

DEL·RIOPLAN

Chapter Six Growth Capacity

In order for Del Rio to realize the future envisioned by its residents and leaders, it must have a balanced strategy for achieving economic growth, while guiding development in a logical and sequential pattern. Doing so will require preparedness and pro-activeness in terms of advanced infrastructure and municipal facility planning, as well as land use management and growth guidance. This element establishes a policy framework that is designed to guide decisions relating to timely extension of adequate infrastructure, provision of quality municipal services, and a logical sequencing of future development.

Del Rio has experienced an increase in population of almost 40 percent over the course of the last three decades (refer to **Chapter 2, Community Snapshot**) – from 21,330 persons in 1970 to 33,867 persons in 2000. At the same time, Ciudad Acuna has increasingly become a thriving Mexican city across the border, which has and continues to influence the amount of economic development activity in Del Rio. According to the projected population outlined earlier in this plan, there are expected to be an additional 13,145 persons over the course of the next 15 years, which must be accommodated with available land and the corresponding infrastructure and municipal facilities and services. The question put before the community is: Where is the most logical and fiscally responsible location for the requisite future development to occur? This is the purpose and substance of this chapter. In brief, it is in the community’s best interests to guide development to occur in locations for which infrastructure already exists or, as an alternative, where it may be readily and efficiently provided. At the same time, there are other significant considerations with respect to its compatibility with the adjacent existing development, the capacity and conditions of the existing infrastructure, its sensitivity to the natural environment, its influence on the overall character and appearance of the community, and its economic contributions to the City.

This chapter is closely related to each of the other elements of this plan addressing land use, parks and recreation, transportation, and economic development as they relate to the expected future growth and the community’s capacity to meet the growing demands for providing public facilities and services. The analysis and findings presented in this chapter are based primarily on known factors regarding the existing utility infrastructure systems, programmed and anticipated

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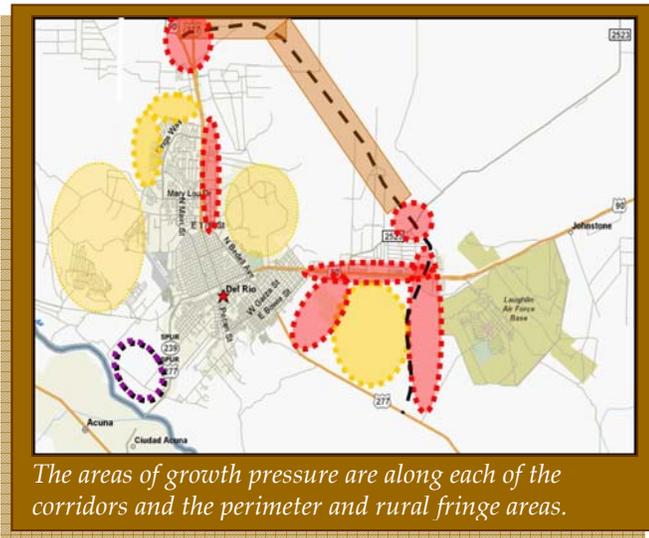
utility improvements, and projected population growth of the City. It is a general conclusion that the community must continue to focus its attention on the replacement, revitalization, and reinvestment in its current infrastructure while, at the same time, ensuring that new development is not inadvertently and/or unnecessarily contributing to the fiscal burden of the community to operate and maintain its infrastructure. Therefore, this chapter is focused on providing guidance to accommodate the added population and employment in a responsible and proactive manner.

In addition to analyzing the City’s capacity to support the projected future change in population and expansion of development, this chapter also establishes a policy framework for managing future growth in a manner that is wise and fiscally responsible. Without a proactive stance to ensure that development occurs in a logical and sequential pattern, it will continue to be driven solely by market forces, which does not necessarily occur in a manner that can be efficiently served with adequate public facilities and services.

Del Rio, like other mid-sized and remote communities and, particularly, those along the border, is increasingly challenged by limited fiscal resources. The City has made a commitment to reinvest in its aging infrastructure in the older, well-established areas, but there remains a significant amount of investment to replace compromised water and sewer pipes and streets. It is, therefore, essential for the City to evaluate its pattern of development and seek ways to improve the efficiency of its service provision and its effectiveness in delivering quality, reliable, and adequate facilities and services to its population. A sprawling or leap-frog growth pattern will detrimentally affect the efficiency of the City’s service provision.

KEY GROWTH CAPACITY ISSUES

The following issues pertain to the City’s capacity to provide adequate facilities and services and ability to manage future development. The findings are based on analysis of the existing land use and expected future development pattern, planned improvements of the water and wastewater systems, and both short-term and long-range strategies to manage future growth. These issues are summarized into the following broad categories:



The areas of growth pressure are along each of the corridors and the perimeter and rural fringe areas.

Sustainable Provision of Quality Infrastructure

The scale of the currently needed infrastructure improvements, such as a new wastewater treatment plant, in addition to replacement of aging water/sewer lines and streets, warrants community dialogue as to the feasibility of future development and its pattern of growth. Major improvements such as the outer loop and the improvement/widening of U.S. 90 will create development pressure in an area removed from current service provisions, which would severely stretch the City’s fiscal resources should development be allowed without sound growth

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and fiscal management policies. At the same time, the City must support its economic development objectives by providing the necessary infrastructure for new business development. Without long-range strategic planning, the economic potential of the community may be constrained by the ability to extend and maintain the required facilities and services. Therefore, compact development is more suitable and feasible than continued outward growth. Such development form, however, requires strict adherence to growth policies and strategic direction as to the provision of services and consideration of new development.

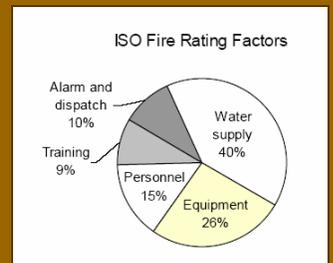
With the exception of the new water plant in 2004, the primary focus has been on the day-to-day operations and maintenance of the utilities systems. In fact, the two wastewater treatment plants were constructed during the 1970s when the population increased by 41 percent. Since, there have not been any major expansions or upgrades to these plants. Much of the concentration has been on replacing its aging infrastructure, solving recurring problems with inflow and infiltration of stormwater into the sanitary sewer system, and complying with Federal permitting regulations. Due to the amount of asbestos cement pipe that was installed in the 1940s, there is a considerable loss of water amounting to 21,345,000 gallons annually. This is the result of leaks in the system, which have been reduced over time from a rough average of 30 repairs per day to approximately 15 repairs per day. Nonetheless, this is still a significant number of repairs that requires continued attention and investment.

Water Supply and Distribution – Currently providing irrigation to our nine hole golf course and Del Rio High School fields, the water distribution system includes two raw water pump stations located at San Felipe Springs; a recently constructed (2002) 18.2 million gallon per day (MGD) water treatment plant (incorporating a membrane building, chemical feed facilities, two clear wells, finished water pump station, recycle lagoon, and over 220 miles of finished water piping); and related civil, mechanical, and electrical support facilities. Also, there are four elevated storage tanks, one ground level water tanks, one standpipe tank, two recently constructed two million gallon (MG) tanks on Bedell Street, and related water infrastructure. There are also various wells for future water supply.

The relatively new water treatment plant has the capacity to treat 18.2 MGD. The flow demands are an average of 12.28 MGD during the summer months and roughly 6.81 MGD during the winter months. Therefore, this water plant is operating at 67 percent capacity and 37 percent capacity during the summer and winter seasons, respectively. The current demands are based on an estimated population of 37,500 persons. Therefore, based upon a projected Year 2025 population of 47,012 persons, the water plant will be operating at 76 percent capacity during the winter and 84 percent capacity during the summer. Using general planning parameters, the City will need to expand its

Insurance Services Office (ISO) collects information on public fire protection and analyzes the data using a Fire Suppression Rating Schedule (FSRS). ISO assigns a Public Protection Classification (PPC) from 1 to 10. Class 1 represents the best public protection, and Class 10 indicates less than the minimum recognized protection.

By classifying a community's ability to suppress fires, ISO helps communities evaluate their public fire protection services. The program provides an objective, country-wide standard that helps fire departments in planning and budgeting for facilities, equipment, and training. And, by securing lower fire insurance premiums for communities with better public protection, the PPC program provides incentives and rewards for communities that choose to improve their firefighting services.



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water treatment capacity during the horizon of this plan.

It is understood that there are difficulties in meeting acceptable water pressures due to the age and quality of water pipes, particularly in the older areas of the community. Besides the obvious inconvenience of poor water pressure at the tap, there are significant issues with respect to meeting the minimum fire flow pressures necessary to adequately respond to a fire. Without sufficient pressure, fire may spread more rapidly, thereby affecting more structures and lives. In addition, the Insurance Services Office (ISO) rating is based, in part, on the availability of water and its pressure, which, in turn, impacts the rating and, hence, insurance rates in the community. Therefore, addressing water pressures is also of importance.

Wastewater Collection and Treatment – The existing wastewater treatment system consists of the San Felipe Wastewater Treatment Plant (SFWWTP), which itself consists of a rarely utilized 1.18 MGD plant (Old San Felipe Plant) and the new San Felipe Plant permitted at 2.62 MGD, for a combined permitted discharge capacity of 3.80 MGD. The Silver Lake Wastewater Treatment Plant (SLWWTP) is permitted at a capacity of 2.76 MGD. The wastewater system includes about 215 miles of collection mains and service laterals and 19 lift stations.

Between the two wastewater treatment plants, the operating capacity is at approximately 65 percent. Given the 75-90 rule of the Texas Council on Environmental Quality (TCEQ), either one or both treatment plants will also need to be designed and constructed during the horizon of this plan. This rule requires that design must be underway at the time a plant reaches 75 percent capacity, and construction must be initiated when it reaches 90 percent capacity.



A problem of the City’s wastewater infrastructure systems, particularly resulting from aging infrastructure (pipes, valves, and manholes), is the inflow and infiltration (I/I) of stormwater into the sanitary sewer lines. The most significant impact associated with this problem is the burden placed on the treatment plants to treat an increased volume of wastewater. During periods of rainfall, the flow rates peak at the plant. To address this problem, the City must be proactive by replacing sewer mains concurrent with major road projects, as well as through an ongoing program of televising sewer lines in known problem areas to identify needed improvements. A formalized capital replacement/rehabilitation program is needed to readily upgrade the reliability of the wastewater collection system.

A reduction of inflow and infiltration into the wastewater collection system is a key for recovering the treatment capacity of the existing system. With an average of 18,000 gallons per household per month, this equates to 194 gallons per person per day, which is significantly higher than its design flow. There has not been a detailed inflow and infiltration study in the

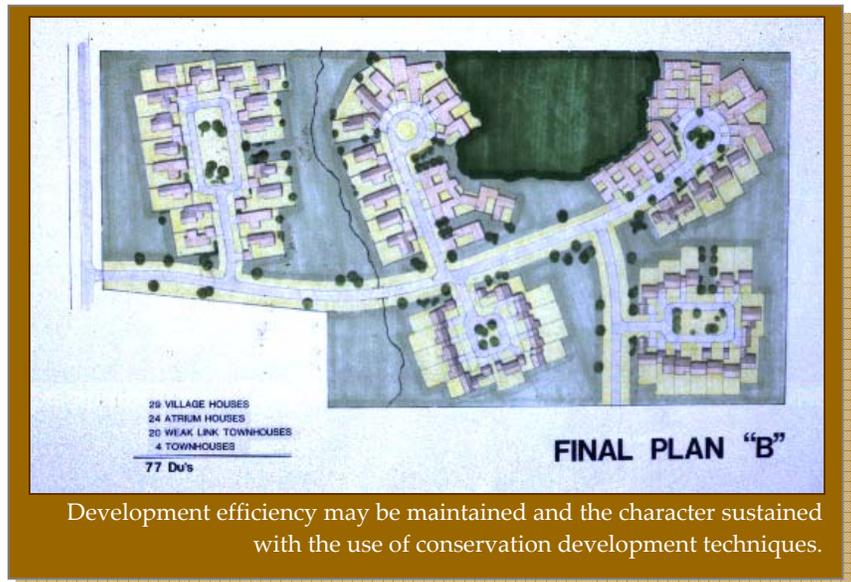
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City. Reducing the infiltration could potentially reduce the flow to the plants to extend its life beyond the horizon of this plan.

Stormwater Management – Due to the terrain and the presence of natural drainage features, such as the San Felipe and Cienegas Creeks, the community has expansive areas that are within the Federal Emergency Management Agency (FEMA) designated floodplains and flood prone areas. As displayed in **Figure 6.1, Floodplain Areas**, the areas that are primarily affected by flooding are along both creeks, with the most expansive areas throughout the Jap Lowe Estates development. There is periodic flooding in these areas during storm events, the severity of which depends on the size, duration, and nature of the event. There are still many localized flood prone areas that are threatened by flooding by as small as 10- or 25-year storm events. It is not unusual for the City to experience disrupted traffic due to poor street drainage.

Due to Tropical Storm Charley in August 1998, the City commenced a study to identify homes within the flood-affected area. A total of approximately 199 homes were identified, which were prioritized for buyout in concert with FEMA guidelines and strategies. In essence, homes were classified according to their location relevant to the floodway and floodplain and their relative percent damage resulting from the tropical storm flood. The buyout properties were located primarily in the San Felipe Neighborhood, on the southeast side of San Felipe Creek. These lots are highly visible today within these areas. In addition to these properties, which were most severely damaged by the flood, there were also hundreds of others that also sustained some level of damage. Therefore, storm drainage continues to be a significant consideration in the community.

Flooding is brought about by the overland flow of water caused by the volume of rainfall, together with the amount and degree of imperviousness, and soil types and conditions. Therefore, the design of development has a significant influence on the volume of stormwater that is generated and its means of collection and conveyance. The density and intensity of development, measured in terms of units per acre and ratios of open space and impervious surface coverage, contribute to both localized and community-wide flooding conditions. Generally, the means for managing stormwater is to require the design of subdivisions and nonresidential sites to comply with predevelopment run-off conditions. The use of development clustering, as opposed to conventional “cookie-cutter” development, also helps to reduce impervious area while increasing the amount of open space available for recharge.



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Solid Waste Collection and Disposal – The City recently acquired an additional 80 acres for the purpose of expanding the existing landfill. Therefore, the landfill site can function throughout the horizon of this plan.

GOAL: Adequate and efficient provision of municipal facilities.

RECOMMENDATIONS TO CONSIDER:

1. Amend the zoning ordinance to incorporate density bonuses for cluster (50 percent open space), conservation (75 percent open space), and preservation (90 percent open space) development, which, in effect, leaves portions of developments undisturbed; allows overland conveyance of stormwater; reduces the buildable area and, hence, impervious cover; increases aquifer recharge; and allows development of otherwise sensitive lands. The subdivision regulations could be amended so as to allow for this type of development.
2. As part of a water master plan, study the causes for the excessive amount of water loss (estimated at 21,345,000 gallons annually) and, subsequently, prepare recommendations and an improvement program to remedy the problems, with priority on those for which there is the greatest leakage. A cost-benefit analysis could be prepared to analyze the total costs of improvement relative to the estimated costs for the loss of water. It is acknowledged that much of the loss is due to old pipes that were originally installed. Continue with the policy to replace or rehabilitate the water lines concurrent with street reconstruction and major repairs.
3. Research problems related to the availability and pressure of water that impacts the City's current Insurance Services Office (ISO) rating. Subsequently, prepare a plan and improvement program to make the necessary improvements so as to gain a better rating and, hence, insurance rates.
4. Update the Capital Improvement Plan (CIP), which includes wastewater to identify necessary equipment upgrades and capacity expansions for one or both of the treatment plants. According to an estimated operating capacity between the two plants of 65 percent, expansion will be necessary during the horizon of this plan.
5. Concurrent with a CIP update, conduct a study to specifically locate the problem areas causing the excessive peak wastewater flows. Subsequently, prepare recommendations and an improvement program to remedy the most significant problem areas. Develop a replacement policy to ensure improvements maximize cost effectiveness relevant to the reliability of the system and the efficiency of the City's growth. Create and fund a formalized program to replace aging and failing wastewater collection infrastructure.
6. Identify "best management practice" piping, manhole, bedding, and backfill materials and incorporate their use into a revised technical specification for use on all new construction projects. Subsequently, implement a testing and inspection program to ensure adherence to construction method and material specifications for all projects.
7. Identify and eliminate all unauthorized connections to all utilities systems, as applicable. Subsequently, prepare a public awareness program to alert the public to the illegality of unauthorized dumping into the wastewater system and its associated costs to the City.
8. Prepare a drainage study based upon future land use plans (refer to **Chapter 3, Land Use**) and current drainage conditions to identify necessary structural and non-structural

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improvements to the drainage infrastructure to eliminate the flooding of structures and residential properties and to solve overflow conditions on many of the streets in coordination with the Texas Department of Transportation (TXDOT).

9. Develop drainage policies and determine the effectiveness of regional detention and the service areas. Develop a set of specific drainage performance standards that will provide for compliance in all areas of the community. Require uniform practices for development runoff at all storm frequencies to meet pre-existing runoff conditions.

Sequential Pattern of Development Concurrent with Adequate Service Provision

The intent of these planning policies and principles is to encourage compact and efficient development patterns, thereby minimizing fiscal impacts caused by an outward, sprawling development pattern. For Del Rio, sprawl has not been a substantive issue, other than the development that has occurred along the U.S. 90 corridor stretching the full distance to Laughlin Air Force Base. There are inclinations of a sprawling pattern around the community, albeit not of a scale as to cause alarm of significant consequence. Nonetheless, it is important for this plan to anticipate the pattern of future growth and to put the necessary policy guidance in place to effectively manage it.

According to the projected future population, assuming similar ratios to that of the current land use, there will be a need for an additional 4,040 acres of land for single-family residential development, as displayed in **Table 6.1, Estimated Future Land Use Acreages**. Additionally, there will be a need for 200 acres of land for multiple-family development, 185 acres for commercial use, and 206 acres for industrial development, for a total of 4,631 acres. This is based upon an inventory of existing land use and assumes similar densities. Given the portion of runoff area (Jap Lowe Estates) and its large-lot zoning, the constraints of development within the air installation compatibility use zone (AICUZ), and the influence area of the Del Rio International Airport, the areas remaining to accommodate the estimated future development include the vacant and undeveloped lands adjacent and along each of the corridors, which will most likely be developed with

more intensive residential and nonresidential uses, as well as the peripheral and rural fringe areas around the community.

The most efficient pattern of growth for

the community will be growth that occurs sequentially from the developed areas that is closely coordinated and timed to occur concurrent with adequate service provision. Haphazard

Table 6.1, Estimated Future Land Use Acreages

Land Use	Current Acreage	Projected Future Acreage	Year 2025 Needed Acreage
Single-Family Residential	10,409	14,449	4,040
Multi-Family Residential	516	717	200
Commercial	477	662	185
Industrial	532	738	206
Public and Civic	507	704	197
TOTAL	12,441	17,270	4,829

NOTE: Assumes a Year 2025 population of 27,012 persons.

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development that occurs in an unplanned and uncontrolled manner is inefficient and undesirable. Rather, the community must establish its growth sequencing plan, which provides guidance to the capital improvements facilities plans.

Two important tools available to the City to manage its future growth are annexation and zoning. Within the limits of the Compatible Land Use and Hazard Zoning Ordinance pertaining to the protection of LAFB, there are viable management and control mechanisms. Outside of this area and within the extraterritorial jurisdiction (ETJ), however, there is less control of land use since the only authority of the City is its subdivision regulations. Therefore, in order to more effectively

manage the pattern of future development within the growth pressure areas, and particularly along the outer loop, the City might consider using its annexation authority. Doing so will grant zoning authority and, hence, the ability to determine the amount, type, scale, and pattern of development within these areas. This is not to say, however, that these areas are to be entirely restricted from any type of development. Instead, the intent is for the City to have the ability to make decisions about its pattern of future use and its fiscal feasibility.

To meet the community's economic development objectives and to accommodate the projected future growth – an additional 13,145 persons in the next 20 years - it will be necessary for the City to annex additional territory and extend its municipal infrastructure.

It is advocated by this plan that appropriate instruments be put in place through incentives and resolution of common development and redevelopment constraints to allow and encourage infill development on vacant parcels. Over time, there will also be an increased propensity for redevelopment, which should also be accommodated and encouraged. This would help maximize the efficiency of service provision by intensifying the use of existing and available infrastructure.

In accordance with the Texas Local Government Code, "...in its extraterritorial jurisdiction a municipality shall not regulate:

- 1. The use of any building or property for business, industrial, residential, or other purposes;*
- 2. The bulk, height, or number of buildings constructed on a particular tract of land;*
- 3. The size of a building that can be constructed on a particular tract of land, including without limitation any restriction on the ratio of building floor space to the land square footage;*
- 4. The number of residential units that can be built per acre; or*
- 5. The size, type, or method of construction of a water or wastewater facility that can be constructed to serve a developed tract of land..."*

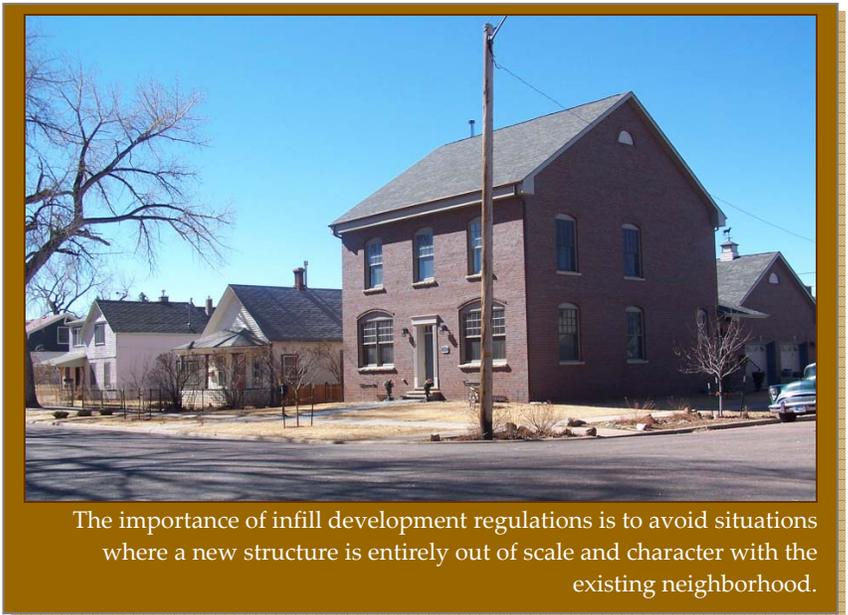
GOAL: Fiscally responsible pattern of future development.

RECOMMENDATIONS TO CONSIDER:

1. Prepare an annexation plan to identify the areas for which the imposition of land use controls is advantageous. The plan does not have to comply with the State mandated plan requirements unless there are more than 100 parcels with a residence affected. The only areas for which a plan compliant with the State laws may apply would be the rural subdivisions to the west should the City decide the areas are warranted for inclusion in the City. Consistent with the Growth Sequencing Plan, consider the appropriateness and timing for annexation of the following areas:
 - A minimum width of 1,000 feet along the alignment of the outer loop, extending from its

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- intersection with U.S. 90/U.S. 277 on the north to U.S. 90 East.
- Areas at each of the planned intersection locations of highways and roads, such as F.M. 2523, with the outer loop. These areas should be sufficient in size to encompass development at and around these interchanges.
 - The areas between the outer loop and the current City limits.
 - The area around the Del Rio International Airport so as to protect its long-term interests for expansion and improvement.
 - Any additional areas beyond the limits of Jap Lowe Estates that are within the influence area of the San Felipe Aquifer and springs.
 - Along U.S. 90/U.S. 277 to the north.
 - Along the proposed arterial roadway around the northwestern quadrant of the community, tying together North Veteran’s Boulevard and Cantu Road.
 - Peripheral rural development areas. Those that are developed and developing are not likely feasible for annexation. Areas that are not yet developed may be subject to annexation to allow the City the ability to manage its pattern of development.
2. Adopt specific land use controls within the annexed area along the loop that falls with the limits of the Air Installation Compatibility Use Zone (AICUZ), consistent with the land use recommendations of April 2000 AICUZ Study, as amended from time to time and future additional studies.
 3. Establish a formalized annual rehabilitation and replacement program for the water distribution and wastewater collection systems within the well-established areas of the community so as to enable infill development and/or redevelopment.
 4. Meet with property owners within the established areas, as well as developers, to identify the constraints to infill development. Subsequently, amend the zoning and subdivision ordinances and vary other standards and requirements so as to mitigate the obstacles.
 5. Create and adopt infill development standards concerning density, intensity, and other dimensional requirements to maintain a consistent character with adjacent existing development. Of particular importance within many of the older, historic areas is to ensure that the architecture and materials are consistent with those in the immediate neighborhood.



The importance of infill development regulations is to avoid situations where a new structure is entirely out of scale and character with the existing neighborhood.

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6. Adopt a policy regarding the provisions of infrastructure to candidate infill development sites. Extend adequate infrastructure to serve infill development sites. Finally, prioritize capital projects that will benefit undeveloped sites that will increase density and the efficiency of the infrastructure system.

Managing Development in an Efficient and Fiscally Responsible Manner

A majority of the dense urban development has occurred within the City limits or, in some cases, directly abutting or in near proximity to them with a request for annexation. The benefit to the owners of properties within the City limits is the availability of urban infrastructure (water, sewer, solid waste, and drainage improvements), services (police, fire, and emergency medical services, among others), and the City’s authority to regulate development through its zoning and subdivision ordinances.

Due, in part, to the availability of water and sewer from the City, development has been able to occur outside of the City limits in areas that are not feasible for annexation. Development in Spring Lake Estates, Cienegas Terrace, and Chaparral Hills, for instance, has been allowed without annexing into the City.

There are both practical and policy issues associated with peripheral development. The more significant issues relate to the inability of the City to promote orderly growth and urbanization by coordinating development with the provision of facilities and services. Another common issue with development occurring outside the City limits is a limitation for expanding the tax base in line with increasing service demands. This is especially important since residents and businesses outside the City benefit from access to public facilities and services, such as parks and libraries, but do not share in the tax burden associated with constructing and maintaining these facilities and services. A peripheral pattern of development stretches resources and increases costs for providing services, while burdening the capacities of infrastructure systems that are not adequately designed to support such development.

It is important to acknowledge the influence of public investments on private development activities. As commonly stated, the three most important factors in real estate development are location, location, and location. The importance of location is derived, at least in part, by the presence and availability of infrastructure, such as streets and utilities. Therefore, where there are readily accessible facilities, land values escalate and development shortly follows. This is an important growth management consideration given the forthcoming outer loop. Location of such a significant transportation feature will attract development, which could be an impetus for an inefficient development pattern without the requisite policies and management tools in effect.

GOAL: Adequate infrastructure provision concurrent with new development.

RECOMMENDATIONS TO CONSIDER:

1. Promptly following adoption of the plan, assemble a group of appropriate staff persons to prepare an annexation plan. Such plan should focus its attention on the specific identification and definition of the designated urban area. This area should include the limits of current

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infrastructure provision, as shown in **Figure 6.2, Water Infrastructure**, and **Figure 6.3, Wastewater Infrastructure**, as well as those areas that can be certified as being capable of ready extension of adequate service for new development. The designated rural area should also be defined and mapped. Subsequently, prioritize these areas according to their ability to serve new development in the immediate, near, mid, and long terms. Proceed with annexing the areas not already within the City limits that are determined to be within the immediate and near terms.

2. The urban area contained within the growth sequencing plan should include sufficient land area to accommodate the expected population within five-year increments, estimated at roughly 275 acres. In addition to residential land use acreage, there must also be a proportional amount of land set aside for multiple-family development, as well as commercial industrial, and public/institutional land.
3. Evaluate the City's capital improvement program and annual capital plan against the growth sequencing plan to ensure utility extensions and capacity improvement projects are consistent with the defined urban area. The capital improvement program and plan should be prioritized in accordance with the sequencing and timing of development.
4. Utilize the provision of facilities and services to guide the timing and sequencing of future development. Utilize the Growth Sequencing Plan in prioritizing capital infrastructure improvements, thereby using capital investment to direct future development.
5. Incorporate adequate public facilities provisions into the development code, requiring the availability of facilities and services concurrent with the timing and density/intensity of development. Determine the design capacities of road and utility systems as a basis for restricting development so as not to exceed the established thresholds. Adopt strict utility extension policies that are tied to impact fees that are proportional to the provision of infrastructure to areas without existing facilities and services.
6. Adopt a utility extension policy whereby the City will not extend water and wastewater service to areas outside of the City limits unless a study has been conducted to identify the requisite water and sewer rates necessary to be feasible and warranted.
7. Develop a fiscal impact model whereby the City can quantify the fiscal consequences of development and, subsequently, adopt policies to ensure responsible outcomes.
8. Expand the City limits by phasing the incorporation of land within the urban area as adequate infrastructure and municipal services are available and development approval is requested. Require that all users within the urban area annex into the City limits. Establish as a condition of annexation that the subject parcel must be contiguous to the City limits for a dimension of not less than 25 percent of its boundaries. Adopt zoning concurrent with annexation that is consistent with the managed growth areas of the plan.
9. Incorporate transferable development rights (TDR) into the zoning ordinance to allow a transfer of density from the agricultural and rural areas to the urban area. Require the construction of improvements within the rural areas to conform to specified development standards, i.e. widths of rights-of-way and pavement and technical design specifications. Formulate decision criteria for consideration of zone changes within the managed growth areas.

SENSIBLE FUTURE DEVELOPMENT

Typical development patterns are based upon the simple notion of creating development that is both marketable and profitable. Often, little thought is given to the cumulative impact of development until it has occurred and the impacts are realized. Sprawl is defined as an inefficient consumption of land, which spreads from urban and suburban areas to undeveloped rural land that results in an inefficient use of infrastructure. While sprawl is marketable to the general public, equating to larger lots and lower home prices, as well as the financial institutions that fund development projects, from the perspective of the community, it is short-sighted and of long-term consequence.

In recent years, communities are adopting development practices that still allow for marketability and profit, but also aid the community in achieving efficiency and improving quality of life. While the popular term “Smart Growth” has been attached to this notion, it is really nothing more than sensible planning that better reflects the interests of the community and its residents. The tenets of planning for sensible development seek to accomplish the following:

- ◆ balancing the need to support economic development, while protecting the environment;
- ◆ directing development to the areas for which public services and utilities are readily available;
- ◆ encouraging infill development on vacant or underutilized properties where existing infrastructure may be more efficiently utilized;
- ◆ promoting a more compact development pattern to reduce the need for costly infrastructure and minimize the loss of raw productive land;
- ◆ maintaining a highly efficient street network and infrastructure systems; and
- ◆ providing community gathering areas and pedestrian-friendly destinations.

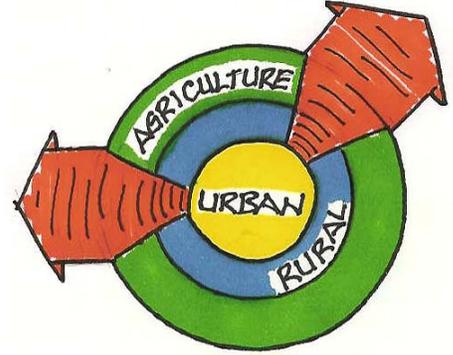
The goal for Del Rio is not to limit or slow development activity. Rather, the objective is to seize its economic development opportunities, while carefully managing the location and pattern of growth and rewarding those who place an emphasis on the community’s values.

The following policies are intended to assist the community in making decisions regarding the timing and pattern of future development, which may be used to either support or deny applications for development around the periphery of the community where facilities and services are not readily available or capable of supporting increased development densities. Policies for helping the community achieve attractive and fiscally responsible future development include:

- Policy 1:** The efficiency of existing infrastructure will be maximized by directing development via annexation, zoning, and/or capital investment to occur in areas that immediately abut existing and adequately-sized facilities and improvements, rather than allowing peripheral development that will require costly infrastructure extensions and expansion of service areas.
- Policy 2:** The development of water and wastewater systems will be closely coordinated with the planned pattern of new development and in areas that are suitable and desirable for future growth.

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- Policy 3:** Development will be staged in a deliberate sequence so as to enable timely provision of adequate public facilities and services. Incentives will be provided to encourage development of vacant and underutilized areas that are already served by infrastructure before development occurs in the fringe and peripheral areas of the community.
- Policy 4:** Future growth will occur in more dense, compact development patterns where infrastructure is readily available and its efficiency is greatly improved.
- Policy 5:** The outlying rural areas and sensitive lands, including the floodway and 100-year floodplain; aquifer and springs protection areas; the air installation compatibility use zone (AICUZ), as may be amended from time to time; the influence area of the Del Rio International Airport; and areas of historical, cultural, or natural amenity will be preserved and, thus, protected from the encroachment of premature urban development.
- Policy 6:** A true mixing of uses will be encouraged through zoning allowances and requirements, thereby bringing neighborhoods and businesses together to form more compact centers of community activity and creating opportunities for social interaction.
- Policy 7:** Adequate facilities and services will be constructed and sustained to meet the increasing public need.
- Policy 8:** Partnerships will be established with other jurisdictional authorities such as Val Verde County, Kinney County, Laughlin Air Force Base, the Del Rio – Val Verde County Joint Zoning Board, Government Services Administration (GSA), the San Felipe - Del Rio Consolidated Independent School District, and area utility service providers to develop long-term growth management strategies that will conserve resources and sustain adequate service provision, while at the same time meeting economic development objectives.
- Policy 9:** Relationships will be formalized with governmental and other entities through joint projects, inter-local agreements, and memoranda of understanding to provide more cost effective coordination of services and growth management policies.
- Policy 10:** Preservation measures will be enacted to protect sensitive lands and conserve environmental resources.



GROWTH SEQUENCING PLAN

Evolving land use patterns within and around the community have exhibited sprawl characteristics. While the amount of development is not such that it is highly apparent or reached proportions that are of primary concern, it is, nonetheless, an important land use planning consideration that will – over time – have implications on the public health, safety, and welfare. Sprawl is a highly inefficient pattern of growth. Costs associated with the provision of both capital and social infrastructure are much higher than they are for more compact patterns of

development. This is particularly relevant and important when the community is confronted by limited fiscal resources and increasing demands for service.

In addition to its fiscal consequences, sprawl results in the degradation of natural resources by prematurely committing vast areas to the impacts of urban development. Phased, orderly growth mitigates this situation by comprehensively addressing the impacts of development on the natural systems. Leap-frog development – recognized by the large-lot, rural subdivisions developing around the periphery of Del Rio – is piecemeal in nature, which is detrimental to any type of comprehensive framework.

Another significant aspect of sprawl is the tendency toward strip commercial development, such as that seen along U.S. 90 from San Felipe Creek extending to LAFB. This pattern of development occurs as infill between sprawled developments – in this case, the City and the base. Without advanced planning, this same pattern will likely occur along the outer loop. Unless the City enacts its zoning authority through annexation of the outer loop, it is likely that there will be increased development pressure at its intersections with U.S. 287, U.S. 90, and U.S. 277. This form of development would have a multitude of negative impacts, including a premature increase in land values and, hence, a depreciation of values in the City, increased pressure for an inefficient extension of utilities, a potential for erosion of downtown businesses due to reduced traffic, a rise in vacant and derelict buildings, traffic safety, and community aesthetics. While many of these impacts may be handled by regulatory means – assuming annexation and the imposition of zoning - land use policies offer an approach to prevent, rather than remedy, the problem.

Managed Growth Areas

The principal strategy for managing the future growth of Del Rio is the concept of Managed Growth Areas (MGAs). The underlying premise of this approach is simply to direct development to areas that are either currently served or may be readily provided with municipal facilities and services within the time horizon of this plan. The MGA concept is based upon a desire to have Del Rio grow in a responsible manner, with infrastructure provided economically and efficiently and surrounding agricultural and sensitive lands protected from unwarranted and premature conversion to urban land use.

To implement the MGA concept, the extraterritorial jurisdiction must be defined according to three use designations. These designations relate to the feasibility of annexation and provision of urban infrastructure and the allowable densities/intensities of development. The designated areas are as follows:

Designated Agricultural Area

The designated agricultural area should generally include the following properties:

- ◆ Areas within the 75+ decibel limits, as defined by the Air Installation Compatibility Use Zone (AICUZ), which may be amended from time to time;
- ◆ Areas currently zoned into the Agriculture-Open District; and

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- ◆ Those for which agriculture is the primary intended use.

Development within this area should be restricted to a use and density that preserves its agricultural character. To do so, this area requires a minimum open space ratio ranging from 65 to 95 percent, depending on the intensity of development.

Policies for the Designated Agricultural Area

- ◆ The land use pattern within the extraterritorial jurisdiction will reduce the consumption of land and concentrate growth within the urban area.
- ◆ Any development within the agricultural area will strictly adhere to the requirements and standards of the development regulations, as amended.
- ◆ Designated agricultural areas will not be considered for annexation or urban development by the City.
- ◆ Urban infrastructure improvements and municipal services will not be extended to serve the designated agricultural areas.
- ◆ Existing agricultural uses will be protected from encroaching development so as to prevent impacts on neighboring uses and to allow for their long-term viability and continued operation.
- ◆ Compatible land uses, which support utilization of the resource and minimize conflicts among uses, will be required adjacent to the designated agricultural areas.
- ◆ Agricultural operations will implement best management practices to reduce environmental impacts and mitigate any unavoidable impacts.
- ◆ A program authorizing the transfer of development rights may be established for the designated agricultural area, which may only be transferred to the designated urban area.

Designated Rural Area

Within this area, development should be restricted to preserve a rural land use pattern by allowing very low-density residential units. The intention of this area is similar to the R-220 Estate Residential Single Family District, which restricts development to five-acre tracts with no more than ten percent lot coverage. Similar to the minimum lot requirements of the R-220 district, the rural area should permit varying intensities of residential development subject to standards for minimum open space and maximum density.

Land uses permitted in the rural area may be designed to accommodate more intensive development in the future, provided they are outside of the defined environmentally sensitive areas. In other words, where appropriate, lot sizes, placement of structures, and the design of the infrastructure systems may be such that re-subdivision and intensification may occur in the future. The designated rural areas should include the following:

- ◆ Areas within the 65+ decibel limits, as defined by the Air Installation Compatibility Use Zone (AICUZ), which may be amended from time to time;
- ◆ Areas within the defined aquifer and spring protection zone;
- ◆ Areas currently zoned into the R-220, Estate Residential Single Family District; and
- ◆ Areas immediately abutting the City limits and beyond that needed to accommodate the projected future nonresidential uses and 90 percent of the projected future population.

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Development within the designated rural area should be permitted at a density that preserves its rural character. Minimum open space ratios ranging from 65 to 90 percent would be necessary, with permitted net densities ranging from 0.04 units per acre (20-acre minimum lot size) to 2.44 units per acre (one-half acre minimum lot size).

Policies for the Designated Rural Area

- ◆ Permitted land uses will be limited to very low densities with significant areas designated as permanent open space, ranging from 65 to 90 percent, dependent upon the development type and density.
- ◆ Development within the rural area will strictly adhere to the requirements and standards of the development regulations, as amended.
- ◆ Any land within the designated rural area will not be considered for urban development, including institutional uses or public facilities.
- ◆ To preserve rural character, natural features (such as water bodies and significant wetlands, scenic resources, and habitat areas) will be afforded long-term protection, minimize environmental degradation, and enhance environmental quality.
- ◆ A rural level of service will be defined for the provision of infrastructure, which may be sustained by minimal infrastructure improvements, such as septic systems and rural roads. Development that exceeds the defined rural level of service will not be permitted.
- ◆ Designated rural areas will not be considered for annexation by the City.
- ◆ Urban services will not be extended within the rural area without advanced approval of the City, consistent with the Growth Sequencing Plan (as developed by the City), and subject to the policies and provisions of this plan.
- ◆ Growth within the urban area will be considered as to its impact on the rural area so as not to cause infrastructure facilities to be improved to urban standards.
- ◆ Standards for rural water service will assure adequate quality and quantity for domestic supply consistent with rural residential densities.
- ◆ Residents in the designated rural areas should anticipate lower levels of public services and infrastructure than that available within the urban area.
- ◆ New development will be clustered at the edges of agricultural fields to minimize the consumption of agricultural land and possible conflicts with current or future farming activity.
- ◆ The designated rural areas will be designed and constructed in a manner to allow re-subdivision and intensification in the future.
- ◆ Rural areas will retain a high proportion of undisturbed soils to maintain groundwater recharge and high water quality.
- ◆ A program authorizing the transfer of development rights may be established for the designated agricultural area, which may only be transferred to the designated urban area.

Urban Area

This area is intended to accommodate the City's urban development during the horizon of this plan. To achieve this end, within this area is where capital improvements and facilities should be

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planned. It permits all types of development, including residential, commercial, institutional, and industrial uses.

The boundaries and size of the urban area are ultimately based upon the area necessary to accommodate all new residential dwelling units within the City during the horizon of this plan. Based upon recent population increases and the projected future growth, it is expected that the City will add approximately 700 persons per year. This equates to roughly 55 acres of single-family residential development annually.¹ To coordinate the timely and efficient extension of infrastructure, it is advised that the City maintain an inventory within the City limits to accommodate five years of growth or 275 acres.

The urban area consists of those areas that are permitted to develop to urban levels of density or intensity, either presently or over the course of the horizon of this plan. It is generally planned to be consistent with the fiscal ability of the City to provide capital infrastructure to accepted standards for urban development. The essence of the managed growth plan, is concentrating the City's capital resources to provide a level of urban facilities to the urban area during the time period of this plan.

Policies for the Designated Urban Area

- ◆ Development within the urban area shall strictly adhere to the requirements and standards of the development regulations, as amended.
- ◆ The provision of urban services will be available during the horizon of this plan.
- ◆ Infrastructure investments will be channeled to support the Growth Sequencing Plan (as developed by the City) and the Future Land Use Plan.
- ◆ Areas within the urban area that are not incorporated will be annexed prior to development.
- ◆ Lands included in the urban area may only include those for which infrastructure may be efficiently and cost-effectively provided, including roads, water, sanitary sewer, storm drainage, schools, and other urban governmental services.
- ◆ Growth will be directed in the following order:
 - first, to the urbanized areas with existing infrastructure capacity;
 - secondly, to areas that can be readily and efficiently served by infrastructure improvements; and
 - lastly, to areas requiring major infrastructure improvements.
- ◆ Land outside of the urban area and within the designated rural area may transfer development rights and density to the urban area, subject to the provisions of Del Rio's Development Code, as amended.

¹ Assuming 3.09 persons per household (2000 Census) and an average of four units per acre.

INFRASTRUCTURE PROVISION

An effective approach for managing the type, pattern, and density of the community's future growth is allowing development to occur only as adequate municipal facilities are available. One means of ensuring that growth occurs in areas where infrastructure is either present or desired includes the creation of an Adequate Public Facilities Ordinance (APFO). Also known as concurrency requirements, this mechanism ensures that infrastructure is available prior to or concurrent with development.

Adequate Public Facilities Ordinances (APFOs) tie or condition development approvals to the availability and adequacy of public facilities. Adequate public facilities are those facilities relating to roads, sewer systems, water supply and distribution systems, schools, and fire protection that meet adopted level of service standards.

Adequate public facilities ordinances require applicants for new development to demonstrate that facilities and services will be available to serve the project at the time the development is available for occupancy. Utilizing this system, the community is able to adopt level-of-service standards, which can be used as criterion for approving or denying applications, depending on conformance to the standards. Issuance of building permits is based upon the established existence of public improvements or capital facilities. As an alternative, establishment of impact fees and greater developer participation in infrastructure construction and financing may be necessary to shorten development timeframes.

This approach is both practical and defensible. The key to effectively employing this system is being rational in making determinations as to the adequacy or inadequacy of public facilities. The strength of this approach is its ability to allow the community to establish a direct, causal link between the provision of public facilities and the public health, safety, and welfare. The general components of an APFO include:

- ◆ Determining a service threshold or point at which demand exceeds the desired capacity of public facilities, whether it is water and wastewater systems, roadways, parks, or schools. Generally, the difference between the established threshold and the existing level of service is the amount available to a development.
- ◆ Determining if there are projects that will be exempted or receive flexibility in meeting the threshold requirements by way of achieving other community objectives, such as infill development, mixed use, affordable housing, etc.
- ◆ Determining the measures to remedy situations when the threshold is exceeded, including delay of development until such time as the project no longer exceeds the threshold, reducing the project's impact to the point that it meets requirements, or mitigating the impact of the project by upgrading public facilities or infrastructure.
- ◆ Reserving the amount of capacity projected for a development during the time between approval of a project and its completion, which counts against the total capacity of public facilities in future applications for development. An expiration date for approved projects may be necessary so as not to unnecessarily burden or deny other projects.

ANNEXATION

Annexation allows the community to extend its municipal services, regulations, voting privileges, and taxing authority to new territory. It is a mechanism provided under State law for promoting

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orderly growth and urbanization by coordinating private land development with construction or improvement of public facilities (streets, water, sewer, drainage, etc.) and provision of adequate public services through phased expansion of the City’s corporate limits. The City may also use its annexation authority to expand the tax base in line with increasing service demands. This is especially important when residents and businesses outside the City limits benefit from access to municipal facilities and services, such as parks, trails, libraries, and other community facilities, but do not share the tax burden associated with constructing and maintaining those facilities and services.

Annexation also allows the City the ability to impose its land development regulations, which provides an essential growth management tool to implement this Comprehensive Plan for Del Rio. As with all development regulations, the intent is to protect the public health, safety and general welfare. At the same time, annexation extends the City’s extraterritorial jurisdiction, enabling it to better regulate the subdivision and development of land over an expanded area. However, it is important to realize the stringent requirements mandated by State law for extending services to newly-annexed areas in a timely and adequate manner, which must be comparable to pre-existing services and service levels in similar incorporated areas.

Municipal annexation activities are governed by planning and procedural requirements contained in the Texas Local Government Code.² Following significant changes to this State enabling legislation by the Texas Legislature in 1999 (Senate Bill 89), which made annexation and service planning a much more challenging process for Texas cities, the City of Del Rio should ensure knowledgeable counsel when developing and implementing an annexation strategy and program. Chapter 43, as amended, outlines critical steps and timing considerations, including:

- ◆ Maintaining a three-year annexation plan to identify specific properties the City intends to annex following a three-year waiting period;
- ◆ Acting on annexation proposals within 31 days after the three-year waiting period to prevent these properties from becoming exempt from annexation for another five years;
- ◆ Conducting a comprehensive inventory of all current service provisions in areas identified in the annexation plan (including services provided by all entities, the condition of facilities, existing public safety response times, and current service costs);
- ◆ Initiating preparation of a municipal service plan for the targeted area within ten months of receiving data for the service inventory;
- ◆ Ensuring that basic public services are extended immediately (including police, fire, and EMS) and that “full municipal services,” including necessary capital improvements, are provided within 2.5 years of annexation, unless certain exceptions apply (such as a negotiated service schedule for a requested annexation);
- ◆ Potentially negotiating agreements in lieu of annexation to formalize interim service provision and cost-sharing arrangements and possible compliance with City ordinances or development standards;
- ◆ Potentially entering into arbitration proceedings if annexation planning and negotiation is unsuccessful; and

² Chapter 43, Municipal Annexation, Texas Local Government Code

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- ◆ Potentially negotiating “strategic partnership agreements” with special districts.

Including a candidate area in the three-year annexation plan does not force the City to annex the area at the appointed time. However, if the annexation plan is amended to remove a proposed area, then the area may not be placed in the annexation plan again for a set period, thereby extending the three-year waiting period even longer. Of significance in the law for Del Rio due to the largely undeveloped property surrounding the City limits, there is an exemption from the expanded planning requirements for annexation proposals that will involve fewer than 100 tracts of land where each tract contains at least one residential dwelling.

The City’s annexation program should include an ongoing process of appropriate planning and preparation for future annexations in compliance with the requirements of State law and consistent with this Comprehensive Plan. The City should conduct studies periodically to identify and monitor prime growth areas within the extraterritorial jurisdiction (ETJ), particularly adjacent to the outer loop and in the areas identified for future urban development where the City’s land use management capabilities are most needed. These studies should consider anticipated infrastructure improvements that may create an opportunity or demand for new urban development. Based on these studies and the evaluation of potential annexation options, an annexation plan should be developed and periodically updated, which would become the basis for developing annual or periodic annexation proposals. The annexation plan should identify specific properties targeted for eventual incorporation and should be based on careful research as to the available utilities and infrastructure and existing land use in the area. Potential constraints to the development of infrastructure or extension of services should be a primary consideration, such as floodplain areas and the potential limits of gravity wastewater service. Coordination with utility providers may be necessary to determine future service areas and the potential need for service agreements.

The annexation planning process should be conducted in conjunction with annual review and updates to this Comprehensive Plan. The Comprehensive Plan should be updated, as needed, to support the City’s annexation program. Timely preparation of an annexation plan is essential to identify properties within the designated urban area that are in the City’s interest to annex prior to development.

Annexation Policies - As a general policy statement, annexation should occur prior to or concurrent with development of the designated urban area to properly plan for and coordinate the extension of adequate public facilities and services. The following policies should be considered in guiding the City’s decisions for annexing additional territory:

- Policy 1:** The City will annex territory in strict adherence to the Growth Sequencing Plan (prepared by the City) and in accordance with the policies of this Comprehensive Plan. Only property within the designated urban and rural areas will be considered for annexation.
- Policy 2:** The City will anticipate and effectively manage its long-term pattern of growth in a forward-looking and fiscally responsible manner, while balancing the needs of current residents and existing infrastructure investments.

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- Policy 3:** The City will ensure that future growth is closely coordinated with infrastructure investments, compatible with existing development, environmentally sensitive, and fiscally responsible.
- Policy 4:** The City will establish criteria for considering the suitability of requested extensions to the corporate limits within the designated urban and rural areas.
- Policy 5:** The City will prepare and maintain an annexation plan, as necessary and required, and conduct associated service planning for gradual expansion of the corporate limits and extension of municipal facilities and services, where determined feasible and beneficial to the City. The plan will be periodically updated to account for changing development conditions and new infrastructure development.
- Policy 6:** In order to maximize the efficiency of the existing infrastructure, the City will direct growth toward developable and under-utilized areas within the current corporate limits and the designated urban area before additional territory within the designated rural area is considered for annexation.
- Policy 7:** Following infill of undeveloped portions of the corporate limits and the designated urban area, the City will focus its annexation strategy toward the growth areas at the fringe of the current urban area to extend municipal services and manage development quality.
- Policy 8:** The City will use fiscal impact analyses to assess the projected costs of providing municipal services and weigh them against the anticipated revenues of each annexation proposal, whether initiated by the City or a property owner. Fiscal impacts will be assessed on a multi-year timeframe, recognizing that first-year costs may exceed revenues because of up-front service extension costs and capital expenditures, as well as the lag time before initial collection of taxes and fees. Intangible benefits of proposed annexations will also be evaluated.
- Policy 9:** The City will utilize its annexation authority to extend its jurisdiction to encompass critical areas, such as the outer loop, and areas provided municipal services subject to the policies of this plan, which may require regulatory protection and control of development.
- Policy 10:** Where short-term annexation is not feasible, the City will consider the option of negotiated agreements with land owners, developers, or other entities in lieu of annexation to provide for interim service arrangements, cost-sharing or fee mechanisms, and potential adherence to development guidelines to ensure desired development outcomes in areas subject to possible future incorporation.

Annexation Criteria - Important criteria for use in considering whether annexation of land is warranted and fiscally responsible include the following:

- ◆ The subject parcel(s) is(are) within the designated urban and/or rural areas.
- ◆ The land requested for annexation is certified to be within the City’s utility service area, with proven feasibility of efficiently extending water and sewer mains.
- ◆ All parcels could be adequately served by municipal police, fire, ambulance, and road maintenance meeting City standards.

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- ♦ All public improvements, off-site as well as on-site, necessary to serve the density of the annexed area will be constructed and financed in accordance with City standards and policies.
- ♦ As determined by the City, the actual financial impact for providing police, fire, road maintenance, and other public improvements is favorable to the tax base and offsets the necessary costs.