent, neutral color. Special paving materials, such as unit pavers of brick, stone, or other decorative pavers may be used at special nodes, plaza areas, and streets within sidewalk extensions and other special pedestrian areas in order to differentiate them from the sidewalk and define a specific place.

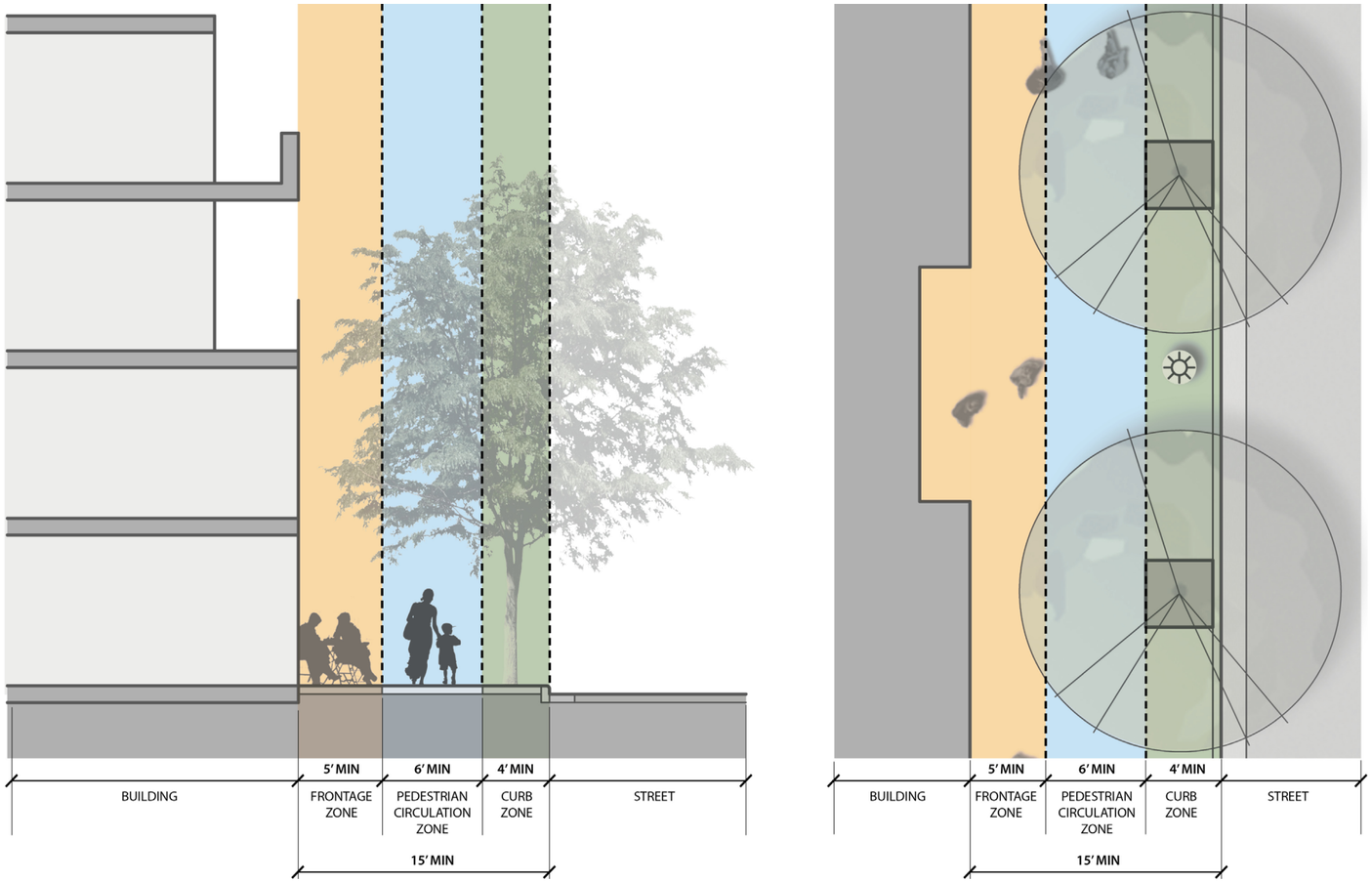


Figure 6.23
Sidewalk Zones: Section and Plan

STREET PLANTING

A minimum of one row of trees shall be planted in tree wells on both sides of all streets. Two rows of trees shall be planted on sidewalks that are greater than 15 feet in width. Street trees shall be located in the Curb Zone of the street unless the width of the sidewalk or right-of-way prevents planting in that area. Trees shall be planted at a spacing of no greater than 50 feet, as is feasible.

Trees shall be a minimum of 4-inch caliper at the time of planting and shall be container grown. Trees shall be locally grown to enhance their probability of success (from an area that extends from San Antonio to Waco and from Interstate 35 to Uvalde), having been grown in an alkaline soil environment for a minimum of five years.

Tree wells shall be 4 feet by 4 feet minimum, with 4 feet by 6 feet preferable, and shall include tree grates and tree guards.

Trees species outside the Texas Mall shall be:

- Red Oak, *Quercus shumardii* – all east / west streets
- Cedar Elm, *Ulmus crassifolia* – all north / south streets (except Congress Avenue)

LIGHTING

Roadway illumination levels shall not be excessive, yet shall be adequate for safe vehicle operation at the design speed of the street. Energy-efficient lighting, such as light-emitting diode (LED) lamps, shall be utilized. Luminaries should provide white light to render colors more naturally and attractively.

Poles and fixtures should be attractive and should complement the character of the street environment. Pole heights should relate to the scale of the street and its users; along pedestrian corridors luminaries should be mounted on poles not exceeding 15 feet in height and on all other streets luminaries should be mounted on poles not exceeding 20 feet in height.

Red Oak in Downtown Austin

Cedar Elm in Downtown Austin

6

STREET FURNISHINGS

Various elements should be placed along sidewalks and plazas, including seating, trash receptacles, consolidated newspaper racks, bicycle racks, tree grates, tree guards, bollards, planters, kiosks, flower stands, signage and wayfinding elements, transit shelters, parking meters, and utility and services devices (e.g. traffic signal controls, mail boxes, fire hydrants, etc.).

Furnishings along 15th Street, the Capitol Seam, should be a continuation of the historic vernacular on the Capitol grounds and the Texas Mall. The light standard should be the ground-mounted acorn fixture on the fluted pole. All other furnishings should be the same as those on the mall.

Furnishings on all other complex streets should convey a coordinated design expression among all of the elements in the complex. The character should not be historic, but be more contemporary with clean lines and few flourishes. Furnishings should be different in color than the historic streetscape elements on the mall and 15th Street. They should be readily available from established manufacturers to avoid expensive custom fabrication and ensure ease of replacement, and they should be durable and easy to maintain.

Specific characteristics should include:

- Seating should be user-friendly but not encourage long-term use and sleeping.
- Trash receptacles should be provided at two diagonally opposite corners of each intersection in areas with high pedestrian circulation.
- Recycling options should be provided.
- Bicycle racks should be placed in the Curb Zone such that locked bicycles do not obstruct the sidewalk pedestrian path of travel.
- In places where a large number of bicycle racks are needed, the use of an on-street parking space or creation of a sidewalk extension (amenity bulb-out) for bicycle parking should be considered.
- Tree grates should be provided for all new trees that are located in paved pedestrian areas in order to increase the usable sidewalk area and protect the tree's roots.
- All tree grates shall meet American with Disabilities Act (ADA) and Texas Accessibility Standard (TAS) accessibility standards.
- Tree guards should be installed on all new trees in heavy pedestrian areas.
- Tree guards should be strong and durable, appropriately sized to avoid damage to the tree as it reaches maturity, and compatible with the design of the tree grate.
- Transit shelters should be provided at all bus transit stops to the extent feasible and coordinated with CapMetro.
- Shelters may be custom-designed or pre-manufactured products.
- Shelter facilities may be incorporated into adjacent buildings.
- Transit shelter facilities should be publicly accessible within hours of transit operation.

Shelter facilities may include the following features:

- Shelter from wind and rain.
- Seating.
- Lighting.
- Information related to area wide wayfinding, transit routes, scheduling, and costs.
- Transparent design to allow users to be visible from the surrounding streets and to feel secure.
- Construction and siting to minimize visual obstruction of adjacent businesses.
- ADA- and TAS-compliant, both in design and siting.
- Compatible with the character of the street and surrounding built environment.

(Clockwise from top) Street furnishings shall convey a coordinated design expression between all elements in the complex. The light standard on the Capitol grounds shall be continued on 15th Street. Transit shelters shall be compatible with the street character of the complex.

INTERSECTION DESIGN

Crosswalks shall be highly visible at all intersections in accordance with City of Austin standards, and shall match the sidewalk paver. Where feasible, curb return radii of 22.5 feet shall be provided in order to reduce pedestrian street-crossing distance and to slow turning traffic. Sidewalk extensions (bulb-outs) with a 15-foot-maximum curb return shall be provided wherever parallel parking occurs and a bulb-out is feasible. Refer to figure 6.24 for a prototypical street intersection.

Where sidewalk extensions (bulb-outs) are installed, drainage improvements shall be installed as needed in order to allow clear walkways. Alternatively, curb extensions may be built separate from the existing curb to continue drainage along the existing curb.

Lighting adequate for intersection safety as well as illumination of sidewalks shall be provided.

Bicycle lanes, where designated, shall be striped continuously to the stop bar and surfaced with bicycle lane pavement paint, green in color, per the City of Austin specifications.

The following should be provided at all signalized intersections:

- Pedestrian push-button and countdown signals to indicate how many seconds are available for pedestrians to cross and to signal motorists that they should anticipate and yield to pedestrians in the intersection.
- Pedestrian median refuges (where applicable) with pedestrian push buttons on noses of raised and landscaped medians.
- Visual and audible cues for pedestrians who are sight- and hearing-impaired.

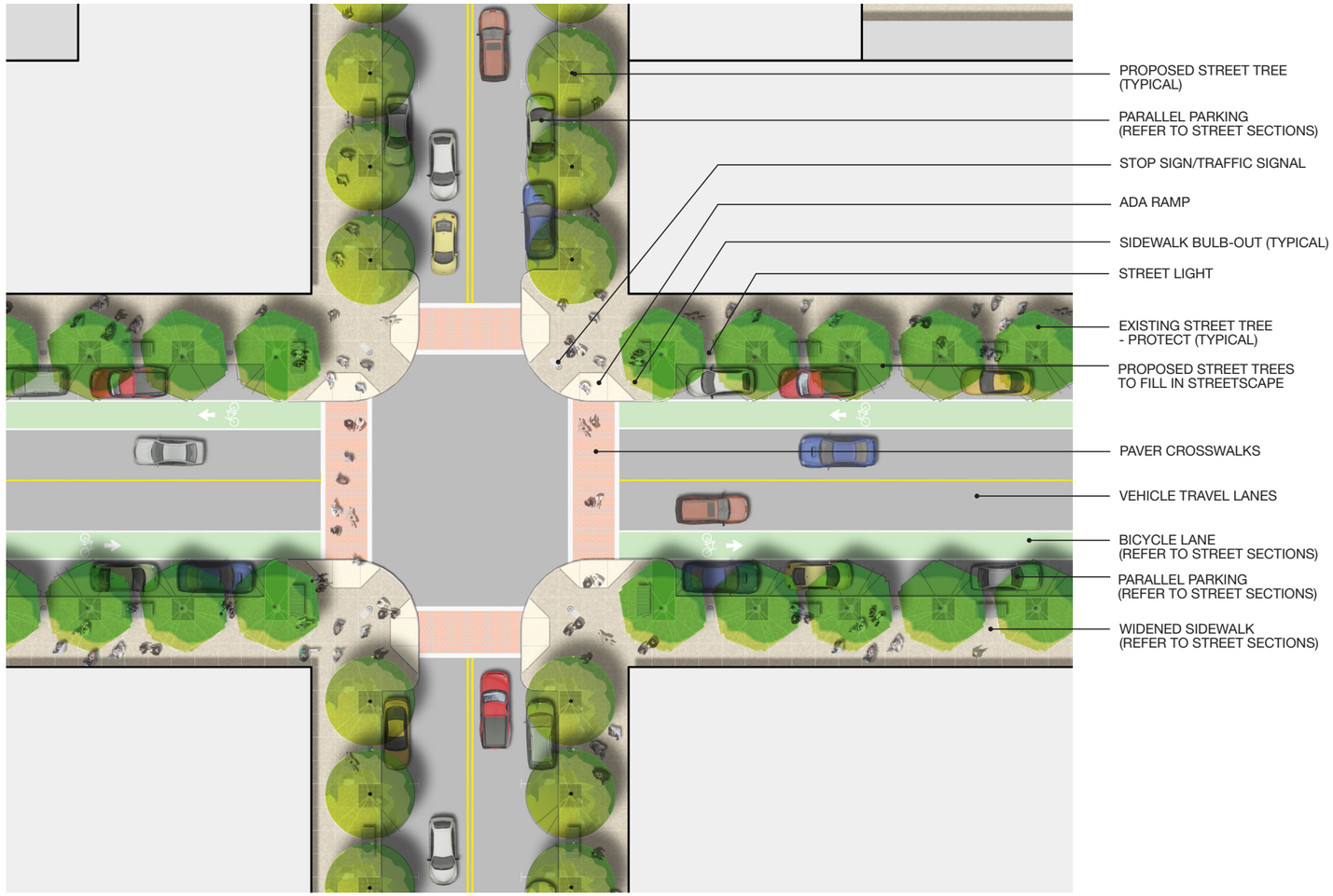


Figure 6.24
Prototypical Street Intersection

STREET DESIGN

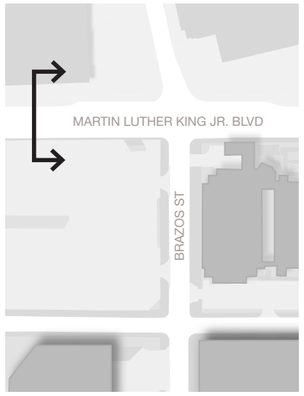
Multi-Modal Streets

Multi-modal streets carry high levels of vehicular traffic and are important links between the University of Texas campus and downtown Austin. Elements for pedestrian safety, such as reduced pedestrian crossing lengths, pedestrian signalization, and crossing refuges are especially important on these streets.

Martin Luther King Jr. Boulevard

- The streetscape character will be asymmetrical.
- Sidewalks on the south side shall be 15 feet wide.
- One row of trees shall be planted on the south sidewalk.
- Street trees shall be Red Oak.

Refer to figure 6.25 for existing and proposed cross sections of Martin Luther King Jr. Boulevard.



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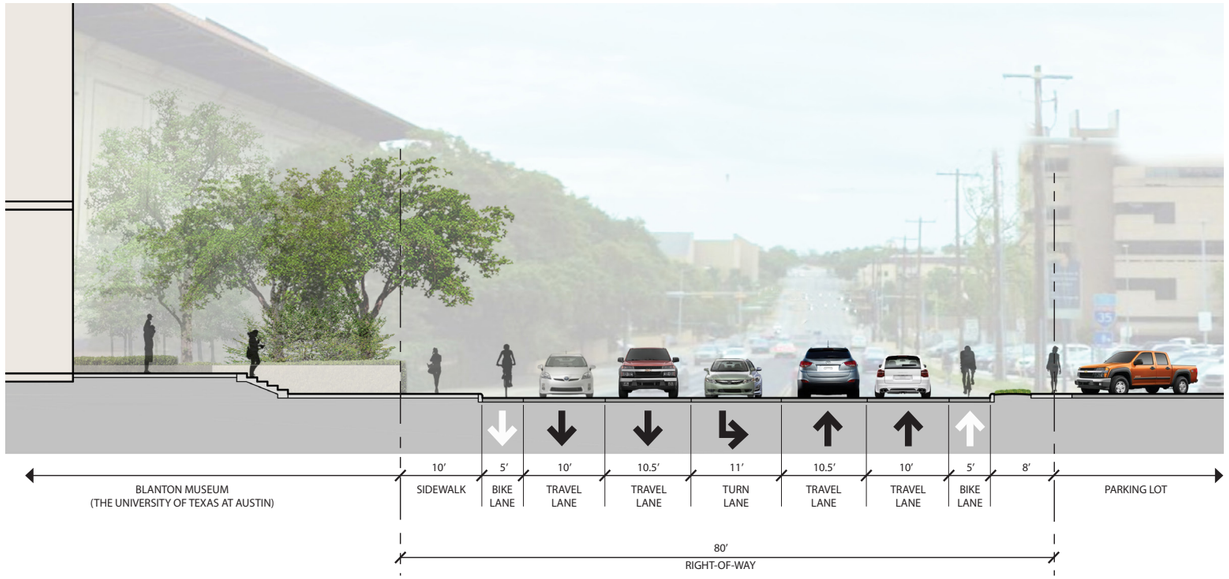


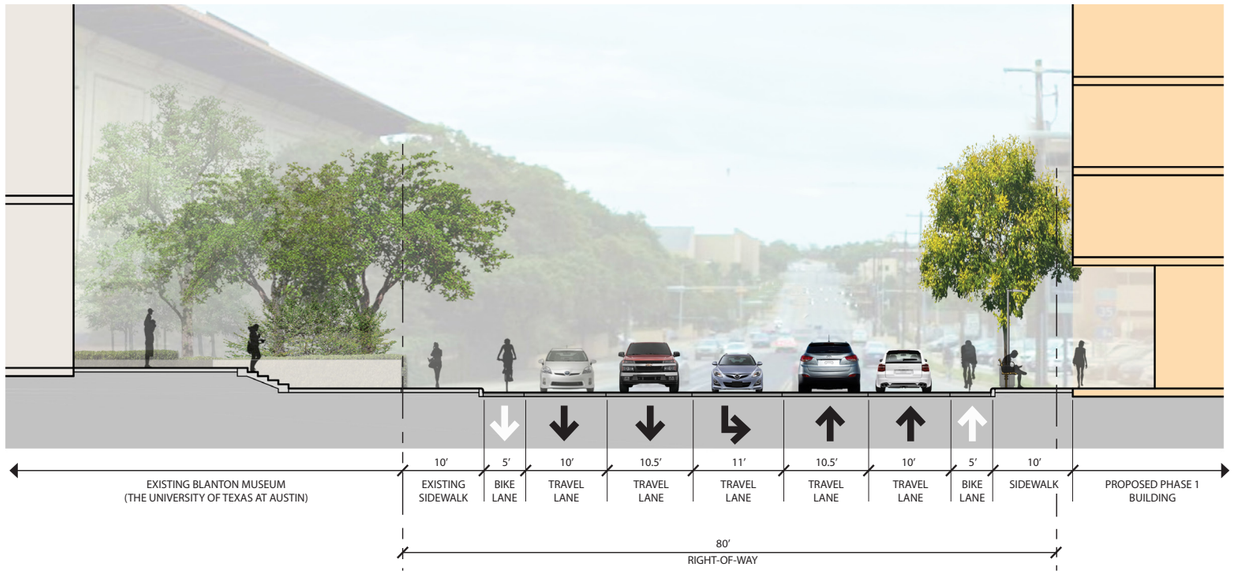
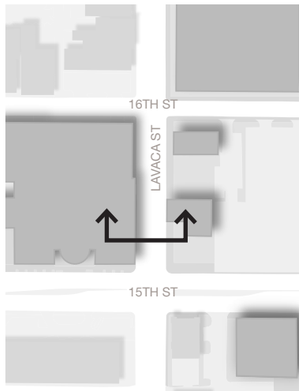


Figure 6.25
Martin Luther King Jr. Boulevard: Existing and Proposed Cross Sections

Lavaca Street

- The streetscape character will be asymmetrical.
- Sidewalks shall be 15 feet wide minimum on the east side of the street. Two rows of trees shall be planted where the sidewalk exceeds 15 feet in width.
- Street trees shall be Cedar Elm.

Refer to figure 6.26 for existing and proposed cross sections of Lavaca Street.



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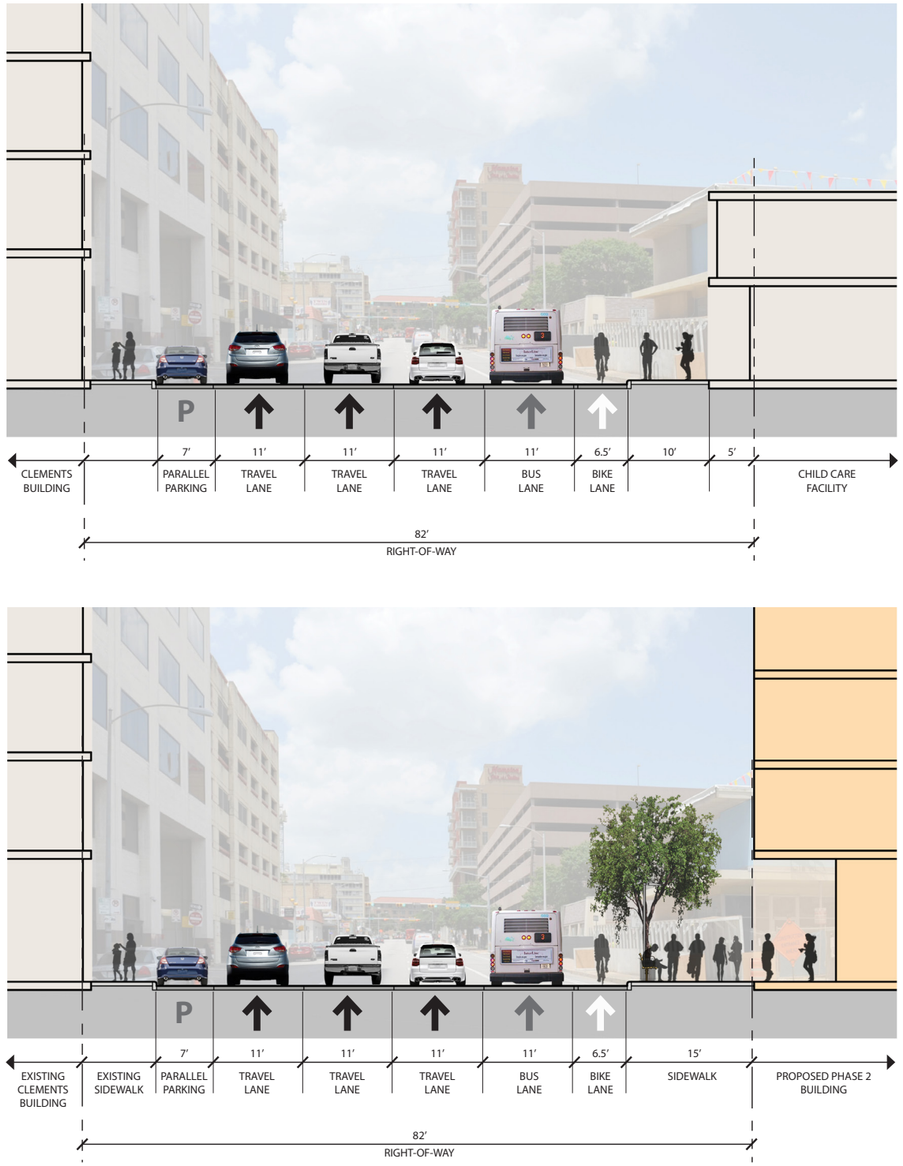
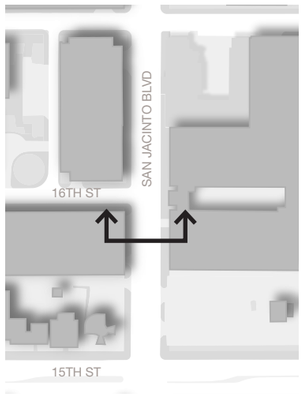


Figure 6.26
Lavaca Street between 15th and 16th Streets: Existing and Proposed Cross Sections

San Jacinto Boulevard

- Sidewalks shall be 15 feet wide on the west side of the street and 17.5 feet wide on the east side.
- Reverse-angled parking shall be removed between 17th Street and Martin Luther King Jr. Boulevard and replaced with parallel parking.
- Two rows of trees shall be planted along the east sidewalk and one row on the west side.
- Street trees shall be Cedar Elm.

Refer to figure 6.27 for existing and proposed cross sections of San Jacinto Boulevard.



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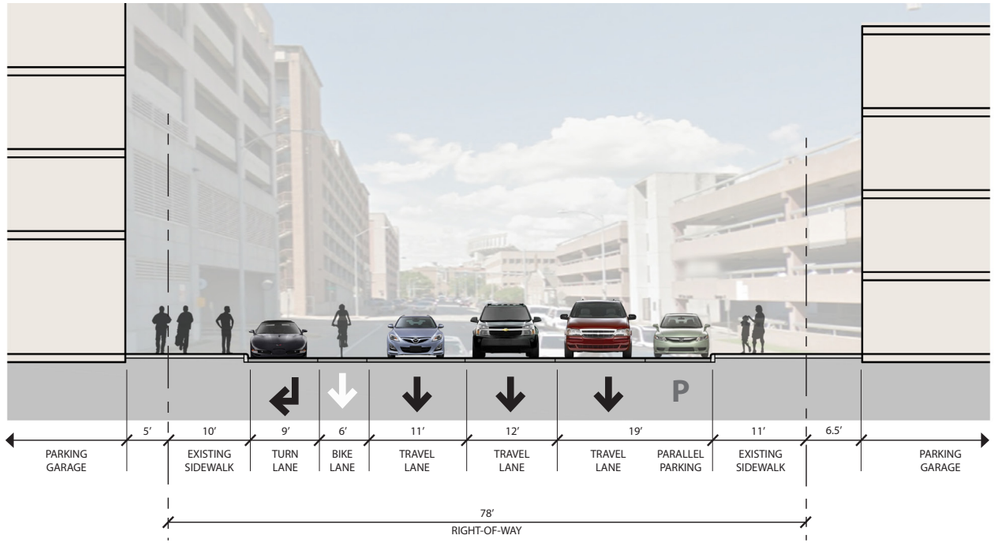


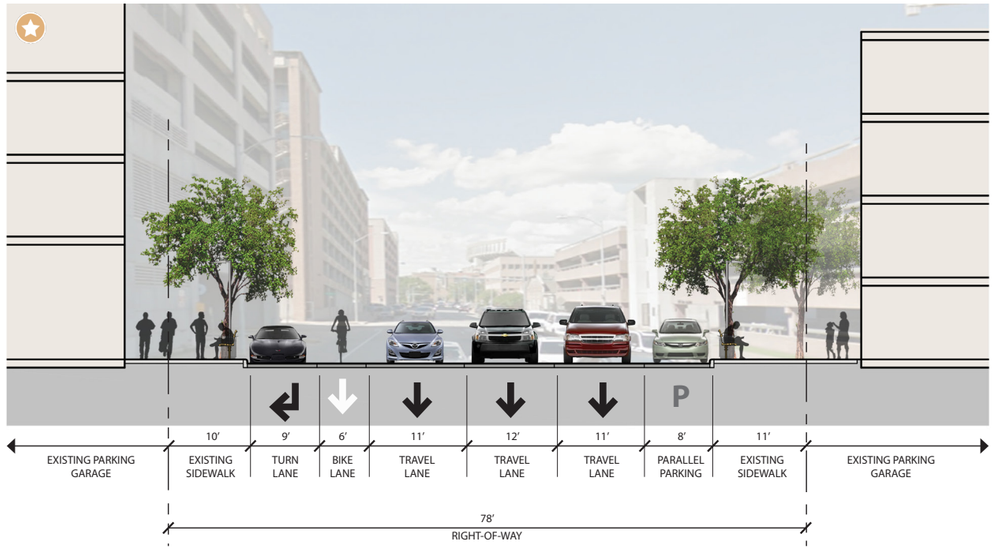
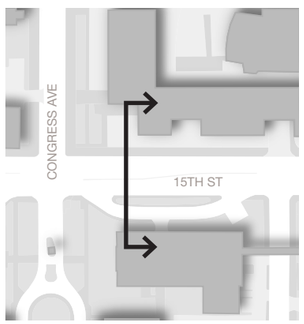


Figure 6.27
San Jacinto Boulevard: Existing and Proposed Cross Sections

15th Street

- The streetscape character will be asymmetrical.
- Sidewalks shall be 18 feet wide.
- The front yards at the John H. Reagan and the Texas Workforce Commission Buildings shall be modified so that they create a positive image at the “seam” between the Capitol grounds and the Texas Mall. The existing driveways could either be relocated or utilize a drop-off along the curb line. In all cases, Live Oaks shall be planted, consistent with the street trees along 15th Street.
- Trees shall be Live Oak.
- Street lights shall be consistent with the ground-mounted pole and fixture on the north Capitol grounds.
- Special paving and markers shall be used at the crossing of the Texas Mall and 15th Street in order to connect the complex to the Capitol grounds.

Refer to figure 6.28.



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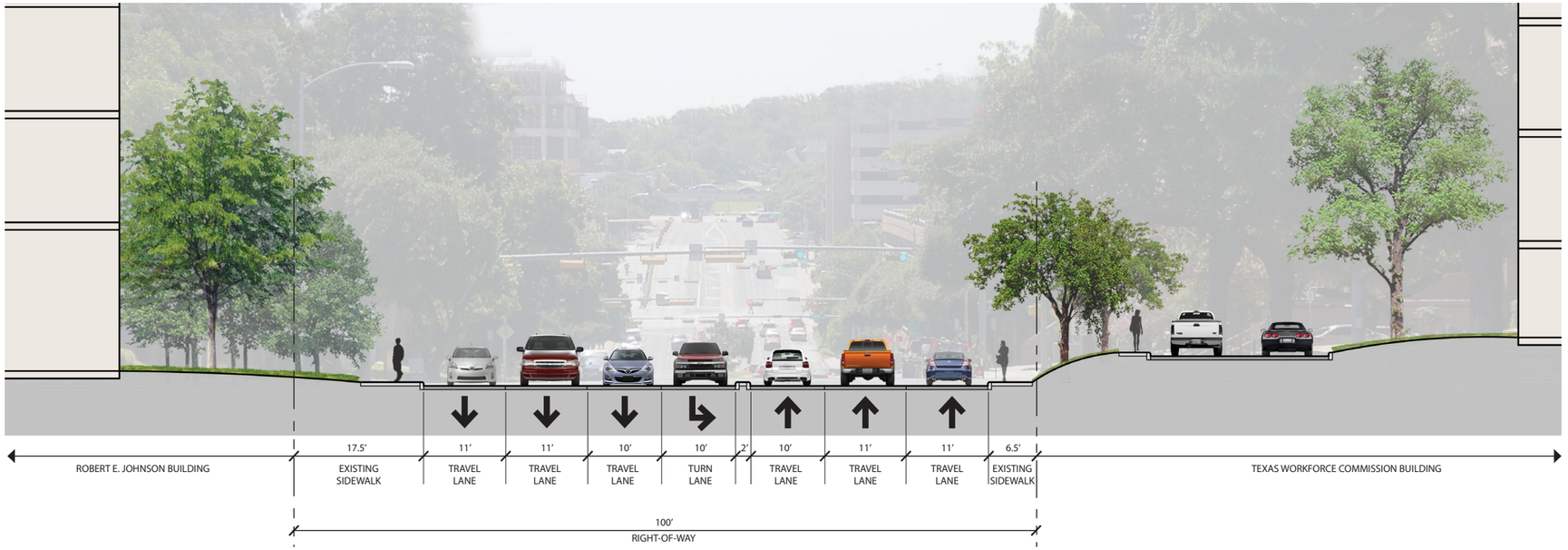


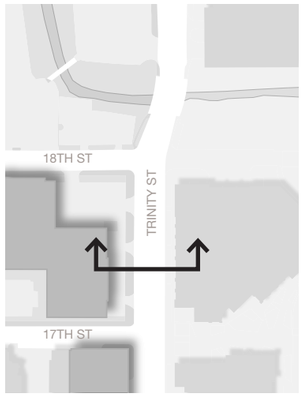
Figure 6.28
15th Street: Existing and Proposed Cross Sections

6

Trinity Street

- The Trinity Street cross section shall be modified to match the cross sections of the street north of Martin Luther King Jr. Boulevard and south of 15th Street.
- Parallel parking shall remain on the east side of the street.
- Sidewalks shall be 17 feet wide on the west side.
- Street trees shall be Cedar Elm.
- Two rows of trees shall be planted along the west side.

Refer to figure 6.29 for Trinity Street cross sections.



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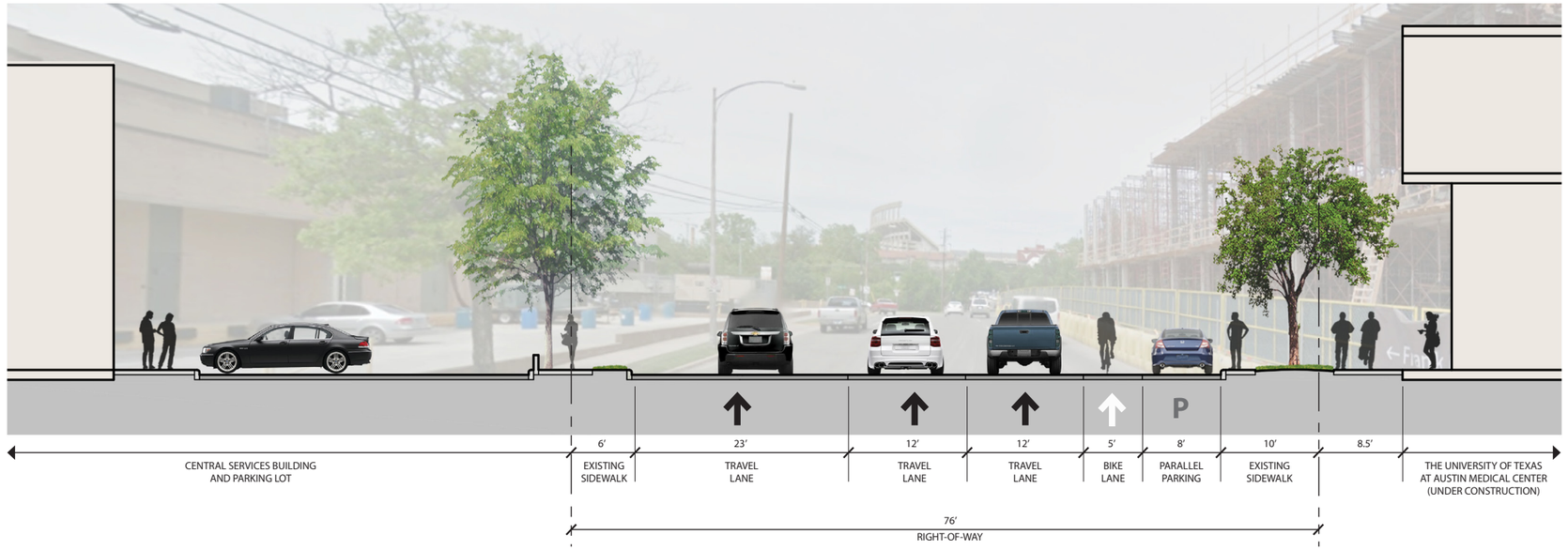


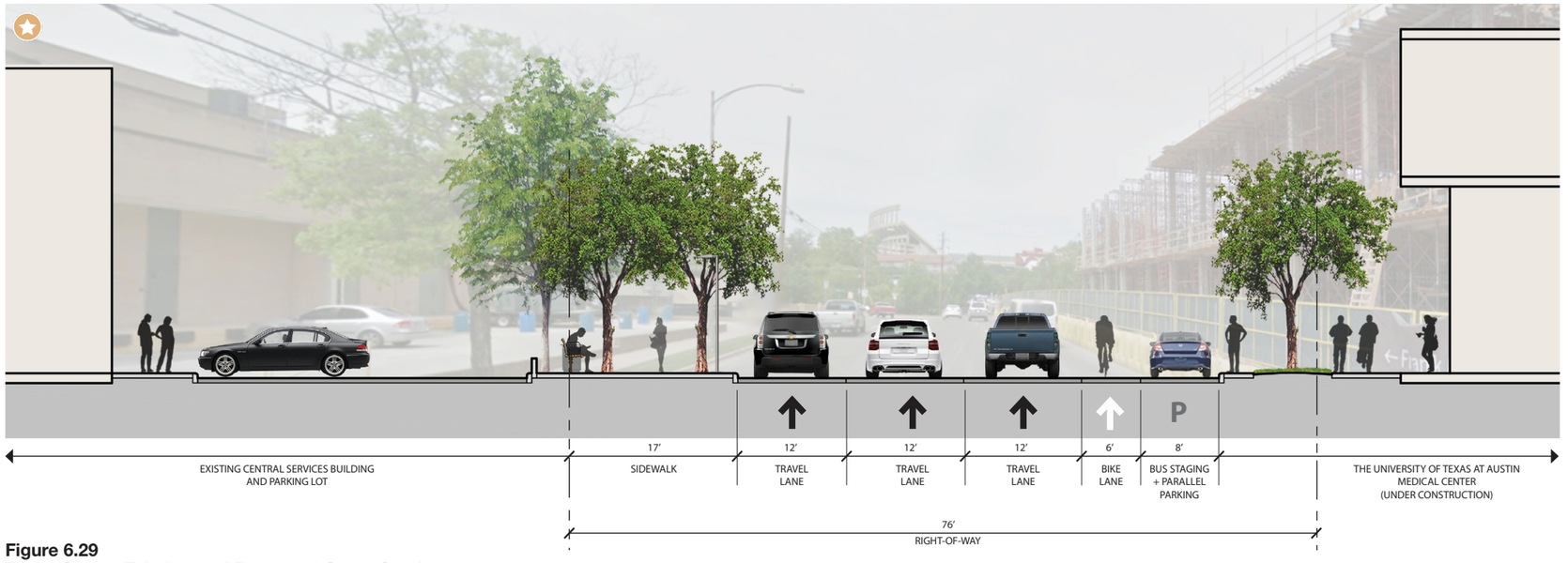


Figure 6.29
Trinity Street: Existing and Proposed Cross Sections

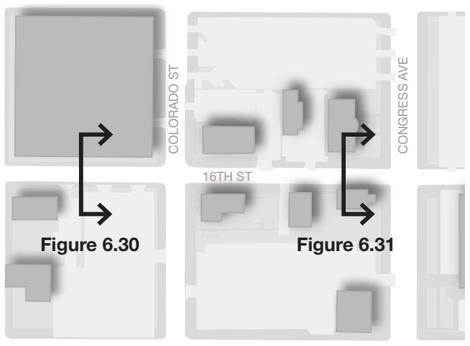
Internal Access Streets

The internal access streets are the minor streets within the Capitol street hierarchy. New service and garage access points shall be located on these streets.

16th Street

- 16th Street shall be modified to be a two-way street with one lane in each direction.
- Parallel parking shall remain on the north side.
- Sidewalks shall be 16.5 feet to 26.5 feet wide on the north side and 10 feet wide on the south side to continue the existing character of the block.
- The block between Colorado Street and Congress Avenue shall reinforce the existing historic character of the buildings and improvements.
- Street trees shall be planted along both sides and shall be a double row on the north.
- Street trees shall be Red Oak.

Refer to figures 6.30 and 6.31 for 16th Street cross sections.



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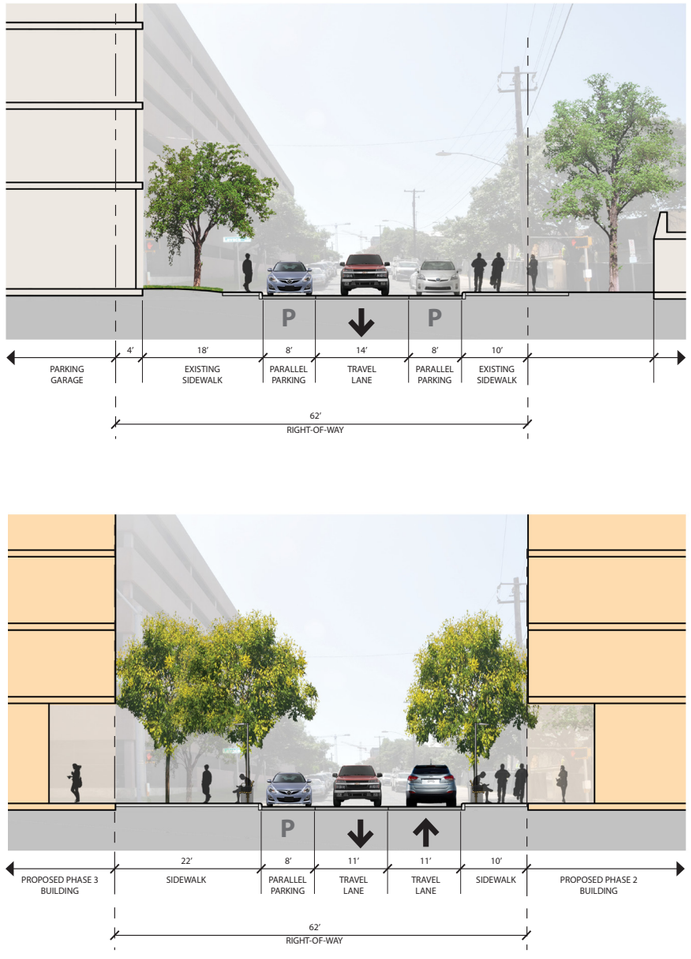


Figure 6.30
16th Street between Lavaca and Colorado Streets: Existing and Proposed Cross Sections

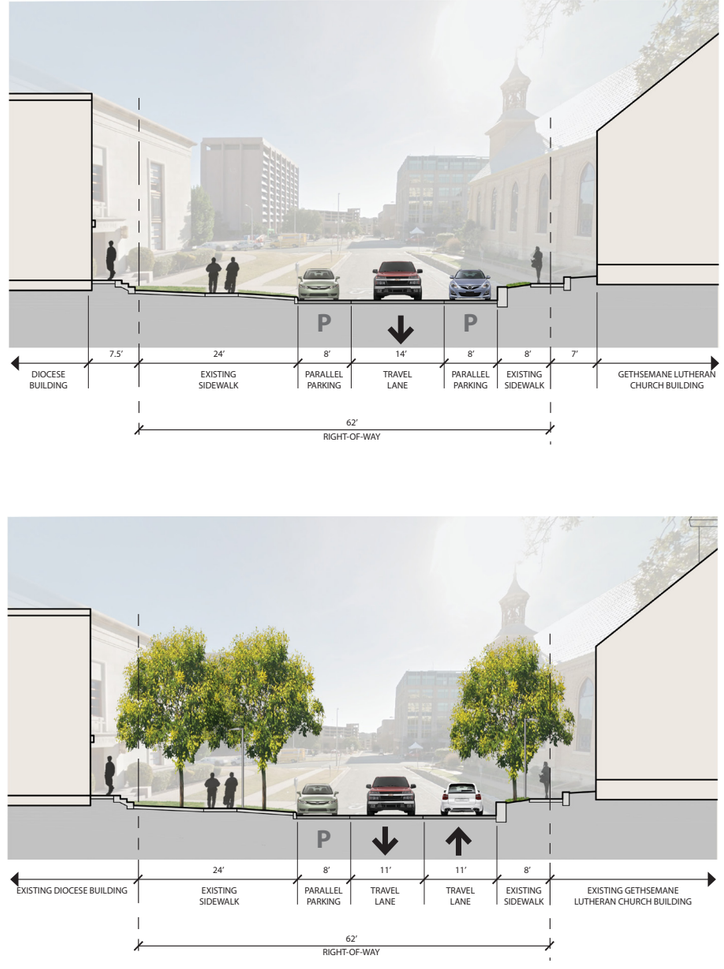


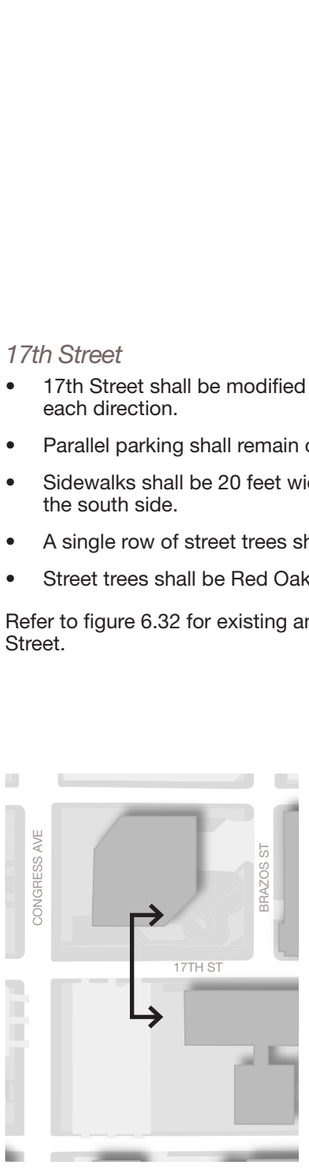
Figure 6.31
16th Street between Colorado Street and Congress Avenue: Existing and Proposed Cross Sections

6

17th Street

- 17th Street shall be modified to be a two-way street with one lane in each direction.
- Parallel parking shall remain on the north side.
- Sidewalks shall be 20 feet wide on the north side and 8 feet wide on the south side.
- A single row of street trees shall be planted along both sides.
- Street trees shall be Red Oak.

Refer to figure 6.32 for existing and proposed cross sections of 17th Street.



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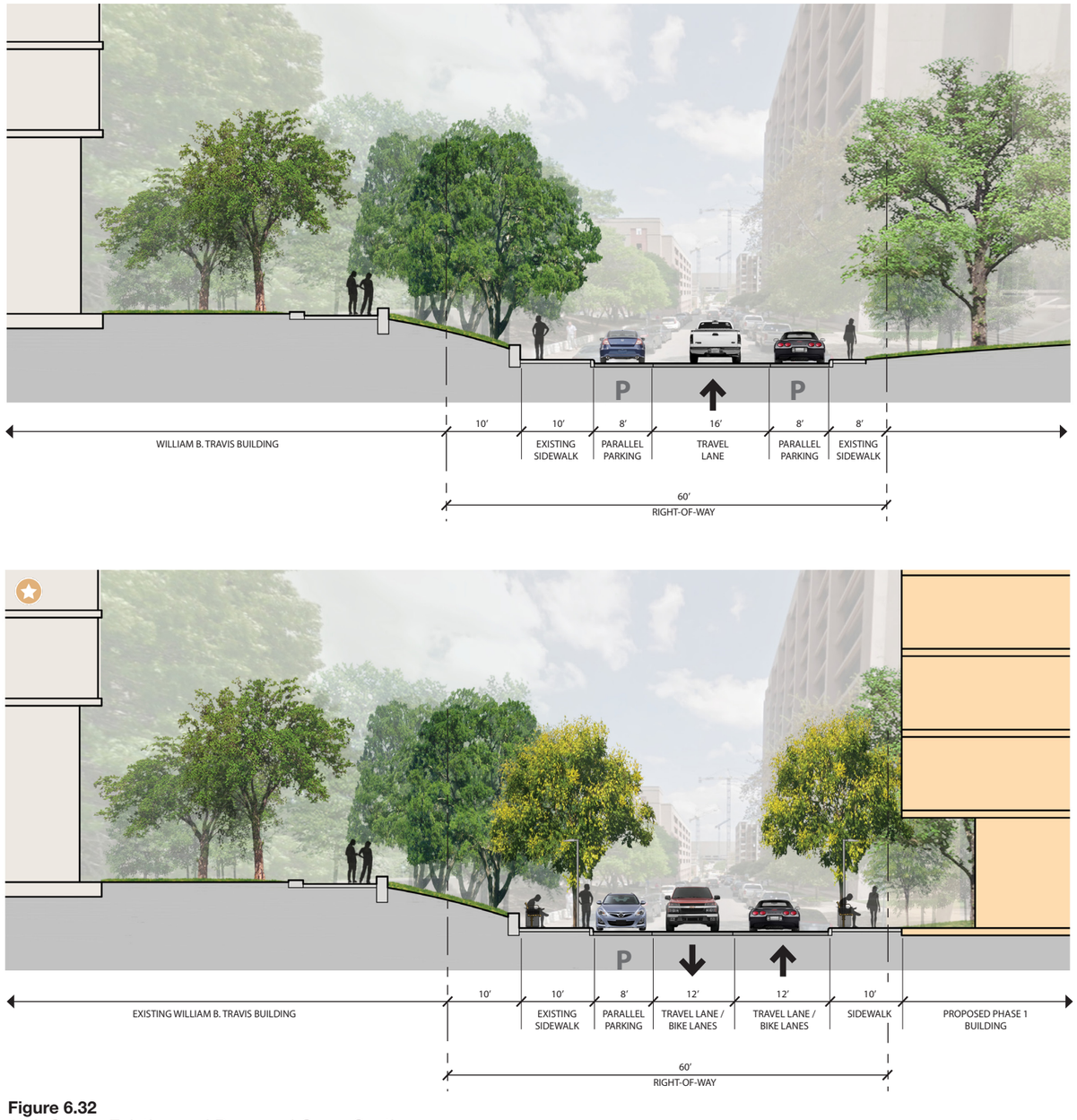
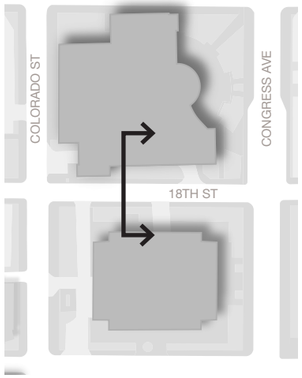


Figure 6.32
17th Street: Existing and Proposed Cross Sections

18th Street

- 18th Street shall be modified to be a two-way street with one lane in each direction.
- Parallel parking shall be retained on the north side except at the Texas State History Museum where bus access will be located.
- Sidewalks shall be 21 feet wide on the north side and 7 feet wide on the south side.
- Street trees shall be planted along both sides and shall be a double row on the north.
- Street trees shall be Red Oak.

Refer to figure 6.33 for cross sections of 18th Street.



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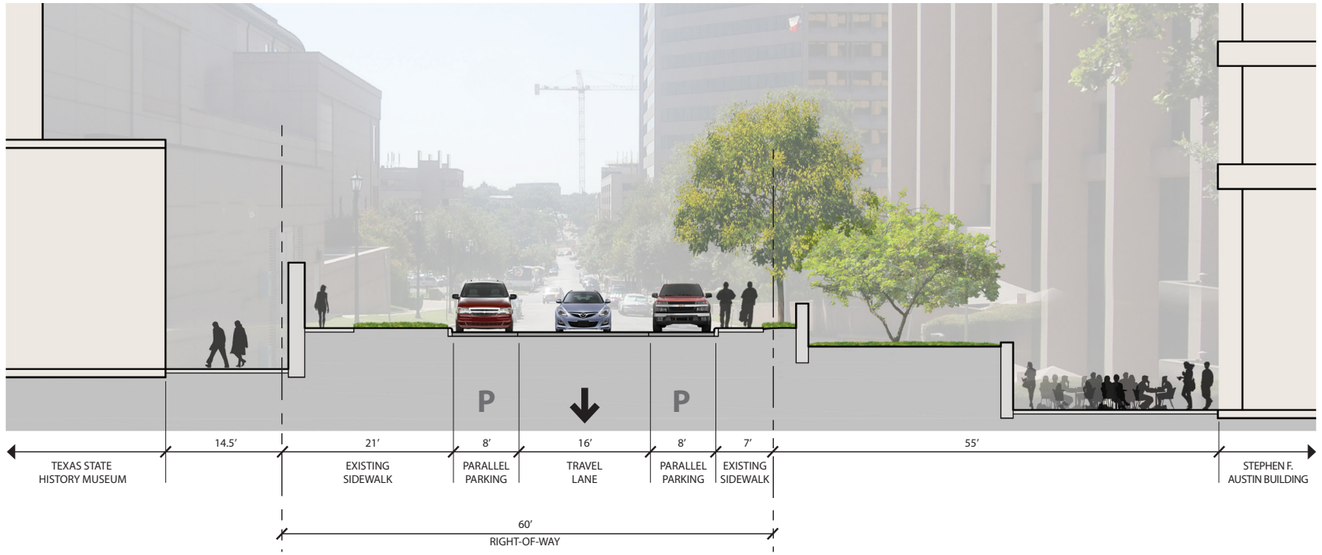


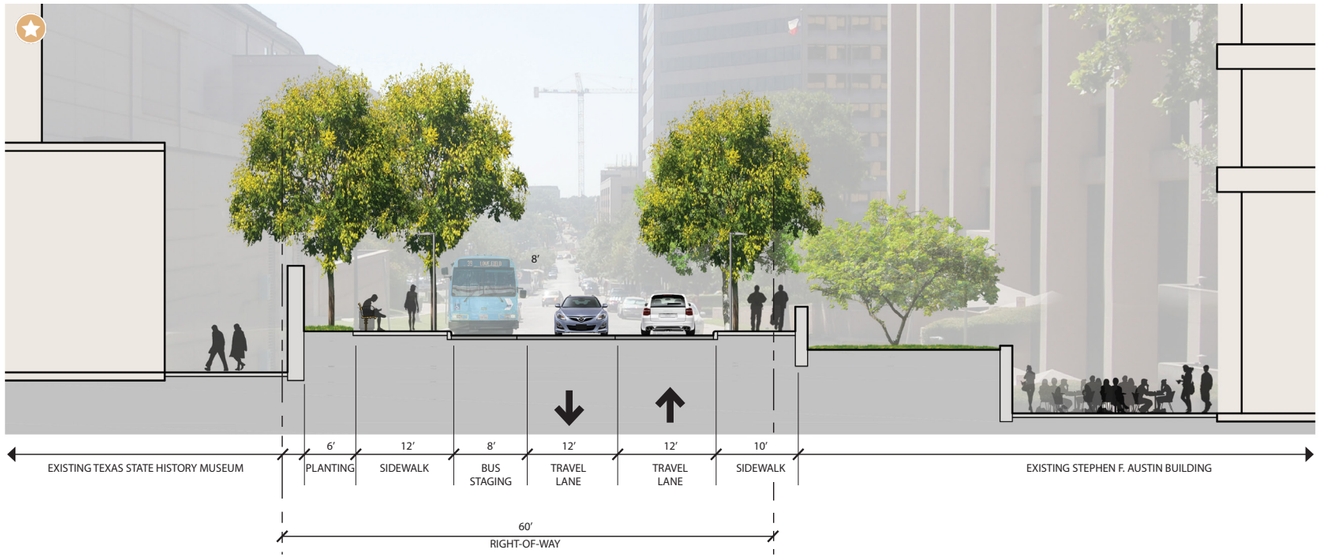
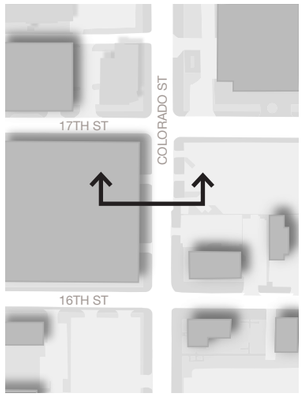


Figure 6.33
18th Street: Existing and Proposed Cross Sections

Colorado Street

- Sidewalks shall be 17 feet wide on the west and 21 feet wide on the east.
- Two rows of trees shall be planted along both sidewalks.
- Street trees shall be Cedar Elm.

Refer to figure 6.34 for cross sections of Colorado Street.



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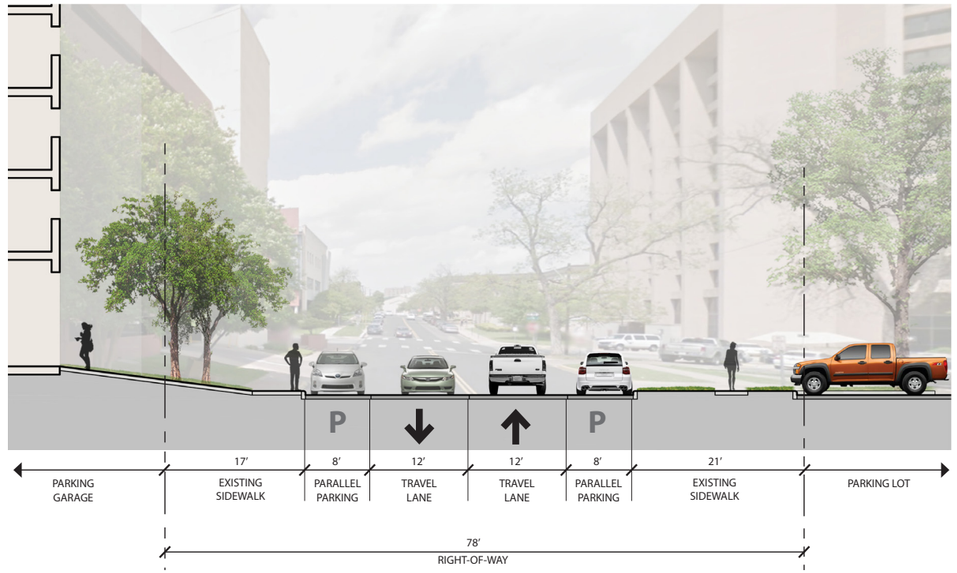


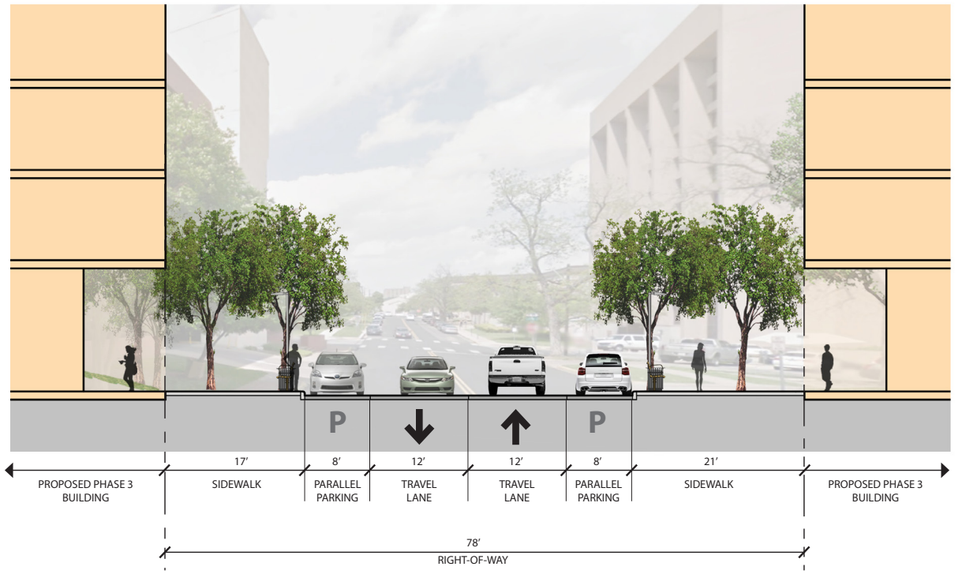
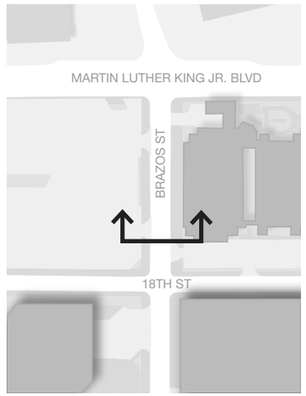


Figure 6.34
Colorado Street: Existing and Proposed Cross Sections

Brazos Street

- Sidewalks shall be 18.5 feet wide on the west side and 23.5 feet wide on the east side.
- Two rows of trees shall be planted along both sidewalks.
- Street trees shall be Cedar Elm.

Refer to figure 6.35 for Brazos Street cross sections.



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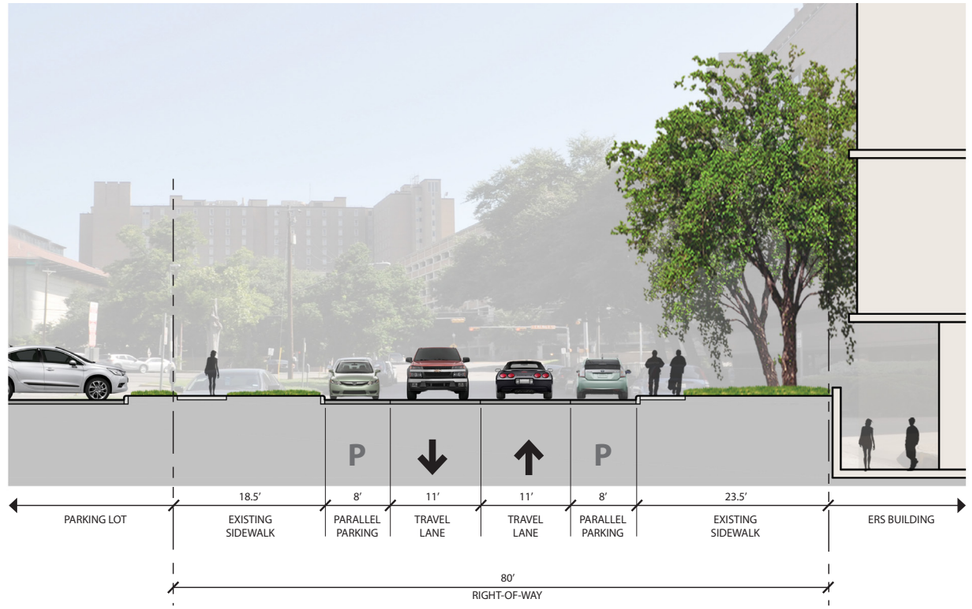


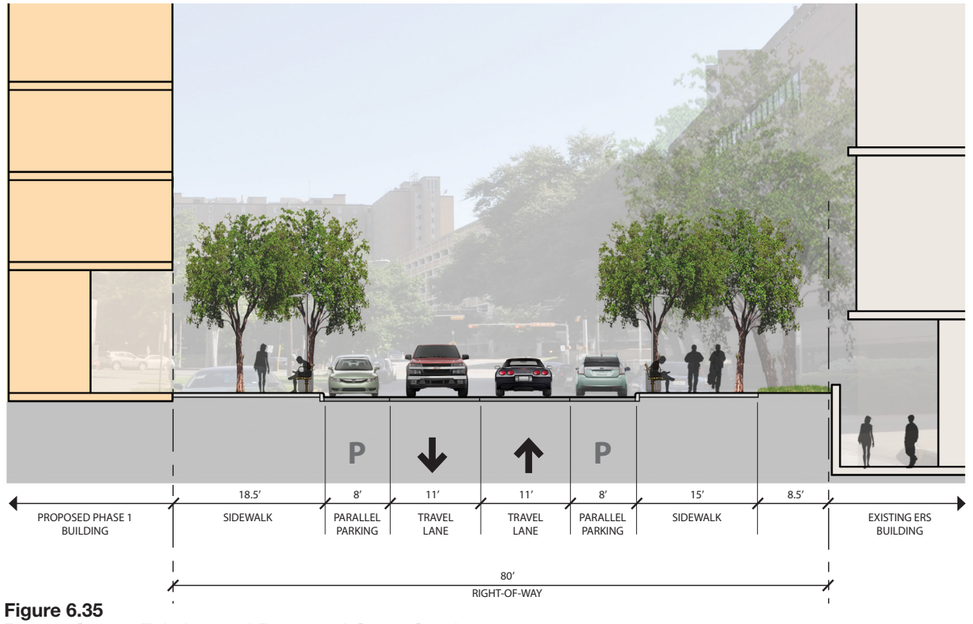


Figure 6.35
Brazos Street: Existing and Proposed Cross Sections

6

Architectural Design Guidelines

The Architectural Design Guidelines have been devised to provoke strong and innovate building designs that create a distinctive and pervasive sense of place for the entire Capitol Complex. The principles and examples contained herein are intended to encourage architects working in the complex to exercise creativity to generate unique buildings distinctive to the complex. The results should produce strong architecture that generates a powerful district ethos.

PRINCIPLES

1. Massing
2. Building Edge
3. Engaging Public Space
4. Building Materials
5. Durability and Lifespan
6. Natural Light and Fenestrations
7. Climate Responsiveness
8. Screen Service Areas
9. Parking Garages
10. Timelessness and Identity
11. Fabric and Focus

ARCHITECTURAL HISTORY

With a history dating to the earliest days of Texas statehood, the range and diversity of architectural character in the Capitol Complex is noteworthy. Yet, there is a subtle cohesion among the majority of structures due in part to a relatively limited period of substantial construction. To understand the significance of the development of the complex, one must begin with its original edifices.

The history of architecture within the Capitol Complex begins with the centerpieces of state government–the original State Capitol and the Governor's Mansion, both completed in the 1850s. These structures were joined contemporaneously by one of the most unique buildings still standing in the complex today, the Old Land Office Building. This building, designed by German-born Christoph Conrad Stremme and opened in 1858, marks the lone example of Romanesque Revival architecture for the complex, and is situated on the grounds just to the southeast of the Capitol. Though the original Capitol would be replaced three decades later, the siting remained the same, and these three buildings endure as the primary anchors of the larger complex and serve as icons for the state at large.

Governor's Mansion

One of the oldest and most distinguished state executive residences in the country, the Governor's Mansion is a delicate blend of frontier plainness and aspiring sophistication. Simple, but elegantly refined, the building stands not only as a telling essay on Texas culture in the mid-nineteenth century, but also as a repository of [over 150] years of social and political memories. It serves also as a fine example of the well-crafted, pattern-book-based design that brought refinement of proportion, line, and material usage to early Texas building.

The City of Austin was founded as the new capital of the Republic of Texas in 1839 amid some controversy about moving the seat of government to such a remote location on the "western frontier." Even when planning began for a new governor's residence in late 1853, significant opposition to the effort came from a contingent of East Texas legislators who disputed such an investment in a town whose future was uncertain, having only been designated as capital until 1870. The city was, in the 1850s, a small, rude village largely made up of clapboard-covered log houses. But Austin was growing both in size and in the permanence of its buildings, and the legislature was finally convinced by Governor Elisha M. Pease to invest in a substantial building which would indicate the state's commitment to Austin as its permanent capital city.

The fragility of this commitment to Austin in earlier years is evident in the character of the state's first executive mansion that the new building was to replace. Built in 1838, the building was a poorly constructed two-story frame structure with a dog-run splitting the house in half lengthwise. When Sam Houston became President of the Republic for the second time in 1841 he declined to live in the house because of its poor condition and stayed in a hotel instead.

Governor Pease seems largely responsible for the aspirations of the state to replace the earlier poor investment with a landmark building that had style as well as utility. Pease was a well-traveled man with an interest in architecture and a predilection for the then-popular Greek Revival style. He served personally on a three-man commission established by the legislature to oversee the building along with two fellow Greek Revival devotees – State Treasurer James H. Raymond and State Comptroller James B. Shaw.

At the time of the construction of the Governor's Mansion all three of the commissioners, Pease, Shaw, and Raymond, lived in houses built by Abner H. Cook, a prominent Austin citizen, well established at the time as a builder of fine homes. Cook, who had come to Austin in 1839 after working in Nashville, Tennessee, and Macon, Georgia, was a master builder well versed in the Greek Revival style. His knowledge was acquired not only from firsthand experience with fine buildings of the style in the Deep South, but also from standard guidebooks of the time on carpentry, building, and architecture such as those published by Asher Benjamin and Minard Lafever.

Cook had a substantial building operation including a brick kiln in Austin, a stone quarry, and part interest in a lumber mill in nearby Bastrop. As low bidder for the project, Cook was selected to build the Governor's Mansion in the summer of 1854. The bids had been based on drawings prepared by Richard Payne, an Austin architect and contractor who frequently worked with or for Cook. Thomas W. Ward, another architect, was paid a small consulting fee "for his time" later in the project as well.

The building that Cook built bore a strong resemblance to his prior residential work in Austin and especially to the Raymond House, the Shaw House, and the Neill-Cochran House. All of these had dominant two-story hexastyle porticos with heavy flat entablatures. The orders on the Governor's Mansion, as on the Raymond and Shaw homes, were Ionic and very similar to plates which appear in Benjamin's guidebooks. The notable "wheat sheaf" design of the balustrade, common to all of these houses, was a hallmark of Cook's Greek Revival work in Austin.

Although the original portion of the Governor's Mansion has had little structural alteration through the years, it would have felt very different than it does today when it was first occupied by Governor Pease in June 1856. Local reports at the time deemed it "just what a Republican Governor's house ought to be" (*Austin State Gazette*, August 18, 1855), and indeed it must have seemed a noble gesture rising above the raw little village of Austin at the time. It would have recalled the Jeffersonian advocacy of the Greek Revival style for Washington and especially for the President's House earlier in the century. It bore an even closer resemblance to The Hermitage in Nashville, the home of Andrew Jackson. It would have seemed American and Southern in tradition.

But there were hints of its Texas roots as well. Its sandstone-mottled local brick (originally unpainted) would have lent a rugged texture in contrast to the graceful lines and smooth surfaces of its white columns, balustrade, entablature, and trim. Its interior would have had a plain frontier feeling with wide halls, large simple rooms, white plastered ceilings and walls, understated classic trim, and natural Bastrop pine floors. Its straightforward plan and eastern orientation, surrounded by lawns and garden, would have made it a comfortable and pleasant residence well suited to its warm climate. The mansion spoke at once to the hardscrabble past and to the aspiring and cultivated future of the emerging state it represented at mid-century.

Originally published in Landmarks of Texas Architecture*, 1986, University of Texas Press*

Early photograph of the historic Texas Governor's Mansion

6

State Capitol

Across the lawn from the Governor's Mansion, the old Greek Revival capitol building of 1853 was badly gutted by fire in 1881 and, with little regret, demolished to make way for a much larger and grander capitol building at the terminus of Congress Avenue. The first capitol had always been too small and timid to live up to its focal location in the city plan. The state resolved in its second effort to create a suitable crown for the capitol hill around which Austin was, by then, rapidly developing.

A competition process had, in fact, already been set into motion a year before the old capitol building burned, in which plans and specifications were solicited for a new building. Although the competition had been publicized in major newspapers nationwide, its naive and demanding requirements resulted in only eleven entrances. Aided by consulting architect Napoleon LeBrun of New York City, the Capitol Commission, sponsors of the competition, selected the entry by Elijah E. Myers of Detroit. Myers was immediately summoned to Austin, where, after agreeing to some modifications suggested by LeBrun, he was appointed design architect for the Texas State Capitol.

Myers was a fortuitous selection for the project. He was a prolific public building designer who built numerous courthouses and city halls in the Midwest, the Far West, and the South as well as state capitols in Michigan, Colorado, Idaho, Utah, and Texas. Forty-eight years old at the time he received the Texas commission, Myers had risen from a modest beginning as a Philadelphia carpenter to become one of the leading architects of America's Gilded Age.

Selection of a contractor for the project, like selection of the architect, was handled in an unconventional manner by the state's Capitol Commission. Payment was to be made in land, so that the award was given to the contractor who required the smallest quantity of three million acres of state land in the Panhandle that had been set aside by the legislature for the project. The commission received only two bids in response to their unusual terms, the lower one coming from Mattheas Schnell of Illinois, whose interest was more in the land than in the construction contract. After some negotiation, Abner Taylor of Taylor, Babcock, and Company in Chicago was brought into the deal to act as contractor of record. The land transfer and development resulting from the Capitol contract provoked a series of events that are at least as intriguing as the story of the Capitol itself–events which eventually included the creation of the famous XIT Ranch.

The construction of the Capitol Building was not a smooth process. Shortly after work began in late 1883 the state's superintendent on the project, R. L. Walker, complained that the local limestone that had been selected for the project was embedded with pyrites (a pale yellow mineral commonly known as "fool's gold"), which would disintegrate when exposed to air and streak the cream-colored stone. The contractor subsequently submitted a sample of similar, but clearer, limestone from a quarry in Bedford, Indiana. This, however, was deemed unsuitable by Governor John Ireland, who insisted that such a selection would be contrary to the state's policy of using Texas materials wherever possible. The governor favored the use of Texas red granite, and popular sentiment supported his opinion.

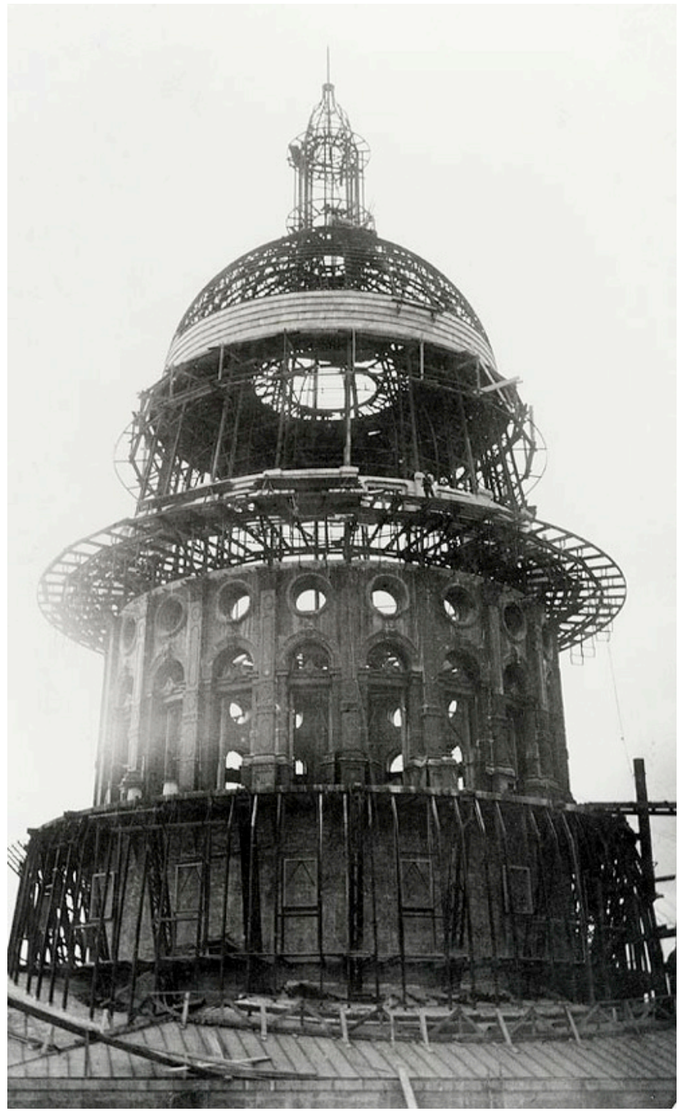
The contractor estimated that use of the much harder and more difficult-to-work granite would cost an additional $613,865, or twenty percent more than the original bid for the building. No such funds being available, the legislature was called into special session but adjourned without making an additional appropriation. A compromise was finally reached when, in mid-July 1885, the contractor proposed to build the building of granite if the state would furnish a quarry free of cost and provide convict manpower to operate it. In addition he asked that three porticos be eliminated from the design and that detailing of the stone be simplified to reflect the change of material. The state agreed to the terms and Myers begrudgingly made the necessary design changes in early 1885, changing the orders of the building from the complex Corinthian to a simpler modified Doric.

The state and Myers, during the same period as the stone controversy, began to have a falling-out. The contractor complained in early 1885 that there were defects in the plans as drawn. Unpleasant accusations were exchanged between the state and its architect, which led to visits by Myers to the job site and eventual deviations from the original drawings. Additional complaints continued to surface, and in February 1886 the Capitol Commission charged Myers with a long list of defects, evasions, and questionable motives, listing nine items in his plans which were deemed to be "either impractical, insufficient, defective or unsafe." The attorney-general was directed to place Myers' bond in suit, and the architect's involvement with the project was terminated.

Despite these and other problems, involving labor disputes, structural redesign of the dome, and complaints against the contractor on completion over roof leaks and basement drainage, the building was accepted by the state and dedicated on May 18, 1888. The result of seven years of strained relationships was a magnificent edifice which immediately became a great credit to its creators. The populace of the state received it warmly, charmed by its classic configuration, its elegant proportions, its massive, rusticated walls, and its dramatic balconied rotunda. Much to his Texas hosts' satisfaction, magnate Jay Gould deemed it "the finest building in the world–certainly the finest I have ever seen" when he visited Austin shortly after its completion *(Southwestern Historical Quarterly,* January 1955, p. 427*).*

Temple Houston, Sam Houston's son, noted at the Capitol dedication that "the architecture of a civilization is its most enduring feature, and by this structure shall Texas transmit herself to posterity" *(Texas Legislative Council, The Texas Capitol, Symbol of Accomplishment,* 1967, p. 64*).* Judging by the building's endurance as a potent symbol of the state for a full century, his prediction seems likely to prove true.

Originally published in Landmarks of Texas Architecture*, 1986, University of Texas Press*



Construction of the Capitol dome

Acquisition of Historic Buildings

After the completion of the Texas State Capitol in 1888, few examples exist of state-funded buildings erected before the mid-twentieth century. There are, however, a small number of historic structures within the complex that were acquired following a series of growth plans spurred by the 47th Legislature and its “Capitol Plan Report.” Most of these buildings are clustered along a single block of 16th Street between Colorado Street and Congress Avenue. The most notable examples are the pre-Civil War Carrington-Covert House, completed in 1857, and the Gethsemane Lutheran Church from 1883. Both buildings are listed on the National Register of Historic Places. Today, this grouping of historic buildings is occupied by the Texas Historical Commission.

One additional acquisition worth noting is the Ernest O. Thompson Building, originally the Austin Daily Tribune Building. Designed by Shirley Simons, Sr., and Page, Southerland & Page, the building was completed in 1941 and purchased by the State of Texas in 1945. It marks one of the two important examples of Art Deco architecture within the Capitol Complex today.

The other sample of Art Deco architecture is the 1933 State Highway Building (now the Dewitt C. Greer Building). It sits just south of the Old Land Office, where it is linked, but contrasts stylistically with the neighboring 1918 State Office Building (now the James Earl Rudder Building). These two buildings are the lone examples of state-led building construction within the complex from the time of the Texas State Capitol to the mid-twentieth century.

The five-story steel-frame James Earl Rudder Building was designed by Atlee B. Ayers in a Classical Revival style. Though its exterior ornamentation in brick, limestone, and cast iron presents a historicist reference, the interior was a modern open floor plan at the time of construction. The nine-story Dewitt C. Greer Building was designed by Adams & Adams and Lang & Witchell with a limestone facade and pink granite skirting at the base, referencing the materiality of the nearby State Capitol. A series of symmetrical step-backs as the building rises provides an elegant massing and an important specimen of Art Deco design. The two buildings are jointly listed in the National Register of Historic Places.

20th Century State Buildings

The Capitol Complex does have a few remaining examples of pre-World War II architecture, but a vast majority of the buildings were completed in the period from the late 1950s to the early 1980s. The siting of several buildings and the growth of the complex was made possible by the state’s targeted acquisition of properties north to 19th Street (now Martin Luther King, Jr. Boulevard), between Colorado and Brazos streets. Within this era of expansion, there were smaller, concentrated periods of growth, the first and most significant of which occurred from 1959 to 1962.

Though plans for buildings such as the Texas State Library exist from the 1930s, traction for building on the Capitol grounds did not occur until the late 1950s, coinciding with the 1956 Capitol Area Master Plan. Beginning with the opening of the Sam Houston Building in 1959, six buildings would be completed in the area immediately adjacent to the Texas State Capitol in the next three years. The other five structures include the Supreme Court Building, the John H. Reagan Building, the Texas Workforce Commission Building, the State Insurance Building, and the Library and Archives Building (now the Lorenzo de Zavala State Archives and Library). Together, these buildings marked a shift in the Capitol Complex architecture to a mid-century modern style. Reference to the Capitol was made primarily through the common use of pink granite, some of which was sourced from the same quarry as the Capitol itself. Certain of these buildings, such as the Supreme Court Building and the State Library and Archives Building, are elegant enough in their simplicity to signify important civic institutions. However, as an assembly, they generate a strong fabric to formalize the bounds of the Capitol grounds and reinforce the Capitol building as the central focus of the complex.

Following the six buildings along the Capitol grounds, the complex would wait another decade to see the completion of its next round of state buildings. In 1973 the Stephen F. Austin Building, the Lyndon B. Johnson Building, and the Texas Workforce Commission Annex were completed. The former two examples began to step the development in the complex northward, past the historic district of 16th Street. The Stephen F. Austin Building can be interpreted, in part, as Brutalist style, but all three of these examples continued the modernist character of their predecessors a decade prior. It would be another ten years before the William B. Travis Building would mirror the Stephen F. Austin Building across Congress Avenue in 1983. Altogether, in a period of two and a half decades, ten significant new structures were added to the Capitol Complex, shifting the architectural language away from historicist references and toward a simple modern aesthetic that pays appropriate deference to the stature of the Capitol building.

After the mid-1980s, the last thirty years have seen the addition of only three new buildings to the Capitol Complex. These include the Price Daniel Sr. Building in 1991, the Robert E. Johnson Building in 2000, and the Texas State History Museum in 2001. The Texas State History Museum, designed by E. Verner Johnson & Associates, was situated at the northern end of Congress Avenue, creating a partial gateway to the complex from Martin Luther King Jr. Boulevard. Like some of the mid-century buildings, it also sourced pink granite from the quarry that generated the material for the walls of the Texas State Capitol.

This last era of limited development also saw the renovation and expansion of the Capitol itself. However, understanding the importance and formalism embodied in the existing building, the expansion was constructed largely below-grade. This type of strategic move, coupled with the precedent set by its mid-century neighbors provides cues for future development to ensure that the complex maintains an integrity and stature appropriate of state government while strengthening the position of the Texas State Capitol at its center.

New buildings in the Capital Complex should reflect from the distinguished history of the district. The admirable avoidance of efforts to mimic or replicate the actual style of the Capitol Building, while maintaining coherence for the whole Capitol Complex through the use of pink granite as a dominant material, should be continued. While it is inevitable that large buildings will be added to the complex, as they have been over the last decades, the Capitol Building itself should maintain its role as the dominant focus with its own distinctive architectural character protected from any competition from newer construction. In addition, smaller historic structures such as the Governor’s Mansion, The Old Land Office Building, and the historic buildings along 16th Street should be respected, and should not be dominated, in terms of scale, by buildings nearby.

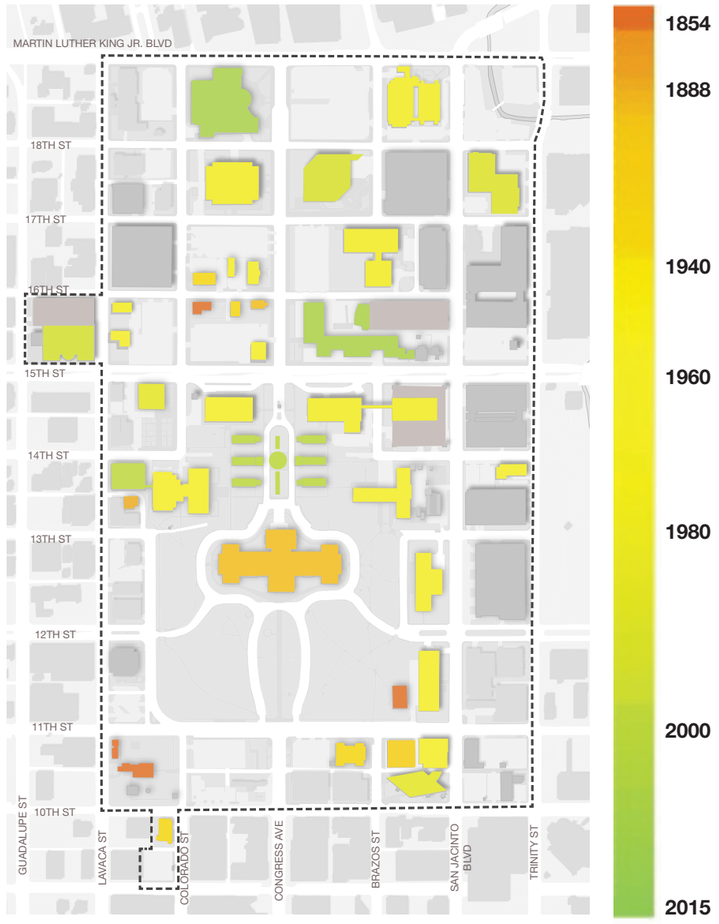


Figure 6.36
Building Age

6

ARCHITECTURAL PRINCIPLE 1

Massing

Massing should be responsive to the human scale. Variety in building form should be utilized to break up long, singular facades and activate the building volume. Massing should also be responsive to physical context so as not to diminish nearby buildings by creating great disparities of scale.

Overall building massing should respond to the new pedestrian-oriented environment created at street level in the master plan. Buildings should not be conceived as solid blocks or towers but as edges to public space that relate to the human scale through the use of varying volumes and materials. Step backs should be utilized to break up masses vertically. Variety in edge configurations should be utilized to break up long singular facades and activate building masses. New buildings within the Capitol Complex that are not impacted by Capitol View Corridors (CVCs) or the Capitol Dominance (CD) Overlay should have massing that respects the preeminence of the Capitol Building.

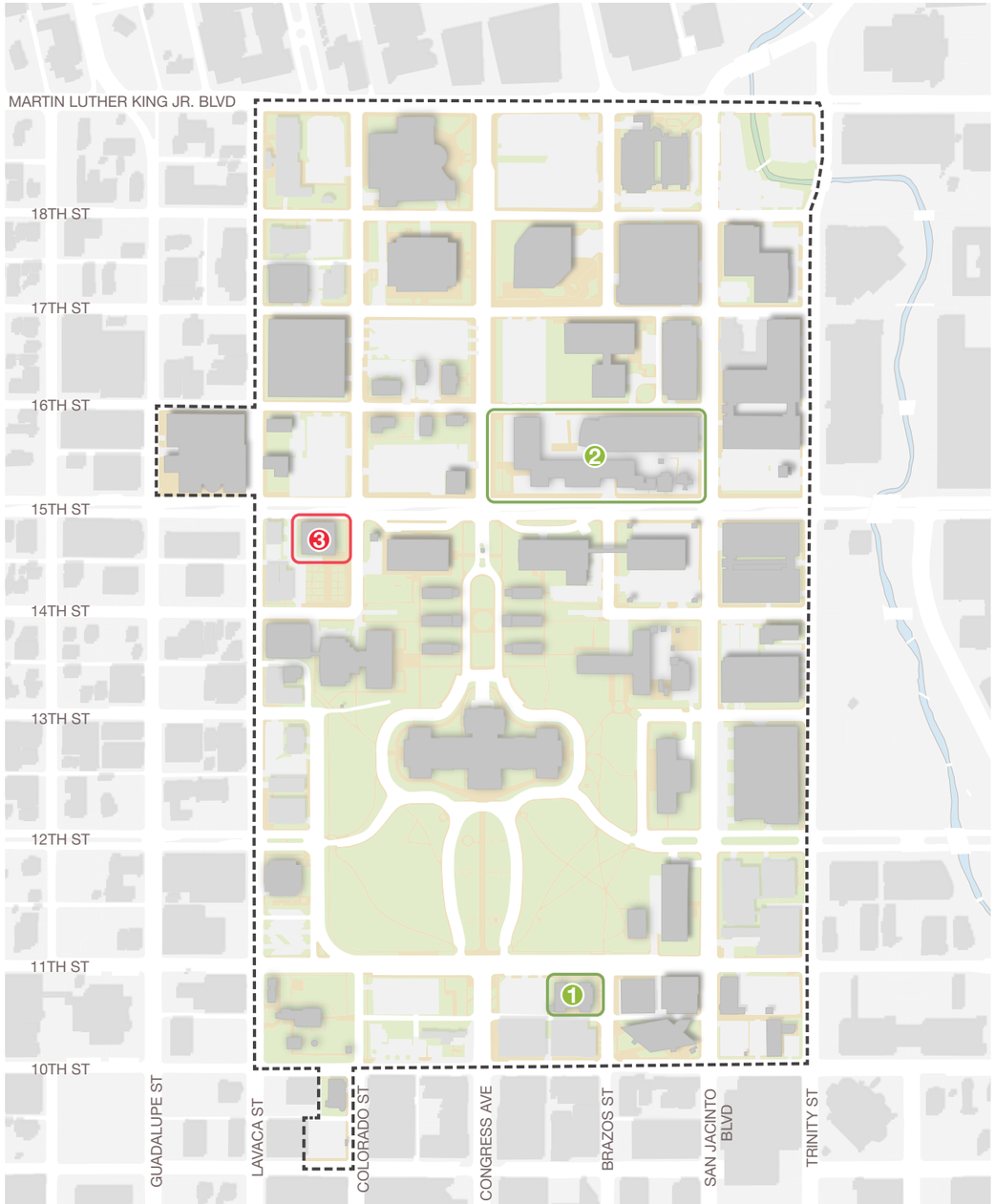


Figure 6.37
Massing Examples

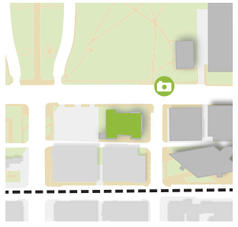
1. Dewitt C. Greer Building
2. Robert E. Johnson Building
3. Texas Law Center

Denotes positive example

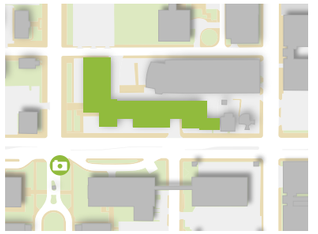
Denotes negative example

Denotes camera position

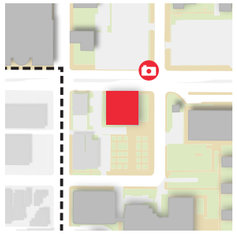
The Dewitt C. Greer Building steps down at the primary facade along 11th Street to better relate to the pedestrian scale.



The articulated massing of the Robert E. Johnson Building along 15th Street breaks up what would otherwise be a very long static facade along an active street.



The pure form and dark glazing of the Texas Law Center expresses little relationship to the human scale. The solid wall of glass and granite seems to turn its back to 15th Street which is intended to have a generous pedestrian environment in the master plan.



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ARCHITECTURAL PRINCIPLE 2

Building Edge

Buildings should be used to define and reinforce the public realm.

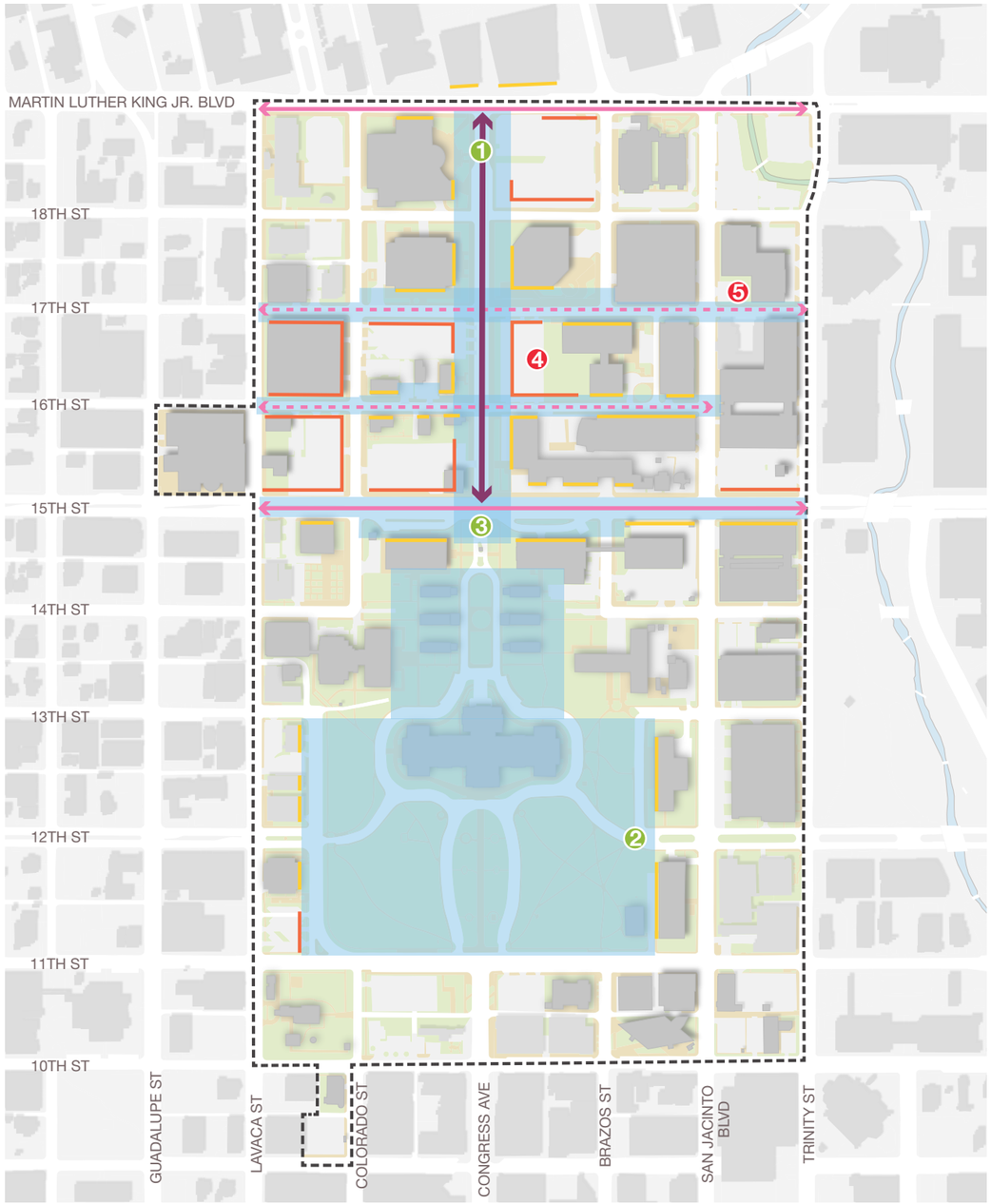
As important axes and spaces are created throughout the Capitol Complex, buildings should be used to strengthen edges and define perimeters. The alignment of buildings along build-to lines will reinforce the public realm by creating consistent edges that can be used both to articulate public spaces and activate the street level.

IMPORTANT AXES

The master plan transforms North Congress Avenue into a tree-lined pedestrian mall that will serve as a major axis connecting the University of Texas at Austin campus to the north and the Capitol grounds to the south. Building edges shall align along this new axis in order to create a defined edge for the new public space. Secondary axes are created along Martin Luther King Jr. Boulevard and 15th Street to connect surrounding districts such as the Medical District to the east. The alignment of buildings along these axes are less rigid than along Congress Avenue but should still be well-defined to emphasize the axes. As 16th and 17th Streets are developed as tertiary axes, building edges should emphasize the axis but not overpower the existing historical architecture.

BUILD-TO LINE

Proposed building edges will align with existing buildings throughout the complex in order to strengthen axes of importance and better define public space. Large outdoor public rooms, such as the Capitol grounds, should be maintained with consistent building alignment, and new public spaces of smaller scales should be created as infill development occurs. Upon a full build-out of the complex, the axes of importance and the Capitol grounds will become the hubs of public spaces. Figure 6.38 looks at building edges in relation to Phase 1 to 3 development. Refer to the Urban Design Guidelines, Principle 3 Civic Realm, for additional build-to lines pertaining to full build out.



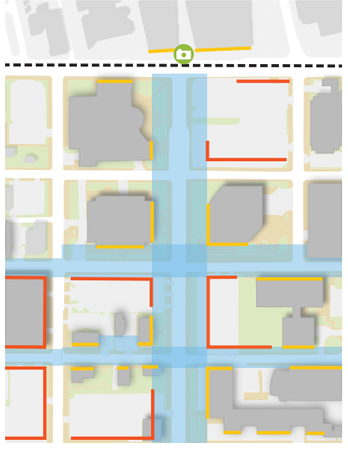
Primary Axis
Secondary Axis
Tertiary Axis
Existing Building Edge
Proposed Building Edge
Public Space

Figure 6.38
Build-To Lines

1. Congress Avenue
2. Capitol Grounds
3. 15th Street
4. Lyndon B. Johnson Building
5. Central Services Building

Denotes positive example
Denotes negative example
Denotes camera position

The current view looking south down Congress Avenue begins to show the edge created by the existing buildings. As infill development occurs, this edge will become further defined, emphasizing the Texas Mall as a primary axis in the Capitol Complex.



The state buildings along the east side of the Capitol grounds work together to create a monumental edge to the open lawn surrounding the Capitol.

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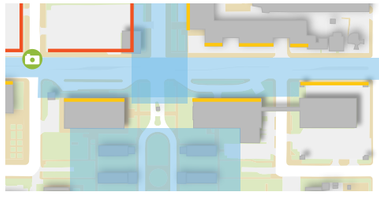
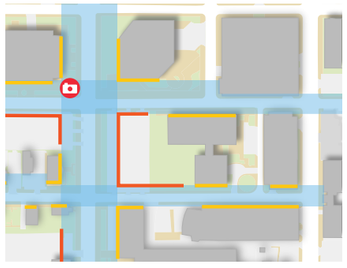
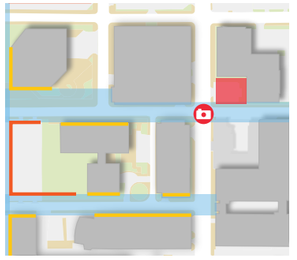
Through their placement along 15th Street, the John H. Reagan Building and the Texas Workforce Commission Building begin to create a consistent street edge that future development along this axis will reinforce. A new street section along this secondary axis will rework the drop-off drives from both buildings and create improvements at the street level that will serve as a gateway to the Capitol grounds.



The current siting of the Lyndon B. Johnson Building leaves ambiguous space facing Congress Avenue. This area will be developed to frame the new central axis of the district.



The Central Services Building is surrounded by surface parking on three edges of the site, resulting in an irregular building edge along the build-to lines of the block. The lack of a defined edge creates an uninviting pedestrian void between street and building. New development should create an appropriate edge that is scaled to the pedestrian and fosters walkability in the Capitol Complex.



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ARCHITECTURAL PRINCIPLE 3

Engaging Public Space

The ground plane of buildings should be activated through public-oriented uses at the street level and visible entrances along major axes. Architectural features should be used to create porous envelopes at the ground-level.

Buildings should help to define public space at a variety of scales from the sidewalk to the plaza to the park. The ground plane of a building should be activated through public-oriented programs at the street level and visible building entrances located along major streets and public spaces. Architectural features should be utilized to create porous building envelopes that foster interaction between building and pedestrian.

PUBLIC-ORIENTED PROGRAMS

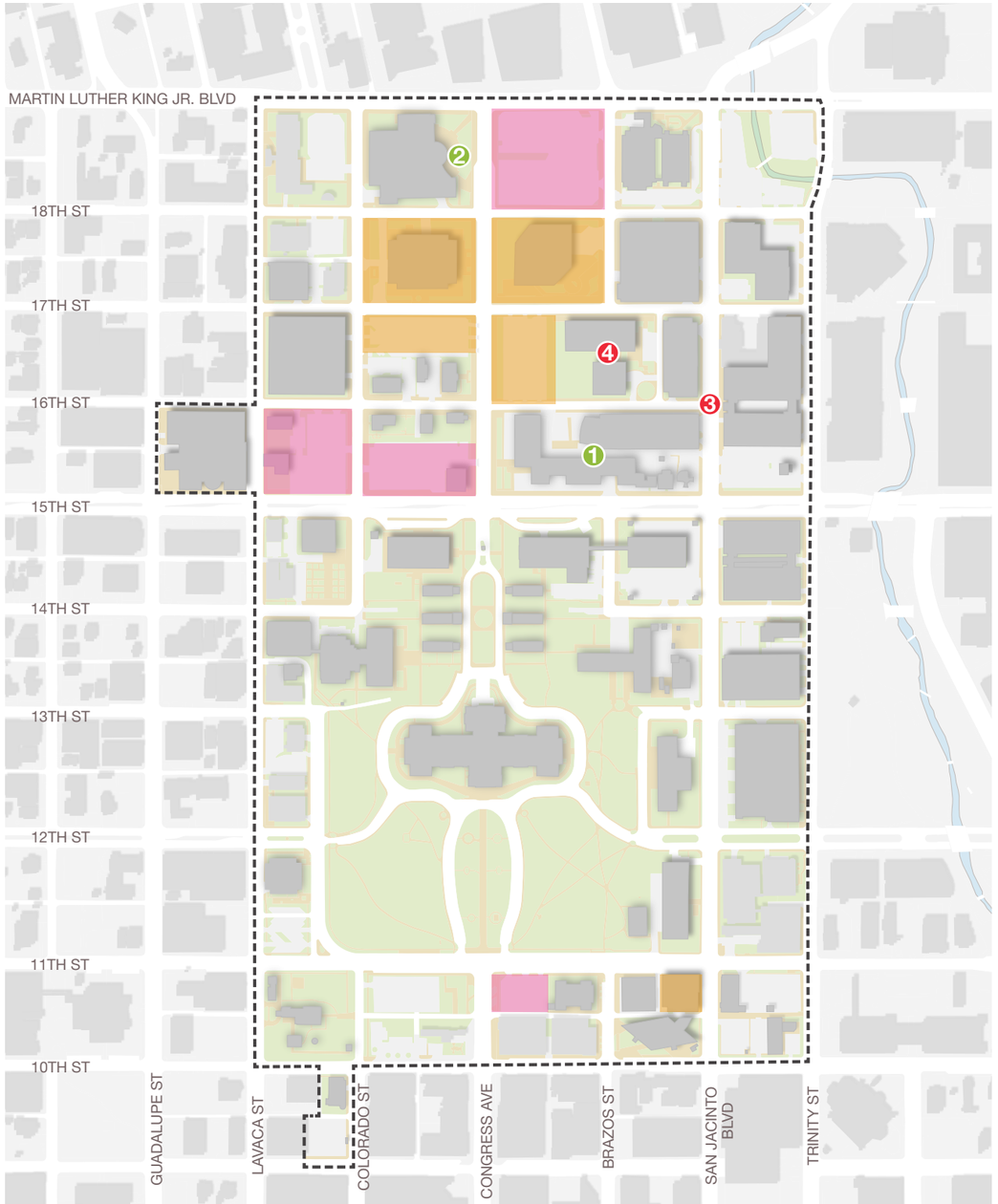
Sites which serve as gateways into the complex should contain more public-focused amenities while sites inwardly central to the complex should focus on district amenities. All public programs that might otherwise occur out of functional necessity in a building should, insofar as possible, be located adjacent to and interacting with public spaces.

VISIBLE BUILDING ENTRY

Building entrances should be located along major axis streets and adjacent to defined public space of varying scales. Entrances should not emphasize the car, but rather the pedestrian. They should be highly visible and accessible from the street level. Properly designed entrances will greatly enhance the public character of the complex.

POROUS BUILDING ENVELOPE

A porous building envelope at the street level has the opportunity to engage the pedestrian and activate public space surrounding the building. The use of arcades and porticoes provides pedestrians refuge from the elements and breaks up a static facade. Generous glass at the street level not only gives a sense of what goes on in the building to passersby, but also creates a feeling of security with more eyes on the street.



Public Amenity Site

District Amenity Site

Figure 6.39
Engaging Public Space Examples

1. Robert E. Johnson Building
2. Texas State History Museum
3. San Jacinto Boulevard
4. Lyndon B. Johnson Building

Denotes positive example

Denotes negative example

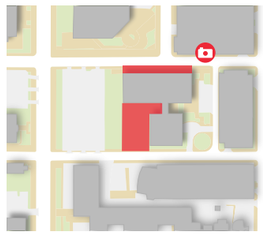
Denotes camera position

The Robert E. Johnson Building engages the surrounding urban realm through a porous ground-level that consists of arcades along Congress Avenue and an open breezeway on 15th Street. Multiple entry points along the building edge help to activate the street level. The main public entry at 15th Street and Congress Avenue opens onto a small plaza while secondary entrances, located on the internal breezeway, give access to a more park-like courtyard away from existing streets.

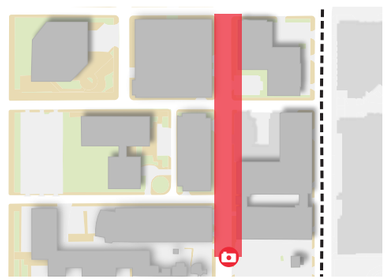
6

The ground-level of the Texas State History Museum creates an activated street where sidewalk, plaza, and museum entry meet.

The solid podium at the base of the Lyndon B. Johnson Building creates a barrier at the street level and directs the flow of people away from adjacent sidewalks. The lawn south of the tower also misses an opportunity to create a public space. The current condition of this space is uninviting and not easily accessible to building users.



The single-function parking garages that line San Jacinto Street create a dead public zone that does very little to engage the pedestrian.



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ARCHITECTURAL PRINCIPLE 4

Building Materials

Building facades that face the Texas Mall and the perimeter of the complex shall be predominantly granite. Compatible alternate materials may be used more on upper levels than on lower levels, where granite should be more consistent.

Building materials can play a powerful role in unifying the Capitol Complex and giving a strong identity to the home of Texas state government. Granite, in a color that matches the capitol building, will be the dominant material used to bind the complex together. It shall be most prominent along the major axes of the complex and the very most prominent along Congress Avenue. As one moves away from Congress Avenue, more variety in materials may be employed. Granite-compatible materials such as precast concrete and metals such as zinc may be used. Varying textures and colors may be employed within a cohesive material palette to create dynamic building facades.

GRANITE ALONG CONGRESS AVENUE

Building facades that face the Texas Mall and the perimeter of the complex shall have predominately granite facades. As one moves away from the main axes, additional materials such as precast concrete and metals may become significant building materials. The emphasis of granite along Congress Avenue will reinforce the importance of the Texas Mall in the complex.

MIXED MATERIALS

Building volumes that do not face a prominent axis may contain a mixture of granite and other compatible building materials. A mixed-material building may combine granite with other materials of similar or compatible colors and textures in varying ratios depending on the proximity to Congress Avenue. In addition, the upper floors of buildings in any part of the complex may have less granite and more alternative materials than the lower floors. See figures 6.40, 6.41, and 6.42 for facade granite ratios throughout the complex.

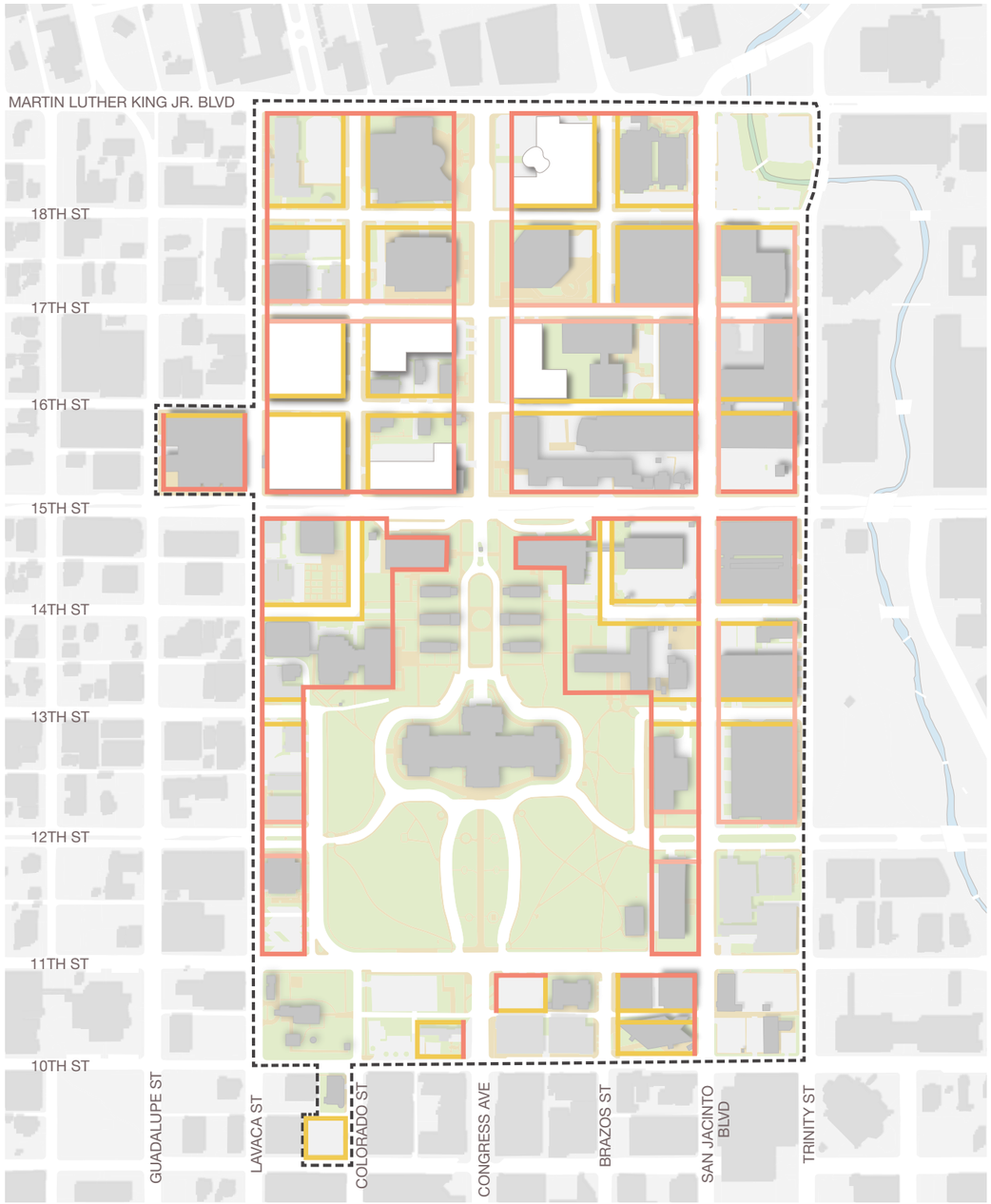


Figure 6.40
Material Emphasis

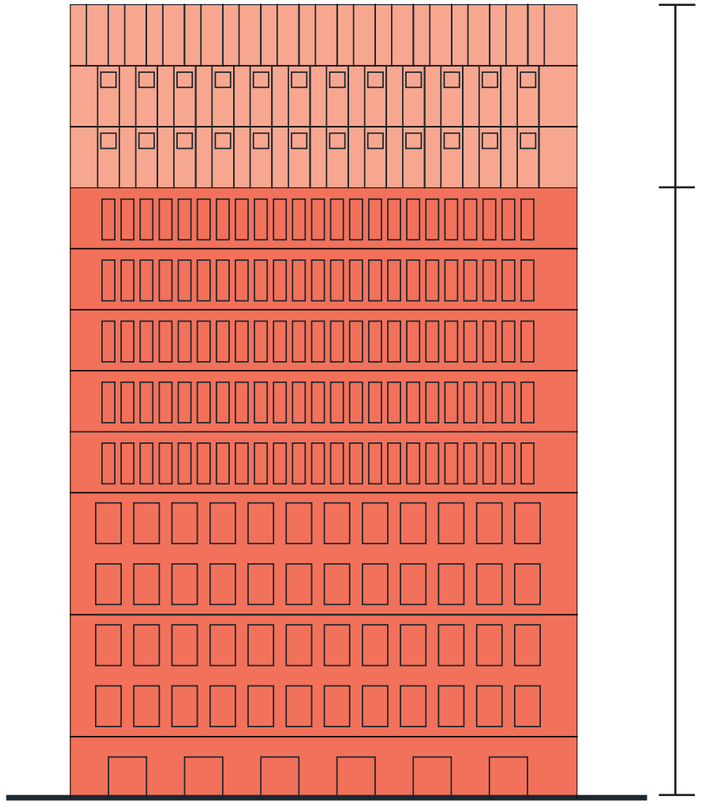


Figure 6.41
Primarily Granite Facade

Granite

Granite + Alternate Material

All material percentages shown are for non-glazed areas.

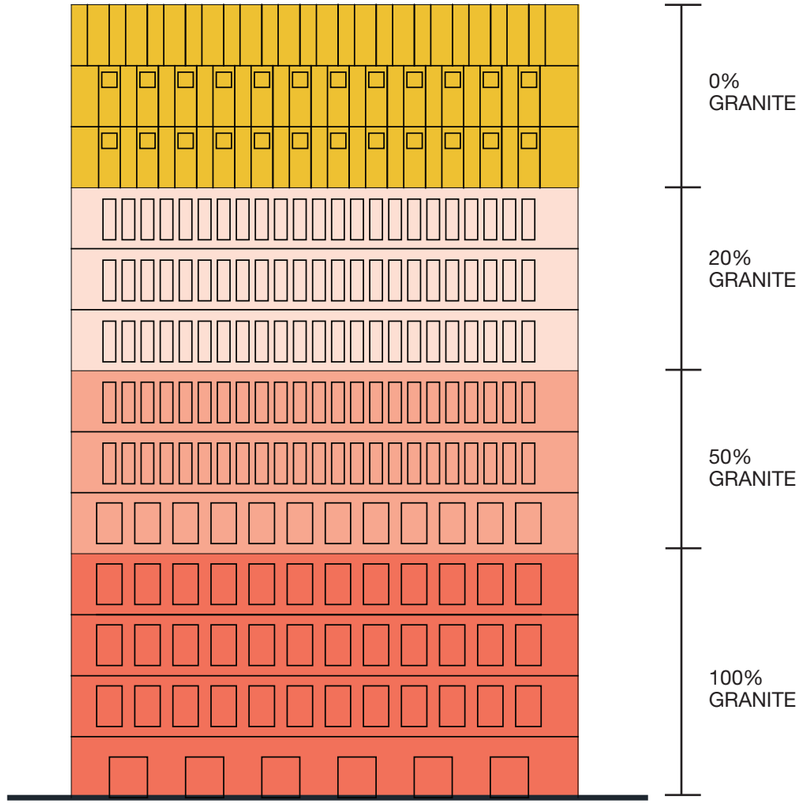


Figure 6.42
Mixed Granite Facade

Granite

Granite + Alternate Material

Granite + Alternate Material

Alternate Material

All material percentages shown are for non-glazed areas.

6

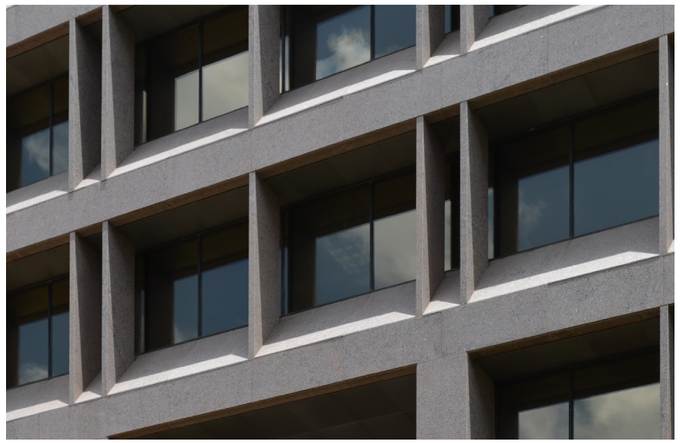
TYPES OF GRANITE

Split-Face Granite

Split-face granite offers more variety in scale and texture than do other granite finishes. The Robert E. Johnson Building uses this material along a ground-level arcade to break up the scale of the relatively large building and provide a different texture at the ground plane. The smaller blocks of granite relate to the human scale of the street and the texture is extremely durable, which is beneficial at street level where wear and tear is more of an issue.

Honed Granite

Honed granite can be found in a large number of the mid-century buildings throughout the Capitol Complex. The matte finish of the material ages gracefully, hiding normal wear and tear of the building over time. The versatility of the material can also be cohesively blended with other facade materials such as precast concrete and metal. New construction should seek to use this durable and relatively cost effective material.



Polished Granite

Polished granite is primarily used on existing buildings to emphasize a portion of a full granite facade. The John H. Reagan Building uses polished granite to display a state seal etched in the stone, which also emphasizes the main building entry.

ALTERNATE MATERIALS

Granite Composites

Granite composites may be explored as an additional means to achieve a “full” granite facade without the price. Concrete containing exposed aggregate, that mimics the speckled nature of real granite, is a good granite alternative. When used in large quantities this material can be an economical way to achieve the look of full granite facade.

Concrete

Concrete (precast concrete in particular) may be used to match the heft and character of granite. The material can be colored to be compatible with other facade materials; pink and gray hues work well with Texas pink granite. The Robert E. Johnson Building incorporates multiple hues of concrete to break up the building visually and create balance with the other building materials.

Metal

As less granite is required in the building facade, other materials such as metal may be incorporated. Metals can be used in a more traditional way for mullions in glazing systems, or in a contemporary application of wall panel systems or mechanical roof screens. Metals can also vary in texture and color to achieve a desired look. Zinc is especially compatible with granite because it complements the gray hues and has a matte finish. Painted metal panels should be used very sparingly because of maintenance issues.

6

MATERIAL RATIO

Primarily Granite

The building facades shown below all use granite as the primary material, but the size, finish, and arrangement of pieces showcase the aesthetic variety that can be achieved with a single material.

The Sam Houston Building combines two different finishes and sizes to create a dynamic facade.

The State Insurance Building spaces granite panels to create a shading mechanism offset from a glass facade.

The Supreme Court and Thomas C. Clark Buildings vary the color of granite to define the stepped massing of the two buildings.

Mixed Granite

In a mixed-material building facade, granite shall appear closer to the street level while compatible materials such as metal may be used toward the top of the building or as accent pieces along the facade. Granite usage may diminish as one moves away from the street level, where materiality is more noticeable.

The examples on this page illustrate the ways in which a mix of materials is used to establish a building base, emphasize an entrance, or break up a solid facade.

The Robert E. Johnson Building utilizes a variety of granite textures on the ground plane and switches to concrete and metal farther up the facade.

The Employees Retirement System Building combines cast-in-place concrete with a granite aggregate and polished granite accent pieces.

6

ARCHITECTURAL PRINCIPLE 5

Durability and Lifespan

Materials and construction should be of a quality to produce 100-year structures. Buildings should incorporate sustainable techniques that contribute to the longevity of the complex.

Durability, performance, and long-term sustainability should drive architectural character. Material choices and construction techniques should be of a quality to produce 100-year building envelopes. Maintenance will be necessary over the life of the building; necessity for routine renewal should be minimized.

DURABILITY

Buildings within the Capitol Complex originate from the 1850s to the 2000s. The exterior skins of many of these buildings have required little investment in renewal through their long life. Future buildings shall be designed and constructed to a similar level of durability.

Figure 6.43 classifies state-owned buildings as durable, semi-durable, less-durable, and least durable. Durable buildings are defined as those that were designed to stand the test of time through material choice, constructibility, and preservation efforts. These include buildings listed on the National Register of Historic Places, or designated as State Antiquities Landmarks and/or Recorded Texas Historic Landmarks. Semi-durable buildings are built to last but may require some upkeep over the years. Less durable is defined as buildings requiring frequent maintenance. Least durable buildings include parking structures and buildings with current repair costs accounting for more than half the replacement cost of the building.

SUSTAINABILITY

Sustainable design choices should be made that extend the life of the building. Regional and recycled materials should be used if they can meet the long-term durability requirements.

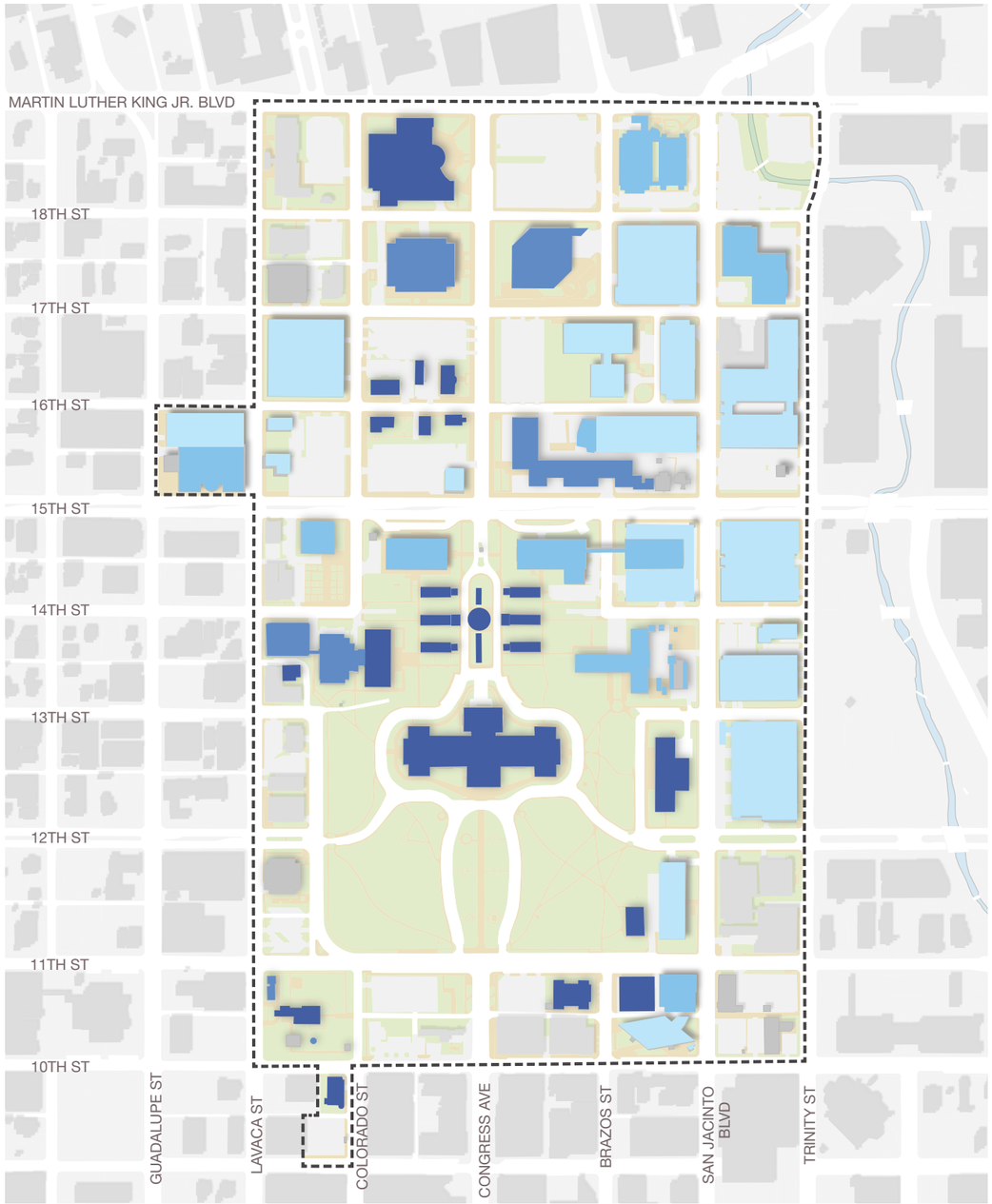


Figure 6.43
Existing Building Durability

Durable materials such as granite shall be utilized for building facades. Many of the state office buildings constructed during the 1960s and 1970s used granite as the primary facade material and have required very little investment in maintenance since then.

The Texas State Capitol has stood the test of time and exemplifies the very best qualities of a durable structure.

Many of the parking garages throughout the complex were not built on principles of durability and long lifespan. Some employ a precast concrete structural system, with 25-year lifespans at best.

6

ARCHITECTURAL PRINCIPLE 6

Natural Light and Fenestrations

Buildings should employ thin floor plates and maximize glazing to create naturally-lit work environments. Street-level glazing shall be maximized to provide connectivity to the urban realm.

Buildings that employ maximum fenestrations achieve maximum opportunities for daylighting and views. When paired with adequate shading techniques, daylighting can transform work environments and minimize dependence on artificial lighting, thus reducing overall energy loads. Thinner floor plates can also increase daylighting effectiveness and allow natural daylight to reach the inner core of a building.

MAXIMIZE FENESTRATIONS

Glazing shall be maximized in occupied areas of buildings to create naturally-lit work environments. Windows should be incorporated at the street level to provide a visual connection to the surrounding urban realm. Though ample glazing is desired, the material mix presented in Principle 4 should remain visibly present.

THINNER FLOOR PLATE

Thinner floor plates should be used to allow light to penetrate deeper into the building core. Figure 6.45 graphically shows both a successful and an unsuccessful ratio of floor plate depth to light penetration. Daylighting techniques such as light shelves may be utilized to extend light deeper into the building core.

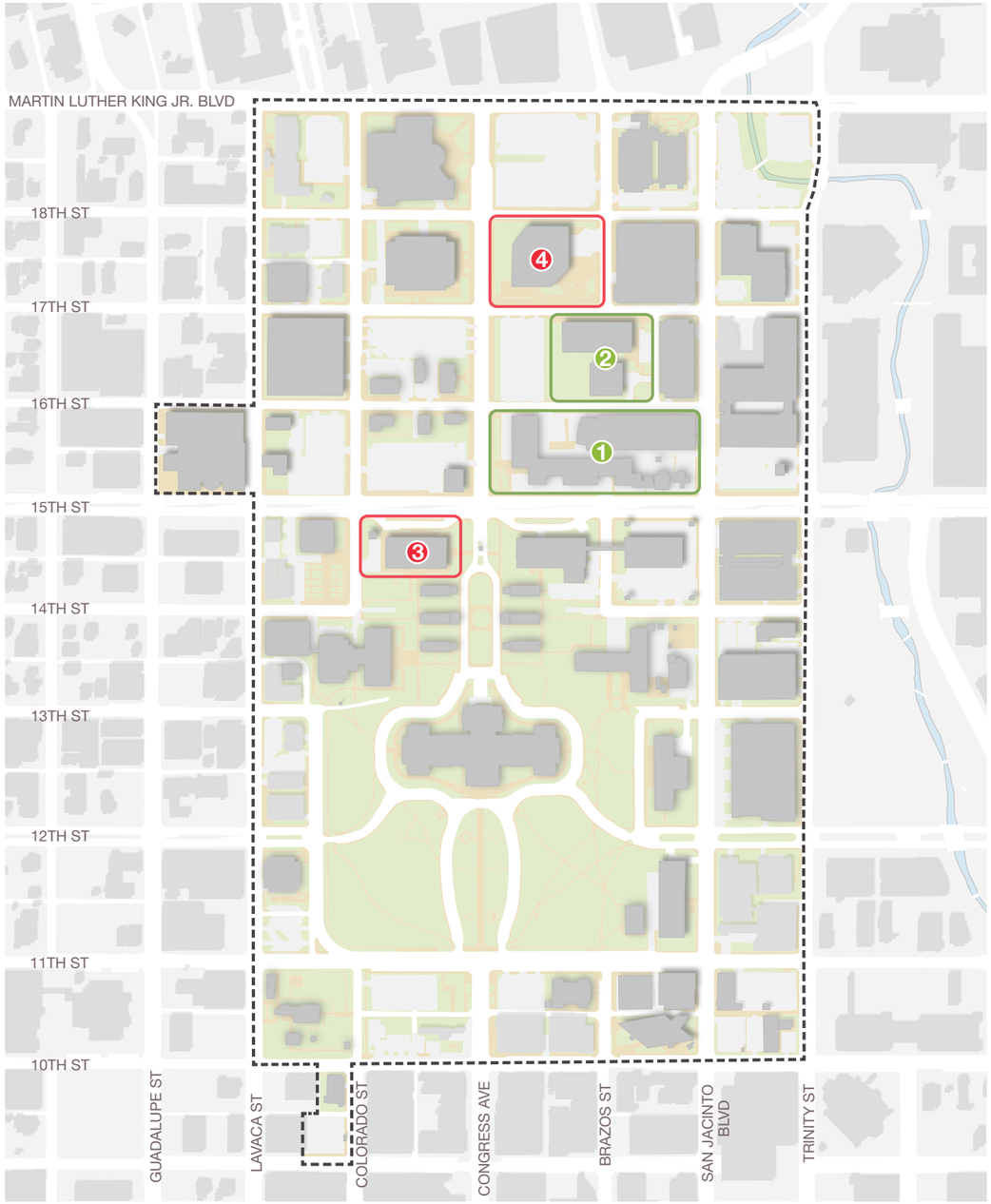
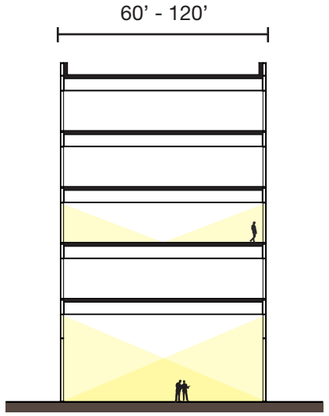


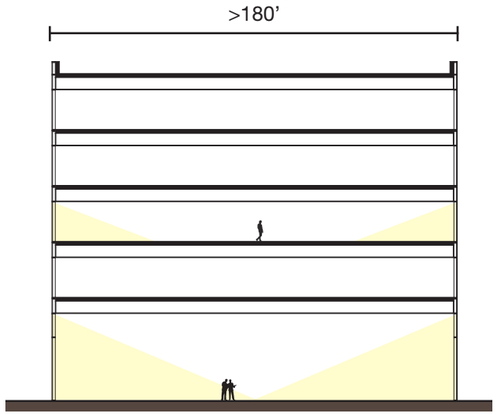
Figure 6.44
Natural Light and Fenestration Examples

1. Robert E. Johnson Building
2. Lyndon B. Johnson Building
3. John H. Reagan Building
4. William B. Travis Building

- Denotes positive example
- Denotes negative example
- Denotes camera position



Successful



Unsuccessful

Figure 6.45
Floor Plate Ratio

Proper daylighting on the interior of a building can reduce lighting loads and create a better work environment. The Robert E. Johnson Building uses thinner floor plates coupled with large amounts of glazing to achieve optimal daylighting throughout the office building. Even with large amounts of glazing, the building facade captures the appropriate material mix for its location in the Capitol Complex.

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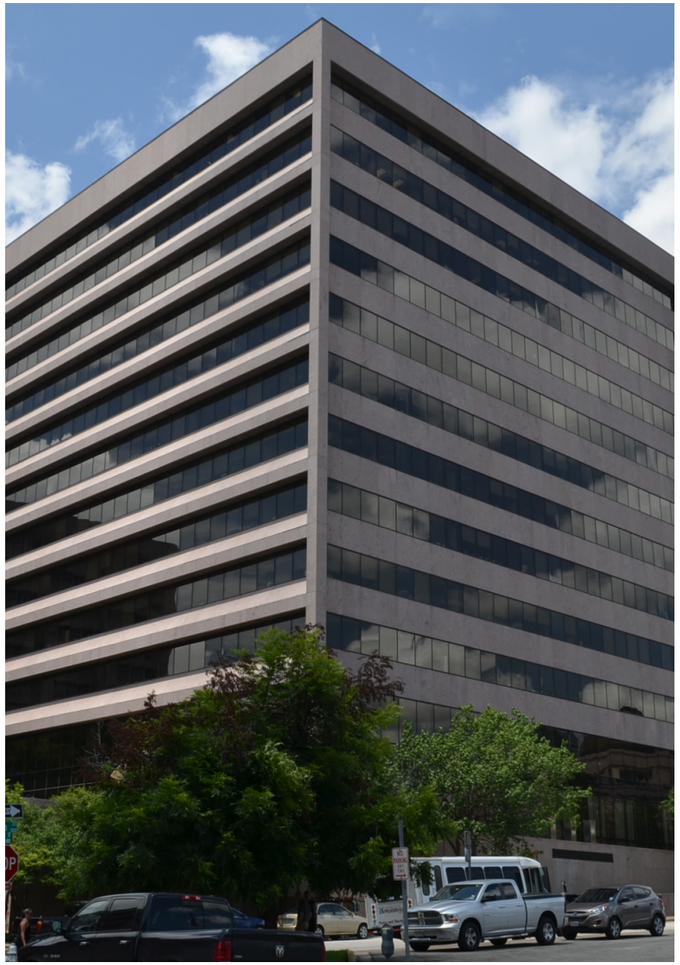
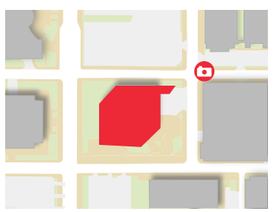
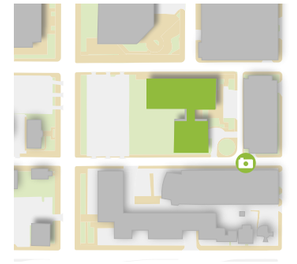


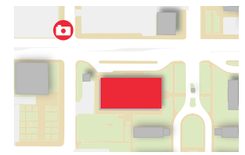
The William B. Travis Building uses large ribbon windows on all six sides, but the large floor plate restricts how much daylight reaches the interior spaces.



The large amount of glazing and thin floor plate of the Lyndon B. Johnson Building allow light to penetrate deeper into the building.



Fenestrations should be utilized for both daylighting and views. The John H. Reagan Building employs slivers of glazing that reduce the amount of light that enters the building and restricts views for the workers inside.



ARCHITECTURAL PRINCIPLE 7

Climate Responsiveness

Building design shall be responsive to the hot Texas climate. Sun-shading strategies should be devised in accordance with building orientation.

Building character shall be responsive to the need to mitigate the strong Texas sun and provide relieving shade in the hot Texas climate. Sun-shading strategies should be relevant to building orientation without blocking views to the exterior and reducing daylighting opportunities. Building materials should minimize heat island effect and offer protection from solar heat gain. Shading opportunities along the building exterior should be utilized to keep building entrances and surrounding public spaces activated during warmer months.

LOCAL CLIMATE

The Austin area climate can be classified as semi-arid, with hot summers and cool winters. Buildings shall be designed to both hot and cold conditions, shielding direct summer sun and allowing winter sun to warm the building envelope.

MITIGATE HEAT GAIN

During the summer months, direct solar gain should be avoided to reduce mechanical cooling loads. Sun-shading techniques such as fins, louvers, and screens placed on the exterior of building glazing should be utilized on south-facing and west-facing facades. A combination of techniques may be employed to reduce overall solar heat gain.

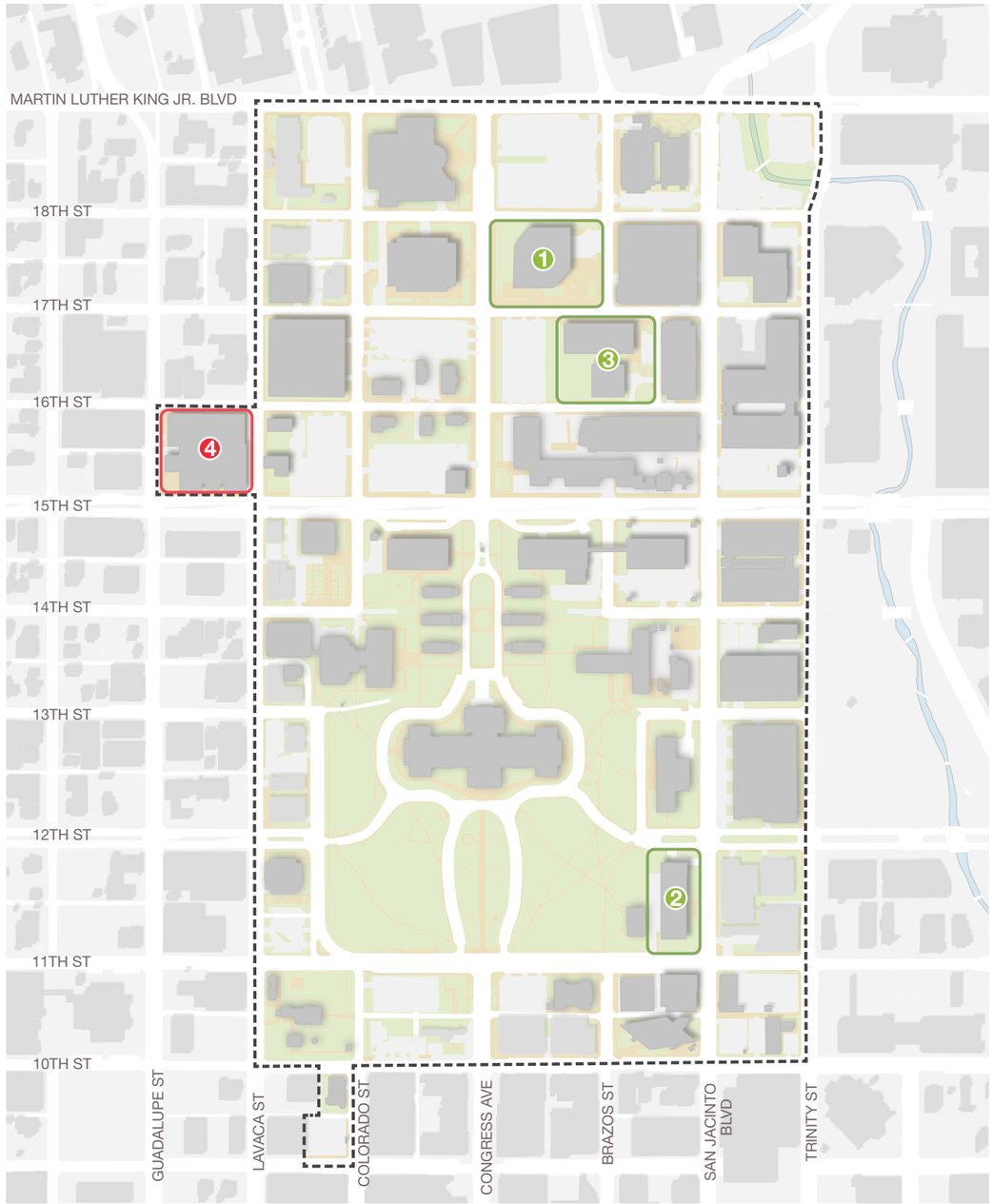


Figure 6.46
Natural Light and Fenestration Examples

1. William B. Travis Building
2. State Insurance Building
3. Lyndon B. Johnson Building
4. William P. Clements Building

Denotes positive example

Denotes negative example

Denotes camera position

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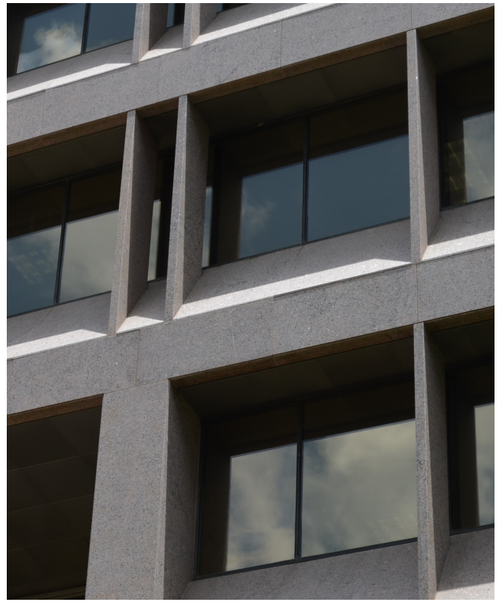
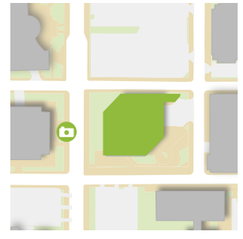
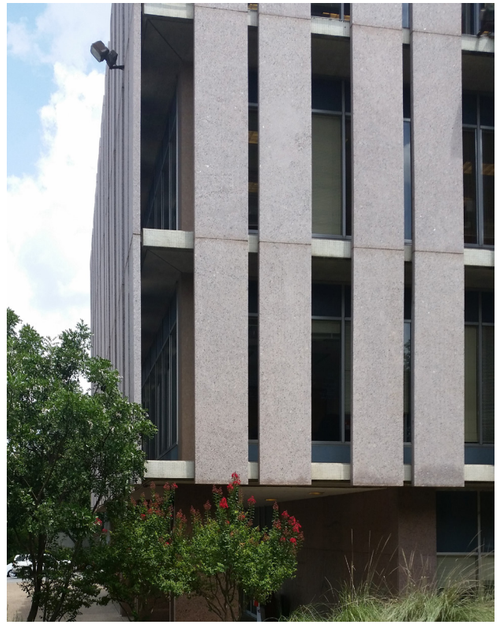
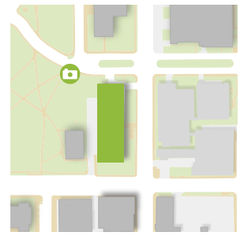


The William B. Travis Building demonstrates the use of proper sun shading techniques on a primarily glass facade. Each face of the building utilizes a different shading technique based on the building orientation. Sun-heavy south and west sides use both vertical and horizontal fins, while the north side is left open to sun exposure.

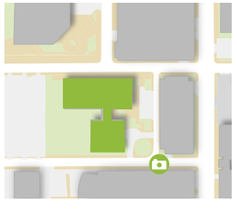




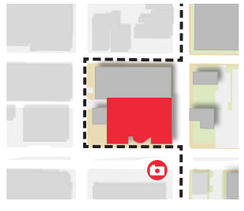
Offset granite panels protect the glass storefronts of the State Insurance Building from heavy sun exposure. The panels act as a secondary facade that shades the glass behind, while still allowing views through to the Capitol grounds.



The orientation of the Lyndon B. Johnson Building is responsive to the local climate through its placement and protection of glazing. The north and south facades utilize glazing in conjunction with deep overhangs for solar protection. East and west facades contain no glazing in an effort to eliminate high solar heat gains.



The William P. Clements Building provides large quantities of unprotected glazing along east, west, and south facades.



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ARCHITECTURAL PRINCIPLE 8

Screen Service Areas

Service areas shall be integrated into the character of the building to minimize the visual impact from street level.

Service areas, when not carefully considered in building design, can detract from the street-level appearance of buildings. Service vehicle access to buildings and location of mechanical equipment shall occur on internal access streets and limit the ways in which they disengage the pedestrian. Mechanical equipment on the ground plane shall be minimized but, when necessary, be properly enclosed with materials from the surrounding building facade.

GROUND PLANE

Service areas at the street level include ground-located mechanical equipment, loading docks, and building maintenance areas. These back-of-house items shall be seamlessly integrated into the character of the building through material choices and location along internal access streets.

ROOF PLANE

Since entire roofs often constitute service areas, they shall be designed to minimize visual impact from adjacent buildings and the street level. Penthouses or screen material similar in color to the overall building facade shall be used to hide equipment. All roof penetrations and equipment shall be painted in order to reduce unsightly views from adjacent buildings.

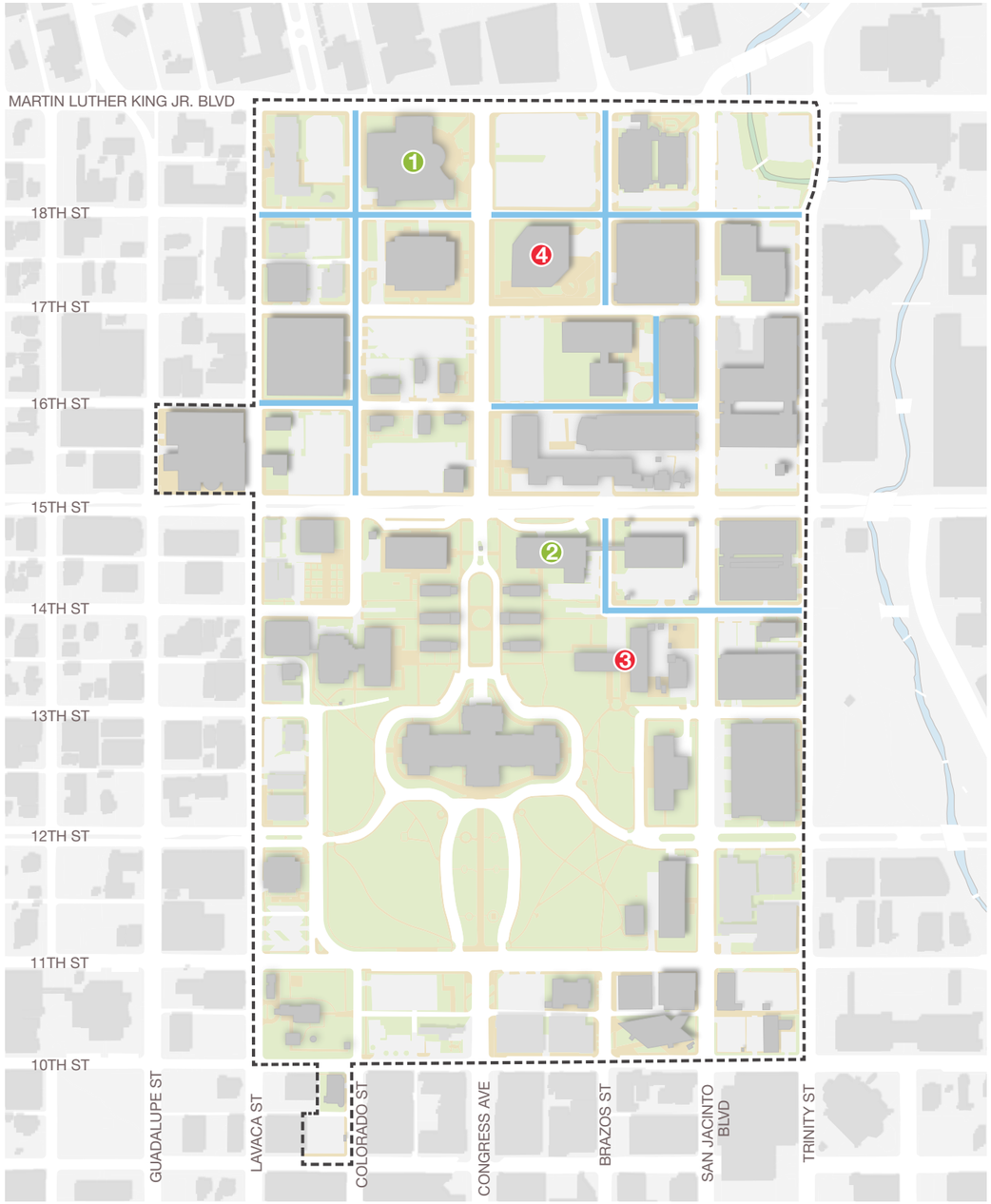


Figure 6.47
Service Area Examples

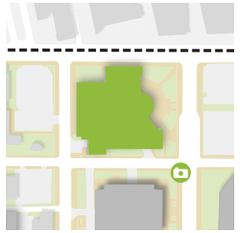
1. Texas State History Museum
2. Texas Workforce Commission Building
3. Sam Houston Building
4. William B. Travis Building

Denotes positive example

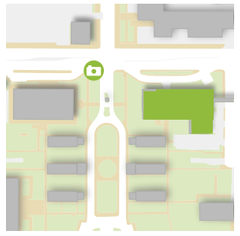
Denotes negative example

Denotes camera position

Mechanical equipment located at the street level should be integrated into the design of the building. The Texas State History Museum uses a granite wall in style with the rest of the museum to hide building mechanical equipment.



Mechanical systems located on roofs should be screened to minimize views from the street. The Texas Workforce Commission Building uses metal screens in a color that complements the pink granite of the building.



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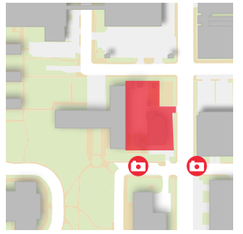
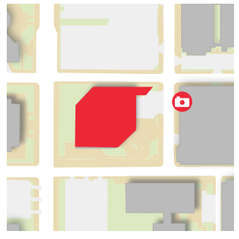
The low site walls surrounding the central plant adjacent to the Sam Houston Building are insufficient in height to hide the equipment behind. Planting on the east side of the block is also too short to minimize visual impact from the pedestrian level.



The service side of the William B. Travis Building is properly located along an internal access street but little is done to visually screen the loading dock and back-of-house services from the street.



Screening of mechanical equipment at the roof level will become even more important as the complex becomes more dense. Buildings that currently only use parapets as a means of screening roof equipment may need to employ additional methods to reduce unsightly views from surrounding buildings.

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ARCHITECTURAL PRINCIPLE 9

Parking Garages

Below-grade parking shall be used where possible. Above-grade parking garages shall be integrated into the architectural character of the building.

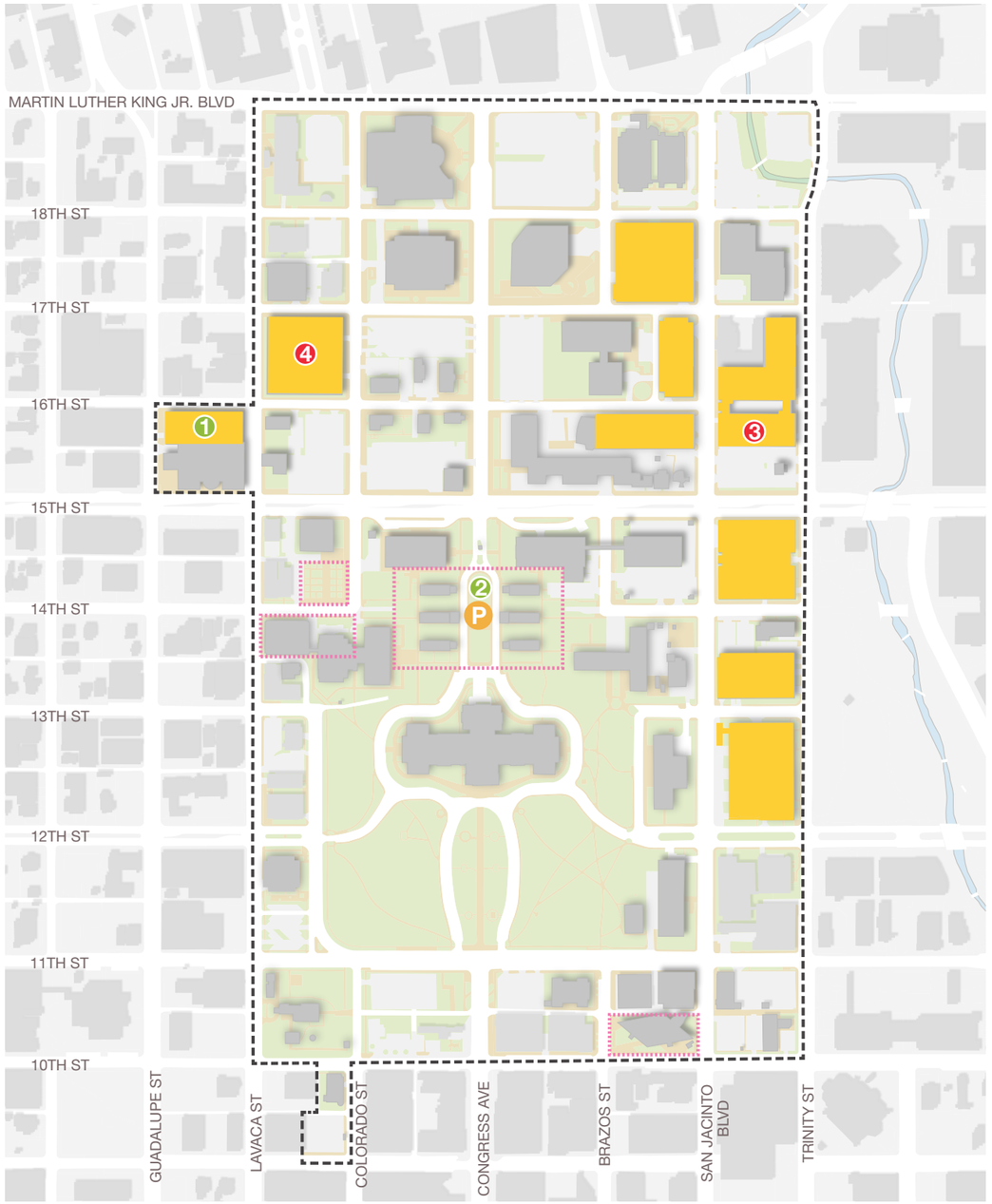
Parking garages shall be utilized throughout the Capitol Complex to minimize surface parking and concentrate vehicular storage in properly designed structures. Where possible, parking shall be located below-grade. Above-grade garages should be designed to appear integrated into the architectural character of the building. Materials should be utilized to create dynamic facades that disguise the raw parking structure and relate to the scale of the pedestrian along the street level. Safety of pedestrians and drivers should be addressed through logical garage entrances and open stairwells that empty onto public sidewalks.

ABOVE-GRADE

Currently, most of the parking in the complex is provided through the use of above-grade parking structures. Many of these structures are not built of a quality worth preserving or replicating and, as future development ensues, above-grade parking will be replaced by office buildings with attached below-grade parking. If above-grade parking is warranted, the aesthetics of the garage shall blend seamlessly into the architectural character of the complex.

BELOW-GRADE

As the Texas Mall is created on Congress Avenue, below-grade parking will be built underneath for public and private use. Whenever possible, new development shall provide below-grade parking rather than above-grade parking garages to preserve the integrity of the active street.



Existing Surface Garage

Existing Underground Garage

Figure 6.48
Existing Parking Locations and Examples

1 Garage J

2 Underground Capitol Garage

3 Garage B

4 Garage E

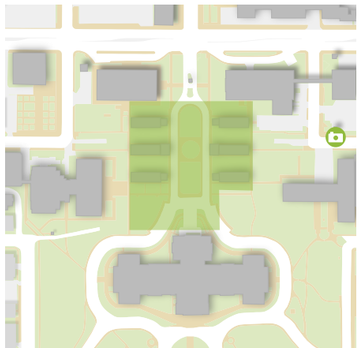
Denotes positive example

Denotes negative example

Denotes camera position

Garage J addresses the street level by incorporating businesses into the bottom level of the garage. Mixed-use garages help to activate the street below.

Underground parking is utilized beneath the Capitol grounds as a way to minimize unsightly garages and provide parking for employees and staff.



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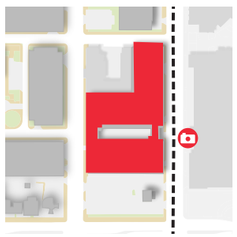
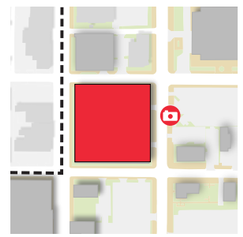
Well-designed garage entrances that are easily navigable help alleviate driver confusion and potential congestion on the street. Garage B has too many directional options upon entry and lacks any indication via signage or building design of correct traffic flow.



The enclosed stair tower in Garage E provides no visual security.



ARCHITECTURAL PRINCIPLE 10

Timelessness and Identity

Building design shall avoid creating a false sense of historical development that represents a specific time in architectural history. Appropriate text and graphics should be used to identify state facilities.

New buildings in the Capitol Complex should avoid a historicist style in order to create a unified character that is not of a specific era, giving prominence to the Capitol itself as a singular gesture to history and grandeur. Buildings should also employ a system of appropriate identity so that they may be identified as state buildings.

APPROPRIATE STYLE

Buildings should be designed of a timeless style that neither dates nor detracts from the civic character of the complex. Aesthetic trends should be avoided altogether. Noted good examples of appropriate style that currently exist in the complex should be used as inspiration for new designs.

IDENTITY

When paired with good aesthetic design, identity will further emphasize the civic magnitude of a state building. Appropriate examples of identity can be seen throughout the complex in the form of building names, state seals, and symbolic quotes either etched in or applied to building facades. All forms of identity should be utilized near building entrances to denote the front of the building.

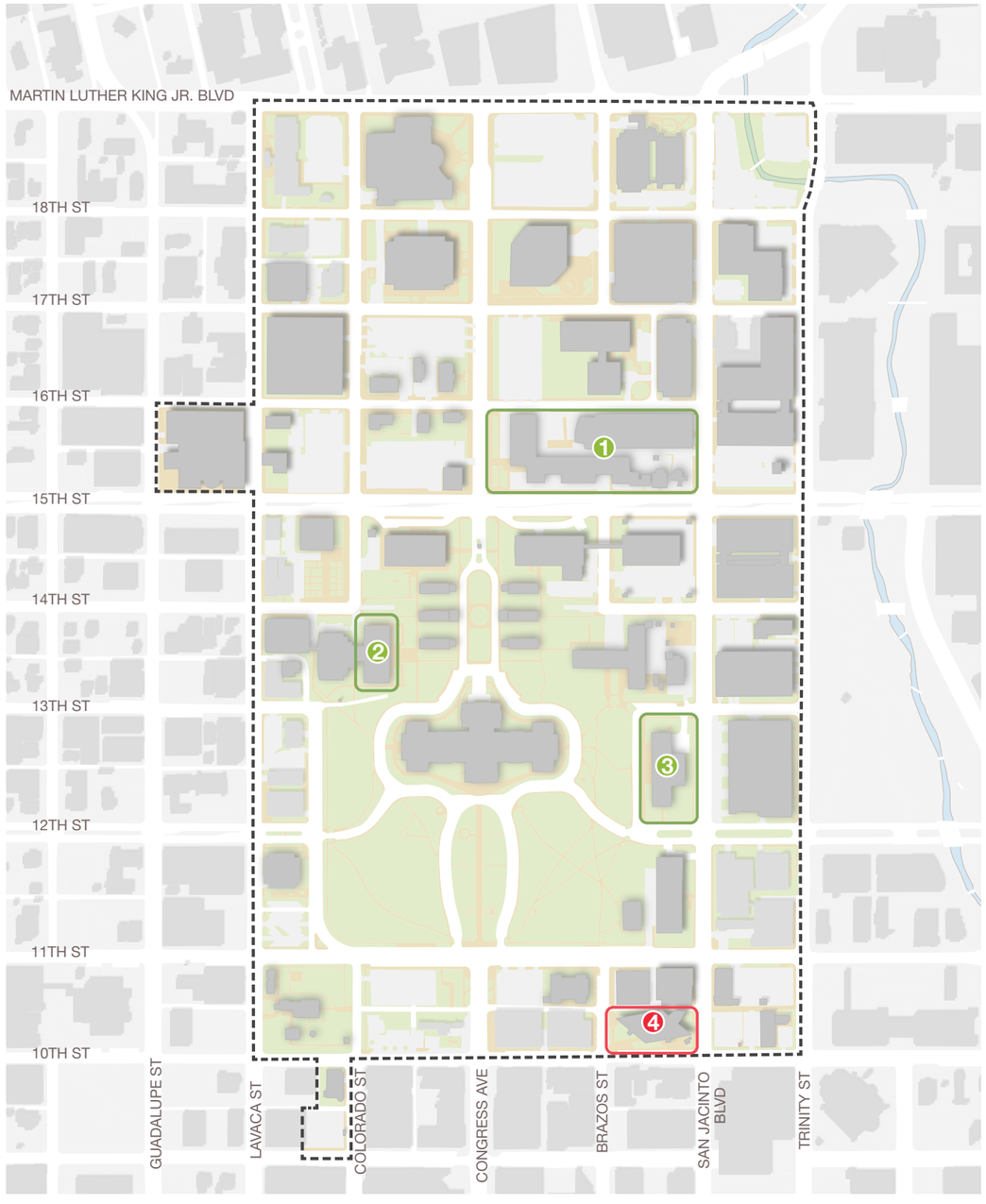


Figure 6.49
Timelessness and Identity Examples

1. Robert E. Johnson Building
2. Supreme Court Building
3. State Archives and Library Building
4. Thomas Jefferson Rusk Building

Denotes positive example

Denotes negative example

Denotes camera position

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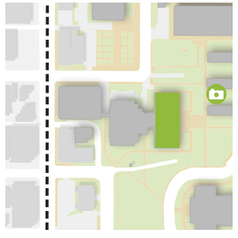
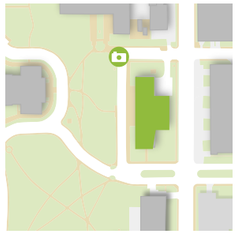
The civic simplicity of the Supreme Court Building possesses the appropriate grandeur to complement the Capitol yet stand alone in its own design.

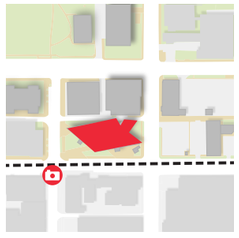


The identity of the State Archives and Library Building includes the use of the traditional state seal and an excerpt from a founding document.



Built in the early 2000s, the Robert E. Johnson Building exemplifies a modern office building with large amounts of glazing and a varied material palette.

The all-glass facade of the Thomas Jefferson Rusk Building does not evoke the identity of a state office building.



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ARCHITECTURAL PRINCIPLE 11

Fabric and Focus

The Capitol Complex shall be composed of a network of buildings that create district interest while relating back to the citywide focus of the complex, the Texas State Capitol.

The building fabric throughout the Capitol Complex shall create the sense of a district within the city while allowing focus to remain on the central icon of the complex, the Capitol. It is important for the complex 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 “fabric” or “focus” should be made early in the design process and should be based on both building function and the location in the complex.

CITYWIDE FOCUS

Citywide-focused buildings are defined as highly visible and notable throughout the city of Austin. These buildings possess an architectural character that is influential to surrounding buildings. The Capitol is the dominant focal point in the Capitol Complex and has been preserved as such by maintaining Capitol View Corridors throughout the city. The Governor’s Mansion is the less dominant citywide focus in the complex.

DISTRICT FOCUS

District-focused buildings should be used to frame views of the Capitol and create district landmarks at key locations throughout the complex. These buildings should help to highlight citywide focal buildings and major gateways into the Capitol Complex.

FABRIC

Fabric buildings play a supporting role within the Capitol Complex. Their modest designs weave together the fabric of the complex creating a cohesive district character across the variety of buildings.

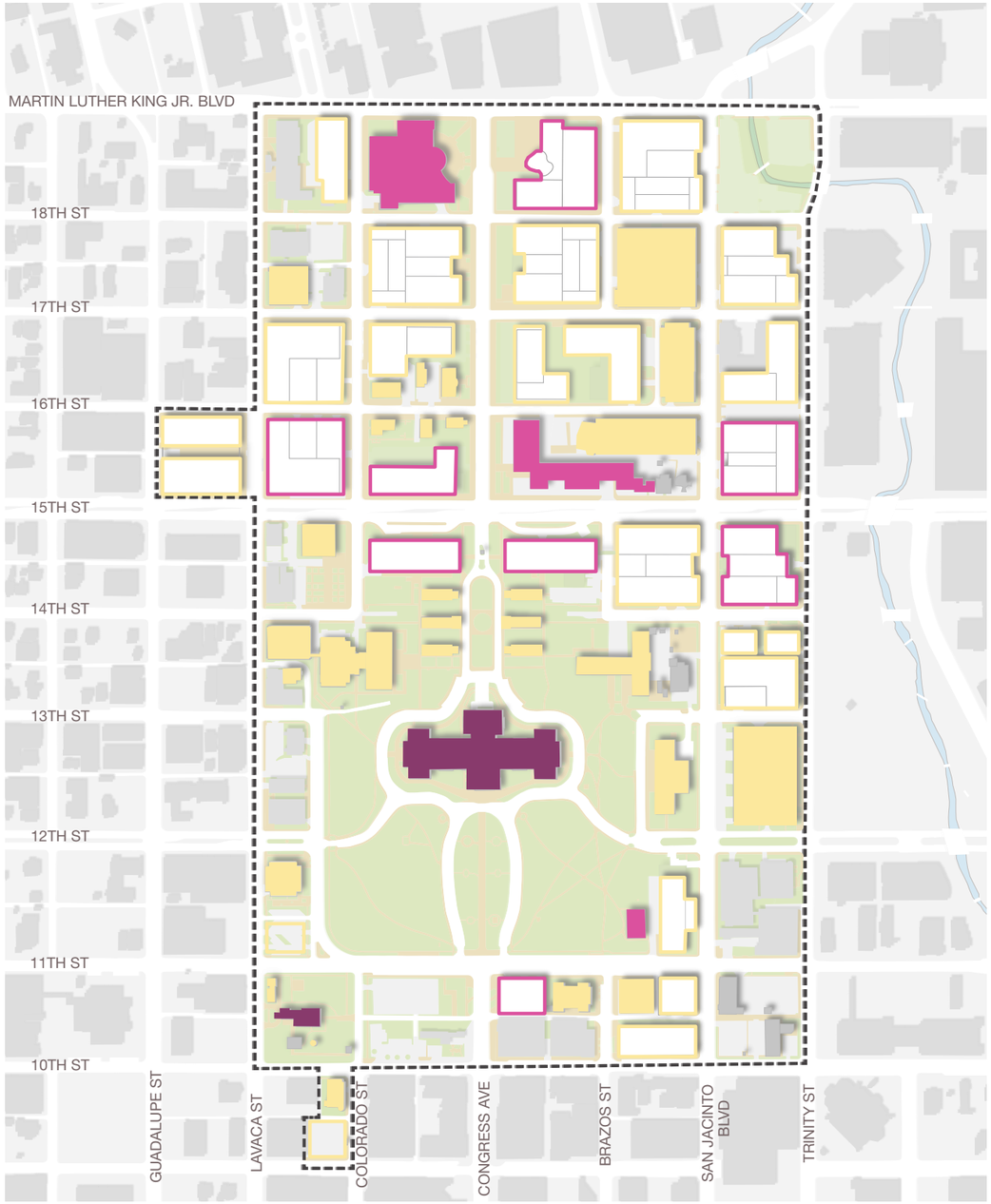

Figure 6.50
Fabric and Focus Examples

With high visibility throughout the city of Austin, the Texas State Capitol Building is the focal point of the Capitol Complex. Its scale and materials set the tone for the rest of the complex.

The Governor's Mansion is a citywide-focused which has its own identity and character and serves as a landmark within the Capitol Complex.

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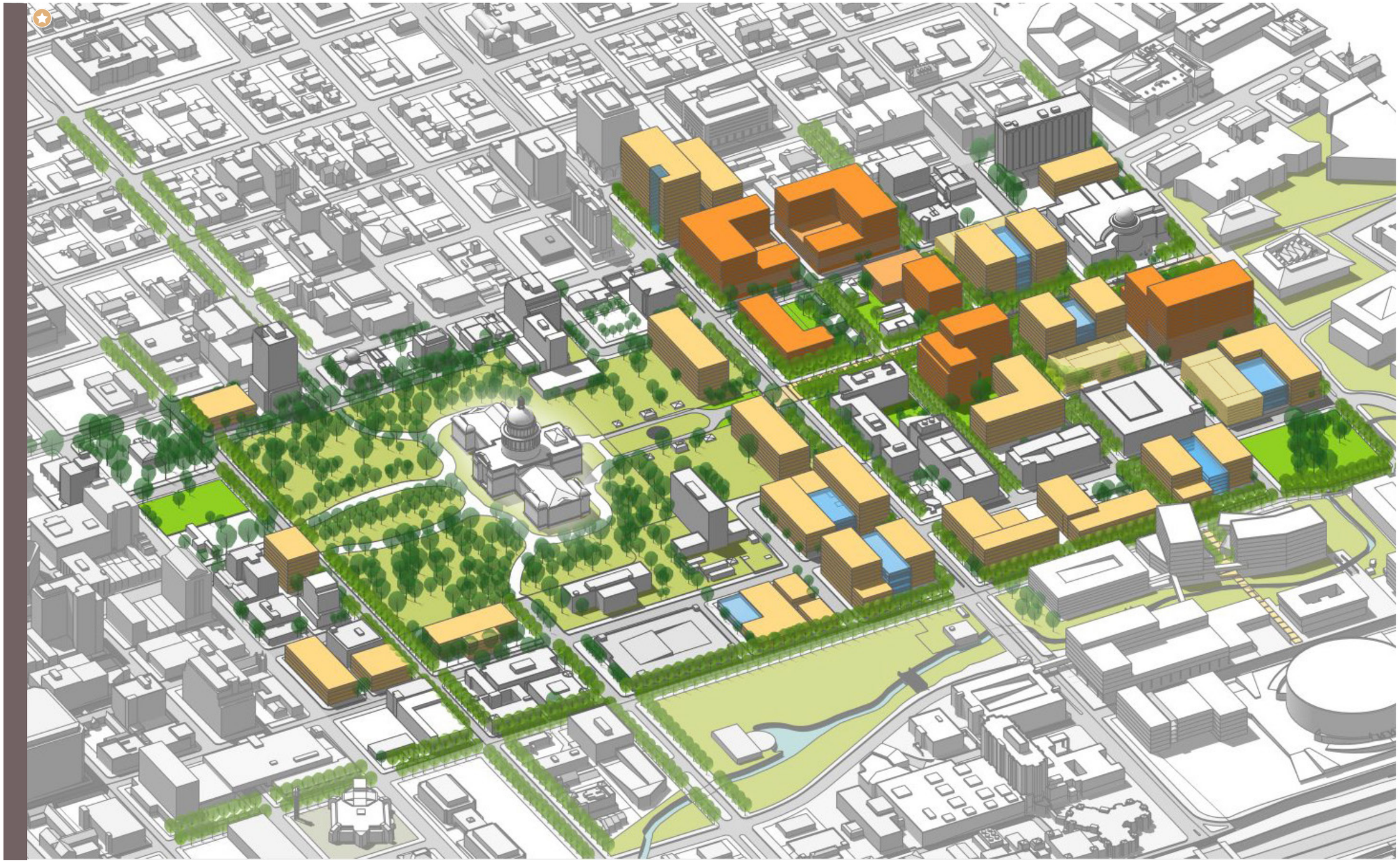
As the Capitol Complex is developed according to the master plan, the Texas State History Museum will remain a focal building that frames the Texas Mall and delineates a major gateway into the complex.

The Robert E. Johnson Building serves as a notable building that will frame the Texas Mall. Its architectural character supports surrounding focal buildings while establishing its own notable identity in the fabric of the complex.

The State Archives and Library Building fulfills the role of fabric building with its simple design and strong placement that helps to tie the Capitol to the rest of the complex.



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Appendices

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APPENDIX 1

Parking

The following parking study compares parking demand during and between the 84th Texas Legislature Session.

During the first review of the Capitol Complex parking, with input provided by stakeholders, an office parking ratio was developed based on buildings and parking dedicated to state office employees within the area north of the Capitol (refer to figure A.1 for areas included). The office parking ratio from the August 2014 data collection included a 10% employee vacation adjustment. The employee vacation adjustment was removed from the Spring 2015 collections. Tables A.3 to A.5 show the office parking ratio for each collection period for comparison.

To document the parking supply and demand in the Capitol Complex, collection dates were selected by stakeholders at anticipated peak demand dates during the 2015 Texas Legislative Session and data collection was performed between the hours of 6:00 am and 8:00 pm. The goal of this analysis was to determine a parking ratio for state office buildings and legislative parking needs for use in parking planning of future office building development within the Capitol Complex.

The Capitol Complex total peak parking demand utilization (minus on-street parking) was 79%, or 9,248 cars, observed Wednesday, April 15, 2015. This was an increase of 2,048 cars from the August 2014 non- legislative session collection period. These numbers are based on evaluation of the entire complex. Refer to table A.1.

When removing parking locations not dedicated to state employees (Garages C, F, M, Visitor, and Texas State Capitol, plus surface lots 6, 8, 11, 15, 18, 25 and Texas State Capitol), an adjusted peak parking demand utilization of 82% or 6,966 cars, was observed Wednesday, April 15, 2015. This was an increase of 1,074 cars from the August 2014 collection period. Refer to table A.2.

Although the Capitol Complex total parking increased 18% over the August 2014 non-session collection, the parking demand, and therefore the state employee office parking ratio, did not change.

Capitol Complex Employee Parking Demand Distribution by Location – April 2015 Collection												
		Wednesday, April 15, 2015								Peak Demand	Surplus/ (Deficit)	Peak Utilization
Location	**Capacity**	6:00 AM	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM			
Garage Hourly Subtotal	**8,952**	**857**	**5,102**	**7,348**	**7,321**	**7,561**	**6,013**	**1,635**	**1,047**	**7,561**	**1,391**	**84%**
Garage Hourly Occupancy		10%	57%	82%	82%	84%	67%	18%	12%			
Surface Hourly Subtotal	**2,200**	**867**	**1,802**	**1,900**	**1,826**	**1,877**	**1,522**	**1,150**	**1,079**	**1,900**	**300**	**86%**
Surface Hourly Occupancy		39%	82%	86%	83%	85%	69%	52%	49%			
HOURLY TOTAL DEMAND	**11,152**	**1,724**	**6,904**	**9,248**	**9,147**	**9,438**	**7,535**	**2,785**	**2,126**	**9,438**	**1,714**	**85%**
Total Hourly Occupancy		15%	62%	83%	82%	85%	68%	25%	19%			

Table A.1
Capitol Complex Parking Demand

Capitol Complex Employee Parking Demand Distribution by Location – April 2015 Collection												
		Wednesday, April 15, 2015								Peak Demand	Surplus/ (Deficit)	Peak Utilization
Location	**Capacity**	6:00 AM	8:00 AM	10:00 AM	12:00 PM	2:00 PM	4:00 PM	6:00 PM	8:00 PM			
Garage Hourly Subtotal	**7,438**	**552**	**4,074**	**5,900**	**5,875**	**6,079**	**4,776**	**1,076**	**662**	**6,079**	**1,359**	**82%**
Garage Hourly Occupancy		7%	55%	79%	79%	82%	64%	14%	9%			
Surface Hourly Subtotal	**1,059**	**160**	**854**	**910**	**855**	**887**	**589**	**302**	**293**	**910**	**149**	**86%**
Surface Hourly Occupancy		15%	81%	86%	81%	84%	56%	29%	28%			
HOURLY TOTAL DEMAND	**8,497**	**712**	**4,928**	**6,810**	**6,730**	**6,966**	**5,365**	**1,378**	**955**	**6,966**	**1,531**	**82%**
Total Hourly Occupancy		8%	58%	80%	79%	82%	63%	16%	11%			

Table A.2
Capitol Complex Parking Demand - Dedicated State Employee Parking Areas

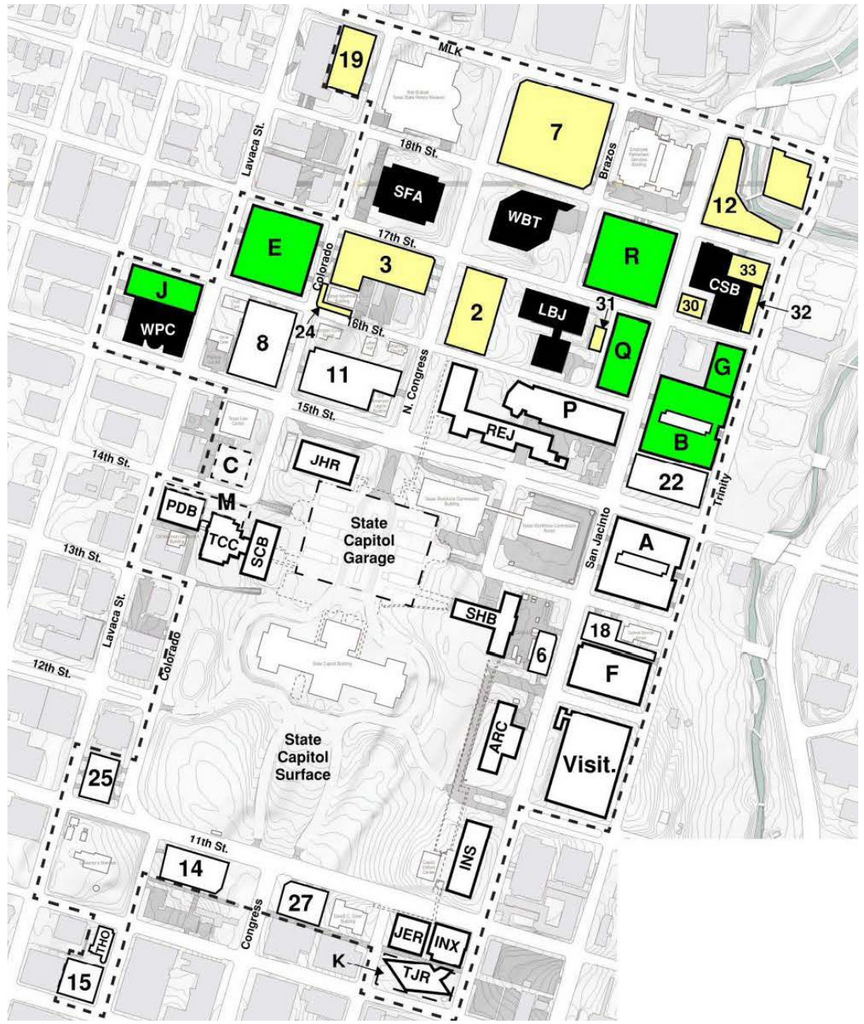

Figure A.1
Buildings and Parking Areas Dedicated to State Office Employees North of the Capitol

- Surface Lot
- Above Grade Garage
- Below Grade Garage
- Building (included)
- Building/Parking (excluded)

Building Square Feet Type	Building Square Feet [1]	Peak Parking Demand [2, 3, 4]	Parking Demand Ratio
State Facility Gross Square Feet	1,661,096	5,434	3.3
State Facility Usable Square Feet	1,297,007	5,434	4.2

Notes:
1. Refer to Figure A.1 for buildings and parking supply included.
2. Includes parking data collected on 8/20/2014.
3. Includes 15% buffer (5% effective parking supply + 10% employee vacation adjustment)

Table A.3
State Capitol Complex Parking Office Demand Ratio - August 2014

Building Square Feet Type	Building Square Feet [1]	Peak Parking Demand [2, 3]	Parking Demand Ratio
State Facility Gross Square Feet	1,661,096	5,456	3.3
State Facility Usable Square Feet	1,297,007	5,456	4.2

Notes:
1. Refer to Figure A.1 for buildings and parking supply included.
2. Includes parking data collected on 4/15/2015.
3. Includes 5% effective parking supply buffer.

Table A.4
State Capitol Complex Parking Office Demand Ratio - April 2015

Building Square Feet Type	Building Square Feet [1]	Peak Parking Demand [2, 3]	Parking Demand Ratio
State Facility Gross Square Feet	1,661,096	5,454	3.3
State Facility Usable Square Feet	1,297,007	5,454	4.2

Notes:
1. Refer to Figure A.1 for buildings and parking supply included.
2. Includes parking data collected on 5/14/2015
3. Includes 5% effective parking supply buffer.

Table A.5
State Capitol Complex Parking Office Demand Ratio - May 2015

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APPENDIX 2

Traffic Analysis

A planning-level analysis was conducted for the Capitol Complex Master Plan area defined by Martin Luther King Jr. Boulevard to the north, 15th Street to the south, Trinity Street to the east and Guadalupe Street to the west. This effort assessed the existing operational conditions of the area roadway system links and determined if reserve capacity exists to support future development.

Sample traffic counts were collected on the roadway links in the study area. The area roadways were classified by their function as arterials and collectors. Each category has a theoretical link capacity taken from widely-used traffic models. The existing peak-hour traffic volumes were then compared to the theoretical capacity based upon an acceptable level of service for the number of through-lanes on each street. A summary of hourly and daily link capacities per lane is provided in table A.8.

The analysis revealed that the existing roadway links operate at acceptable levels of service. The roadways interior to the arterials display more reserve capacity than do the arterials.

This planning level effort reviewed the potential reserve link capacity between intersections. It did not address specifics of how the intersections operate. As specific buildings are proposed, detailed analysis will be considered as a part of the ongoing planning effort to address the more microscopic impacts to the immediate area.

Consideration will be given during design to the goods and services needs of each building and garage portal with respect to necessary turning radii. Careful thought will also be given to the location of on-street parking and its potential to block motorists' sight distance at intersecting driveways and streets.

ROADWAY LINK CAPACITY

Link capacity is a function of surrounding land development characteristics (central business district, suburban, etc.) and the functional classification of the roadway (arterial, local street, etc.). By calculating the ratio of volume to capacity for a roadway link, level of service (LOS) may be defined. Based upon guidelines established, LOS criteria are summarized in tables A.6 and A.7.

Area Type	Roadway Functional Classification				
	Principal Arterial	Minor Arterial	Collector	Local	Frontage Road
CBD	5,750 [1] (5,250)	5,750 (5,250)	4,750 (4,250)	4,750 (4,250)	5,750 (5,250)
CBD Fringe	6,250 (5,750)	6,250 (5,750)	5,000 (4,500)	5,000 (4,500)	6,250 (5,750)
Urban Residential	6,750 (6,250)	6,500 (6,000)	5,250 (4,750)	5,250 (4,750)	6,500 (6,000)
Suburban Residential	7,250 (7,000)	7,250 (6,500)	5,750 (5,250)	5,750 (5,250)	7,250 (6,500)
Rural	8,250 (7,050)	7,750 (7,000)	6,000 (5,500)	6,000 (5,500)	7,750 (7,000)

Note:
1. Numbers outside parenthesis represent divided or one-way roads; those inside parenthesis represent undivided roads.

Table A.6
Daily Roadway Link Service Volumes (per lane)

Volume/Capacity Ratio	Level-of-Service
≤ 0.45	A or B
0.45 – 0.65	C
0.66 – 0.80	D
0.81 – 1.00	E
> 1.00	F

Table A.7
Daily Roadway Link Level of Service Guidelines

Capitol Complex Master Plan – Existing Link Capacity Analysis															
Classification	**Street Name**	**# of Vehicular Through Lanes**				**Theoretical Peak Hour Link Capacity Volume**	**Theoretical Peak Hour Total Link Capacity**	**Existing Peak Hour Through Volumes, All Lanes AM (PM)**				**Existing Link LOS AM (PM)**			
		EB	**WB**	**NB**	**SB**	**Per Lane at LOS D**	**Volume at LOS D**	**EB**	**WB**	**NB**	**SB**	**EB**	**WB**	**NB**	**SB**
MA-D	Martin Luther King Jr. Boulevard	2	2			500 VPLPH	1000 EB, 1000 WB	668 (591)	582 (728)			A/B/C (A/B/C)	A/B/C (A/B/C)		
C	18th Street		1			325 VPLPH	325 WB		57 (158)				A/B/C (A/B/C)		
C	17th Street	1				325 VPLPH	325 EB	155 (224)				A/B/C (A/B/C)			
C	16th Street		1			325 VPLPH	325 WB		29 (97)				A/B/C (A/B/C)		
MA-D	15th Street	3	3			500 VPLPH	1500 EB, 1500 WB	1359 (1441)	1148 (1162)			A/B/C (A/B/C)	A/B/C (A/B/C)		
MA	Guadalupe Street				3	500 VPLPH	1500 SB				907 (1170)				A/B/C (A/B/C)
MA	Lavaca Street			3		500 VPLPH	1500 NB			862 (1025)				A/B/C (A/B/C)	
C	Colorado Street			1	1	325 VPLPH	325 NB, 325 SB			329 (61)	71 (411)			D/E (A/B/C)	A/B/C (D/E)
C	Congress Avenue			1	1	325 VPLPH	325 NB, 325 SB			296 (73)	59 (278)			A/B/C (A/B/C)	A/B/C (A/B/C)
MA	San Jacinto Boulevard				3	500 VPLPH	1500 SB				345 (968)				A/B/C (A/B/C)
MA	Trinity Street			3		500 VPLPH	1500 NB			417 (449)				A/B/C (A/B/C)	

Table A.8
Existing Link Capacity Analysis

C Collector
MA Minor Arterial
MA-D Minor Arterial Divided
LOS Level-of-Service
VPLPH Vehicles Per Lane Per Hour
EB Eastbound
WB Westbound
NB Northbound
SB Southbound

APPENDIX 3

Glossary of Terms

GENERAL TERMS

Americans with Disabilities Act (ADA)—Federal civil rights legislation that prohibits discrimination and guarantees that people with disabilities have the same opportunities as everyone else to participate in the mainstream of American life, including accessibility to sites, facilities, and public and commercial buildings.

Capitol Dominance (CD) Overlay—The Capitol Dominance Overlay protects the visual and symbolic significance of the Texas State Capitol by keeping buildings in close proximity to the Capitol from dominating the structure. The CD Overlay applies to all property within a one-quarter mile radius of the Texas State Capitol dome.

Capitol View Corridor (CVC)—Texas Capitol view corridors are laid out to preserve the view of the Texas State Capitol building from specified points throughout the city by limiting the height of structures located in the view corridors.

Gross Square Feet (GSF)—The total area on all floors of a building included within the outside faces of its exterior walls.

Texas Accessibility Standards (TAS)—Scoping and technical requirements by the State of Texas for accessibility to sites, facilities, and public and commercial buildings by individuals with disabilities.

Usable Square Feet (USF)—The specific area of a building that a tenant will occupy in order to do business, including everything inside the boundaries of a building floor, minus stairwells and elevator shafts.

URBAN DESIGN TERMS

Active Edge—Building facades with material transparency to reveal active and visible interior uses, such as retail or community spaces.

Build-to Line—The line at which a building facade is constructed to help define the edge of a street or public space.

Civic Space—An area of a developed place—city or campus—that is considered a part of the public realm.

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 occupies the entire site would have an FAR of 2.0; a two-story building that occupies half of the site would have an FAR of 1.0.

LANDSCAPE AND OPEN SPACE TERMS

Dark-Skies Compliant—Light sources that limit the obtrusive aspects of lighting to reduce glare, trespass, energy waste, and sky glow.

Indigenous Plants—Plants whose presence in the Austin region is the result of only natural processes, with no human intervention. The term does not imply that a plant necessarily originated or evolved where it is found.

Landscape Improvements—Improvements within open space that include planting, irrigation, pedestrian/bicycle paving, site furnishings, lighting, and public art.

Multi-Modal Streets—Streets that carry several modes of traffic including vehicular, pedestrian, bicycle, and public transit, and do not give priority to any one mode.

Native Plants—Plants that came into being in South Central Texas.

Open Space—Exterior spaces consisting of the Texas Mall, Waller Creek, building entrances, building courtyards, and streetscapes.

Pervious (Permeable) Paving—A range of sustainable materials and techniques for pavements with a base and sub-base that allow the movement of stormwater through the surface. In addition to reducing runoff, this effectively traps suspended solids and filters pollutants from the water.

Turf Grass—Plants that create a thick mat over the soil surface

ARCHITECTURAL TERMS

Arcade—A succession of arches, in a row, supported by columns or piers, or a covered walkway enclosed by a line of such arches on one or both sides.

Human Scale—The proportional relationship of the physical environment (buildings, trees, parking lots, streets, etc.) to human dimensions.

Massing—The general shape and size of a building.

Portico—Colonnaded porch or entrance to a structure, or a covered walkway supported by regularly-spaced columns.

Public Realm—All of the spaces between buildings that can be freely accessed, encompassing all outdoor areas including roads, parks, squares, pedestrian routes, and bike paths.

Streetscape—The visual elements of a street, including the road, adjoining buildings, street furniture, trees, and open spaces, that combine to form the street's character.

Urban Realm—Public realm in an urban context.

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