Regional Center Profiles

The following section provides the results of the regional center analysis and measures how a center performs relative to the future vision for its category. This study uses data from the Comprehensive Plan Initial Studies, the U.S. Bureau of Labor and Statistics (BLS), VIA Metropolitan Agency, WalkScore.com and the U.S. Census, including the Location Affordability Index (LAI). The analysis utilizes nine indicators of existing conditions that illustrate differences between the centers. The indicators are grouped by type:

- **Social:** Job diversity, Housing and Transportation (H&T) Index, Per Capita Income
- **Connectivity:** Transit Utilization, Walkability, Median Commute Distance
- **Mix of Uses:** Ratio of Workers to Residents, Residential Density, Employment Density

An analysis of potential for land development complements the regional center profiles. It includes indicators for population and employment per developed acre and the percent of acres developed in each center.

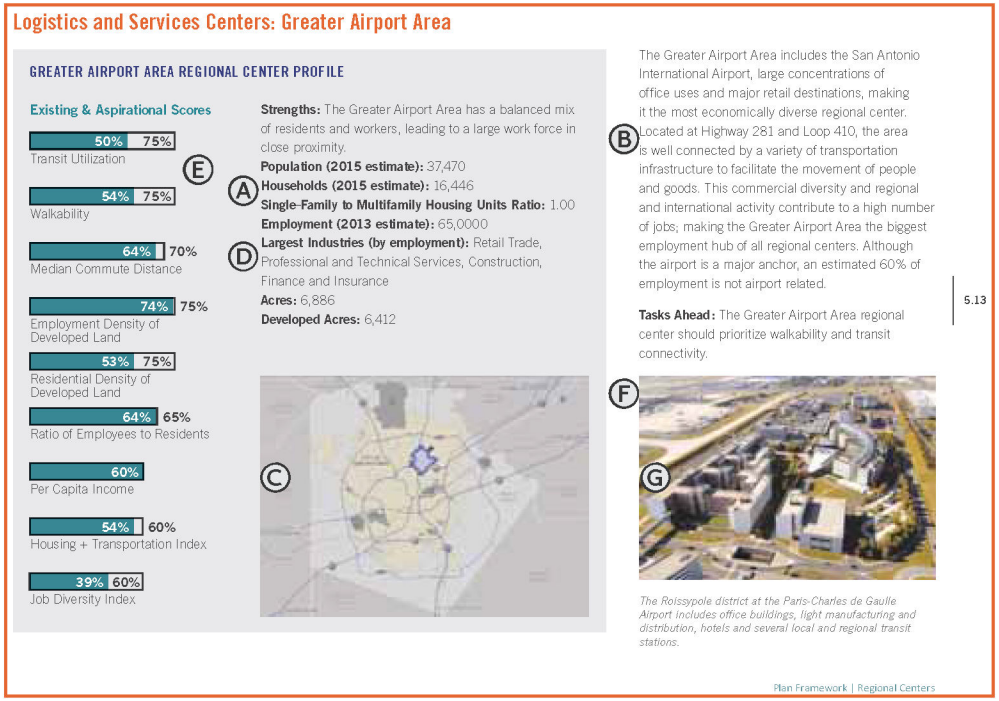
The city and stakeholders developed aspirational scores and ideal measures of success for each of the indicators, tailored to the three regional center types. Comparing the existing conditions scores in each center to the aspirational scores shows how each center is performing well and where it needs improvement to reach its potential.

Aspirational scores vary based on the urban form, land use mix and anticipated specialization of each of the three regional center types. For example, Activity Centers have high aspirational scores for transit use and residential density, while these criteria are less relevant for Logistics/Service Centers and Special Purpose Centers based on the descriptions of the regional center types on page 5.2.

How well a center is currently meeting its aspirational score is demonstrated by bar graphs.

The profiles on the following pages tell the story of each regional center's analysis. Each one provides:

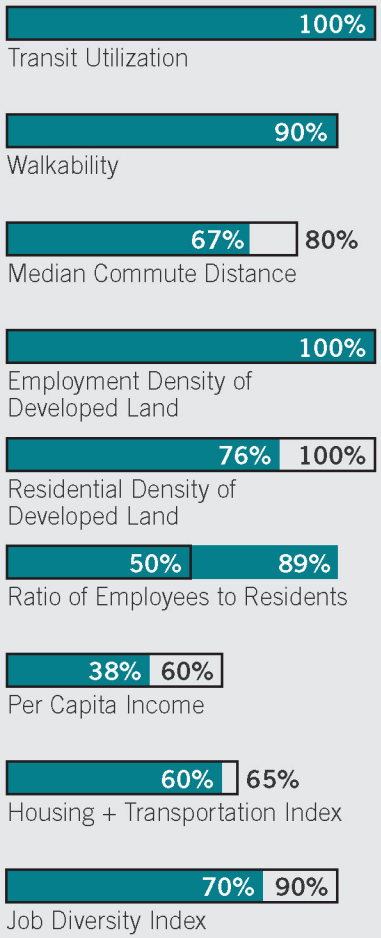
- Strengths (A)
- Introductory Text (B)
- Locator Map (C)
- Key Economic and Demographic Facts (D)
- Existing Conditions and Aspirational Scores (E)
- Tasks Ahead (F)
- Precedent Photo (G)



Activity Centers: Central Business District (Downtown)

CENTRAL BUSINESS DISTRICT (DOWNTOWN) REGIONAL CENTER PROFILE

Existing & Aspirational Scores



Strengths: Downtown is the most walkable and transit-friendly regional center. It has a high concentration and diversity of jobs and is surrounded by a large workforce.
Population (2015 estimate): 5,567
Households (2015 estimate): 2,920
Single-family to Multifamily Housing Units Ratio: 0.18
Employment (2013 estimate): 44,400
Largest Industries (by employment): Accommodations and Food Service, Healthcare and Public Administration
Acres: 960
Developed Acres: 840

Downtown is the historic and cultural center of the city and home to the world-renowned Riverwalk. It is the center of San Antonio's traditional economy, anchored by our multi-billion-dollar tourism, education and healthcare industries. The urban core is revitalizing and experiencing a growth renaissance, supported by the "Decade of Downtown" movement. The City Center is evolving into a vibrant mixed-use area with a range of employment, services and housing, all centered around great historical and cultural destinations.

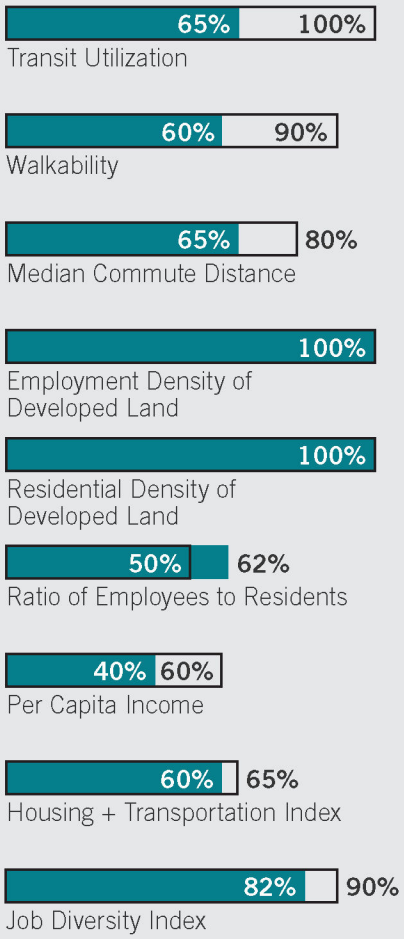
Tasks Ahead: Although it is close to meeting the aspirational scores, Downtown needs to continue adding housing to even the mix of employment and residents.

The Cityway development in downtown Indianapolis includes a world-class business hotel, high-end apartments, restaurants, retails shops and other community amenities.

Activity Centers: Medical Center

MEDICAL CENTER REGIONAL CENTER PROFILE

Existing & Aspirational Scores



Strengths: The Medical Center has great job diversity and a large concentration of housing.

Population (2015 estimate): 39,117
Households (2015 estimate): 19,318
Single-family to Multifamily Housing Units Ratio: 0.08
Employment (2013 estimate): 64,000
Largest Industries (by employment): Healthcare, Finance and Insurance, Education
Acres: 3,670
Developed Acres: 3,330

The South Texas Medical Center is a major cluster of 45 healthcare and medical-related facilities, including 12 hospitals and five specialty institutions. Healthcare employment reached 27,500 jobs in 2011 and accounts for nearly 30% of all healthcare employment in the city. The Medical Center is also home to USAA, one of the city's largest employers. This area will continue to be the primary hub of medical-related activities in San Antonio with potential to evolve into a vibrant mixed-use center.

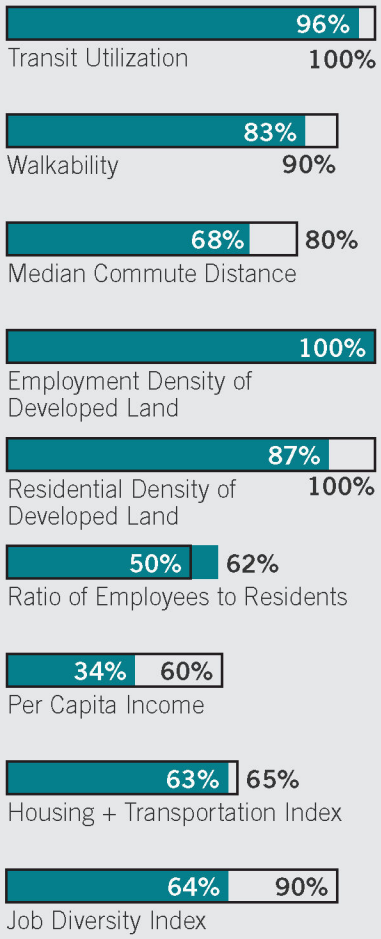
Tasks Ahead: Transit use to and within the medical center can be increased and the pedestrian environment can be improved to make it more walkable.

Chestnut Hill Square in Boston is a lifestyle and retail destination with a mix of shops and restaurants anchored by medical office and clinical spaces.

Activity Centers: Midtown

MIDTOWN REGIONAL CENTER PROFILE

Existing & Aspirational Scores



Strengths: The Midtown area has a high concentration of jobs and housing in a walkable environment.
Population (2015 estimate): 10,302
Households (2015 estimate): 4,380
Single-family to Multifamily Housing Units Ratio: 1.00
Employment (2013 estimate): 16,950
Largest Industries (by employment): Healthcare, Education, Transportation Services
Acres: 1,190
Developed Acres: 1,110

Located between Downtown and the historic neighborhoods to the north, Midtown is the nexus of live, work and play in central San Antonio. Anchored by Brackenridge Park, San Pedro Springs Park, San Antonio College and the Pearl Brewery redevelopment, Midtown increasingly attracts multifamily residential development and businesses in creative industries. Broadway, one of several major arterials connecting Downtown to Midtown and neighborhoods to the north, is slated to become a major cultural corridor in San Antonio.

Tasks Ahead: The Midtown area will benefit from additional job diversity, particularly those which help increase incomes of residents in the area.

The renovated Fred Meyer in the Uptown neighborhood of Portland, Oregon added an active street edge with additional shops and restaurants on a former parking lot.

Activity Centers: Brooks

BROOKS REGIONAL CENTER PROFILE

Existing & Aspirational Scores

36% 100%
Transit Utilization

47% 90%
Walkability

42% 80%
Median Commute Distance

11% 100%
Employment Density of Developed Land

30% 100%
Residential Density of Developed Land

26% 50%
Ratio of Employees to Residents

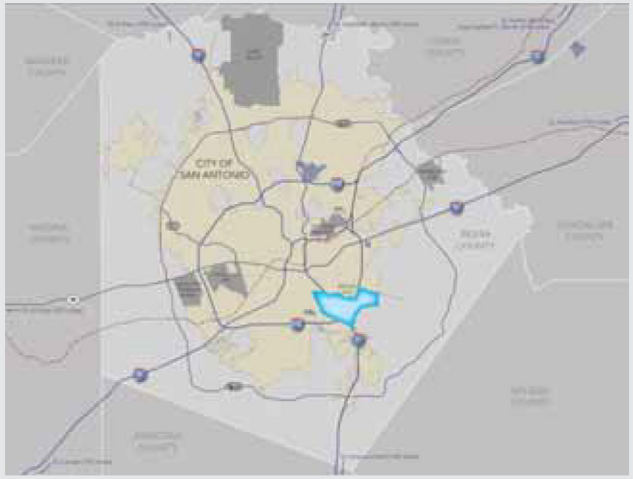
33% 60%
Per Capita Income

56% 65%
Housing + Transportation Index

62% 90%
Job Diversity Index

Strengths: The Brooks regional center has successfully captured a significant number and diversity of jobs in a short period of time. Additionally, the area benefits from excellent highway and arterial connectivity to Downtown and other regional centers.

Population (2015 estimate): 20,149
Households (2015 estimate): 6,885
Single-family to Multifamily Housing Units Ratio: 1.91
Employment (2013 estimate): 7,200
Largest Industries (by employment): Healthcare, Public Administration, Retail Trade
Acres: 7,540
Developed Acres: 4,800



Anchored by the redeveloping Brooks City Base, this area is one of San Antonio's emerging activity centers and a major catalyst for growth on the south side of the city. As the focus of redevelopment in the area, the 1,200 acre mixed-use Brooks City Base has attracted 3,000 jobs, comprising over 40% of the center's employment. Brooks is located near several major highways including I-37, which connects to Downtown and the San Antonio International Airport.

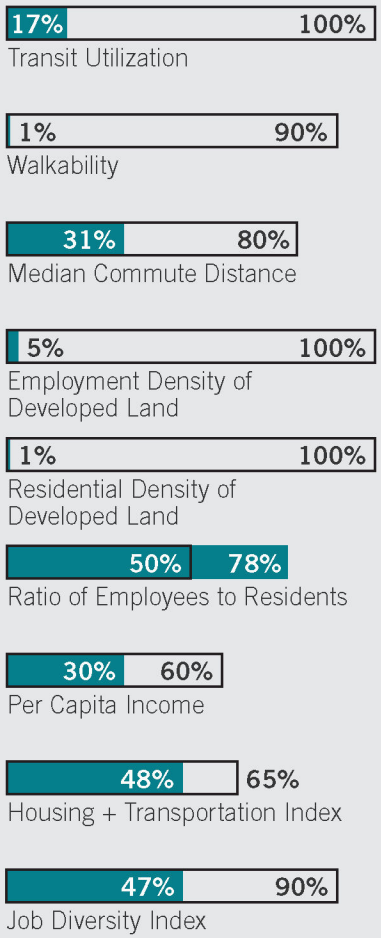
Tasks Ahead: Future efforts led by the Brooks Development Authority should focus on attracting jobs and high-density housing to the Brooks City Base redevelopment. As this regional center develops, walkability and transit connectivity should be prioritized.

The Fleet Street Condominiums and Aloft Hotel development in National Harbor, Maryland anchors a key intersection in the National Harbor mixed-use district.

Activity Centers: Texas A&M University–San Antonio / Toyota

TEXAS A&M UNIVERSITY–SAN ANTONIO / TOYOTA REGIONAL CENTER PROFILE

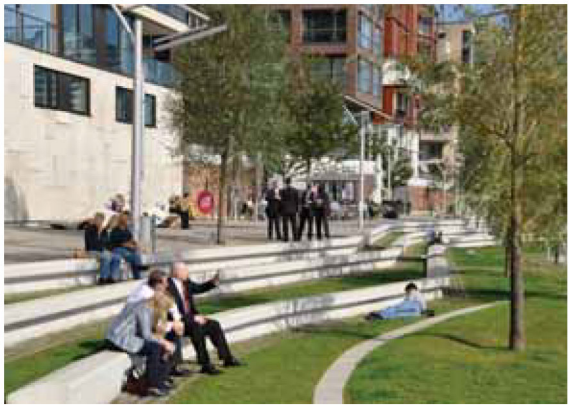
Existing & Aspirational Scores



Strengths: The Texas A&M University - San Antonio regional center benefits from two strong employment anchors, as well as ample land for future redevelopment.
Population (2015 estimate): 1,070
Households (2015 estimate): 308
Single-family to Multifamily Housing Units Ratio: 0.78
Employment (2013 estimate): 3,800
Largest Industries (by employment): Transportation Equipment Manufacturing, Education
Acres: 7,240
Developed Acres: 5,260

Anchored by the Toyota manufacturing complex and the new Texas A&M University-San Antonio campus, this is one San Antonio's emerging regional centers. The Toyota assembly plant employs over 3,000 and supports 23 related nearby suppliers. The university currently has 4,500 students and plans to grow to 25,000 students by 2025 on its 700-acre campus. Significant opportunities exist to develop vibrant mixed-use neighborhood serving the university and the south side of the city.

Tasks Ahead: Planning for this regional center should focus on increased connectivity and other infrastructure and investments that will catalyze the expected residential and employment growth.

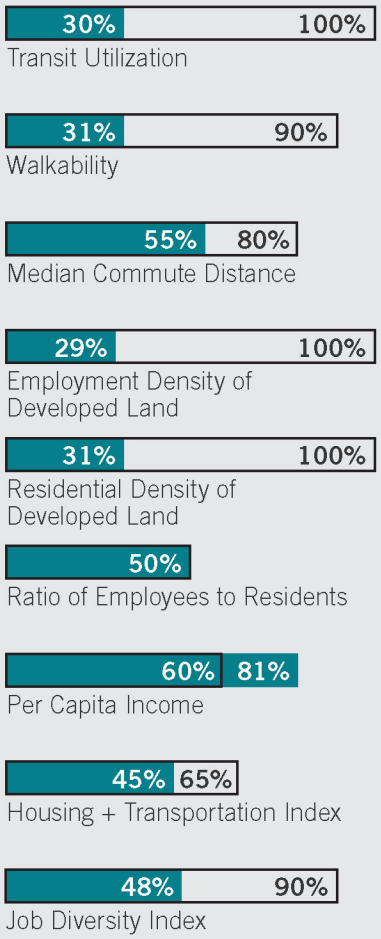


HafenCity urban regeneration project in Hamburg, Germany is adding a diverse mix of uses and vibrant open spaces to an area that had limited infrastructure and amenities.

Activity Centers: UTSA

UTSA REGIONAL CENTER PROFILE

Existing & Aspirational Scores



Strengths: The UTSA regional center has a good mixture of jobs and residents with a significant employment base anchored by the University.

Population (2015 estimate): 18,557
Households (2015 estimate): 7,482
Single-family to Multifamily Housing Units Ratio: 0.82
Employment (2013 estimate): 18,650
Largest Industries (by employment): Healthcare, Education, Retail Trade, Oil and Gas
Acres: 7,780
Developed Acres: 4,730

Anchored by the University of Texas at San Antonio, the UTSA activity center is a focus of entertainment and retail for the northern portion of the city. Located at the northern intersection of I-10 and Loop 1604, the UTSA regional center includes major destinations such as Six Flags Fiesta Texas, The Rim Shopping Center and The Shops at La Cantera.

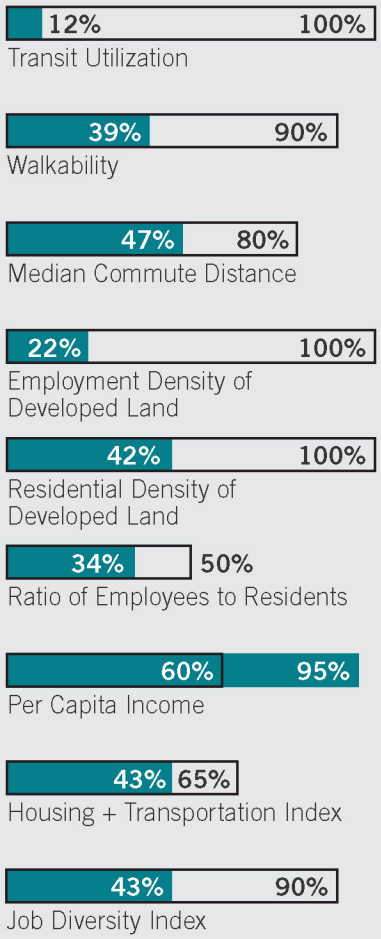
Tasks Ahead: UTSA will benefit from increased housing and employment density. As it grows, multimodal connectivity should be prioritized.

Developed by Washington University in St. Louis, Missouri, the Lofts of Washington University is a student housing and retail mixed-use project along a vibrant commercial corridor a 1/2-mile from the main university campus.

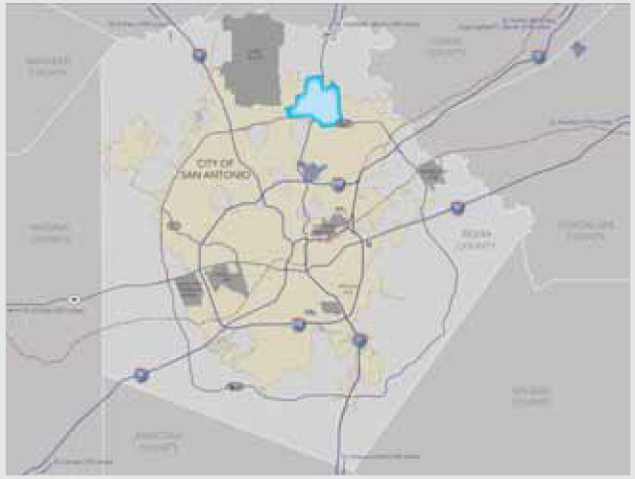
Activity Centers: Stone Oak

STONE OAK REGIONAL CENTER PROFILE

Existing & Aspirational Scores



Strengths: The Stone Oak regional center is major service and retail hub.
Population (2015 estimate): 40,503
Households (2015 estimate): 15,004
Single-family to Multifamily Housing Units Ratio: 2.52
Employment (2013 estimate): 21,300
Largest Industries (by employment): Healthcare, Finance and Insurance, Retail Trade
Acres: 10,240
Developed Acres: 7,095



The Stone Oak regional center is located at US Highway 281 and Loop 1604. It comprises the master planned community of Stone Oak, two independent hospitals and the Northwood Shopping Center, among other uses. This mix of uses supports over 21,000 jobs and 75,000 residents in the area.

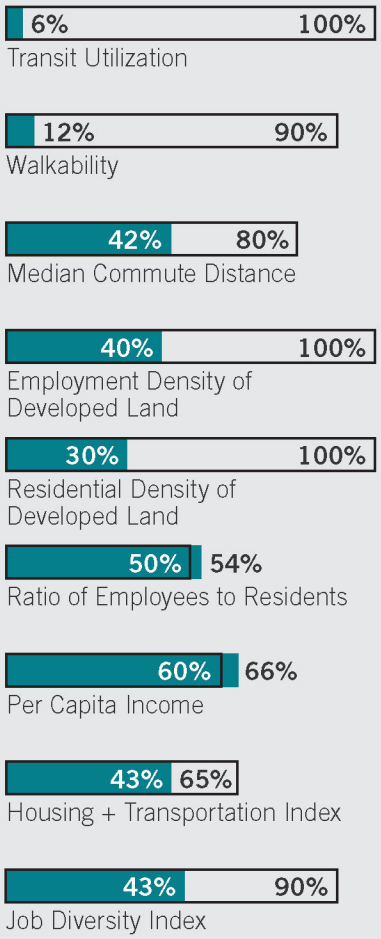
Tasks Ahead: Planning for Stone Oak regional center should focus on increased density and multimodal connectivity.

The Cleveland HealthLine bus rapid transit system has helped to connect existing residents to regional destinations and new projects like this two block mixed-use development.

Activity Centers: Highway 151 and Loop 1604

HIGHWAY 151 AND LOOP 1604 REGIONAL CENTER PROFILE

Existing & Aspirational Scores



Strengths: The Highway 151 and Loop 1604 regional center has attracted major employers, an educational institution and entertainment destinations.

Population (2015 estimate): 11,859
Households (2015 estimate): 3,998
Single-family to Multifamily Housing Units Ratio: 7.74
Employment (2013 estimate): 14,200
Largest Industries (by employment): Retail Trade, Healthcare, Finance and Insurance, Education
Acres: 4,205
Developed Acres: 2,546

Home to several large employment campuses, including Wells Fargo, as well as the SeaWorld amusement park, this regional center is one of San Antonio's emerging centers. Located on the western edge of the city, it includes the Westover Hills area and portions of the large master planned community of Alamo Ranch. This area, including portions of unincorporated Bexar County has been a focus of major development activity during the past decade.

Tasks Ahead: This emerging regional center should prioritize transit service to link uses that are largely disconnected from each other.

The EMX bus rapid transit system connects several neighborhoods, employment centers, a new hospital and mixed-use districts in Eugene and Springfield, Oregon.

Logistics and Services Centers: Greater Airport Area

GREATER AIRPORT AREA REGIONAL CENTER PROFILE

Existing & Aspirational Scores

50% 75%
Transit Utilization

54% 75%
Walkability

64% 70%
Median Commute Distance

74% 75%
Employment Density of Developed Land

53% 75%
Residential Density of Developed Land

64% 65%
Ratio of Employees to Residents

60%
Per Capita Income

54% 60%
Housing + Transportation Index

39% 60%
Job Diversity Index

Strengths: The Greater Airport Area has a balanced mix of residents and workers, leading to a large work force in close proximity.
Population (2015 estimate): 37,470
Households (2015 estimate): 16,446
Single-family to Multifamily Housing Units Ratio: 1.00
Employment (2013 estimate): 65,0000
Largest Industries (by employment): Retail Trade, Professional and Technical Services, Construction, Finance and Insurance
Acres: 6,886
Developed Acres: 6,412

The Greater Airport Area includes the San Antonio International Airport, large concentrations of office uses and major retail destinations, making it the most economically diverse regional center. Located at Highway 281 and Loop 410, the area is well connected by a variety of transportation infrastructure to facilitate the movement of people and goods. This commercial diversity and regional and international activity contribute to a high number of jobs; making the Greater Airport Area the biggest employment hub of all regional centers. Although the airport is a major anchor, an estimated 60% of employment is not airport related.

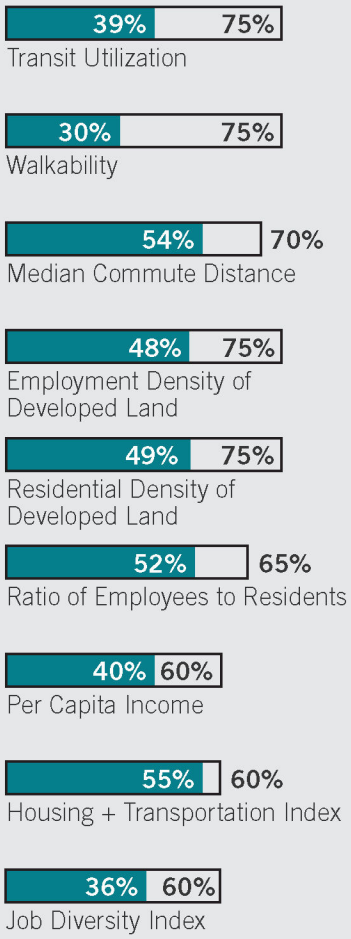
Tasks Ahead: The Greater Airport Area regional center should prioritize walkability and transit connectivity.

The Roissypole district at the Paris-Charles de Gaulle Airport includes office buildings, light manufacturing and distribution, hotels and several transit stations.

Logistics and Services Centers: Northeast I-35 and Loop 410

NORTHEAST I-35 AND LOOP 410 REGIONAL CENTER PROFILE

Existing & Aspirational Scores



Strengths: The Northeast I-35 and Loop 410 regional center has superior regional connectivity and an emerging potential for revitalization of former industrial uses.

Population (2015 estimate): 13,607
Households (2015 estimate): 5,147
Single-family to Multifamily Housing Units Ratio: 2.45
Employment (2013 estimate): 15,000
Largest Industries (by employment): Retail Trade, Construction, Accommodation and Food Services
Acres: 2,638
Developed Acres: 2,257

As the traditional industrial employment center for San Antonio, the area around I-35 and Loop 410, has several types of employment and community-serving retail. As industrial uses shift to the southeast portion of the city and further north along the I-35 corridor, this area is beginning to evolve away from its industrial roots. This evolution creates new opportunities for infill redevelopment and capitalizes on the center's location on the main route to Austin.

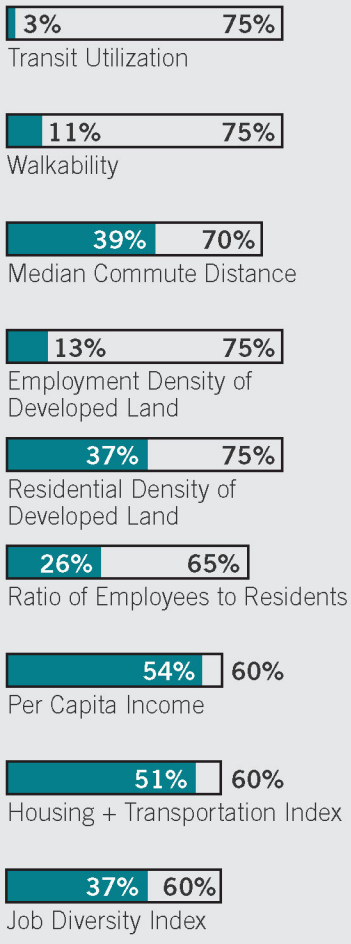
Tasks Ahead: This evolving regional center will benefit from coordinated land use planning to leverage existing infrastructure and support new types of development.

Ebene CyberCity on Mauritius, an island nation in the Indian Ocean, is 9 miles south of the capital and is being developed as a new information technology hub.

Logistics and Services Centers: Rolling Oaks

ROLLING OAKS REGIONAL CENTER PROFILE

Existing & Aspirational Scores



Strengths: The Rolling Oaks regional center has superior connectivity to regional highways. This area is in the process of rapid expansion attracting new residents and businesses.

Population (2015 estimate): 23,987

Households (2015 estimate): 8,979

Single-family to Multifamily Housing Units Ratio: 3.86

Employment (2013 estimate): 8,400

Largest Industries (by employment): Retail Trade, Accommodations and Food Service, Wholesale Trade

Acres: 6,638

Developed Acres: 4,624

The Rolling Oaks regional center, at I-35 and Loop 1604, is poised to expand rapidly over the next 25 years. Already a major retail location with assets such as Rolling Oaks Mall and The Forum at Olympia Parkway (in Selma, Texas), Rolling Oaks is expected to add a significant number of new residents and jobs by 2040. This growth will be supported by this regional center's ideal location on the I-35 corridor leading to Austin.

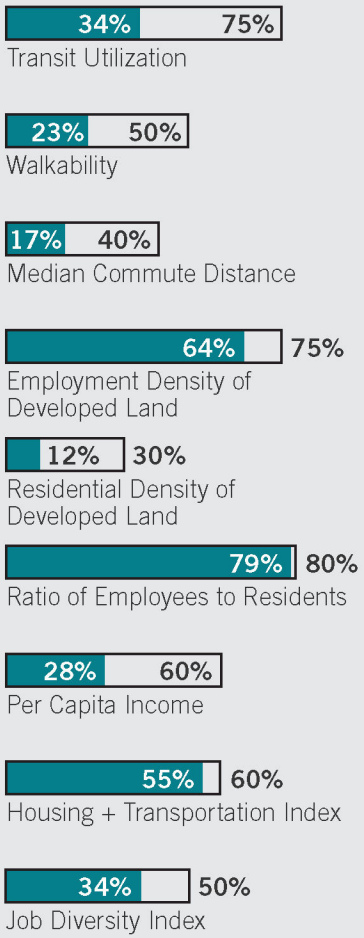
Tasks Ahead: This emerging center should prioritize attracting major employers and greater job diversity.

Ecospace business park in Newtown, Rajarhat is multi-use, mixed-use development that integrates offices with ample open space, trails and housing nearby.

Special Purpose Centers: Fort Sam Houston

FORT SAM HOUSTON REGIONAL CENTER PROFILE

Existing & Aspirational Scores



Strengths: The Fort Sam Houston regional center is a major national destination because of Brooks Army Medical Center – a DOD Level I Trauma Center.

Population (2015 estimate): 16,506
Households (2015 estimate): 4,190
Single-family to Multifamily Housing Units Ratio: 1.21
Employment (2013 estimate): 62,000
Largest Industries (by employment): Military, Advanced Manufacturing, Retail Trade, Agriculture
Acres: 8,080
Developed Acres: 6,978

This special purpose center includes JBSA-Fort Sam Houston and large portions of San Antonio's older industrial sites along I-35. Fort Sam is a designated Historic Landmark and one of the Army's oldest installations. As home to Brooks Army Medical Center, the only U.S. Department of Defense (DOD) Level I Trauma Center, this regional center supports an innovative employment sector. The area is home to over 62,000 jobs, of which 40,000 are military jobs.

Tasks Ahead: This regional center will benefit from improved connectivity and multimodal access, as most of the area's employees commute a long distance. Support of innovative and advanced manufacturing job types will help increase average resident incomes.

New development in Boulder, Colorado has integrated bicycle facilities, landscaping and public space in close proximity to safe and reliable public transit.

Special Purpose Centers: JBSA-Lackland / Port San Antonio

JBSA-LACKLAND / PORT SAN ANTONIO REGIONAL CENTER PROFILE

Existing & Aspirational Scores

66% 75%
Transit Utilization

10% 50%
Walkability

0% 40%
Median Commute Distance

42% 75%
Employment Density of Developed Land

9% 30%
Residential Density of Developed Land

72% 80%
Ratio of Employees to Residents

29% 60%
Per Capita Income

57% 60%
Housing + Transportation Index

43% 50%
Job Diversity Index

Strengths: The JBSA-Lackland / Port San Antonio regional center is a significant economic driver for the city. Existing major employers provide a strong economic base while Port San Antonio's foreign trade zone designation and strategic master plan will help attract the city's targeted industries.

Population (2015 estimate): 19,425

Households (2015 estimate): 3,217

Single-family to Multifamily Housing Units Ratio: 1.99

Employment (2013 estimate): 50,500

Largest Industries (by employment): Military, Information Technology, Transportation Equipment Manufacturing

Acres: 8,900

Developed Acres: 8,637

This regional center is home to JBSA-Lackland and Port San Antonio, the former Kelly Air Force Base. Redevelopment of The Port, a 1,900-acre site, is creating an economic engine for San Antonio. This master planned employment center and foreign trade zone currently has over 12,000 employees. With only about 40% of Port San Antonio's land utilized, full development of the site could potentially support an additional 35,000 jobs. Located between I-35, Loop 410 and US Highway 90, Port San Antonio has strong highway connectivity as well as direct air and rail access.

Tasks Ahead: This employment-focused regional center will benefit from expanded housing options for JBSA-Lackland and Port San Antonio employees.

Rotterdam, Holland has focused on developing housing in and near historically single use office and industrial areas to create stronger community and decrease congestion.

Chapter 6: Place Types

With the major building blocks of the city identified (regional centers, urban centers, corridors and neighborhoods), we then described the types of places that we would like each of those building blocks to be.

Throughout the SA Tomorrow process, participants pointed to examples of development they like, both within San Antonio and around the country. The common thread linking each of these desirable examples is that they are actual places. Instead of a poorly planned collection of buildings, uses and infrastructure, the residents of San Antonio want true places. Residents want places where the sum of the individual investments in development projects, roads, transit, parks, open space and trails amounts to an attractive destination that is well-defined, walkable and provides plenty of shopping and dining options.

San Antonio will use the concept of "place types" to designate the appropriate and desired development patterns for the major building blocks. The place types provide the design intent and key planning and design parameters related to how each place will be developed—with a desirable mix of land uses, city form, public spaces, roads, parking and other infrastructure.

The place types will guide desirable development within each of the major building blocks.

At least one place type is appropriate for each of the building blocks. For example, there are three different place types that represent three distinct approaches to urban centers. The larger geographies of regional centers and corridors allow for many place types to be developed within each of those building blocks. In neighborhoods, several different place types are appropriate at different scales, including main streets, community corridors and green neighborhoods (which would usually be new neighborhoods, but its defining characteristic can be applied to existing neighborhoods to make them more sustainable).

All place types were defined with an eye toward how they transition to existing single-family neighborhoods that may be nearby. The city considered land use, scale and massing to ensure that each of the place types will be developed in a manner that is harmonious and complementary with existing and future neighborhoods.

We used four major determinants to explore and define place types: land use; mobility; sustainability; and natural topography and other natural features.

An exploration of the determinants resulted in 12 place types organized into three categories: Multimodal Mixed-Use; Trails, Parks and Open Space; and Adaptive Reuse.

Coordination with VIA

The multimodal, mixed-use place types were developed in coordination with VIA's Vision 2040 transit-supportive development typologies. They align with the specific Vision 2040 typologies of Urban Centers, Community Corridors and Neighborhood Main Streets. The VIA Typologies are further described through key characteristics such as orientation, land use, street network, housing unit density minimums and transit facility areas of influence.

SA Tomorrow's urban center typologies vary from VIA Vision 2040 by introducing three different urban center place types instead of a single urban center transit supportive development type. The three urban center typologies include regional/ commuter rail; high-capacity transit corridor; and institutional/ campus mixed-use.

REGIONAL/COMMUTER RAIL

Multimodal, Mixed-Use Place Types

Multimodal mixed-use place types are transit-supportive and address all levels of transit service, from broader regional commuter rail station areas and larger institutions, to smaller scale places such as short segments along community corridors and neighborhood main streets. The place types in this category include:

- Regional/Commuter Rail;
- High Capacity Transit Corridor;
- Institutional/Campus Mixed-Use;
- Community Corridor; and
- Neighborhood Main Street.

Regional/Commuter Rail

A Regional/Commuter Rail place type has a major transit station along a regional or commuter-heavy rail corridor. The predominant land uses surrounding the transit station should be mixed, with high-density residential closer to the station and then transition to single-family residential moving further away from the station. The features that make this place type unique are pedestrian access to regional transit and pedestrian and bicycle connectivity, which activate the surrounding neighborhood. The VIA Centro Plaza, Robert Thompson Transit Center and future Lone Star Rail all have the potential to fully realize the Regional/Commuter Rail place type.

MAJOR DETERMINANT

Major transit station along a regional or commuter heavy rail corridor.

RELATION TO VIA TRANSIT SUPPORTIVE DEVELOPMENT TYPOLOGIES

One of three typologies corresponding to VIA's Urban Center typology.

PREDOMINANT LAND USES

Mixed-use housing and office development with retail on a portion of the ground floor, office, multifamily housing and attached single-family housing.

Legend

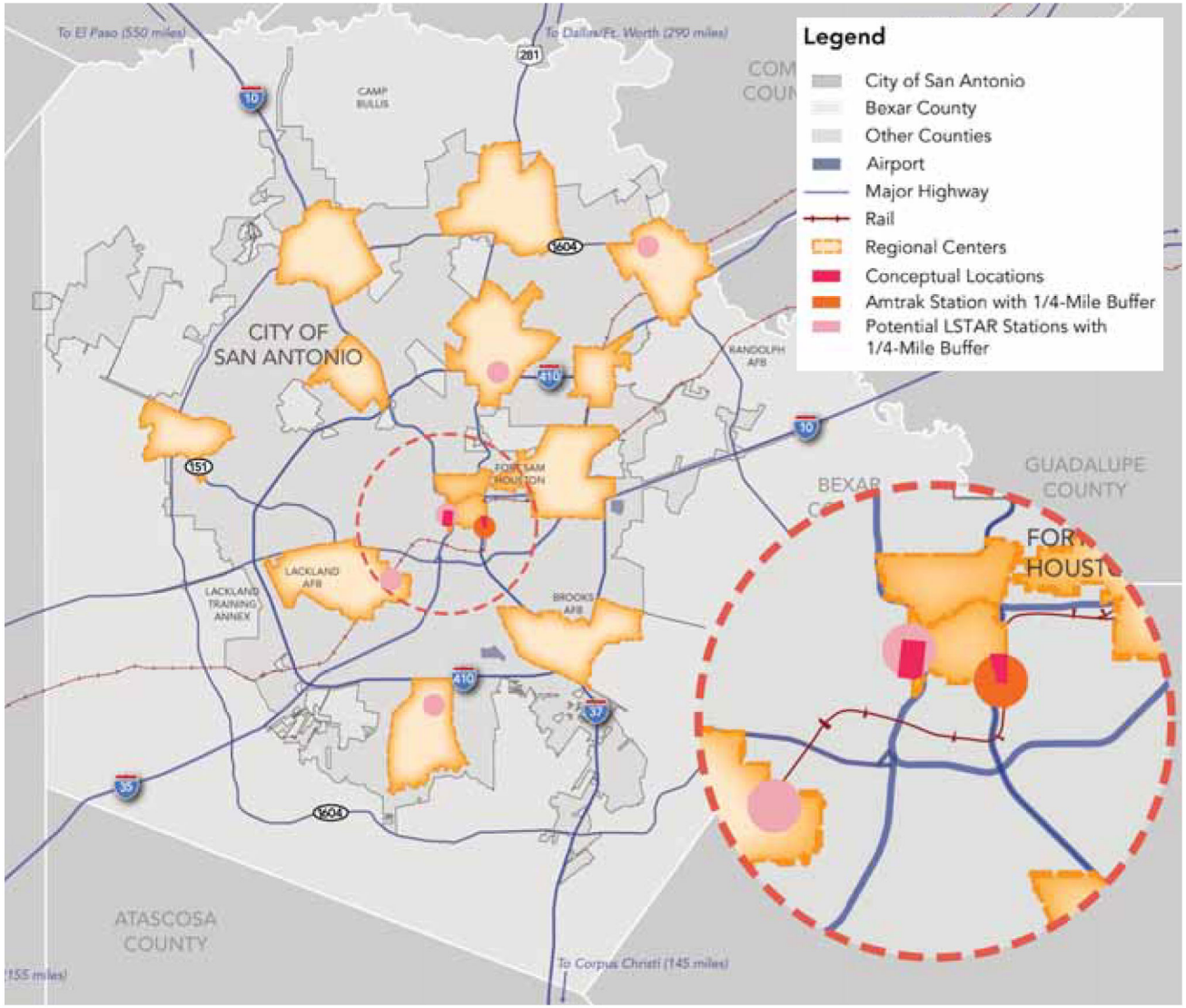
Institutional *Office* *Mixed-Use* *Multi-Family Residential* *Single-Family Residential* *Parking* *Park / Open Space*

PERFORMANCE STANDARDS

Height: 5 to 12-stories or 70 to 150 feet
Massing and Density: 20 to 60 housing units per acre and 2.5:1 to 8:1 Floor Area Ratio (FAR)

Street Level Activation: Transparency along primary street of 60%; transparency along side street of 25%
Connectivity: Maximum block perimeter of 1,200 feet; minimum 150 intersections per square mile

Public Space: Plazas and park spaces totaling 15 acres per 1,000 residents
Parking: On-street and off-street parking (most in structures)



Denver, Colorado (top) and San Diego, California (bottom) both have regional transit and Union Station areas that have helped to stimulate millions of dollars in new development.

POTENTIAL LOCATIONS

The Regional/Commuter Rail place type is appropriate within ¼-mile to ½-mile of commuter and regional rail stations. The map above illustrates areas within ¼-mile of existing Amtrak stations and a potential new regional rail station. The applicability of this place type to the regional centers is addressed at the end of this chapter.

HIGH-CAPACITY TRANSIT CORRIDOR

High-Capacity Transit Corridor

High-capacity transit corridors often have many major stations or transfer points and serve as anchors for higher-density and intensity mixed-use development. These stations are usually served well by mixed-use development in the immediate proximity, along with high-density residential development that transitions out to lower-scale structures and attached single-family housing as development approaches the detached single-family residential neighborhoods. Surrounding neighborhoods along high-capacity transit corridors have great pedestrian and bicycle access to nearby stations. San Pedro and Broadway are high-capacity transit corridors that would be well served by this place type.

MAJOR DETERMINANT

Stations along corridors with premium bus service with dedicated right-of-way, or light rail transit.

RELATION TO VIA TRANSIT SUPPORTIVE DEVELOPMENT TYPOLOGIES

One of three typologies corresponding to VIA's Urban Center typology.

PREDOMINANT LAND USES

Mixed-use housing and office development with retail on a portion of the ground floor, office, multifamily housing and attached single-family housing.

The High-Capacity Transit Corridor can develop around bus rapid transit (BRT) of light rail transit (LRT).

Legend

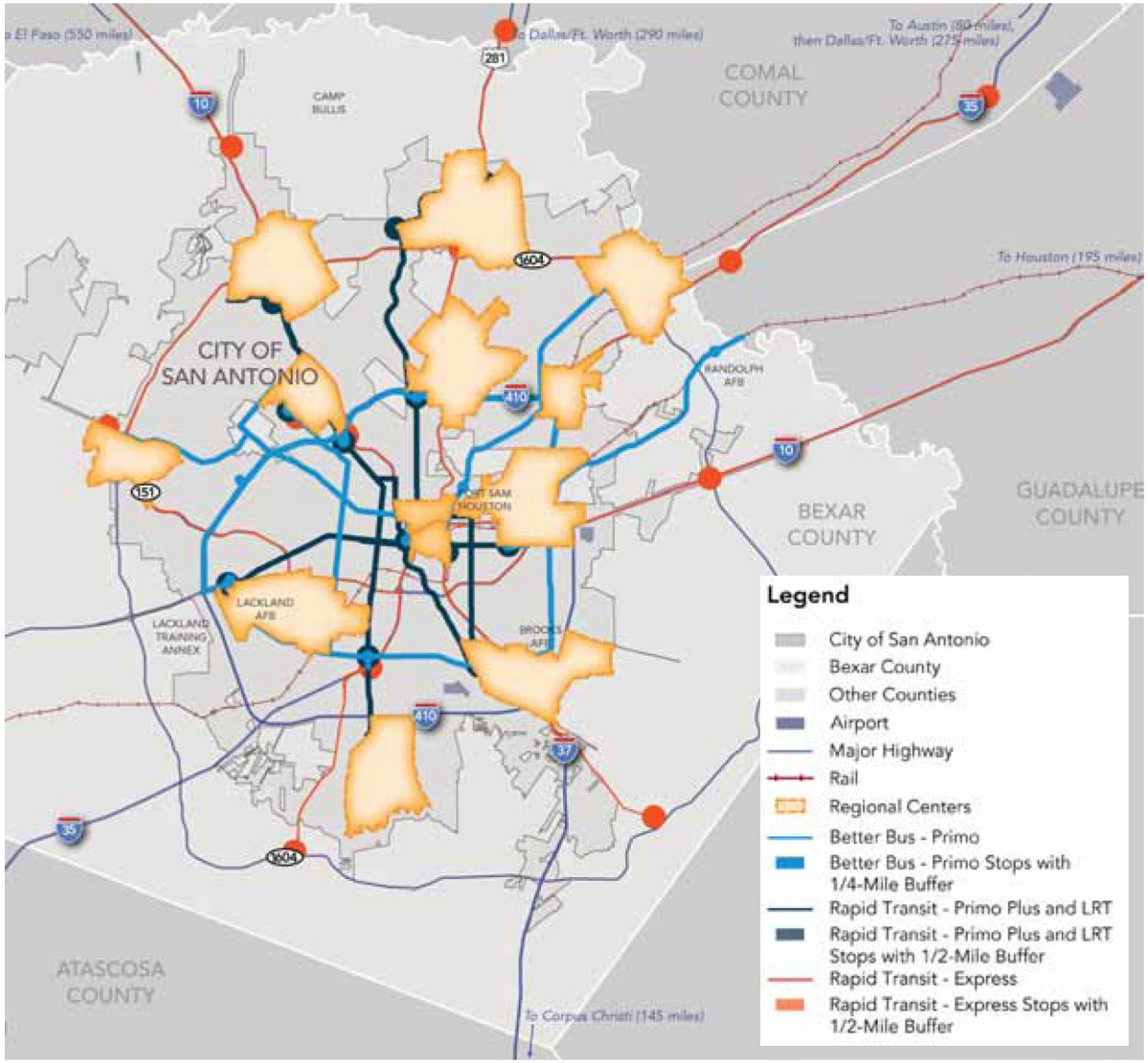
Institutional *Office* *Mixed-Use* *Multi-Family Residential* *Single-Family Residential* *Parking* *Park / Open Space*

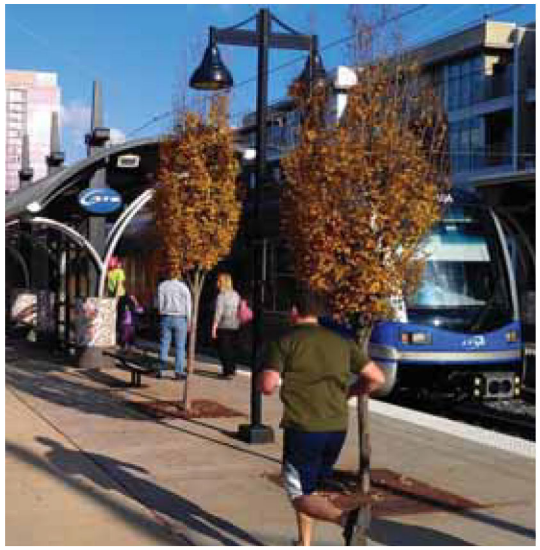
PERFORMANCE STANDARDS

Height: 4 to 8-story development or 55 to 110 feet
Massing and Density: 16 to 40 housing units per acre and 2.5:1 to 5:1 Floor Area Ratio (FAR)

Street Level Activation: Transparency along primary street of 60%; transparency along side street of 25%
Connectivity: Maximum block perimeter of 1,200 feet; minimum 150 intersections per square mile

Public Space: Plazas and park spaces totaling 15 acres per 1,000 residents
Parking: On-street and off-street parking (most in structures)





LRT has anchored development in Charlotte, North Carolina's South End (top) and BRT has catalyzed revitalization of a major corridor in Cleveland, Ohio (bottom).

POTENTIAL LOCATIONS

The High-Capacity Transit Corridor place type is appropriate within ¼-mile to ½-mile of existing and planned Primo bus, Primo Plus bus, light rail and express transit routes. The applicability of this place type to the regional centers is addressed at the end of this chapter.

INSTITUTIONAL/CAMPUS MIXED-USE

Institutional/Campus Mixed-Use

Large institutional or campus-style developments tend to be magnets for people, which helps develop a built-in critical mass that can support a variety of amenities and services. These existing destinations should be enhanced with mixed-use development, higher-density residential land use and open spaces that can serve the surrounding community. Often, public-private partnerships catalyze the transformation of institutions and campuses into true places. If appropriately planned and designed, the institutional core and identity can actually be strengthened. Strong pedestrian and bicycle connections to the surrounding neighborhoods help to stitch the institutional anchor into the surrounding community fabric. Key locations such as Our Lady of the Lake University, Port San Antonio, UTSA, Texas A&M-San Antonio, USAA and the Medical Center are candidates for the institutional/campus mixed-use place type.

MAJOR DETERMINANT

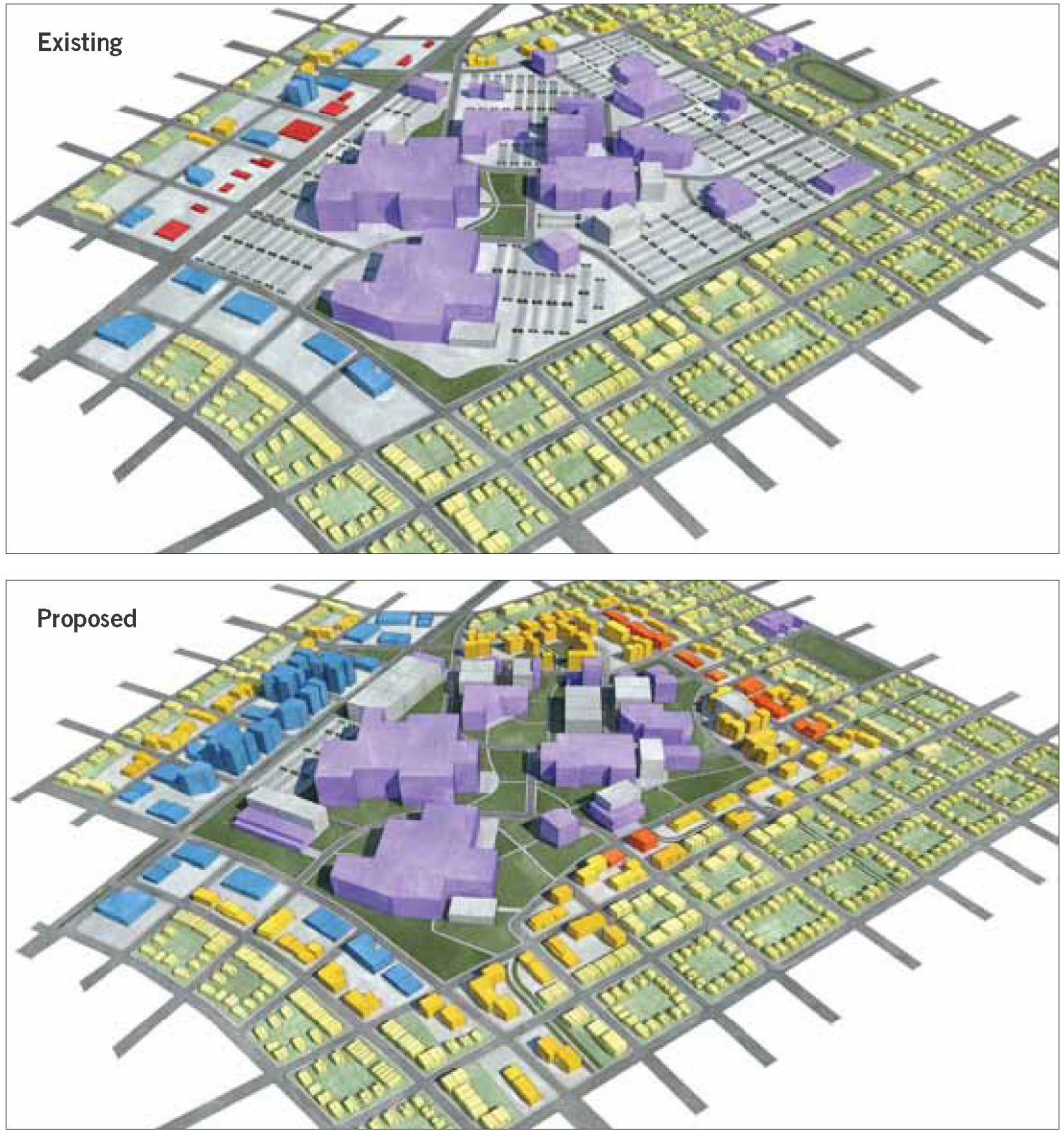
Existing or new institutional/campus anchor.

RELATION TO VIA TRANSIT SUPPORTIVE DEVELOPMENT TYPOLOGIES

One of three typologies corresponding to VIA's Urban Center typology.

PREDOMINANT LAND USES

Medium-density mixed-use development, multifamily housing and attached single-family housing.

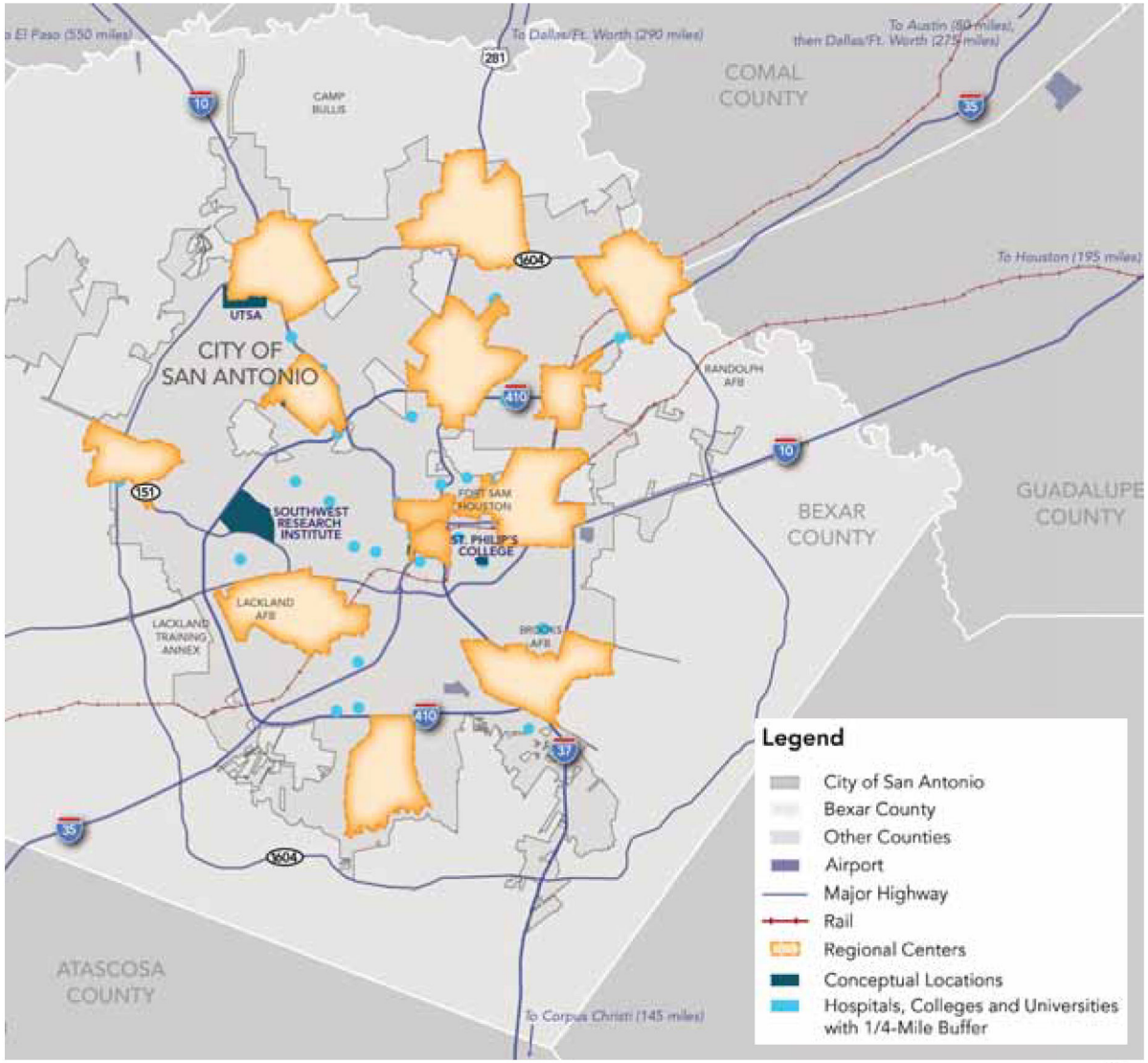


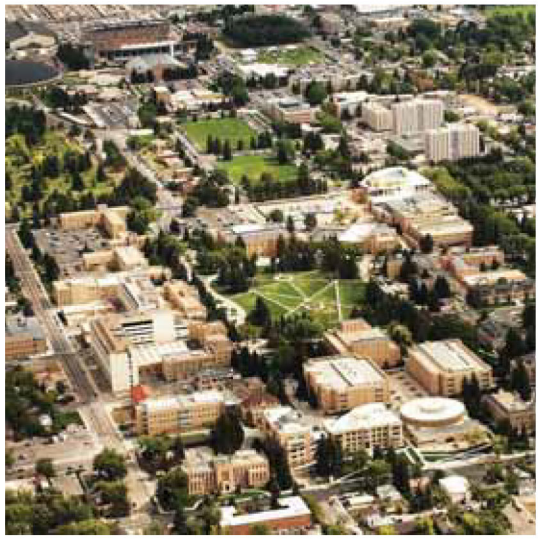
PERFORMANCE STANDARDS

Height: 2 to 5-story development or 35 to 70 feet
Massing and Density: 16 to 30 housing units per acre and 2:1 to 4:1 Floor Area Ratio (FAR)

Street Level Activation: Transparency along primary street of 50%; transparency along side street of 20%
Connectivity: Maximum block perimeter of 1,200 feet; minimum 120 intersections per square mile

Public Space: Plazas and park spaces totaling 15 acres per 1,000 residents
Parking: On-street and off-street parking (most in structures)





Seattle's University District (top) has stitched together the University of Washington with adjacent neighborhoods and the University of Wyoming (bottom) has developed strong open space connections with the surrounding community.

POTENTIAL LOCATIONS

The Institutional/Campus place type is appropriate within ¼-mile to ½-mile of existing and planned hospitals, colleges and universities. The map above illustrates areas within ¼-mile of existing hospitals, colleges and universities. The applicability of this place type to the regional centers is addressed at the end of this chapter.

COMMUNITY CORRIDOR

Community Corridor

The Comprehensive Plan and VIA Vision 2040 Plan share the Community Corridor place type. Community Corridors are commercial areas with limited available land that may surround a transit facility (typically a bus stop). They are focused on an infill development and redevelopment approach to corridor revitalization. They can be transformed over time through adaptive reuse and infill strategies and reinvention of auto-oriented strip malls. Land uses include higher-density residential and commercial mixed-use. Future development should maintain a necessary parking supply and visibility for key retail sites. An improved streetscape should frame higher-intensity uses, mixed with existing retail and new development that better relates to the corridor and its pedestrian realm. Roosevelt, Perrin Beitel, Pleasanton and Zarzamora are potential candidates for the Community Corridor place type.

MAJOR DETERMINANT

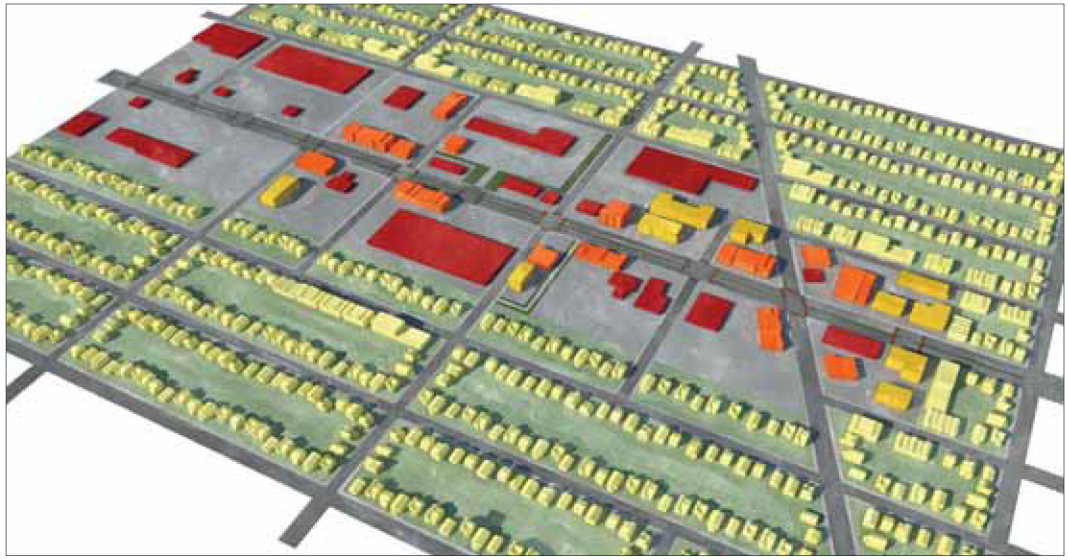
Arterial or collector corridor with adjacent commercial uses and a transit facility.

RELATION TO VIA TRANSIT SUPPORTIVE DEVELOPMENT TYPOLOGIES

Aligns with the Community Corridor typology.

PREDOMINANT LAND USES

Mixed-use development, retail, restaurants and multifamily residential.



Legend

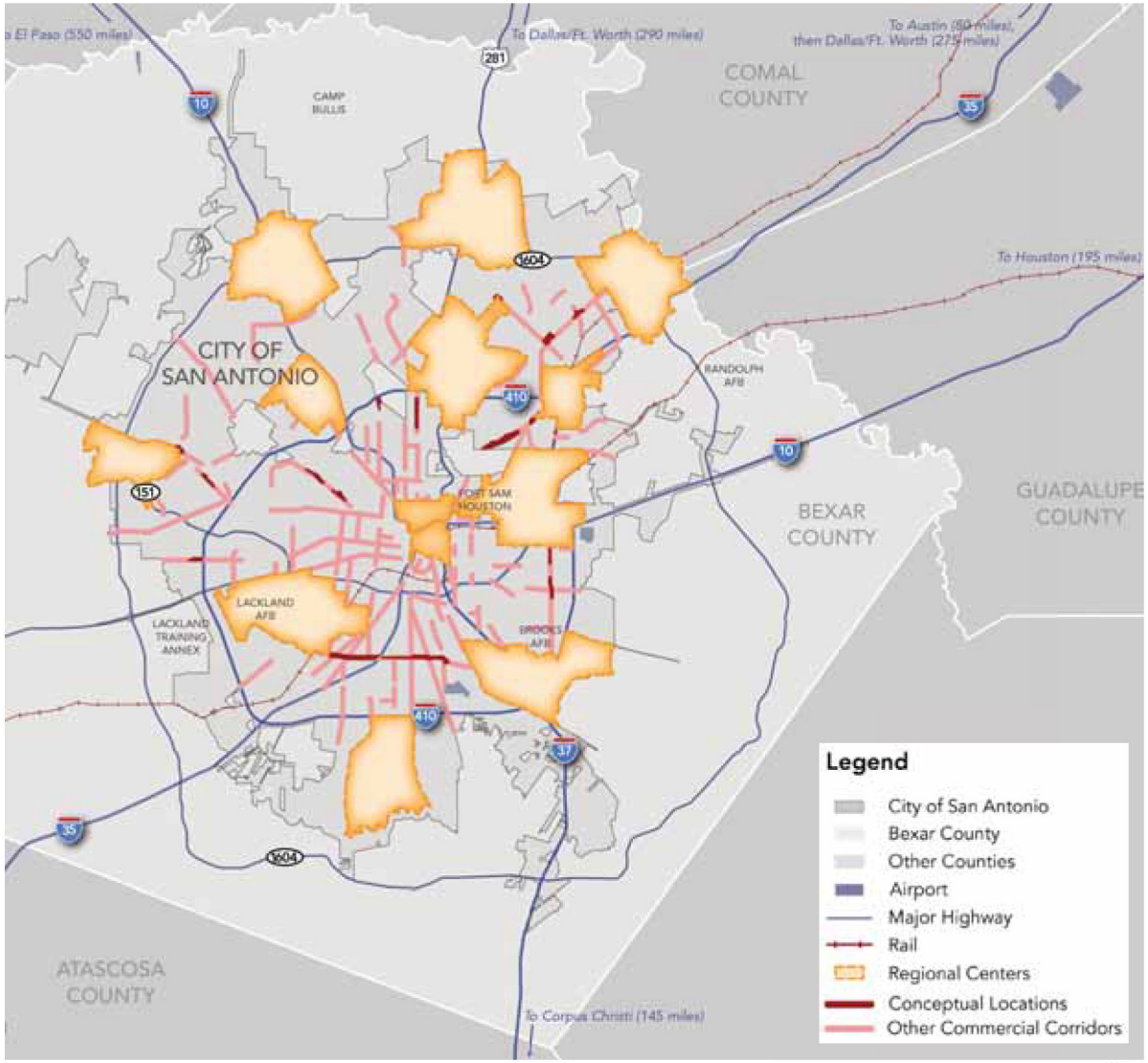
Institutional *Office* *Mixed-Use* *Multi-Family Residential* *Single-Family Residential* *Parking* *Park / Open Space*

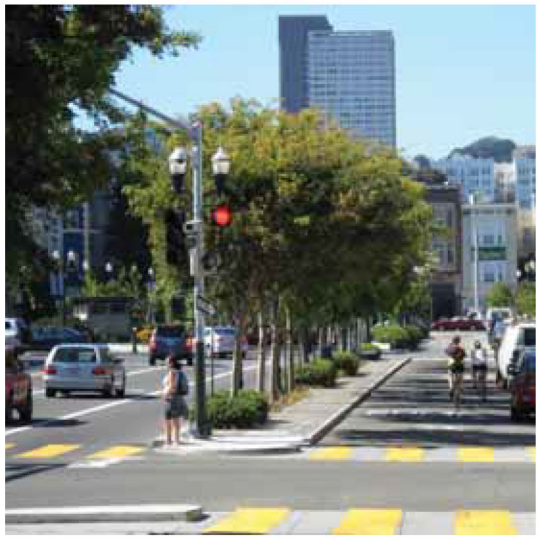
PERFORMANCE STANDARDS

Height: 2 to 5-story development or 35 to 70 feet
Massing and Density: 10 to 30 housing units per acre and 1:1 to 4:1 Floor Area Ratio (FAR)

Street Level Activation: Transparency along primary street of 50%; transparency along side street of 20%
Connectivity: Maximum block perimeter of 1,200 feet; minimum 90 intersections per square mile

Public Space: Plazas and park spaces totaling 10 acres per 1,000 residents
Parking: On-street and off-street parking (mix of surface and structured parking)





Complete street improvements have helped to stimulate new development along major corridors in West Sacramento, California (top: West Capital Boulevard) and San Francisco, California (bottom: Octavia Boulevard).

POTENTIAL LOCATIONS

The Community Corridor place type is appropriate along existing commercial corridors. The map above illustrates the majority of commercial corridors throughout the city. It also highlights several conceptual locations for the Community Corridor place type where the conditions are known to be conducive for this style of development. The applicability of this place type to the regional centers is addressed at the end of this chapter.

NEIGHBORHOOD MAIN STREET

Neighborhood Main Street

The neighborhood main street place type aligns with the VIA Vision 2040 transit-supportive development typology. It is an area within a new or existing neighborhood that has development largely limited to the land immediately adjacent to the transit facility. The neighborhood main street provides a safe, quality walking environment for residents nearby. It's ideal for small commercial and entertainment-based districts that draw local patrons. The mix of uses includes local-serving commercial, small scale mixed-use, smaller multifamily development and attached single-family residential. This place type typically occurs along a short two to four-block linear corridor with a mix of restaurants, small shops and local services. Southtown, Southcross, Flores and Commercial Avenue are examples of the Neighborhood Main Street place type.

MAJOR DETERMINANT

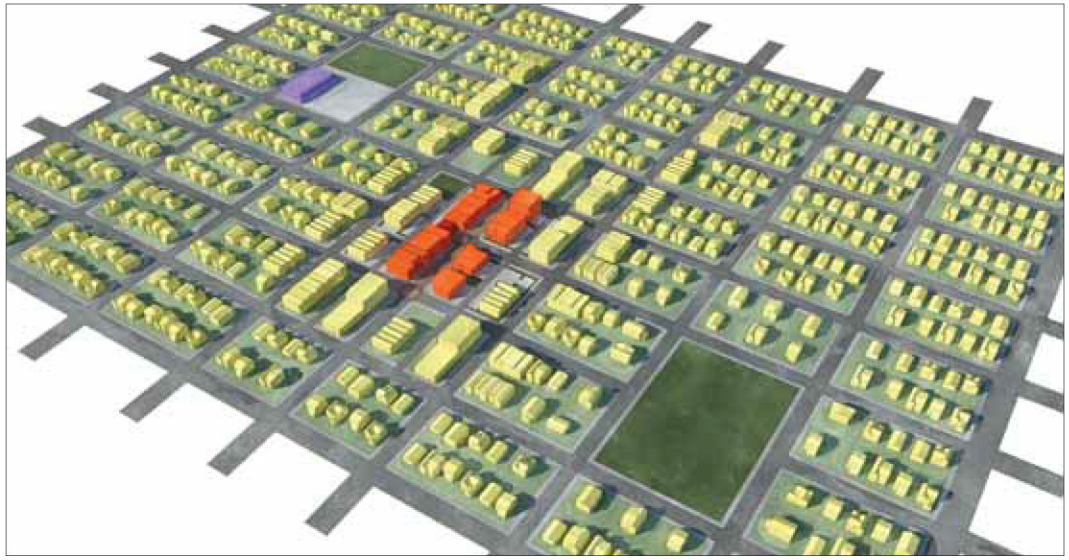
Small commercial node nestled within a single-family neighborhood.

RELATION TO VIA TRANSIT SUPPORTIVE DEVELOPMENT TYPOLOGIES

Aligns with the Neighborhood Main Street typology.

PREDOMINANT LAND USES

Local-serving commercial, small scale mixed-use, smaller multifamily development and attached single-family residential.



Legend

Institutional *Office* *Mixed-Use* *Multi-Family Residential* *Single-Family Residential* *Parking* *Park / Open Space*

PERFORMANCE STANDARDS

Height: 1 to 4-story development or 20 to 70 feet
Massing and Density: 15 to 20 housing units per acre and 1:1 to 3:1 Floor Area Ratio (FAR)

Street Level Activation: Transparency along primary street of 50%; transparency along side street of 25%
Connectivity: Maximum block perimeter of 1,200 feet; minimum 90 intersections per square mile

Public Space: Plazas and park spaces totaling 10 acres per 1,000 residents
Parking: On-street and off-street parking

POTENTIAL LOCATIONS

The Main Street place type is appropriate existing or future neighborhoods and can be as small as an intersection and as large as several blocks long. The applicability of this place type to the regional centers is addressed at the end of this chapter.

San Antonio's South Town (left) is enjoying a renaissance. Existing and new neighborhoods are revitalizing, adding and augmenting main street-style development around the country (above).

TRAIL-ORIENTED DEVELOPMENT

Trails, Parks and Open Space Place Types

These place types are designed to create stronger connections among the city's active and passive recreational and cultural assets by both leveraging and protecting these important community features. Place types in this category include:

- Trail-Oriented Development;
- Community/Regional Park;
- Natural/Historic/ Cultural Asset; and
- Green Neighborhood.

Trail-Oriented Development

The Trail-Oriented Development place type builds on the growing network of trails and pathways throughout San Antonio and the region. Key features include well-connected, multi-use pathways and trails (often along drainage ways or other water features); multiple trail crossings that include both dedicated pedestrian and bike bridges, as well as vehicular bridges with sidewalks; and strong pedestrian and bicycle connectivity with surrounding neighborhoods. The predominant land uses can vary significantly, ranging from single-family residential to medium scaled mixed-use development. Higher-intensity development should be limited to select nodes along the trail and development should generally provide a substantial buffer between structures and the trail. Existing and potential locations for the trail-oriented place type include the Riverwalk, San Antonio Greenway Trails, Alazán and Apache Creeks, the Mission Reach and Leon Creek.

MAJOR DETERMINANT

Multi-use pathway or trail corridor.

PREDOMINANT LAND USES

Varied, but may include some combination of attached and detached single-family residential, small-scale commercial, low to medium-intensity multifamily and mixed-use development.

Legend

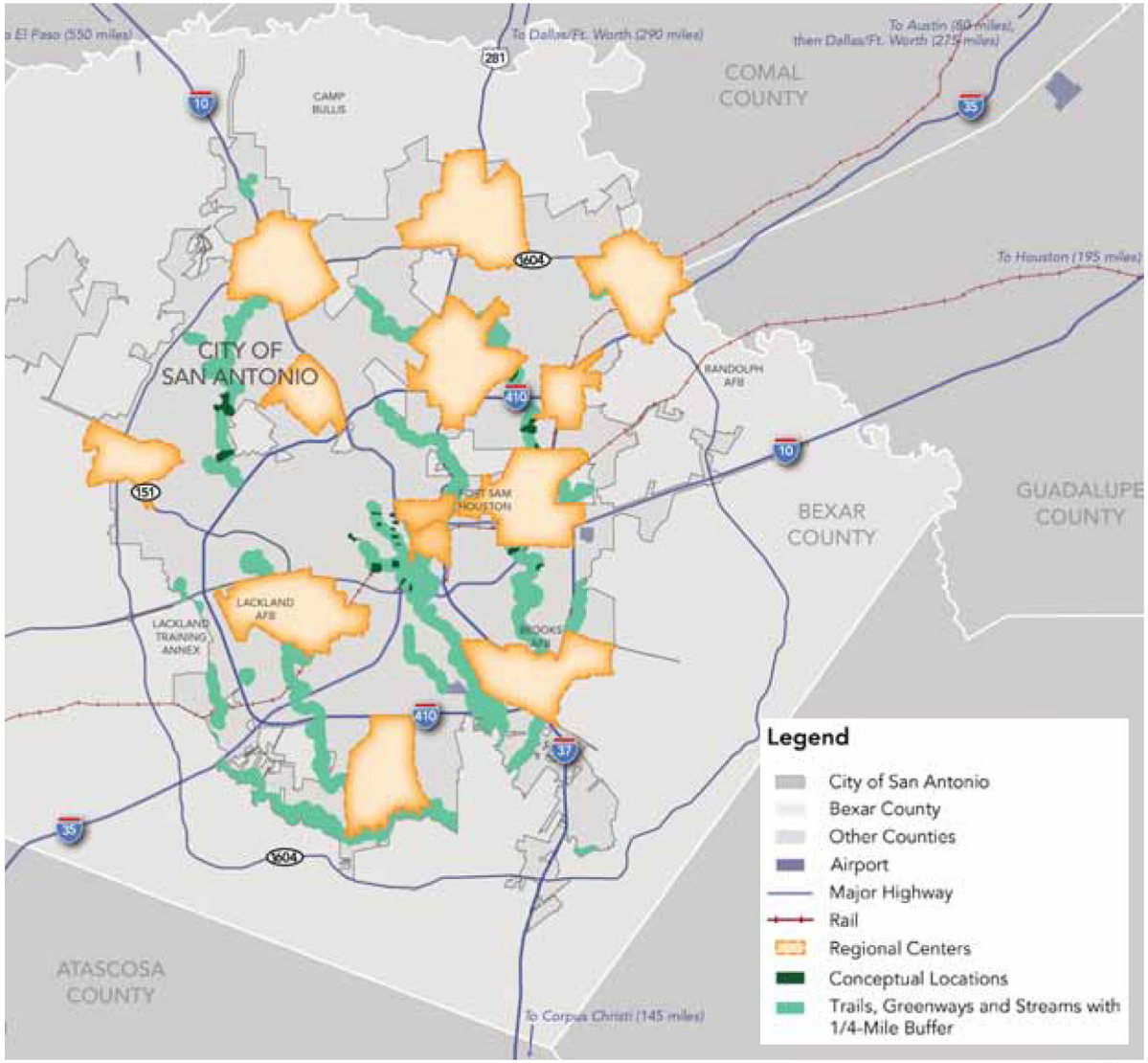
Institutional *Office* *Mixed-Use* *Multi-Family Residential* *Single-Family Residential* *Parking* *Park / Open Space*

PERFORMANCE STANDARDS

Height: 1 to 4-story development or 20 to 70 feet
Massing and Density: 5 to 20 housing units per acre and 0.25:1 to 2:1 Floor Area Ratio (FAR)

Street Level Activation: Transparency along primary street of 50%; transparency along side street of 20%
Connectivity: Maximum block perimeter of 1,200 feet; minimum 90 intersections per square mile

Public Space: Plazas and park spaces totaling 20 acres per 1,000 residents
Parking: On-street and off-street parking



San Antonio is a leader in trails and trail-oriented development. Peer cities that have also helped to pioneer this style of development include Minneapolis, Minnesota (top) and Denver, Colorado (bottom).

POTENTIAL LOCATIONS

The Trail-Oriented Development place type is appropriate along existing or future trails, greenways, streams and other flowlines. The map above illustrates priority locations and all areas within ¼-mile of existing and planned trails, greenways, streams and flowlines. The applicability of this place type to the regional centers is addressed at the end of this chapter.

COMMUNITY/REGIONAL PARK

Community/Regional Park

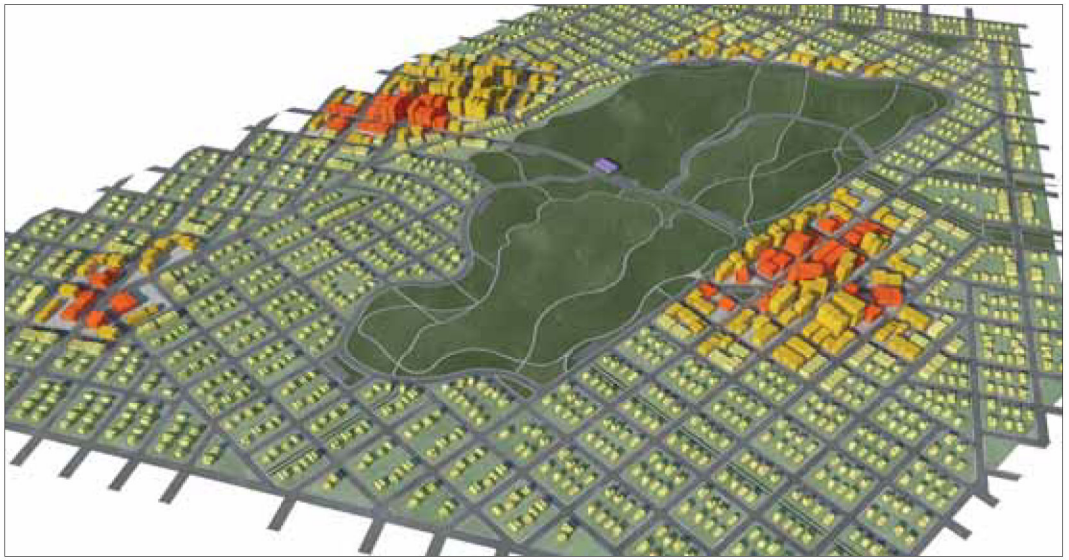
Large community and regional parks provide an amenity that can be better leveraged with medium to higher-intensity development along a portion of their perimeters. A major park entrance is a frequent anchor for the higher-intensity nodes. The predominant land uses in higher-intensity edges include attached single-family residential, medium to high-density residential and small to large-scale mixed-use development. Development should have the main entrance oriented to the park. Mixed-use and commercial development should be buffered from detached single-family housing with smaller scale multifamily development and attached single-family development. Neighborhood pedestrian and bicycle connections should be emphasized. Areas well-suited for this include Brackenridge Park and Phil Hardberger Park.

MAJOR DETERMINANT

A large community or regional park.

PREDOMINANT LAND USES

Detached single-family residential, attached single-family residential medium to high-density residential and small to large-scale mixed-use development.



Legend

Institutional *Office* *Mixed-Use* *Multi-Family Residential* *Single-Family Residential* *Parking* *Park / Open Space*

PERFORMANCE STANDARDS

Height: 2 to 12-story development or 35 to 150 feet

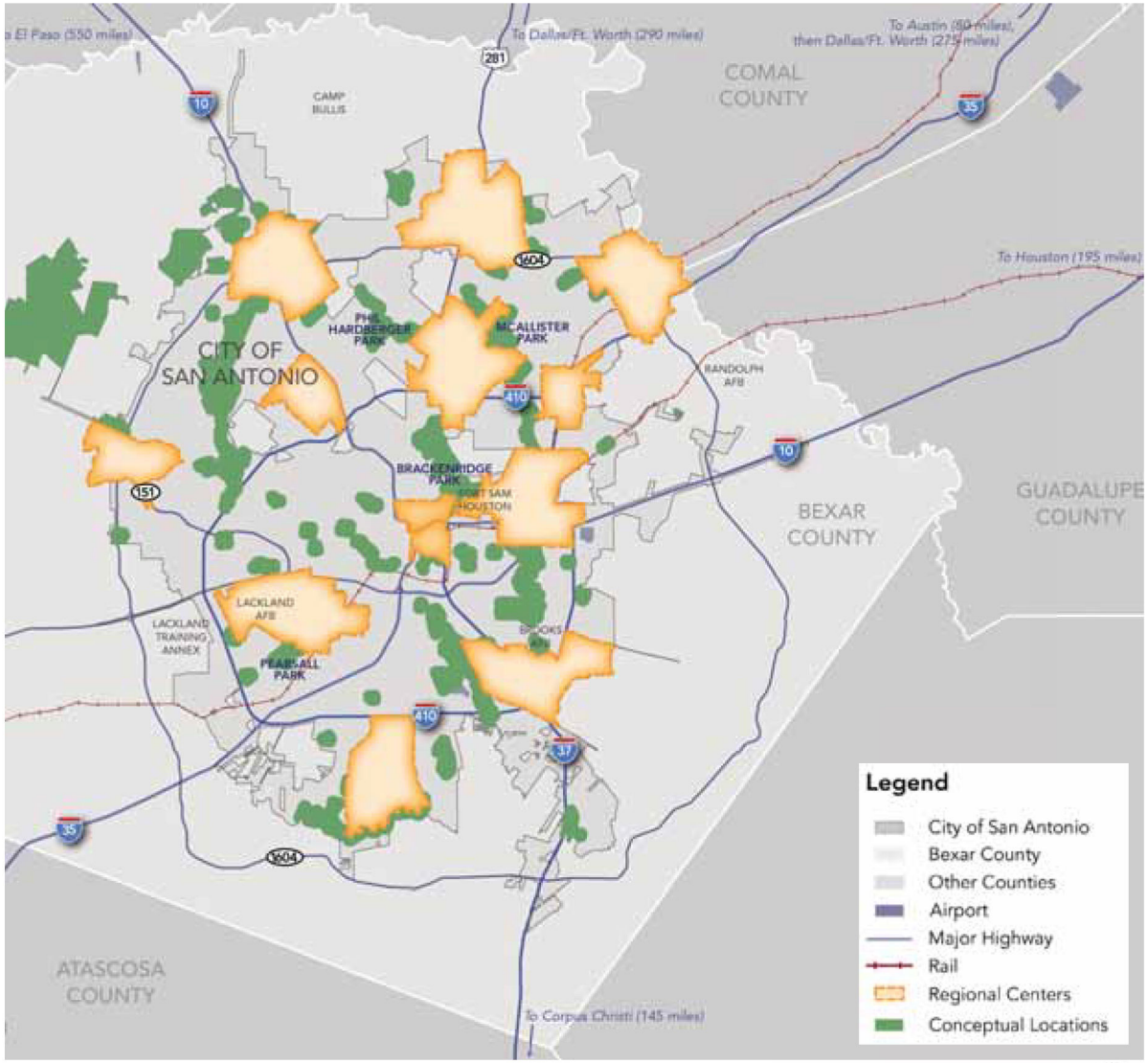
Massing and Density: 10 to 40 housing units per acre and 1:1 to 6:1 Floor Area Ratio (FAR)

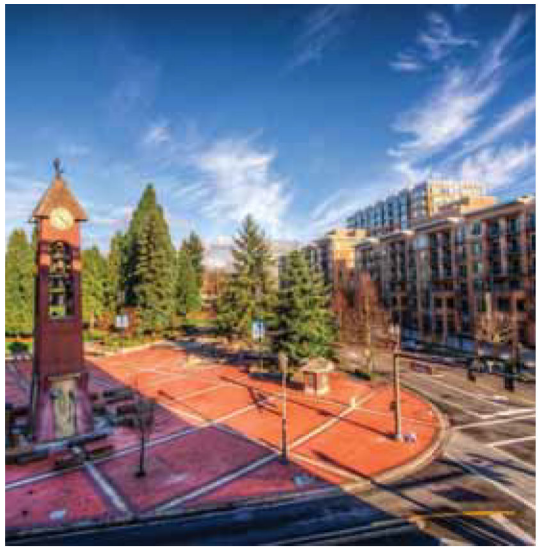
Street Level Activation: Transparency along primary street of 50%; transparency along side street of 20%

Connectivity: Maximum block perimeter of 1,200 feet; minimum 90 intersections per square mile

Public Space: Plazas and park spaces totaling 20 acres per 1,000 residents

Parking: On-street and off-street parking





Vancouver, Washington attracted extensive redevelopment in downtown with Esther Short Park (top) and Denver reconnected with their waterfront with the development of Commons Park along the Platte River (bottom).

POTENTIAL LOCATIONS

The Community/Regional Park place type is appropriate near community and regional parks that are approximately 20 acres or more. The map above illustrates conceptual locations where the conditions are known to be conducive for this place type. It also shows all areas within ¼-mile of existing parks that are 20 acres or larger. The applicability of this place type to the regional centers is addressed at the end of this chapter.

NATURAL/HISTORIC/CULTURAL/ECONOMIC ASSET

Natural/Historic/Cultural Asset

Sometimes the most important aspect of a place has everything to do with what is there now, what happened there or what has been there historically. The Natural/Historic/Cultural Asset place type is intended to respect and preserve such places of importance. Protected assets can include historical structures, special habitat or areas identified as a place of significance. Key features can include a peripheral vehicular road with more limited access through the amenity, neighborhood pedestrian and bike connections, and parking limited to on-street spaces along the perimeter road and small parking lots near a few trailheads. Unlike other place types, the density adjacent to these place types is much lower, scaling up as one moves away from the asset. The surrounding land use context is primarily single-family residential neighborhoods with a character strongly influenced by the natural, historic or cultural asset. Appropriate areas include the World Heritage Corridor (Mission San Antonio de Valero [Alamo] to Mission San Francisco de la Espada), military assets and the San Antonio River Authority Plan (e.g., San Pedro Creeks Project).

MAJOR DETERMINANT

A natural, historic, or cultural asset.

PREDOMINANT LAND USES

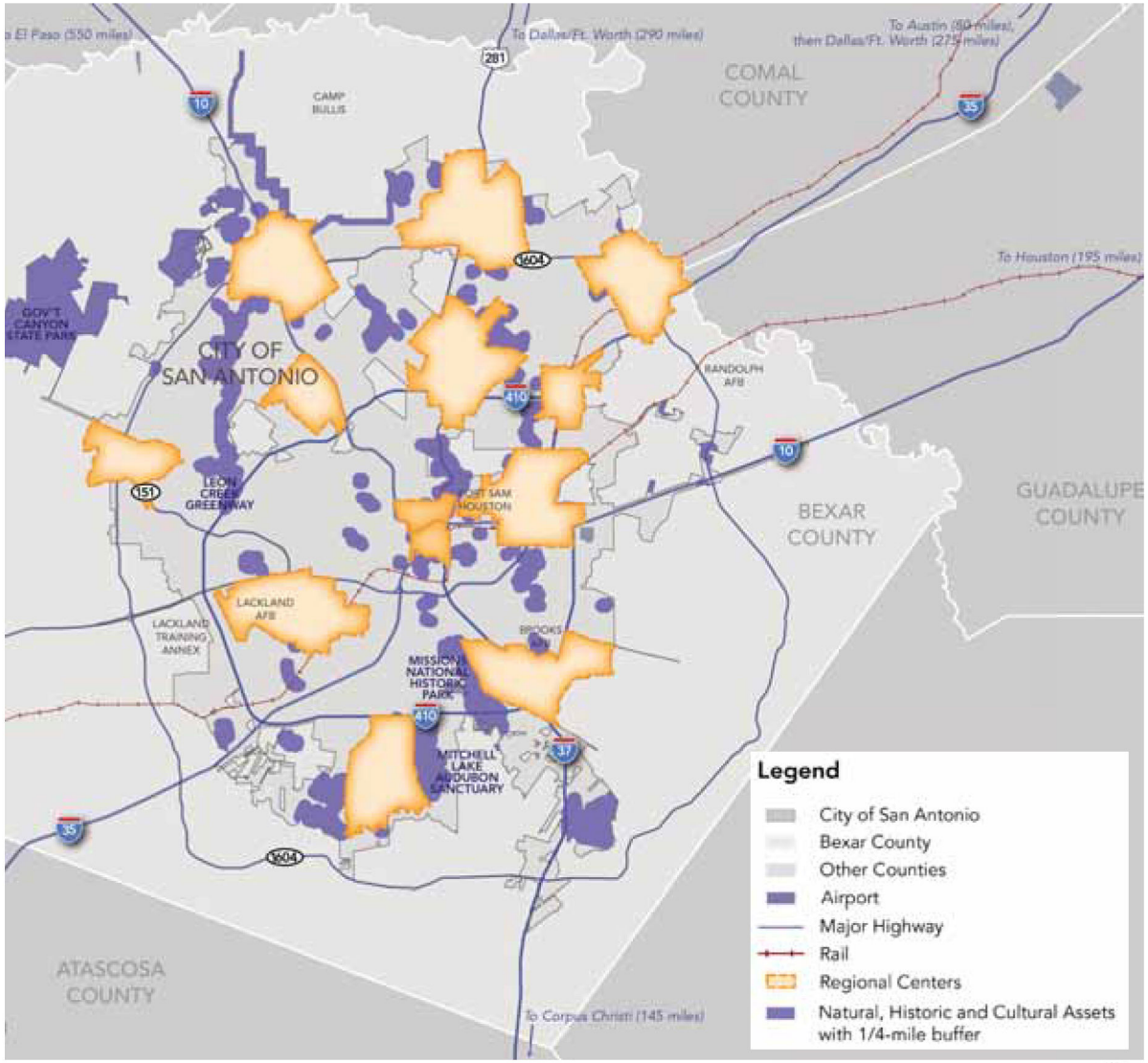
Detached single-family residential with attached single-family residential and multifamily residential farther from the asset.

Legend

Institutional *Office* *Mixed-Use* *Multi-Family Residential* *Single-Family Residential* *Parking* *Park / Open Space*

PERFORMANCE STANDARDS

Height: 1 to 2-story development or 20 to 350 feet
Massing and Density: 2 to 10 housing units per acre and 0.25:1 to 1:1 Floor Area Ratio (FAR)
Street Level Activation: Transparency along primary street of 35%; transparency along side street of 15%
Connectivity: Maximum block perimeter of 1,600 feet; minimum 75 intersections per square mile
Public Space: Plazas and park spaces totaling 20 acres per 1,000 residents
Parking: On-street and off-street parking



The World Heritage Corridor missions inspired the creation of the Natural/Historic/Cultural Asset place type. Conservation easements, open space buffers and low density development can help preserve and respect community assets.

POTENTIAL LOCATIONS

The Natural/Historic/Cultural Asset place type is appropriate adjacent to those assets. The map above shows areas within ¼-mile of natural, historic and cultural assets around San Antonio with an area of five acres or larger. The applicability of this place type to the regional centers is addressed at the end of this chapter.

GREEN NEIGHBORHOOD

Green Neighborhood

The Green Neighborhood place type typically involves new development focused on optimizing sustainability. Key features include the use of natural drainage ways, a network of connected pedestrian and bicycle trails, designated areas for urban agriculture, alternative energy production, localized utilities and site orientation for passive lighting, heating and cooling. The land use mix is mostly compact single-family residential with the potential for a mixed-use node. There are often a variety of small and larger park-like open spaces within the development. It's common to use sustainable materials and technology such as solar panels, small wind turbines and low impact development practices. Potential locations for this could include Mahncke Park and areas outside Interstate Loop 410 in the southern portion of the city.

MAJOR DETERMINANT

New residential neighborhood development focused on sustainability and low impact development.

PREDOMINANT LAND USES

Compact single-family residential with some mixed-use and/or smaller scale commercial.

Legend

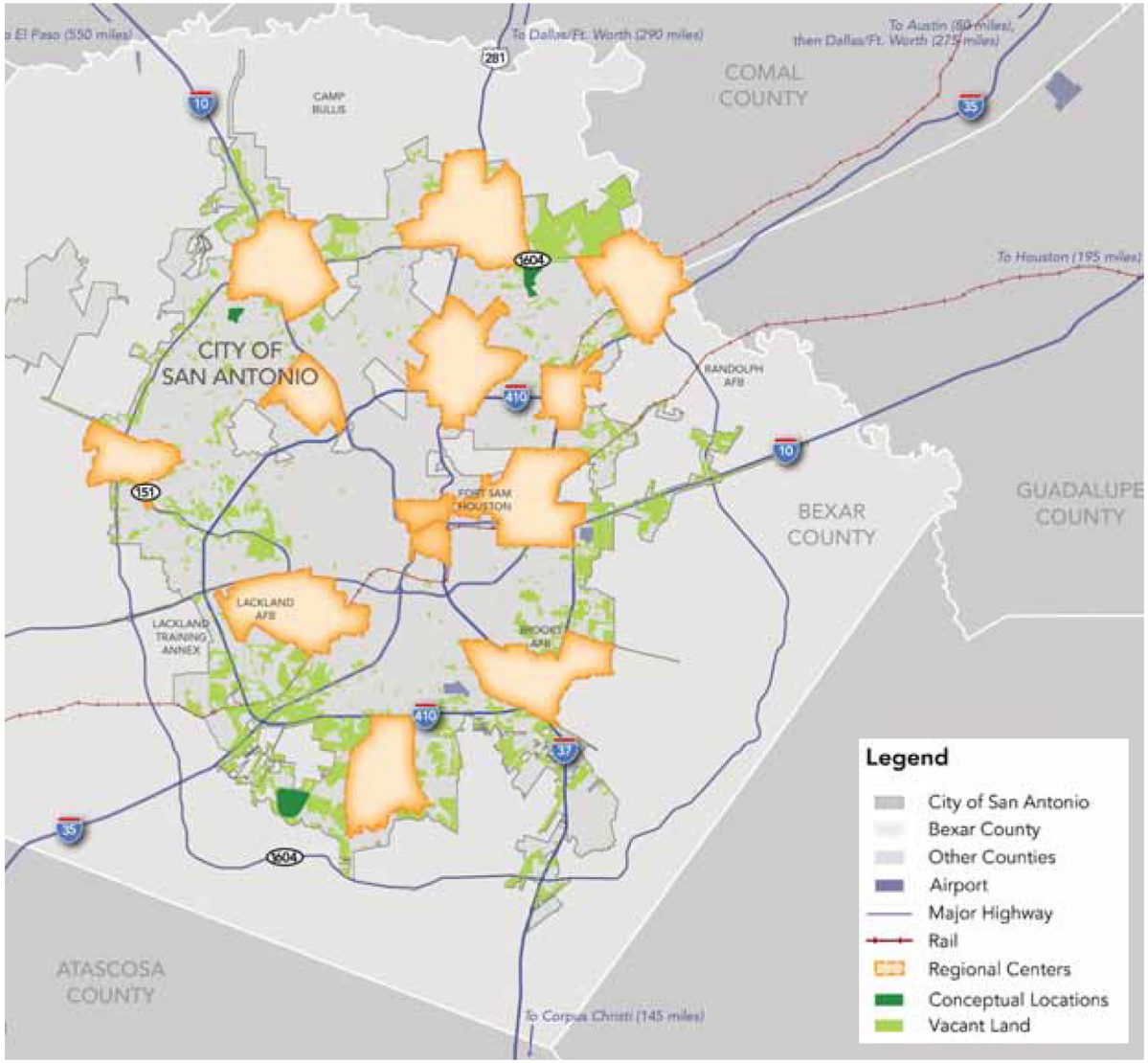
Institutional *Office* *Mixed-Use* *Multi-Family Residential* *Single-Family Residential* *Parking* *Park / Open Space*

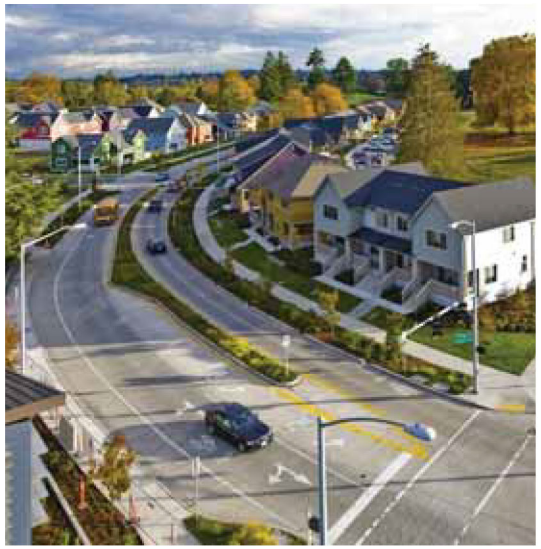
PERFORMANCE STANDARDS

Height: 2 to 4-story development or 30 to 65 feet
Massing and Density: 10 to 20 housing units per acre and 0.5:1 to 2:1 Floor Area Ratio (FAR)

Street Level Activation: Transparency along primary street of 25%; transparency along side street of 15%
Connectivity: Maximum block perimeter of 1,000 feet; minimum 90 intersections per square mile

Public Space: Plazas and park spaces totaling 15 acres per 1,000 residents
Parking: On-street and off-street parking





Seattle's High Point neighborhood includes green homes and an integration of low impact development (LID).

POTENTIAL LOCATIONS

The Green Neighborhood place type is all vacant areas of the city and especially in areas with natural open space or more sensitive landscapes. The map above depicts the majority of vacant parcels in San Antonio with an area of five acres or larger. The applicability of this place type to the regional centers is addressed at the end of this chapter.

SHOPPING MALL RETROFIT

Adaptive Reuse Place Types

Adaptive Reuse place types offer solutions for areas still in transition that will need to evolve to remain relevant either in their current use or change to a new use. The place types in this category include:

- Shopping Mall Retrofit;
- Office Park Infill; and
- Industrial Site Reuse.

Shopping Mall Retrofit

San Antonio has many large, suburban shopping malls—many were built decades ago and have outlived their intended use. Most were designed to focus on an interior corridor and they are surrounded by a "sea" of parking lots. However, razing a shopping mall for new development can be cost prohibitive. Adaptive reuse of large shopping mall spaces can help activate the available indoor spaces and the surrounding neighborhoods. Adaptive reuse can also integrate new transportation connections and placemaking amenities.

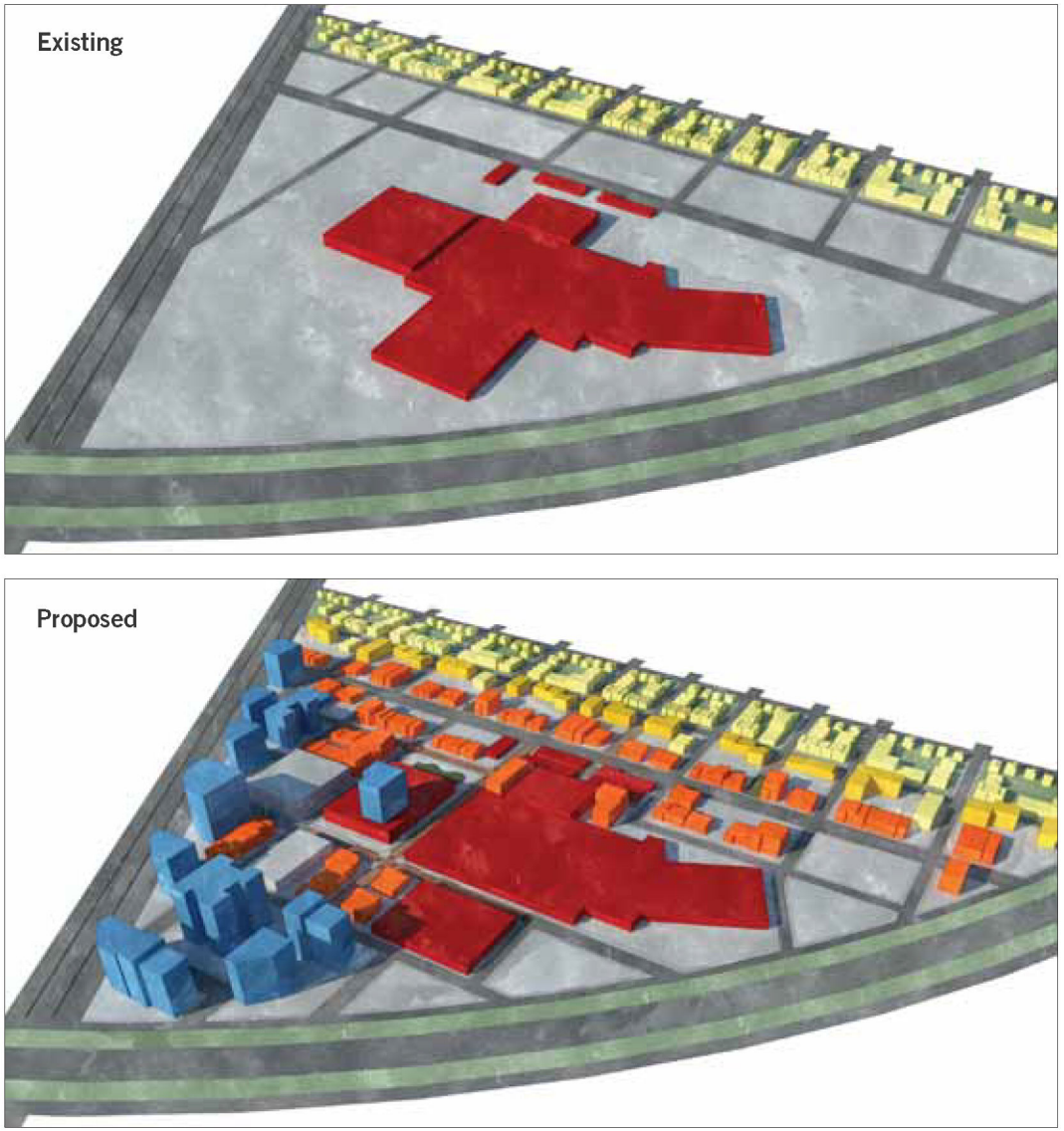
Introducing new connections through a shopping mall site can help break the mall into smaller pieces with double-loaded exterior commercial corridors. This helps orient storefronts outwardly, reintroducing the surrounding street grid into the site and creating better pedestrian and bicycle connections to the surrounding community. The land use mix includes commercial, medium to high-density residential, office and civic uses. Parking solutions can include on-street parking, parking structures and retaining downsized parking lots. Rackspace is a well-known example of this place type, and South Park Mall could be better used with this place type designation.

MAJOR DETERMINANT

Shopping mall revitalization or reuse.

PREDOMINANT LAND USES

Retail, mixed-use, medium to high-density residential, office and civic uses.

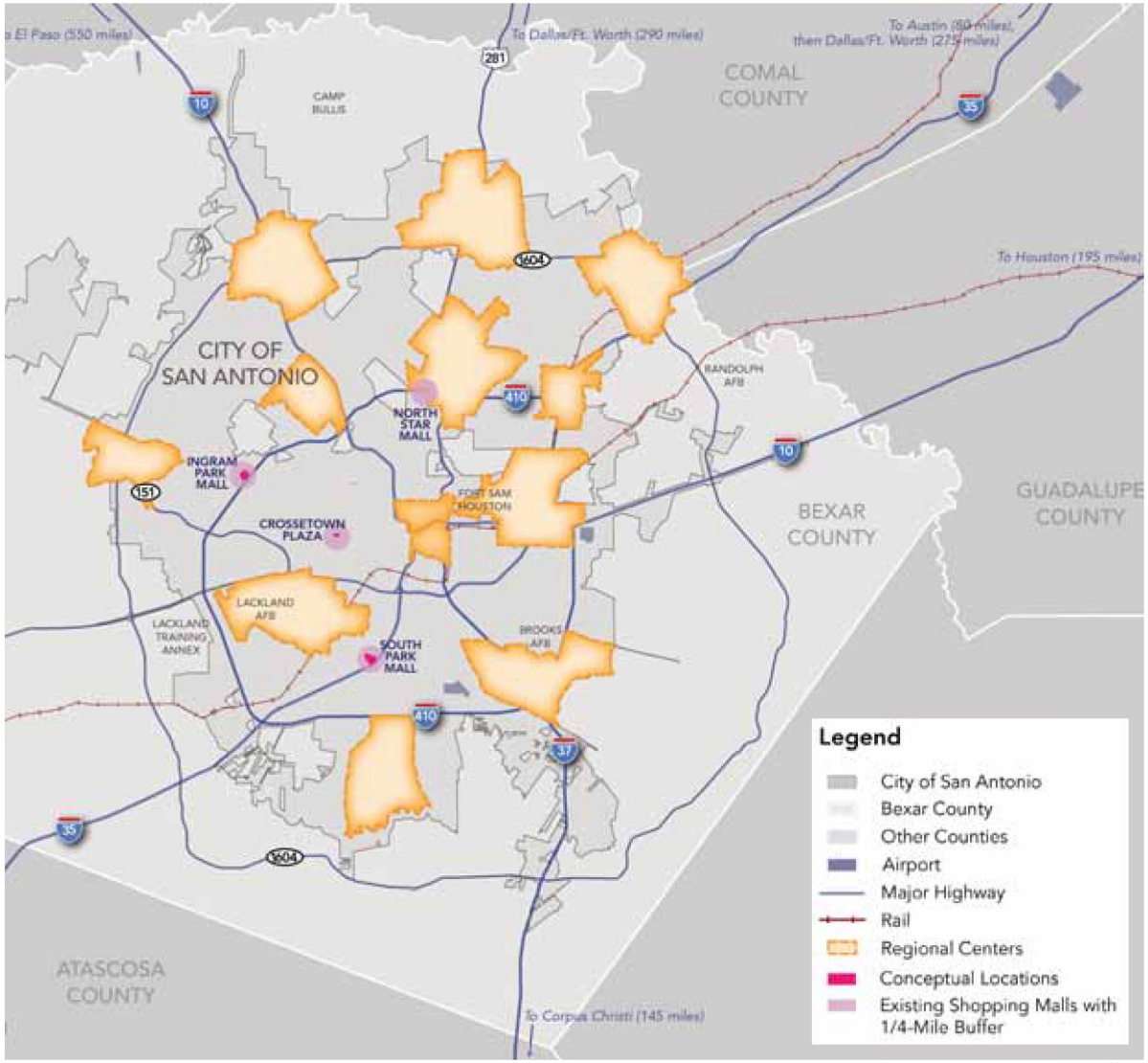


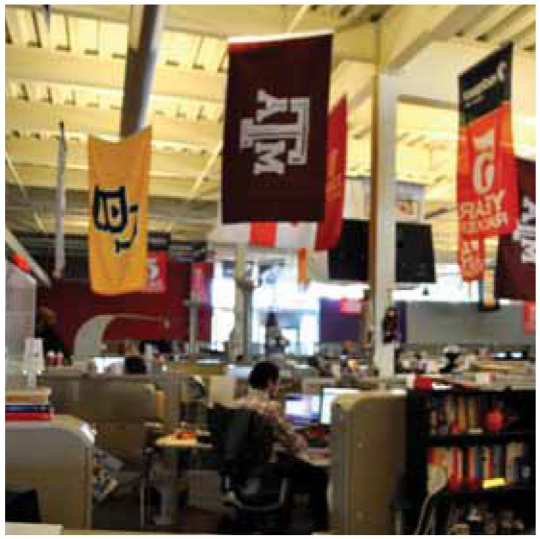
PERFORMANCE STANDARDS

Height: 2 to 8-story development or 35 to 110 feet
Massing and Density: 15 to 40 housing units per acre and 2:1 to 5:1 Floor Area Ratio (FAR)

Street Level Activation: Transparency along primary street of 50%; transparency along side street of 20%
Connectivity: Maximum block perimeter of 1,200 feet; minimum 90 intersections per square mile

Public Space: Plazas and park spaces totaling 10 acres per 1,000 residents
Parking: On-street and off-street parking (most in structures)





Stonebridge at Potomac Town Center (top) is an updated shopping mall that includes apartment lofts, shopping and dining, and public spaces. Rackspace in San Antonio (bottom) converted an old shopping mall to their offices.

POTENTIAL LOCATIONS

The Shopping Mall Retrofit place type is appropriate at under-performing and outdated shopping malls. The map above shows areas within ¼-mile of existing shopping malls. It also shows several conceptual locations for the place type where the conditions are known to be conducive for this style of development. It should be noted that several shopping malls are currently performing well. The applicability of this place type to the regional centers is addressed at the end of this chapter.

OFFICE PARK INFILL

Office Park Infill

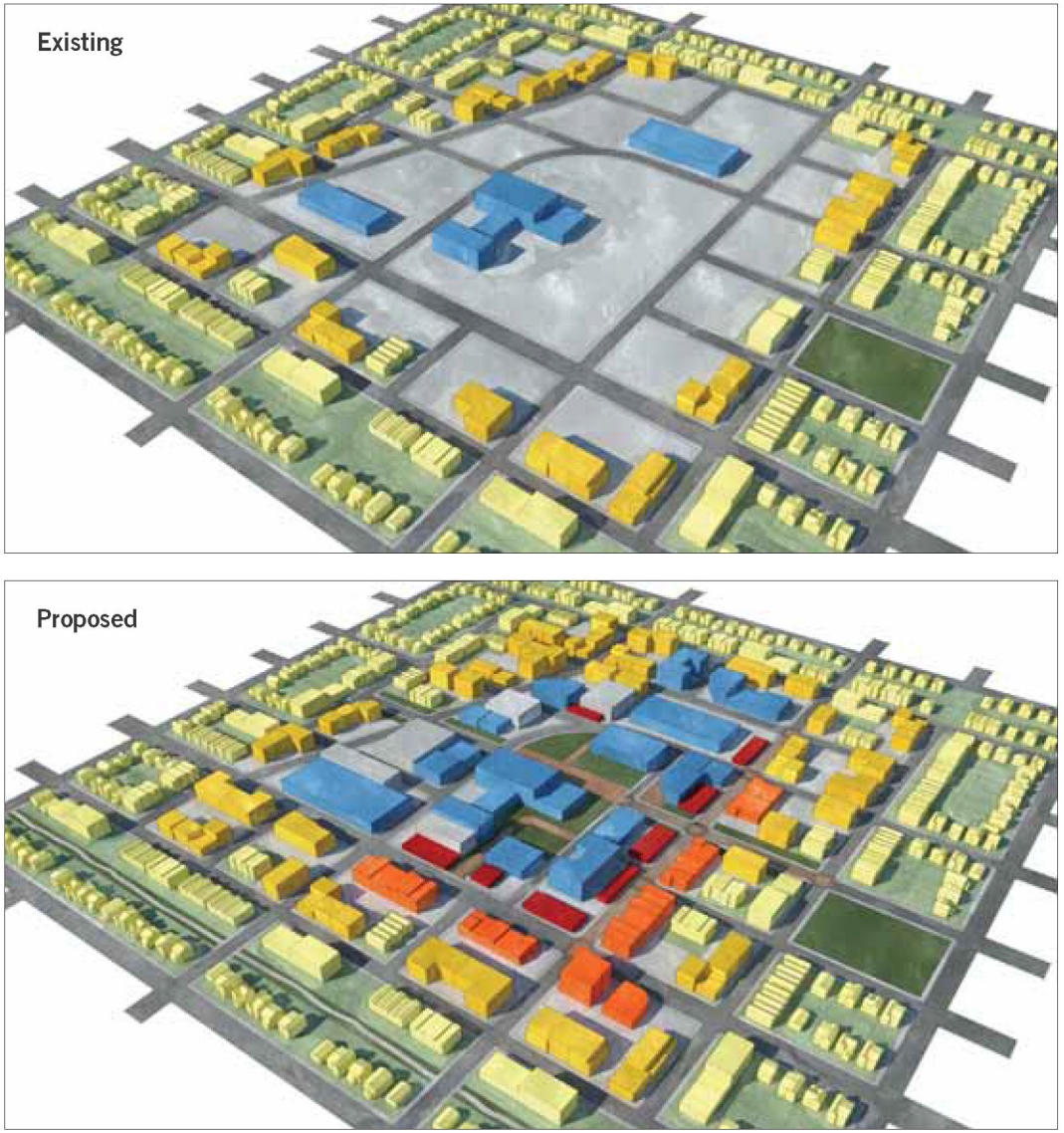
Suburban-style office parks with large buildings surrounded by parking are very similar to shopping malls in that they are heavily auto-oriented and are frequently focused inward. Infill development should be used to create a denser, more compact development pattern, with integrated plazas and park spaces. Pedestrian connectivity to and within the site should be a major objective. The mix of uses includes office buildings with a better pedestrian level experience, medium to high-density residential and parking garages wrapped with retail and additional office space. Multi-use/commercial edges bring more activity into the immediate area and help to better integrate office parks with other surrounding land uses. Potential locations include Port San Antonio, Brooks and the Westover Hills area.

MAJOR DETERMINANT

Suburban-style office park.

PREDOMINANT LAND USES

Office, mixed-use, commercial, and limited multifamily and attached single-family residential.



PERFORMANCE STANDARDS

Height: 2 to 10-story development or 35 to 130 feet

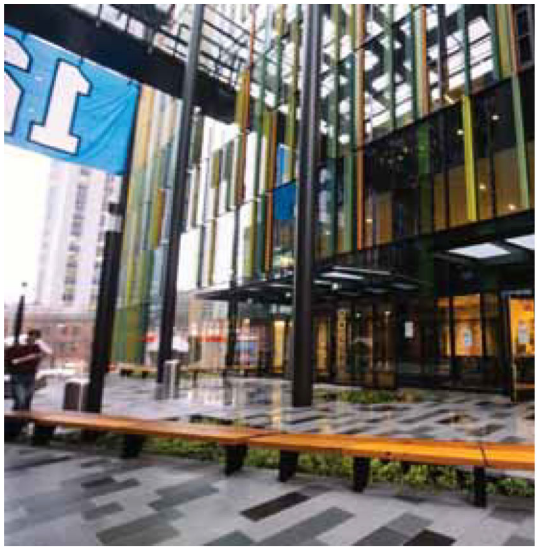
Massing and Density: 15 to 40 housing units per acre and 2:1 to 6:1 Floor Area Ratio (FAR)

Street Level Activation: Transparency along primary street of 40%; transparency along side street of 20%

Connectivity: Maximum block perimeter of 1,200 feet; minimum 90 intersections per square mile

Public Space: Plazas and park spaces totaling 5 acres per 1,000 residents

Parking: On-street and off-street parking (most in structures)



POTENTIAL LOCATIONS

The Office Park Infill place type is most appropriate in suburban-style office parks with large surface parking lots and underutilized landscaped areas. The applicability of this place type to the regional centers is addressed at the end of this chapter.

Top companies - Google (left), Amazon (top right) and Facebook (bottom right) are making major efforts to update their traditional office campuses with more urban amenities and mixed-use development.

INDUSTRIAL SITE ADAPTIVE REUSE

Industrial Site Adaptive Reuse

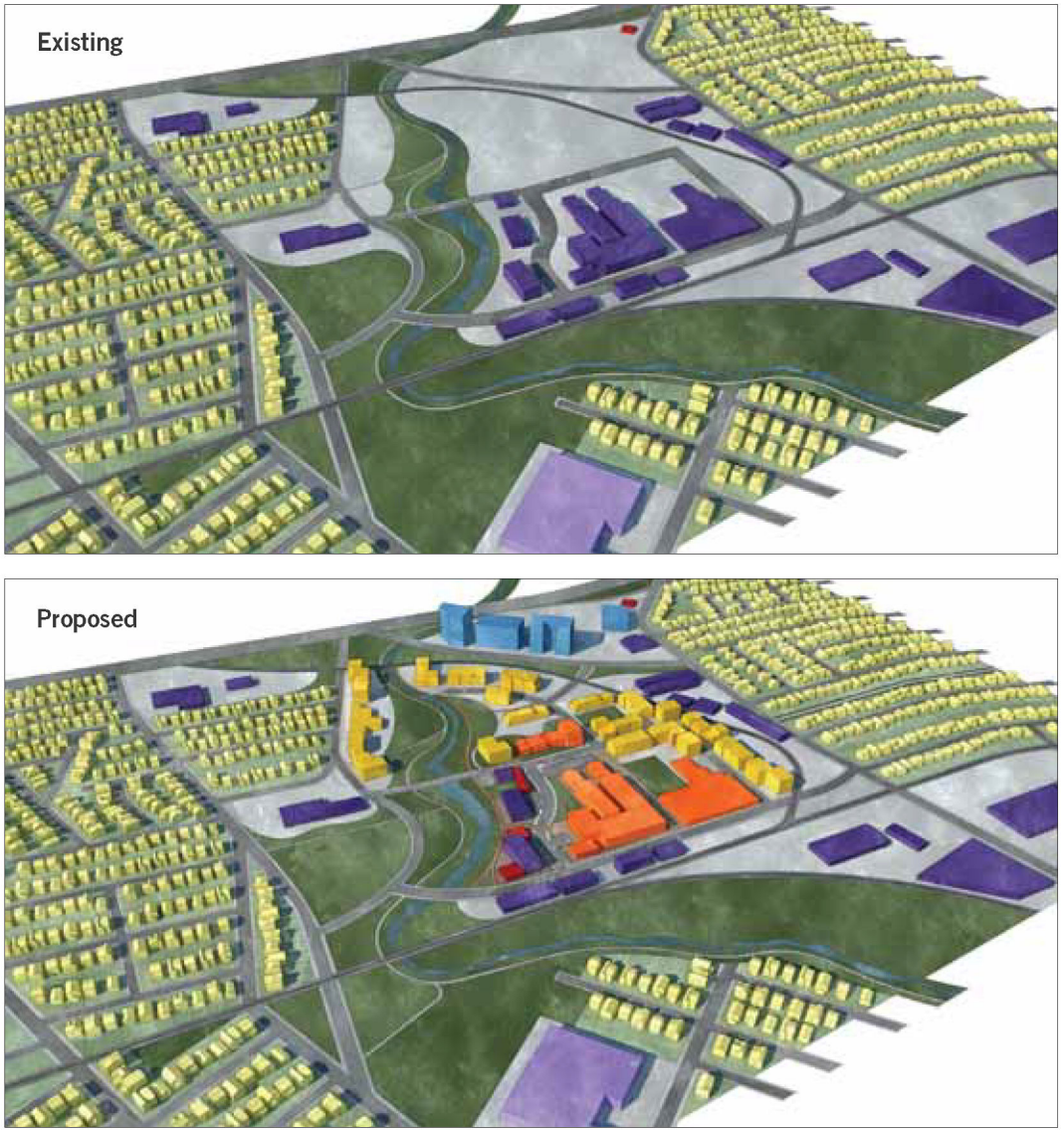
Industrial sites are some of the least activated "places" in urban areas. Buildings typically have deep setbacks, are single-story with high ceilings, few windows and specific intended uses (such as storage or manufacturing) that are associated with very few people for the size of the buildings and properties they occupy. Industrial Site Adaptive Reuse can breathe new life into underutilized and vacant industrial sites. Key features include adaptive reuse of older industrial buildings, great public spaces and introducing a large mix of uses. High-density residential is often brought into the sites, mixing old structures and infrastructure with new uses, and integrating ample landscaping and pedestrian connectivity throughout the site. This place type is well represented by the Pearl Brewery and Blue Star developments. Future areas where this place type would work include the Lone Star Brewery site.

MAJOR DETERMINANT

Larger industrial site.

PREDOMINANT LAND USES

Multifamily residential, office, retail, mixed-use and light manufacturing.



PERFORMANCE STANDARDS

Height: 2 to 8-story development or 35 to 110 feet
Massing and Density: 15 to 40 housing units per acre and 2:1 to 5:1 Floor Area Ratio (FAR)

Street Level Activation: Transparency along primary street of 40%; transparency along side street of 15%
Connectivity: Maximum block perimeter of 1,200 feet; minimum 90 intersections per square mile

Public Space: Plazas and park spaces totaling 10 acres per 1,000 residents
Parking: On-street and off-street parking

POTENTIAL LOCATIONS

The Industrial Site Adaptive Reuse place type is appropriate at abandoned, under-performing and outdated industrial sites. The applicability of this place type to the regional centers is addressed in the next section of this chapter.

San Antonio's Pearl Brewery (left and bottom right) has been reinvented as a mixed-use neighborhood, employment center and entertainment destination. Berkeley's Fourth Street neighborhood (top right) contains a combination of reused industrial structures and new development.

Place Types and Regional Centers

Regional Centers represent one of the major opportunities for developing the place types presented in this chapter. The following table summarizes where place types are appropriate within the 13 regional centers. It also indicates the place types that should be encouraged and incentivized in specific regional centers. The following symbols are included in the table:

— not appropriate or recommended

A appropriate

! recommended

POTENTIAL PLACE TYPES IN REGIONAL CENTERS

	CBD	Medical Center	Midtown	Brooks
Regional/Commuter Rail	!	—	—	—
High-Capacity Transit Corridor	A	!	A	!
Institutional/Campus Mixed-Use	A	!	!	A
Community Corridor	—	A	A	!
Neighborhood Main Street	—	—	—	—
Trail-Oriented Development	A	—	A	A
Community/Regional Park	!	—	A	—
Natural/Historic/Cultural/ Economic Asset	(	—	A	A
Green Neighborhood	—	—	—	!
Shopping Mall Retrofit	—	—	—	A
Office Park Infill	A	A	A	—
Industrial Site Adaptive Reuse	!	—	!	A

Texas A&M -SA / Toyota	UTSA	Stone Oak	Highway 151 / Loop 1604	Greater Airport Area	NE I-35 / Loop 410	Rolling Oaks	Fort Sam Houston	Lackland AFB / Port San Antonio
A	—	—	—	!	—	A	—	A
A	A	!	!	!	!	A	A	A
!	!	—	A	—	—	—	A	!
—	A	A	!	!	!	A	!	—
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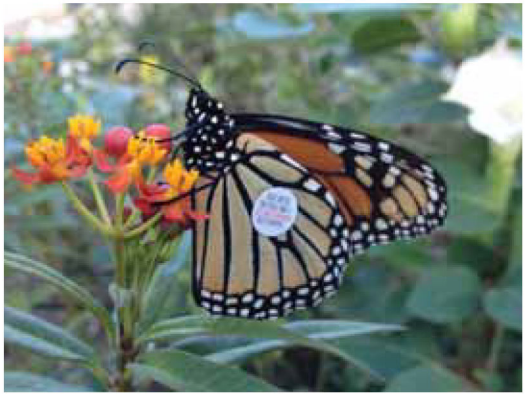
ONLY
E GRAYSON
400
300



SECTION 3

Plan Elements

Chapter 7: Plan Element Framework

Previous sections of this Plan have outlined our city's Background and Vision (Section 1) and the Plan Framework (Section 2). Section 3: Plan Elements, provides an outline and discussion of each of the nine plan elements that make up our Comprehensive Plan.

Each of these nine elements was guided by a Plan Element Working Group (PEWG) composed of community leaders and representatives of relevant City departments, partner organizations, utilities, colleges and universities, neighborhoods and advocacy groups.

Although many of these elements are typically found in other cities' Comprehensive Plans, ours also needed to move beyond the standard to reflect our city's unique context and history. The inclusion of the Historic Preservation and Cultural Heritage (HPCH) and Military (M) elements do just that.

The nine elements in our plan are:

- Growth and City Form (GCF)
- Transportation and Connectivity (TC)
- Housing (H)
- Jobs and Economic Competitiveness (JEC)
- Community Health and Wellness (CHW)
- Public Facilities and Community Safety (PFCS)
- Natural Resources and Environmental Sustainability (NRES)
- Historic Preservation and Cultural Heritage (HPCH)
- Military (M)

Organization

Each of the following nine chapters focuses on one of the elements listed above. The chapter provides an overview of major issues and challenges specific to each element as well as a set of goals and policies to set the direction for how our community will respond to and address the challenges before us.

We begin each chapter with an introduction to the element and proceed by addressing key questions relating to that element's policies and goals. Wherever possible, we include examples of case studies that demonstrate best practices that have been proven successful in other urban areas.

Plan Element Goals and Policies are defined as follows:

- Goals are the broadest statements of the community's desired long term direction. Goals describe ideal end-state conditions in 2040 that would result if the Plan is successfully implemented.
- Policies are statements that identify the community's preferred actions in relation to the Plan Element Goals.

Each element's goals and policies reflect and support the City's Vision and the key Guiding Principles that characterize the City's ambitions for the next 25 years.

Chapter 8: Growth and City Form (GCF)

San Antonio is the seventh largest city in the country, having surpassed Dallas as the second largest city in Texas in the early 2000s. With an estimated population of 1.44 million, our population and employment growth is expected to continue.

The Alamo Area Metropolitan Planning Organization forecasts that 1.1 million more people with over a half million jobs and households will locate in Bexar County by 2040.

The main reason for our continued growth is our existing assets. San Antonio is home to the primary employment centers and economic engines of the greater San Antonio-New Braunfels metropolitan statistical area. We're a major tourist center, attracting about 25 million leisure visitors every year. We're business-friendly with an affordable tax environment. The City's municipally-owned utilities provide affordable, reliable energy and water with innovative approaches to long-term service provision—a draw for many businesses. We combine our business environment with a relatively low cost of living and average home price. And our strong cultural heritage creates a unique sense of place, demonstrated in our historic neighborhoods and our well-known public spaces. Clearly, San Antonio offers a high quality of life that will attract employers and employees.

Growth presents a tremendous opportunity for San Antonio—if we plan for it now.

Growth will create demand for a range of housing types and locations and generate a variety of jobs requiring a variety of employment sites. Aligning the City's land use plan—how, where and what we develop—with market demand and consumer and employer preferences will allow us to: expand and diversify housing; preserve existing neighborhoods and natural resources; generate more economic activities; achieve our land use objectives; and help address issues such as affordable housing, income/economic segregation and health and wellness.

The City is proactively addressing the challenges and opportunities of growth. Some of the issues we face include changing demographic trends, effectively utilizing our land supply and development patterns to ensure we develop sustainably and remaining economically competitive so all of our residents may experience and benefit from a high quality of life.

The Growth and City Form (GCF) goals and policies were developed in response to five key areas of questions about what we would like our city to be in the future.

1 Strategic Infill

Where in the city should higher-intensity growth be directed and encouraged?

Given the decreasing land supply in traditionally high-growth areas (north and northwest), which other areas of the city can sustain additional growth?

How can the City shift development momentum to areas that traditionally have had limited demand?

GCF Goal 1

Higher-density uses are focused within the city's 13 regional centers and along its arterial and transit corridors.

GCF Goal 2

Priority growth areas attract jobs and residents.

San Antonio has a polycentric economic geography with multiple large concentrations of employment and housing throughout the city (e.g., Downtown, the Medical District, military bases, etc.). These concentrations are largely located along major transportation routes, making living near work easier for many residents. But a polycentric pattern also creates challenges.

The composition of the economy (mainly based on healthcare, the military, education and tourism) and the dispersed employment nodes have scattered both employment opportunities and economic assets across the city, so much so that it is often difficult to distinguish the concentrations. This dispersion is compounded by the lack of master plans that could guide development and attract employment. Without coordinated growth plans, it is difficult to leverage these assets to their potential and create the spin-off economic activities that can result from clustered businesses in similar industries.

The City has identified priority growth areas that include regional employment centers, mixed-use centers, areas of high land capacity for growth, underserved areas of the city, land near the City Center, premium transit corridors and key arterial corridors.

Our efforts will focus on 13 regional centers—nine existing and four emerging. We can strategically focus employment and housing growth in those centers, aligning land use planning and infrastructure investment with economic development. These centers can offer a wide variety of employment-oriented uses, sites, infrastructure and amenities. Some also can be developed into vibrant, mixed-use areas that offer the live-work-play environments that are attracting development and business nationally, but are lacking in San Antonio. Continued employment and housing growth in these centers will also keep commute times low and offer more opportunities for transportation connections.

San Antonio also has a number of large, transformational development projects that can change the direction of growth within the city. Four of these sites are Hemisfair, Brooks City Base, Port San Antonio and the Texas A&M University-San Antonio campus. Developing these sites can catalyze development in areas of the city where recent growth has been relatively limited. Even more significantly, these transformational projects are in areas with an ample supply of developable land. The large size, limited number of landowners and public and political backing for site development can result in model projects that will serve as a guide for future growth in the city.

There are additional opportunities for sustainable infill development within the urban core as well. Inside Loop 410, a large number of commercial and industrial zoned parcels are vacant or underutilized. This indicates that site uses and buildings are out-of-date and don't meet current market demand. Allowing these areas to be redeveloped with a wider mix of uses, including housing, can help revitalize those areas and improve the existing neighborhoods around them.

We can create policies and infrastructure that shift growth to areas within the city limits, which will encourage more compact, mixed-use, walkable communities. Compact forms of development allow for denser population and employment, more efficient land use and less sprawl.

Pedestrian-scaled development with the proper mix of uses can bolster a city's growth by catalyze further development and attracting new residents and visitors.

San Antonio's environmental assets provide an opportunity for investment in neighborhood amenities and infrastructure (including green infrastructure) that will facilitate higher-density development and create urban centers.

Development Strategies for Connected Growth: Portland, Oregon

The Portland Metro region in Oregon is perhaps the most frequently cited example of an American metropolis working to reduce its dependence on the automobile by creating more walkable neighborhoods, connected destinations and transportation choices. Portland has an elected and effective regional government (Metro) that coordinates urban growth in 24 cities and parts of three counties. Metro's urban growth management plans include: *Urban Growth Boundaries*, a set of policies that protects fertile farmland and open space by limiting the development of sprawling suburbs and exurbs through strict controls over location of growth; *Parking Management* which allows developers and the housing market to determine parking ratios, saving them money and supporting Metro's 2040 Growth Concept for mixed-use areas near light rail; and *Transportation Choices* which includes 5 major light rail extensions.

Portland's array of public policies that manage urban growth have created more compact forms of development, offering financial, mobility, environmental and livability benefits for the Metro area.

2 Strategic Expansion

How can San Antonio utilize annexation strategically?

Should San Antonio grow (more so) into other counties?

How should San Antonio address development in unincorporated Bexar County?

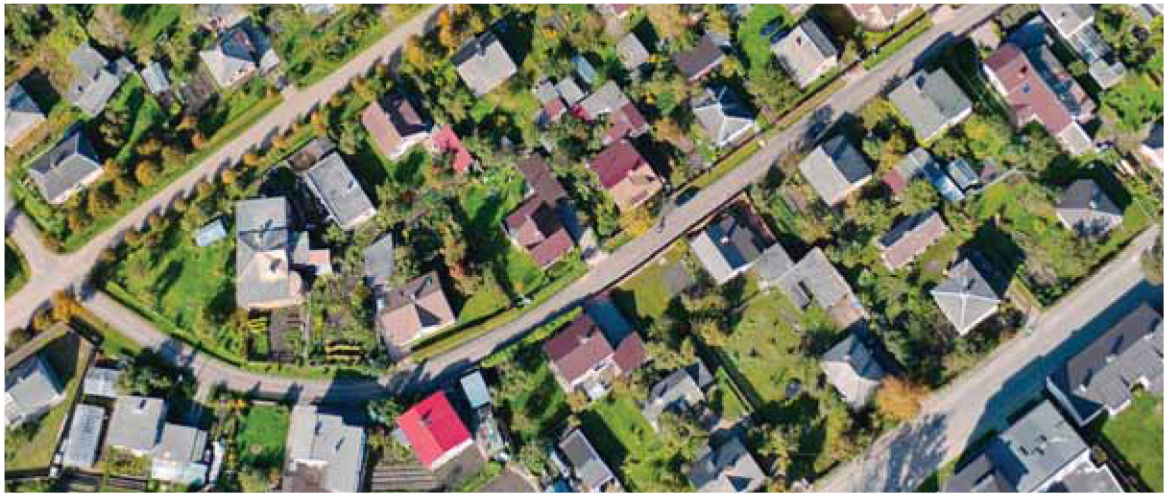
What is the City's role in providing infrastructure for new development in greenfield and annexation areas?

Should the City and SAWS direct growth through water provision policies and decisions?

How should the provision of services from SAWS, CPS Energy, VIA and others be connected to the City's growth plans?

GCF Goal 3

Strategic annexation benefits existing and future residents and does not burden the City fiscally.



Neighboring jurisdictions present challenges for new development and the corresponding new infrastructure in these expanding communities.

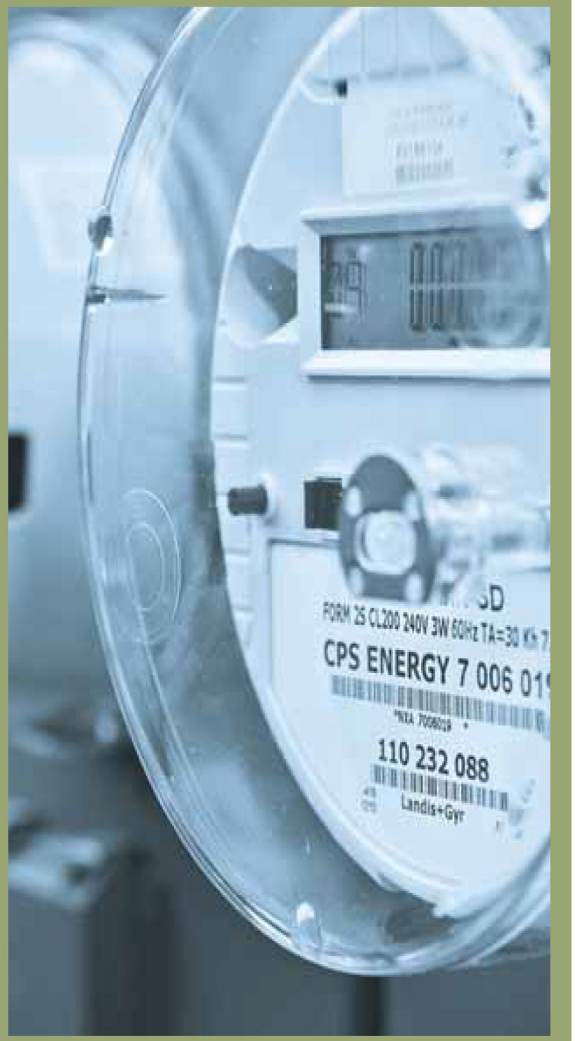
As of 2013, San Antonio covered 467 square miles with a population density of 3,017 people per square mile. Historically, San Antonio has had no major physical or political constraints to outward expansion. However, that's no longer the case. The city boundary and ETJ have effectively reached the northern edge of Bexar County as well as the boundaries of several other jurisdictions including Boerne, Bulverde, Converse, Live Oak, Schertz and Universal City. On the west, the city has begun to enter Medina County. This continued outward expansion has led to resources being spread across a large geographic area, and to a perception among some residents that there has been disinvestment in the inner portions of the city.

San Antonio can annex unincorporated areas of Bexar County. However, changes to the State's annexation law in 1999 made it very difficult for the City to continue to annex new areas. Nonetheless, development continued in unincorporated Bexar, which put a strain on both the County and the City.

Bexar County's 2012 analysis showed that, like other Texas counties, it has limited capability to fund and provide acceptable urban-level services to new development. The County cannot adopt zoning, perform residential building inspections or raise enough revenue through bond issuance to offset infrastructure and service costs. Development that occurs in the county, within the city's extraterritorial jurisdiction (ETJ), is subject to San Antonio's subdivision and ordinance, but there are no mechanisms for applying or enforcing the City's other development regulations. In some cases, these developments have created unforeseen impacts because the City has such limited control of the area.

Do SAWS and CPS impact City Form?

The availability of utility services allows new development to occur around the city's edges. However, until recently, San Antonio's growth was not aligned with the service provision boundaries maintained by our major utility providers. Both SAWS and CPS serve areas that extend beyond the city boundary as well as the ETJ, and are required to fulfill any requests for service within those areas. In addition, SAWS and CPS typically benefit from expanding their infrastructure and prefer to provide service when requested to prevent competitive and/or substandard utility providers. If one of these utilities denies service to an area outside their service area boundary, the developer can find an alternative means of provision. SAWS and CPS tend to serve newly developing areas to ensure minimum standards are met. SAWS has sometimes been forced to take over operations of sewer plants because the provider couldn't provide adequate service and maintain infrastructure. Expansion by our service providers may in some cases diverge from the Goals of the SA Tomorrow Comprehensive Plan. To address these potential conflicts, the City, SAWS and CPS should arrange regular coordination meetings to address impacts of planned development.



The Comprehensive Plan Initial Studies found that infill development has a greater fiscal benefit than building in undeveloped areas (greenfield development). This means that the City expends fewer resources providing infrastructure and ongoing services to infill areas. Building major infrastructure such as water and sewer systems and roads is typically costlier to the City for greenfield development sites. It is also more expensive for cities to provide ongoing police and fire service to areas under new development.

San Antonio can develop a comprehensive approach to annexation that is consistent with growth forecasts and that ensures newly-annexed residents receive the same level of service as current residents—without creating undue burdens on the city.

3 Housing Stock

How can growth be managed in a way that respects and protects the city's historic features, neighborhoods and cultural assets?

How can we leverage growth to support and improve the lives of our current and future residents?

GCF Goal 4

Sustainable infill and mixed-use developments provide walkable and bikeable destinations for all residents.

GCF Goal 5

Growth and city form support improved livability in existing and future neighborhoods.

GCF Goal 6

Growth and city form support community health and wellness.

During the past decade San Antonio has been losing its competitive market position for single-family housing within the metro area; developers and homebuyers are looking outside city boundaries in unincorporated Bexar. However, this large amount of development still relies on City services and infrastructure.

Since 2000, residential development has been located mainly in the north and northwestern portions of the county. But those areas are nearing build-out with a lack of available land, traffic congestion, topographic constraints and challenges for utility services. Land capacity will likely push future residential growth more to the west and south. The City's policies and infrastructure (utilities, schools, services) will determine whether we attract development into San Antonio or continue expanding into other counties.

The City's Comprehensive Plan Initial Studies found that there is not enough residentially-zoned land to accommodate forecasted demand for housing in several areas of the city, especially to the north if development continues with the same density and patterns. Increasing the density of some neighborhoods and the average density of single-family development will reduce the demand for additional land. Rezoning the vacant and underutilized commercial and industrial parcels (inside Loop 410) will allow development of residentially-focused mixed-use neighborhoods, greatly increasing the housing supply and walkability. Currently, only 14% of San Antonio's neighborhoods offer walkability (defined as very or somewhat walkable), and most of those are in our historic districts.

At the same time, our historic neighborhoods are central to life in San Antonio. The 27 historic districts offer some of the most desirable places to live in San Antonio. Property values within historic districts have increased more than in other areas. They offer the characteristics of neighborhood types that are in demand locally and nationally, including walkability (all historic districts have higher Walk Scores than the citywide average), a greater mix of uses and shorter commute times to work.

The City can develop policies to encourage higher-density housing in some areas while preserving our existing neighborhoods.

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4 Natural Resources

How can growth be managed in a way that respects and protects the city's natural resources?

Do the City and San Antonio Water System (SAWS) have enough water to serve future growth?

GCF Goal 7

Development practices avoid, minimize or mitigate negative impacts on the city's natural resources, water supply, water quality, surface waterways and air quality.

To help ensure a more sustainable future for our community, the City should encourage and incentivize new and existing development that protects San Antonio's abundant and precious natural resources.

The high-growth northern areas of Sac Antonio and Bexar County are bordered by environmentally sensitive natural resources. These include the Edwards Aquifer (one of the most important and sensitive aquifers in Texas), steep slopes of the Texas Hill Country, 100-year floodplain and critical wildlife habitats. The Comprehensive Plan Initial Studies showed that nearly 30% of land available for development in these sensitive areas was constrained. The topography also makes providing water and sewer service in those areas costly and difficult.

The City of San Antonio historically relied almost entirely on a single source of water, the Edwards Aquifer. With the creation of San Antonio Water System (SAWS), we have made great strides towards developing a sustainable supply of water for residents with water management planning, diversification of supply and an award-winning conservation program. While we still face challenges related to regulations, extreme weather and demand for water associated with outdoor irrigation, we continue to innovate.

One of these initiatives is the Twin Oaks Aquifer Storage and Recovery plant that stores water underground for peak use or drought. A more recent SAWS water supply diversification project is the Vista Ridge Pipeline. Although the 142-mile pipeline will provide the largest non-Edwards Aquifer water supply in the City's history, consideration of and unanimous SAWS and City Council commitment to the project allowed for significant community debate regarding water reliability, SAWS rate restructuring and conservation and landscape irrigation controls.

Our City also leads in water conservation efforts, including the largest direct water recycling program in the nation—using recycled water to irrigate parks, golf courses, lawns, and the River Walk. Our continued efforts to address develop new diversification and conservation solutions will help ensure a more sustainable future for our community.

Smart Growth and Urban Containment Policies: Austin, Texas

The City of Austin is bisected north-south by portions of the Edwards Aquifer, a sensitive source of drinking water. Although 34% of Austin's land area is classified as "undeveloped," much of it has environmental constraints. Austin's predicted growth rate (double over 30 years) will place heavy demands on resources, infrastructure and services. To help mitigate the impact, the City has launched a series of *planning initiatives* to manage and direct growth; developed an extensive *overlay system* to identify and map environmentally sensitive lands and lands unsuitable for development; and established *five "growth areas,"* three where new development and redevelopment are desired and two where they are not.

By mapping where Austin wants development, and providing infrastructure and tax break incentives, the City has enticed development in the desired areas and away from the open space and natural resources it wants to preserve.

5 Education

How can we leverage growth and development to support educational access and achievement?

GCF Goal 8

Students throughout San Antonio have enhanced educational access and perform at a high level. (See also PFCS Goal 4)

There are 17 independent school districts operating within the San Antonio area with local control over the education system in their respective areas. While the City has a limited role in education, we can develop policies that encourage a broader variety of employment opportunities and housing choices across the city, especially in the southern, eastern and western areas of the city that have not traditionally seen high levels of economic growth. Neighborhood-friendly infill development can attract new families and improve the real estate market in those areas.

The City can also work to help provide land, facilities and entitlements that can be used to establish new schools as communities grow. And we can work closely with school districts in priority growth areas to support and enhance student success, including those in early childhood education programs.

Promoting innovative educational opportunities within priority growth areas of our city can drive market demand for housing and can help bolster our city's educational growth and development by supporting and invest in existing schools and their neighborhoods.

Goals and Policies

The goals and policies for Growth and City Form show a willingness to consider new, progressive approaches that will ensure San Antonio grows and develops in ways that benefit our existing and future residents, our businesses and our environment. These goals and policies are linked with the other important directives in the following chapters. The policies that can create higher-intensity, mixed-use developments align with policies to leverage the unique polycentric pattern of our regional economic centers, improve transportation options, attract young, skilled workers and provide environmental enhancements for air quality, water conservation and stormwater management.

The eight goals address the key issues identified above and provide the framework for the policies and actions the City will take as a result of SA Tomorrow. The policies are not associated with specific goals, but are grouped by common theme.

GROWTH AND CITY FORM (GCF) GOALS

Eight goals were developed to fulfill the City's vision and to address the key issues identified for the Growth and City Form element.

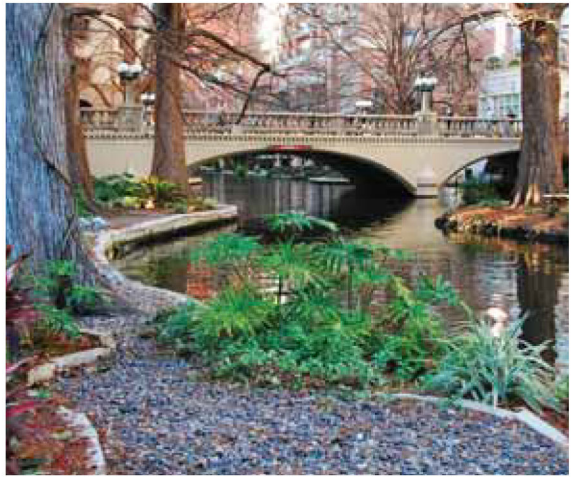
- **GCF Goal 1:** Higher-density uses are focused within the city's 13 regional centers and along its arterial and transit corridors.
- **GCF Goal 2:** Priority growth areas attract jobs and residents.
- **GCF Goal 3:** Strategic annexation benefits existing and future city residents and does not burden the City fiscally.
- **GCF Goal 4:** Sustainable infill and mixed-use development provide walkable and bikeable destinations for all residents.
- **GCF Goal 5:** Growth and city form support improved livability in existing and future neighborhoods.
- **GCF Goal 6:** Growth and city form support community health and wellness.
- **GCF Goal 7:** Development practices that minimize, mitigate or avoid negative impacts on the city's natural resources, water supply, water quality, surface waterways and air quality.
- **GCF Goal 8:** Students throughout San Antonio have enhanced educational access and perform at a high level. (See also PFCS Goal 4)

GROWTH AND CITY FORM (GCF) POLICIES

Priority Growth Areas

- **GCF P1:** Incentivize the development of housing and employment uses in the city's priority growth areas.
- **GCF P2:** Identify and support catalyst projects which include a mix of housing types for a range of income levels and which attract additional employment.
- **GCF P3:** Invest in neighborhood amenities and infrastructure (including green infrastructure) that will attract new residents to priority growth areas.
- **GCF P4:** Create subarea/corridor plans for the city's regional centers, major arterials, and transit corridors to ensure maximum coordination of land use, transportation and other infrastructure in support of higher-density development.
- **GCF P5:** Invest in needed amenities and infrastructure that will facilitate higher-density development in the city's priority growth areas.
- **GCF P6:** Align land uses and infrastructure improvements in regional centers with employment uses and jobs best suited for each center's unique assets.
- **GCF P7:** Ensure employment centers provide a variety of land uses and infrastructure that will allow the city to remain economically competitive.

Enhanced public realm for residents and visitors support improved livability in existing and future neighborhoods.



Sustainable infill and mixed-use development in San Antonio will provide more walkable and bikeable destinations for all residents and promote community health and wellness.

Infill and Revitalization

- **GCF P8:** Continue to focus on the revitalization of neighborhoods adjacent to downtown and extend these efforts to regional centers, urban centers and transit corridors.
- **GCF P9**: Allow higher-density and mixed uses in portions of, or adjacent to, single-family residential areas to encourage shopping, services and entertainment amenities in closer proximity to housing and where appropriate.
- **GCF P10:** Develop a plan to preserve and maintain affordable housing within revitalizing neighborhoods and along transit corridors.
- **GCF P11:** Continue and bolster incentive programs for infill development in priority growth areas.
- **GCF P12:** Develop programs to encourage and incentivize adaptive reuse.
- **GCF P13:** Evaluate commercial and industrial land use and zoning designations in the core of the city, regional centers, urban centers and primary transit corridors to determine areas that could be converted to residential or mixed-use.
- **GCF P14:** Establish appropriate buffers and transitions (land use, form and/or landscaping) between residential neighborhoods and surrounding higher-density development.

Annexation

- **GCF P15:** Work with AACOG (Alamo Area Council of Governments), AAMPO, and other regional partners to determine a consistent approach for forecasting growth in the region and develop a strategic, proactive approach to annexation that is consistent with the adopted growth forecast.
- **GCF P16:** Ensure the City's annexation policy supports desired city form.
- **GCF P17:** Ensure that newly annexed residents of the city receive the same level of service as current residents.
- **GCF P18:** Ensure that annexation decisions do not create an undue fiscal burden on the City or utilities providers, SAWS and CPS.
- **GCF P19:** Ensure that the City's growth and annexation plan provides guidance for growth plans and policy decisions made by the major utility providers, SAWS and CPS.

Transit

- **GCF P20:** Work with VIA Metropolitan Transit to develop a long-term transit plan that increases transit connectivity to employment centers.
- **GCF P21:** Work with VIA Metropolitan Transit to develop a long-term transit plan that facilitates transit-supportive development.

Natural Resources and Environmental Sustainability

- **GCF P22:** Encourage development types and designs that promote and support water conservation practices.

- **GCF P23:** Implement stormwater infrastructure management best practices that balance well-developed and well-maintained regional and site-specific stormwater infrastructure (i.e., gray and green infrastructure). (See also NRES P17 and PFCS P13)
- **GCF P24:** Incentivize developments in or near the recharge and contributing zones and in areas identified by the watershed master plans of the Bexar Regional Watershed Management Consortium to use low impact development techniques, to meet minimum standards for pervious area and to develop natural resources mitigation plans.
- **GCF P25:** Explore incentive and enforcement programs for Low Impact Development (LID).
- **GCF P26:** Encourage land intensive development patterns to locate outside of the Edwards Aquifer recharge and contributing zones and along preservation reaches of rivers and creeks. (See also CHW P36 and NRES P11)
- **GCF P27:** Purchase undeveloped land within the Edwards Aquifer recharge and contributing zones and along river and creek corridors for public open space.
- **GCF P28:** Incentivize development that is consistent with recommendations within the watershed master plans of the Bexar Regional Watershed Management Consortium.
- **GCF P29:** Develop and promote incentives and other tools to facilitate development types and designs that promote and support water conservation practices.

Strategic infill with the appropriate uses on developable land and maximum coordination of land use, transportation and other infrastructure in support of higher-density development will help ensure our city grows and develops in ways that benefit our existing and future residents, our businesses and our environment.

- **GCF P30:** Develop and promote incentives and other tools to facilitate development types and designs that protect natural resources, water quality, surface waterways and air quality.
- **GCF P31:** Promote development that leverages and protects the public's investment in major green infrastructure and natural resources projects (e.g., the San Antonio River Improvements Project and other creek and trail restoration projects). (See also PFCS P9)
- **GCF P32:** Support the efforts of and collaborate with appropriate governmental entities to monitor, protect and ensure water quality within the Edwards Aquifer. (See also NRES P17 and CHW P41)

Schools and Education

- **GCF P33:** Support and invest in existing schools and their neighborhoods.
- **GCF P34:** Promote innovative educational opportunities within priority growth areas of the city to drive market demand for housing.
- **GCF P35:** Help provide land, facilities, and/or entitlements that can be used to establish schools that attract a broader spectrum of families with children.
- **GCF P36:** Collaborate with and provide support to underperforming independent school districts to enhance access and improve performance.
- **GCF P37:** Increase funding and support for early childhood education programs in underperforming school districts.


H-E-B

Chapter 9: Transportation and Connectivity (TC)

San Antonio has long enjoyed high quality of life complemented by a congestion-free network of roads and highways. Until recent years we all moved about our city with few impediments; new roads and ample parking were built in unison with the rapid outward expansion of development, particularly to the north and northwest parts of the city.

San Antonio has many transportation assets that have kept congestion at bay and the transportation system working at an acceptable level of service, despite being the seventh largest city in the country. Our low cost of living, relatively short commute times and dispersed land uses all encouraged and facilitated a transportation culture dominated by automobiles. In fact, statistics show that 95% of us drive to work, while 5% percent either walk, bike or use public transit.

Continued reliance on single-occupancy-vehicle travel is not sustainable. Current traffic projections indicate that our road and highway network will be unable to accommodate the unprecedented growth anticipated over the next 25 years. We are already witnessing longer-than-average commutes during rush hour especially on the major highways and in the northwest part of town. While many people from around the country are attracted to our economic stability and low cost of living, both are in jeopardy if we continue "business as usual" when planning our transportation system.

For a variety of environmental, economic development, and community health reasons, this plan calls for a new approach to transportation planning in our city. Expected congestion can no longer be managed simply by building new roads, and many of us have expressed a desire for more safe, comfortable and healthy transportation options. Walking, bicycling and transit must be prioritized. Many of us will continue to drive for some or all of our trips, but our city needs to provide a wider range of mobility choices that allow us access to work, recreation and other daily activities if we cannot or choose not to drive a car.

The Transportation and Connectivity element is somewhat unique in this plan, as a separate Multimodal Transportation Plan is being developed concurrently as part of the SA Tomorrow effort. Because the Multimodal Transportation Plan will address the full range of mobility issues in great detail, this chapter examines San Antonio's transportation challenges and opportunities at a more comprehensive level, making connections to the other elements of this plan.

The Transportation and Connectivity (TC) goals and policies were developed in response to the five key transportation challenges that follow.

1 Multimodal Network

How can San Antonio increase access to, safety and use of multimodal transportation options for all residents?

How can we improve pedestrian safety and comfort throughout the city?

How can we more successfully implement and improve upon our long-range bicycle plan?

How and when can San Antonio implement high-capacity premium transit that links key residential areas and employment centers with healthcare, cultural, educational and recreational facilities?

How can San Antonio provide better regional non-automobile connections?

TC Goal 3

San Antonio's transportation and connectivity networks support a high quality of life and strong, healthy communities.

TC Goal 5

San Antonio provides a range of convenient, safe and comfortable active transportation options for all users and abilities and many regularly use multimodal options such as walking, biking and transit.
(See also CHW Goal 4)

The five questions above highlight the importance of alternative modes of transportation and illustrate the range of options we want to see incorporated throughout our city. Many San Antonio residents currently walk, bike and ride public transit, but there is much work to be done before these options are viewed as safe and desirable choices for the majority of residents.

WALKING

The National Highway Traffic and Safety Administration (NHTSA) has named San Antonio a Pedestrian Focus City, a classification of 22 cities that have pedestrian death rates higher than the national average. Along with Dallas, San Antonio has the highest average pedestrian fatality rate per 100,000 people in Texas based on data from 2010 through 2013. San Antonio's existing pedestrian network includes gaps in existing sidewalks, sidewalks in disrepair, sidewalks with accessibility issues such as barriers and absent curb ramps, and even some roadways without sidewalks. Pedestrian safety is an area of focus for the City of San Antonio. Particular attention should be paid to ensure residents of all ages and abilities have the opportunity to safely walk to a variety of daily amenities and activities, such as transit stops, schools, local parks and trails, healthcare services, and employment and cultural destinations.

BICYCLING

While bicycling is gaining popularity for both commuting and recreation, safety remains a concern. There were 258 bike crashes in San Antonio in 2013, increasing to 324 in 2014. Of even greater concern are the serious injuries and fatalities associated with increased bicycling. There were five fatal bike crashes in 2013 and one in 2014, all of which occurred on larger roadways (collectors and arterials).

Short commute times and increasing popularity of cyclists coupled with unsafe conditions provide an opportunity to identify and prioritize bicycle infrastructure improvements.

The Alamo Area Metropolitan Planning Organization (AAMPO) travel demand model shows that the majority of all bicycle trips in the network are 10 miles or less in distance and 48% of all trips are 10 minutes or less in duration. These shorter trips are ideal opportunities for bike travel if improved infrastructure is in place. When implemented, the projects detailed in the City's 2011 Bike Master Plan will help reduce the danger of bicycling by providing a connected bicycle network of trails, bike lanes and other facilities throughout the city.

San Antonio also has the BCycle bike-sharing program. Users can pick up a bike at any BCycle station and return it to any BCycle station when finished with their ride. Users can pay a membership fee to gain unlimited access to the BCycle system or they can pay based on the time that the bike is used. There are currently 55 BCycle stations in San Antonio. Most are located in Downtown; some are near the Mission and Museum Reaches of the Riverwalk, on the campus of San Antonio College and throughout the River North area.

The City must continue to prioritize expanding of our bicycle network, creating a valuable amenity for residents and adding a distinctive element to entice and delight the many visitors our city attracts every year.

By incorporating multimodal opportunities and developing a safe and convenient pedestrian travel network, San Antonio can have a more accessible public transit system and safer, more walkable streets.

Expanding and enhancing our bicycle network for our residents is a priority, while ensuring the engineering and design of transportation facilities provides for the safety of all users.

HIGH-CAPACITY TRANSIT

A regional high-capacity transit network, such as Bus Rapid Transit (BRT) or light rail, will not only help to reduce vehicle miles travelled (VMT), it will also help San Antonio meet future transportation demands of residents and businesses. Cities compete with each other for residents and businesses, and a robust rapid transit system is increasingly considered a hallmark of world-class cities. Two key demographics that cities compete for include millennials and baby boomers. Statistics show that both of these groups are driving less and demanding alternative modes of transportation. They are also less willing to pay a high percentage of their incomes for transportation costs. A high-capacity and high frequency transit network answers both of these concerns and could serve as a major attractor to these important demographics in our city.

The Transportation and Connectivity goals and policies of this Comprehensive Plan are aligned with the VIA Vision 2040 plan being concurrently developed by VIA Metropolitan Transit. This collaboration should continue, and both entities must focus on aligning VIA's high-capacity transit corridors with the city's regional centers and other key investments.

REGIONAL MOBILITY

The Lone Star Rail District (LSRD) had proposed a 118-mile passenger rail service from north of Austin to San Antonio. The proposed passenger rail service (LSTAR) would have operated on existing Union Pacific freight rail lines and offered 75-minute express service from Downtown Austin to Downtown San Antonio.

Unfortunately, as of early 2016, Union Pacific has pulled out of the cooperative agreement with LSRD to provide commuter rail jeopardizing the proposed LSTAR line. However, there is still an expressed desire by stakeholders for regional rail connectivity. The City and rail district should continue to explore options that do not rely on Union Pacific tracks. Implementation of this regional rail connection will complement and link into the high-capacity transit network and demonstrate our City's commitment to playing a larger role in the regional economy.

The full range of multimodal options described above will enhance our quality of life and improve our air quality and health outcomes. In addition, a robust mobility network is a desirable amenity to many skilled workers, increasing the chances that San Antonio can attract and retain a workforce that supports targeted industries at the heart of our economic development strategy.

Connecting People with Transit: Los Angeles, California

First and last mile connections are a problem all cities face when talking about making public transit accessible to all residents. In cities like Los Angeles, which have a large and dispersed population, the challenge is that not many households and workplaces fall within a ¼ mile of a transit station. To help increase ridership and accessibility Los Angeles has implemented a new fist and last mile strategy to make the first and last mile between public transit access as enjoyable and easy as possible. To achieve this, Los Angeles has: *partnered with ride-hailing and bike sharing services* to decrease commute time to a transit station; *developed 'mobility centers'* (hybrid convenience store and bus stop); and *increased wayfinding measures* that outline multiple ways for users to get to their final destination.

The Los Angeles County Metropolitan Transportation Authority (Metro) First-Last Mile Strategic Plan is moving the city towards a more enjoyable and accessible public transit system. By paying attention to the entire trip, specifically the first and last miles, the City is investing in a more coordinated infrastructure with the desire of extending the reach of transit and ultimately increasing ridership.

2 Land Use and Transportation

How can San Antonio enhance its transportation system to ensure residents have safe and easy access to a range of daily amenities and basic services?

TC Goal 1

San Antonio has a world class multimodal transportation system, providing safe and comfortable connectivity to residential, commercial, education, cultural, healthcare and recreation opportunities.

Walking, bicycling and high-capacity transit options must be integrated into a comprehensive network that provides San Antonio residents with multiple options for accessing residential, commercial, educational, cultural, healthcare and recreation opportunities throughout our city. In addition, this network must be coordinated and aligned with key land use objectives and investments that ensure a greater number of people live in close proximity to this range of multimodal options in the future. The City's Complete Streets program, existing and planned linear greenway multi-use trails, and investments in regional centers should all be leveraged to achieve this goal. Our City must make a concerted effort to link regional centers with multimodal and transit corridors, providing multiple, non-automobile options for our residents traveling to and from work and other daily activities. Mobility within regional and urban centers is also important. Even if residents and employees must drive for some longer trips, many will choose other options for shorter trips that are easily reached by walking and biking. Expanded multimodal connections between and within employment and housing concentrations enhance our residents' quality of life, increase access to employment and increases efficiency of our transportation system.

COMPLETE STREETS

A Complete Street is a roadway planned, designed and operated to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. There is no one type of Complete Street since roadways must serve different purposes for different land uses. Thus, Complete Streets are context-driven, with different components and amenities depending on the community served. While all Complete Streets are designed to accommodate all modes of travel in a safe, accessible and comfortable manner, they can be tailored to best serve the needs of surrounding communities, both existing and planned.

LINEAR GREENWAY TRAILS

San Antonio is developing a world-class system of bike paths and trails through the linear greenway parks, which provide routes for bicyclists outside of the street network. The City, in collaboration with other agencies, created paths along Leon Creek, Salado Creek, Medina River, and the Mission and Museum Reaches of the San Antonio River. Future plans include extending existing paths further along the waterways and creating new paths along greenways such as San Pedro and Alazán Creeks. This network of greenway trails connects us to a variety of important destinations, provides a direct connection to our treasured natural resources and offers safe and beautiful routes for commuting, recreational or visiting cyclists. In addition, this trail network is the basis for the unique Trail-Oriented Development place type illustrated in Chapter Six.

Finally, strategic development of regional centers in San Antonio represents the city's best opportunity to absorb and leverage projected population and employment increases while preserving the existing fabric of neighborhoods. These regional centers are one of the main building blocks of our city's future. Each is at a different stage of development and offers unique potential in terms of combining land uses and multimodal connectivity. We must focus our efforts on carefully considered regional center plans that link existing and emerging land uses with our investments in walking, biking, and transit.

Connecting Regional Centers: Cleveland, Ohio

In 2008, the City of Cleveland completed the $197 million, 9-mile bus rapid transit (BRT) line, known as the HealthLine. The HealthLine connects Clevelands's downtown to its health and education regional centers and its eastern neighborhoods along Euclid Avenue. With dedicated lanes, covered stations and electronic ticketing, the HealthLine has been instrumental in: *spurring $5.8 billion in development* along the Euclid Avenue corridor since 2008; increasing access to *Cleveland's medical, education and arts centers*; and supporting the development of a *multimodal network to compliment and support the BRT route*.

Considered one of the best US examples of BRT implementation, the scheme has generated $114.54 in economic development for each transit dollar spent and has seen a 60% increase in ridership over the old route. Significantly, a majority of the ridership growth has been in choice ridership – people who have a car but choose to ride public transportation.

3 Congestion

How can San Antonio reduce vehicle miles traveled (VMT) and proactively address anticipated future problems with congestion and transportation delays?

TC Goal 6

San Antonio utilizes technology and other innovative services and solutions to ensure predictable and reliable travel throughout the city.

TC Goal 7

San Antonio's roadway system has managed congestion and is efficient for residents and businesses.

One of the reasons San Antonio currently lacks a sufficient range of transportation options is that, even as recently as 2010, the transportation system operated at an acceptable level of service (LOS); congestion was really not a problem in our city. Level of service is a measure of delay and congestion on roadways and at intersections. It is reported by a letter grade of A through F, with A representing the ideal condition with very little delay and congestion present, and F representing over-capacity conditions with substantial delay and congestion. Although the city's road network generally operated at an acceptable LOS in 2010, by 2013 it was ranked 43rd in the country for worst traffic congestion according to TomTom's annual Traffic Index report. It had an overall congestion level of 15% (8% on highways and 22% on non-highways), compared to a 21% congestion rate in Houston and Austin and the 16% congestion rate in the Dallas-Fort Worth area. With an addition of 1.1 million people by year 2040 we will continue to see dramatic increases in demand on the transportation system.

With vehicle miles travelled (VMT) increasing due to this continued growth, the levels of congestion will worsen. The City expects the largest increases in population on the far-west side, downtown and the far-north side areas. The north side of the city will be congested by 2040. All major roads on the north and west sides of the City outside of Loop 410 will be over capacity with the exception of Wurzbach Parkway. The south side will experience significant congestion as well, with most major north-south roads operating at LOS F. The inner east and southwest sides are the only areas of the city that will have available capacity on the road network.

Based on the AAMPO travel demand model results, congestion will result in a decrease in average speed (about 48%), meaning it will take twice as long to travel the same distance on the same roadway in year 2040 compared to year 2010. Total vehicle hours of delay will also increase by over 900% from 2010 to 2040.

We'll need to use a wide range of tactics to manage and mitigate this future congestion. The expansion of multimodal and transit options described earlier in this chapter is one important approach. However, many of us will continue to drive, and we must explore innovative technologies and programs that will work in concert to manage and minimize the impacts of congestion on our roadways. The Multimodal Transportation Plan details a wide range of possible technologies and strategies. For example, Transportation Demand Management tools will help to reduce average VMT per person and shift roadway demand away from peak hours. The City should work with VIA to implement technologies that improve transit performance and reliability, especially on priority corridors. In addition, the City and VIA should test and implement a suite of roadway pricing and accessibility options such as managed lanes, high occupancy vehicle (HOV)/high occupancy toll (HOT) lanes and ramp metering to create the most efficient roadway system possible.

Reaching our City's environmental, community health and economic aspirations requires prioritizing transportation projects and investments that manage congestion and reduce emissions and vehicle miles traveled and increase multimodal transit options.

Non-automobile travel alternatives can be encouraged by creating expanded, more accessible and safer pedestrian and bicycle networks and transit options.

How do we get around?

Our city's dependency on automobiles and the resulting congestion produces many negative impacts on our community's economy, environment and overall health and wellness.

80 % of San Antonians who drive alone to get to work as of 2013

22.4 vehicle miles travelled (VMT) by San Antonians in 2013

18.7 SA2020's VMT goal for our city

**$453**$_{mil}$ predicted economic savings if residents reduce their daily VMT by 1 mile

For more information on what we are doing to address this challenge, refer to the San Antonio Sustainability Plan; SA Tomorrow Multimodal Transportation Plan; and VIAVision 2040 Plan.

4 Effectiveness

How can San Antonio update its transportation planning and facilities to meet current and future needs, including increasing demands from residents and businesses?

TC Goal 4

San Antonio builds, manages and maintains its transportation and connectivity system cost-effectively in order to meet current and future needs and expectations.

TC Goal 8

San Antonio is a world leader in moving people and goods safely, efficiently and sustainably.

In an era of increasing costs and limited resources, our City must invest in transportation improvements wisely. We seek to be a world leader in mobility and connectivity; to do so requires a holistic and innovative approach to our entire transportation system, and a more nuanced understanding of how people will choose to move about our city over the next 25 years. It will be crucial to coordinate efforts among City departments and between the City and VIA to ensure efficient transportation and mobility investments in the coming years.

The City took an important step toward efficient management of transportation planning and investment by creating the Transportation and Capital Improvements Department (TCI) in January 2014. TCI combines the former Public Works and Capital Improvements Management Services departments. The newly combined department employs over 800 people dedicated to meeting the infrastructure and transportation needs of our city. TCI is also the lead department on the Multimodal Transportation Plan, and will be instrumental in implementing the recommendations of that plan.

TCI manages the City's five-year rolling Bond Program that funds over $500 million of capital improvement projects and other high-profile capital projects like the Henry B. Gonzales Convention Center expansion and the San Antonio Airport projects. Future Bond Programs should fund important infrastructure and mobility investments in our city's regional centers, particularly in coordination with corresponding investments from VIA.

Considering the scale of our City's Bond Program and other transportation investments, we must prioritize projects carefully to yield the most effective and impactful results. The Transportation and Connectivity policies in this Plan call for prioritization of projects based on long-term cost-effectiveness and value, emissions and VMT reductions, coordination with other large-scale projects and considerations of a project's full life cycle costs.

Cost-effective building, management and maintenance of our transportation and connectivity system will help us meet current and future needs and expectations.

We intend to utilize technology and other innovative services and solutions to ensure predictable and reliable travel throughout our city.

5 Economic Competitiveness

How can San Antonio update its transportation planning and facilities to meet current and future needs that strengthen its role in the regional, national, and international economy?

TC Goal 2

San Antonio's transportation system supports the city's competiveness in the regional, national, and international economy.

Transportation and mobility impact not only our city's environment and community health outcomes, but also serve as key economic development tools. Although often distant from our everyday lives, freight transportation is an important aspect of our system and is an important driver of our economic success. Freight moves through our city by roadway and rail.

Seven major railroad lines pass through San Antonio, all operated by Union Pacific Railroad (UPRR). Major rail yards are located at Port San Antonio, and along I-35 south of Fort Sam Houston. San Antonio's proximity to the I-35 and I-10 corridors is a great economic asset with regard to movement of goods. The North American Free Trade Agreement (NAFTA) has greatly increased the movement of freight between Texas and Mexico, the state's largest trading partner. Major freight rail and highway corridors originating on the Texas border in Laredo and the Rio Grande Valley all converge in and pass through San Antonio. Trade between Texas and Mexico has increased in recent years and is expected to continue to place additional demands on the City's transportation infrastructure.

The recent growth and activity associated with the energy sector has also contributed to an increase of freight traffic. Drilling in the Eagle Ford Shale formation, primarily in counties south of San Antonio such as Karnes and Atascosa, has increased dramatically over the last several years. The Eagle Ford Shale formation produces over a million barrels of oil per day (Texas Railroad Commission). San Antonio is the nearest major city to the Eagle Ford Shale, located less than an hour away from the northern edge of the oil field. Major truck and rail corridors from the region pass through San Antonio. Many companies operating in the Eagle Ford, such as Halliburton and Baker Hughes, have now located in San Antonio. The large number of trucks and employees needed to drill and maintain oil wells has increased traffic on the highways heading to and from the south such as I-37 and US Highway 181.

Finally, as described in earlier parts of this chapter, an integrated and well-designed multimodal network is an important economic development tool. San Antonio's current urban form—defined for the most part by low-density, single-use developments connected by an auto-centric transportation system—does not offer the kind of places that will attract today's young, skilled, innovative workers. Continuing with the status quo and perpetuating the same basic development types and patterns that have dominated the city over the past few decades will all but ensure San Antonio's inability to become a center of innovation and creative industry.

Instead, we must plan for and encourage the creation of more neighborhoods and districts that offer the density, mix of uses, mobility options and amenities that draw skilled millennial workers, retiring baby boomers and many other segments of the population that crave a sustainable, walkable, and human-scaled place to live. San Antonio should continue with traditional business attraction efforts, and we also need to add the additional layer of strategic and holistic thinking about what will help bring targeted industries and businesses to the city. In this sense, the land use, urban design, and mobility goals and policies that punctuate almost every plan element are also economic development policies.

To be successful, we do not need to retrofit the entire city, and the status quo of city form dominated by an auto-centric transportation system and few places with true urban amenities will no longer work. The goals and policies articulated for this and other plan elements must address these challenges and work towards creating and linking great places to live, work and play.

Goals and Policies

The City of San Antonio supports the creation of walkable, bikeable and transit-oriented places, looking towards our City's environmental, community health and economic aspirations. The eight Transportation and Connectivity goals address the key issues identified above and provide the framework for the policies and actions the City will take as a result of the SA Tomorrow process. The policies are not associated with specific goals, but are grouped by common themes.

TRANSPORTATION AND CONNECTIVITY GOALS

Eight goals were developed to address the key issues identified and provide the framework for the policies and actions the City will take resulting from the SA Tomorrow process.

- **TC Goal 1:** San Antonio has a world class multimodal transportation system, providing safe and comfortable connectivity to residential, commercial, education, cultural, healthcare, and recreation opportunities.
- **TC Goal 2:** San Antonio's transportation system supports the city's competiveness in the regional, national, and international economy.
- **TC Goal 3:** San Antonio's transportation and connectivity networks support a high quality of life and strong, healthy communities.
- **TC Goal 4:** San Antonio builds, manages and maintains its transportation and connectivity system cost-effectively in order to meet current and future needs and expectations.
- **TC Goal 5:** San Antonio provides a range of convenient, safe and comfortable active transportation options for all users and abilities and many regularly use multimodal options such as walking, biking and transit. (See also CHW Goal 4)
- **TC Goal 6:** San Antonio utilizes technology and other innovative services and solutions to ensure predictable and reliable travel throughout the city.
- **TC Goal 7:** San Antonio's roadway system has managed congestion and is efficient for residents and businesses.
- **TC Goal 8:** San Antonio is a world leader in moving people and goods safely, efficiently and sustainably.

TRANSPORTATION AND CONNECTIVITY (TC) POLICIES

Planning and Investment

- **TC P1:** Prioritize transportation projects that manage congestion based on objective criteria to evaluate long-term cost effectiveness and value.
- **TC P2:** Prioritize transportation projects and investments based on the ability to reduce emissions and vehicle miles travelled (VMT).
- **TC P3:** Implement policies and programs based on objective criteria to consider full life cycle costs (including capital construction and maintenance as well as the full range of benefits (mobility, safety, economic development, quality of life, etc.)) in cost-benefit analysis of transportation projects.
- **TC P4:** Provide funding to maintain and expand a multimodal transportation system in a cost-effective, equitable, accessible and efficient manner.
- **TC P5:** Increase cost effectiveness and efficiency through coordinated project timing with other projects, other agencies and private development, thus avoiding costs of deferred maintenance.
- **TC P6:** Develop procedures to incorporate multimodal improvements during the maintenance phase of roadways.

Multimodal Transportation

- **TC P7:** Expand safe pedestrian and bicycle networks and transit options/access to encourage non-automobile travel alternatives. (See also NRES P40)
- **TC P8:** Prioritize transportation improvements that will incorporate multiple modes of travel and will provide connections between those modes.
- **TC P9:** Continue to encourage and implement programs and projects that make the City's bicycle network more accessible, direct and continuous in order to increase bicycling safety and opportunities for daily bicycle travel for riders of all levels and abilities. (See also CHW P24)
- **TC P10:** Invest in furthering the momentum of the City's current river and trail investments for multi-use paths and multimodal connectivity.
- **TC P11:** Develop a safe and convenient pedestrian travel network with sidewalks and trails integrated into the transportation system and activity areas such as schools, libraries, shopping and neighborhood centers. (See also CHW P28)
- **TC P12:** Prioritize safe accommodation and alternative routes for people walking, bicycling and at transit stops during street reconstruction.
- **TC P13:** Develop and implement specific maintenance procedures for pedestrian and bicycle facilities.
- **TC P14:** Incorporate multimodal opportunities to ensure access and use of transportation facilities.
- **TC P15:** Identify and prioritize bicycle infrastructure improvements in areas where increased bicycle trip rates can best address congestion problems and provide options for commuting to places of employment.

Safety and Comfort

- **TC P16:** Ensure the engineering and design of transportation facilities provides for the safety of all users.
- **TC P17:** Identify and implement regulations to improve the safety of people walking and bicycling.
- **TC P18:** Prioritize and maintain safe pedestrian crossings and continue supporting and implementing Safe Routes to School and Safe Routes to Transit programs.
- **TC P19:** Invest in infrastructure and amenities that provide shade and increase the comfort of pedestrians and waiting transit riders.
- **TC P20:** Accommodate the specific mobility and wayfinding needs of disabled individuals in all transportation modes.
- **TC P21:** Increase parking facility safety with design that minimizes conflicts between vehicles and people walking and bicycling.
- **TC P22:** Prioritize safety improvements and enhancements that effectively reduce crash and fatality rates and provide protection of the most vulnerable users (including children, seniors, persons with disabilities) and people walking and bicycling.
- **TC P23:** Develop performance and safety criteria for periodic evaluation of roadways and right-of-way.

Supporting active transportation technologies and infrastructure will encourage walking and bicycling for existing and future residents.

Land Use and Transit Supportive Development

- **TC P24:** Incentivize transit supportive development opportunities and incorporate transit supportive infrastructure improvements to promote transit use.
- **TC P25:** Develop incentives and zoning regulations to encourage transit-supportive development.
- **TC P26:** Encourage and invest in pedestrian-scaled streetscapes that promote placemaking and encourage walking and bicycling.
- **TC P27:** Encourage and invest in transportation infrastructure investments that also serve to strengthen social networks.
- **TC P28:** Assess and implement placemaking opportunities when developing transportation projects.
- **TC P29:** Prioritize construction and maintenance of sidewalks, crosswalks, and pedestrian lighting in neighborhoods, retail and employment areas within a half mile of major transit stops and stations.
- **TC P30:** Design commercial, residential, educational, cultural, and recreational facilities that support and provide access to and all transportation modes.
- **TC P31:** Encourage and invest in transportation network improvements that support economic development.
- **TC P32:** Leverage multimodal transportation improvements in San Antonio as attractors of businesses and talent.

Regional Transportation

- **TC P33:** Work with other regional transportation agencies to improve San Antonio's overall transportation network to enhance connectivity and efficiency.
- **TC P34:** Partner with and support the Lone Star Rail District to pursue regional rail between San Antonio and Austin is implemented.

Technology and Innovation

- **TC P35:** Continuously identify, investigate and incorporate new and emerging transportation technology and innovative solutions to improve efficiency.
- **TC P36:** Promote Transportation Demand Management (TDM) tools to reduce vehicle miles traveled (VMT) per person and manage peak hour congestion.
- **TC P37:** Utilize technology and other innovative solutions for improving and prioritizing transit reliability, especially on major routes and corridors.
- **TC P38:** Test and implement options that provide reliable transportation alternatives through pricing and accessibility, such as managed lanes, high occupancy vehicle (HOV)/high occupancy toll (HOT) lanes, ramp metering, etc.
- **TC P39:** Optimize intelligent transportation systems (ITS) and traffic signal systems to provide reliable travel times throughout the city.
- **TC P40:** Support development of autonomous and connected vehicle systems and plan for implementation in design.
- **TC P41:** Utilize managed motorways strategies to address reliability at a system-wide level. Managed Motorways is an innovative solution that provides real-time traffic management of the entire system – freeways, frontage roads and arterials.
- **TC P42**: Develop incident management strategies to maintain travel reliability on major roadways.
- **TC P43:** Continuously assess and integrate technological and design improvements that will move San Antonio to the forefront of safe, efficient and sustainable transportation systems design and infrastructure.

General Policies

- **TC P44:** Protect and enhance the environment through responsible, compatible and sustainable transportation projects.
- **TC P45:** Improve public health by supporting active transportation technologies and infrastructure that encourage walking and bicycling.
- **TC P46:** Provide community education to increase awareness of rules, appropriate behavior, and etiquette for drivers, bicyclists, pedestrians and transit riders.
- **TC P47:** Invest in public education and outreach about the regional benefits of a robust, interconnected transit system.
- **TC P48:** Support and invest in intermodal transportation facilities that safely, effectively and efficiently provide for the transfer of people and goods between modes.
- **TC P49:** Ensure resiliency in the transportation network and preparedness for system operations and management during natural or man-made emergencies.

Frequent and continuous assessment and integrated technological and design improvements will move San Antonio to the forefront of safe, efficient and sustainable transportation systems design and infrastructure.