

Chapter 3: Development Suitability

Overview

Issues with Sprawl

Chapter Three—Development Suitability of the Austin Tomorrow Comprehensive Plan (ATCP) sets forth the multi-faceted problem of sprawl as the single most significant urban issue for Austin and Central Texas. It notes that the most significant change in American cities during the Twentieth Century was the economic and social movement away from the central city and recognizes that Austin was not immune from this phenomenon (ATCP, p. 111).

“The decentralization of Austin, although slow at the outset, has gained momentum in recent years. Rising land costs, the search for environmental amenities and access to the countryside and industrial and commercial location on the city’s fringe are a few factors which have propelled the suburbs further and further away from the central city.” (ATCP, p. 111)

The circular process of sprawl—where residential development on the urban fringe spawns commercial and industrial growth which in turn generates more residential growth—is facilitated by the construction and expansion of roadways and other infrastructure. The concept of infrastructure as a driver of unsuitable, low-density development on the urban fringe is central to Chapter Three.

In response to the negative consequences of dispersed, low-density urban growth, the plan discusses issues associated with urban sprawl and the need to “...shift toward a more contained urban form (ATCP, p. 109)”.

“A more compact and planned urban community can render the goal of the provision of public services compatible with the goal of preserving Austin’s urban resources.” (ACTP, p. 113)

The Costs of Sprawl

Chapter Three examines the different costs associated with suburbanization. These range from those difficult to quantify such as pollution and a degraded natural environment to those more quantifiable such as infrastructure construction and maintenance.

The negative effects of urbanization increased as the rate of decentralized suburban development increased. The most significant of these relates to the hydrological cycle. Water pollution, stream erosion, and decreased spring and creek flow are cited as some of the more significant adverse effects.

The plan observes that diminished water quality is not the only cost associated with sprawl. As development sprawls further afield, roadways through and adjacent to established neighborhoods must carry increased traffic loads. As traffic along these roads increases, the desire to increase land use intensities along them often follows. Such changes sometimes result in neighborhoods becoming less desirable places to live. Those households with the means to do so often leave, contributing toward a spiral of disinvestment in inner-city communities.

Suburbanization incurs additional costs associated with the construction and maintenance of infrastructure and the provision of municipal services. As new, low-density development is constructed further away from established urban areas the costs of streets, power lines, water and sewer mains increases. The costs of other services such as public safety and parks also increase as the populations they serve become more dispersed.

“Utilities and services should be extended on a coordinated basis to those areas contiguous to the city where growth is most suitable. A more compact and planned urban community can render the goal of the provision of public services compatible with the goal of preserving Austin’s urban resources.” (ACTP, p. 113)

In response to the negative consequences of dispersed, low-density urban growth, the chapter discusses issues associated with urban sprawl and the need to “...shift toward a more contained urban form (ATCP, p. 109)”.

Development Suitability

Sprawl is identified in the ATCP as a clear threat to the vitality of Austin. To better direct future development in Austin and the region, the plan presents the notion of development suitability.

“Suitability must be measured in terms of the impact of development on the community’s valuable resources. The goals identified by the community give primary emphasis to the preservation of open space, natural areas, creek environments, and water quality.” (ATCP, p. 113)

Two types of development suitability were examined. The first looks at the natural environments' suitability for development. The second examines the development suitability of the urban environment. Policies and principles for each of the following areas— natural and urban environments— are expanded upon in Chapter Four of the ATCP.

Natural Environment

To determine suitable areas for urban development, a number of maps were produced. These maps depict limiting factors for urban development. Areas where these factors overlap should be considered

- Slopes in excess of 15%
- Environmental geology
- Lands of prime agricultural capacity
- Floodplains and areas of special importance for water quality
- Soil limitations for septic tanks
- A synthesis map of environmental factors.

Urban Environment

Chapter three identifies the differing types of land uses throughout Austin and expands on principles and policies for these areas:

- Residential Districts
- Commercial Districts
- Historic structures and districts
- Waterways and floodplains
- Parks, greenbelts and open spaces.

Residential Districts

The plan establishes a typology for neighborhoods and a series of broad principles and policies for these areas.

Stable Residential Districts

These are neighborhoods where the housing is in good condition, primarily owner-occupied, predominantly single-family, and where rents or property values are moderate to high. These include new subdivisions and existing neighborhoods not yet experiencing redevelopment pressures. Municipal efforts in these areas should be directed at preservation with more intense land use kept to the fringes and must be compatible with the adjacent communities. Efforts should also be made to maintain municipal services.

Residential Conservation Districts

These are older neighborhoods that are experiencing some development pressures but maintain their vitality and cohesion. The houses in these neighborhoods are generally in good condition with a few exceptions. The majority of the district is single-family with some apartments or more intense land uses. Municipal efforts in these districts should be aimed at conservation and renovation. Zoning is an important tool to preserve these neighborhoods by not allowing new, more-intense land uses in the neighborhood. Municipal services and facilities should be maintained.

Community Development Districts

These are neighborhoods characterized by older, poorly maintained houses, some of which may be substandard. The area has a large number of renters and low-income households. Municipal efforts in these districts should include programs to promote rehabilitation of the housing stock as well as social programs.

Chapter Three suggests a neighborhood planning process. The goal of this process is to increase community participation in the municipal decision-making process. A part of this process would be to further refine the ideas of development suitability as it relates to the specific neighborhood. Once the plan is adopted, the plan recommends the community staying actively involved in its implementation.

Commercial Districts

The plan defines three types of commercial districts and sets forth principles and policies for each: Central Business District, Commercial Strip Districts, and Commercial Centers.

Central Business District (CBD)

The ATCP recognizes the CBD's historical importance to the City:

“Early in Austin’s history the CBD was the only commercial center, the dominant location for business activity and for the production and exchange of goods. The CBD is the traditional heart of Austin, but no longer the city’s major retail center.” (ATCP, p. 116)

The plan calls for the CBD to be redeveloped and redefined as a residential, commercial, employment, entertainment, and cultural district. Capital improvement expenditures and other policies are suggested to promote the revitalization of the CBD.

Commercial Strip Districts

The ATCP discusses the characteristics of strip commercial development and proposes several policy changes to reduce the effect of strip development on adjacent residential areas. These include limits to the number of curb cuts, reductions in the number of signs, changes to setback requirements, improved landscape requirements, and noise standards.

Commercial Centers

The ATCP cites shopping centers as preferable land uses when compared to strip commercial development. It recognizes that both are automobile-oriented commercial; however it describes shopping centers as preferable to commercial strip development. The plan posits that promoting centers over strip commercial could reduce the pressure to locate more intense commercial uses along busy roadways.

Industrial Districts

The ATCP notes that, by and large, the residential areas of the City have not been overly affected by industrial development. It recommends adopting different regulations for industrial uses if they locate near residential areas or in environmentally sensitive areas and locating new industrial districts to the north or south of the City in areas with better development suitability.

Historic Structures and Districts

The ATCP states that historic structures and districts should be recognized and preserved. The plan proposes regulations that prevent the “...destruction of, or the encroachment upon, historic areas or structures (ATCP, p. 119).” The regulations should also ensure that new development in historic districts respect the surrounding neighborhood.

Waterways and Floodplains

The ATCP discusses the adverse affects urbanization can have on creeks and streams. These include increased stormwater flows, flooding, erosion, and diminished water quality. It recommends that development in 100-year floodplains should be severely limited.

Parks, Greenbelts, and Open Spaces.

The ATCP describes the importance of these spaces and places for a city and presents an open space policy recommendations. The plan recommends the purchase of open space in both the central part of the city and on the periphery.

Austin Tomorrow Comprehensive Plan and Infrastructure

The most significant policy implications to arise from the ATCP are the control of growth through extension of municipal utilities and services, especially water and wastewater, to suitable areas. The plan recommends that public facilities (infrastructure and municipal services) be directed to the areas with the fewest limitations. Development in those areas with the greatest number of limitations should be avoided. The Development Suitability Synthesis map depicts those areas where utilities should and should not be extended.

“The extension of public facilities...should be directed toward the regions with fewest [environmental] limitations; development regulations should facilitate future urbanization in these areas. Further public investment for the extension or improvement of public facilities in areas with major limitations should be avoided”. (ACTP p. 113)

Changes in Population and Land Area: Austin, 1979-2008

As a visionary planning document, the ATCP expresses a deep concern about the affects of urbanization on the natural and built environment. It recognizes sprawl as being more than an emerging issue and the major driver behind growth and development for the foreseeable future. The plan predicted that by 1995 the Austin corporate limits would contain 175 square miles (ATCP, p. 112). It also predicted that by 2000 there would be over a half million people living in the City (ATCP, p. 109). On both accounts the estimates proved to be off by at least 30%. Austin grew to 230 square miles by 1995 and the 2000 population was over 650,000 people.

By noting these underestimates, the intent is not to point to of any deficiency in the predictive methods employed by the ATCP planning process. Rather, it is to demonstrate that the City and the metropolitan region grew much more than most people expected.

Furthermore, it is not an unreasonable proposition to assume that Austin's and Central Texas' population will continue to grow at a robust rate for the foreseeable future. Although there has been a trend toward more infill development throughout this decade, the sprawl development that the ATCP cautioned against remains the region's most significant driver for growth and development.

Changes in Land Area

The area within Austin's corporate boundaries has continued to increase. Since 1960 the City has grown by 433%. Prior to changes to State of Texas law in the 1990s, the City of Austin established a pattern of extensive expansion through annexation. However, the City has continued to grow. In 2008, Austin is expected to expand to over 300 square miles. Although the changes in State law reduced the amount of land annexed, it created a more predictable process. By 2010, Austin is estimated to grow by slightly more than nine square miles.

Austin's Land Area (Square Miles): 1960 to 2007

Year	Land Area	10 Year Land Area Change Percentage	10 Year Land Area Change In Square Miles
1960	55.8	8%*	4.7*
1970	81.4	46%	25.6
1980	128.9	58%	47.5
1990	226.3	76%	97.4
2000	265.1	17%	38.8
2007	297.6	12%	32.5

*1951 to 1960

Population Change

Austin is a popular place. The most visible consequence of this popularity has been sustained population growth. Between the booms and busts and the transition from a higher education and government-oriented economy to a more diversified one encompassing all varieties of high-tech and manufacturing as well as government and an expanding higher education sector, Austin has continued to grow. Over the last fifty years Austin's population grew by 35% to 41% every decade and doubled every twenty to twenty-five years.

Over the last three decades Austin's population increased by nearly 400,000 people. The early 1980s experienced the first significant spike in population due, in large part, to internal domestic migration. Following the mid-decade economic downturn population growth slowed to a trickle. An improving economy and increased domestic migration during the early 1990s jumpstarted the area's population growth and began the most significant period of growth in the City's and the metropolitan area's history. As the headiness of the local economy grew during the mid and late 1990s and the economy of Mexico and other Latin American countries declined, growing international migration further contributed to a growing population. Following the economic downturn of the early 2000s, population growth slowed once again. As the mid-decade economic health of the region improved and Austin's national cachet increased, the population grew as both international and domestic migration continued anew. During the 2000s the City and the region reached a demographic critical mass. The population was, for the first time, large enough for the natural increase

Austin Population Growth: 1960-2007

Year	Population	10 Year Percent Change	10 Year Numerical Change	20 Year Percent Change	20 Year Numerical Change
1960	186,545	40%*	54,088*	112%**	98,615**
1970	251,808	35%	65,263	90%***	119,349***
1980	345,890	37%	94,082	85%	159,345
1990	465,622	35%	119,732	85%	213,814
2000	656,562	41%	190,940	90%	310,672
2007	735,088	12%****	78,526****	58%*****	269,466*****

*1950 to 1960

**1940 to 1960

***1950 to 1970

****2000 to 2007

*****1990 to 2007

Austin Metropolitan Area* Population Growth: 1960 to 2007

Year	Population	10 Year Percent Change	10 Year Numerical Change
1960	301,261	17%**	44,616**
1970	398,938	32%	97,677
1980	585,051	47%	186,113
1990	846,227	45%	261,176
2000	1,249,763	45%	403,536
2007	1,501,522	20%***	251,759***

*Bastrop, Caldwell, Hays, Travis and Williamson Counties

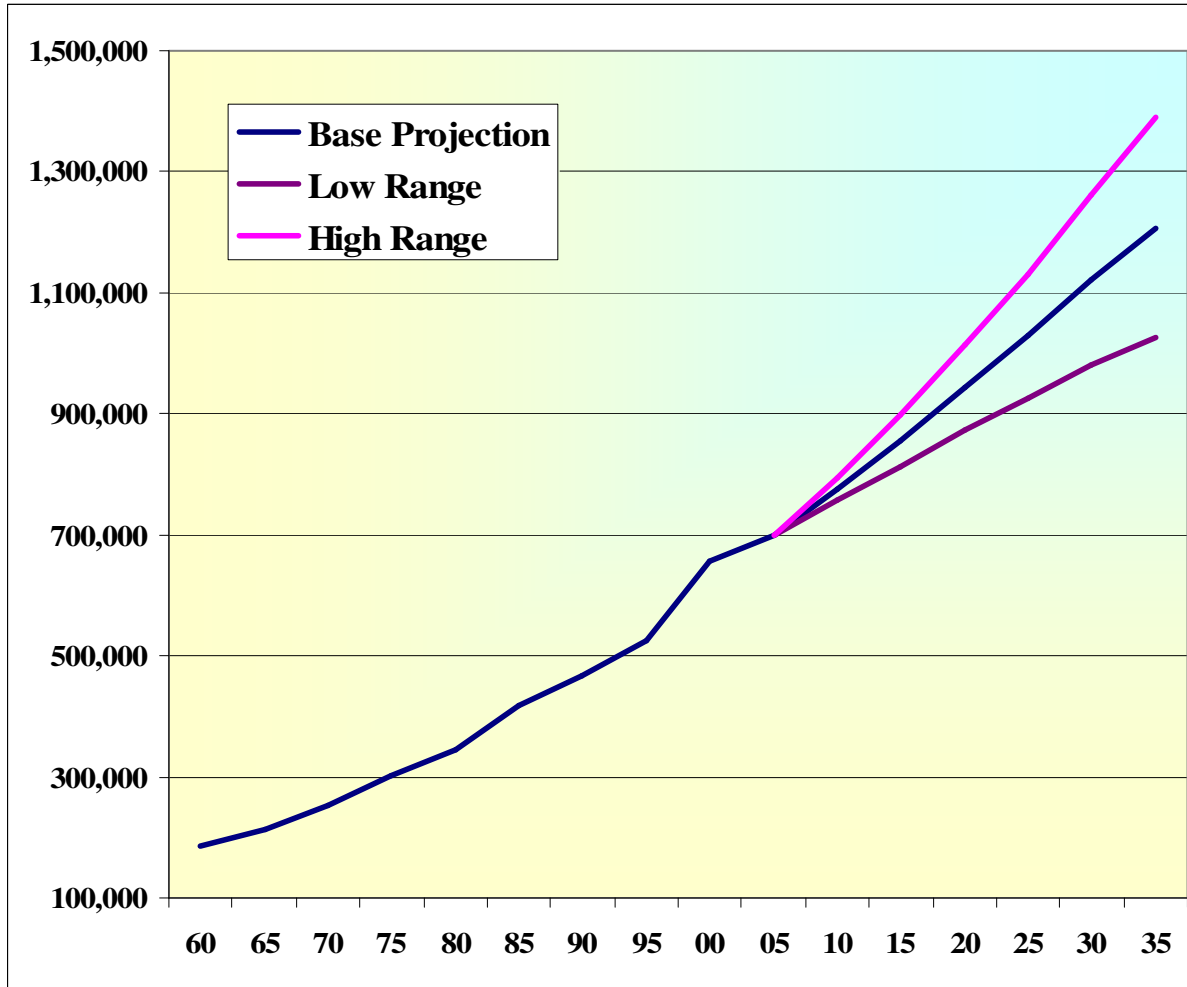
**1950 to 1960

***2000 to 2007

in population (the number of birth versus the number of deaths) to have a more significant contribution to the area's population growth. Although the population growth for the 2000s has slowed and will not meet that of the 1990s, the projected absolute increase in people is still impressive. By the end of this decade it is estimated that between 115,000 and 140,000 more people will have been added to the City since 2000.

The significant growth over the last three decades was not limited to Austin. The rate of population growth for the Austin Metropolitan Area has paralleled and outpaced that of Austin. This is primarily due to the rapid suburban growth in Williamson County and unincorporated areas of Travis County and, to a lesser extent, suburban and exurban growth in Hays and Bastrop Counties.

The population of Austin and the surrounding area is expected to continue to grow for the foreseeable future. A person born in Austin in the early 1960s, over the span of an average lifetime, can expect to see their hometown grow by upwards of a million people or more (a factor of five) and the metropolitan area grow by an even higher rate. Sometime over the next fifteen years the population of Austin is expected to top one million. This represents an increase of over a quarter of million more people (the City's population in 1970) than in 2007. By 2035 there may be as many as 1.2 million people living in the Capital City. As significant as the population growth in Austin is projected to be, it is only part of the total forecast for Central Texas. By 2020 the population of the Austin Metropolitan Area is expected to increase to 2.3 million and to 2.5 million people by mid decade. The projected population for the metropolitan area is expected to top an impressive three million people by the early 2030s.



City of Austin Population Forecast: 2007-2035

Density

Austin, overall, is not nor has it ever been a very dense place. In fact, it is over 25% *less* dense than it was in 1960. Although gross population density is not an absolute indicator of sprawl, it does point toward dispersed land use patterns. Although the gross population density has crept slightly higher since the 1990 low point, Austin remains much less dense than many comparable US cities. Austin has a gross density lower than larger Texas cities such as San Antonio, Dallas and Houston. Recent City of Austin policy directions have sought to redirect development into already developed areas of the City, such as Downtown and along major arterial roadways. However, when compared to the persistent growth in the urban hinterlands, this inner-city development represents a small percentage of the total development in the City and even less of that in the larger metropolitan area.

Austin's Gross Population Density: 1960 to 2007

Year	Land Area (Square Miles)	Population	Persons Per Square Mile
1960	55.8	186,545	3,343
1970	81.4	251,808	3,093
1980	128.9	345,890	2,683
1990	226.3	465,622	2,058
2000	265.1	656,562	2,477
2007	297.6	735,088	2,470

Gross Densities of Select US Cities (2006)

City	Persons Per Square Mile
San Francisco, CA	15,834
Baltimore, MD	8,058
Seattle, WA	6,901
Milwaukee, WI	6,215
Dallas, TX	4,709
Portland, OR	4,199
Houston, TX	3,701
Denver, CO	3,642
Columbus, OH	3,384
San Antonio, TX	2,808
Charlotte, NC	2,515
<i>Austin, TX (2007)</i>	2,470
Memphis, TN	2,327
Indianapolis, IN	2,152
Fort Worth, TX	1,828

Austin's Future and Sprawl

The ATCP is a forward looking document. It foresaw sprawl as a concern that must be addressed and pointed toward the inevitable negative externalities that follow this form of development. However, despite warnings and the proscriptions of the ATCP, Austin sprawled beyond the predictions of the plan and its authors. Although many of the planning policies and principles recommended in the ATCP came to pass, especially relating to water quality and environmental protection, sprawl continues unabated.

Although it has been stated that a trend is not destiny, based on historic patterns and reasoned projections, there is no reason to believe that the population forecasts for Austin and its metropolitan area will not come to pass. Whether they arrive by 2035 or 2050—all of these people will need to live somewhere. If current development trends (and the policies and practices that foster them) continue, the “less-contained” urban form the ATCP warned against will present Austin and the region with significant fiscal, transportation, and environmental hurdles. Unless we change the manner in which we approach these issues, this growth will threaten the area’s vitality and quality of life. It could place future generations in increasingly untenable positions that could have been moderated or avoided had we acted in a more forward looking, consistent, and thoughtful manner.

Chapter Three Addendum: New Maps

Chapter Three of the ATCP contains numerous maps. Since the plan’s adoption in 1979, many of the maps have become outdated. Also, since its adoption, initiatives and policies have been adopted that guide City policy. The Chapter Three Addendum maps reflect these changes.

Replaces Figure 3-1: *City Limits*

Since the adoption of the ATCP the corporate boundaries of Austin have significantly expanded. The new map reflects this change.

Replaces Figure 3-2: *Steep Slopes*

The original ATCP map depicting steep slopes (those greater than 15%) is based on pre-1979 data. The revived map employs more current data, displays a greater area, and reflects the larger size of Austin and its extraterritorial jurisdiction.

Replaces Figure 3-5: *Water Quality and Water Hazard Areas*

The map in the ATCP reflects pre-1979 data and policy concerns. The updated map

- Reflects policies changes regarding the Edwards Aquifer and its recharge and contributing zones
- Depicts better mapping of area flood prone areas
- Reflects Austin’s larger sphere of influence to an expanded extraterritorial jurisdiction.

Replaces Figure 3-7: Environmental Development Limitations

The original ATCP map did not indicate the developed areas of the City and extraterritorial jurisdiction. It also indicated areas of limitation by the number of limitations present. The new map simplified this into a single category, “Limitations Exist”.

Replaces Figure 3-9: Neighborhood Planning Areas

The Neighborhood District Boundaries map included in the ATCP designates a number of inner-city Austin neighborhoods based on specific qualities:

- Stable Residential Districts (newer and/or more affluent neighborhoods)
- Residential Conservation Districts (older, stable neighborhoods)
- Community Development Districts.(older, less affluent neighborhoods)

The new map reflects neighborhoods as defined by the City of Austin’s Neighborhood Planning process.

New Figure 3-10: Watershed Regulation Areas

This new map reflects changes to development policy since the adoption of the ATCP. It depicts the “Desired Development Zone” (where new development is encouraged) and “Drinking Water Protection Zone” (where new development is not encouraged). This map also depicts the different types of watersheds (urban, suburban, etc.).

New Figure 3-11: Future Land Use

This new map is a composite map of the future land use maps (FLUMs) of adopted neighborhood plans.

Replaces Appendix 1: 1975 Land Use with Environmental Development Limitations, with 2003 Land Use With Environmental Development Limitations

This map combines the City's 2003 Land Use Inventory with the aforementioned City of Austin Environmental Development Limitations map (Fig. 3-7).

Replaces Appendix 2: Growth Areas with Growth Concepts

This new map depicts numerous planning initiatives:

- Transit-Oriented Development
- Core Transit Corridors
- Passenger Rail Line
- Master Planned Areas (Mueller, North Burnet/Gateway, University Neighborhood Overlay (UNO), Downtown
- Proposed Activity Centers.